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   INTRODUCTION

   REVIEW OF LITERATURE

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   STATEMENT OF THE PROBLEM

   OBJECTIVES

   HYPOTHESES

   RESEARCH METHODOLOGY

   RESULTS & DISCUSSION

   FINDINGS

   RECOMMENDATIONS/SUGGESTIONS

   CONCLUSIONS

   SCOPE FOR FURTHER RESEARCH

   ACKNOWLEDGMENTS

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   APPENDIX/ANNEXURE

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- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

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CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

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- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.
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- Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

LAGUNA INDUSTRIES' CORPORATE SOCIAL RESPONSIBILITY (CSR) PROGRAMS: LAGUNA INTERNATIONAL INDUSTRIAL PARK, PHILIPPINES

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ABSTRACT

This descriptive-correlational study was an attempt to determine the community welfare programs being implemented by select business organizations situated and operated in Laguna International Industrial Park (LIIP) Biñan, Laguna, Philippines. The respondents were composed of two ideal groups: the company personnel represented by the select managers and employees of LIIP business organizations and the residents of Barangay Mamplasan, Biñan, Laguna. Stratified random technique was utilized. The study revealed that LIIP business organizations in the export processing area have been performing their social responsibility as evidenced by the various community welfare programs implemented in their area of operation. The implementation of the community welfare programs has been perceived to have high impact on the social and economic progress of the community residents. The level of implementation of the community welfare programs had direct impact on the community enhancement as perceived by the respondents. Strategies have been proposed to cope with the constraints encountered in the implementation of the community welfare programs.

KEYWORDS

Business Organization, Community Welfare Programs, Corporate Social Responsibility.

INTRODUCTION

The concept of social responsibility is far from being a new concept. It has been in existence for quite a long time. Unfortunately, it has not been nurtured by narrow-minded businessmen who think that realizing the concept would mean diversion of some part of the company's income to activities other than business resulting in smaller profits. Such is a misconception about corporate social responsibility which is rooted in the belief that a business is established for the personal gain of the capitalists. In truth, the goal of business is not only the pursuit of profit; business exists to sustain the survival of society. Businesses must therefore entail a sense of responsibility to the society and the environment. Since business operates within the society, it must also contribute to societal development. A business enterprise cannot be fully appreciated without some knowledge of the social and economic context in which it operates. Such an organization may become increasingly irrelevant to the society where it belongs, unless it contributes its share for development.

Business organizations entail important relationship with various sectors such as the employees, customers, and government, among others. As social institutions, they must satisfy two minimum requirements. First, they must give status and function to the individuals. Second, they must offer their employees equal opportunities (Drucker, 2000). These roles are now termed collectively as corporate social responsibility.

Several models highlight the concept of corporate social responsibility. The household model of Gow and Miranda (1990:85) is regarded by its advocates as no different from a household where every member is expected to contribute his share to its successful functioning. Viewed from this perspective, the business organization is a kind of extended family in which top management plays a role akin to a father's. The company does not simply pursue profits single-handedly

and formulate cold, impersonal strategies for the attainment of its objective. Rather, it must have the cooperation of its workers, from top to bottom, for business to be successful.
The vendor model (Gow and Miranda, 1990:85), on the other hand, puts the consumers at the front and center. Thus, instead of focusing internally on shareholders, executives, unions and employees, the vendor model highlights the external responsibilities of the firm. The vendor kind of corporate management underscores its intentions of offering only nothing but the best, that is, high quality goods, services, and welfare programs that will comprehensively uplift the social and economic status of those who patronize them.
Other models which are relevant to this present undertaking include the investment model and civic model (Gow and Miranda, 1990:85). The investment model holds that business organizations should divert part of its corporate profits to such undertakings as endowing an educational institution or scientific organization and others with funds. Undoubtedly, the company adhering to this model is bound to reap intangible benefits from its investments in the long run –favorable image and goodwill in the minds of the public. Such image could result in an increase in patronage for the company's products and services. The civic model as a social philosophy is more concerned with installing devices that would minimize, if not totally eliminate, pollution in the community.
Based on the foregoing models, this study would advance that the household, vendor, investment, and civic models of social responsibility promote or encourage corporate management's awareness of social responsibility. Corporate management's awareness in turn would help promote the practice of community welfare programs. As stated earlier, "realistic knowledge produces adjustment and commitment of energies to a plan of action and that a committed person values the goal so much that the possibility of attaining it outweighs the risk of failure" (Cronback, 1963). Thus, the higher the management's awareness is, the greater is the likelihood of adoption of socially responsive programs.

FIGURE 1.THE THEORETICAL FRAMEWORK OF THE STUDY

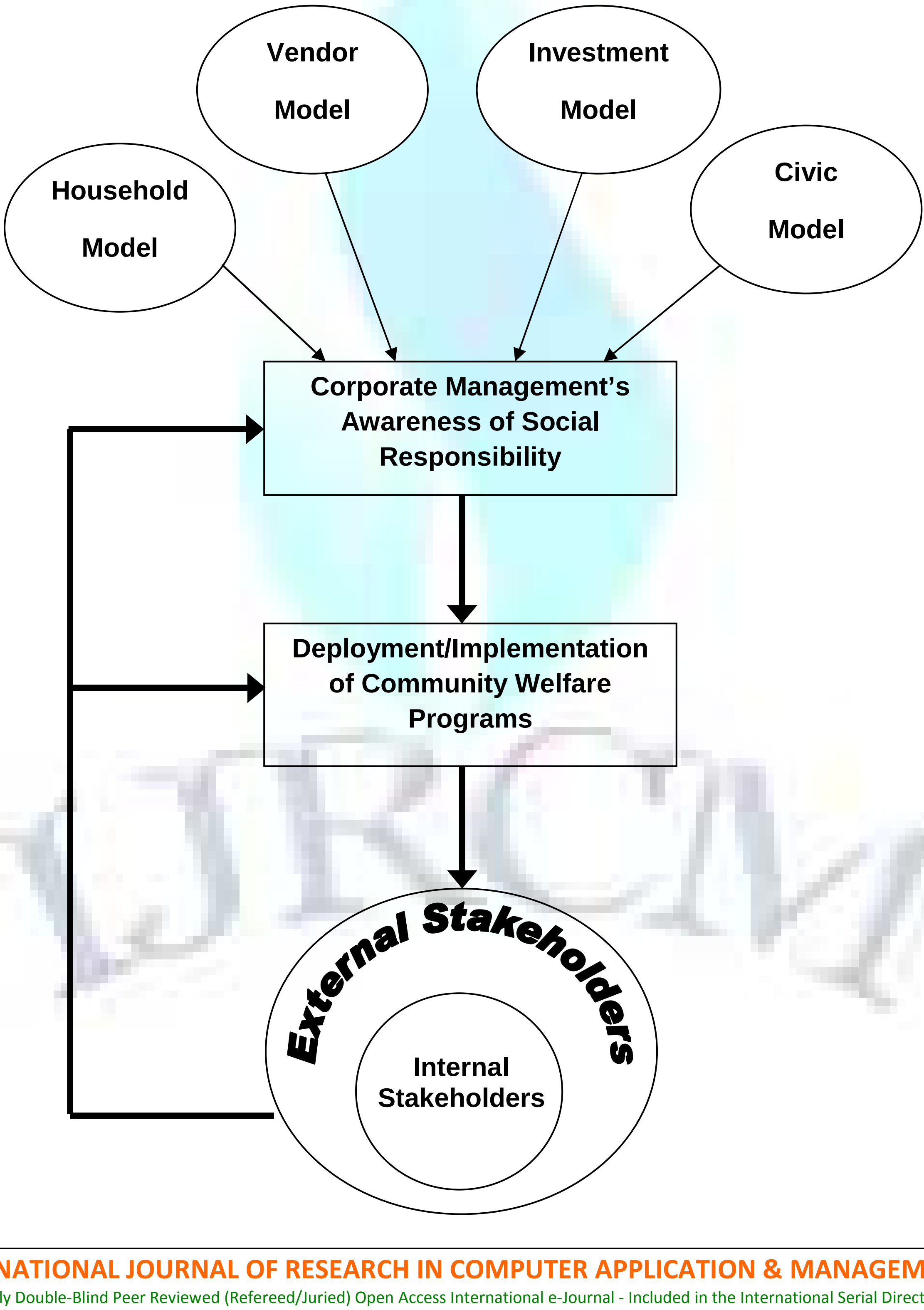

Figure 1 shows the theoretical framework of the study. The framework is anchored on the famous theory of Miranda and Gow (1990) that accentuates on the household, vendor, investment, and civic models of social responsibility which promote or encourage corporate management's awareness of social responsibility that can directly influence the community welfare programs undertaken by different business corporations to the community they serve. Likewise, the present study dwelt on the concept that proper implementation of community welfare programs by business organizations has great impact on the social and economic progress of the members of the community.

In particular, this study aimed at determining the community welfare programs being implemented by LIIP business organizations. It underscored their level of implementation as perceived by the community residents, and their perceived impact on community enhancement in terms of social and economic upliftment. Additionally, it probed into whether or not there was a significant relationship between the perceived level of implementation of community welfare programs and their perceived impact on community enhancement in terms of social and economic upliftment. Finally, the study highlighted the constraints being encountered in the implementation of community welfare programs and the strategies that could be proposed to efficiently and effectively manage their implementation.

METHODOLOGY

This descriptive-correlational study focused on the corporate social responsibility welfare programs of LIIP business organizations. It examined the associative relationships between and among variables. These variables included the community welfare programs being implemented by LIIP business organizations and their level of implementation.

The study tapped both primary and secondary sources. The primary data were taken from the responses of the target respondents to the researcher-made questionnaire. There were two ideal groups of respondents identified in this study: the company personnel (made up of managers and regular employees) and the community residents (composed of the members of the community under investigation). In this study, the second group of respondents consisted of the members of the community of Barangay Mamplasan, Biñan, Laguna who were the primary recipients of the community welfare programs being implemented by LIIP business organizations. The secondary sources of data were published and unpublished master's theses and dissertations, journals, periodicals, books, etc.

The study covered 60 business organizations with 3,576 company personnel and 3,194 residents of Barangay Mamplasan, Biñan, Laguna as of Calendar Year 2009. The required computed minimum sample size for the selected company personnel (managers and employees) was 200 or 52.91 % and 178 or 47.09 % for community residents (community members) out of the total sample size of 378. Since the population was segmented into groups, stratified random method was used to determine the number of company personnel and community residents to be included as respondents of the study. In this manner, the selection was proportional, and this contributed much to the representativeness of the sample, which is the main advantage of this sampling technique. The Slovin's formula was used to determine the sample size of the respondents. Table 1 shows the distribution of respondents of the study.

TABLE 1: POPULATION AND SAMPLE OF THE STUDY

Respondents	Population	Sample Size	%
Company Personnel	3,576	200	52.91
Community Residents	3,194	178	47.09
Total	6,770	378	100.0

The questionnaire which was the main instrument used in gathering the needed research data was divided into several parts. Part I of the questionnaire focused on community welfare programs being implemented by business organizations in LIIP and the level of implementation of the community welfare programs as perceived by the community residents. Part II dealt with the perceived impact of the community welfare programs on community enhancement in terms of social and economic upliftment. Part III centered on the constraints being encountered in the implementation of community welfare programs by selected business organizations. The instrument was subjected to both face validity and content validity. The researcher presented the questionnaire to a panel of experts for some comments and suggestions. After incorporating the suggestions of the panel of experts, the instrument was subjected to a pre-test and post-test validation with some business organizations in the export processing area not included in the study in order to ensure its internal validity and reliability.

RESULTS AND DISCUSSIONS

1. THE COMMUNITY WELFARE PROGRAMS IMPLEMENTED BY LIIP BUSINESS ORGANIZATIONS

With respect to the infrastructure development programs being implemented by LIIP business organizations, "street lighting" ranked first followed by "school fencing". The seventh was "construction of community hospital". The findings imply that LIIP business organizations' proper implementation of community welfare programs should be part of their undertaking in order to help uplift the social and economic conditions of the community.

One of the most important programs being implemented by LIIP business organizations was on social welfare. The study showed that "giving aids to calamity victims" was their prime concern in the implementation. The second was "support to civic activities", and "support for local historical researches" was the third prioritized social welfare program. The findings show that LIIP business organizations were genuinely concerned about the well-being of the members of the community they serve.

With regard to cultural development programs, "involvement in community religious activities" ranked first, followed by "support community local festivals" and "financial contributions to social welfare projects. The findings reveal that LIIP business organizations were predominantly advocates of religious activities. They give an insight into the business organizations' intention to uplift the quality of living of the members of the community by supporting community projects that generate earnings/funds.

Corporations must do well in these challenging times of growing poverty, slow economic growth and fast inflation. They need to reach out to the communities where they operate (Juan, 2009). Every business has to strive not only to be profitable but also to fulfill its obligations to the community in which it thrives (Dela Cruz, 1990). This view was supported by Abello (1995) when he said that profits should no longer be the only goal of business; service to community should be an integral part of its undertaking.

2. LEVEL OF IMPLEMENTATION OF THE COMMUNITY WELFARE PROGRAMS

Table 2 presents the perceived level of implementation of the community welfare programs with the following areas: Infrastructure Development, Social Welfare, Cultural Development, Economic, and Community Welfare.

TABLE 2: THE LEVEL OF IMPLEMENTATION OF THE COMMUNITY WELFARE PROGRAMS AS PERCEIVED BY THE COMMUNITY RESIDENTS

Infrastructure Development Programs	Weighted Means	Description	Ranking
Street Lighting	3.157	Implemented	1
Road Pavement	3.101	Implemented	2
Construction of School	3.028	Implemented	3
Construction of Community Hospital	2.949	Implemented	4
Construction of Community Plaza	2.910	Implemented	5
Construction of Clinic	2.809	Implemented	6
School Fencing	2.646	Implemented	7
Grand Mean	**2.943**	**Implemented**	

Social Welfare Programs	Weighted Means	Description	Ranking
Giving aids to calamity victims	2.989	Implemented	1
Support local historical researches	2.764	Implemented	3
Support to civic activities	2.848	Implemented	2
Grand Mean	**2.867**	**Implemented**	

Cultural Development Programs	Weighted Means	Description	Ranking
Support community local festivals	3.129	Implemented	1
Financial contributions to social welfare projects	3.011	Implemented	3
Involve in community religious activities	3.022	Implemented	2
Grand Mean	**3.054**	**Implemented**	

Economic Programs	Weighted Means	Description	Ranking
Hiring company employees from company residents	3.011	Implemented	1
Paying higher and/or competitive rates	2.938	Implemented	3
Support for community income generating projects	3.000	Implemented	2
Grand Mean	**2.983**	**Implemented**	

Community Welfare Programs	Grand Means	Description	Ranking
Infrastructure Development Programs	2.943	Implemented	3
Social Welfare Programs	2.867	Implemented	4
Cultural Development Programs	3.054	Implemented	1
Community Economic Programs	2.983	Implemented	2
Grand Mean	**2.962**	**Implemented**	

Numerical Ranges	Descriptions
3.51-4.00	Highly Implemented
2.51- 3.50	Implemented
1.51- 2.50	Less Implemented
1.00- 1.50	Not Implemented

Notably, all the areas that constitute the community welfare programs were perceived to be implemented. There was no specific area that garnered a mean of 3.51 or higher which is described as highly implemented. The findings would show LIIP business organizations' concern for the members of the community.

The findings on the level of implementation of community welfare programs could be supported by the reports of the following business firms and well-known business organizations on their benevolent activities related to corporate social responsibility.

Del Monte Foundation, Inc. (2009), a non-stock, non-profit organization spearheaded education and development programs geared towards the socio-economic and cultural growth of the host communities. Under its flagship program, the foundation has trained more than 3,000 women, heads of families, and out-of-school youths as well as employees' families living in company housing camps during the last five years. Training priority is given to agro-industrial fields of competency such as plant propagation, driving and engine trouble shooting, carpentry, food processing, weaving, electronic and automotive technologies. Many graduates have become small business entrepreneurs, augmenting family income and serving the community by sharing technology expertise not readily available in the countryside.

Philippine Business For Social Progress or PBSP (2003), being the country's largest corporate–led foundation dedicated to uplift the lives of the poor and help the communities become self-reliant, has supported more than 6,000 social development projects and benefited more than four (4) million beneficiaries nationwide.

The Committee for Economic Development or CED (2000) used a "three concentric circle" approach to explain the concept of CSR. The inner circle included basic economic functions- growth, products, and jobs. The intermediate circle suggested that the economic functions must be exercised with a sensitive awareness of changing social values and priorities. The outer circle outlined emerging and still vague responsibilities that corporation should assume to become more actively involved in improving the social environment in which they operate.

3. THE PERCEIVED IMPACT OF THE COMMUNITY WELFARE PROGRAMS ON COMMUNITY ENHANCEMENT

Tables 3 and 4 present the weighted means relative to the perceived impact of the community welfare programs on community enhancement in terms of social and economic upliftment.

TABLE 3: THE PERCEIVED IMPACT OF THE COMMUNITY WELFARE PROGRAMS ON COMMUNITY ENHANCEMENT IN TERMS OF SOCIAL UPLIFTMENT

Statements	Weighted Means	Description	Ranking
a. Deterrence of criminal offenses	2.966	High	4
b. Availability of venue for recreational activities	3.028	High	2
c. Restoration and preservation of culture	3.056	High	1
d. Enabling the community to sustain the practice of "Bayanihan"	2.871	High	6
e. Enhancement of their talents and expressing gratitude for the bountiful blessings	2.955	High	5
f. Nurturing one's spiritual commitment or growth	3.017	High	3
Grand Mean	**2.982**	**High**	

Numerical Ranges	Descriptions
3.51-4.00	Very High
2.51- 3.50	High
1.51- 2.50	Low
1.00- 1.50	Very Low

As shown in table 3, the respondents agreed that the impact of the community welfare programs in terms of social upliftment was "high" with a grand mean of 2.982. Business organizations have the crucial role of restoring and preserving the culture of the community, and of helping nurture the spiritual growth of the community residents.

TABLE 4: THE PERCEIVED IMPACT OF THE COMMUNITY WELFARE PROGRAMS ON COMMUNITY ENHANCEMENT IN TERMS OF ECONOMIC UPLIFTMENT

Statements	Weighted Means	Description	Ranking
a. Empowered to avail of needed health services	3.180	High	1
b. Enables the community to successfully implement its development programs	3.112	High	2
c. Given the chance to start anew	2.893	High	6
d. Economic survival through employment	3.017	High	4
e. Raises the buying capacity of the community residents	2.949	High	5
f. More job opportunities leading to community economic growth	3.090	High	3
Grand Mean	**3.040**	**High**	

Numerical Ranges	Descriptions
3.51-4.00	Very High
2.51- 3.50	High
1.51- 2.50	Low
1.00- 1.50	Very Low

As shown in table 4, the impact of the community welfare programs on community enhancement in terms of economic upliftment was described by the respondents of the study as "high" with the grand mean of 3.040. With the implementation of community welfare programs by business organizations, the community residents' health conditions would be taken care of.

The findings on the impact of the community welfare programs on community enhancement in terms of social and economic upliftment are supported by the accepted principles of corporate social responsibility. Leveriza (2001) stated that business, as a social institution, has a responsibility to the society. The ethical dimension of business is inherent to the social responsibility that it bears in society. It should welcome the opportunity to share in such responsibility. According to J. Clifton Williams (2001:415), business must abide by the obligations of his organization to its employees, customers, business associates and the communities in which it does business. Otherwise it will fail to attain its organizational goals. Furthermore, Murray and Montanari (2001) posited that nature of a socially responsible business organization as one which is seen to accomplish "the desired ends of society in terms of moral, economic, legal, ethical and discretionary expectations." For some writers, however, such a definition would be too broad in that it goes beyond the economic and legal limits which were often held to mark the boundaries of the firm's responsibility.

Finally, Friedman (2001) claimed that the only social responsibility of a company was to maximize profits and that it had no further obligation to the community, to company employees, or to customers. However, others argued that business decision makers are obliged to take actions that protect and enhance society's interests. Companies vary in their level of social responsibility, ranging from the lowest level, known as social obligation, to the highest, known as social responsive.

4. THE PERCEIVED LEVEL OF IMPLEMENTATION OF COMMUNITY WELFARE PROGRAMS VIS-À-VIS THEIR PERCEIVED IMPACT ON COMMUNITY ENHANCEMENT

Table 5 shows the relationship between the perceived level of implementation of community welfare programs and their perceived impact on community enhancement in terms of social and economic upliftment as described by a computed correlation coefficient of 0.61 and 0.69 respectively. This signifies that the greater the implementation of community welfare programs by business organizations is, the higher is their impact on community enhancement.

The relationship was significant at the 0.05 significance level. The amount of variations noted in the impact on community enhancement due to implementation of community welfare programs reached 37.21 percent for social upliftment and 47.61 percent for economic upliftment, which was quite large. Hence, the level of implementation is a strong predictor of social and economic upliftment.

TABLE 5: RELATIONSHIP BETWEEN THE PERCEIVED LEVEL OF IMPLEMENTATION OF COMMUNITY WELFARE PROGRAMS AND THEIR PERCEIVED IMPACT ON COMMUNITY ENHANCEMENT

Indicators	Pearson r	t – value	r^2 (%)	Interpretation
Community Welfare Programs vs. Social Upliftment	0.61 Moderate	10.21 Reject Ho $p < 0.05$	37.21 Large	Strong Predictor Significant
Community Welfare Programs vs. Economic Upliftment	0.69 Moderate	12.65 Reject Ho $p < 0.05$	47.61 Large	Strong Predictor Significant

The findings on the relationship between the perceived level of implementation of community welfare programs and their perceived impact on community enhancement in terms of social and economic upliftment are supported by Roxas (2003), and Boone and Kurtz (2001). The former pointed out that community relations did not only address industrial place, but more importantly, "it was to foster the overall development of the community. In terms of broad goals, the company was in a position to act as catalyst, liaison and development coordinator via the community". Boone and Kurtz (2001), on the other hand, affirmed from the historical view that social responsibility performance was usually evaluated by the firm's contribution to national output and provision of employment opportunities. Items such as weekly wage payments were often used as measures of social performance.

5. CONSTRAINTS ENCOUNTERED IN THE IMPLEMENTATION OF COMMUNITY WELFARE PROGRAMS

As shown in table 6, LIIP business organizations "agreed" that they encountered constraints in the implementation of community welfare programs to the community of the respondents of the study as evidenced by the grand mean of 2.840.

TABLE 6: THE CONSTRAINTS BEING ENCOUNTERED IN THE IMPLEMENTATION OF COMMUNITY WELFARE PROGRAMS

Constraints	Weighted Means	Description	Ranking
a. The policies used in the implementation of community welfare programs to the target beneficiaries are poor.	2.960	Agree	2
b. There is lack of proper supervision and monitoring among business organizations when implementing community welfare programs to the target beneficiaries.	2.810	Agree	6
c. The representatives of the implementing organizations do not have ample technical know-how in the conduct of community welfare programs to the target beneficiaries.	2.900	Agree	3
d. There is inadequate experience and expertise in human resource management among the representatives of the implementing business organizations.	2.770	Agree	9
e. There is inappropriate number of representatives from the implementing business organizations to carry out fully the community welfare programs to the target beneficiaries.	2.800	Agree	7.5
f. There are problems in the means of transportation usually encountered by the implementing business organizations when delivering the needed materials to carry through the community welfare programs to the target beneficiaries.	2.680	Agree	10
g. The community welfare programs being conducted by the implementing organizations do not match to the needs or demands of the target beneficiaries.	2.800	Agree	7.5
h. There are not enough funds intended for the conduct of community welfare programs among the implementing business organizations.	2.840	Agree	4
i. There are not enough volunteers to assist the representatives of the implementing business organizations in the conduct of community welfare programs to the target beneficiaries.	2.830	Agree	5
j. There is the big number of community residents in the areas that cannot be hired by business organizations due to global financial crisis leading to retrenchment that most of the corporations are currently experiencing.	3.010	Agree	1
Grand Mean	**2.840**	**Agree**	

Numerical Ranges	**Descriptions**
3.51- 4.00	Strongly Agree
2.51- 3.50	Agree
1.51- 2.50	Disagree
1.00- 1.50	Strongly Disagree

Constraints are restraining factors that deter the successful implementation of any program. However, these restraints could be converted into facilitating factors to avoid possible problems that disrupt the smooth implementation of the program. Madamba (1999) claimed that corporation has the collective responsibility to its members. Today, societal consensus demands that managers assume responsibilities beyond the profit realm. The socially responsible manager, if he is to survive, must assume a much more significant role, one that is deeply involved in the solution of society's major problems. Since business exists because of an unwritten mandate from society and since society's values are changing and creating new and different expectations from business, business must respond to these changes if it is to keep its mandate in full force.

Noda (1998) reiterated that in a free enterprise, private property system, a corporate executive is an employee of the owners of business. He has direct responsibility to his employers. That responsibility is to conduct the business according to their desires, which generally will be to make as much money as possible while conforming to the basic rules of society. In the conventional wisdom, a socially responsible businessman is one whose managerial staff balances a multiplicity of interests. Instead of striving only for larger profits for its stockholders, a responsible enterprise also takes into account employees, suppliers, dealers, local communities, government and the nation.

According to Santamaria (2002), in meeting its obligations to the society, business has areas of concern today. First, people are entitled to job opportunities without regard to non-performance related factors as race, religion, color, political beliefs, or sex. Second, they are entitled to salaries equal to those of others doing the same work under the same conditions. The third area of concern is to uplift of the condition of the community where business operates. Business can provide employment to the people in the community. It can also help artistically inclined persons use their talent through art competitions and scholarships.

Finally, according to Donaldson (1989) as cited by Koontz, the most serious barriers to corporate social responsibility are not in the nature of people or business and industry, but are attitudinal. There is therefore a need to change attitude via a change in the culture of an organization.

6. PROPOSED STRATEGIES TO EFFICIENTLY AND EFFECTIVELY MANAGE THE IMPLEMENTATION OF COMMUNITY WELFARE PROGRAMS

Business organizations are conscious of their social responsibilities to the community where they operate. Community welfare programs undertaken by them must therefore be implemented efficiently and effectively to uplift the social and economic conditions of the members of the community. In this regard, this study proposes strategies for efficient and effective management of the implementation of the different community welfare programs. The proposal is presented in table 7.

TABLE 7: PROPOSED STRATEGIES FOR THE IMPLEMENTATION OF COMMUNITY WELFARE PROGRAMS

Community Welfare Programs	Objectives	Strategies
Infrastructure Development Programs	To efficiently and effectively manage the implementation of infrastructure development programs.	a. Clear policies when implementing community welfare programs to the target beneficiaries. b. Proper supervision and monitoring of community welfare programs should be strictly done by the implementing business organizations.
Social Welfare Programs	To efficiently and effectively manage the implementation of social welfare programs.	c. Strengthen the technical-know how of the representatives of the implementing organizations before conducting community welfare programs to the target beneficiaries. d. Hone up the human resource management skills of the representatives of the implementing business organizations.
Cultural Development Programs	To efficiently and effectively manage the implementation of cultural development programs.	e. Designate enough number of representatives to carry out fully the community welfare programs to the target beneficiaries. f. Upgrade the technology and related equipment used to facilitate well the implementation of the community welfare program to the target beneficiaries.
Community Economic Programs	To efficiently and effectively manage the implementation of community economic programs.	g. Identify the needs or demands of the target beneficiaries before implementing the conceptualized community welfare programs so as to avoid the occurrence of undesirable incidents during the implementation. h. Allocate enough funds for the realization of the conceptualized community welfare programs of the implementing business organizations. i. Encourage more volunteers to be part of the implementation of community welfare programs to the target beneficiaries. j. Prioritize community residents when hiring employees to work in various business organizations in the area.

The formulation of the proposed strategies to efficiently and effectively manage the implementation of community welfare programs was supported and strengthened by the concept of corporate social responsibility. Bowen (2006) posited that public responsibility, social obligations and business ethics are synonyms to social responsibility. Social responsibility, then, "refers to the obligation of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of objectives and values of our society."

Margaret Stroup and Ralph Neubert of Monsanto (2006) believed that the evolution of social responsibility has been from voluntary ("doing good", at reduced business profits by consuming resources) to mandatory (pressure from stake holders to force certain desired social responses and actions, again at a cost to the business) and to investments in the future (social responsibility becomes an investment that improves the long-term performance of a business). As a result of this evolution, "Corporations are beginning to realize that, for their survival and competitive advantage, they must evolve from doing good to doing better. Only slowly is recognition growing that long-term value to the corporation of conducting its business in a socially responsible manner far outweighs short – term costs."

Mintzberg (2001) agreed that the issue on corporate social responsibility is not how corporations should respond to social pressures, but what should be their long-term role in the dynamic social systems. In other words, business organizations should take account of the societal demands when formulating their strategies and re-order their priorities as a consequence.

Lydia Sarmiento-Enrile, president of the League of Coporate Foundations (LF) pointed out those community relations, which used to be a peripheral activity of the company, to be a critical business strategy. She said that communities impact greatly on the ability of the business to operate properly. To be the "neighbor of choice", the LFC president underscored that a company must build a legacy of trust by building positive and sustainable relationship in the community with key individuals, groups and organizations. A company must demonstrate sensitivity to issues and concerns of the community. It must be able to design programs that improve the quality of community life and that promote the company's long goals and strategies (Membership and Corporate Involvement Unit, PBSP, 2004).

Finally, Mintzberg (2001) argued that social responsibility is manifested in a number of ways: responsibility for its own sake, enlightened self-interest, sound investment theory and the circumvention of outside influence. There is a little evidence to suggest that firms have adopted a strategy of corporate responsibility for its own sake, particularly in the area of environmental impact. However, where it does occur, the basis for this approach entails corporations anticipating and responding to future environmental pressures arising from industrial activities and taking the necessary preventative measures to ensure compliance. While such a socially responsive approach is indeed rare, there are cases of social responsibility which is driven by notions of self-interest (in its various guises), and this is typified by the remaining elements of Mintzberg's driving forces.

CONCLUSION

This descriptive-correlational study was an attempt to determine the community welfare programs being implemented by select business organizations situated and operated in Laguna International Industrial Park (LIIP) Biñan, Laguna. The business organizations in the export processing area were performing their social responsibility as evidenced by the various community welfare programs implemented in their area of operation. Moreover, the business organizations have implemented various community welfare programs on infrastructure development, social welfare, cultural development, and community economic development. The implementation of the community welfare programs was perceived to have high impact on the social and economic upliftment of the community residents. The greater the level of implementation of community welfare programs is, the higher was their impact on the community enhancement as perceived by the respondents. However, in any endeavor such as the implementation of community welfare programs, constraints were bound to be encountered by the implementers. Strategies, therefore, have been proposed as a response to the constraints encountered in the implementation of the community welfare programs.

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MAPPING THE INTELLECTUAL STRUCTURE OF HUMAN RESOURCES

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ABSTRACT
To explore the intellectual structure of human resources (HR) research in the last decade, this study identified the most important publications and the most influential scholars, as well as the correlations among these scholars' publications. This study used bibliometric and social network analyses to investigate the intellectual foundations of extant HR literature. By analyzing 41,001 citations in 1,941 articles published in the SCI and SSCI journals in the HR field between 2002 and 2011, this study mapped the knowledge network of HR studies. The results of this mapping can be used to identify research directions in HR research and to provide a valuable tool for researchers to access relevant literature in this field.

KEYWORDS
Co-Citation, Human Resources, Multipath Routing, On-Demand Routing, Security.

INTRODUCTION
In today's information-based economy, the increasing popularity of wireless portable devices, such as laptops, PDAs, wireless telephones, and wireless sensors, has highlighted the importance of human resources (HR) (Sanchez Quiros & Garcia-Tenorio Ronda, 2011). Sanchez and Ronda tested a model on Canadian biotechnology companies to understand the process of innovation from four perspectives: (1) the identification of the most appropriate competitive strategy; (2) the mediating role that HR development (HRD) performs; (3) the decisive role of HR in the development of organizational commitment; and, (4) the effects of organizational commitment on organizational results (Gholifar, Hedjazi, Hoseini, & Rezaei, 2011). Gholifar et al. investigated factors that affect faculty members' psychological empowerment toward access to HRD in colleges in Iran by using structural equation modeling (SEM). HR is a dynamically distributed system of wireless nodes that move independently of each other (Delery, 1996). In the past decade, research on HR has been particularly extensive. However, despite the HR field having established itself as an academic discipline, its establishment has been a slow process because HR scholars prefer to publish their best work in more established journals. Another major obstacle to the development of HR is its unusually high degree of interaction with other disciplines. This overlapping blurs the boundaries of the HR field, causing its distinct theoretical models and analytical tools to be unjustly attributed to competing fields. Because of limited resources for the development of HR, the cross-fertilization of ideas between scholars of HR is difficult to obtain. Consequently, although an HR field definitely exists, what it constitutes remains unclear, as does the quality of its work and what its prospects and needs for future development are.

This study provides HR researchers with a map to better understand HR-related publications and to provide a systematically objective mapping of the themes and concepts in the development of the HR field. In addition, this study helps identify the connections among various HR publications, determining their statuses and positions on their contributions to the development of the HR field. The principal methods used in this study were citation analysis, co-citation analysis, social network analysis, and factor analysis, which were conducted to identify the invisible network of knowledge generation underlying HR literature.

STUDIES OF ACADEMIC LITERATURE
One of the most frequent techniques used to study a body of literature is a simple literature review, where a highly subjective approach is used to structure the earlier works. Quantitative and objective techniques have recently become popular, with more available online databases to use the written and published works of a given field, to examine the invisible knowledge networks in the communication process. These techniques are attractive because they are objective and unobtrusive (Garfield, 1979).

Certain previous studies have explored management research literature using bibliometric techniques. Taylor, Dillon, and van Wingen (2010) examined the intellectual structure of information systems research, finding that the discipline has transitioned from a fragmented adhocracy to a polycentric state, which is appropriate for an applied discipline. Zhao and Wang (2011) used co-citation analysis to identify the most influential authors and studies in the pervasive and ubiquitous computing field. Zhang, Chen, and Li (2009) used an original paper-reference matrix as the information source, transforming the paper-reference matrix into a visual analysis using a new approach to explore co-citation relationships. Lin, McLee, and Kuo (2011) used a factorial analysis technique in an author co-citation study to examine the paradigms of Web services research. To the best of our knowledge, this is the only study on the HR field. Therefore, we used citation and co-citation analyses on recent studies related to HR that were cited in the Science Citation Index (SCI) and Social Sciences Citation Index (SSCI) to understand the gaps in HR literature.

METHODOLOGY
We collected data on authors, journal articles, publication outlets, cited references, and publication dates. Using these articles, we determined the intellectual structure of HR between 2002 and 2011 based on the objectives of the individual studies. We chose the period of 2002 to 2011 because HR studies have made

dramatic progress in the past 5 years. We used citation analysis and co-citation as our primary methods. First, we identified the sources of HR publications using the database to search for authors, topics, and journals related to HR studies.
Second, we systematized the collected data by screening, ranking, sorting, summing, and subtotaling. Consequently, key nodes in the HR invisible knowledge network were identified. In addition, we developed several structures following a series of operations. Finally, we used co-citation analysis and the HR knowledge network to map the knowledge distribution process of the HR field.
This study analyzed data collected from the SCI and SSCI. More than 9,000 leading scholarly journals are available on the SCI and SSCI. Although some studies have conducted their analyses using other online databases, this study chose the SCI and SSCI because they are the most accepted and comprehensive databases on HR publications.
We did not use data from journals that have been used by peer researchers (Walstrom & Leonard, 2000). We primarily conducted our analysis using data from the SCI and SSCI from 2002 to 2011. The key word method was used to collect data from the SCI and SSCI databases using a key word search. The key words we chose were “human resources” and “mobile ad hoc network.” A total of 1,941 journal articles were collected, and 41,001 publications were cited. Books and journal articles were used as the cited references.

RESULTS

CITATION ANALYSIS

We used the Excel package to tabulate each of the 1,941 source documents and the 41,001 references and to identify HR studies published by relevant scholars. Our background statistics, obtained using citation analysis, are shown as follows: We listed the most cited HR articles from the last decade from the top three most cited journals (*IEEE Transactions on Information Theory*, *IEEE-ACM Transactions on Networking*, and *IEEE Journal on Selected Areas in Communications*) in Table 1. We found that HR-specific journals were ranked 14th in the ad hoc networks area, indicating that most studies on HR were published in non-HR-specific journals. There is a gap to fill because HR lacks the knowledge generation and dissemination abilities necessary for it to develop into a full-fledged field. In addition, using a cluster analysis on the article titles in information systems journals, we determined that HR research is often published in journals related to information systems and computer studies.

TABLE 1: CITATIONS OF THE JOURNALS

Titles of the Journals	2002-2006	2007-2011	Total Citations
ACAD MANAGE J	814	1494	2308
INT J HUM RESOUR MAN	481	1315	1796
HUMAN RESOURCE MANAG	363	878	1241
ACAD MANAGE REV	413	835	1248
J MANAGE	297	618	915
STRATEGIC MANAGE J	236	528	764
HUM RESOURCE MANAGE	234	447	681
J APPL PSYCHOL	205	686	891
IND LABOR RELAT REV	179	237	416
PERS PSYCHOL	174	430	604
J INT BUS STUD	159	288	447
J MANAGE STUD	143	291	434
LANCET	111	223	334
HARVARD BUS REV	108	225	333
ADMIN SCI QUART	106	258	364
IND RELAT	92	160	252
HUM RELAT	89	209	298

Thereafter, we used the total number of citations within the selected journal articles to identify the most influential scholars and documents, based on the number of citations. The most frequently cited HR publications from 2002 to 2006 were Perkins’ “Ad-hoc On-demand Distance Vector Routing,” Johnson’s “Dynamic Source Routing in Ad Hoc Wireless Networks,” and Broch’s “A Performance Comparison of Multi-hop Wireless Ad Hoc Network Routing Protocols” (Table 2). Between 2006 and 2010, the three most cited HR publications were Perkins’ “Ad-hoc On-demand Distance Vector Routing,” Broch’s “A Performance Comparison of Multi-hop Wireless Ad Hoc Network Routing Protocols,” and Johnson’s “Dynamic Source Routing in Ad Hoc Wireless Networks” (Shown in Table 3).

TABLE 2: FREQUENTLY CITED DOCUMENTS, 2002-2006

Total Citations	Full Citation Index For Document
86	HUSELID MA, 1995, ACAD MANAGE J, V38, P635
75	DELERY JE, 1996, ACAD MANAGE J, V39, P802
66	BECKER B, 1996, ACAD MANAGE J, V39, P779
60	MACDUFFIE JP, 1995, IND LABOR RELAT REV, V48, P197
44	BARNEY J, 1991, J MANAGE, V17, P99
28	ARTHUR JB, 1994, ACAD MANAGE J, V37, P670
26	YOUNDT MA, 1996, ACAD MANAGE J, V39, P836
25	HULER RS, 1987, ACADEMY MANAGEMENT E, V1, P207, DOI 10.5465/AME.1987.4275740
25	IGHT PM, 1992, J MANAGE, V18, P295

Combining journal articles and books, the top five most cited scholars between 2002 and 2006 were Perkins, Johonson, Broch, Royer, and Lee (Table 4). The top five most cited scholars between 2007 and 2011 were Perkins, Johonson, Hu, Broch, and Lee (Table 5). These authors have had the most influence in promoting the development of the HR field, thereby helping define the field itself. They have influenced the primary foci of HR research, developing an indication of their historical values, as well as the popularity of certain HR topics.

TABLE 3: HIGHLY CITED DOCUMENTS, 2007-2011

Total Citations	Full Citation Index For Document
155	HUSELID MA, 1995, ACAD MANAGE J, V38, P635
97	BARNEY J, 1991, J MANAGE, V17, P99
83	DELERY JE, 1996, ACAD MANAGE J, V39, P802
77	BECKER B, 1996, ACAD MANAGE J, V39, P779
76	MACDUFFIE JP, 1995, IND LABOR RELAT REV, V48, P197
74	ARTHUR JB, 1994, ACAD MANAGE J, V37, P670
65	DELANEY JT, 1996, ACAD MANAGE J, V39, P949
63	YOUNDT MA, 1996, ACAD MANAGE J, V39, P836
53	HUSELID MA, 1997, ACAD MANAGE J, V40, P171
51	Wright PM, 2002, J MANAGE, V27, P701

In using citation analysis, we were unable to eliminate bias against beginning scholars who place more emphasis on the quality, rather than the quantity, of their research because the analysis ranked authors based on the frequency of which they have been cited (Tables 4 and 5), a paper-based ranking (Tables 2 and 3). Furthermore, determining the key research themes indicated the popularity of certain HR topics (Tables 2 and 3). These results further indicate that frequently cited titles have been "field-defining," and that these titles have created the foundations of HR as a distinct field. We compared the information shown in Table 2 with that in Table 3 to determine whether any patterns existed between 2002 to 2006 and 2007 to 2011. The top two most influential publications in the last 5 years indicated their dominant status in HR research for this period.

TABLE 4: FREQUENTLY CITED AUTHORS, 2002-2006

Author	Frequency	Author	Frequency
Wright PM	181	ULRICH D	86
HUSELID MA	152	BECKER B	75
SCHULER RS	144	ARTHUR JB	71
PFEFFER J	123	BARNEY J	71
DELERY JE	104	MACDUFFIE JP	71

TABLE 5: FREQUENTLY CITED AUTHORS, 2007-2011

Author	Frequency	Author	Frequency
WRIGHT PM	308	DELERY JE	131
HUSELID MA	203	Warner M	129
SCHULER RS	172	Ulrich D	118
Pfeffer J	166	BECKER BE	107
Brewster C	136	BARNEY J	105

The results shown in these tables indicate that the total number of citations is gradually increasing, indicating that HR research is not only recognized as a legitimate academic field, but is gaining recognition in academic literature. In addition, there were few differences between the most influential papers in the first 5 years and in the second 5 years. Some examples are provided as follows: Four publications were ranked in the top five most cited publications for both periods, although there were slight differences in their rankings. Publications from Perkins, Johnson, Broch, and Lee were in the top five most cited publications in the first 5 years, and they had three rankings in the top five most cited publications in the second 5 years. This indicates that these influential authors still dominate HR studies and that the HR field is developing rapidly and only has a few classic studies. More theoretical breakthroughs and efforts are needed to further develop the HR field.

CO-CITATION ANALYSIS

We conducted data mapping in this stage to determine the intellectual structure of HR research. We used co-citation analysis, such as the bibliometric technique, which information scientists use to map intellectual structures. We counted the articles chosen from paired or co-cited documents. Thereafter, the co-citation was counted in matrix form and a snapshot of the distinct point was statistically captured (Small, 1993).

We used the Excel package to tabulate the co-citation analysis for each document source. However, this was difficult because many of the authors had co-citations that probably did not significantly impact the development of the HR field. In addition, some studies had co-citations for studies that were too recent to have influenced the field. To facilitate the analyses, we ensured that the authors in the final set had at least 30 citations during the first 5 years, and 30 citations during the second 5 years. The top scholars were identified according to the total number of citations in the selected journals.

We used a common procedure known as varimax rotation to conduct factor analysis of the co-citation correlation matrix to fit the maximum number of authors on the minimum number of factors. The diagonals were applied to the criterion, causing the omission of two cases that were considered missing data (Zhang et al., 2009).

Four factors were extracted from the data on the first 5 years (2002-2006), and together they explained over 87% of the variance in the correlation matrix. Table 6 shows the four most important factors, in addition to the authors who had a factor loading of at least 0.5. As is typical in this type of analysis, authors with less than a 0.5 loading or with cross-loadings were dropped from the final results (White & Griffith, 1981). We tentatively assigned names to these factors on the basis of our own interpretation of the authors with high loadings. Our interpretation of the results is that HR research in this period consisted of at least three subfields: on-demand routing, multipath routing, and grid location service (Figure 1). We made no attempts to interpret the remaining factors because of their small eigenvalues. They have also been excluded from Table 6.

Similarly, HR studies were clustered around various research themes between 2007 and 2011, and together these themes explained over 85.6% of the variance in the correlation matrix for the second 5 years. Table 7 shows the four most important factors, as well as the authors who had a factor loading of at least 0.5. We tentatively assigned names to these factors on the basis of our own interpretation of the authors who had high associated loadings. Our interpretation of the analysis results was that HR research during this period was composed of at least four key subfields: on-demand routing, security in HR, multipath routing, and ad-hoc on-demand distance vector routing (AODV).

The most influential authors in the HR field from 2002 to 2006 were clustered together, as shown in Table 6. The primary research focus was on on-demand routing, specifically two dynamic routing protocols for ad hoc networks: dynamic source routing protocol (DSR) (Das, Perkins, & Royer, 2000) and ad hoc on-demand distance vector protocol (AODV). These protocols resulted from systematic performance studies conducted by Perkins and Royer (1999). The common characteristic that DSR and AODV share is that they initiate routing activities on an on-demand basis. The reactive nature of these protocols significantly differs from traditional proactive protocols (Das et al., 2000). Studies on the AODV and DSR found a route to the destination using the flooding method, and the number of rebroadcasts of the route request packet is in proper proportion to the total number of nodes (Song, Wong, & Leung, 2004).

The names of the authors obtained using multipath routing on the second group are shown in Table 6. Multiple paths were established using multipath routing for direct control over each path. Consequently, the reliability, performance, and security were increased. Gerla and Lee defined multipath routing as useful routing that improves delivery reliability, busty traffic, responses to congestion, and the effective bandwidth of communication pairs (Lee & Gerla, 2002).

The grid location service (GLS) authors were the third group. GLS, combined with geographic forwarding, enables the construction of HR that scales to a larger number of nodes than was possible using previous methods (Li, Jannotti, De Couto, Karger, & Morris, 2000). Broch, Maltz, Johnson, Hu, and Jetcheva (1998) provided overviews of these ad hoc routing techniques, as well as comparative measurements using 30-50 nodes simulations. GLS can be used as a location service for routing protocols, substantially improving the scaling properties of mobile networks.

The most influential authors in HR studies for the second 5 years (2007 to 2011) were clustered together (Table 7). As shown in Table 6, the main topic of research was on-demand routing. Toh presented the best routing protocols for ad hoc networks, mobility, and power conservation, including the DSR and associativity-based routing (ABR), both of which initiate routing activities on an on-demand basis (Toh, 1997).

The securing HR authors were the second group. Zhang and Lee (2000) defined intrusion detection, which complemented intrusion prevention techniques and improved network security. Zhou and Haas (1999) identified security services, determining that the single most important feature that makes HR unique is its absence of a fixed infrastructure.

The multipath routing authors were the third group, as shown in Table 6. Lee and Gerla (2002) defined multipath routing, determining that it can improve the effective bandwidth of communication pairs, busty traffic, responds to congestion, and can increase delivery reliability.

TABLE 6: AUTHOR FACTOR LOADINGS: 2002-2006

	1		2
Strategic Human Resource	54.50%	Cooperative Strategy	19.30%
Delery JE	0.965	Child J	0.89
Wright PM	0.953	Barney J	0.855
Gerhart B	0.948	Hofstede G	0.841
Huselid MA	0.945	Barney JB	0.817
Arthur JB	0.936	Porter ME	0.816
Ulrich D	0.929	Wood S	0.729
Becker B	0.925	Pfeffer J	0.693
Delaney JT	0.924	Warner M	0.513
Boxall P	0.914		3
Snell SA	0.904		6.60%
Macduffie JP	0.889	Brewster C	0.744
Youndt MA	0.879		4
Lepak DP	0.869	Human resource management	4.20%
Osterman P	0.806	Guest DE	0.534
Kamoche K	0.78	Guest D	0.515
Ichniowski C	0.778		5
Jackson SE	0.762		2.40%
Schuler RS	0.745	Warner M	0.515
Guest D	0.691		
Guest DE	0.645		
Pfeffer J	0.579		

TABLE 7: AUTHOR FACTOR LOADINGS, 2007-2011

	1		2
Modes of Theorizing in Strategic Human Resource	55.80%	Individuals and Organizations	15.40%
Delery JE	0.958	Rousseau DM	0.814
Boxall P	0.952	Hofstede G	0.805
Schuler RS	0.94	Tsui AS	0.801
Huselid MA	0.931	Meyer JP	0.726
Gerhart B	0.93		3
Arthur JB	0.924	Publics and Counter-publics	6%
Lepak DP	0.897	Warner M	0.934
Wright PM	0.894	Wood S	0.756
Macduffie JP	0.891		4
Becker B	0.89		4.50%
Batt R	0.865		5
Ichniowski C	0.858		3.90%
Youndt MA	0.853		
Ulrich D	0.829		
Lawler EE	0.82		
Barney J	0.728		
Storey J	0.686		
Guest D	0.671		
Pfeffer J	0.667		
Brewster C	0.584		
Tsui AS	0.52		

CONCLUSION

Research on HR has been extensive in the past decade. This study investigates HR research using citation and co-citation data published in the SCI and SSCI between 2002 and 2011. The SEM results proposed by Sanchez and Ronda show that companies with a first-mover strategy have more successful innovation results, and that HR practices play a crucial role in generating organizational commitment (Sanchez Quiros & Garcia-Tenorio Ronda, 2011). First, these results allow us to ensure that HR practices are a critical mechanism through which organizations generate flexible working philosophies. Second, HR aligns the behaviors and skills of employees to achieve commitment. This study analyzed the various implications for biotechnology managers, and future streams of research were provided. The findings obtained by Gholifar et al. (2011) provide an expanded understanding of factors that influence faculty members' psychological empowerment, and the subsequent implications are discussed. Study findings showed that professional skills and organizational culture have significantly positive effects on the psychological empowerment of faculty members, but that management-organizational factors have little effect on the psychological empowerment of faculty members.

Using factor analysis of the co-citation data, we mapped the intellectual structure of HR research, suggesting that contemporary HR research is organized along various concentrations of interests: on-demand routing, securing HR, and multipath routing.

Mapping the intellectual structure of HR studies indicated that HR has created its own literature and has gained a reputation as a legitimate academic field, with HR-specific journals gaining a status befitting an independent research field. These journals include the *IEEE Journal on Selected Areas in Communications*, *IEEE-ACM Transactions on Networking*, and *IEEE Transactions on Information Theory*. Because HR is a new field, and our analysis showed that it has an evolving structure, we believe that HR publication outlets will gain the popularity and prestige necessary for becoming a prominent academic field once the current paradigms and key research themes in HR studies are determined, and how they relate to each other. With more scholars and resources contributing to HR studies, a better academic environment that is conducive for the cross-fertilization of research ideas will be formed, allowing the HR field to gain the momentum necessary for further development.

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ROLE OF COMPETENCE DEVELOPMENT FOR ENHANCEMENT OF TECHNICAL SKILL WITH SPECIFIC REFERENCE TO BHILAI STEEL PLANT

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ABSTRACT

We are in for another new beginning as we have moved in the Golden Jubilee year of Steel Authority of India Limited (SAIL). Today, in India, viewed as emerging economic power in the world, we have the conditions conducive for achieving economic prosperity provided we put in the desired effort. Bhilai Steel Plant, the flagship unit of SAIL, is operating above the rated capacity since many years. The key to the competitive advantage of any organization is the function of competent work force. As the workers are the backbone of any industry, the skills development of workers must be the prime concern for every organization. Welding skill is a core competency required in an integrated steel plant like Bhilai Steel Plant. The workers of Bhilai Steel Plant undergo the welding skill development training on regular basis. The object of this study is to find out if after taking the welding skill development training in the past, the workers have attained the skill competency in welding jobs and to find out the training need on the basis of skill gap.

KEYWORDS

Economic power, Competent work force, Welding skill, Core competency, Integrated steel plant.

INTRODUCTION

The human resource development (HRD) profession has contributed significantly to major initiatives that have transformed organizations and brought about a fundamental rethinking of the importance of learning and continuous development in the workplace. HRD has worked to create work environments that generate value for external stakeholders while providing meaningful work for those who perform it. The HRD profession has been on the forefront of the effort to infuse working with learning. Although widespread recognition that learning is central to organizational well-being has emerged only in the past two decades, HRD has been a major contributing force in this area. We have advanced the understanding that new ideas, innovation, and resourcefulness— all products of learning and employee development—are inseparable from organizational success and sustainability. The HRD profession can take some measure of satisfaction that organizations and the workforce are generally better off today because of our efforts.

Bhilai Steel Plant, known as flagship unit of Steel Authority of India limited (SAIL), was conceived by the Founding Fathers of our Nation in the 2nd Five Year Plan as one of the first steps of independent India's drive towards industrialization and self-reliance. It envisaged the setting-up of one million tonne steel plant in a sleepy pastoral village of Bhilai on the Durg district of Chhattisgarh. On the 4th February 1959, the first President of India, Dr Rajendra Prasad, dedicated Bhilai to the nation. Since then, Bhilai has never looked back, steadily growing and modernizing itself. Production capacity was expanded in two phases – first to 2.5 MT which was completed in 1967 and then to 4 MT which was completed in 1988. To retain market leadership, Bhilai Steel Plant has already taken decisive steps towards implementation of Modernization and Expansion Schemes targeted at achieving 7.5 MT hot metal and 7.0 MT crude steel production capacity.

The human side of this enterprise is second to none in the country and is nurtured and groomed to respond to every situation and to welcome newer and tougher challenges. Human Resources Development department's endeavour to align human potential and motives with the organizational business goals is paying rich dividends. Bhilai Steel Plant is synonymous with a sustainable culture of excellence where the leadership and the enablers have uniform focus on all aspects of a collective enthusiasm for excellence in, quality of life and product, customer care, Profitability and Highest standards in individual, group and organizational performance.

The HRD department with its vision of being recognized as a valuable business partner is engaged in continuous enhancement of employees' knowledge, skills and attitudes not only for addressing the current needs but also for successfully meeting the challenges of expansion and modernization that are on the anvil. Several plant wide interventions have been introduced and are ongoing and some are forthcoming based on our constant vigil on the emerging and forecast scenario. These initiatives result from the business and other contemporary imperatives and are aimed at ensuring comprehensive excellence in everything that we do. There are immense opportunities for us to play a proactive role in the achievement of these goals at both the macro as well as the micro levels. Focus on Competence Development Programmes, which are potentially of desired value, are crucial for the sustenance and growth of the organization. This requires competency of an individual for superior performance in a job or situation. Competency is an underlying characteristic of an individual that is casually related to criterion-referenced effective and / or superior performance in a job or situation. Underlying characteristic means the competency is a fairly deep and enduring part of a person's personality and can predict behaviour in a wide variety of situations and job tasks. Casually related, it means that a competency causes or predicts behaviour and performance. Criterion-referenced means that the competency actually predicts who does something well or poorly, as measured on a specific criterion or standard. These competency characteristics, traditionally, comprise Knowledge, Skill and Attitude.

Skill is a type of underlying competency characteristics. Skill is the ability to perform a certain physical or mental task satisfactorily. Skills relevant to industrial activity can be imparted both by the formal education and training system and by in-firm training and experience. The need for skills varies by activity and technology. The skills requirements are more diverse and the range of necessary special skills wider for large scale and technologically complex industries like an integrated steel plant. The operations of the technology at world level of efficiencies require range of workers' supervisory, maintenance, quality control and adoptive skill. It is important to note that at high level of technology, the qualification and experience required are very specific and therefore difficult to substitute for one another. Thus, the pattern of skill creation has to match, at least in broad terms, the evolving pattern of individual activity.

At Bhilai Steel Plant, Technical skill development and enhancement of workforce is done through in-house training at HRD Centre**.** Different forms of technical training which include, Unit Training on specific equipment/Operational units by the experts of that unit, Enhancement of Engineering Skills on basic technical trades, PLC, Hydraulics, Pneumatics and multi-skill training programmes, are carried out through the regular training modules.

SCOPE OF THE STUDY

In this research paper, the study of the enhancement of welding skills of the employees who are involve in welding activities in Bhilai Steel Plant, has been undertaken. Welding is one of the critical technical skills which is a joining process of two metals. This is a specialised maintenance activity which directly affects the production in an integrated steel plant.

The present study of this research paper has been undertaken by the author while carrying out research work on "*A Study of the Employee Competence Development Programmes in Bhilai Steel Plant.*"

OBJECTIVES

The main objectives of this paper are:

1. To find out the technical skill competence level of workforce in the organizations.
2. To compare the technical skill levels in the organizations where welding is the major job.
3. To identify the skill gap for which training programmes should be developed.

RESEARCH METHODOLOGY

Bhilai Steel Plant is the largest integrated steel plant in India. Iron ore and coal, which constitute the major inputs, pass through different processing units to produce finished steel products like rails and heavy structural's, wide and heavy steel plates, light structural's, angles, rounds and wire rods. The major maintenance jobs of these production units are carried out by Central Maintenance Organization. The maintenance of machines and equipments of the plant require welding skills as core competency. Welding is a major and important activity for construction and repairs in the plant.

In this study, the sample have been collected from the departments of Bhilai Steel Plant where welding job is a critical and major activity for smooth running of the production units. The sample consists of 69 welders who are the regular workers. The 5 welding skills namely Welding / gas cutting in various positions, Profile Gas Cutting, Control of Distortion, Welding Fault / Inspection and Surface and Edge Preparation are assigned the abbreviations as SK 1, SK 2, SK 3, SK 4 and SK 5 respectively. The four skill grade scores have been denoted by 1, 2, 3 and 4 corresponding to behavioural attributes of *Learning Stage, Need Supervision, Competent and Expert* respectively.

The data has been analyzed with the help of descriptive statistical techniques of tabulation, histograms, and bar charts. The statistical methods like mean and Chi Square Test have been applied for analyzing the variables.

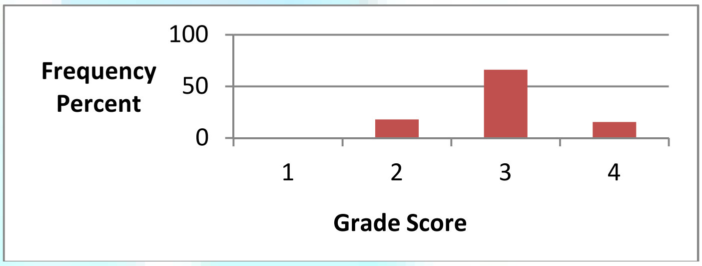
RESULT AND DISCUSSION

Frequency of the Skill Levels (Skill Grade Scores) With Respect Identified 5 Skills: The study indicates the frequency of the skill levels (skill grade scores) with respect to all the 5 skills viz. SK1, SK2, SK3, SK4 and SK5 of the 69 technicians deputed for welding jobs. The skill grade score and corresponding frequency of the grade score is presented in Table no.1 and in the adjacent graph.

TABLE NO. 1

Gr. Score	Freq. of grade score	freq. Percent
1	3	0.8
2	62	18
3	228	66
4	52	15.2

FIG. NO. 1



The above data in table no.1 indicates varying frequency of occurrence of skill grade scores corresponding to four skill levels. The largest frequency of skill grade score is 228 corresponding to grade score 3 and the lowest is 3 corresponding to grade score 1. It means most of the workers are competent for the jobs with respect to most of the welding skills. There are a few welding skills where the competency level is of learning stage.

Mean of Grade Scores (Skill Levels) of all the Sample Population: Table No. 2 shows the mean of grade scores (skill levels) of all the sample population of technicians for each of the 5 welding skills. Four out of the five skills have mean grade score of 3 and the lowest is 2.8 corresponding to SK 3. Therefore, most of the welding technicians are having competent level of grade. This means that they are competent for carrying out the required welding jobs at the site but they lack expertise to teach and train others. Moreover, there exists skill gap corresponding to SK3 (Control of Distortion) for competent level.

TABLE NO. 2

Skills	Mean of Gr. Score
SK 1	3
SK 2	3
SK 3	2.8
SK 4	3
SK 5	3

THE NOS. OF EMPLOYEES FALLING UNDER EACH OF THE FOUR SKILL LEVELS

TABLE NO. 3

Gr. Mean Score	No. of employees	Employee Percent
0 to 1	0	0
1.1 to 2	4	6
2.1 to 3	44	64
3.1 to 4	21	30

FIG. NO. 3

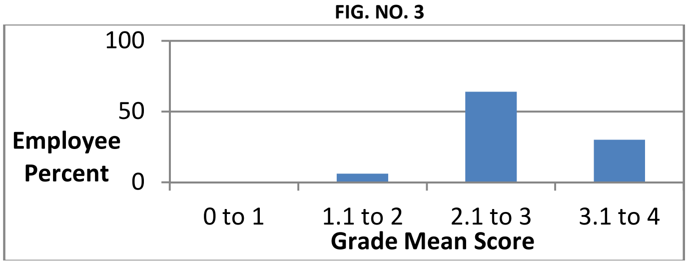


Table No. 3 and the adjacent graph show the skill competence level of the welders under study. Highest number of 44 welders fall under the grade mean score between 2.1 to 3 which is corresponding to the *competent* skill level. Similarly, no welder is between 0 to 1 grade mean score which means that none of the welder is at the *learning stage*. There are only 4 employees who fall in the skill competence level of 1.1 to 2 which corresponds to skill level of *Need Supervision.* Second highest number of 21 welders is in the *expert* category corresponding to grade mean score between 3.1 and 4. Therefore, 30% sample population has the potential to be competent as well as they can also supervise others.

CONCLUSION

The above result shows that there are no welders at *learning stage*. It indicates that welders have received the basic skill level during their training. Thirty percent of the welding technicians are in the *expert* category who can execute the welding job independently and at the same time guide and supervise the fellow technician to carry out the welding job. Only three percent of the welders *need supervision* while doing the welding job. Majority of the welding technicians are *competent* to perform the required jobs. The competency level of most of the welding skills is in the *competent* level category. The result shows that focused training is required to develop *competent* category of the work force into *expert* category in most of the skills. A basic training module should be designed to enhance the skill levels of the welding technicians to develop them into *competent* level from the *need supervision* level.

Skill gap Identified for the technicians who need supervision requires building competency through a process of designing a programme in which the focus should be hands on training with respect to identified skills. However, the programme should be evolved in collaboration with the shop floor line managers. Structured training programme for emphasizing practical as well as theoretical aspects need to designed to upgrade the skill of competent level to expert level. However, when competence development programmes, as above, are applied to human resource systems such as training and succession planning, the results can be profound. Establishing a competence development human resource system has the potential to promote continuous learning and create an infrastructure for moving the organization forward. In BSP , we have found that launching an effort such as this requires a great deal of research and planning to determine how the concept of competencies can be introduced, implemented, and leveraged in order to make an organizational impact.

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EFFECTIVE SUPPLY CHAIN MANAGEMENT THROUGH SAP

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ABSTRACT
Organizations work under tremendous pressure with both internal and external environments to acquire the global competitive position. In the constantly changing business environment, organization needs to respond quickly to the continuous challenges that they face from the competitors through changes in strategies. Integration and implementation of Information Technology derive benefit through process transformation which helps and ensures organizations to have the capacity and capability to continuously create greater business value. In today's highly competitive global economy, leading enterprises are increasingly using Systems, Applications and Products in Data Processing (SAP) with Supply Chain Management (SCM) to reduce operations costs, enhance competitiveness and increase market share by transforming fundamental business processes and achieving measurable business value. Systems, Applications and Products in Data Processing (SAP) is an automated integrated system and provides real time information available to Supply Chain Management (SCM) for quick and pro-active decision making and no duplication of manual efforts. Business value realization is an all-encompassing activity that involves process, people and technology.

KEYWORDS
Installations, Market Share, SAP, SCM.

INTRODUCTION
Process transformation helps global organizations to achieve measurable business value from every process like procurement, sales, order management, distribution, shipping, billing, from inventory management to procurement to planning and forecasting, manufacturing, maintenance, human capital management and finance. Process Transformation services enable by leveraging best practice functionality inherently available with SAP and its integration with SCM. Business transformation utilizes industry-specific business process models, benchmarks and best practices for process optimization and innovation.

Supply Chain Management (SCM) deals with the flow of products as well as information between different supply chain members' organizations. SCM handles diverse activities like purchasing, quality control, demand and supply planning, material and inventory control, production planning, scheduling, control and still many more, but all under the same network with two main objectives: timeliness and quality, so that the organizations can avail correct and valid information easily and at the earliest in their premises (Mishra, R.K., 2004).

LITERATURE REVIEW
Supply chain management (SCM) is the oversight of materials, information and finances as they move in a process from supplier to manufacturer to wholesaler to retailer and finally to a consumer. SCM involves coordination and integration of these flows both within and among companies. According to (Simchi-Levi et al. 2000), SCM is a set of approaches utilized to effectively integrate suppliers, manufacturers, warehouses and stores, so that merchandise is produced and distributed at the right quantities to the right locations and at the right time, in order to minimize system wide cost while satisfying service level requirements. Since suppliers are located all over the world, it is essential to integrate the activities both inside and outside of an organization "SCM is defined as the systematic, strategic coordination of the traditional business functions and the tactics across the business functions within a particular company and across businesses within the supply chain, for the purpose of improving the long-term performance of the individual companies and the supply chain as a whole" (Ballou, 2004). A supply chain is not confined to a chain of businesses with one-to-one, business- to-business relationships, but a network of multiple businesses and relationships that offers between one to many and many to many integration. SCM deals with total business process excellence and represents a new way of managing the business and relationships with other members of the supply chain (Lambert and Cooper 2000). An increase or decrease in the number of the suppliers and customers will alter the dimension of the SCM, becomes narrower if company make a strategic call for selective customer or supply base reduction and enlarges with outsourcing and functional spin offs (Hokey Min and Gengui Zhou, 2002) . Huge global competition makes organizations to innovate the existing processes to sustain in the marketplace through implementation of technology that adds value to the final product. SCM systems provide for its adopters, an integration of key business processes from end user through original suppliers that provides products, services and information that add value for customers and other stakeholders (Lambert and Cooper 2000).

SCM helps to maintain a tight control in the process of fluctuating demands of the customer needs by coordinated planning and flow of material and information among supply chain partners which can mitigate the "bullwhip effect" (Lee et al. 1997). Meeting the demands and needs of the customer is the main focus of any current business for sustenance and "You need a strategy for managing all the resources that go toward meeting customer demand. A big piece of planning is developing a set of metrics to monitor the supply chain so that it is efficient, costs less and delivers high quality and value to customers" (Ben Worthen 2006). Technology helps in maximizing the value of investments, continuously improve processes and drive innovation, SCM systems are most likely to provide tangible business value when well targeted, well timed, well managed and accompanied with complementary investments and actions (Barua and Mukhopadhyay, 2000). SCM is based on the integration of all activities that add value to customers starting from product design to delivery. With the advent of internet the process has become much easier for organizations to overcome the ever-increasing complexity of the systems driving buyer–supplier relationships. (Graham and Hardaker 2000) highlight the role of the Internet in building commercially viable supply chains in order to meet the challenges of virtual enterprises. SCM integrates supply and demand which results in equilibrium for price and quantity. SCM systems use finite capacity planning algorithms that do not require iterative adjustments to the master schedule (Raman and Singh 1998), and real-time planning capabilities allow firm to react quickly to supply and demand changes.

IMPORTANCE OF STUDY
Supply Chain Management is a new source of Competitive advantage which encompasses various integrated activities into a seamless process that manufacture a product to satisfy customers. To remain competitive, companies must seek new solutions to important SCM issues such as modal analysis, supply chain

management, load planning, route planning and distribution network design. Companies must face corporate challenges that impact SCM such as reengineering globalization and outsourcing.

PROBLEM STATEMENT
It is important for companies to get products to their customers quickly? Faster product availability is key to increasing sales, (R. Michael Donovan) advocates "There's a substantial profit advantage for the extra time that you are in the market and your competitor is not" and "If you can be there first, you are likely to get more orders and more market share." The ability to deliver a product faster can make or break a sale. If two alternatives appear to be equal and one is immediately available and the other will be available later, obviously the one that is available readily is bound to be grabbed by the customers, hence SCM has an important role to play in moving goods more quickly at competitive price to its customer destination.

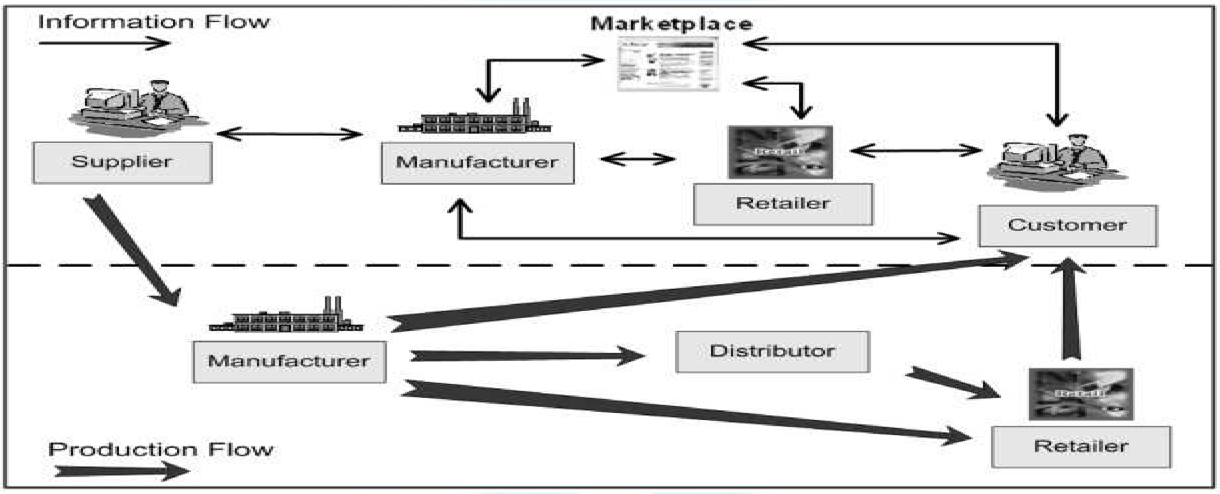
OBJECTIVES
1. SCM Flow
2. SAP SCM Model
3. SAP SCM Benefits

RESEARCH METHODLOGY
Study of the paper focus on the implementations of SAP SCM by the organizations global wide and the revenue generation thus resulted from its implementation and its current market share. Secondary data is used from various sources to analyze the usage of SAP SCM and its market share.

SCM

SCM is a new way of managing the business and its related relationships. The ultimate goal of an effective SCM is to reduce inventory. According to (Ballou 2007), "Supply Chain Management as a concept and practice encompasses the planning and management of all activities involved in sourcing and procurement, conversion and all logistics management activities". Technological innovation and prevailing competition has led to improvements and implementation of SCM with a focus on complete automated integrated application software SAP. (Wei et al. 2007) presented a comprehensive SCM project selection framework, employing three phases and ten steps. The three phases are strategy analysis phase, the system analysis phase and the group decision-making evaluating phase. Moreover, (Kotzab et al. 2006) developed another model for SCM implementation, containing four major factors: (1) Implementation of SCM within organization, (2) SCM activities, (3) internal SCM-conditions and (4) joint SCM-condition. Herein, the internal and joint SCM-conditions are considered antecedents for SCM activities, which then directly affect an organization's degree of SCM implementation.

FIGURE – 1: SUPPLY CHAIN MANAGEMENT FLOW



SAP

SAP R/3 belongs to the family of enterprise resource planning systems. An ERP system has several distinctive characteristics (Norris et. al., 1998). SAP, the company developing and marketing R/3, is based in Walldorf, Germany. SAP stands for "Systems, Applications and Products in Data Processing." SAP R/3 is a popular system due to its functionality and flexibility and its ability to be customized to suit an organization also contributes to its complexity (Best, Peter, 2000). SAP R/3 popularity among medium to large organizations has been due to several measurable characteristics (Ernst & Young). The functionality of R/3 modules is claimed to be suitable for most organizations, being based on "global best practice", however extensive configuration is still required to customize R/3 to the organization (V Naresh kumar and Pavan kumar, 2012).

Core SAP programs are written in C and application software is written in ABAP/4 (Advanced Business Programming Language). All development objects are stored in the R/3 Repository. Development objects are assigned to programmers with a development class. Old versions of objects are retained for reconstruction if required. R/3 landscape consists of Development, Quality and production boxes and SAP uses a Change and Transport System (CTS) to control the transfer of changes in developed objects from development to quality and finally to production (Metzger & Roehrs 2000).

SAP AND SCM

SAP R/3 has been widely implemented to create value-oriented supply chains that enable a high level of integration, improve communication within internal and external business networks, and enhance the decision making process. (Al- Mashari and Zairi, 2000) discussed the SAP R3 implementation case for reengineering supply chain and highlight the importance of IT infrastructure for the successful implementation of SAP R3 for the reengineering supply chain.

SAP Supply Chain Management (SAP SCM) is used to improve and optimize the supply chain by enabling automated decision making, providing improved analytical tools to users and sharing information with internal system customers and external business partners. SAP SCM application features collaboration, planning, execution and coordination of the entire supply chain. SAP SCM empowers companies to adapt their supply chain processes to a dynamic competitive environment that results in improved user productivity and changes business processes faster.

FIGURE – 2: SAP SUPPLY CHAIN MANAGEMENT

Demand and Supply Chain Planning	Demand Planning and Forecasting	Safety Stock Planning	Supply Network Planning	Distribution Planning	Service Parts Planning
Procurement	Strategic Sourcing	Purchase Order Processing	Invoicing		
Manufacturing	Production Planning and Detailed Scheduling	Manufacturing Visibility and Execution	MRP Based Detailed Planning		
Warehousing	Inbound Processing	Outbound Processing	Cross Docking	Warehousing and Storage	Physical Inventory
Order Fulfillment	Sales Order Processing	Billing	Service Parts Fulfillment		
Supply Chain Visibility	Strategic Supply Chain Design	Supply Chain Analytics	Supply Chain Risk Management	Sales and Operation Planning	
Supply Network Collaboration	Supplier Collaboration	Customer Collaboration	Outsourced Manufacturing		

Source SAP AG

SAP SCM can operate at higher levels of responsiveness in financial and operational efficiency and help the organizations meet the challenges posed by constantly changing market environment. SAP SCM responsive network capabilities provides an integrated, end-to-end feedback loop that links planning through execution, as a result, partners can sense changes, profitably respond and adapt to new situations with speed and accuracy in real time.

SAP SCM maintains balance between the push and pull requirements needed to successfully network in dynamic business environment. It helps managing, demanding, forecasting and calendar-driven events, thus gives the power to visualize realistic plans up-front and the flexibility to change quickly to unexpected events and emerging opportunities as they occur. SAP SCM helps organization and synchronization of suppliers and manufacturers at global scenario thus enables to achieve maximum quality at low cost while serving a globally dispersed customer base.

SAP SCM support planning and execution capabilities for managing enterprise operations and provide visibility and collaboration technology for extending the operations beyond the corporate boundaries. It results in measurable improvement through cost reductions, increase in service level and productivity gains ultimately leading to higher profit. SAP SCM increases revenue through improved in-stock performance, enhanced customer satisfaction, enhanced margins, reduce order cycle times, reduce response times and reduced operating costs thus freeing up of the working capital. SAP SCM transforms traditional supply chains from linear, sequential steps into a responsive supply network in which communities of customer centric, demand-driven companies share knowledge intelligently, adapt to changing market conditions and respond proactively to shorter, less predictable life cycles.

SAP SCM COMPONENTS

DEMAND AND SUPPLY PLANNING

DEMAND PLANNING AND FORECASTING: Use state-of-the-art forecasting algorithms for product life-cycle planning and trade promotion planning.

SAFETY STOCK PLANNING: Meet desired customer service levels while maintaining a minimum amount of safety stock.

SUPPLY NETWORK PLANNING: Simulate and implement comprehensive tactical planning and sourcing decisions based on a single, globally consistent model.

DISTRIBUTION PLANNING: Determine the best short-term strategy to meet demand and to replenish stocking locations.

SERVICE-PARTS PLANNING: Use the latest forecasting, inventory planning and distribution models to improve service levels while reducing inventory costs.

PROCUREMENT

STRATEGIC SOURCING: Identify and evaluate potential vendors based on historical performance and other data. Create long-term plans for sourcing that take into account the company's financial and marketing strategies.

PURCHASE ORDER PROCESSING: Manage the purchasing process for direct materials, indirect materials and services. Convert demand into purchase orders or delivery schedules for a scheduling agreement.

INVOICING: Receive, enter and check vendor invoices for correctness. Use automatic workflow to ensure proper invoice circulation and automatic blocking for payments that exceed set limits.

MANUFACTURING

PRODUCTION PLANNING AND DETAILED SCHEDULING: Generate optimized schedules for machine, labor and overall capacity utilization. Address problems of unequal allocation of constrained materials and capacity, due-date commitments and sequencing of incoming orders without disrupting existing plans.

MANUFACTURING VISIBILITY, EXECUTION AND COLLOBORATION: Meet and deliver on production plans by managing production processes and the deployment of the workforce and resources on the shop floor. Document, monitor and dispatch inventory across the production life cycle. Share information with partners to coordinate production and increase visibility and responsiveness on the shop floor.

MATERIAL REQUIREMENTS PLANNING-BASED DETAILED SCHEDULING: Create feasible production plans across different production locations to fulfill demand to the schedule and to the standard expected by the customer. Use the advantages of production planning and detailed scheduling for scheduling, simulation and alert monitoring to optimize order sequences that can be released for production.

WAREHOUSING

INBOUND PROCESSING AND RECEIPT CONFIRMATION: Receive and process externally procured goods into the warehouse with a single RF scan. Capture detailed and overview information using RF identification (RFID)-enabled tools.

OUTBOUND PROCESSING: Use a combination of RF, voice recognition or RFID technology to manage all the steps of goods issue, including distribution and proof-of-delivery activities.

CROSS-DOCKING: Direct inbound goods from receipt to issue without interim storage. Use cross-docking, planned and opportunistic to minimize duplicate goods movements within the warehouse, optimize the flow of goods from inbound to outbound processing and shorten routes within the warehouse.

WAREHOUSING AND STORAGE MANAGEMENT: Optimize internal movement and storage of goods within a warehouse. Utilize task interleaving to decrease travel and improve efficiencies.

PHYSICAL INVENTORY: Plan and execute a physical inventory or velocity-based dynamic-cycle counts.

ORDER FULFILLMENT

SALES ORDER PROCESSING: Fulfill a range of contracts or purchase orders by delivering a specific product configuration and quantity or by providing a service at a specific time.

BILLING: Manage the entire billing process, from the creation and cancellation of invoices through the transfer of billing information to the accounting department.

SERVICE-PARTS ORDER FULFILLMENT: Expand visibility into the entire service-parts supply chain, providing the ability to respond rapidly to customer and internal orders from the most appropriate locations.

SUPPLY CHAIN VISIBILITY

STRATEGIC SUPPLY CHAIN DESIGN: Perform strategic and tactical business planning. Test scenarios to determine how to address changes in the market, in the business or in customer demand.

SUPPLY CHAIN ANALYTICS: Improve visibility across the extended supply chain. Define, select and monitor key performance indicators (KPIs) for a comprehensive view of performance. Use predefined KPIs based on the supply chain operations reference (SCOR) model.

SUPPLY CHAIN RISK MANAGEMENT: Identify measure, manage and monitor risks. Define risk impact and risk mitigation strategy and develop process and scenario alternatives. Assign the effort of mitigation strategy.

SALES AND OPERATIONS PLANNING: Align company's financial goals, marketing efforts and inventory targets in one consolidated plan. Gain access to relevant data, including aggregated, role-specific information about time, organization, product, geography and units of measure.

SUPPLY NETWORK COLLABORATION

SUPPLIER COLLABORATION: Connect to and collaborate with suppliers by providing them easy and seamless access to supply chain information, which facilitates ability to synchronize supply with demand.

CUSTOMER COLLABORATION: Collaborate with customers by providing them broad functionality for replenishment, including min/max-based vendor-managed inventory.

OUTSOURCED MANUFACTURING: Connect to and collaborate with contract manufacturers by providing them easy and seamless access to supply chain information that extends visibility and collaborative processes to their manufacturing processes.

SAP SCM POTENTIAL BENEFITS

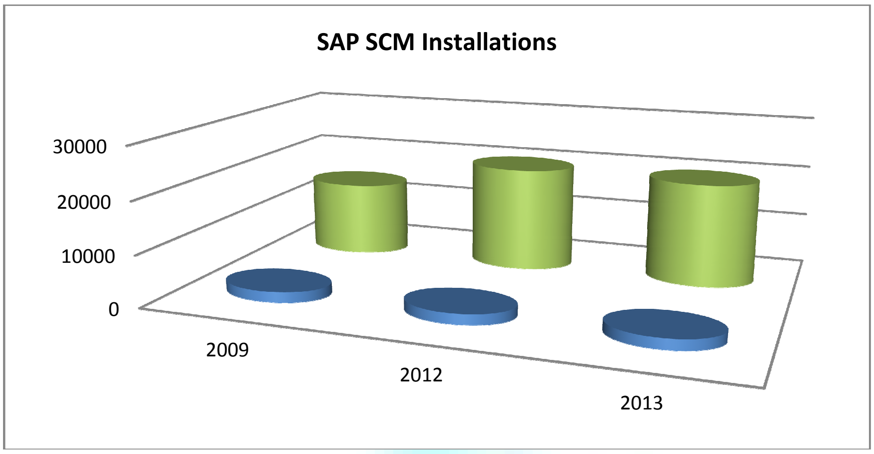
1. **IMPROVED SAP SCM STAFF AND TASK PRODUCTIVITY:** Since the processes are predefined through customization and configuration, master data is centralized and the SCM staff is well versed with the business processes, the business transactions are secured. SAP SCM Helps in proportional increase in the volume distribution in the rural and niche markets through organization structure and supply partners thus ensures task productivity.
2. **INCRESED INVENTORY TURNS/REDUCED DAYS IN INVENTORY:** Customers and large institution buyers sometimes directly negotiate and create bulk and repeated orders with the manufacturing company helps the procurement of products at lower costs. This is possible because of large order quantities thus increases the inventory turnover ratio. SAP SCM provides opportunity for customers to place orders online.
3. **REDUCED DAYS SALES OUTSTANDING:** SAP SCM helps the SCM staff in identifying the sales outstanding through the automation procedures like alert, workflows, online PO Creations. SCM also handles the JIT procedures through supply chain partners thus reduces the sales outstanding.
4. **REDUCED INVENTORY SCRAP:** JIT inventory and efficient supply chain partners help in reduced inventory scrap, no excess inventory at any time.
5. **IMPROVED NET FIXED ASSET UTILIZATION, AVOIDING NET FIXED ASSET ADDITIONS:** SAP SCM helps organizations to plan the optimal and continuous utilization of production processes through demand forecasting.
6. **REDUCED COST OF GOODS SOLD:** Customer loyalty and satisfaction is high, brand reins and the cost of the good is obtained at a highly competitive price through SAP SCM partner channels, so the advertisements or any additional cost involved in marketing is reduced, thus enhances company margins.
7. **IMPROVED STRATEGIC SOURCING:** Since the SAP SCM integration helps the supporting partners on a long term plan, hence the situation would ensure win-win.
8. **IMPROVED PURCHASE ORDER, INVOICE AND PAYMENT PRODUCTIVITY:** System Creates the Purchase orders automatically by workflows or through access to the vendor ordering system. Receipt and check of vendor invoices for correctness. Use automatic workflow to ensure proper invoice circulation and automatic blocking for payments that exceed set limits. SAP Checks for GR document for stock and IR documents for payment and cancels though a automatic process, thus avoids duplication of payments.
9. **REDUCED MAVERICK SPENDING:** Since SAP handles budget and actual, it helps in tight control over the expenditure, this is possible through the concept of cost center. Historical data is also used for evaluation and control. Performance of supply chain partners is important as they all work for common objectives of better customer support.
10. **IMPROVED PRODUCTION ERXCEPTION HANDLING:** Recalling a product is unusual in India because of the fragmented nature of distributed network hence newer technologies such as RFID would be used in keeping track of products along the entire chain that would limit counterfeit products to enter the market. Since the SAP SCM is tightly integrated with the Inventory, vendors, accounting and production planning, system takes care of authorizations and other processing related issues efficiently.
11. **REDUCED ACCOUNTS RECEIVABLE, BAD DEBT WRITE-DOWNS AND DISPUTES:** SAP SCM provides healthy and stiff competition in the market thus forces the retailers not to take advantage of prolonged credit period and simultaneously work for less discounts. Efficient reporting procedures benefits the account receivables part of organizations
12. **REDUCED TRANSPORTATION DUTIES AND TAXES AND INCREASE REBATES INCENTIVES:** The emergence of substitutes normally takes a toll on company sales, as prices will come down drastically and customers will benefit with reduced transportation duties and entitled for rebates and incentives.
13. **REDUCED TRANSPORTATION ERROR COSTS:** Companies are using innovative transportation systems like cold chain management systems for retaining the quality of the product during shipment thus reducing the transportation loses. SAP handles shipments, containers, insurance, picking and packing through automated programs.
14. **IMPROVED CUSTOMER RETENTION AND INCREASE CUSTOMER LOYALTY:** SAP SCM Provides a weapon for companies to change in policies based on environmental factors thus positions itself in higher trade margins. It helps in bypassing the multiple distribution layers to reach customers directly through channel partners at highly competitive prices. Hence SAP SCM helps organizations to retain customer's trust and loyalty.
15. **CONSOLIDTED CURRENT SCM SOLUTIONS:** SAP SCM helps all in one solutions

SAP SCM ANALYSIS

TABLE–1 DATA FOR SAP SCM INSTALLATIONS

Year	2009	2012	2013
SAP SCM Installations	14500	20300	20000

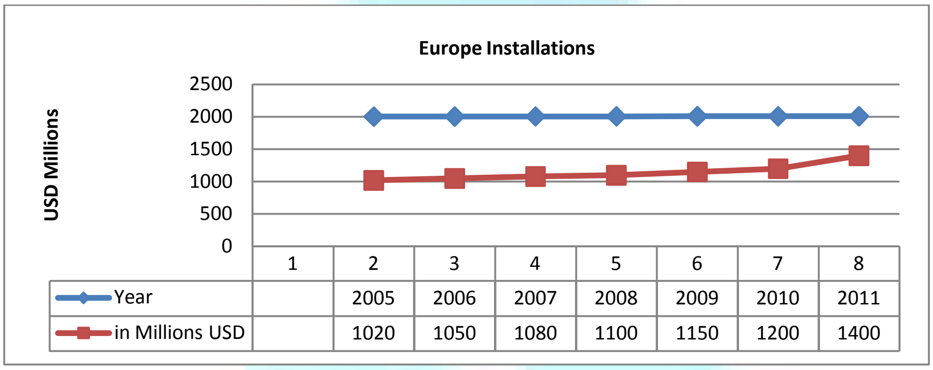
FIGURE–3 SAP SCM INSTALLATIONS



TABLE–2 REVENUE GENERATED IN USD MILLIONS OF SAP SCM INSTALLATIONS IN EUROPE

Year	Revenue Millions USD
2005	1020
2006	1050
2007	1080
2008	1100
2009	1150
2010	1200
2011	1400

FIGURE–4 TURNOVER IN USD OF SAP SCM EUROPE INSTALLATIONS



TABLE–2 REVENUE GENERATED IN USD MILLIONS OF SAP SCM INSTALLATIONS GLOBE WIDE

Year	Revenue Billions USD
2001	4.5
2002	5.2
2003	7.7
2004	9.0
2005	9.3
2006	11.87
2007	13.2
2008	15
2011	17.3
2012	15.5

FIGURE – 5: TURNOVER IN USD OF SAP SCM GLOBE INSTALLATIONS

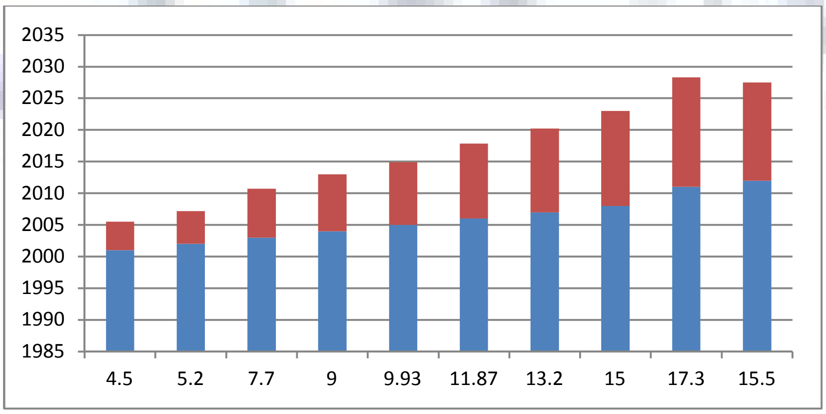
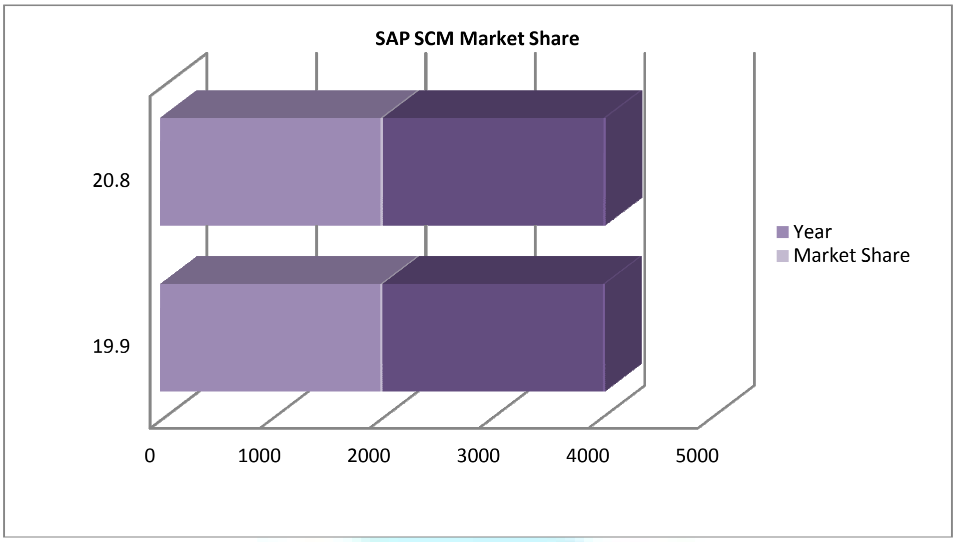


FIGURE –6: MARKET SHARE SAP SCM

Year	2011	2012
Market Share	19.9	20.8

FIGURE – 6: MARKET SHARE SAP SCM



Source SAP AG

CONCLUSION

Today's organizations need technological solutions that can improve business processes, streamline IT landscapes and transform organizational and governance structures. Many companies have realized the advantages of using powerful tools like SAP R/3, especially when the operations of the organizations are geographically distributed. Global competitions have made organizations to invest in SCM implementation to derive competitive advantage. Since the organization long term survival focuses to the efficient inventory control and optimization, SAP SCM and Inventory are tightly integrated so that the transformation of the business to the realization of revenue value can be derived with the implementation of the right technology, skilled and optimal usage of right human resources and making the efficient design and utilization of the processes.

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CONVERSATION OF INNOVATION IN BUSINESS: INDIAN INDUSTRY CASE STUDY

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ABSTRACT

Indian industrial atmosphere is characterized by hierarchical forms of industry organization, which are increasingly inadequate in modern sectors, where innovation relies on platforms and horizontal ecosystems of firms producing complementary products. Using this engineering analytical software illustrated two key sources of inefficiencies that this mismatch can create, all the while recognizing that hierarchical ecosystems have played a major role in Indian success in manufacturing -driven industries. First, hierarchical industry organizations can "lock out" certain types of innovation indefinitely by perpetuating established business practices. Second, even when the vertical hierarchies produce highly innovative sectors in the domestic market, the exclusively domestic orientation of the "hierarchical industry leaders" can entail large missed opportunities for other members of the ecosystem, who are unable to fully exploit their potential in global markets. India has to adopt legislation in several areas in order to address these inefficiencies and capitalize on its innovation: strengthening antitrust and intellectual property rights enforcement; lowering barriers to entry for foreign investment and facilitating the development of the venture capital sector.

KEYWORDS

Innovation, Business, Analytical Engineering software, Success in Business.

1. INTRODUCTION

India faces two interconnected challenges. The first one is common to all advanced economies: the rising competition from lower-cost countries with the capacity to manufacture mid-range and in some cases advanced industrial products.

Unlike – or to a significantly greater extent than – other advanced economies e.g. the United States, India also confronts a challenge posed by the global changes in the Industrial growth.

Therefore, it is striking that, as India trying to become more economically advanced, its strengths have continued to be in manufacturing. When it comes to engineering analytical services, it has either failed to produce competitive companies, or, when it has, these companies have failed to establish themselves in foreign markets.

In the current paper is that these weaknesses can be attributed to Indian hierarchical, vertically integrated and manufacturing-driven forms of industry organization, which are increasingly inadequate in modern sectors, where innovation relies on platforms and horizontal ecosystems of firms producing complementary products. Using this case studies we illustrate two key sources of inefficiencies that this mismatch can create, all the while recognizing that hierarchical ecosystems have played a major part in success in manufacturing-driven industries.

First, hierarchical industry organizations can "lock out" certain types of innovation indefinitely by perpetuating established business practices. For example, the strong hardware and manufacturing bias of Indian computer and electronics firms is largely responsible for the virtual non-existence of a standalone software sector. Second, even when the vertical hierarchies produce highly innovative sectors in the domestic market, the exclusively domestic orientation of the "hierarchical industry leaders" can entail large missed opportunities for other members of the ecosystem, who are unable to fully exploit their potential in global markets.

Accordingly, India is facing the challenge of creating a post-industrial exporting base. This in turns requires an environment conducive to innovation. Indian Government policy-makers are aware of the issue. Many have called for efforts to replicate Silicon Valley, and tried to use other successful strategy. These ideas, as interesting as they are, can only come to fruition decades from now. Silicon Valley is the product of over half a century of development. Its foundations include massive levels of high-skilled immigration, well-funded, cosmopolitan, dynamic and competitive private and public universities, a very liquid labor market, a vibrant venture capital industry, an

Enormous Pentagon R&D budget and the common law. Japan's chances of duplicating another Silicon Valley are therefore rather low.

There are however soft good and service industries in which India is *already* very strong, such as Wipro, Infosys. These are "low hanging fruits," which offer far better prospects for Indian industry internationally than competing with Silicon Valley. We argue that India has to adopt legislation in several areas in order to address the inefficiencies described above and capitalize on its innovation capabilities in these sectors: strengthening antitrust and intellectual property rights enforcement; improving the legal infrastructure; lowering barriers to entry for foreign investment and facilitating the development of the venture capital sector.

2. THE NEW ORDER OF INDUSTRIAL INNOVATION: ECOSYSTEMS AND PLATFORMS

The rapid development of computer-based industries since the second half of the twentieth century has spearheaded and accelerated the shift from vertically integrated, hierarchical industry structures to horizontal structures, composed of platform-centered ecosystems. While this change has been pervasive throughout most sectors of the economy, it has been most salient in technology industries with short product life-cycles. As a result, the nature of competition and competitive advantage has shifted *away* from pursuing quality through tightly integrated vertical "stacks" of components and *towards* building scalable "multi-sided platforms" (cf. Evans Hagiu and Schmalensee (2006).

Analytical Engineering software Industries: the quintessential ecosystem

Ecosystems are most simply defined as constellations of firms producing engineering software's consists complementary products or essential components of the same system. Today's such industry is the archetype of modern ecosystems. There are two critical components, the operating system and the solver, which are controlled by two companies –Romex,LS Dyna. Ecosystem leadership is defined by three elements: i) control of the key standards ; ii) control of the nature and timing (pace) of innovation throughout the industry and iii) ability to appropriate a large share of the value created by the entire ecosystem.

It is important to emphasize that the horizontal ecosystem that we know today has little to do with the structure of the engineering software industry at its beginning in the early 1980s. And even less to do with the structure of the computer industry in the early 1950s. At that time, each computer was on its own island. Only large corporations, government agencies, and universities bought mainframe computers, and they did so from a few large companies.

Economic drivers of vertical crumbling and environment structures

While at first glance it may seem that every step of vertical crumbling in the Engineering software industry was a strategic decision involving real tradeoffs that could have gone either way, there is a clear sense in which the process of vertical disintegration was inevitable due to technological and economic factors beyond the control of any single actor. And this process has occurred (or is occurring) in many other technology industries.

There are three fundamental forces driving vertical disintegration. First, rapid technological progress leads to economies of specialization.

The second important factor in the evolution of technology-based industries is modularity and the emergence of standards (cf. Baldwin and Clark 1999).

The third and final driver of vertical disintegration is increasing consumer demand for product variety. The vertically integrated model works well for one-size-fits-all solutions.

Thus, ecosystems are the natural consequence of vertical disintegration. They have become the most efficient market-based solution to the problem of producing complex systems in a large variety of technology-intensive industries, satisfying a large variety of end user demands and maintaining a sufficiently high rate of innovation throughout the system. It is important to emphasize however that not every industry will move towards horizontal, platform-centered ecosystems.

3. HISTORICAL BACKGROUND ON INDIAN'S INNOVATIVENESS

In order to achieve a better understanding of innovation ways, it is helpful to provide a short historical perspective on their evolution.

Opening to foreign traffic

Britain, as the leader of the Industrial Revolution, entered the industrial age on its own terms. India & Japan had a radically different experience. To preserve their hegemony over the country, the House of Tokugawa, which established the Edo shogunate (1600-1868), banned almost all foreign trade after the 1630s. Despite its isolation the country was not backward. It possessed a well-functioning bureaucracy and a good transportation network; there was no banditry, and literacy was high by the standards of the age.

Authorized systems

A second factor with a significant bearing on innovation is the lawful system. In new industries where the absence of laws governing businesses leads to officials opposing their veto to new projects on the grounds that they are not specifically authorized by existing regulations. Thus entrepreneurs, and businesses in general, are more likely to face legal and regulatory hurdles in code law jurisdictions where adapting the law to new technologies, new financial instruments, and other innovations, is more cumbersome.

4. CASE STUDY

The following case studies are designed to illustrate the two key types of inefficiencies which result from the mismatch between prevailing forms of industrial structures (vertically integrated and hierarchical) and the nature of innovation in new economy industries such as software and the Internet, where building horizontal platforms and ecosystems is paramount.

First, the vertical structures can stifle some forms of innovation altogether (e.g. software). Second, they can limit valuable innovations to the domestic users. From these case studies, we can draw some lessons on the steps which India could take to enhance its capabilities to harness its strong innovative capabilities.

4.1. Analytical engineering Software

Given the degree of high-technology penetration in the Indian e economy and the international competitiveness of the engineering Software, the weakness (indeed, the non-existence) of Indian packaged software industry looks puzzling. Indeed, engineering software production has historically suffered from chronic fragmentation among incompatible platforms provided by large systems integrators

There are two root causes for this peculiar situation: a strong preference for customized engineering software development by suppliers and customers.

These two factors have perpetuated a highly fragmented, vertically integrated and specialized computer industry structure, precluding the emergence of modular systems and popular software platforms (e.g. Romax,PTC). In turn, the absence of such platforms has thwarted the economies of scale needed to offer sufficient innovation incentives to independent software developers, which have played a critical role in the development of the IT industry in the United States.

The dominance of customized systems and its origins

Rapidly, engineering software development companies found it profitable to lock-in its customers by supplying highly customized software, often free of charge, which meant that clients had only one source of upgrades, support and application development. Over time, many of the former U.S. partners were forced to exit the industry due to intense global competition from IBM. However, their licensees remained and perpetuated their incompatible systems.

The new industry became prominent with the workstation and PC revolutions in the early 1980s, which brought computing power into the mainstream through smaller, cheaper, microprocessor-based machines. An important consequence was the great potential created for software/hardware platforms, which a handful of companies understood and used to achieve preeminence in their respective segments.

The prevalence of closed, proprietary strategies prevented the economies of scale necessary for the emergence of a successful, standalone engineering software industry. No single computing platform became popular enough with users to provide sufficient innovation incentives for packaged application software.

Government policies

The second important factor which has shaped the evolution of engineering software industry is the longstanding bias in favor of hardware over software.

Other factors

Comparative studies of the U.S. and India engineering software industries also mention several other factors that further explain the phenomenon described above. One is the relative underdevelopment of the venture capital market for technology-oriented start-up companies in India compared to the United States, where venture capital had widely supported the emergence of successful small and medium-size software companies.

This gap, however, has been recently narrowed due to policies designed to improve the availability of venture capital to technology firms. Another factor is the Indian system of "life time employment" for regular employees of large businesses, which results in low labor mobility and is quite compatible with the "closed garden" approach to technological innovation. By contrast, high labor mobility has been a crucial driving force behind the technological innovation, which is based on spillovers, transfers, cumulative inventions and a high degree of modularity. The latter model seems to have been more appropriate for creating a vibrant software industry. "Life time employment" is losing ground, but the top managerial ranks of large Japanese corporations remain dominated, and often monopolized, by those who have been with the company since they joined the labor market.

5. DISCUSSION AND STRATEGY EXECUTIONS

As we have noted, Indian industry is surely capable of innovation but it operates in an environment that is not conducive to mobilizing the innovative capabilities of soft goods and service sector businesses, especially in the international arena. Fundamentally, this stems from a mismatch between the country's vertical and hierarchical industrial organizations and the horizontal, ecosystem-based structures prevailing in "new economy" sectors.

As we have argued in section 2 however, the latter have been the far more effective form of "industry architecture" for driving innovation in most of today's technology industries, on which services and soft goods rely.

This mismatch makes the current organization and performance of some Indian sectors appear as stuck in inefficient equilibria. Indeed, one important common denominator across the three industry case studies presented above is the prevalence of self-reinforcing mechanisms which have locked the corresponding sectors into highly path-dependent structures. The weakness (or, more precisely, virtual absence) of analytical engineering software industry has been perpetuated by large system suppliers which have locked their customers from early on into proprietary and incompatible analytical engineering software systems; as a result, these customers have always found it in their best interest to deepen the customization and rely on the same suppliers for more proprietary systems. Absent any external shock (or public policy intervention), it is hard to see a market opportunity for potential Japanese software companies.

The second aspect that needs to be emphasized is that the hierarchical forms of industrial organization that prevail in some Japanese sectors are *not* uniformly less innovative than the more horizontal modes of organization. By subordinating everyone to the “ecosystem leaders” (i.e. the companies at the top of the industry structure) however, hierarchical structures can create large inefficiencies by preventing companies at lower levels of the hierarchy from capitalizing on their innovations outside of the vertical structure – in particular, in global markets.

Strategy measures to from industry structures

Extrapolating from the above case studies, there are several initiatives which Indian policy-makers could take to remedy the issue of inefficient industry structures.

First and also part of the legal system remedies is enforcement of intellectual property rights (IPRs). This is perhaps the key institutional ingredient for innovation, especially in the soft goods sector. For many businesses in these industries IPRs are their main asset, in some cases their only one. Indian’s weak IPR regime undermines the balance sheet of innovative companies, makes it harder for them to obtain financing, and diminishes their bargaining power.

First, despite recent improvements, Indian remains deficient in the enforcement of anti-trust. Monopolies and oligopolies are particularly nefarious in industries where there is a need for constant and fast innovation. The self-reinforcing mechanisms we described earlier (augmented by the importance of established, long-term relationships in India) creates high barriers to entry in most Indian industries which protect incumbents and make it harder for India e innovators to succeed.

Second the development of new industries based on ecosystems which are not defined by hierarchical relationships requires a strengthening of the legal system in other fields beside antitrust. In the more flexible and non-hierarchical ecosystems which define many of the innovative industries we have discussed, there is a need for effective third-party enforcement.

Finally, a necessary policy measure is to further open the country to foreign investment. The difficulty which foreign investors face in India deprives Indians innovative companies of equity partners and business partners, further locking them into domestic ecosystems which may stifle their development. It also makes it harder for Indian companies to succeed overseas, since foreign investors could help them capture markets outside of India.

6. CONCLUSIONS

India presents a unique case of industrial structures which have produced remarkable innovations in certain sectors, but which seem increasingly inadequate to produce innovation in modern technology industries, which rely essentially on horizontal ecosystems of firms producing complementary products. As our cases studies of shows two potential sources of inefficiencies that this mismatch can create. First, the Indian hierarchical industry organizations can simply “lock out” certain types of innovation indefinitely by perpetuating established business practices: this is the case with software, an industry from which India is almost entirely absent. Second, even when the vertical hierarchies produce highly innovative sectors in the domestic market is the exclusively domestic orientation of the “hierarchical industry leaders” can entail large missed opportunities for other members of the ecosystem, who are unable to fully exploit their potential in global markets.

We have argued that improving Indian’s ability to capitalize on its innovations will require certain policy measures, aiming to alter legislation and incentives that stifle innovation: strengthening the enforcement of antitrust and intellectual property rights, strengthening the legal infrastructure, lowering barriers to entry for foreign investment. On the other hand, private sector initiative is also critical, which requires the development of the venture capital sector, a key and necessary ingredient for stimulating innovation in modern industries.

Understanding the nature of the new innovation-producing ecosystems which have developed in industries associated with the new economy will help Indian policy-makers and managers develop better ways for business to take advantage of its existing strengths to expand innovation beyond the industrial sphere into the realm of internationally-competitive enterprises.

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CRYPTOGRAPHY: THE ESSENTIAL PART OF MODERN ERA

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ABSTRACT

In today's era cryptography is an important part of preventing private data from being stolen. It can be used to authenticate that the sender of a message is the actual sender and not a fraud. For sending the message many types of algorithms are used so that a message can send without any alteration. It ensures confidentiality because only a reader with the correct deciphering algorithm or key can read the encrypted message. Finally, it can protect the integrity of information by ensuring that messages have not been altered. Many types of cryptography algorithms are used but in this paper we introduce public key cryptography for strong authentication.

KEYWORDS

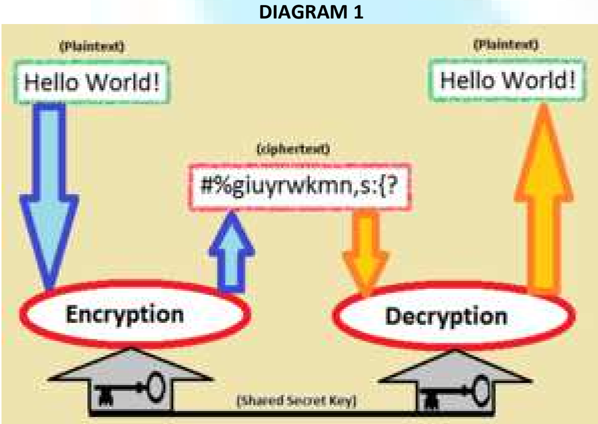
cryptography, private data.

INTRODUCTION

Cryptography comes from Greek words meaning "hidden writing". It is the science of hiding information so that unauthorized users cannot read the message. It converts readable data or cleartext into encoded data called ciphertext. This process is called encryption. Decryption is the reverse, in other words, moving from the unintelligible cipher text back to plaintext. A cipher (or cypher) is a pair of algorithms that create the encryption and the reversing decryption. By encryption and decryption the original message can be send to the receiver. In this paper firstly we describe about cryptography. In second part of paper three types of algorithms that are used for encrypt or decrypt the messages are discussed. Last part of the paper tells about public key encryption.

This diagram gives the brief idea about cryptography.

DIAGRAM 1



[2]

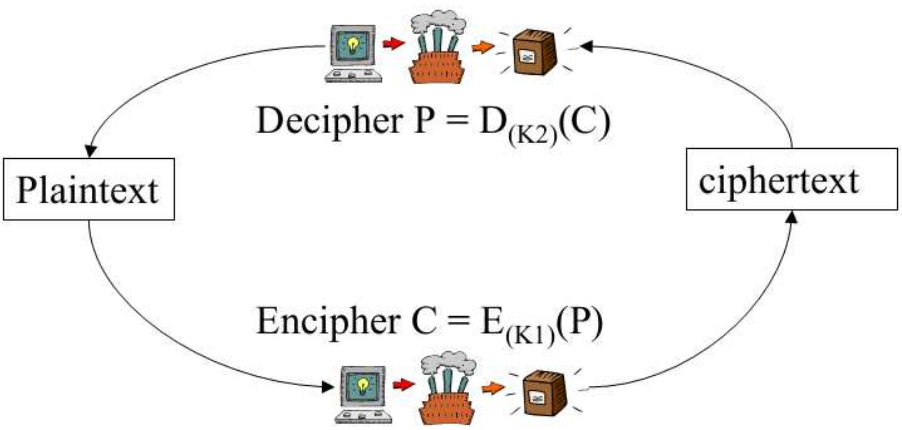
There is one more word that is frequently used in encryption and decryption is KEY. Some algorithm used public key and some used private key.

Public key:- This is the key that is known to everyone.

Private Key:- This is the key that is known only to receiver and sender.

Below the diagram shows how the plaintext is converted into ciphertext and then again decrypted using key.

DIAGRAM 2



[1]

Cryptography can be divided into several areas of study. Three types of algorithms used for encryption are:

- Hashing
- Symmetric, also called private or secret key

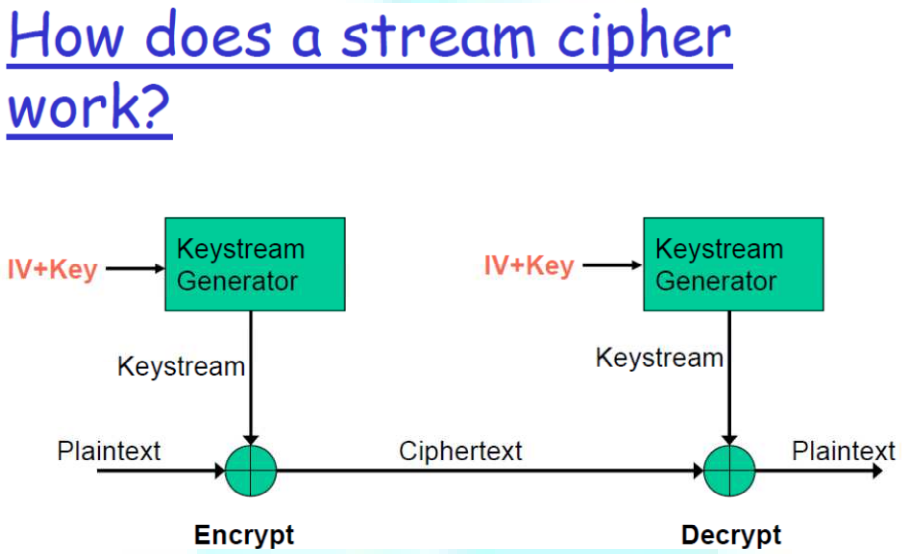
- Asymmetric, also called public key

Hashing:-Cryptographic hash functions are the cryptographic algorithms that take a message of any length as input, and output a short, fixed length hash which can be used in (for example) a digital signature. A hashing algorithm is used to create an irreversible code of a piece of information. This hashed code is called a *hash* or *digest* and is unique to the information and can be used as a signature for the data. A hash is used for comparison purposes to make sure data has not been changed; thus it ensures the integrity of a message.[3]For the good hash functions, the thing is sure that an attacker cannot find two messages that produce the same hash. MD4 is a long-used hash function which is now broken by the hackers. MD5, a strengthened variant of MD4, is also widely used but broken in practice.[2] The U.S. National Security Agency developed the Secure Hash Algorithm series of MD5-like hash functions. SHA-0 was a flawed algorithm that the agency withdrew. SHA-1 is widely deployed and more secure than MD5, but cryptanalysts have identified attacks against it. The SHA-2 family improves on SHA-1, but it isn't yet widely deployed. Thus a hash function design competition is underway and meant to select a new U.S. national standard, to be called SHA-3, by 2012.Message authentication codes (MACs) are much like cryptographic hash functions, except that a secret key can be used to authenticate the hash value upon receipt. [2]

Symmetric Key Cryptography:-Symmetric key cryptography refers to those encryption methods in which both the sender and receiver share the same key (or, less commonly, in which their keys are different, but related in an easily computable way). This was the only kind of encryption publicly known until June 1976. Symmetric key ciphers are implemented as either block ciphers or stream ciphers. A block cipher enciphers input in blocks of plaintext and the stream cipher uses individual characters as the input form.

Stream Cipher:-Stream cipher is more suitable for binary strings.

DIAGRAM 3

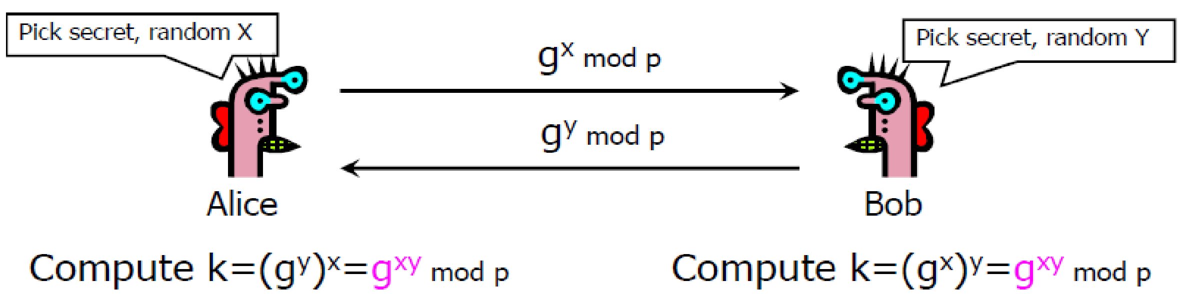


Stream ciphers, in contrast to the 'block' type, create an arbitrarily long stream of key material, which is combined with the plaintext bit-by-bit or character-by-character, somewhat like the one-time pad.[4] In a stream cipher, the output stream is created based on a hidden internal state which changes as the cipher operates. That internal state is initially set up using the secret key material. RC4 is a widely used stream cipher.[4]

Block Cipher:- Block ciphers can also be used as stream ciphers. The Data Encryption Standard (DES) and the Advanced Encryption Standard (AES) are the two main block cipher designs. These have been designated cryptography standards by the US government. After the adoption of AES design, DES's designation was finally withdrawn. Despite its deprecation as an official standard, DES remains quite popular and it is used across a wide range of applications from ATM encryption to e-mail privacy and secure remote access. After that many other block ciphers have been designed and released, with considerable variation in quality. Many have been thoroughly broken, such as FEAL.

Public-Key Cryptography:- In Symmetric-key cryptosystems the system uses the same key for encryption and decryption of a message, though a message or group of messages may have a different key than others. A major disadvantage of symmetric ciphers is the key management necessary to use them securely. Each distinct pair of communicating parties must share a different key, and possibly each cipher text exchanged as well. The number of keys required increases as the square of the number of network members, which very quickly requires complex key management schemes to keep them all strong and secret. So the management of key is the main problem in symmetric key cryptography. In a groundbreaking 1976 paper, Whitfield Diffie and Martin Hellman proposed the notion of *public-key* (also, more generally, called *asymmetric key*) cryptography in which two different but mathematically related keys are used—a *public* key and a *private* key.[2] A public key system is so constructed that calculation of one key (the 'private key') is computationally infeasible from the other (the 'public key'), even though they are necessarily related. Instead, both keys are generated secretly, as an interrelated pair.[2] In public-key cryptosystems, the public key is freely distributed, while its paired private key must remain secret. In a public-key encryption system, the *public key* is used for encryption, while the *private* or *secret key* is used for decryption. Diffie and Hellman did widespread academic efforts in finding a practical public-key encryption system. But this race was finally won in 1978 by Ronald Rivest, Adi Shamir, and Len Adleman, whose solution has since become known as the RSA algorithm.[2]The Diffie–Hellman and RSA algorithms, in addition to being the first publicly known examples of high quality public-key algorithms, have been among the most widely used.[2] Others include the Cramer–Shoup cryptosystem, ElGamal encryption, and various elliptic curve techniques.[2]

DIAGRAM 4



[8]

Public-key cryptography can also be used for the implementation of digital signature schemes. A digital signature is significant of an ordinary signature. They both have the characteristic of being easy for a user to produce, but difficult for anyone else to forge. Digital signatures can also be permanently tied to the content of the message being signed. That's the reason they cannot then be moved from one document to another, for any attempt will be detectable. In digital signature schemes, there are two algorithms: one for *signing*, in which a secret key is used to process the message (or a hash of the message, or both), and one for *verification,* in which the matching public key is used with the message to check the validity of the signature. RSA and DSA are two of the most popular digital signature schemes.[2] Digital signatures are central to the operation of public key infrastructures and many network security schemes (e.g., SSL/TLS, many VPNs, etc.). These algorithms are most often based on the computational complexity of "hard" problems, often from number theory. For example, the hardness of RSA is related to the integer factorization problem, while Diffie–Hellman and DSA are related to the discrete logarithm problem. More recently, *elliptic curve cryptography* has developed in which security is based on number theoretic problems involving elliptic curves.[2] Because of the difficulty of the underlying problems, most public-key algorithms involve operations such as modular multiplication and exponentiation, which are much more computationally expensive than the techniques used in most block ciphers, especially with typical key sizes.[2] As a result, public-key cryptosystems are commonly hybrid cryptosystems, in which a fast high-quality symmetric-key encryption algorithm is used for the message itself, while the relevant symmetric key is sent with the message, but encrypted using a public-key algorithm. Similarly, hybrid signature schemes are often used, in which a cryptographic hash function is computed, and only the resulting hash is digitally signed.[2]

CONCLUSION
Secrecy is at the heart of cryptography. Security is at times viewed as a standalone component of a system's architecture, where a separate module provides security. To achieve a secure system, security must be assimilated into every component, since components designed without security can become a weak point for attacker to attack. In early cryptography, there was a confusion about what was to be kept secret. But in modern era Cryptography this problem is about to finish. Public Key Cryptography (PKC) has been the enabling technology underlying many security services and protocol sin traditional networks such as the Internet. After Diffie-Hellman PKC, in the context of wireless sensor networks, elliptic curve cryptography (ECC), one of the most efficient types of PKC, is being investigated to provide PKC support in sensor network applications so that the existing PKC-based solutions can be exploited.

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EMPLOYEE PRODUCTIVITY MANAGEMENT SYSTEM ADOPTED BY THE HOSPITALITY INDUSTRY IN INDIA

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ABSTRACT

In the recent years, the word productivity has gained popularity in the business world. The problem of scarcity has a deep rooted impact on the economies of each and every business unit. Almost all organizations, either reactively or proactively, have become serious on their productivity. Although it looks simple from the face of it, productivity management is a big challenge to organizations especially when the product is in the form of a service. The characteristics of service industry make productivity management in such industries more difficult and challenging. Hospitality industry being a part of such a service industry faces a similar problem. However, the hospitality industry cannot just sit over the problem and thus have to find a gateway to deal with the issues of productivity management in hotels. This study is aimed at analyzing the Productivity Management System adopted and implemented by the hospitality industry with an objective to identify the challenges in measuring productivity in the Hotels and to identify various methods adopted by the them to measure the employee productivity. In an effort to do so, a survey in the form of a questionnaire and interviews was conducted from the sample comprising of 100 hotel employees from the management and the associates categories to understand their views on the entire process. The responses received were represented graphically and analyzed using basic analytical tools.The findings of his research states that although the industry is concerned with the issues related to employee productivity, the implementation of the productivity management system is not very effective. The major reasons contributing to the ineffectiveness of the system are lack of management will, lack of common parameters of productivity measurement and intangible nature of the product of the industry i.e. "Service".

KEYWORDS
Hospitality Industry, Hotels, Employee Productivity, Service Industry, Productivity Management System, Hotel Industry.

1. INTRODUCTION

In the recent years, the word productivity has gained popularity in the business world. The problem of scarcity has a deep rooted impact on the economies of each and every business unit. Almost all organizations, either reactively or proactively, have become serious on their productivity. Moreover, in today's world of cut-throat competition, every organization is striving hard to have an upper edge over their competitors. The organizations have realized that enhancing their productivity goes a long way in success of their business operations and thus productivity has become a matter of great concern amongst them.

"**Productivity** is an average measure of the efficiency of production. Productivity is a ratio of production output to what is required to produce it (inputs of capital, labor, land, energy, materials, etc.). The measure of productivity is defined as a total output per one unit of a total input." (Source – Wikipedia)

Although it looks simple from the face of it, productivity management is a big challenge to organizations especially when the product is in the form of a service. The characteristics of service industry make productivity management in such industries more difficult and challenging. Hospitality industry being a part of such a service industry faces a similar problem. However, the hospitality industry cannot just sit over the problem and thus have to find a gateway to deal with the issues of productivity management in hotels.

Although there are various inputs that needs to be studied under productivity management, this study concentrates on labor as a parameter of measurement of productivity. Thus we are indeed talking of labor productivity or employee productivity or workforce productivity.

Employee Productivity Management is series of interlinked activities or tasks right from formulating a productivity management model to suit the organization to taking measures in enhancing the employee productivity. This study aims at analyzing the productivity management system adopted by the hotels and the challenges faced by them is implementation of the same.

2. LITERATURE REVIEW

1. Juan Gabrie, (2010) used time-series techniques to estimate the long-run relationship between real wages and labour productivity in the Mexican tourism. The finding shows that the average labour productivity depends positively on real wage, and are weakly exogenous and causes labour productivity. Moreover, the impulse-response function shows that a positive shock in real wages produces a small negative effect in productivity for two years followed by a large positive one.
2. Christine A. Witt, (2010) discussed problems of measuring productivity, together with specific reasons for low productivity in the hotel sector. It is suggested that increased usage of operations management techniques by hotel management is likely to result in improved productivity, and various examples are presented of situations in which these techniques can be successfully employed.
3. Peter Jones, (2009) examining the level of productivity in the housekeeping departments in a chain of 45 hotels. The paper reviews the concept of productivity and the issues relating to its measurement, before reviewing previous studies of productivity in the hotel sector. A number of factors are identified that appear to affect productivity performance. The paper concludes that there is no significant difference in productivity levels according to the size, location, demand variability or age of the hotel, thereby refuting evidence from some prior studies.
4. Osman M. Karatepe, (2008) examined the effects of negative affectivity (NA) and positive affectivity (PA) on work–family conflict and family–work conflict and the effects of both directions of conflict on marital satisfaction and turnover intentions. The findings of the study indicated that family–work conflict has a detrimental impact on marital satisfaction. However, this study provided no empirical support for the relationship between work–family conflict and marital satisfaction.
5. Ching-Fu Chen, (2007) analyzed the cost efficiency of Taiwan's international tourist hotel sector. A stochastic cost frontier function with three inputs (i.e. labor, food and beverage, and materials) and one output as the total revenue is specified and used to estimate hotel efficiency. The results reveal that hotels in Taiwan are on average operating at 80% efficiency.
6. Gunjan M. Sanjeev, (2007) provided exploratory insights on measurement of efficiency of the hotel and restaurant companies operating in India. The study also explores whether there is a relationship between the efficiency and size of the hotel and restaurant companies. The study identifies the top performers in this sector. Also, managers get important insights for their strategic and operational decisions to improve performance.
7. Carlos Pestana Barros, (2005) discusses, by means of data envelopment analysis, the efficiency of individual hotels belonging to the Portuguese state-owned chain, Pousadas de Portugal, which is managed by the enterprise, ENATUR. By identifying the efficient hotels in a sample, the slacks in inputs and

outputs of the inefficient hotels and the peer group of efficient hotels, the data envelopment analysis stands out as one of the most promising techniques to aid the improvement of efficiency. Managerial implications arising from this study are also considered.

8. Hasan Kilic, (2005) report on an empirical research study which investigated the factors influencing productivity in hotels in Northern Cyprus. According to the research findings staff recruitment, staff training, meeting guest expectations, and service quality are the main productivity factors in hotels; while crises, technology, marketing, and forecasting are ranked relatively low.
9. Robert Johnston (2005) provides a structure for analyzing productivity in service organizations by distinguishing between operational and customer productivity. The authors also identified some of the problems in measuring productivity, especially in a service setting, and then use a few examples to illustrate the sometimes counterintuitive relationship between operational and customer productivity.
10. Marianna Sigala, (2005) aimed to illustrate the value of stepwise data envelopment analysis (DEA) for measuring and benchmarking productivity. The issues and problems regarding productivity measurement as well as the advantages of using DEA in productivity measurement are analyzed. Six inputs and three outputs are identified as the factors affecting rooms division efficiency in three star hotels.
11. Bo A. Hu, (2004) proposed Data Envelopment Analysis (DEA) as an effective tool to measure labor productivity of hotels. Using the data collected from the hotels in the State of California, the study applies DEA to calculate the labor productivity score of each sampled hotel. The internal and external determinants of labor productivity are examined. Implications of the study's results are also discussed.
12. James R. Brown, (2000) gained insights as to how managers can improve the productivity of their service businesses. The context of the study was the hotel industry, in which the authors examined empirically the impact of labor and capital as well as selected strategic and organizational inputs on the dollar value added by the hotel. They found that regardless of hotel size, value added rose significantly with an increasing number of employees. Expanding the number of rooms available for sale as well as upscale positioning generated significantly greater value added for medium-sized hotels.

3. OBJECTIVES OF THE STUDY

1. To explore the employee productivity management system followed in Hotels.
2. To identify the challenges in measuring productivity in the Hospitality Industry.
3. To identify various methods adopted by the hotels to measure the employee productivity and to check its suitability.
4. To analyze the effectiveness of the Productivity Management System followed in hotels and the satisfaction level of the employees on the same.

4. LIMITATIONS OF THE STUDY

1. This study is purely based on the information given by the employees and management of sample hotels.
2. The study is conducted in the current scenario and the opinions, perception and expectations of the respondents may differ with time.
3. The study does not differentiate respondents on basis of their demographic factors which may have an influence of their perception thereby identifying scope for further research.

5. RESEARCH METHODOLOGY

COLLECTION OF DATA

The data required for the research was collected using the following techniques:

PERSONAL INTERVIEWS

The researcher conducted personal interviews with employees and Human Resource managers of reputed hotel brands to explore the productivity management system followed in their organizations.

QUESTIONNAIRE

A questionnaire bearing straight forward and relevant questions was drafted and handed over to the sample to obtain their responses.

SAMPLING TECHNIQUES

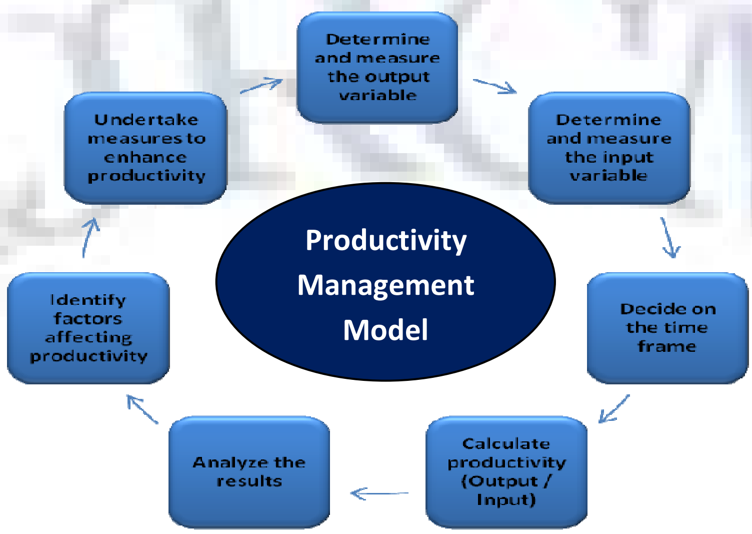
The population being “employees of Hotels” is more of less homogeneous in nature since the characteristics and service conditions of the industry are almost similar in nature throughout the population. With due consideration to this fact, a sample comprising of 100 employees representing the ‘Manager’ & “Associates” categories of various hotels from five star to serviced apartments was selected on random basis to conduct the study.

6. OBSERVATIONS & DISCUSSIONS

Labor is the costliest and most critical variable expense in the hospitality business. The most commonly used parameter to calculate the return on labour investment is evaluation of the “Labour Productivity” of the Organisation. It is imperative that hospitality managers learn to design and effectively implement the employee productivity model that suits the best to their hotel. Once the productivity model is developed it becomes a blue print of the Productivity management process.

6.1 EMPLOYEE PRODUCTIVITY MANAGEMENT MODEL

A model is nothing but a skeleton or a flowchart of inter linked activities that becomes a guideline for developing any process. A model should be flexible enough to be modified as per the needs and requirements of the process.



6.2 CHALLENGES FACED BY THE HOSPITALITY INDUSTRY IN IMPLEMENTATION OF EMPLOYEE PRODUCTIVITY MANAGEMENT SYSTEM

Hospitality industry is a part of service industry and is characterized by certain features that create challenges in designing and implementation of employee productivity management system. These features or characteristics needs to be studied in detail for the effective development of a productivity management system. These features are briefly discussed below:

1. Intangible Product (Characteristics of Service Industry):

While the term productivity is most often associated with the goods-producing-industries, it is critically important to monitor and manage this aspect of performance in the hospitality sector as well. Productivity is a ratio between input and output at a given quality level. The inputs in the hospitality industry may be in the form of man, money material & machine. All these components can be quantified or measured but this is just half done because the second aspect in productivity management is the output or the product itself and their lies the major challenge for the hospitality industry because its product is intangible in nature which cannot be monitored or easily measured. The product of this industry is service and its measurement is hidden in the perception of its end users that is the customers which in the hotel language are termed as "Guests" Thus intangibility of the product of the hospitality industry is the biggest hurdle in the productivity management process in this industry. Service as an output product cannot be quantified or mathematically measured and thus as per the above mentioned formula of productivity measurement, the ratio of input and output cannot be easily established. The only way to make measurement of productivity in the hospitality industry possible is to make its output measurable and this is the major challenge in front of the industry.

2. Lack of Knowledge about Productivity Management:

The management of hotel industry basically posses expertise in the technical area of hotel operations. They are the masters in the field of hospitality. However, they lack the scientific and technical knowledge required for implementation of productivity management system in their hotel. Moreover, due the hectic and busy schedule of the managers, they are discouraged to acquire any professional training in the area of productivity management. Even if a person who posses the required knowledge is hired, due to his varied duties he is not able to devote sufficient attention towards the said issue.

3. Lack of common parameters of measuring productivity.

As mentioned earlier, measurement of productivity in the hospitality industry is a challenging task. However, experts have suggested a few parameters on which the employee productivity can be measured in hotels. These parameters differ from each other and different parameters have to be used for measurement of productivity in different operational areas of hotels depending upon its suitability. Thus to measure the productivity of the entire hotel a combination of all the parameters have to be used thereby making the process more complex. Thus lack of common parameters of measurement of productivity is a big challenge for the hotel managers.

4. Lack of scientific approach towards labour management.

Hotel managers being originated from the operations, tend to be more inclined towards operational issues. Thus labor management is a lower priority to these operational driven managers. Moreover, their limited knowledge and scientific approach towards labor management becomes a biggest hurdle in productivity management.

5. Lack of management initiative.

Although productivity management is an important management task, hotel managers are not very keen on the same. As discussed earlier, due to the various challenges in implementing the same, managers tend to tackle the issue halfheartedly. Thus lack of management initiative is another challenge of the hospitality industry with regards to productivity management.

6. Difficulties in measuring customer satisfaction.

The most suitable parameter to measure employee productivity in the hospitality industry revolves around the output of satisfied customers. Thus before calculating the productivity, one has to measure the satisfaction level of the hotel customers. This itself is a very complex task since every customer has a different perception of being satisfied and measuring the comparative satisfaction level of all the customers is a very difficult task thereby creating a challenge in productivity management.

7. Diverse operations.

The operations of the hospitality industry are diverse in nature. Thus every department is operationally different from each other. Since the nature of work, skill sets required, manpower requirement is different for every department, one cannot have uniform parameters of measuring employee productivity thereby making productivity management in hotels more difficult.

6.3 METHODOLOGY ADOPTED TO MEASURE EMPLOYEE PRODUCTIVITY IN HOTELS

I. BASIS OF REVENUE GENERATION

$$\text{PRODUCTIVITY} = \frac{\text{Total revenue generated per unit of time}}{\text{Total number of employees}}$$

$$\text{PRODUCTIVITY} = \frac{\text{Total food \& beverage revenue generated per unit of time}}{\text{Total number of employees in F \& B Service department}}$$

$$\text{PRODUCTIVITY} = \frac{\text{Total food revenue generated per unit of time}}{\text{Total number of employees in Food Production department}}$$

$$\text{PRODUCTIVITY} = \frac{\text{Total room revenue generated per unit of time}}{\text{Total number of employees in Front Office / Sales department}}$$

II. **BASIS OF TIME FRAME**

$$\text{PRODUCTIVITY} = \frac{\text{Average number of covers served per unit of time}}{\text{Total number of employees in F \& B department}}$$

$$\text{PRODUCTIVITY} = \frac{\text{Average number of check ins handled per unit of time}}{\text{Total number of employees in Front Office Department}}$$

$$\text{PRODUCTIVITY} = \frac{\text{Average number of rooms serviced per unit of time}}{\text{Total number of employees in Housekeeping department}}$$

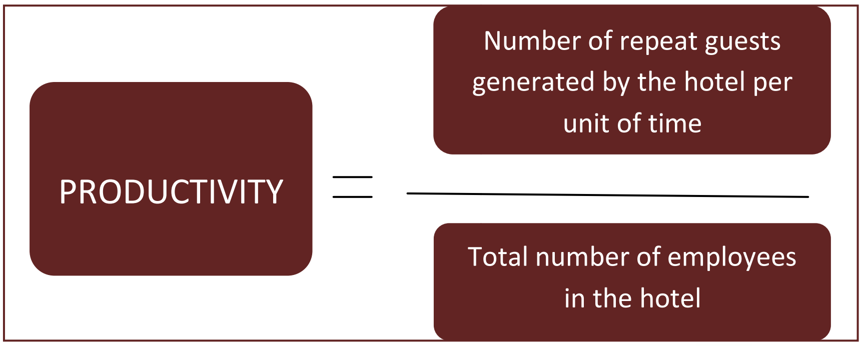
III. **BASIS OF GUEST SATISFACTION**

$$\text{PRODUCTIVITY} = \frac{\text{Average number of guest satisfaction points generated per unit of time}}{\text{Total number of employees in the concerned department}}$$

$$\text{PRODUCTIVITY} = \frac{\text{Number of guest praises / positive feedbacks generated per unit of time}}{\text{Total number of employees in the concerned department}}$$

$$\text{PRODUCTIVITY} = \frac{\text{Number of guest complaints / negative feedbacks generated per unit of time}}{\text{Total number of employees in the concerned department}}$$

IV. BASIS OF REPEAT BUSINESS

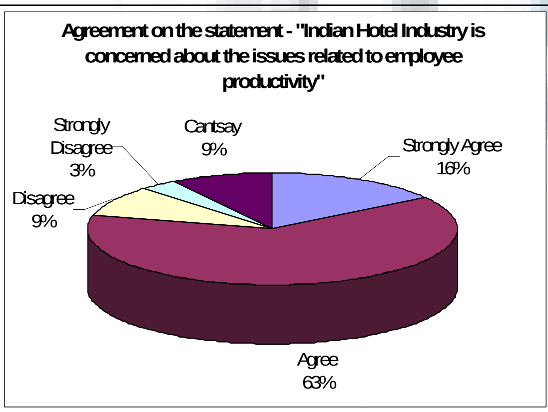


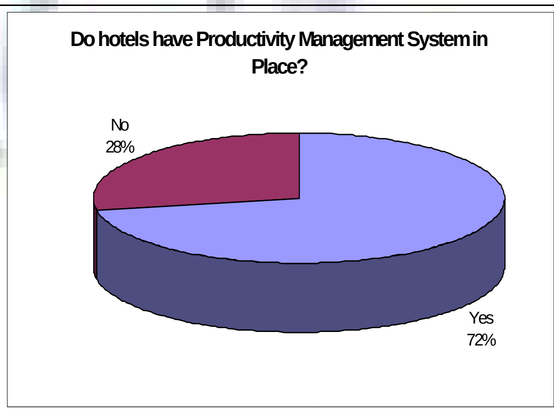
6.6 METHODOLOGY ADOPTED TO ENHANCE EMPLOYEE PRODUCTIVITY IN HOTELS

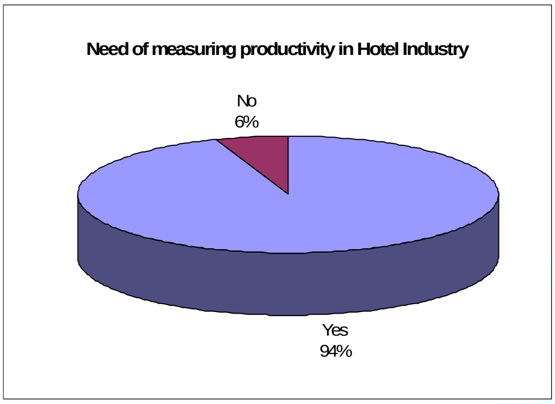
- **Transparent Productivity management system:** The employees should be aware of the Productivity Management System adopted by the organization. The various parameters of measuring the productivity should be clearly defined and adhered to. It a good practice to involve employee representatives in designing the system so as to make the system more effective. When the employees are aware that their productivity is being monitored by the management, they consciously or sub-consciously strive to improvise on the same.
- **Training & Development:** This is the most vital measure of improving employee productivity in any organization. This measure focuses on a positive approach towards the Productivity Management System wherein the employees are empowered to tackle the operational challenges. Training may be in the form of knowledge skills enhancement, adaptation to automation, stress management, general work approach etc. In all its forms, training aims at the holistic development of the employees. A well trained employee is gateway to success of any organization.
- **Motivation:** Along with regular training & development, motivation plays an important role in enhancing the employee productivity. When the employees get a feel that the management is acknowledging their efforts, they go an extra mile to prove their capabilities. The literal meaning of "Motivation" is "To move", thus by motivating the employees, they start moving towards achieving the organizational goals.
- **Fair employment practices:** Adherence to fair employment practices is a key to achieve high levels of employee productivity. Fair employment, in a nut shell comprises of creating a better work place for the employees. It may consist of compensation, work culture, rewards & recognition system, employee welfare, employee relations, etc.

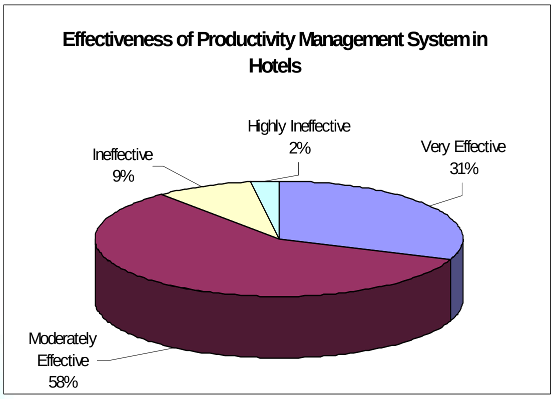
7. FINDINGS

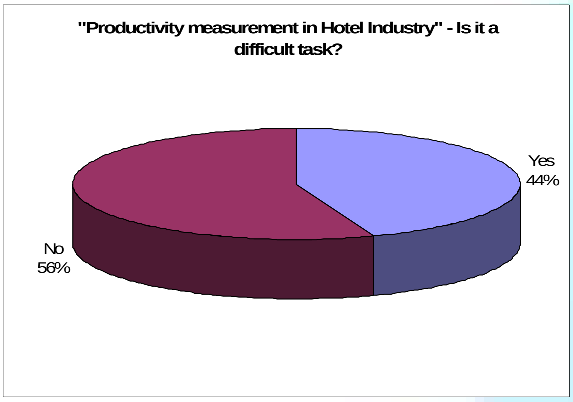
A. PRELIMINARY INFORMATION

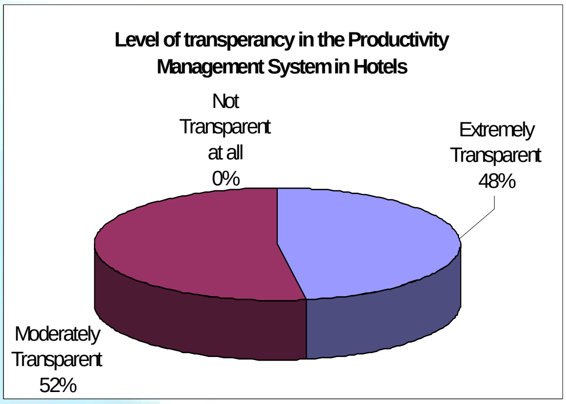




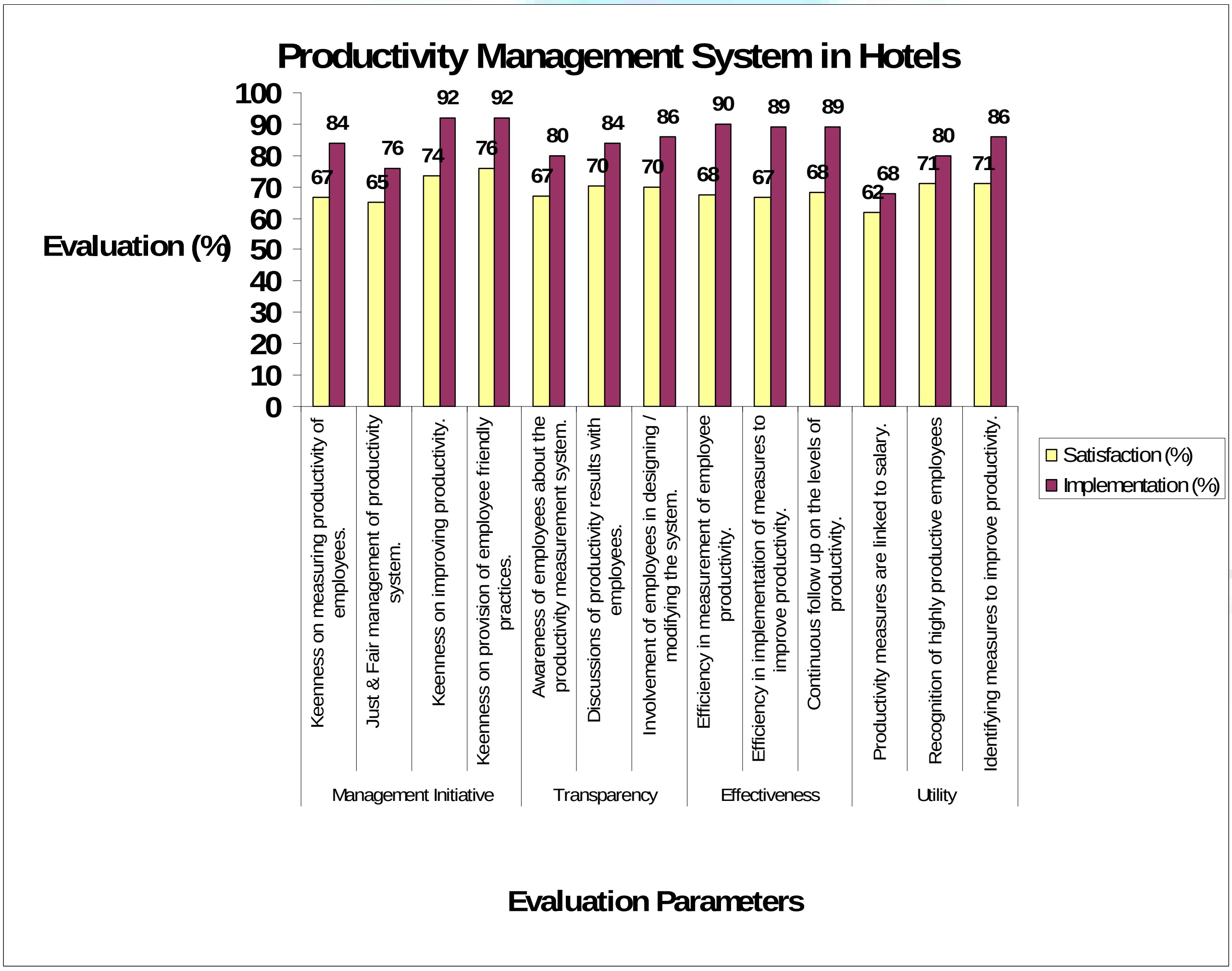




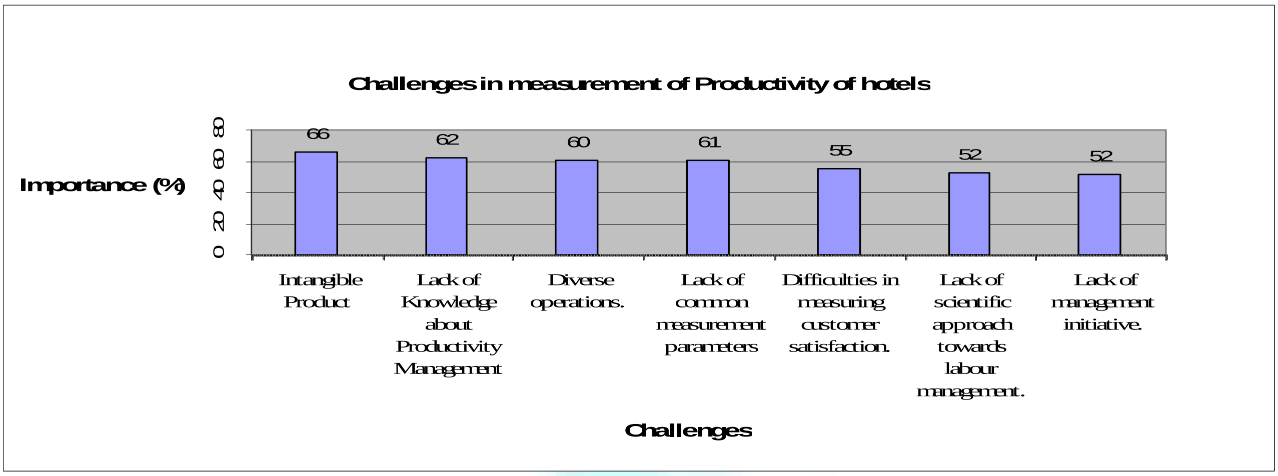




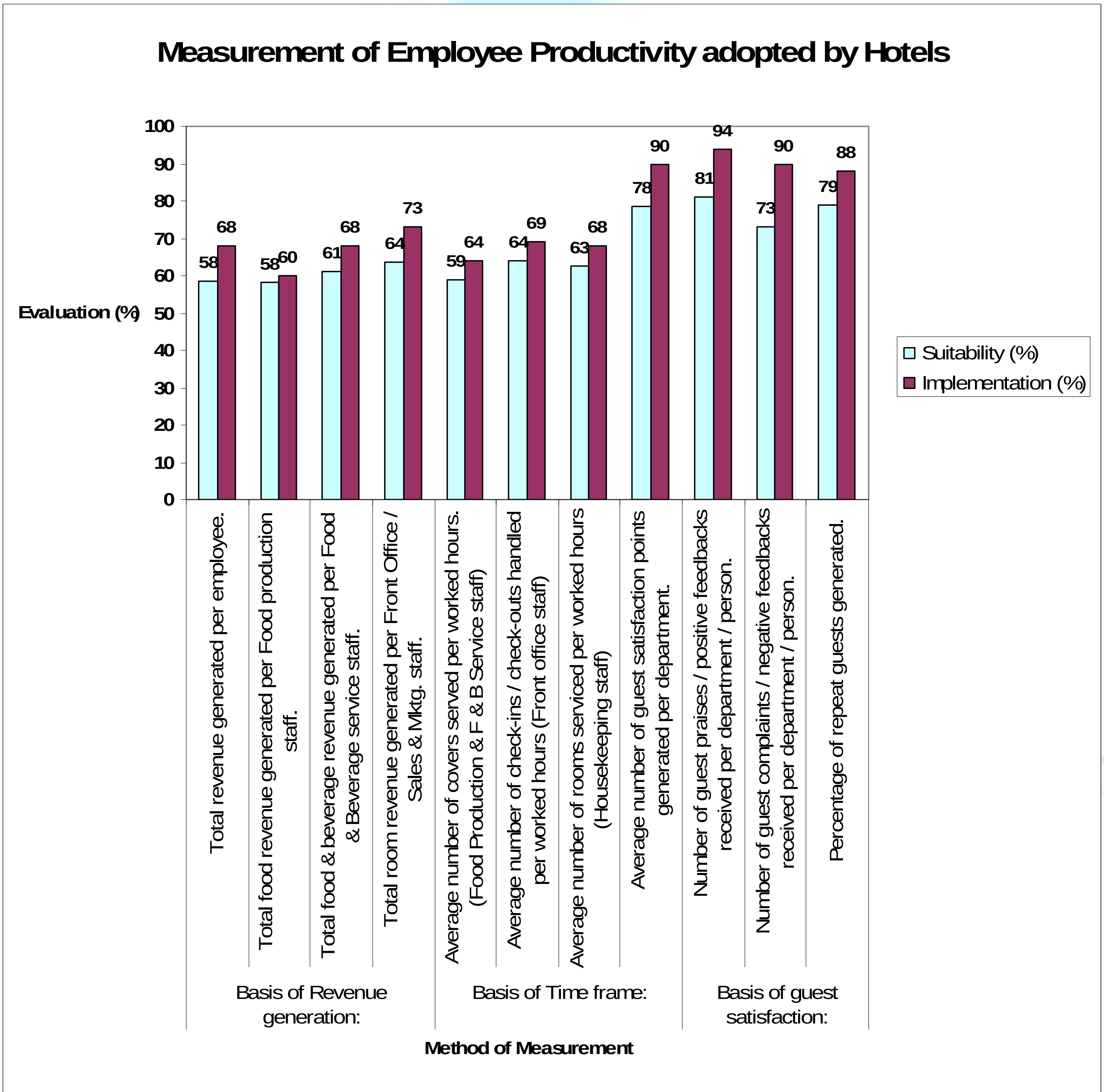
B. PRODUCTIVITY MANAGEMENT SYSTEM IN HOTELS



C. CHALLENGES IN MEASURING EMPLOYEE PRODUCTIVITY IN HOSPITALITY INDUSTRY



D. METHODOLOGY ADOPTED TO MEASURE EMPLOYEE PRODUCTIVITY IN HOTELS



8. CONCLUSIONS

The findings of the research can be concluded as under:

1. The hotel industry is concerned about the issue related to employee productivity and most of the hotels have the Productivity Management System in place, however, its implementation is not very effective.
2. The major reason behind the ineffectiveness of the system is the lack of management will and approach towards implementation of the system.
3. Measurement of productivity in Hotels is a challenging task and the major reason being that the industry is characterized by an "Intangible Product" i.e. "Service" and moreover the management of hotels lacks knowledge about Productivity Management.
4. There are several identified methods of measuring employee productivity based on "Revenue generation", "Time frame" & "Guest Satisfaction". However, the most suitable one is on the basis of "Guest satisfaction" and the same is used by most of the hotels.
5. The utility of the Productivity Management System is limited to identification of shortfalls and the same is not linked to the remuneration of the employees.
6. Employee productivity is measured on a collective basis and methods of measuring individual employee productivity are not in place.
7. The industry lacks common parameters of productivity measurement thus the every hotel has its own model for the same therefore comparison between two hotels becomes difficult.

9. SUGGESTIONS & RECOMMENDATIONS

Based on the responses received by the employees of the hotel industry on the issues related to Productivity management in hotels, the following suggestions & recommendations can be made:

1. The management of hotels should be more keen on the implementation of the "Productivity Management System" by acquiring the necessary knowledge on the same and should hire experts to develop and implement the system for better results.
2. Proper parameters to be selected for measurement of productivity so as to get accurate results.
3. The employees should be involved in the entire process to strengthen the system and make it more effective.
4. Avenues for measuring individual employee productivity should be explored for identification of less productive employees so as to take relevant measures to train and develop them for enhancing their productivity.
5. The system should identify key areas that have a direct impact on employee productivity and should take measures to control them thereby resulting into higher productivity.
6. As a part of effective implementation of the system, the management should link remuneration of the employees to their productivity. Thus it will act as a great motivation to the employees to enhance their productivity.

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AN EMPIRICAL STUDY ON AWARENESS LEVELS OF CORPORATE SOCIAL RESPONSIBILITY WITH A SPECIAL REFERENCE TO FORD FOUNDATION

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ABSTRACT
Globally Corporate Social Responsibility (CSR) has grown exponentially in the last decade. Today, the companies are ranked not only on the basis of their financial performance but also on their contribution towards the society. If this social responsibility is neglected, then the firm's reputation gets damaged there by creating a negative impact on the stakeholders and importantly on the society. The collapse of Rana Plaza factory in Bangladesh which exposed the unsafe working conditions can be cited as an example for the same. In the wake of the horrific collapse of building which killed as many as 800 workers in Rana Plaza factory, Wal-Mart an U.S retail chain store had pledged $1.8 million to train Bangladesh plant managers in safety techniques as a part of CSR. On the other hand, U.S power plant Enron has become a by-word for corporate irresponsibility for its financial misrepresentation. Driven by the CSR movement, firms (especially multinational corporations) have sought to position themselves as good corporate citizens. Beyond protecting firm and brand reputation, companies that are considered to be 'good' corporate citizens may get listed in a special category called as Socially Responsible Investment (SRI) indexes. There are many NGOs who are into the services of Corporate Social Responsibility but this study is with respect to Ford Foundation. The Ford foundation is chosen as it is one of the largest and oldest international NGO which is into philanthropic services and charity for more than 75 years. This research does the survey about the awareness levels of select respondents in CSR and the ford foundation. The survey was done with the help of the structured questionnaire.

KEYWORDS
Corporate Social Responsibility (CSR), Ford foundation, Non-Government Organization (NGO), Socially Responsible Investment (SRI).

INTRODUCTION
Ever since the emergence of civilization, social behavior has become an integral part of human life. However, due to competition and concept of "*Survival of the Fittest*" corporate started to concentrate on their survival, least worrying about the society. In the recent past the old ideology of giving back to the society what it got from it has emerged as the concept of *Corporate* Social *Responsibility (CSR)*.

These days, the website of every Fortune 1000 company has some form of CSR report. Most use the detailed principles of the Global Reporting Initiative, a nonprofit that develops and disseminates sustainable reporting guidelines.

Today, the companies are ranked not only on the basis of their financial performance but also on their contribution towards the society. If this social responsibility is neglected, then the firm's reputation would badly damage making a negative impact on the stakeholders and importantly on the society. The collapse of the *Rana Plaza garment factory* in Bangladesh exposed the unsafe working conditions. In the wake of this incident which killed as many as 800 workers, *Wal-Mart* had pledged $1.8 million to train Bangladesh plant managers in safety techniques as a part of CSR. Enron has become a by-word for corporate irresponsibility for its financial misrepresentation on the flip side of the coin.

AN OVERVIEW ABOUT CORPORATE SOCIAL RESPONSIBILIITY
The term "corporate social responsibility" came into common use in the late 1960s and early 1970s after many multinational corporations formed the term stakeholder, meaning those on whom an organization's activities have an impact. It was used to describe corporate owners beyond shareholders as a result of an influential book by R. Edward Freeman, Strategic management: a stakeholder approach in 1984. Corporate social responsibility (CSR) is also known as corporate responsibility or Citizenship or Sustainability or Corporate social performance etc.

CSR is about how companies manage the business process to produce an overall positive impact on society. For this the companies need to answer two aspects of their operations:

1. The quality of their management in terms of their people and their processes.
2. The nature and quantity of their impact on society in various areas.

DEFINITIONS OF CSR

In the words of Carroll and Buchholtz 2003 *"CSR can be defined as the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point of time."*

World Business Council for Sustainable Development, 2000 defines *" CSR as the commitment of business to contribute to sustainable economic development, working with employees, their families, the local community and society at large to improve their quality of life."*

CONTRIBUTION OF NGOs TO CORPORATE SOCIAL RESPONSIBIITY

Among the many business organisations that are involved in socially responsible activities the contribution of Non-Government organizations (NGO's) is significant. A non-governmental organization (NGO) is any non-profit, voluntary citizens' group which is organized on a local, national or international level. The number of NGOs operating in the United States is estimated at 1.5 million. Russia has 277,000 NGOs. India is estimated to have had around 3.3 million NGOs in 2009, just over one NGO per 400 Indians, and many times the number of primary schools and primary health centre's in India. Types of NGOs:

DIRECTED NGOs

The CEO or the Chairman of the corporate heads these NGOs. This establishes a noble idea of the corporate towards the society.

FUNDED NGOs

These NGOs are also established and funded by the corporate for the purpose of social activities. But they work independently without the interference of the corporate. They are registered bodies to conduct social responsibility activities.

ESTABLISHED NGOs

These NGOs are registered bodies under Societies Registration Act, Public/Private charitable Trust Act, or Companies Act as not-for-profit organization. They pull funds on their own through donations from philanthropic organizations, corporates. Some of the NGO's are funded by the government.

NGO TYPE BY LEVEL OF COOPERATION

Community-based Organizations (CBOs) arise out of people's own initiatives. They can be responsible for raising the consciousness of the urban poor, helping them to understand their rights in accessing needed services, and providing such services.

Citywide Organizations include organizations such as chambers of commerce and industry, coalitions of business, ethnic or educational groups, and associations of community organizations.

National NGOs include national organizations such as the Red Cross, YMCAs/YWCAs, professional associations, etc. Some have state and city branches and assist local NGOs.

International NGOs range from secular agencies such as Redda Barna and Save the Children organizations, OXFAM, CARE, ***Ford Foundation***, and Rockefeller Foundation to religiously motivated groups. They can be responsible for funding local NGOs, institutions and projects and implementing projects.

OVERVIEW OF FORD FOUNDATION

The foundation was established on January 15, 1936, in Michigan by Edsel Ford (president of the Ford Motor Company) and two other executives "to receive and administer funds for scientific, educational and charitable purposes, all for the public welfare." It was originally funded by a US$25,000 gift from Edsel Ford. It first started regional office in 1952 in New Delhi. Foundation provides grants to organizations in the United States, Latin America, Africa, the Middle East and Asia. More than $16.3 billion in grants distributed worldwide .Committed to more than $565 million for program-related investments (PRIs) since 1968 Annually 40,000 proposals had been received and about 1,400 grants made Fiscal year 2011 assets valued at $10.3 billion and approved US$413 million in grants.

INITIATIVES AND ACTION PLANS

Initiative	Action Plan
Democratic and Accountable Government	Promoting Transparent, Effective and Accountable Government
Human Rights	Strengthening Human Rights Worldwide
Economic Fairness	Expanding Livelihood Opportunities for Poor Households
Sustainable Development	Expanding Community Rights Over Natural Resources
Freedom of Expression	Advancing Media Rights and Access
Sexuality and Reproductive Health and Rights	Youth Sexuality, Reproductive Health, and Rights

This data explains the various social issues in which Ford Foundation involves itself.

FORD FOUNDATION IN INDIA

At the invitation of Prime Minister Jawaharlal Nehru, the foundation established an office in India in 1952. Chester Bowles, US ambassador to India from 1951, initiated the process. It was the foundation's first program outside the United States. Through their office in New Delhi, foundation also has a limited presence in Nepal and Sri Lanka. Since its establishment, the New Delhi office has made more than 3,500 grants totaling more than $508 million to nearly 1,250 institutions.

Ford has chosen to focus on three particularly oppressed sections of Indian society — Adivasis, Dalits, and women. All three are potentially important components of a movement for basic change in Indian society. Foundation appointed *Kavita N. Ramdas* as representative in New Delhi serving India, Nepal and Sri Lanka.

Of the total grants made across the different regions the grant made to India, Nepal and Sri Lanka is of **2.55%,** which can be viewed from the below tables.

GRANTS ALLOTTED FOR THE YEAR 2012 IN INDIA, NEPAL AND SRI LANKA

Initiatives	Amount
Democracy, Rights and Justice	$3,758,500
Economic opportunity and Assets	$4,552,021
Education Creativity and fire expression	$3,900,000
Program related investments (PRIs)	-
Other Grant actions	$1,222,912
Total	$13,433,433

TOTAL GRANTS ALLOTTED ACROSS ALL THE REGIONS FOR THE YEAR 2012

Initiatives	Amount
Democracy, Rights and Justice	$178,119,792
Economic opportunity and Assets	$139,250,290
Education Creativity and fire expression	$143,789,054
Program related investments (PRIs)	$29,500,000
Other Grant actions	$35,236,735
Total	**$525,895,871**

REVIEW OF LITERATURE

As per Beckan (2007) opined that it is universal that the motive of the business venture is to earn profits. Besides, it's true that the actions of business impact the local. National and global community, so businesses have a responsibility to ensure that the impact is positive.[1]

Eraqi (2010) opined that CSR is a human activity, which encompasses human behavior, use of resources, and interaction with people, economics, and environment.[2]

Peter Chan et.al (2006) in their article suggested that the future research agenda on CSR and development should focus on following four areas: a) the relationship between business and poverty reduction; b) the impact of CSR initiatives; c) governance and dimensions of CSR; d) power and participation in CSR.[3]

Soni Yadav et.al in their article concluded that common people or general educated people are getting aware about the CSR and its role in society, and they have also maintained a positive approach towards it. [4]

NEED & IMPORATANCEOF THE STUDY

The above literature search indicates that enough research has not taken place in this field of CSR, especially with reference to a specific organization. Hence, a need for an empirical work has been felt in this regard. The outcome of the survey will certainly be beneficial to the society and organizations alike.

STATEMENT OF THE PROBLEM

To understand the awareness levels of the students and corporate executives and to analyze the same

OBJECTIVES

This study is being undertaken with the following objectives:

- To study the concept of CSR.
- To know the history of Ford Foundation.
- To survey the awareness levels of select respondents about CSR and Ford Foundation.

HYPOTHESIS

The following Hypothesis is being proposed:
Ho: There is no significance difference between the categories of persons and awareness levels.
H1: There is a significance difference between the categories of persons and awareness levels.

RESEARCH METHODOLOGY

PERIOD & SAMPLE SIZE

The study was conducted during the year 2013. A sample of 100 students from different colleges and 30 employees from different organizations were taken through convenience sampling.

DATA COLLECTION

The study largely relied on primary data collected from the respondents with the help of structured questionnaire. However, some important text books, journals, websites etc., have been referred.

STATISTICAL ANALYSIS

Various statistical tools like Percentages, Averages Chi-Square etc., have been used.

RESULTS AND DICUSSIONS OF THE STUDY

1) CSR ACTIVITIES

The respondents were sought to inform about the CSR activities taken up by their companies which is presented below-

TABLE 1: ACTIVITIES TAKEN UP

S.no	Activities taken up	Percentage
1	Donations	53%
2	Sponsorship of sports and other events	17%
3	Social cause	20%
4	Partnership projects of social solidarity	10%
5	Corporate foundation	20%
6	Corporate voluntary	10%
7	Others	7%

Note: In the above table the respondents have chosen more than one option, therefore the total percentage in 137.

The above data indicates that 53% of the companies have engaged in the CSR activities by way of donations to organizations having social and environmental utility. 17% are by way of sponsorships to sports and cultural events. 20% are involved in social cause related activities. 10% have taken up by having partnership projects. 20% are through corporate foundation and 10% are voluntarily involved. Only 7% are engaged through due to other reasons.

2) BENEFITS WITH CSR

The data given by respondents about the main benefits of adoption of social responsibility by companies is shown below:

TABLE 2: BENEFITS OF CSR ADOPTION

S.no	Benefits	Percentage
1	Corporate reputation	37%
2	Improving relations	57%
3	Strengthening employees	53%
4	Identifying reputational risk	0
5	Access to credit	0

Note: In the above table the respondents have chosen more than one option, therefore the total percentage is 147.

- 57% of the respondents feel that companies adopt social responsibilities for improving relations with suppliers, institutions etc. 53% adopt for strengthening the employee morale where as 37% adopt for the benefit of corporate reputation.

3) FUNDING SOURCES

The below data explains various sources of funding for these social activities.

TABLE 3: SOURCE OF FUNDING (n=80)

S.no	Source	Percentage
1	Self funded	20
2	Corporate funding	20
3	Government funding	20
4	Others	**0**

Note: In the above table the respondents taken into consideration are only those who have answered question no 9 as YES. Therefore the percentage is 60%.

From the above table it can be seen that self funding, corporate funding, and government funding form 20% of the source of funding for the organizations.

4) GEOGRAPHICAL SPREAD OF THE ORGANIZATIONS:

The information about the Geographical spread of the organizations involved in social activities is given below:

TABLE 4: GEOGRAPHICAL SPREAD

S.no	Spread	Percentage
1	International	40%
2	National	20%
3	Regional	13%
4	Local	10%

Note: In the above table the respondents taken into consideration are only those who have answered question no 9 as YES. Therefore the percentage is 83% and the remaining 17% are not involved in CSR activities.

The above table indicates that 40% of the organizations have international spread, 20% has National spread, 13% regional and local spread forms 10%.

5) INFORMATION SOURCE

The various Sources of Information from where the respondents heard about ford foundation are shown below:

TABLE 5: SOURCE OF INFORMATION

S.No	Source	Percentage
1	Electronic media	13%
2	Print media	7%
3	Corporate journals	7%
4	Others	**3%**

Note: In the above table the respondents taken into consideration are only those who have answered question no 11 as YES. Therefore the percentage is only 30% and the remaining 70% are not aware of ford foundation.

From the above table it can be known that 13% of the employees are aware of ford foundation through electronic media while 7% know through print media and corporate journals. 3% are aware through other means of sources.

6) PRACTICE OF CSR

The below data shows the opinion of the respondents in practicing CSR when they become entrepreneur:

TABLE 6: OPINION

S.no	Opinion	Percentage
1	YES	83%
2	NO	17%

From the above table it can be known that 83% of the employees show interest in practicing CSR while 17% are not interested in CSR as they are not interested in Entrepreneurship.

DATA ANALYSIS AND INTERPRETATION

1) AWARENESS OF CSR

Calculated value obtained is 23.92604 and the table value is 7.815. It is found that there is significant difference between categories of persons about the awareness of CSR. Hence employees are more aware then the students as per the chi-square.

2) ENGAGEMENT OF COLLEGES AND COMPANIES IN CSR

Calculated value obtained is 20.68015 and the table value is 3.841. It is found that there is significant difference between categories of persons about the involvement in socially responsible activities. Therefore companies are more involved in these activities then the colleges as per the chi-square.

3) LEVEL OF ACTIVITY

Calculated value obtained is 45.33 and the table value is 7.815. It is found that there is significant difference between categories of persons about the level of activities performed as a part of CSR.

Companies are regularly involved in the activities of CSR when compared to the colleges as per the chi-square.

4) MAJOR HINDRANCE IN PRACTICING CSR

Calculated value obtained is 10.51433 and the table value is 7.815. It is found that there is significant difference between categories of persons about the opinions for not practicing CSR activities, as per the chi-square.

5) RECENT INVOLVEMENT OF COLLEGES AND COMPANIES IN SOCIALLY RESPONSIBLE ACTIVITIES

Calculated value obtained is 65.5651 and the table value is 5.991.It is found that there is significant difference between categories of persons involving in recent social activities. Companies are more involved in these activities as compared to the colleges as per the chi-square.

6) AWARENESS OF FORD FOUNDATION

The chi-square calculated value is 1.3628 and the table value is 3.841. This indicates that there is no significance difference between the categories of the persons about the awareness of the ford foundation.

7) AWARENESS ABOUT FORD FOUNDATION ACTIVITIES

Chi-square calculated value is 2.764977 and the table value is 3.841, hence there is no significance difference between the categories of the persons about the awareness of the ford foundation activities.

FINDINGS

1. It is found out form the study that the awareness levels about CSR and Ford foundation is low among the respondents. However, employees are more aware of the CSR and Ford foundation when compared to the students.
2. It is observed that companies are adopting social responsibilities for improving relations with suppliers or for strengthening the employee morale, or may be to improve their corporate reputation.
3. Students are engaged in social activities through college NSS and also on individual basis through other institutions such as Crazy head, Street cause, Art of living, Yuvatha, Mother Tereasa orphanage, Helping hands for poor and Bachpan bachao.
4. Most of the funds raised for these social activities are Self Funded and corporate funding in case of companies.
5. Students are keen to know more about CSR and they felt that corporate companies to should spread awareness about CSR by visiting different reputed universities, long standing colleges etc.

SUGGESTIONS

1) It is suggested to the companies to spread the information about CSR to all the educational institutions so that students can be made aware of social responsibility. It can be done by collaborating with NSS, NCC wings of different colleges and also by visiting select reputed colleges and make a presentation of the cause and invite memberships from students.
2) Ford Foundation is herewith suggested (as an outcome of survey) to use different media so that general public will become more aware of the same.
3) It is suggested by the employees in the survey that every company should spend a percentage of net profit for the society.
4) Students suggested in the survey that Ford foundation should expand its branches across the country so that people in need can be approached.
5) It is suggested to Ford foundation that students involving in social activities through various institutions should be given a chance to participate in their activities.
6) There is a provision for CSR of 2% in the companies' bill which should be implemented by the government.

CONCLUSIONS

The survey results presented in this report indicate that the awareness levels about CSR and ford foundation is very less among the respondents. As students are tomorrow's citizens and new entrepreneurs they should be made aware of this CSR. The ford foundation is one of the very big NGO operating worldwide but its activities are unknown to the people. Companies are adopting social responsibilities for improving relations with suppliers; institutions etc or for strengthening the employee morale and for benefit of corporate reputation but there are only few companies which come forward for the benefit of the society. There is an overall need for corporate to look at giving something to society.

LIMITATIONS

The limitations of the study are:

1. As the study is with respect to the Hyderabad region hence, it may become a limitation.
2. The small number of respondents may become a limitation.

SCOPE FOR FURTHER RESEARCH

There is a scope of further empirical research for the study as there are other organizations and NGOs which are into the social service.

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AN EMPIRICAL STUDY ON WEAK-FORM OF MARKET EFFICIENCY OF BSE BANKEX STOCKS

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ABSTRACT

Efficient Market Hypothesis (EMH) states that stock prices incorporate all relevant information as and when such information becomes available. This implies that there cannot be a systematic way of exploitation of trading opportunities to earn excess profits. This paper empirically examines the efficient market hypothesis in its weak form (random walk model) for the banking index BSE BANKEX in India. Stock prices of 14 banks constituting BANKEX are considered for the period June 2003 to Dec 2012. The random walk hypothesis is examined using Auto Correlation test, Runs test, Augmented Dickey-Fuller Unit Root test. The null hypothesis of unit root is convincingly rejected, suggesting that the banking stocks in India do not show characteristics of random walk and as such are not efficient in the weak form. The rejection of weak form efficiency means that investors can better predict stock price movements and earn abnormal profits.

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G 14, G32.

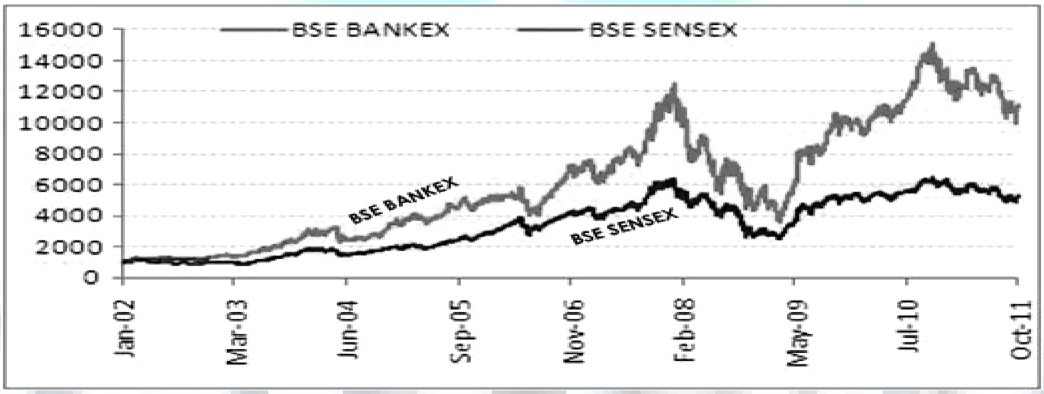
KEYWORDS
Augmented Dickey-Fuller Unit Root test, Auto Correlation, Efficient Market Hypothesis, Runs test, Weak form market efficiency.

INTRODUCTION

Economic liberalization has brought in an unprecedented growth and improvement in the Indian banking industry. The banking industry has moved gradually from a regulated environment to a deregulated market economy. The new market developments have seen changes in the intermediary role of banks. With the banking stocks emerging as a major segment in equity markets, the BSE designed an index exclusively for bank stocks—BSE Bankex. This index tracks the leading stocks of the banking sector. With the base date for Bankex being 1st Jan 2002 and the base value being 1000 points, this index disseminated on a real-time basis through BSE Online Trading (BOLT) terminals from 23rd June, 2003.

Several studies have established complementarity between economic growth and financial development. Finance capital plays an important role in an economy's growth. Banking companies stocks have a weightage of 14.26% in the BSE Sensex, represented by one public sector bank—SBI and two private sector banks—ICICI bank and HDFC bank. The chart below depicts the performance of BSE Bankex and BSE Sensex.

PERFORMANCE OF BSE BANKEX VIS-À-VIS BSE SENSEX



(Source: ACE MF, *Personal*FN Research)

The chart above depicts that the growth of BSE Bankex is fast-tracked than the BSE Sensex, and has outperformed Sensex many a time. The performance of Bankex intensified during the period 2006 to March 2008 and decelerated during March 2008 – March 2009. However, the trend has reversed thereafter.

EFFICIENT MARKET HYPOTHESIS

Fama (1970) defines an efficient market as a market in which prices always reflect the recent available information, at any given time, the prices in the market already reflect all known information, and also change fast to reflect new information. He further states that three different levels of efficiency exist based on 'available information' – the weak, semi-strong, and strong forms.

Weak form efficiency or the Random Walk Theory states that prices of stocks can never be predicted because of the random nature of the stock price movements. This means at any given time there is an equal chance of a stock's price rising or falling. The stock market is "informationally efficient." The investors buying and selling stocks consist of a large number seek and gain access to relevant information. The long term prices will reflect performance of the company over time and the short term movements in prices can best be described as a random walk. According to random walk theory in an efficient market, historical patterns cannot be used to predict future movements in any kind of meaningful way. At any one point in time, the movement of a stock is random. Share prices exhibit no serial dependencies, that is, there are no "patterns" to asset prices. The next minute prices could be anyone's guess and therefore it is not possible to make profits. When investors buy stocks, they usually do so because they believe the stock is worth more than they are paying. In the same way, investors sell stocks when they believe the stock is worth less than the selling price. If the efficient market theory and random walk hypothesis are true, then an investor's ability to outperform the stock market is more a luck than an analytical skill.

LITERATURE REVIEW

The random walk hypothesis has been proven through a number of empirical studies. By examining real data, researchers such as Fama and Malkiel (1970) found there was no correlation between successive price changes. In other words, the next movement of a stock is completely independent of its prior movements. In fact, Malkiel (1973) states that the movement of the stock market and the individual stocks, is just as random as flipping a coin.

Extensive empirical researches have been carried out to study the weak form efficiency traits of the Indian stock markets. Some of the studies relevant to this paper are summarized as below. Sharma and Kennedy (1977), Sharma (1983), Barua (1987), Ramachandran (1986), Vaidyanathan and Gali (1994) tested the market efficiency in Indian capital market, and provided evidence in favour of weak-form efficiency. A study by S K Choudhuri, (1991) finds that the markets are not weak form efficient. Srinivasan (1993) studied the efficiency of the market in assimilating the information content of rights issues and concluded that the market was by and large efficient. Sunil Poshakwale (1996), Rakesh Gupta, and Parikshit K. Basu (2007), Batool Asiri (2008), P K Mishra and B B Pradhan (2009) also conclude by their studies that Indian capital market is weak form inefficient. Prusty (2007) tested the market efficiency in Indian capital markets, and provided evidence in favour of weak-form efficiency. Nikunj R. Patel, Nitesh Radadia and Juhi Dhawan (2012) investigate the weak form of market efficiency of 4 markets in Asia—BSE India, Hong Kong's Hang Seng index, Tokyo's Nikkei and Shanghai's SSE composite index and conclude that the stock markets are weak form inefficient. Bhanu Pant and Dr. T. R. Bishnoi(2001) analyse the behavior of daily and weekly returns of five Indian stock market indices for random walk during April-1996 to June-2001using Q-statistic & Dickey-Fuller test and conclude that Indian stock market indices do not follow randomwalk. N.K. Totala, H.S. Saluja, Dr. Ira Bapna and Vishal Sood (2012) examine the market efficiency of the BSE Bankex companies to check the randomness of the price movements of the banking companies and find that Bankex and a majority of the banking companies' stock prices walk randomly.

The above literature proves that the EMH and the random walk theory have featured in financial economics for many years. There is mixed evidence regarding the weak form efficiency in the random walk model. Debates take place on the role of past stock prices for predicting the future returns. This paper examines the weak form efficiency of Efficient Market Hypothesis (EMH) in Indian banking sector in the random walk framework.

OBJECTIVES OF THE STUDY

- To study whether the Bankex and stock prices of Bankex Banking Companies are stationary or not
- To apply various statistical tests of market efficiency
- To identify the level of market efficiency of Bankex

RESEARCH METHODOLOGY

HYPOTHESIS

H_o1: BSE Bankex stocks are not informationally efficient

H_o2: BSE Bankex stock prices are not random and there is no influence of current prices on subsequent price changes

SCOPE OF THE STUDY

The study is based on daily prices of the BSE Bankex stocks listed in BSE were taken for 9 financial years from 23rd June 2003 to 31st Dec 2012. BSE Bankex has an equal composition of both public (7) and private sector banks (7). A public bank is one which has many shareholders, and they elect from their own body who are entrusted with its management. A private bank is one which has few partners, and the bank's management is attended to personally by them.

SAMPLE/DATA

Daily closing prices of BSE Bankex and the 14 BSE Bankex Companies have been considered, the data ranging between 23rd June 2003 and 31st Dec 2012. The secondary data is collected from the annual reports, published research reports by banking industry, etc. and websites like, www.bseindia.com, www.moneycontrol.com, www.rediff.com, www.sebi.gov.in and www.yahoofinance.com .

STATISTICAL TESTS FOR ANALYSIS

Log normal prices have been considered to perform the various tests to check the weak form of market efficiency. Stock prices can never go below 0 as a result of which the distribution of stock prices tends to be skewed to the right. This is because while it cannot fall below 0, it can theoretically keep rising towards infinity (mathematically this means that the distribution has bounds of 0 to +∞). Hence, the lognormal distribution of stock prices is considered more appropriate to perform statistical tests. As the lognormal distribution is skewed to the right, the mean is always greater than the median. There is a difference between the symmetric normal distribution (bounded at [-∞ to +∞]) and the non-symmetric right skewed lognormal distribution.

Tests like the Runs test, Auto correlation test and Augmented Dickey Fuller test are conducted to test the hypothesis.

RUNS TEST

Runs analysis is a non-parametric test and is independent of the normality and constant variance of data. Runs test determines if successive price changes are independent. It is a strong test to check the randomness and in investigating serial dependence of share price movements. It compares the expected number of runs with the observed number of runs by a random process. The objective of performing a runs test is to test whether weak form of efficient market hypothesis holds good or not in the Bankex stocks.

RUNS TEST RESULTS

Bank	Test Values	Cases < Test Value	Cases >= Test Value	Total Cases	Number of Runs	Z	Asymp. Sig. (2-tailed)
Axis	0	1192	1185	2377	1135	-2.236	0.025
BOI	0	1234	1144	2378	1147	-1.697	0.09
BOB	0	1196	1182	2378	1156	-1.393	0.164
Canara	0	1197	1181	2378	1118	-2.952	0.003
Federal	0	1184	1194	2378	1122	-2.789	0.005
HDFC	0	1222	1156	2378	1160	-1.194	0.232
ICICI	0	1215	1163	2378	1119	-2.891	0.004
IDBI	0	1190	1188	2378	1153	-1.518	0.129
Indusind	0	1180	1198	2378	1160	-1.228	0.219
Kotak	0	1232	1146	2378	1157	-1.292	0.196
PNB	0	1204	1174	2378	1145	-1.839	0.066
SBI	0.159	2377	1	2378	3	0.029	0.977
Union bank	0	1199	1179	2378	1128	-2.54	0.011
Yes bank	0	913	942	1855	860	-3.172	0.002
Bankex	0.145	2377	1	2378	3	0.029	1

Runs Test was applied on daily closing stock prices of the 14 banking companies (Table above). The test is employed on the total number of runs in the transformed data. A total of cases ranging between 1855 and 2378 were observed. Large significance values (>0.05) indicate that the data are not randomly ordered. The results of BOI, BOB, Federal, IDBI, Indusind, Kotak, PNB and SBI show that the **significance (2 tailed)** value are **greater than 0.05** (95% level of confidence) and the difference is therefore, not statistically significant. The **null hypothesis (H_o—successive price changes are not random) cannot be rejected.**

AUTO CORRELATION TEST

Auto-correlation (AC) test is a reliable measure for testing of either dependence or independence of random variables in a series.

AUTO CORRELATION TEST RESULTS

BANKEX	AC	0.134	-0.025	-0.006	-0.023	-0.058	-0.07	0.004	0.045	0.022	0.039	0.025	-0.006
	Prob	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Axis	AC	0.011	-0.038	-0.014	0.022	-0.024	-0.025	0.002	0.000	0.057	0.033	0.006	-0.043
	Prob	0.596	0.153	0.237	0.253	0.239	0.218	0.307	0.405	0.067	0.046	0.067	0.027
BOB	AC	0.085	-0.037	-0.041	-0.012	-0.045	-0.053	-0.02	-0.004	0.034	0.046	0.003	-0.02
	Prob	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
BOI	AC	0.084	-0.008	-0.01	-0.015	-0.064	-0.045	0.011	0.002	-0.001	0.053	-0.004	-0.044
	Prob	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Canara	AC	0.082	-0.019	-0.008	-0.061	-0.033	-0.025	-0.008	0.006	0.007	0.031	0.000	-0.007
	Prob	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
Federal	AC	0.046	-0.049	-0.013	0.009	-0.042	-0.01	-0.003	-0.031	0.000	0.031	0.013	0.007
	Prob	0.025	0.005	0.011	0.024	0.009	0.016	0.028	0.021	0.035	0.026	0.036	0.052
HDFC	AC	-0.005	-0.012	0.004	-0.006	-0.011	-0.011	-0.011	0.011	-0.008	0.021	-0.004	-0.002
	Prob	0.789	0.822	0.934	0.973	0.978	0.982	0.987	0.99	0.994	0.984	0.992	0.996
IDBI	AC	0.082	-0.012	-0.016	-0.028	-0.032	-0.049	0.024	0.031	0.021	0.03	0.006	0.000
	Prob	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001
IndusInd	AC	0.052	-0.046	-0.044	-0.011	-0.009	-0.005	-0.005	0.028	0.031	0.028	-0.021	-0.017
	Prob	0.01	0.003	0.001	0.002	0.005	0.01	0.018	0.016	0.013	0.011	0.013	0.017
Kotak	AC	0.022	0.013	-0.007	0.007	-0.026	-0.016	-0.008	0.004	0.031	-0.012	-0.015	0.016
	Prob	0.287	0.451	0.638	0.768	0.632	0.658	0.737	0.82	0.68	0.741	0.772	0.796
PNB	AC	0.062	-0.008	-0.018	-0.013	-0.025	-0.013	0.026	0.012	0.02	0.019	0.018	-0.03
	Prob	0.002	0.009	0.017	0.032	0.035	0.054	0.052	0.074	0.084	0.097	0.113	0.09
SBI	AC	0.091	-0.028	-0.01	-0.012	-0.061	-0.047	0.015	0.043	0.02	0.024	0.019	0.011
	Prob	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
UBI	AC	0.094	-0.042	-0.027	-0.027	-0.028	-0.031	-0.018	-0.026	0.024	0.022	0.003	0.007
	Prob	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Yes Bank	AC	0.147	-0.054	0.018	-0.043	-0.059	-0.047	0.017	0.038	0.03	0.029	0.017	-0.038
	Prob	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

The serial correlation coefficient measures the relationship between the values of a random variable at time t and its value in the previous period. Auto correlation test evidences whether the correlation coefficients are significantly different from zero. AC tests were performed upto 12 lags for the daily stock returns. The table shows the results of AC coefficients for the daily returns of the BSE Bankex stocks.

The analysis of the table reveals that Bankex and banks like BOB, BOI, Canara, Federal, IDBI, Indusind , PNB, SBI, UBI and Yes bank are significantly correlated. This indicates that share prices of these banks do not walk randomly. Axis bank earned its significance value in the 8^{th} and 10^{th} lag. All the data prove that they are serially and significantly correlated, and there is an existence of autocorrelation between them and with the Bankex. The AC coefficients computed for the log of the market return series shows significant auto-correlation at different lags for the sample period. The null hypothesis **H_o: there is no significant relationship between BSE Bankex and BSE Bankex Banking Companies is rejected**. As per the AC results, the Bankex and the **14 banks constituting Bankex do not walk randomly**, i.e., **their prices are not independent to each other.**

UNIT ROOT TEST

The Unit Root test verifies the stationary mode of the series under consideration. It also determines the order of the series' integration. A stationary process is one whose statistical properties do not change over time. Non-stationary processes are unpredictable and cannot be modelled or forecast. The results of Augmented Dickey Fuller (ADF, 1979) unit root test are depicted as below.

UNIT ROOT TEST RESULTS

	Intercept and trend		**Intercept and no trend**	
Bank name	ADF t statistic critical value	p value	ADF Critical value (26 lags with intercept and no trend)	p value
Axis	-35.6444	0.000	-35.5978	0.000
BOB	-34.4596	0.000	-34.4655	0.000
BOI	-44.8667	0.000	-44.8082	0.0001
Canara	-44.8667	0.000	-44.8713	0.0001
Federal	-46.5488	0.000	-46.5578	0.0001
HDFC	-49.0305	0.000	-49.0028	0.0001
ICICI	-44.2332	0.000	-44.2205	0.0001
IDBI	-44.9685	0.000	-44.9681	0.0001
Indusind	-46.2319	0.000	-46.2416	0.0001
Kotak	-47.7122	0.000	-47.7134	0.0001
PNB	-45.7906	0.000	-45.7788	0.0001
SBI	-44.4754	0.000	-44.4706	0.0001
UBI	-44.3745	0.000	-44.3652	0.0001
Yes Bank	-30.3634	0.000	-30.3708	0.0000

H_0: Series does not contain unit root and is not stationary

H_1: Series does contain unit root and is stationary

The Unit Root Test verifies the stationary mode of the series under consideration. Further, their order of integration is being determined. The results of Augmented Dickey Fuller (ADF, 1979) unit root test are depicted in the table. The ADF test was carried out in two situations—(a) intercept and trend and (b) intercept and no trend.

INTERCEPT AND TREND

The t-statistic critical values at 1%, 5% and 10% level of significance for intercept and trend are -3.96191, -3.4117 and -3.12773 respectively. The calculated ADF critical values for all banks range between -30.36 and -49.03 which are all smaller than the t statistic. This clearly indicates that the data is stationary. The null hypothesis **H_o: Series does not contain a unit root is therefore rejected. The p values are also below 0.05 which also proves that the null hypothesis should be rejected**.

INTERCEPT AND NO TREND: The t-statistic critical values at 1%, 5% and 10% level of significance for intercept and no trend are -3.43291, -2.86256 and -2.56736 respectively. The critical ADF values range between -30.37 and -49.00 indicating that they are much lower than the t statistic. This proves that the data is stationary. The null hypothesis **H_o: Series does not contain a unit root is hence rejected. The p values are also less than 0.05 which also proves that the null hypothesis should be rejected.**

CONCLUSION

This paper revisits the weak form of efficiency of EMH by testing the same on BSE Bankex stocks and adds to the literature the evidence of its weak form inefficiency. This inefficiency may be due to stock market irregularities and market volatility. To verify the weak-form of efficiency of BSE Bankex stocks, Runs test, Auto-correlation and Unit Root test were applied.

The results of Runs test provide evidence that random movement of shares prices are not influenced by successive price changes and the null hypothesis—successive price changes of shares of BSE Bankex Companies are not random is not rejected. Auto correlation tests performed on the Bankex stocks with 12 lags also prove that the stocks are serially and significantly correlated and the null hypothesis that there is no significant relationship between BSE Bankex and BSE Bankex Banking Companies is rejected. The Unit Root test established that the Bankex series does contain a unit root and hence was stationary. All the results confirm that the prices of BSE Bankex stocks are not weak form efficient. The BSE Bankex stock prices are random.

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A SURVEY ON AUTOMATIC QUESTION-ANSWERING TECHNIQUES

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ABSTRACT

The advent of WWW has reintroduced the need for user-friendly querying techniques that reduce information overflow, and poses new challenges to the research in automated QA. The goal of current works of the unity of research of Technologies is to improve efficiency of e-learning by introducing intelligence into e-learning environments and automating a set of its features.The system allows learners to post subject related questions / doubts to the subject experts. This usually requires the subject expert to answer the same query with different sentence framing a number of times. This paper discusses the development of an automated frequently asked questions retrieval system techniques. This paper discuss few simple FAQ retrieval techniques briefly.

KEYWORDS
FAQ, Frequently Asked Questions, automatic answers.

1. INTRODUCTION

People sitting in front of the computers expect quick solutions. People browsing a website want to get quick answers to their questions. In order to enable the latter, an evolving WWW-based automated FAQ answering system [1] has been developed. This system answers questions when asked in ordinary English, using pre-stored information. eLearning, subject expert consultation, provides a service to the learners to post subject related questions / doubts to the subject expert. The subject expert would then respond to the queries and clarify the doubts. Over a period of time the repository of questions posed by the learners would grow enormously and there is a high probability of posting repeated questions with different sentence framing though they may have similar semantics. The development of automated response generation for frequently asked questions would stimulate faster response. This requires the FAQ retrieval techniques. These techniques were developed in order to make automated FAQ answering affordable for virtually any website.This same concept is also useful in Educational institutes and companies, for customers/users post their questions and get response automatically.

2. FAQ RETRIEVAL TECHNIQUES

As the FAQs and answers are entered into the database, there are three generic approaches[2] how a question-answering system can retrieve them :

A. *AI (Artificial Intelligence) solutions* use complex knowledge bases in order to comprehend both the query (i.e., user question) and FAQs. AI solutions render good quality of question answering. Unfortunately, they require high qualifications and rare skills of the involved personnel. Development and maintenance of the knowledge bases is expensive. In a multi-lingual environment, the development and maintenance is required not only for the application domain data but also for language specific features in each language.
B. *Statistical techniques of Information Retrieval* evaluate common terms in the query and each FAQ – how many and how representative they are – and decide whether or not the query and the FAQ are equivalent. Unfortunately, statistical techniques work rather poorly if pieces of text are 1-10 words short. They do not work at all if the query and FAQ use different wording to carry the same meaning. The main advantage of this technique is simple to implement.
C. *Manual indexing of documents* is done for specialized collections. For example, all pieces of legislation issued by the Swedish parliament have manually assigned keywords used by search systems. Precision of the retrieval of manually indexed documents is high because the keywords are representative, selected using human intelligence.

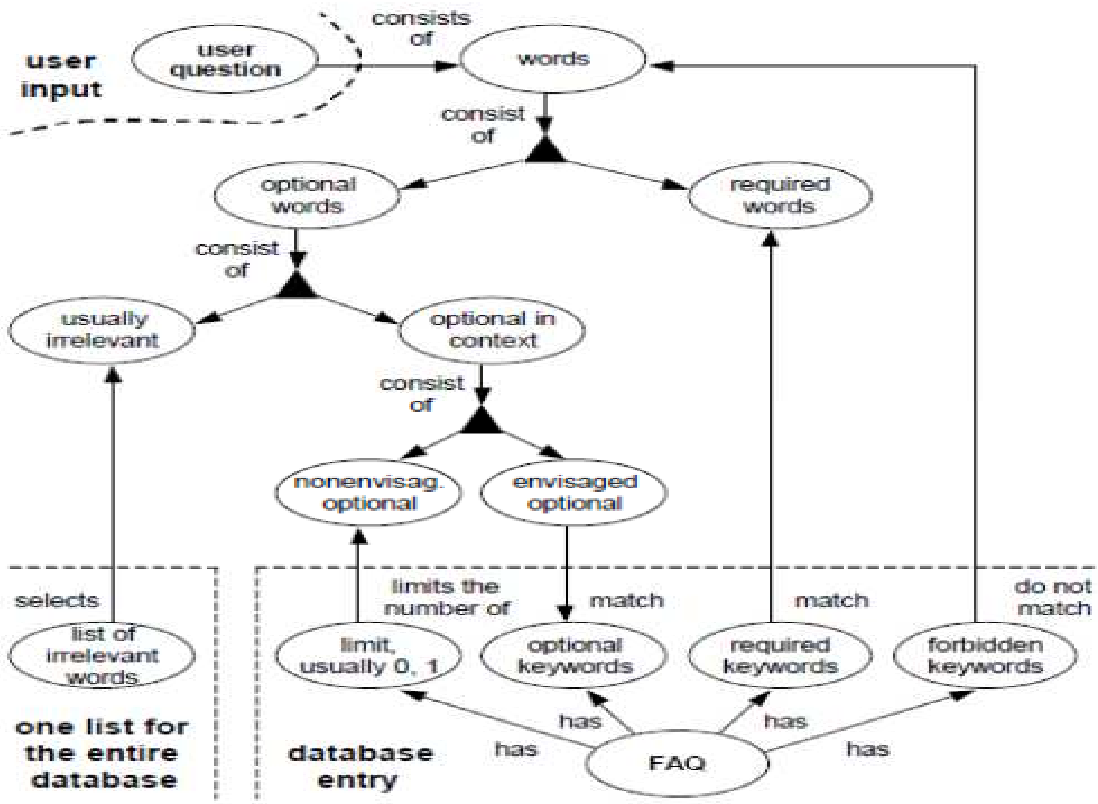
Some question-answering systems, the most well-known of which is Ask Jeeves, use manual indexing of their question templates alias FAQs. A shortcoming of this approach is that each document needs to be processed manually but the question templates are re-usable.

Apparently the multi-lingual environment and the human resources available in the KOM 2002[2] project call for *manual indexing of FAQs*. As far as automatisation of such work is considered, today's technologies cannot communicate the meaning of a natural language sentence from the human mind to the computer without any manual work done at some point of the development of the system itself or its imported components .Next sections discussing the two techniques of FAQ retrieval in detail.

3. PRIORITIZED KEYWORD MATCHING

The Prioritized Keyword Matching technique was developed in order to make automated FAQ answering affordable for virtually any website and easy way to comply with the conference paper formatting requirements is to use this document as a template and simply type your text into it[2].

FIG 1: CONCEPTS INVOLVE IN PRIORITIZED MATCHING KEYWORD



BASIC IDEA

As shown in the Fig:1 the idea of Prioritized Keyword Matching is based on the assumption that there are three main types of words in a sentence within a certain context in a certain subject:

1)Required keywords: are the words important for matching, that convey the essence of the sentence. They cannot be ignored.

2)Optional keywords: These keywords are not much important as 'Required key words', these keywords help to convey the meaning of the sentence but can be omitted without changing the essence of the sentence. The nuances may change though.

3)"Irrelevant" words: like "a", "the", "is", etc., are words that are too common in ordinary language or in the subject. The meaning of "irrelevant" words is close to that of stop-words in Information Retrieval. The only difference is that stop-words are assumed always unimportant in a given collection of documents. The Prioritized Keyword Matching technique Matching and the relationship sperforms formal keyword matching without understanding the meanings of the words and it is the statically technique.

4. QUESTION TEMPLATE METHOD

Let us introduce a *question template* – a dynamic, parameterized FAQ as opposed to the traditional static FAQ. A question template is a question with entity slots – free space for data instances that represent the main concepts of the question. For example, "When does <performer> perform in <place>?" is a question template where <performer> and <place> are the entity slots. If we fill these slots with data instances that belong to the concepts, we get an ordinary question, e.g., "When does Depeche Mode perform in Globen?" The question template's "answer" is created by the help of a *database query template* – a formal database query having entity slots for data instances, primarily primary keys. After the slots are filled, the template becomes an ordinary executable database query. Processing of a query template and executing the query returns raw data Basing on this raw data Answering a user question takes the following steps. The question assistant:

1. retrieves data instances that are relevant to the user question
2. retrieves question templates that match the user question
3. combines the retrieved data instances and question templates, and creates one or several interpretations of the original question; the user selects a desired interpretation, and the question assistant answers it.

5. CONCLUSIONS

This paper presents continued research in automated FAQ answering by using shallow language understanding. The Prioritized Keyword Matching technique discussed here was developed in order to match an arbitrary user question to an FAQ entry in the database. Relative simplicity of the Prioritized Keyword Matching is aimed at making automated FAQ answering affordable for an average website. In the second method, 'Question Template method' is, unlike a static FAQ, a question shape contains entity slots that are replaced by data instances from the underlying database. The entity slots are bound to the concepts, or entities, in the conceptual model of the database while the templates themselves express the relationships between these concepts in form of natural language sentences. The main advantage of the question assistant is its simplicity. The system is recommended in situations where answering of typical questions is appropriate, where the conventional keyword-based search retrieves too much irrelevant information.

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MICRO SMALL & MEDIUM ENTERPRISES COMPETING IN GLOBAL BUSINESS ENVIRONMENT: A CASE OF INDIA

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ABSTRACT

MSMEs have been globally considered as an engine of economic growth and as key instruments for promoting equitable development. The major advantage of the sector is its employment potential at low capital cost. The labour intensity of the MSME sector is much higher than that of large enterprises. MSMEs constitute more than 90% of total enterprises in most of the economies and are credited with generating the highest rates of employment growth and account for a major share of industrial production and exports. In India too, MSMEs play an essential role in the overall industrial economy of the country. In the year of 2006 government formulated MSMED act with an aim to facilitate the promotion and development and enhancing the competitiveness of micro, small and medium enterprises and to meet the new business challenges in the competitive global business environment. The focus of this paper is the discussion of the competitiveness facing SMEs in the global business environment by examining the opportunities and supports from the government. Furthermore, this study also analyses the challenges of Indian MSMEs in global market.

KEYWORDS

Small and Medium Enterprises (SMEs), Challenges, Competitiveness, Globalization, Economic Growth, Global Business Environment.

1. INTRODUCTION

India's international trade policy was largely governed by WTO's multilateral trade framework which obliges its member countries to tariff reduction and restrictive non-tariff barriers but does not eliminate tariffs altogether. In recent years however, India's trade policy is being determined by Free Trade Agreements (FTAs). A Free Trade Agreements are more comprehensive treaties aim at total elimination of all tariffs and covering trade not only in goods but also in services, as well as investment, TRIPS plus intellectual property rights (IPRs), and even public procurement and competition policy. FTAs with Japan, Malaysia, and South Korea for example are of this variety. Those currently under negotiation with the European Union and European Free Trade Associatin are also comprehensive. FTAs are expected to reduce India's ability to choose policy in the interest of domestic enterprises.

- Key Features of Free Trade Agreement:
- Elimination of tariff barriers (import and export duties) on 85 to 90% of goods.
- The trading partners must be treated equally even if they are not equal in terms of socio-economic development indictors.
- Partner countries cannot have discriminating trade policy instruments such as taxes, subsidies, regulations, or laws) favouring their own companies over foreign companies.
- They also include chapters covering services, investments, public procurement and competition policy. All these chapters invariably influence each other and the aggregate impact on the industries could be much deeper

Under FTAs, markets are supposed to be fully opened up and foreigners and locals would be treated equally. Unlike in the WTO, under FTAs, developing countries will not be technically entitled to concessions given under the 'special and differential treatment' (S&DT) and FTA partners are supposed to engage in fully reciprocal trade, i.e. give and take of equal magnitude.

The Indian MSME sector is at an inflection point. On the one side, key policy initiatives such as the Defence Offset Policy and the Public Procurement Policy are expected to create unprecedented business opportunities for the sector in the coming years. The defence offset obligations alone are likely to create $15-20 billion worth business opportunities for Indian MSMEs over the next decade. On the other side, industry bodies across geographies are looking to deepen the collaborative engagements with Indian MSMEs.

Hence, from the demand perspective Indian MSMEs are seeing huge growth prospects. However, certain issues are to be addressed on the supply side. First, enterprises need to continuously raise the quality of their manufactures while remaining frugal. This implies that a certain amount in house R&D has now become imperative for the Indian MSMEs. In coming days high quality standards alone will determine their global competitiveness and relevancy in different markets. Second, enterprises need to develop intra-sector eco-system in order to meet the scaled-up demand.

The emerging business environment offers a definitive opportunity for Indian MSMEs to scale up their operations and grow bigger. CII National MSME Council is working upon an institutional mechanism that assists 25 micro enterprises from all four regions to grow to the level of small enterprises, help 25 regional small enterprises to develop into medium enterprises, and support 25 medium enterprises to graduate to the level of large enterprises, summing up to 100 enterprises from each of the three categories to expand.

For enterprises to move up the value chain, they will need seamless access to a large skill base. Both Government and industry have taken cognizance of the urgent need to bridge the skill gap in the MSME sector, from the quantitative and qualitative standpoints. The MSME Ministry has introduced various skills development programmes and schemes for the benefit of industry. Industry has also launched different skills development initiatives. In the coming times, as Indian MSMEs enter new and sophisticated fields of business, skills will become even more critical to the sector's growth and development. Skills apart, financing of business will remain a big challenge for Indian MSMEs. While bank credit flow to the sector has grown appreciably over the years, concerted efforts are being made to promote SME-dedicated stock exchanges in the country. SME exchanges make it easier for enterprises to get listed on the exchange and launch their IPOs.

2. AN OVERVIEW OF SMALL AND MEDIUM ENTERPRISES (MSMEs) IN INDIA

2.1 DEFINITION: In accordance with the provisions of Micro, Small & Medium Enterprises Development (MSMED) Act, 2006, the Micro, Small and Medium Enterprises (MSME) are classified into two Classes:

Manufacturing Enterprises: The enterprises engaged in the manufacture or production of goods pertaining to any industry specified in the first schedule to the industries (Development and regulation) Act, 1951). The Manufacturing Enterprises are defined in terms of investment in Plant & Machinery.

Service Enterprises: The enterprises engaged in providing or rendering of services defined in terms of investment and are in equipment.

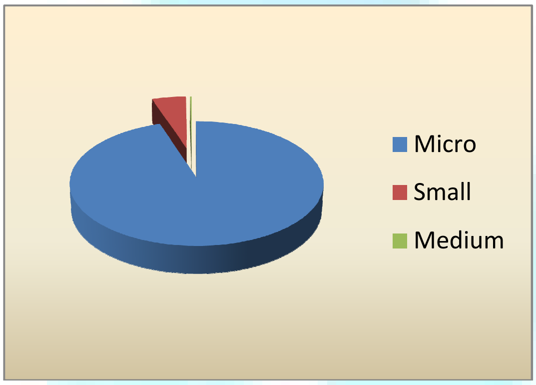
	Manufacturing Sector
Enterprises	**Investment in Plant & Machinery**
Micro Enterprises	Does not exceed twenty five lakh rupees.
Small Enterprises	More than twenty five lakh rupees but does not exceed five crore rupees.
Medium Enterprises	More than five crore rupees but does not exceed ten crore rupees.
	Service Sector
Enterprises	**Investment in Equipments**
Micro Enterprises	Does not exceed ten lakh rupees.
Small Enterprises	More than ten lakh rupees but does not exceed two crore rupees.
Medium Enterprises	More than two crore rupees but does not exceed five core rupees.

The limit for investment in plant and machinery / equipment for manufacturing / service enterprises, as notified, vide S.O. 1642(E) dtd.29-09-2006

2.2 PERFORMANCE OF MSME SECOR IN INDIA: MSMEs contribute significantly to employment generation and development of rural areas. MSME sector is one of the key drivers for India's transition from an agrarian economy to an industrialized economy. Around 50% of MSMEs in India are owned by underprivileged groups, which show how MSMEs contribute to improve the entrepreneurial skills and economic empowerment. MSMEs feed local consumer markets and international value chains. As per information in the annual report of MSME 2012-13, MSMEs account for a large share of industrial units which can be seen from the fact that in the year 2011-12, the total number of enterprises in MSME Sector (Registered+ Unregistered) was 447.73 lakhs with total employment of 1012.59 lakhs. MSMEs are accordingly also effective vehicles of employment generation.

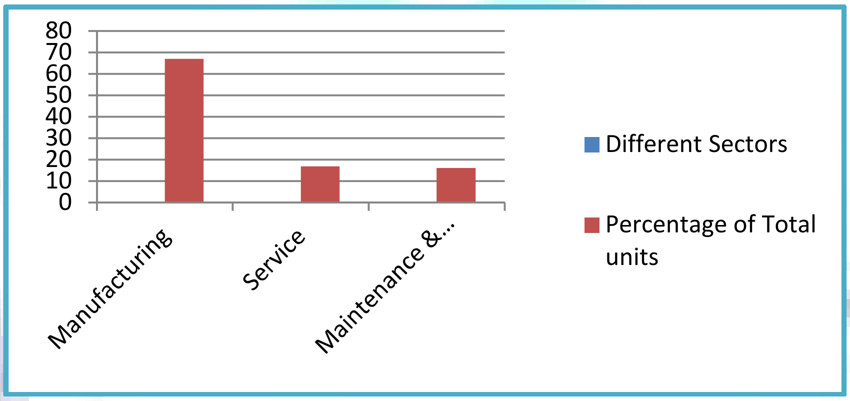
The estimated numbers of enterprises and employment have increased at an annual compound growth rate of 28.02% and 26.42% respectively. MSMEs contribution to rural development can be observed from the fact that 200.19 lakhs of the working enterprises were located in rural areas, which accounted for 55.34% of the total working enterprises in MSME sector; whereas 161.57 lakhs (44.66%) of the working enterprises were located in urban areas. The sector currently produces more than 6,000 quality products, ranging from handloom saris, carpets and soaps to pickles, auto and machine parts targeting both domestic and international markets. Provided necessary support, MSMEs are likely to experience a high growth path, and the share of MSMEs in the country's GDP is expected to touch double-digits by the end of this decade, from the current 8.72 per cent.

FIG. 1: COMPOSITION OF MSMES



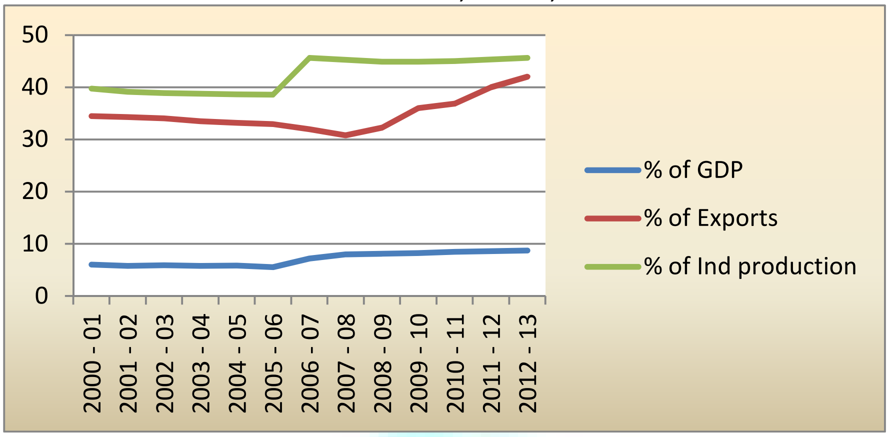
Note: After MSMED Act 2006, all SSIs and rural industries merged as MSMES. Some of the industries are not registered as per act. Here Researcher explaining that Micro Enterprises are 94.94%, Small Enterprises 4.89% and Medium Enterprise 0.17%.Findings from the MSME data percentage of sickness of enterprises have down since 2006.So there is chance to up gradation of Micro Enterprises increase to Small enterprises and Small Enterprises to Medium Enterprises

FIG. 2: PERCENTAGES OF DIFFERENT SECTORS OF MSMEs



Note: Here Researcher mentioned the registered MSMEs and how the different sectors having their percentage of enterprise with total enterprises. In manufacturing sector having 67.10% ,Service sector 16.78% and Maintenance& others 16.12%.There is chance to increase the service sector percentage.

FIG. 3: MSMEs CONTRIBUTION TOWARDS GDP, EXPORTS, AND INDUSTRIAL PRODUCTION



Note: Up to MSMED Act 2006, SSIs are taken. Then ARIs and SSIs are called as MSMEs.That is the reasons in 2005-06 total units are 12.34 million registered units, but in 2006 -07 total MSMEs increased to 26.19 million registered units. Due to global economic slowdown 2008-09 exports came down. It is expected that GDP contribution to be reached to double digits shortly.

2.3 ROLE OF MSMES IN INDIAN EXPORTS

The main markets for the 20 most-exported MSME product groups, which accounted for more than 90 per cent of MSME exports from 2009 to 2012, include the USA, European Union (EU), UAE, Turkey, Singapore, Hong Kong, Israel and Saudi Arabia. The MSME sector accounts for around 45 per cent of total manufacturing output15. MSME sector has about 36 million working enterprises and 80 million employment throughout the country. It has been continuously growing at a rate of 12-13% per annum, far above the large sector. The MSME sector contributes about 45 per cent of the manufacturing output and 43 percent of the total exports of the country, and 8.72 per cent of the country's GDP. MSME exports have expanded at an annual average growth rate of 11.0% during 2007 to 201116. For the period 2009-12, MSME exports are estimated at US $ 325 billion. MSME exports mainly consist of pearls, precious stones, metals, electrical, electronic equipment, pharmaceutical products, organic chemicals, articles of iron & steel etc.As per the information received from the ministry of MSME, for the year 2011-12, MSME exports are estimated at US $ 131 billion constituting 43% of total exports of the country. Participation in exports gives MSMEs exposure to global trends, and stimulates innovative ideas and designs.

3. CHALLENGES FACING INDIAN MSMES IN THE GLOBAL BUSINESS ENVIRONMENT

Although Indian MSMEs are a diverse and heterogeneous group, they face some problems, in domestic business Environment and Issues in FTAs are as follows:-

3.1 CHALLENGES IN DOMESTIC MARKET

3.1.1 Lack of availability of adequate and timely credit. The major dependence for some sectors (eg. Handicrafts) is for larger working capital requirement, which directly impacts their production cycle.

3.1.2 High cost of credit, with interest rates of 14-16%.

3.1.3 Collateral requirements being insisted upon by banks

3.1.4 Limited access to equity capital for MSMEs

3.1.5 Marketing is one of the critical areas where MSMEs face problems including product differentiation, brand building, customized tailor-made services, clientele building, after sales servicing etc. Many entrepreneurs are not entering in the field of exports due to lack of market knowledge, availability of a growing domestic market, and the complexities of international trade.

3.1.6 Limited scale of operations leads to low production capacity (and consequent low exportable surplus), which is related to the maximum limits for capital investment for definition of MSME

3.1.7 Problems of designing, packaging and product display due to limited capacities financial and human

3.1.8. Inadequate infrastructure facilities, including power, water, roads, etc. which are however not unique for MSMEs, but impact manufacturing more than services

3.1.9 Low technology levels and lack of access to modern technology.

3.1.10 Lack of skilled manpower

3.1.11. Absence of a suitable mechanism which enables the quick revival of viable sick enterprises and allows unviable entities to close down speedily.

3.1.12. Lack of coordination among the various organizations involved in the promotion of MSMEs, including organizations of the State Governments, and poor linkages with the institutional stakeholders in the private sector. There is also duplication of programmes run by various Ministries for the same target group

3.1.13. Lack of reliable and updated data base to help in monitoring the development initiatives and formulation of appropriate schemes to meet the differential needs of the heterogeneous beneficiaries.

3.1.14. Non availability of raw materials at a competitive cost, very often due to low volumes

3.1.15. High transaction costs and procedural delays leading to high fixed costs.

3.2 NEW CHALLENGES OF GLOBAL COMPETITIVENESS

Under FTAs, the key trade issues can be classified into two categories: Good Trade Issues and Non-Goods Trade Issues especially the MSME sector.

3.2.1 In goods trade, there are mainly six issues: (I) Import Duties, (II) Export measures, (III) Non-tariff measures, (IV) rules of Origin, (V) Anti-concentration clause and (VI) Sectorals (Zero for Zero reduction).

(I) Import Duties: Increased import competition due to tariff elimination would be a big threat for MSMEs. According to the SIDBI survey, 71% of the surveyed MSMEs found that their sales due to imports declined by 26-50 percent.

(II) Export Taxes: If India is forced to remove existing export taxes as a FTA requirement on a number of products including raw leather and wood, MSMEs could face severe shortage of raw material and they will no longer be able trade competitively. Livelihoods of millions of people dependent on these MSMEs will be adversely affected. For example, in furniture sector, Malaysia imposes export taxes on raw timber which keep their inputs relatively cheap and hence they remain competitive in furniture trade. Kenya too revived its leather industry by imposing 40 per cent export duty on raw hides and skins.

(iii) Non-Tariff Measures/Barriers: By agreeing to stringent NTM/NTBs in FTAs, it would become compulsory for MSME exporters to meet high health, safety, labour and environment standards for exports to developed country markets. Majority of MSMEs in India neither have the capacity nor the facilities to match the high standards of developed countries. MSMEs cannot hope to gain from FTAs because these do not ensure lower standards or easier processes of quality certification. Consequently, MSMEs exports may face very high rate of rejection in importing countries. Some development analysts feel that labour and environment standards must be pursued domestically, committing to these in trade agreements is an invasion of India's domestic policy choice.

(IV)Rules of Origin (ROO): The Indian MSMEs often want to import cheap inputs as intermediate goods from neighbouring countries like China and MSME products often have huge import content. Due to stricter ROO, MSMEs will not be able to import at cheaper rates these intermediate goods and their products will no longer qualify for exports and additional market access.

As an export promotion measure, under Duty drawback scheme Indian MSMEs are provided reimbursement of import duty, if the import is meant for manufacturing of export products. This may encourage higher import content but then these products will come up against the ROO barrier and will not be able to export to FTA partners with strict ROO.

(V)Anti-concentration clause: The Clause may be problematic for the auto industry, textile & garments and fisheries. Most of these industries are in the MSME sector. Also, it could be a problem for gender sensitive products i.e. products where women workers are employed in large numbers. Women's employment opportunities in MSMEs will be severely affected if such a product line under food processing industry is left out of the sensitive list.

(VI) Sectorals (Zero for Zero reduction): Under the WTO's proposal on Sectorals, trading partners have to reduce import duty to zero in some sectors with immediate effect on a voluntary basis. Due to inclusion of the Sectorals clause in FTAs, import duty in both the partner countries may become zero with immediate effect in some important and sensitive industry segments like textiles.

3.2.2 IN FTAS, UNDER THE NON-GOODS TRADE ISSUES, THERE ARE KEY ISSUES, NAMELY (I) INTELLECTUAL PROPERTY RIGHTS POLICY, (II), INVESTMENT POLICY, (III) PUBLIC PROCUREMENT POLICY AND (IV) COMPETITION POLICY.

(I) Intellectual Property Rights (IPRs): Under WTO's Trade Related Intellectual Property Rights (TRIPS), member countries are obliged to adhere to minimum harmonised standards for protection of IPRs such as patents, geographical indications (GIs), trademark, industrial design rights, copyright etc.

For small enterprises in particular, the stricter IPR regime will create some major problems. Only 1.65% registered SMEs in the world have patents. This is probably because most MSMEs lack the resources and capability to do research and development and acquire advanced technologies. Smaller producers will be often pushed out by bigger companies, especially multinationals, which can get IP rights such as patents much more easily as they have huge resources to spend on R&D and patent applications. The stricter IPR regime under FTAs will in effect give developed countries considerable control over critical resources in developing economies. It also threatens products which are based on traditional knowledge such as herbal medicines.

(II) Investment Policy: In most industries in India, foreign direct investment is already allowed (given certain restrictions or caps) so additional FDI may not necessarily be forthcoming after opening up of "Investment" in FTAs. But, after an FTA, wholly foreign owned enterprises may be set up in many more areas without any performance requirements and it could also lead to mergers and acquisitions in certain MSME segments. Small entrepreneurs and small business could be taken over by the large enterprises. In the pharmaceutical industry, for example, such acquisitions are already taking place.

(III) Public Procurement: If the government gives market access to India's public procurement market, foreign companies will have a legal right to be treated equally with domestic companies under the 'national treatment' clause when they apply for public procurement contracts. If this happens, Indian MSMEs which supply many products to the government (such as leather, plastic and metal products) will have to compete with foreign companies. This is likely to result in MSMEs losing out in terms of market share for their products. India is not keen to include its government purchase (GP) market under FTAs especially when it is not likely to get much access into developed country procurement markets where a host of Non Terrif Barriers block foreign suppliers.

(IV) Competition Policy: Allowing free competition often allows smaller enterprises to be eaten up by larger ones. The history of competition policy in most countries has shown that it has led to mergers and acquisitions of smaller companies in a big way. Competition Policy often prevents state aid and limits the activities of state trading corporations. Competition policy in FTAs will lead to reduced policy choices for the Indian government. The Indian government may not be able to treat Indian MSMEs preferentially over bigger and foreign industries and also may not be able to proffer development schemes for the Indian MSMES.

4. MAJOR INITIATIVES UNDERTAKEN BY THE GOVERNMENT TO REVITALISE THE MSME SECTOR

MSMEs play a highly constructive role in an economy. This is evident from the economic and socio economic benefits achieved by the developed and the developing world.

4.1 BSE and NSE got the approval for SME platforms from SEBI and have been operational. This will serve as an opportunity for Indian SMEs to raise funds from capital markets.

4.2 To achieve the overall target set by the Prime Minister's National Council on Skill development, Ministry of MSME and the agencies conducted the skill development programmes for 478,000 persons during FY12. During FY13, the Ministry aims to provide training to 572,000 people through its various programmes for development of self-employment opportunities as well as wage employment opportunities in the country.

4.3To improve the productivity, competitiveness and capacity building of MSMEs, the Government of India has adopted a cluster-based approach.

5. SNAPSHOT OF BUDGET 2012-13 FOR MSME SECTOR

5.1 Availability of equity to the MSME sector, the Government has set up an India Opportunities Venture Fund with SIDBI worth ` 50 bn.

5.2 Allocation for the Prime Minister's Employment Generation Programme increased by 23% from ` 10.37 bn to ` 12.76 bn.

5.3 Under the Public Procurement Policy for Micro and Small Enterprises (MSEs), Ministries and Central Public Sector Enterprises (CPSEs) are required to make a minimum of 20% of their annual purchase from MSEs.

5.4 Increase in the turnover limit from ` 6 mn to ` 10 mn for SMEs for compulsory tax audit of accounts and for presumptive taxation.

5.5 Exemption of capital gains tax on sale of a residential property, if the sale consideration is used for subscription in equity of a manufacturing SME company for purchase of new plant and machinery.

5.6. Reduction in the basic customs duty to 2.5% with concessional Counter veiling Duty of 6% on specified parts, components and raw materials for the manufacture of medical devices such as disposables and instruments.

5.7. Full exemption from basic customs duty and CVD to specified raw materials for the manufacture of coronary stents and heart valves.

5.8. Reduction in the excise duty from 10% to 6% on matches manufactured by semi-mechanised units.

6. RECOMMENDATIONS FOR COMPETITIVENESS OF MSMES IN THE GLOBAL BUSINESS ENVIRONMENT

The Cabinet Secretary constituted the Inter-Ministerial Committee for boosting exports to suggest short and medium term measures to enhance exports from the MSME sector. The Committee met the different industry Associations and discussed with their representatives the various issues they face and suggestions to resolve them. Inputs were also taken from the different Government departments and Agencies. Based on the suggestions received, the Committee makes the following recommendations.

6.1 AVAILABILITY AND COST OF CREDIT

The cost of credit and credit availability is perhaps one of the most important factors for MSMEs. Availability of credit at internationally competitive rates is a major issue facing the MSMEs in India.

6.1.1. Cost of Credit: The cost of export credit for MSMEs varies from 11-14% even after taking into account the current 2% interest subvention available. This is on the higher side compared to international standards. There is a need to lower the interest rate for MSME exporters. The Committee recommends that an additional 2% interest subvention may be provided to MSME exporters who repay on a timely basis. A separate sub-limit of say 8% for credit to MSME exporters, within the overall priority sector limit may also be stipulated.

6.1.2. Receipt of Interest Subvention: The credit of interest subvention on a timely basis is essential for exporters. Many banks reportedly pay the interest subvention only after delayed receipt of the amount through RBI/Govt. The Committee recommends that RBI & MoC should examine the reasons for delay; so as to ensure that interest subvention is provided to all the exporters on a timely basis.

6.1.3. Foreign Currency Credit: Interest Rate on Export Credit in Foreign Currency is an important factor in export competitiveness. Currently, the interest rate is as high as Libor + 4%. The Committee recommends to consider whether the spread can be reduced to Libor + 2%. (Earlier it was stated to be LIBOR + 2.5 %.).

6.1.4 Pre-shipment Credit in Foreign Currency – Conversion Losses: Pre-shipment Credit in Foreign Currency (PCFC) is a major component of export credit. The Committee recommends that there is a need to verify if under PCFC, the limits are converted into INR and on payment reconverted to USD leading to losses for the exporter.

6.1.5 Automatic Increase in Credit Limit: When rupee is depreciating, there is a need to immediately increase the Export Credit Limit. The Committee recommends that Export Credit Limit to MSME Units may be increased by 20% automatically.

6.1.6 Swap Facilities: Under the swap arrangement, a bank can buy US dollars up to its eligible swap limit from the RBI and further sell the same amount of dollars at the prevailing market rates for swaps of a similar tenor. RBI to provide 100% refinance under the scheme.

6.1.7 Increasing Access to Finance: The Committee recommends that banks should aim that 40% of Export Credit is earmarked by banks for MSMEs (in consonance with the share of MSMEs in India's total exports).

6.2 MARKETING SUPPORT

The need for better marketing and brand development was recognized to be a major impediment in increasing exports. There is a need to focus more on the marketing needs of the MSMEs to enhance their exports,

6.2.1. Budget for Market Development Assistance/Market Acess Initiatives: Greater support for organizing trade visits, trade promotion and facilitation in major cities is 'required'. The budget for the MDA scheme of DoC is about Rs. 50 crores and the scheme allows support to a maximum of five visits by an exporter with a total annual support of Rs. 7.10

6.2.2. Scope of Market Development Assistance/Market Acess Initiatives: Exporters need to frequently incur soft expenditures like branding, advertisement, promotional events for which financial availability is limited. These expenses need to be encouraged through various means, including the concept of allowing eligible companies to deduct against their taxable income twice the amount of expenses incurred on certain export related qualifying activities.

6.2.3 Building Brand India: Indian Brand Equity Foundation primary objective is to promote and create international awareness of the 'Made in India' label in markets overseas and to facilitate the dissemination of knowledge of Indian products and services. Against this backdrop, a fund to subsidize MSMEs' marketing operations would be a step in the right direction.

6.2.4 Better Market Information: It was suggested that there is a need to create, for the benefit of MSMEs a virtual market information cell on latest development on consumer preferences, standards, regulations, etc. where MSMEs can be made aware.

6.2.5 Support for E-Commerce: It was suggested that Support for E–Commerce be provided as E-Commerce portals provide marketing support to MSME and the linked payment gateway ensures payment without any risk to exporters.

6.2.6. Support from large corporate exporters: Large corporate exporters may be enlisted to promote some of their domestic MSME suppliers in foreign markets, perhaps as a part of their CSR activities. This could also be incentivized.

6.3 PRODUCTIVITY/TECHNOLOGY/SKILL UP GRADATION OF MSMEs

The recommendations of the Committee are as follows:

6.3.1 Enhancement of CLCSS: Credit Linked Capital Subsidy Scheme (CLCSS) provides upfront capital subsidy on institutional finance for technology up gradation to SSI units, including tiny, khadi, village and coir industrial units.

6.3.2 Design Support: Design support and exposure to MSMEs is essential for better product development.

6.3.3 Research/Resource Centres: It was suggested to allocate funds for setting up innovative research/resource centre. The Committee noting that the value addition in knitted export is high recommends setting up of Centers at Tirupur, Kolkata and Ludhiana.

6.3.4 Process/ Product Development Centres: For quality product development, Process cum Product Development Centre should be established in every cluster with technical staff for testing the products and to assist in development of the products.

6.3.5 Tool Rooms: Towards enhancing skill level of workers of MSME sectors, setting up of 100 Tool rooms/Technology Development Centre is recommended.

6.3.6 Common Facilities Centres: It was suggested that 'clusters' may be provided with Common Facility Centres for quality testing, effluent treatment etc.

6.3.7 Compilation of Skill Development Schemes: There is a need to dovetail the various HRD schemes of DIPP, Ministry of HRD, MoLE, Ministry of MSME and also State Governments, so that the maximum utilization of funds for the MSMEs could be ensured.

6.3.8. Linkages with Technical Institutions: To support technological innovation and design, technical institutions such as IIT or NIT may 'adopt' export oriented MSME clusters. Preferably, 'design clinics' may be set up for MSME clusters.

6.3.9 Technology Acquisition Scheme: It was suggested that the Ministry of MSME, through its arm NSIC, can consider looking at providing a platform for technological alliance for SSIs with Global Companies. A Technology acquisition scheme to provide assistance in both, development of indigenous R&D products as well as procurement of global technology, could be considered.

6.4. DUTIES/INDIRECT TAXES/INCENTIVES RELATED ISSUES

There is a need to have a supportive duty and incentive structure for the MSME sector, so that the manufactured product is at a competitive price at the international level. Products of MSMEs need more incentives as MSMEs have a limited resource base.

6.4.1. Differential Tax Regime: Tax deductions for export turnover/ profit were a big incentive for boosting exports (instead of focusing on domestic market). But with the movement towards Direct Taxes Code, profit related deductions are being phased out.

6.4.2. Double Weightage for MSMEs: Double weightage for MSMEs, along with other weightages for grant of recognition as Status Holders, was suggested.

6.4.3 Removal of export incentives for large companies: Export incentives for large exporting units may be phased out and focused incentives provided for the MSME sector.

6.4.4 Reasonable Freight rates: Container Corporation is having a monopoly, freight rates for export cargo were extremely high. The Committee recommends that while freight rates need to be commercially reasonable, differential rates for MSME export products could be considered. The proposed Rail Tariff Authority would also be helpful in this regard.

6.4.5 High Cost of ECGC Cover: The Committee also received representation for introduction of a separate ECGC policy, with more friendly procedures to be implemented for Small & Micro Exporters (based on Export Turnover).

6.4.6 Specific Duty Drawback Rates: The Committee recommends that a list of items without a Duty Drawback Rate may be provided by the export associations along with cost and other data, so that CBEC/Duty Drawback Committee may take further action to ensure fixation of separate Duty Drawback rates.

6.4.7 Inverted Duty Structure: The Committee recommends that different Associations should give a list of items with no dual use – but with inverted duty structure. Central Board of Excise &Customs to examine the matter there after, for appropriate rectification. Information on the relative value added would also be required in order to rectify the disadvantages.

6.4.8. Expeditious Rebates/ Refunds: In order to expedite the process of rebates and refund for MSME exporters, the rebate claims be filed electronically; The hard copies of documents such as shipping bills, ARE – I duly signed by customs etc. may be submitted manually; If possible the CENVAT rebate claims may be paid electronically.

6.4.9. Refund of Excise Duties: It was suggested that refund of Excise Duty against physical export under Rule 18 of central excise may be done on lines similar to Draw Back refund. It was also suggested to dematerialize the duty scrips under chapter 3.

6.4.10. Refund of VAT: The Committee recommends that there should be a provision of a maximum period of one month for refund of VAT beyond which interest may be payable to the exporters

6.4.11. Service Tax on Inward Remittances: The Committee recommends non-levy of service tax on conversion to Rupees on inward remittances of export proceeds.

6.4.12. Status Holder Incentive Scheme: The MSMEs Exports would benefit if the Status Holder Incentive Scheme could be extended until 2019, which has been withdrawn from the year 2013-14.

6.5 INFRASTRUCTURE

Good infrastructure facilities ensure the proper delivery and safety of the exported product along with savings in time and cost.

6.5.1. 24*7 Facilities: There is a need to allow export consignments under Duty Drawback/FTP incentive schemes, on a 24*7 basis, so as to ensure faster delivery of export product.

6.5.2. Port Congestion: The congestion in ports may hamper the export efforts of MSMEs.The Committee recommend that DGFT/CBEC may look into the matter, and take similar measures including electronic payments.

6.5.3.No Detention of Export Consignments: According to FTP provisions, no export consignment shall be detained at ports.

6.5.4. Uninterrupted Power Supply: It was suggested that uninterrupted power supply to the export-oriented MSME clusters/ industrial parks may be ensured, as it would increase working hours and labour productivity and therefore exportable surplus.

6.5.5. MSME Clusters near Highway/Rail Corridors: Locating MSME clusters close to the National Highway or railway corridors were suggested so as to ensure facilitation for boosting exports. Keeping in view the State Governments may be encouraged to acquire land near Highways and Railways corridors.

6.6 INSTITUTIONAL FRAMEWORK

The institutional framework to support MSMEs is essential for their all-round development and contribution to the exports of the country.

6.6.1 Focus On MSMEs:. An Inter-ministerial grievance redressal mechanism to address the policy related issues of exporters related to DGFT and the Central Ministries. The Board of Trade to discuss export strategy, continuously monitor progress of execution and suggest course correction, with a focus on MSMEs.

6.6.2. Facilitation Support: MSMEs face the problem of unpaid invoicing in exports. It was suggested that a facilitation council should be set up to take up the matter on their behalf at a subsidized cost.

6.6.3 Role of Associations: The awareness among MSMEs of the different schemes seems to be limited. The Committee recommends that in order to guide MSMEs, the export Associations need to be more pro-active and these Associations must regularly update/inform the MSMEs regarding the export related schemes, procedures and facilities of the Government.

7. CONCLUSION

Micro, Small and Medium Enterprises (MSME) sector contributes about 40 per cent in the country's total exports and over 8 per cent to India's Gross Domestic Product (GDP). The sector accounts for around 45 per cent of the manufacturing output and provides employment to about 60 million persons through 26 million enterprises. Inter-Ministerial Committee was appointed for boosting exports from MSME sector in India. The Committee had discussed with different departments dealing with MSMEs and working in sectors with large export potential. Suggestions were asked from the different Export Promotion Councils and Industry Associations on the issues and the problems faced by them. The Committee notes that the major problems for the MSMEs relate to the availability and cost of credit, marketing support, improving productivity, technology/skill up gradation, infrastructure and the institutional framework for the MSMEs and suggest short and medium term measures to enhance exports from MSME sector in India. The Committee was conscious of the fact that a number of the recommendations would increase the budgetary expenditures/reduce tax revenue. However, keeping in view the Current Account Deficit, there is an imperative need to boost exports. It is in this context that the Committee has recommended that fiscal benefits/tax related incentives may be limited to 5 years

Government supported/initiated facilities, including Export incentives, have not yet reached many MSMEs in India, especially those located in rural or rather isolated regions. The main reason for that lacking is the lack of information about existing measures. Thus, the main problem is not that the trade facilities do not exist, but it is mainly the lack of awareness by the MSMEs. As lack of awareness by MSMEs to trade promotional incentives is a major issue, the most important policy measure should touch upon 'reaching out to MSMEs.As a researcher opined that Ministry of MSME should tie up private institutions and Industry associations for providing more number awareness training programmes to MSME Entrepreneurs on how to find channel to get information and access to export facilities.

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A STUDY ON CUSTOMER RELATIONSHIP MANAGEMENT (CRM) THROUGH E-BANKING

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ABSTRACT

Relationship marketing, exchanges have shifted from transactions to relationship; the current study explores the association between deployment of customer relationship management (CRM) best practices and E-Banking of profitable customers in Indian retailbanking sector. The study comprises two parts. The first part called the CRM best practice survey involves the use of descriptive research design. The second part viz. case study research involves the use of embedded in Online Banking Customers Survery. Relationship marketing in retail banking is the acitivity done by banks to attaract, interact, and retain more profitable customers because most of the retail banks have both profitable and unprofitable customers, and retention of a small number of customers (5 %) yields 95% increase on the net profit value. To gain competitive advantages, big companies are now moving new orientations which are termed as Customer- Centric Orientations. A customer centric firm is considered one, which has the capability to treat every customer individually and uniquely. The core of relationship marketing is to develop and maintain long term relationship with customer rather than simply a series of discrete transactions. They noted that the guiding principle for the management is the customer's lifetime value firms must consider the entire relationship with the customer rather than calculate discrete transactions.

KEYWORDS

CRM, e-banking.

INTRODUCTION

Several commercial CRM insurance packages are available which vary in their approach to CRM. How ever, as mentioned above, CRM is not just a technology, but rather a comprehensive customer-centric approach to an organization's philosophy in dealing with its customers. This includes policies and process, front-of-house customer service, employee training, marketing systems and information management. Hence it is important that any CRM implementation considerations stretch beyond technology, towards the broader organizational requirements.

The objectives of a CRM strategy most consider a company's specific situation and its customers needs and expectations. Information gained through CRM initiatives can support the development of marketing strategy by developing the organization's knowledge in areas such as identifying customer segments, improving customer retention, improving product offerings(by better understanding customer needs),and by identifying the organization's most profitable customers.

CRM strategies can vary in size, complexity and scope. Some companies consider a CRM strategy to only focus on the management of a team of sales people. How ever, other CRM strategy can cover customer interaction across the entire organization .many commercial CRM insurance packages that are available provide features that serve sales, marketing event management, and project management and finance.

Successful CUSTOMER RELATIONSHIP MANAGEMENT requires marketing, sales and service agility of a star company to enable today's business to out pace their competitors in the race for customers.

Managing the customer experience, maintaining a more reliable data base, improving service operations. Fostering customer loyalty, embracing the characteristics of high performance marketing and other related subjects.

Making such a pivot in CRM to create customer interactions that produce optimal experiences and LONG TERM relationships must be the top mission. Above all, those experiences must be consistent with a company's brand promise.

CRM DEFINITION

CRM defines the process of the company are fully occupied with acquiring customers ,selling the product to the customers, and maintaining a **LONG TERM RELATIONSHIP** to a customer.

CRM is actually a tremendous step forward in creating a system that can provide a means for retaining individual loyalty in a world of nearly seven billion souls. CRM helps in order to understand changing nature of the customer because customer is not what they used to be.

BENEFITS OF E-CRM

- Create long term relationships with customers with minimum cost in E-Banking.
- Reduced the customers defection rate.
- Focuses on high- values customers
- Increase the profitability from low –profit customers.

E-CRM is an approach in relationship management. It benefits all its stake holders who include employees, customer's suppliers and channel partners.E.CRM takes much form and depends on the objectives of every organization, it is not only technology or software, this tool is used to align the business processes with the customers in a strategic way.

E-CRM increase customer loyalty because information stored in this software helps a company to look at the actual cost of winning and retaining the customers. By using this information a company can use its time and resources for most profitable customers. In this way a company can find the best customers by managing them as a premium group. This shows that it is not advisable to treat all customers in the same way.

E-CRM gives more effective marketing because this information is used to predict what kind of product a customer likes to buy and timing of the purchase. It allows to make the campaign targeted and to track it in a more effective way. This customer data is used to analyze it in a more effective way – like which marketing campaign is the best and effective and its impact on sales and profitability.

E-CRM improves customers service and support because it helps to receive, update and fulfill orders remotely and this is the finest used to complete this service in the best practical way.
E-CRM is an efficient and cost reduction tool, which integrates all customers data single database , it permits marketing teams, sales forces, and all departments within the company to exchange information's and to achieve the common objectives of the corporations by using the available statistics.

E-CRM ONLING BANKING: A CASE STUDY OF HDFC BANK

The HDFC Bank was provided a list of variable information's , which are relevant for the case study ,and which were investigated in detail, According to HDFC Bank , a new strategy was outlined at the bank, which includes a large number of steps to change in new customer relation channels like www, self-service , etc.

- Electronic Customer Relationship Management (E-CRM) at HDFC Banking: For more than 15 years HDFC had its IT strategy based on a single, centralized IT platform. All its divisions and subsidiaries are operated on that shared platform. It website provides bank information's , products information , brochures, country information's where HDFC is operating ,events , e-mail support , news and search, When a customers avails the HDFC e-banking facility, it is available for 24 hours a day, 7 days a week. It is a web-based system and it even enables companies to conduct rountine banking transactions. It gives a company quick access to its accounts, create and approve payments, and also gives the current liquidity situations of the firms. A customers company can also integrate its accounts data with HDFC online system. Its first part of the CRM tool at HDFC is the customer portal setup- This portal helps automatic e-mail of transactions. And also helps advicers to see the overall view of the individual's customers files, their history and facilities provide to them, this portal also has the products and solutions which are relevant to the customer's history. This service gives a lot of customers , and the next step is products presentations , which is based on customer score models and behaviours and by considering these score models , matching is done to provide individual needs.
- HDFC Bank helps to overview tasks, files and customer leads generated from the customer's behavior. HDFC is in position to introduced automatic limits for all customers and it's based on the overall overview of scores models and customers credit history.
- It helps the bank advisers to offers more effectively advisory services and sales.
- HDFC introduces more items related to the CRM tools one of them was the the Financial Planning.This tool made it possible for the customers to create and maintain their own financial budgets via the E- Banking facility. By using this tool, customer can share their financial information's with a bank advisor, this has help advisory to make decision based on actual facts, and while previously, it was based on manual entries.
- Functions of HDFC E-Banking
- View Balances and entries
- Make payments to creditors & Order cheques
- Securities trading
- View custody accounts
- Account/ Payments types
- Domestic accounts (both rupees & foreign currency)
- Domestic payments
- International payments from India
- Local payments from outside of India
- No of users : One agreement – multiple users
- Variable authorizations , 2) Variables permissions 3) Personal Passwords
- Connections
- Direct Connection to HDFC Bank/via ISP 2) Access to HDFC Bank Group Website
- Flexible Payments – Store and re- use creditor information's
- Executive payments in a file
- Executive payment online

OTHER OPTIONS

1) Restrictions of funds available for transactions
2) Various securities & forex modules
3) Trade Finance module.

CONCLUSION

The Finding show that the HDFC Bank is using E-CRM tool for mass customizations, customers profile , self- serving and time saving as their primary goal. Then the second priority is for mass market operations, accuracy in order management, personalization's and one marketing as their secondary task. And low importance is given to the marketing campaign. While Monitoring customers behavior , market segmentation and enhanced customers services, right products to right customers , customers promotions and retentions , one bank gives more importance , while the others gives low importance . On the basis of the finding of the study, the following objectives are considered to be the most important for the banks participating in the E-CRM activity.
Mass –Customizations
Customer profiling.
Self Service
One – to – one and Personalization services
It was found that a primary benefit of E-CRM in the banking sector is the reduced cost of operations locks in target prices, and increase in customer loyalty. While Secondary importance is given to customer's recognitions, competitive, products and a high –security system, low priority is given to different contact options for customers to contact and minimize the administrative work. While in overview of transactions, localizations of transactions, real time overview of liquidity positions, organizations activity and one point of contact.
The finding show that definite benefits which are derived from banks perspective by using E-CRM are reduce cost of operations , locks in target price , increase customers loyalty , staff training , evaluations of customer feedback.

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FINANCIAL LEVERAGE AND ITS IMPACT ON STOCK RETURN

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ABSTRACT

Every investment is characterized by risk and return. For a common man, the term 'risk' means a situation in which something unpleasant/unexpected may happen. In other words, risk is a situation involving exposure to uncertainty. If the actual return obtained is same as the expected return, such an investment could be considered to be risk free, if the actual return obtained is less than the expected return, such an investment could be considered to be risky. Leverage is the employment of an asset or source of finance for which firm pays fixed cost or fixed return. Financial leverage is defined as the ability of a firm to use fixed financial charges to magnify the effect of changes in EBIT on EPS. It is ratio of percentage changes in EPS to percentage changes in EBIT. It is also the ratio of EBIT to EBT. In simple it is nothing but Debt-equity ratio. The present study focuses on the impact of financial leverage on the returns of top 175 BSE companies excluding the banking companies. It helps to the companies to select the best portfolio to minimize the risk. The core objective of the study is to find out the impact of financial leverage on stock returns. Though many companies are listed under BSE we have taken only 175 companies out of top 200 BSE stocks excluding Banking companies. Since the study is to relate between stock returns and financial leverage, study is based on financial statement which is not free from bias.

KEYWORDS

Abnormal return, actual return, CAPM return, , systematic risk, unsystematic risk.

INTRODUCTION

Every investment is characterized by risk and return. For a common man, the term 'risk' means a situation in which something unpleasant/unexpected may happen. In other words, risk is a situation involving exposure to uncertainty. In the domain of investment, the term 'risk' has a definite financial meaning. As we are aware, an investor invests his funds in anticipation of a regular stream of income in the future. Since, future is always uncertain, however careful one may be in predicting the future and planning for it, there is bound to be difference between the expected return on investment and the return actually realized. When an investor deploys his funds into some securities, he/she does so after analysing the expected returns. If the actual return obtained is same as the expected return, such an investment could be considered to be risk free, if the actual return obtained is less than the expected return, such an investment could be considered to be risky. Leverage is the employment of an asset or source of finance for which firm pays fixed cost or fixed return. Financial leverage is defined as the ability of a firm to use fixed financial charges to magnify the effect of changes in EBIT on EPS. It is ratio of percentage changes in EPS to percentage changes in EBIT. It is also the ratio of EBIT to EBT. In simple it is nothing but Debt-equity ratio. The present study focuses on the impact of financial leverage on the returns of top 175 BSE companies excluding the banking companies. It helps to the companies to select the best portfolio to minimize the risk.

OBJECTIVES OF THE STUDY

The core objective of the study is to find out the impact of financial leverage on stock returns. In order to achieve this core objective the following specific objectives have been framed.

- To do the risk return analysis of companies under study.
- To find out the risk and return of various portfolios constructed based on leverage.

SCOPE OF THE STUDY

The research study was confined to top 175 BSE companies excluding the banking companies. The study is conducted to analyze the impact of financial leverage on stock return.

METHODOLOGY

Research methodologies used in this study are being studied under the following headings

- **Sources of the data:** The study is mainly based on secondary data.
- **Sample size:** Top 175 BSE companies excluding banking companies
- **Statistical tools used:** Standard deviation, Beta, Coefficient of correlation, Regression, Coefficient of determination.
- **Financial tools used:** Ratio analysis and Comparative Financial statements.

TOOLS USED

$$\text{Return of a year} = \frac{P_1 - P_0}{P_0} * 100$$

Where P_1 = Opening Price
P_0 = Closing Price

$$\text{Average Return/Actual Return} = \frac{\text{Total Return of 5 years}}{5}$$

$$\text{Beta} = r_{xy}\frac{\sigma_x}{\sigma_y}$$

$$\text{CAPM return of the security} = R_f + \beta_i(R_m - R_f)$$

$$\text{CAPM return of the Portfolio} = R_f + \beta_i(R_m - R_f)$$

$$\text{Abnormal Return of security} = \text{Actual Return Of Security} - \text{CAPM Return of Security}$$

$$\text{Abnormal Return of Portfolio} = \text{Actual Return Of Portfolio} - \text{CAPM Return of portfolio}$$

$$\text{Systematic Risk of Security} = \sigma_{m^2} * \beta_i^{\,2}$$

$$\text{Systematic Risk of Portfolio} = \sigma_{m^2} * \beta_p^{\,2}$$

LIMITATIONS OF THE STUDY

Though many companies are listed under BSE we have taken only 175 companies out of top 200 BSE stocks excluding Banking companies. Since the study is to relate between stock returns and financial leverage, study is based on financial statement which is not free from bias.

DATA ANALYSIS AND INTERPRETATION

In the study the attempts are made to analyse the standard deviation (security), beta, returns and risk of the portfolio.

It is clear from Table 1 that MMTC Ltd. has highest (180.95%) actual return and JSW Energy Ltd. has lowest (-10.09%) actual return and the actual return of the portfolio is (40.11%). Manappuram Finance Ltd. has highest (35.55%) CAPM return and Tata Communications Ltd. has lowest (4.31%) CAPM return and the CAPM return of the portfolio is (16.70%). MMTC Ltd. has highest (161.39%) abnormal return and the JSW Energy Ltd. has lowest (-16.87%) and the abnormal return of the portfolio is (23.41%).

It is clear from Table 1 that JSW Energy Ltd. has lowest (4.99) systematic risk and Manappuram Finance Ltd has highest (44536.84) systematic risk and the systematic risk of the portfolio is 8051.03. Hindustan Petroleum Corporation Ltd. has lowest (100.79) unsystematic risk. MMTC Ltd. has highest (145640.46) unsystematic risk and unsystematic risk the of the portfolio is 7281.28.

It is clear from Table 2 that Jindal Steel & Power Ltd. has highest(104.43%) actual return and Suzlon Energy Ltd. has lowest (-12.81%) actual return and the actual return of the portfolio is 29.01%. JSW Steel Ltd. has highest (33.12%) CAPM return and Britannia Industries Ltd. as lowest (5.96%) CAPM return and the CAPM return of the portfolio is 17.22%. Jindal Steel & Power Ltd. has highest (80.69%) Abnormal Return and the Suzlon Energy Ltd. has lowest (-27.30%) Abnormal Return. Abnormal Return of the portfolio is 11.79%.

It is clear from Table 2 that Britannia Industries Ltd. has lowest (13.95) systematic risk and Bharat Petroleum Corpn. Ltd. has highest (37407.31) Systematic Risk and the Systematic Risk of the portfolio is 7730.75. Bharat Petroleum Corpn. Ltd. has lowest (86.75) unsystematic risk and the Jindal Steel & Power Ltd. has highest (15163.92) unsystematic risk and unsystematic risk of the portfolio is 1867.65.

It is clear from Table 3 that TTK Prestige Ltd. has highest (168.97%) actual return and Reliance Communications Ltd. has lowest (-21.15%) actual return and the actual return of the portfolio is 28.30%. Sesa Goa Ltd. has highest (47.19%) CAPM return and Jubilant Food Works Ltd. has lowest (4.29%) CAPM return and the CAPM return of the portfolio is 14.67%. TTK Prestige Ltd. has highest (132.02%) abnormal return and the Reliance Communications Ltd. has lowest (-30.66%) and the abnormal return of the portfolio is 13.63%.

It is clear from Table 3 that Oil India Ltd. has lowest (0.02) systematic risk and Sesa Goa Ltd. has highest (87370.17) systematic risk and the systematic risk of the portfolio is 5945.35. Coal India Ltd. has lowest (0.24) unsystematic risk and the Jindal Steel & Power Ltd. has highest (20177.07) unsystematic risk and unsystematic risk of the portfolio is 1597.01.

It is clear from Table 4 that NMDC Ltd. has highest (81.79%) actual return and Multi Commodity Exchange Of India Ltd. has lowest (0) actual return and the actual return of the portfolio is 28.35%. Engineers India Ltd. has highest (25.07%) CAPM return and Multi Commodity Exchange Of India Ltd. has lowest (6.48%) CAPM return and the CAPM return of the portfolio is 14.11%. NMDC Ltd. has highest (65.35%) abnormal return and the Bajaj Holdings & Investment Ltd. has lowest (-12.02%) abnormal return and the abnormal return of the portfolio is 14.24%.

It is clear from Table 4 that Multi Commodity Exchange Of India Ltd. has lowest (0)systematic risk and Engineers India Ltd. has highest (18226.59) systematic risk and the systematic risk of the portfolio is 4056.48.Multi Commodity Exchange Of India Ltd. has lowest (0) unsystematic risk. The NMDC Ltd. has highest (34195.04) unsystematic risk and unsystematic risk of the portfolio is 3989.12.

It is clear from Table 5 that there is low positive correlation (0.073) between the financial leverage and return on the security. The co-efficient of determination (0.005) says that only 0.5% of the variance in stock return is expressed by variance in the financial leverage

RESULTS AND DISCUSSION

Here an attempt is made by the researcher to analyze the data collected on the topic under study. The results are discussed under various headings based on the degree of financial leverage

Debt/equity ratio 2 and more than 2

MMTC Ltd. has highest (180.95%) actual return and JSW Energy Ltd. has lowest (-10.09%) actual return and the actual return of the portfolio is 40.11%. Manappuram Finance Ltd. has highest (35.55%) CAPM return and Tata Communications Ltd. has lowest (4.31%) CAPM return and the CAPM return of the portfolio is 16.70%. MMTC Ltd. has highest (161.39%) abnormal return and the JSW Energy Ltd. has lowest (-16.87%) and the abnormal return of the portfolio is 23.41%.

JSW Energy Ltd. has lowest (4.99) systematic risk and Manappuram Finance Ltd has highest (44536.84) systematic risk and the systematic risk of the portfolio is 8051.03. Hindustan Petroleum Corporation Ltd. has lowest (100.79) unsystematic risk. MMTC Ltd has highest (145640.46) unsystematic risk and unsystematic risk of the portfolio is 7281.28.

Debt/equity ratio more than 1 but less than 2

Jindal Steel & Power Ltd. has highest (104.43%) actual return and Suzlon Energy Ltd. has lowest (-12.81%) actual return and the actual return of the portfolio is 29.01%. JSW Steel Ltd. has highest (33.12%) CAPM return and Britannia Industries Ltd. as lowest (5.96%) CAPM return and the CAPM return of the portfolio is 17.22%. Jindal Steel & Power Ltd. has highest (80.69%) Abnormal Return and the Suzlon Energy Ltd. has lowest (-27.30%) and the Abnormal Return of the portfolio is 11.79%.

Britannia Industries Ltd. has lowest (13.95) systematic risk and Bharat Petroleum Corpn. Ltd. has highest (37407.31) Systematic Risk and the Systematic Risk of the portfolio is 7730.75. Bharat Petroleum Corpn. Ltd. has lowest (86.75) unsystematic risk and the Jindal Steel & Power Ltd. has highest (15163.92) unsystematic risk and unsystematic risk of the portfolio is 1867.65.

Debt/equity ratio more than 0 but less than 1

TTK Prestige Ltd. has highest (168.97%) actual return and Reliance Communications Ltd. has lowest (-21.15%) actual return and the actual return of the portfolio is 28.30%. Sesa Goa Ltd. has highest (47.19%) CAPM return and Jubilant Food Works Ltd. has lowest (4.29%) CAPM return and the CAPM return of the portfolio is 14.67%. TTK Prestige Ltd. has highest (132.02%) abnormal return and the Reliance Communications Ltd. has lowest (-30.66%) and the abnormal return of the portfolio is 13.63%.

Oil India Ltd. has lowest (0.02) systematic risk and Sesa Goa Ltd. has highest (87370.17) systematic risk and the systematic risk of the portfolio is 5945.35. Coal India Ltd. has lowest (0.24) unsystematic risk and the Jindal Steel & Power Ltd. has highest (20177.07) unsystematic risk and unsystematic risk of the portfolio is 1597.01.

Zero debt/equity ratio

NMDC Ltd. has highest (81.79%) actual return and Multi Commodity Exchange Of India Ltd. has lowest (0) actual return and the actual return of the portfolio is 28.35%. Engineers India Ltd. has highest (25.07%) CAPM return and Multi Commodity Exchange Of India Ltd. has lowest (6.48%) CAPM return and the CAPM return of the portfolio is 14.11%. NMDC Ltd. has highest (65.35%) abnormal return and the Bajaj Holdings & Investment Ltd. has lowest (-12.02%) abnormal return and the abnormal return of the portfolio is 14.24%.

Multi Commodity Exchange Of India Ltd. has lowest (0) systematic risk and Engineers India Ltd. has highest (18226.59) systematic risk and the systematic risk of the portfolio is 4056.48. Multi Commodity Exchange Of India Ltd. has lowest (0) unsystematic risk. The NMDC Ltd. has highest (34195.04) unsystematic risk and unsystematic risk of the portfolio is 3989.12.

FINDINGS AND CONCLUSIONS

Among the companies whose debt equity ratio is 2 and more than 2, MMTC Ltd. has highest (161.39%) abnormal return. JSW Energy Ltd. has lowest (4.99) systematic risk and Hindustan Petroleum Corporation Ltd. has lowest (100.79) unsystematic risk. Among the companies whose debt equity ratio is more than 1 but less than 2, Jindal Steel & Power Ltd. has highest (80.69%) abnormal return. Britannia Industries Ltd. has lowest (13.95) systematic risk and Bharat Petroleum Corpn. Ltd. has lowest (86.75) unsystematic risk. Among the companies whose debt equity ratio is more than 0 but less than 1, TTK Prestige Ltd. has highest (132.02%) abnormal return. Oil India Ltd. has lowest (0.02) systematic risk and Coal India Ltd. has lowest (0.24) unsystematic risk. Among the companies whose debt equity ratio is zero, NMDC Ltd. has highest (65.35%) abnormal return. Multi Commodity Exchange Of India Ltd. has lowest (0) systematic risk and Multi Commodity Exchange Of India Ltd. has lowest (0) unsystematic risk. The correlation coefficient between financial leverage and average return of sample stocks is 0.073. Hence we can conclude that the role of financial leverage has no impact on stock returns..

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TABLE

TABLE 1: RETURN OF PORTFOLIO CONSISTING OF STOCKS WITH MORE THAN 2 DEBT EQUITY RATIO

Sl. No.	Company Name	Actual Return (%)	CAPM Return (%)	Abnormal Return (%)	Systematic Risk	Unsystematic Risk
1	Adani Enterprises Ltd.	73.73	24.00	49.74	16177.40	3384.65
2	Adani Power Ltd.	-8.43	7.19	-15.63	26.88	275.14
3	Bhushan Steel Ltd.	67.22	25.37	41.85	18821.81	2250.30
4	Dish T V India Ltd.	15.94	11.31	4.63	1229.07	1558.87
5	Essar Oil Ltd.	50.71	16.53	34.18	5321.33	17048.99
6	GMR Infrastructure Ltd.	8.75	10.69	-1.94	934.96	2860.12
7	Hindustan Petroleum Corporation Ltd.	4.85	7.52	-2.67	57.32	100.79
8	Housing Development Finance Corporation Ltd.	26.68	13.34	13.34	2481.14	188.96
9	IDFC Ltd.	39.47	20.19	19.28	9904.96	586.47
10	IFCI Ltd.	23.66	17.65	6.01	6577.20	131.02
11	Indiabulls Financial Services Ltd.	3.90	9.77	-5.87	570.04	1866.04
12	Jain Irrigation Systems Ltd.	25.64	18.77	6.87	7962.99	720.29
13	Jaiprakash Associates Ltd.	32.82	18.69	14.13	7865.39	2157.08
14	Jet Airways (India) Ltd.	13.45	19.35	-5.91	8739.38	801.74
15	JSW Energy Ltd.	-10.09	6.79	-16.87	4.99	242.52
16	LancoInfratech Ltd.	52.72	24.53	28.19	17180.15	3254.80
17	LIC Housing Finance Ltd.	83.53	22.82	60.71	14084.57	1014.59
18	Mahindra & Mahindra Financial Services Ltd.	33.67	11.89	21.78	1545.36	1871.18
19	Manappuram Finance Ltd	152.12	35.55	116.57	44536.84	6429.15
20	MMTC Ltd.	180.96	19.56	161.39	9024.10	145640.46
21	Power Finance Corpn. Ltd.	18.75	11.86	6.90	1525.55	551.04
22	Rural Electrification Corpn Ltd	26.60	15.68	10.92	4467.07	1143.85
23	Shree Renuka Sugars Ltd.	20.04	11.27	8.78	1208.62	2672.71
24	Shriram Transport Finance Company Ltd.	69.79	19.55	50.24	9011.20	3102.58
25	Strides Arcolab Ltd.	56.01	23.82	32.19	15850.33	7022.61
26	Tata Communications Ltd	-7.56	4.31	-11.87	247.86	461.39
27	Tata Motors Ltd.	62.26	25.82	36.44	19723.92	3221.87
28	Tata Steel Ltd.	37.03	21.12	15.91	11297.78	479.17
29	United Spirits Ltd.	13.17	15.47	-2.30	4262.52	1244.45
30	Wockhardt Ltd.	35.96	10.59	25.37	890.12	6155.70
Portfolio		**40.11%**	**16.70%**	**23.41%**	**8051.03**	**7281.28**

TABLE 2: RETURN OF PORTFOLIO CONSISTING OF STOCKS WITH MORE THAN 1 AND LESS THAN 1.99 DEBT EQUITY RATIO

Sl. No.	Company Name	Actual Return (%)	CAPM Return (%)	Abnormal Return (%)	Systematic Risk	Unsystematic Risk
1	Adani Ports and Special Economic Zone Ltd.	16.24	16.02	0.22	4801.71	632.41
2	Aditya Birla Nuvo Ltd.	14.42	14.65	-0.23	3521.10	441.40
3	AurobindoPharma Ltd.	55.17	29.77	25.40	28591.55	10095.47
4	Bharat Forge Ltd.	21.91	17.42	4.49	6310.37	796.12
5	Bharat Petroleum Corpn. Ltd.	19.51	8.71	10.80	261.61	86.75
6	Britannia Industries Ltd.	20.30	5.96	14.34	13.95	496.24
7	Century Textiles & Industries. Ltd.	13.89	16.36	-2.47	5144.93	690.16
8	CESC Ltd.	2.16	13.07	-10.91	2288.87	130.33
9	Chambal Fertilisers& Chemicals Ltd.	23.24	9.92	13.32	623.41	385.19
10	Coromandel International Ltd.	76.85	20.84	56.02	10866.94	340.36
11	Gitanjali Gems Ltd.	50.67	18.67	32.00	7832.85	2117.31
12	Glenmark Pharmaceuticals Ltd.	15.36	12.99	2.37	2234.88	758.47
13	Havells India Ltd.	66.39	25.06	41.33	18199.18	3381.06
14	Hindalco Industries Ltd.	37.62	23.17	14.45	14680.19	843.72
15	Idea Cellular Ltd.	7.51	9.33	-1.82	428.39	949.44
16	Indian Hotels Company Ltd.	7.39	17.92	-10.53	6904.56	792.61
17	Indian Oil Corpn. Ltd.	8.57	10.26	-1.69	753.18	93.61
18	IRB Infrastructure Developers Ltd	27.51	20.50	7.01	10365.04	1597.06
19	IVRCL Ltd.	14.06	18.99	-4.94	8254.68	1198.10
20	Jaiprakash Power Ventures Ltd	26.94	15.92	11.02	4701.17	1652.95
21	Jindal Steel & Power Ltd.	104.43	23.74	80.69	15699.71	15163.92
22	JSW Steel Ltd.	76.05	33.12	42.93	37407.31	4902.29
23	Larsen & Toubro Ltd.	30.75	17.07	13.69	5911.75	696.81
24	Mahindra & Mahindra Ltd.	31.34	17.97	13.37	6964.28	1054.41
25	MothersonSumi Systems Ltd.	31.13	12.85	18.28	2136.63	731.27
26	Pantaloon Retail (India) Ltd.	2.50	17.26	-14.76	6126.23	519.14
27	Petronet LNG Ltd.	43.35	12.94	30.41	2197.71	644.26
28	Punj Lloyd Ltd.	7.48	15.16	-7.67	3969.70	2612.79
29	Rajesh Exports Ltd.	68.01	28.71	39.30	26058.63	4198.52
30	Ranbaxy Laboratories Ltd.	29.61	18.91	10.70	8146.51	615.10
31	Reliance Capital Ltd.	14.14	16.41	-2.27	5197.16	1202.92
32	Shree Cement Ltd.	50.27	18.90	31.37	8128.50	2412.78
33	Sintex Industries Ltd.	31.23	21.11	10.12	11281.41	428.36
34	Suzlon Energy Ltd.	-12.81	14.49	-27.30	3387.36	455.62
35	Tata Chemicals Ltd.	24.61	15.58	9.02	4369.53	130.04
36	Tata Power Company Ltd.	29.48	13.23	16.25	2404.53	2758.75
37	Unitech Ltd.	-1.71	16.59	-18.30	5390.47	705.12
38	United Breweries Ltd.	39.14	14.04	25.10	3014.00	4937.96
39	Videocon Industries Ltd.	6.54	17.94	-11.40	6929.08	1189.61
Portfolio		**29.01%**	**17.22%**	**11.79%**	**7730.75**	**1867.65**

TABLE 3: RETURN OF PORTFOLIO CONSISTING OF STOCKS WITH MORE THAN 0 AND LESS THAN 1 DEBT EQUITY RATIO

Sl. No.	Company Name	Actual Return (%)	CAPM Return (%)	Abnormal Return (%)	Systematic Risk	Unsystematic Risk
1	ACC Ltd.	17.27	10.70	6.57	938.96	219.43
2	Ambuja Cements Ltd.	15.90	11.46	4.45	1306.14	193.62
3	Apollo Hospitals Enterprise Ltd.	25.23	10.78	14.45	974.37	408.10
4	Apollo Tyres Ltd.	58.74	24.13	34.61	16422.59	1715.57
5	Ashok Leyland Ltd.	32.01	19.33	12.68	8704.47	1517.16
6	Asian Paints Ltd.	46.82	16.12	30.70	4901.68	192.90
7	Bajaj Auto Ltd.	57.06	18.13	38.93	7150.28	2022.45
8	Bajaj Finserv Ltd.	34.50	11.38	23.12	1266.46	578.64
9	Bata India Ltd.	52.82	12.12	40.70	1676.17	2240.86
10	Bharat Heavy Electricals Ltd.	12.48	11.81	0.67	1495.67	1426.63
11	BhartiAirtel Ltd.	-1.50	7.55	-9.05	60.62	162.40
12	Biocon Ltd.	8.55	13.39	-4.83	2516.79	382.61
13	Bosch Ltd.	23.11	9.75	13.35	565.82	202.70
14	Cadila Healthcare Ltd.	45.17	16.89	28.28	5717.84	2695.33
15	Cairn India Ltd.	25.81	11.16	14.66	1153.61	504.79
16	Castrol India Ltd.	41.98	10.78	31.20	974.68	636.11
17	Cipla Ltd.	7.35	9.38	-2.03	443.35	225.83
18	Coal India Ltd.	-0.23	6.50	-6.73	0.02	0.24
19	Colgate-Palmolive (India) Ltd.	27.84	7.27	20.58	32.81	108.34
20	Container Corpn. Of India Ltd.	5.21	11.85	-6.64	1518.79	340.17
21	Crompton Greaves Ltd.	41.81	24.18	17.63	16508.30	1432.29
22	Cummins India Ltd.	37.99	17.55	20.43	6464.61	342.25
23	Dabur India Ltd.	19.63	9.97	9.65	644.34	23.39
24	DiviS Laboratories Ltd.	27.33	10.07	17.26	678.27	1852.08
25	DLF Ltd.	-5.50	14.37	-19.87	3283.72	44.92

26	DrReddys Laboratories Ltd.	32.17	15.47	16.71	4257.23	1329.60
27	EIH Ltd.	4.32	10.26	-5.94	752.23	775.28
28	Exide Industries Ltd.	48.77	18.85	29.92	8062.97	333.15
29	Financial Technologies (India) Ltd.	2.76	17.41	-14.65	6302.90	1147.19
30	GAIL (India) Ltd.	21.74	11.30	10.45	1223.14	438.68
31	Godrej Consumer Products Ltd.	32.07	10.65	21.42	915.89	847.61
32	Godrej Industries Ltd.	43.82	18.03	25.79	7031.17	680.60
33	Grasim Industries Ltd.	11.42	12.20	-0.78	1726.27	209.18
34	Great Eastern Shipping Company Ltd.	14.75	12.07	2.68	1648.66	1351.46
35	Gujarat Fluorochemicals Ltd.	42.63	13.91	28.73	2909.74	5927.46
36	Gujarat Mineral Devp. Corpn. Ltd.	84.35	23.59	60.76	15433.39	4598.27
37	Gujarat State Petronet Ltd.	21.42	15.07	6.35	3893.93	188.30
38	HCL Technologies Ltd.	42.63	22.08	20.55	12833.17	1938.29
39	Hero MotoCorp Ltd.	29.70	8.13	21.56	144.65	1473.71
40	Hexaware Technologies Ltd.	42.32	15.49	26.83	4283.34	5546.50
41	Hindustan Copper Ltd.	91.80	30.08	61.72	29365.02	6181.33
42	Hindustan Unilever Ltd.	15.81	5.57	10.24	43.31	258.28
43	Housing Development & Infrastructure Ltd.	15.09	24.03	-8.94	16241.81	1826.74
44	India Cements Ltd.	-2.92	9.31	-12.23	422.13	498.93
45	Indiabulls Real Estate Ltd.	-6.07	13.68	-19.76	2734.14	1183.10
46	Indraprastha Gas Ltd.	35.74	12.15	23.59	1695.56	78.20
47	Ipca Laboratories Ltd.	57.58	24.57	33.01	17254.78	3233.97
48	ITC Ltd.	26.42	8.85	17.56	297.64	168.57
49	JaypeeInfratech Ltd.	-2.68	6.72	-9.40	3.08	32.91
50	Jubilant FoodWorks Ltd.	37.71	4.29	33.42	252.89	2661.69
51	Lupin Ltd.	42.43	11.50	30.93	1329.02	1884.07
52	Mahindra Satyam Ltd	5.62	17.11	-11.50	5963.24	1433.19
53	Mangalore Refinery & Petrochemicals Ltd.	31.64	13.53	18.11	2620.70	2800.80
54	Marico Ltd.	26.67	10.75	15.92	961.99	191.33
55	Maruti Suzuki India Ltd.	14.67	11.03	3.63	1093.56	399.18
56	Max India Ltd.	6.74	13.69	-6.94	2738.03	1131.05
57	McleodRussel India Ltd.	65.46	23.45	42.01	15177.64	5024.47
58	Mphasis Ltd.	29.23	17.67	11.56	6596.51	3996.39
59	MRF Ltd.	59.69	22.86	36.83	14138.35	3365.72
60	Nestle India Ltd.	39.74	9.98	29.76	646.67	92.25
61	Neyveli Lignite Corpn. Ltd.	26.99	12.67	14.32	2019.31	3657.73
62	NHPC Ltd.	-7.87	6.90	-14.78	9.58	110.59
63	NTPC Ltd.	3.09	8.07	-4.99	134.06	249.45
64	Oil & Natural Gas Corpn. Ltd.	5.97	9.66	-3.69	534.77	2.00
65	Oil India Ltd	2.43	6.50	-4.06	0.02	43.27
66	Opto Circuits (India) Ltd.	31.43	14.93	16.50	3764.62	221.72
67	Pidilite Industries Ltd.	40.28	16.71	23.57	5522.80	471.89
68	PipavavDefence and Offshore Engineering Co Ltd.	2.66	6.44	-3.79	0.06	28.70
69	Piramal Enterprises Ltd.	23.31	14.09	9.22	3053.23	260.01
70	Power Grid Corpn. Of India Ltd.	2.13	7.11	-4.97	20.94	26.09
71	PTC India Ltd.	8.57	11.70	-3.14	1437.63	892.63
72	Reliance Communications Ltd.	-21.15	9.51	-30.66	484.63	606.78
73	Reliance Industries Ltd.	8.55	10.84	-2.29	1002.65	874.29
74	Reliance Infrastructure Ltd	28.36	14.94	13.43	3772.62	4405.98
75	Reliance Power Ltd	-8.61	11.71	-20.31	1441.14	141.46
76	Sesa Goa Ltd.	139.06	47.19	91.86	87370.17	20177.07
77	Siemens Ltd.	27.33	18.30	9.03	7364.65	316.35
78	Steel Authority Of India Ltd.	19.60	18.12	1.48	7142.46	1155.14
79	Sterlite Industries (India) Ltd.	17.30	16.78	0.52	5588.99	541.23
80	Sun Pharmaceutical Inds. Ltd.	24.08	9.64	14.44	527.23	115.20
81	Sun TV Network Ltd.	13.27	16.99	-3.72	5824.50	965.63
82	Tata Consultancy Services Ltd.	34.37	17.62	16.75	6547.49	2156.11
83	Tata Global Beverages Ltd	17.67	11.13	6.53	1141.85	179.00
84	Tech Mahindra Ltd.	18.91	20.37	-1.46	10173.51	3420.94
85	Thermax Ltd.	45.79	24.69	21.10	17480.97	1217.07
86	Titan Industries Ltd.	52.53	14.41	38.12	3318.18	1168.80
87	Torrent Power Ltd.	62.92	24.13	38.78	16430.61	2192.38
88	TTK Prestige Ltd.	168.97	36.95	132.02	48938.06	15975.21
89	Ultratech Cement Ltd.	22.54	12.89	9.64	2169.71	699.70
90	United Phosphorus Ltd.	-0.94	10.43	-11.37	824.13	174.34
91	Voltas Ltd.	56.82	25.81	31.01	19703.46	1207.26
92	Wipro Ltd.	25.29	18.14	7.15	7173.69	1511.56
93	Zee Entertainment Enterprises Ltd.	17.65	16.79	0.86	5604.45	659.83
Portfolio		**28.30%**	**14.67%**	**13.63%**	**5945.35**	**1597.01**

TABLE 4: RETURN OF PORTFOLIO CONSISTING OF STOCKS WITH 0 DEBT EQUITY RATIO

Sl.No.	Company Name	Actual Return (%)	CAPM Return (%)	Abnormal Return (%)	Systematic Risk	Unsystematic Risk
1	ABB Ltd.	19.51	14.27	5.24	3199.33	634.36
2	Bajaj Holdings & Investment Ltd.	1.76	13.78	-12.02	2813.17	2220.53
3	Bharat Electronics Ltd.	13.88	15.03	-1.15	3858.53	1828.17
4	CRISIL Ltd.	34.52	11.08	23.44	1115.13	578.13
5	Engineers India Ltd.	62.89	25.07	37.81	18226.59	3665.53
6	Glaxosmithkline Consumer Healthcare Ltd.	43.41	11.52	31.89	1338.74	373.12
7	Glaxosmithkline Pharmaceuticals Ltd.	17.65	9.46	8.19	468.91	262.21
8	Hindustan Zinc Ltd.	31.57	16.07	15.50	4847.85	1163.31
9	Infosys Ltd.	14.69	11.97	2.71	1590.17	914.20
10	Multi Commodity Exchange Of India Ltd.	0.00	6.48	-6.48	0.00	0.00
11	National Aluminium Company Ltd.	16.41	14.61	1.80	3487.39	1531.78
12	NMDC Ltd	81.79	16.44	65.35	5226.43	34195.04
13	Oracle Financial Services Software Ltd	30.49	17.64	12.85	6562.01	4492.22
Portfolio		**28.35%**	**14.11%**	**14.24%**	**4056.48**	**3989.12**

TABLE 5: CORRELATION AND COEFFICIENT OF DETERMINATION

Sl.No.	COMPANY NAME	AVERAGE RETURN	DEBT /EQUITY RATIO
1	ABB Ltd.	19.51	0.00
2	ACC Ltd.	17.27	0.09
3	Adani Enterprises Ltd.	73.73	2.94
4	Adani Ports and Special Economic Zone Ltd.	16.24	1.55
5	Adani Power Ltd.	-8.43	2.86
6	Aditya Birla Nuvo Ltd.	14.42	1.55
7	Ambuja Cements Ltd.	15.90	0.03
8	Apollo Hospitals Enterprise Ltd.	25.23	0.38
9	Apollo Tyres Ltd.	58.74	0.80
10	Ashok Leyland Ltd.	32.01	0.83
11	Asian Paints Ltd.	46.82	0.17
12	AurobindoPharma Ltd.	55.17	1.36
13	Bajaj Auto Ltd.	57.06	0.46
14	Bajaj Finserv Ltd.	34.50	0.80
15	Bajaj Holdings & Investment Ltd.	1.76	0.00
16	Bata India Ltd.	52.82	0.15
17	Bharat Electronics Ltd.	13.88	0.00
18	Bharat Forge Ltd.	21.91	1.19
19	Bharat Heavy Electricals Ltd.	12.48	0.01
20	Bharat Petroleum Corpn. Ltd.	19.51	1.53
21	BhartiAirtel Ltd.	-1.50	0.74
22	Bhushan Steel Ltd.	67.22	3.18
23	Biocon Ltd.	8.55	0.22
24	Bosch Ltd.	23.11	0.08
25	Britannia Industries Ltd.	20.30	1.08
26	Cadila Healthcare Ltd.	45.17	0.76
27	Cairn India Ltd.	25.81	0.06
28	Castrol India Ltd.	41.98	0.00
29	Century Textiles & Industries. Ltd.	13.89	1.40
30	CESC Ltd.	2.16	1.15
31	Chambal Fertilisers& Chemicals Ltd.	23.24	1.85
32	Cipla Ltd.	7.35	0.09
33	Coal India Ltd.	-0.23	0.07
34	Colgate-Palmolive (India) Ltd.	27.84	0.02
35	Container Corpn. Of India Ltd.	5.21	0.01
36	Coromandel International Ltd.	76.85	1.19
37	CRISIL Ltd.	34.52	0.00
38	Crompton Greaves Ltd.	41.81	0.33
39	Cummins India Ltd.	37.99	0.04
40	Dabur India Ltd.	19.63	0.40
41	Dish T V India Ltd.	15.94	6.31
42	DiviS Laboratories Ltd.	27.33	0.04
43	DLF Ltd.	-5.50	0.91
44	DrReddys Laboratories Ltd.	32.17	0.53
45	EIH Ltd.	4.32	0.74
46	Engineers India Ltd.	62.89	0.00
47	Essar Oil Ltd.	50.71	2.91
48	Exide Industries Ltd.	48.77	0.20
49	Financial Technologies (India) Ltd.	2.76	0.46
50	GAIL (India) Ltd.	21.74	0.32
51	Gitanjali Gems Ltd.	50.67	1.11
52	Glaxosmithkline Consumer Healthcare Ltd.	43.41	0.00
53	Glaxosmithkline Pharmaceuticals Ltd.	17.65	0.00

54	Glenmark Pharmaceuticals Ltd.	15.36	1.04
55	GMR Infrastructure Ltd.	8.75	2.87
56	Godrej Consumer Products Ltd.	32.07	0.67
57	Godrej Industries Ltd.	43.82	0.92
58	Grasim Industries Ltd.	11.42	0.49
59	Great Eastern Shipping Company Ltd.	14.75	0.87
60	Gujarat Fluorochemicals Ltd.	42.63	0.46
61	Gujarat Mineral Devp. Corpn. Ltd.	84.35	0.05
62	Gujarat State Petronet Ltd.	21.42	0.20
63	Havells India Ltd.	66.39	1.84
64	HCL Technologies Ltd.	42.63	0.31
65	Hero MotoCorp Ltd.	29.70	0.16
66	Hexaware Technologies Ltd.	42.32	0.01
67	Hindalco Industries Ltd.	37.62	1.41
68	Hindustan Copper Ltd.	91.80	0.03
69	Hindustan Petroleum Corporation Ltd.	4.85	2.20
70	Hindustan Unilever Ltd.	15.81	0.05
71	Hindustan Zinc Ltd.	31.57	0.00
72	Housing Development & Infrastructure Ltd.	15.09	0.62
73	Housing Development Finance Corporation Ltd.	26.68	5.37
74	Idea Cellular Ltd.	7.51	1.01
75	IDFC Ltd.	39.47	3.64
76	IFCI Ltd.	23.66	4.10
77	India Cements Ltd.	-2.92	0.68
78	Indiabulls Financial Services Ltd.	3.90	3.12
79	Indiabulls Real Estate Ltd.	-6.07	0.27
80	Indian Hotels Company Ltd.	7.39	1.54
81	Indian Oil Corpn. Ltd.	8.57	1.02
82	Indraprastha Gas Ltd.	35.74	0.13
83	Infosys Ltd.	14.69	0.00
84	Ipca Laboratories Ltd.	57.58	0.55
85	IRB Infrastructure Developers Ltd	27.51	1.68
86	ITC Ltd.	26.42	0.01
87	IVRCL Ltd.	14.06	1.31
88	Jain Irrigation Systems Ltd.	25.64	2.01
89	Jaiprakash Associates Ltd.	32.82	3.55
90	Jaiprakash Power Ventures Ltd	26.94	1.93
91	JaypeeInfratech Ltd.	-2.68	0.54
92	Jet Airways (India) Ltd.	13.45	22.38
93	Jindal Steel & Power Ltd.	104.43	1.14
94	JSW Energy Ltd.	-10.09	2.25
95	JSW Steel Ltd.	76.05	1.53
96	Jubilant FoodWorks Ltd.	37.71	0.01
97	LancoInfratech Ltd.	52.72	3.31
98	Larsen & Toubro Ltd.	30.75	1.42
99	LIC Housing Finance Ltd.	83.53	10.29
100	Lupin Ltd.	42.43	0.59
101	Mahindra & Mahindra Financial Services Ltd.	33.67	3.73
102	Mahindra & Mahindra Ltd.	31.34	1.46
103	Mahindra Satyam Ltd	5.62	0.02
104	Manappuram Finance Ltd	152.12	4.62
105	Mangalore Refinery & Petrochemicals Ltd.	31.64	0.46
106	Marico Ltd.	26.67	0.83
107	Maruti Suzuki India Ltd.	14.67	0.07
108	Max India Ltd.	6.74	0.60
109	McleodRussel India Ltd.	65.46	0.48
110	MMTC Ltd.	180.96	3.03
111	MothersonSumi Systems Ltd.	31.13	1.15
112	Mphasis Ltd.	29.23	0.03
113	MRF Ltd.	59.69	0.57
114	Multi Commodity Exchange Of India Ltd.	0.00	0.00
115	National Aluminium Company Ltd.	16.41	0.00
116	Nestle India Ltd.	39.74	0.15
117	Neyveli Lignite Corpn. Ltd.	26.99	0.35
118	NHPC Ltd.	-7.87	0.71
119	NMDC Ltd	81.79	0.00
120	NTPC Ltd.	3.09	0.71
121	Oil & Natural Gas Corpn. Ltd.	5.97	0.09
122	Oil India Ltd	2.43	0.02
123	Opto Circuits (India) Ltd.	31.43	0.57
124	Oracle Financial Services Software Ltd	30.49	0.00
125	Pantaloon Retail (India) Ltd.	2.50	1.78

126	Petronet LNG Ltd.	43.35	1.06
127	Pidilite Industries Ltd.	40.28	0.54
128	PipavavDefence and Offshore Engineering Co Ltd.	2.66	0.86
129	Piramal Enterprises Ltd.	23.31	0.53
130	Power Finance Corpn. Ltd.	18.75	4.76
131	Power Grid Corpn. Of India Ltd.	2.13	0.84
132	PTC India Ltd.	8.57	0.14
133	Punj Lloyd Ltd.	7.48	1.34
134	Rajesh Exports Ltd.	68.01	1.68
135	Ranbaxy Laboratories Ltd.	29.61	1.15
136	Reliance Capital Ltd.	14.14	1.83
137	Reliance Communications Ltd.	-21.15	0.89
138	Reliance Industries Ltd.	8.55	0.57
139	Reliance Infrastructure Ltd	28.36	0.46
140	Reliance Power Ltd	-8.61	0.31
141	Rural Electrification Corpn Ltd	26.60	5.90
142	Sesa Goa Ltd.	139.06	0.12
143	Shree Cement Ltd.	50.27	1.41
144	Shree Renuka Sugars Ltd.	20.04	2.17
145	Shriram Transport Finance Company Ltd.	69.79	2.41
146	Siemens Ltd.	27.33	0.00
147	Sintex Industries Ltd.	31.23	1.25
148	Steel Authority Of India Ltd.	19.60	0.40
149	Sterlite Industries (India) Ltd.	17.30	0.27
150	Strides Arcolab Ltd.	56.01	3.10
151	Sun Pharmaceutical Inds. Ltd.	24.08	0.03
152	Sun TV Network Ltd.	13.27	0.02
153	Suzlon Energy Ltd.	-12.81	1.80
154	Tata Chemicals Ltd.	24.61	1.15
155	Tata Communications Ltd	-7.56	2.11
156	Tata Consultancy Services Ltd.	34.37	0.02
157	Tata Global Beverages Ltd	17.67	0.48
158	Tata Motors Ltd.	62.26	3.05
159	Tata Power Company Ltd.	29.48	1.74
160	Tata Steel Ltd.	37.03	2.05
161	Tech Mahindra Ltd.	18.91	0.32
162	Thermax Ltd.	45.79	0.06
163	Titan Industries Ltd.	52.53	0.19
164	Torrent Power Ltd.	62.92	0.91
165	TTK Prestige Ltd.	168.97	0.21
166	Ultratech Cement Ltd.	22.54	0.51
167	Unitech Ltd.	-1.71	1.30
168	United Breweries Ltd.	39.14	1.39
169	United Phosphorus Ltd.	-0.94	0.77
170	United Spirits Ltd.	13.17	2.46
171	Videocon Industries Ltd.	6.54	1.97
172	Voltas Ltd.	56.82	0.13
173	Wipro Ltd.	25.29	0.32
174	Wockhardt Ltd.	35.96	3.57
175	Zee Entertainment Enterprises Ltd.	17.65	0.07
	Correlation		0.073
	Coefficient of determination		0.005

WEB SESSION CLASSES: PERFORMANCE METRICS FOR BUSINESS LOGIC ISSUES IN N-TIER AND MVC ARCHITECTURE

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ABSTRACT

Information is a vital role playing versatile thing from availability at church level to web through trends of books. WWW is now the exposed and up-to-date huge repository of information available to everyone, everywhere and every time. Nowadays web and web applications play an important role in every aspect that limelight the performance issues. The most common consideration is performance, because these systems must provide services with low response time, high availability, and certain throughput level. Whenever we think to address these performance issues we find tools like Yahoo!YSlow, GTmetrix, WebPageTest, Google Page Speed etc that consider these issues relevant to application layer only. A hard truth about these issues is that application layer of a web application includes 80%-90% of overall performance issues. In this work we addressed remaining 10%-20% performance issues related with other layers of architecture. With the help of performance models, the performance metrics having dimensions like average response time, average download time, average processing time, session per second, page per second can be evaluated. The goal of our work is to consider these dimensions and the n-tier utilization of web applications while developing square side performance of n-tier and MVC architecture web application. In this work we experiment a web application with concurrent user sessions having database reader classes and web service in order to validate the n-tier and MVC models in ASP.NET environment. This paper is an experimental strives to develop and implement a framework with n-tier and MVC architecture to address performance issues tied with business and database layer. This work is an implementation experience for use of concurrent sessions with web service and reader classes to provide a keen analysis on dimensions of performance metrics evaluated.

KEYWORDS

Performance Metrics, Concurrent Sessions, Performance Dimensions, n-tier, MVC and Load Volume.

1. INTRODUCTION

WWW is immense to obtain information and moreover information voyaged on the web is available in websites. In the past few years new platforms and frameworks for programming environments have been marketed to leap the web development. These new models and techniques of programming are escalated the software development with exponential extent. In contrast to the developing issues of these applications, performance is the key issue. Owing to the heavy load of traffic on the network systems, these are compromising with expectation constraint that they must provide high-availability services with low response time [1,6]. This is the scenario of these systems directing performance as one of the most important factors.

Owing to the reason that performance issues directing navigation of information from these applications is the striking one to sail the web for several purposes. Performance optimization of a web application is a raptorial field to address a state of fast growing rate of amount of information on the web. At the ground level, performance issues strongly tied with application layer does not count all of these tied with overall performance of the application.

The aim of this paper is to raffle a framework, which will elevate web application's dexterity while cutting issues of all sides to surmount the way the Internet can be used to snag more and more information and services with more performance [2, 3, 4].

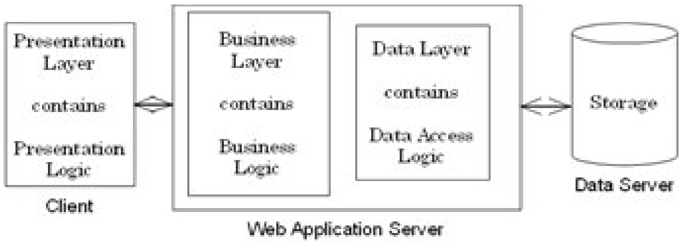
The first part of the paper covers related work that has been done mostly in the field of performance issues in web application development in over ongoing research project for deploying performance efficient applications. The second part defines architecture and functioning of developed framework environment for experiment. The third part provides an overview and critical analysis of experimental framework like experimental results, pseudo code, data structure etc.

2. RELATED WORK

These performance metrics depend on many factors. Several papers and research works outcome with various factors that affect the performance of a web-based information system. In these works several statistical methods, hypothesis tests are used in order to retrieve factors influencing the performance [2, 5]. However, the performance- related dimensions emerge very often only at the end of the software project but with the help of properly designed performance models, the performance metrics of a system can be determined at the earlier stages of the development process [1,3]. In nutshell, performance of a website is evaluated by considering various traffic and tier specific parameters. These are further also categorized as technical and non-technical or behavioral parameters [6, 13].

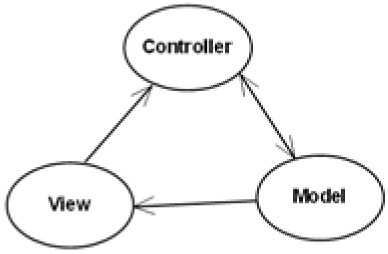
Today one of the most prominent technologies of web-based information systems is Microsoft .NET. Our primary goal is to calculate and analyze the different dimensions of performance metrics of ASP.NET web applications based on n-tier (Fig.1) and MVC architecture (Fig.2) models handling multiple session classes, because these dimensions are the only performance metrics to which the users are directly exposed. Our final goal is to stick these dimensions to the utilization of the tiers.

FIG. 1: ARCHITECTURE OF N-TIER WEB APPLICATION



Presentation layer: collection of classes and/or files that defines user interface or says application interface.
Business layer: collection of classes and/or files that defines functionality or says logic of application.
Data layer: collection of classes and/or files that defines functionality to access database or says database logic of application.
Data Server: A DBMS that is responsible to manage database or says backend of application.

FIG. 2: ARCHITECTURE OF MVC WEB APPLICATION

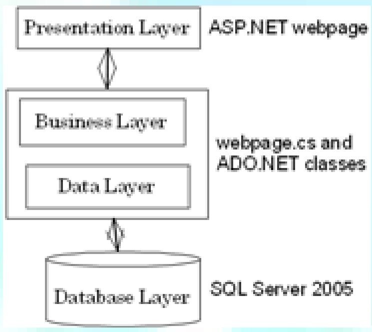


Model: Model objects are the parts of the application that implement the logic for the application and data domain.
View: Views are the components that display the application user interface (UI).
Controller: Controllers are the components that handle user interaction, work with the model, and ultimately select a view to render that displays UI.

3. CONTRIBUTIONS

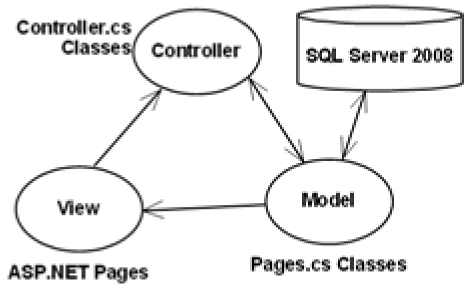
We have implemented an ASP.NET test web application having two different profiles profile1 (Fig. 3) and profile2 (Fig. 4).

FIG. 3: THREE-TIER ARCHITECTURE OF PROFILE1.



Profile2 is having MVC architecture compared to profile1 in our application to meet the needs of the measurement process of dimensions tied with business logic and data access layer.

FIG. 4: ARCHITECTURE OF PROFILE2



Thereafter, we have demonstrated and validated the models in the ASP.NET environment. Firstly, we have defined load volume of five users to both the profiles for seven page requests in each session and estimated the input values of the model parameters like session wait-time, test case volume, and maximum time for test case to be performed in WAPT (Web Application Performance Testing).
Finally, we have tested a web application with two different profile sets running under concurrent user sessions, comparing the observed and predicted values in order to validate the models in the ASP.NET environment.

4. PERFORMANCE

An estimated and approximate performance analysis can be done to compare the implemented strategies with each other. With the increase in availability of web pages on the Internet, the major problem faced by the deployed system is difficulty in information retrieval and this degradation factor is highly passionate with performance metrics of applications on web. With further increase in the size of the Internet, the problem grows exponentially.
In terms of performance parameters like bandwidth, CPU, memory, successful hit, successful session, response time, sending speed, receiving speed, processing time and downloading; profile5 in developed framework holds an edge above the conventional strategies of addressing performance dimensions associated with two tiers of n-tier architecture.

4.1 EXPERIMENTAL SCREENSHOTS

A series of user interfaces of developed framework (Fig. 5, 6, 7 and 8)

FIG. 5: SCREEN SHOTS OF WEB SERVICE

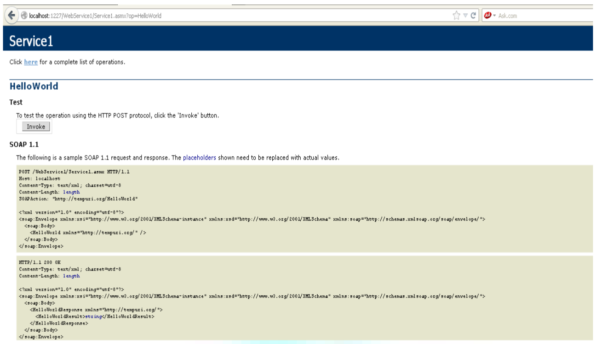


FIG. 6: SCREEN SHOTS OF N-TIER INTERFACE

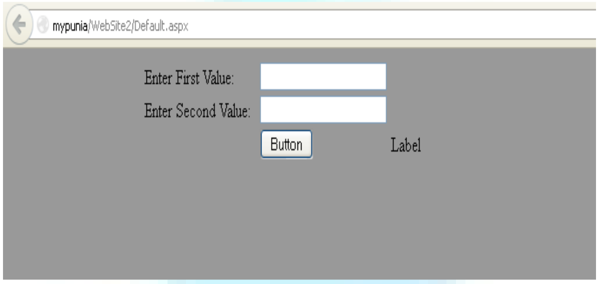


FIG. 7: SCREEN SHOTS OF MVC INTERFACE

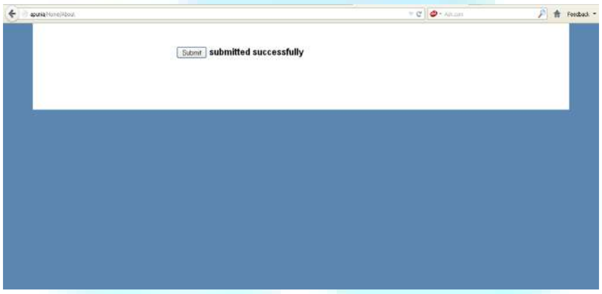


FIG. 7: SCREEN SHOTS OF LOAD TESTING

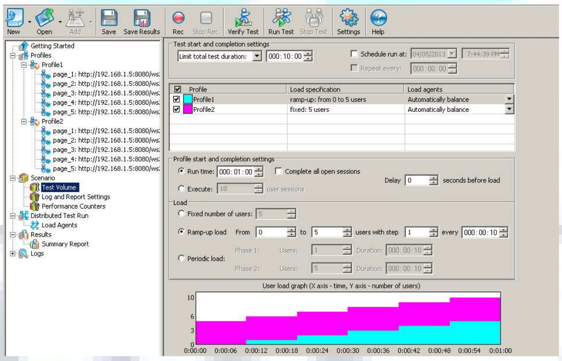
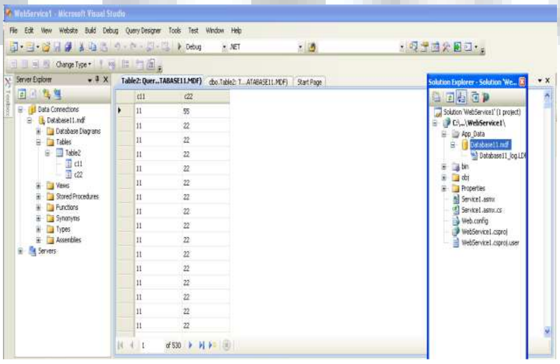


FIG. 8: SCREEN SHOTS OF BACK END



4.2 ANALYSIS

This optimized framework is running on an acer machine, a workstation with 685MHz processor, 12 GB of RAM,840 GB of local disk, 100 Mbit/sec Speed Internet, Windows Server 2003,IIS 7.5,Asp.Net run time framework 4.0,SQL Server 2008 and WAPT Pro 3.0.

In this paper, experimental statistics are presented of five concurrent sessions with seven page request for each session to compare with both the profiles; about these requests issued are published in literature. The profile1 is reported to have issued 8 successful sessions requests over time of 2 minutes with speed of 38.8 Kbits/sec and profile2 is reported to have issued 23 successful sessions requests over time of 2 minutes with speed of 120 Kbits/sec. Performance of any information retrieval system can be analyzed using parameters like coverage, user perception that are presented below:

4.2.1 PERFORMANCE OF PROFILE1 AND PROFILE2

Successful sessions per second

Profile	0:00:00-0:00:06	0:00:06-0:00:12	0:00:12-0:00:18	0:00:18-0:00:24	0:00:24-0:00:30	0:00:30-0:00:36	0:00:36-0:00:42	0:00:42-0:00:48	0:00:48-0:00:54	0:00:54-0:01:00	Total
Profile1	0	0	0	0.17	0	0	0.33	0.17	0.17	0.50	0.13
Profile2	0	0.50	0.33	0.17	0.67	0.33	0.50	0.17	0.67	0.50	0.38
Total	0	0.50	0.33	0.33	0.67	0.33	0.83	0.33	0.83	1	0.52

Successful pages per second

Profile	0:00:00-0:00:06	0:00:06-0:00:12	0:00:12-0:00:18	0:00:18-0:00:24	0:00:24-0:00:30	0:00:30-0:00:36	0:00:36-0:00:42	0:00:42-0:00:48	0:00:48-0:00:54	0:00:54-0:01:00	Total
Profile1	0	0.17	0.33	0.67	0.33	0.50	1.50	1.17	1.33	1.67	0.77
Profile2	1.83	2.67	1.83	1.33	2.33	2.17	2	2	2.33	2.50	2.10
Total	1.83	2.83	2.17	2	2.67	2.67	3.50	3.17	3.67	4.17	2.87

Successful hits per second

Profile	0:00:00-0:00:06	0:00:06-0:00:12	0:00:12-0:00:18	0:00:18-0:00:24	0:00:24-0:00:30	0:00:30-0:00:36	0:00:36-0:00:42	0:00:42-0:00:48	0:00:48-0:00:54	0:00:54-0:01:00	Total
Profile1	0	0.17	0.33	0.67	0.33	0.50	1.50	1.17	1.33	1.67	0.77
Profile2	1.83	2.67	1.83	1.33	2.33	2.17	2	2	2.33	2.50	2.10
Total	1.83	2.83	2.17	2	2.67	2.67	3.50	3.17	3.67	4.17	2.87

Load Agent utilization, %

Name	Utilization	0:00:00-0:00:06	0:00:06-0:00:12	0:00:12-0:00:18	0:00:18-0:00:24	0:00:24-0:00:30	0:00:30-0:00:36	0:00:36-0:00:42	0:00:42-0:00:48	0:00:48-0:00:54	0:00:54-0:01:00	Total
localhost	CPU	12	9	8	19	15	10	10	15	12	13	12
	Memory Mb (%)	69(3)	70(3)	70(3)	71(3)	71(3)	71(3)	71(3)	71(3)	71(3)	72(3)	70 (3)
	Network	0	0	0	0	0	0	0	0	0	0	0

4.2.2 SUMMARY OF PROFILE1 AND PROFILE2

Summary

Profile	Successful sessions	Failed sessions	Successful pages	Failed pages	Successful hits	Failed hits	Total KBytes sent	Total KBytes received	Avg Response time, sec (with page elements)
Profile1	8	0	46	0	46	0	38.8	123	0.02(0.02)
Profile2	23	0	126	0	126	0	120	344	0.02(0.02)

Number of active users

Profile	0:00:00-0:00:06	0:00:06-0:00:12	0:00:12-0:00:18	0:00:18-0:00:24	0:00:24-0:00:30	0:00:30-0:00:36	0:00:36-0:00:42	0:00:42-0:00:48	0:00:48-0:00:54	0:00:54-0:01:00
Profile1	0	1	1	2	2	3	4	4	5	5
Profile2	5	5	5	5	5	5	5	5	5	5
Total	5	6	6	7	7	8	9	9	10	10

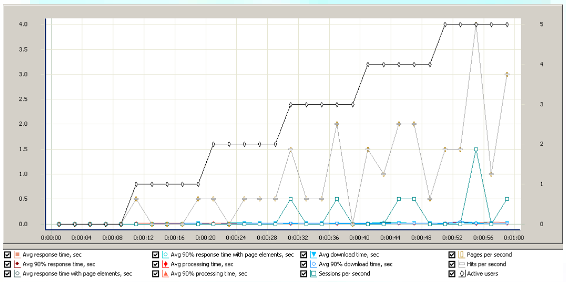
Successful sessions (Failed sessions)

Profile	0:00:00-0:00:06	0:00:06-0:00:12	0:00:12-0:00:18	0:00:18-0:00:24	0:00:24-0:00:30	0:00:30-0:00:36	0:00:36-0:00:42	0:00:42-0:00:48	0:00:48-0:00:54	0:00:54-0:01:00	Total
Profile1	0(0)	0(0)	0(0)	1(0)	0(0)	0(0)	2(0)	1(0)	1(0)	3(0)	8(0)
Profile2	0(0)	3(0)	2(0)	1(0)	4(0)	2(0)	3(0)	1(0)	4(0)	3(0)	23 (0)
Total	0(0)	3(0)	2(0)	2(0)	4(0)	2(0)	5(0)	2(0)	5(0)	6(0)	31 (0)

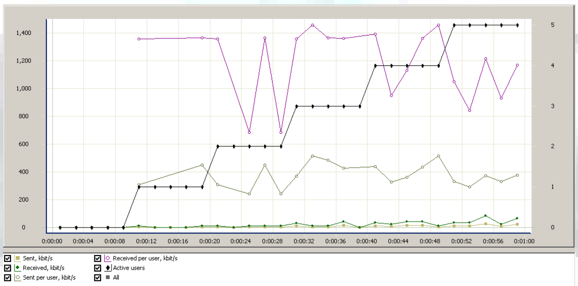
Successful pages (Failed pages)

Profile	0:00:00-0:00:06	0:00:06-0:00:12	0:00:12-0:00:18	0:00:18-0:00:24	0:00:24-0:00:30	0:00:30-0:00:36	0:00:36-0:00:42	0:00:42-0:00:48	0:00:48-0:00:54	0:00:54-0:01:00	Total
Profile1	0(0)	1(0)	2(0)	4(0)	2(0)	3(0)	9(0)	7(0)	8(0)	10(0)	46(0)
Profile2	11(0)	16(0)	11(0)	8(0)	14(0)	13(0)	12(0)	12(0)	14(0)	15(0)	126 (0)
Total	11(0)	17(0)	13(0)	12(0)	16(0)	16(0)	21(0)	19(0)	22(0)	25(0)	172 (0)

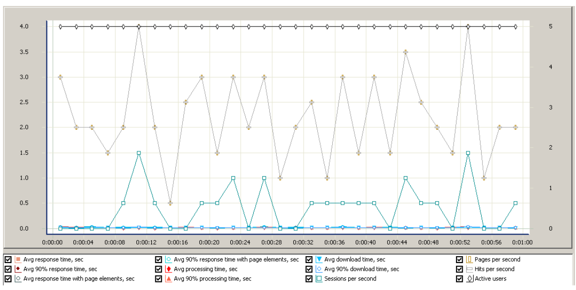
4.2.3 PERFORMANCE OF PROFILE1



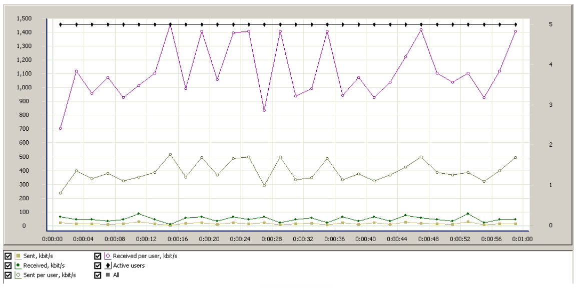
4.2.4 BANDWIDTH OF PROFILE4



4.2.5 PERFORMANCE OF PROFILE5



4.2.6 BANDWIDTH OF PROFILE5



5. CONCLUSION

We have demonstrated a general model for the two profile environments with specific extension (profile2) is expected, which is more efficient than the baseline model handling multiple session classes only to validated n-tier architecture models handling web service and multiple session classes in ASP.NET environment. This is a part of ongoing research work, to utilize advance technologies (like RDF**)** and model (Attribute-Based**)** in web programming. Owing to the lengthy size of coding work, this is not possible to present coding or technical details of all the modules of developed framework. But work is incomplete without functioning details of the basic modules i.e. application interface, business logic and ADO.NET module.

5.1 CODING OF APPLICATION INTERFACE MODULE(PROFILE1)

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default2.aspx.cs" Inherits="Default2" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<script runat ="server" >
  protected void Button1_Click(object sender, EventArgs e)
  {
     SqlConnection con = new SqlConnection(ConfigurationManager.ConnectionStrings["cons"].ConnectionString);
      con.Open();
     SqlCommand cmd = new SqlCommand("Insert into table2 values('" + 11 + "','" + 22 + "')", con);
     cmd.ExecuteNonQuery();
     con.Close();
     Label1.Text = "submitted successfully";
     TextBox1.Text = "";
     TextBox2.Text = "";
  }
</script>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title>Untitled Page</title>
</head>
<body>
  <form id="form1" runat="server">
  <div>

     <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
     <br />
     <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
     <br />
     <asp:Button ID="Button1" runat="server" onclick="Button1_Click" Text="Button" />
     <br />
     <asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>

  </div>
  </form>
</body>
</html>
```

5.2 CODING OF APPLICATION INTERFACE MODULE(PROFILE2):

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs" Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<script runat ="server" >
  protected void Button1_Click(object sender, EventArgs e)
  {
     ws123.Service1 ob = new ws123.Service1();
     Label1.Text = ob.HelloWorld();
     TextBox1.Text = "";
     TextBox2.Text = "";
  }
  </script>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title>Untitled Page</title>
</head>
<body>
  <form id="form1" runat="server">
  <div>

     <br />
```

```
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
    <br />
    <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
    <br />
    <br />
    <asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>
    <br />
    <br />
    <br />
    <br />
    <br />
    <asp:Button ID="Button1" runat="server" onclick="Button1_Click" Text="Button" />

  </div>
  </form>
</body>
</html>
```

5.3 CODING OF BUSINESS LOGIC MODULE(PROFILE1)

```
using System;
using System.Collections;
using System.Configuration;
using System.Data;
using System.Linq;
using System.Web;
using System.Web.Security;
using System.Web.UI;
using System.Web.UI.HtmlControls;
using System.Web.UI.WebControls;
using System.Web.UI.WebControls.WebParts;
using System.Xml.Linq;
using System.Data.SqlClient;

public partial class Default2 : System.Web.UI.Page
{
  SqlConnection("server=.\\SQLEXPRESS;AttachDbFilename=|DataDirectory|\\Database1.mdf;IntegratedSecurity=True;User
Instance=True;trusted_connection=yes");
  SqlConnection con = new SqlConnection(ConfigurationManager.ConnectionStrings["cons"].ConnectionString);

  protected void Page_Load(object sender, EventArgs e)
  {
  }
  protected void Button1_Click(object sender, EventArgs e)
  {
    con.Open();
    SqlCommand cmd = new SqlCommand("Insert into table2 values('" + 11 + "','" + 22 + "')", con);
    cmd.ExecuteNonQuery();
    con.Close();
    Label1.Text = "submitted successfully";
    TextBox1.Text = "";
    TextBox2.Text = "";

  }
}
```

5.4 CODING OF BUSINESS LOGIC MODULE(PROFILE2)

```
using System;
using System.Collections;
using System.ComponentModel;
using System.Data;
using System.Linq;
using System.Web;
using System.Web.Services;
using System.Web.Services.Protocols;
using System.Xml.Linq;
using System.Data.SqlClient;
namespace WebService1
{
  /// <summary>
  /// Summary description for Service1
  /// </summary>
  [WebService(Namespace = "http://tempuri.org/")]
  [WebServiceBinding(ConformsTo = WsiProfiles.BasicProfile1_1)]
  [ToolboxItem(false)]
  // To allow this Web Service to be called from script, using ASP.NET AJAX, uncomment the following line.
  // [System.Web.Script.Services.ScriptService]
  public class Service1 : System.Web.Services.WebService
```

```
  {

     [WebMethod]
     public string HelloWorld()
     {
        SqlConnection con = new SqlConnection("server=.\\SQLEXPRESS;AttachDbFilename=|DataDirectory|\\Database11.mdf;Integrated Security=True;User Instance=True;trusted_connection=yes");

        con.Open();
        SqlCommand cmd = new SqlCommand("Insert into table2 values('" + 11 + "','" + 22 + "')", con);
        cmd.ExecuteNonQuery();
        con.Close();
        return "submitted successfully";
     }
  }
}
```

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THE STUDY OF PROBLEMS FACED BY COMMERCE STREAM STUDENTS OPTING FOR COMPUTER EDUCATION

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ABSTRACT
The purpose of this study was to investigate the problems faced by the commerce students who have opted for computer education at Higher Secondary stage in the schools affiliated to Gujarat Secondary and Higher Secondary Education Board of Vadodara city. The research design adopted for the study was survey. Data collection ended using validated tools like Rating Scale based on the criteria's for text book analysis given by NCERT and separate questionnaire (comprising open ended and close ended questions) were used for both for the students and the teachers. The analysis and interpretation of data was through critically analyses. Findings indicate that the overall quality of the curriculum and text book of the computer education in commerce stream needs change to keep pace with the changing situations of the commercial world leading to many problems are faced by the students and teachers dealing with the present curriculum and syllabus.

KEYWORDS
Commerce Education, Computer Education, Commerce Text Book, Content Analysis.

INTRODUCTION
Today's world is regarded as 'the world of technology and innovations'. Since the first commercial computer appeared in 1951, man's capacity to handle information had indeed undergone a revolutionary change (Argila, 1977). This makes it essential to acquaint the students with what is presently demanded by the commerce sector through commerce education. Knowledge of commerce is given to the students at higher secondary schools in commerce stream and this knowledge imparted acts as roots to be strong to grow for young youths of commerce. Many schools with higher secondary section having commerce stream impart computer education looking to its importance in future, but it is must to keep check of the extent to which the facilities are available and various problems that creep up while computer education is rendered to students.

COMMERCE AND COMPUTERS
Talk about any area of commerce, be it trade, aids to trade viz. banking, insurance, warehousing, transportation etc., manufacturing industries, computers have pervaded everywhere in commerce. E.g. Banks have introduced computers for financial data exchange transactions over the Internet. Electronic commerce has replaced traditional ways of ordering goods and services. The nature, scope and functioning of commerce has changed from commerce to e-Commerce and from business to e-Business. With each new technology, electronic commerce also enables new possibilities, unfeasible before, especially through its interactive nature. E-Commerce in investopedia (1996) is defined as "the buying and selling of information, products, and services via computer networks" e-commerce also includes the "support for any kind of business transactions over a digital infrastructure".

Internet-based electronic commerce is used in all the phases of a commerce transaction: to provide information to its customers (e.g., access to product brochures and price lists), as a marketing tool (e.g., allowing a customer to contact a sales office), as a sales channel (e.g., on-line ordering products) and as a support line (e.g., making available frequently asked questions and answers). Using electronic commerce has assisted an organization to derive value for business. E-Commerce has helped organizations to make money from direct sales. Due to its advantages to the field of commerce usage of electronic commerce in different industries, business units for trade and other services have accelerated at a great speed in India too. Electronic commerce has its great impact on the growth and development of the society and economy.

India is a Developing Nation and to continue its development further, it is must to keep a pace with scientific and technological development that is taking place around the world. Chandra (1984) rightly pointed out in National Workshop On Computer Literacy Curriculum-NCERT that "Anybody who grows up in the world tomorrow, not knowing the computers, not understanding the computers, not being able to use them, will be lost, and that Country which does not prepare its citizens to be fully familiar and conversant with computers, their technologies and their applications would not be able to keep its place with the industrial hierarchy in the community of Nations."

The idea of introducing computer education in schools in India is essential to cater to the present as well as future needs of the society wherein it is felt that computers are here to stay and will play an increasingly important role in social life. Hence, it is not only appropriate but essential that today's student is oriented to adjust in the world largely dominated by computers.

Higher secondary section with commerce stream is the inception stage to gain the knowledge of commerce for commerce students and computer education can play very important role in this initial stage of commerce education as it is hard to see "commerce without computers" where e-commerce is the part of today's grooming, growing technological world.

RECOMMENDATIONS OF VARIOUS COMMISSION AND COMMITEES ON COMPUTER EDUCATION
The report of the **National Workshop on Computer Literacy Curriculum- NCERT (1984)** gave the following recommendations to manifest the importance of computer education.

- Computer education should be introduced at the senior secondary level and may gradually be introduced at middle and primary levels.
- Computer education programme should be the part of the curriculum for every student, irrespective of the area selected for the specialization.
- Computer literacy programme should familiarize the students with the computer as a versatile tool with the immense application potentials in all the aspects of human development.

Planning commission has also given emphasis on the expansion of the computer education:

The 7th **five-year plan (1985-90)** emphasized on the re-orientation of the education system so as to prepare the country to meet challenges of the 21st century.

The 10th **five-year plan (2002-07)** recommended strategically for the development of computer and computer education in the terms of the strategies for hardware, software, marketing and human resource development.

Biswal, A. & Das, A. (2000) reported level wise objectives for computer education as:

- to develop vocational skills in computer for further life.
- to develop creativity in the area of computer.
- to develop a stronger foundation for further studies in computer.

Taking note of above recommendations Gujarat Secondary and Higher Secondary Education Board (GS&HSEB) has introduced subject of computer education as an optional subject to be introduced in both science and commerce stream. It has not made Computer Education compulsory as it is not feasible for all the schools to have computers and also GS&HSEB may not be in a position to finance such schools. It has instead, recognized Computer Education as an option for SUPW (Socially Useful & Productive Work).

OBJECTIVES OF COMPUTER EDUCATION AS PRESCRIBED BY GUJARAT STATE BOARD OF SCHOOL TEXTBOOK (GSBSTB) IN THE SYLLABUS

1. To introduce students to modern usage of computers including career other than computing.
2. To ensure that the students can use the course as a jumping off point to go to more advanced courses in computing.
3. To encourage logical thinking in students.
4. To ensure that the student who do not have the exposure to computers does not find it difficult to grasp the course.
5. To ensure that the students who already have some exposure to computing do not find it too boring or easy.
6. To teach students storage, maintenance and presentation of information. To encourage the computer as a tool in learning process.
7. To introduce students to the most general aspects of one of the widespread application of the Internet namely e-commerce.

It is a must to keep eye on whether the computer education provided to the students is in track with these objectives and what are the hurdles in the way that needs to be removed for qualitative delegation of computer education.

As it is hard to see "*Commerce without Computers*" in today's changing, growing technological world and as the investigator has not come across to any study talking about computer education in commerce stream for recent past years focusing on the problems of the students, the investigator is more interested to know the present conditions and situations prevailing in schools of Baroda city commerce stream with regards to computer education and problems faced by students in computer education as students are the "makers of the Nation." Foreseeing its importance in every aspect of life, many schools have offered computer education to the students but there is nothing that substantiates the extent to which the facilities are available and various problems that creep up while computer education is rendered to students of higher secondary commerce stream by various schools.

The investigator to bring the qualitative change in the computer education & belonging to the field of commerce is more inclined to study the problems faced by the Commerce students in computer education.

RATIONALE OF THE STUDY

Change is the need for the day. The rapid pace at which technology is transforming the process of learning in many countries is almost unbelievable. The imperceptible momentum gathered by the engines of technology while at work in education will change the entire learning scenario like nothing else during the next few years. What is really amazing is that the developments are being telescoped into shorter and shorter time spans and this is the crux of the matter. As a result, the learning tools at the command of the children are getting more effective and sophisticated. At the root of this revolution is the personal computer, the television set, video cassettes, the satellite network and what not. And there is no stopping to this avalanche of change as the world approaches the 21st century.

Also the National Growth, which has taken place in the country, is largely the contribution of goods and services produced and sold in the country, which gives an idea that activities of commerce have accelerated at a greater speed due to technological advancement. Computer is increasingly used in all the aspects of social life in the country. Banking, Railway and Airlines have already introduced computers in their day-to-day operational services. Mainly corporations, hospitals, government agencies and educational institutions use computers. Besides, Computers have also been introduced in large and small business organization for maintenance of the company records and accounts. The use of computers and Internet has increased to such a great extent that commerce has now become e-commerce. We can say that when the power of e-commerce was unleashed for the benefit of the society, the evolution of the business world started. Now Businesses uses electronic data interchange (EDI) to reduce costs, increase the speed, and increase the accuracy of business documents when doing business with other companies. Consumers are no longer tied to local stores or mail catalogues for retail purchases. E-commerce became a new retail outlet in the late 1990s. When even retail purchase and sale in the field of commerce is done with the help computers and internet, it becomes essential to train the students to have know-how of computers. "The pressure for colleges to reform and faculty to change the method of instruction have intensified during the last decade Until teachers use the computer and become comfortable and confident using the computer, the computer may remain an isolated tool with either the potential to increase student learning, or the potential to increase the amount of dust it collects" (Deborah, 2000). Also "Our commerce teachers cannot keep away from these changes." (TOJET, 2000). For a developing Nation like India, as said earlier, it is very essential to keep pace with scientific and technological development and education as an agent of socialization does play a major role in keeping young aspirants of society aware and up to date with these developments. The idea of introducing computer education in schools in India is based on the future needs wherein it is felt that computers are here to stay and will play an increasingly important role in social life. Hence, it is only appropriate that today student to be so oriented as to adjust in the world largely dominated by computers.

Gupta, S. (1999) stated, "Adopting a new technology is a great challenge. There are few constraints in the field of computer education. Major problems in the computer education are related to the resource allocation, training of the teachers, attitude of decision makers, stiff competition, indifferent attitude of government, shortage of teaching staff, etc." Also Goel, Das and Joshi (2000) remarked, "Computer education itself has not been standardized with respect to infrastructure, syllabus and qualification of manpower." So, it is quite necessary to carry out the survey of the problems faced by the commerce students in computer education, which may enable the investigator to answer many of the questions raised.

"Computer education has been introduced in the schools in India and with it is expected that the schools will become the machines of commerce education. However, at present Commerce Education in schools has not become so advanced that computers are used at school stage in the book-keeping or accountancy." (Rao, 2004). In most of the advanced countries the commerce education is totally computerized. (Rao, 2004). The computer education in the commerce stream is not the complete position to develop different skills in the student of commerce. Today in all the areas, work in majority is dependent on computers whereas in schools commerce education is not totally computerized. Student faces difficulties in doing the transaction when placed in the real commercial market at that stage.

The investigator belonging to the field of commerce is more inclined/interested in knowing the problems faced by the students in availing computer education in commerce stream so that the investigator can come up with some effective solutions to the problems to enhance the qualitative aspect of computer education in Commerce Stream.

RESEARCH QUESTIONS

1. What is the computer education course offered at higher secondary level of commerce stream for standard XI, prescribed by GSBSTB?
2. Is the course offered caters to the needs of the commercial world demand?
3. What are the problems faced by the students of commerce stream at higher secondary level in availing Computer Education?

STATEMENT OF THE PROBLEM

STUDY OF THE PROBLEMS FACED BY COMMERCE STREAM STUDENTS AT HIGHER SECONDARY LEVEL OPTING FOR COMPUTER EDUCATION

OBJECTIVES OF THE STUDY

1. To analyze computer education course offered at higher secondary level of commerce stream for standard "XI, prescribed by GSBSTB.
2. To study the problems of Higher Secondary students of Commerce Stream opting computer education.

OPERATIONALIZATION OF THE TERM

Computer Education: Computer education here means the knowledge and the skills imparted to the students at the Higher Secondary Commerce Stream in the schools affiliated to GS&HSEB as per the prescribed syllabus for the computer subject taught in these schools.
Problems: Difficulty faced by the students in terms of the infrastructure facilities, physical facilities provided by the school management, teachers and teaching, curriculum, etc.

RESEARCH METHODOLOGY

DELIMITATION OF THE STUDY

The proposed study is delimited to the English Medium Schools affiliated to Gujarat Board of Baroda City, Gujarat, India.
The proposed study is delimited to schools with Commerce Stream having Computer Education subject (optional / compulsory).
The proposed study is delimited to standard XI of Commerce Stream.

RESEARCH DESIGN

The design of the study was the **survey study** (why it was most suitable for the study) the purpose of which was to reveal the problems faced by the students in computer education of the commerce stream higher secondary level which furnished the evidence for future planning and decision making to bring solution for betterment in its present state with future perspective.

POPULATION OF THE STUDY

The population of the study consisted of all the twenty two English Medium Higher Secondary Commerce Stream Schools of Baroda city Affiliated under GS&HSEB providing Computer education as an optional / compulsory subject.

SAMPLE OF THE STUDY

Five schools from the population were selected for the sample by random sampling method that is approximately twenty two percent of the total population. All the students of class XI commerce opted for computer education from each selected school were selected as the sample and two teachers teaching computer education in those schools constituted as samples.

TOOLS FOR DATA COLLECTION

In the present study, to collect the required data the following tools were used.

RATING SCALE BASED ON THE CRITERIA'S FOR TEXT BOOK ANALYSIS GIVEN BY NCERT

For objective 1: Various Criteria's were rated by the investigator at five point rating scale and the dividing the on the basis of equal hypothesis was divided into three category of below average, average and above average.

QUESTIONNAIRE FOR THE STUDENTS

For objective 2: A separate questionnaire (comprising open ended and close ended questions) for the students of commerce stream opted for computer education was prepared by the investigator, validated by 2 experts. The investigator personally with the help of the questionnaire collected the data from the students.

QUESTIONNAIRE FOR THE TEACHERS

For objective 2: A separate questionnaire (comprising open ended and close ended questions) for the Teachers teaching computer education in commerce stream was prepared by the investigator, validated by 2 experts. The investigator personally with the help of the questionnaire collected the data from the students.

DATA COLLECTION

Data was collected by the investigator through the personal visit to the sampled schools. The investigator personally approached the principal of school along with a written application duly endorsed by University authority and explaining the purpose of the study. After that the investigator administered the tool and collected the data.
At the time of administration of the tool, the investigator at the outset had oriented the students about the purpose of the study and procedure for answering it. After delivery of necessary instruction, the questionnaire was given to them individually. The students were asked to answer the questions in the space provided along with each item in the questionnaire. The investigator has taken care of the relevancy of the data to the possible extent not allowing the teacher to have an influence on the student's responses.
The investigator also oriented the teachers about the purpose of the study and procedure for answering it. After delivery of necessary instruction, the questionnaire was given to them individually. The investigator collected the data by personally providing the explanation of the various questions and reframing the questions and tried to get the possible relevant data from the teachers.

ANALYSIS AND INTERPRETATION OF DATA

Objective1: Analysis was done using the evaluation criteria's for Text Book analysis given by NCERT. Various Criteria's were rated by the investigator at five point rating scale and the dividing them on the basis of equal hypothesis was divided into three category of below average, average and above average.

CRITERIA FOR ANALYSIS

The curriculum of the computer education text book of standard XI commerce was studied by the investigator herself. The section focuses on the overall view of the content studied keeping in mind the various criteria:

1) Selection of the Topic and content, its relevance to the commercial market situation.
2) Sequencing and logical continuity of the content points and sub points.
3) Presentation of the content.
4) Figures, tables, diagrams, graphs and pictures.
5) Illustrations, Exercise.
6) Miscellaneous.
7) Technical Specification (Physical Features)

Evaluation of a text book was done systematically keeping in mind the following factors.

1) Content covered under each selected topic.
2) Validity of the content covered in relation the present demands of the commercial market.
3) Logical continuity of the content points and sub points.
4) Language and ambiguity of the content.
5) Presentation of the content points and the sub points.
6) Graphs, diagrams, figures, charts and pictures used for the explanation of the content.
7) Illustrations and examples used.
8) Presentation and the typographical mistakes.
9) Different levels and types of question in the exercise.

10) Type of assignment, activities, experiments.
11) References provided
12) Any other factor not covered above.

The investigator critically examined each and every page of the text book of computer education for commerce stream standard XI keeping in mind the Criteria's and noting them down in the evaluation sheet.

CRITERIA FOR FINAL ANALYSIS BASED ON THE RATING SCALE

Final Analysis Based Score = Total Score obtained / Score assigned. Total Score assigned = 200

On the basis of the Score assigned and Total Score obtained the investigator keeping in mind the demand of today's commercial market from the education predicted that the content is above average, average or below average on the basis of Equal Hypothesis

ANALYSIS BASED ON THE RATING SCALE

From the above analysis the investigator came to the conclusion about various aspects of the "Introduction to Computers" Text book of computer education of XI Commerce. On the basis of Equal Hypothesis the investigator has divided the five points scale into three categories – up to 1.67 below average, from 1.68 to 3.34 average and above 3.35 above average.

Selection of the Topic and content, its relevance to the commercial market situation which includes 6 sub criteria's like Correlation of the selected topic with the set Objectives of Std. XI Commerce Computer Textbook, Relevancy of the Selected Topics to the commercial market, Relevancy of the Content in the Selected Topics to the commercial market, Correlation between the selected topic, Tradition v/s Modern, Imaginary v/s life related and Interdisciplinary in Nature got final score **2.5** that indicates the Selection of the Topic and content, its relevance to the commercial market situation is at the average level. Thus needs to include certain topics which have more relevancies to the commercial market situation Ex. certain topics based on TALLY 9.2. Topics needs to changed keeping in mind the changing demands and the present context.

Sequencing and logical continuity of the content points and sub points which includes 6 sub criteria's like Organization of Content, Logical Continuity of the points and the sub points, relation between the content points and sub points, Fundamental Unity (Central idea reflected in the Chapter), Objectives according to the level / domain and Summarization got final score **3.17** that indicates the Sequencing and logical continuity of the content points and sub points is at the average level teaching points needs more proper sequencing and the content points and sub points logically connectivity needs to be more focused. Objectives should be more based on the different level and domain of the student.

Presentation of the content which includes 5 sub criteria's like Concreteness (Fairness / biasness), Flow of content using principles of Known to Unknown, Simple to Complex, Presentation in the simple and legible form, Presentation High lighting the important points and with clarity and Up-to-date got final score **3.2** that indicates the presentation of the content is at the average level.

Figures, tables, graphs diagrams, and pictures is one of the aspect of the presentation of the content which includes 4 sub criteria's like Relevancy of the figures, tables, graphs diagrams, and pictures to the content, Proper Labeling of the figures, tables, graphs diagrams, and pictures, Presentation of the figures, tables, graphs diagrams, and pictures its colour, size and Clarity in Presentation got final score **3.25** that indicates the presentation of the figures, graphs, charts, diagrams and pictures are at the average level. The presentation needs to be in more pictorial form, more colourful and attractive and the size of the pictures and the charts needs to be increased as is less legible. It should be such which develops more interest amongst the students to learn.

Illustrations and Exercise including 6 sub criteria's like quality, theoretical or practical approach, relativity with the content, catering to the different level of students, questions of different level, different domain, language and its usefulness got final score **3** that indicates that the illustrations and the examples are at the average level and not fully catering to the needs of the different level of the students, content and the present market scenario. There is a need to incorporate the questions of different level and different types.

Miscellaneous including 7 sub criteria's like Units / Topics Introduction, Unit Objectives Clarification, Key words and its meaning clarification, Instructions for the related Practical assignments and projects, Instructions for the Teacher, References and bibliography for the further use of students and General information got final score **2** that indicates that the miscellaneous section of the text book is below average. Each chapter should have proper introduction, meaning to the key words, instructions for the teachers and the students and should also provide with the proper references which can suffice the need of guidance to the students in doing their practical and the project based assignment. All these are the essential elements for the good text book.

Technical Specification (Physical Features) including 6 sub criteria's like Size of the book, cover page, quality of paper, quality of printing, binding and the price of the book got final score **2.67** that indicates that the technical specification as one of the important aspect of the good book are at the average level. Minor Printing mistakes, spelling mistakes needs to be taken care. Binding should be hard and paper quality should be raised as need to be long lasting. No use of colours is been done which makes the presentation dull and unattractive to the students. There should to coloured prints for the charts, graphs, diagrams and picture presentation.

Considering all the above criteria's the overall quality of the Text book of XI commerce lies at the average level (i.e. **2.78**). All the aspects of the text book needs change especially taking into consideration the commerce stream the selection of the topics and the content should be such that enables the students to keep pace with the changing situations of the commercial market. More practical approach is needed Ex. In chapter Electronic commerce exercise focuses only on the theoretical aspects and that to the knowledge level only no applicability is focused. Similarly Internet only theory no practical exercise so students are not in the position to use net when asked too.

Thus there is a need to make the text book of computer education for XI commerce good, above average of the selected topics, content covered, presentation, type and the level of the examples and the illustrations, printing, quality of the physical aspects of the text book, errors and the mistakes, etc. It should cater to the needs of the changing commercial market.

Objective 2: **To study the problems of Higher Secondary students of Commerce Stream opting computer education. A separate questionnaire (comprising open ended and close ended questions) for the students and the teachers respectively was prepared by the investigator, validated by 2 experts.**

The samples for the objective consisted of the five schools from the population have been selected by simple random sampling method. All the students of class XI commerce opted for computer education from each selected school was selected as the sample, and two teachers teaching computer education in those schools constituted as sample.

The investigator personally visited the English medium schools having commerce stream and providing computer education as an optional / compulsory subject and collected the data form the students and the teachers with the help of the questionnaire.

ANALYSIS ON THE BASIS OF THE TEACHER'S RESPONSES IN RELATION TO THE FACILITIES AND THE TEACHING LEARNING PROCESS

1. BACKGROUND AND THE QUALIFICATION OF THE TEACHERS

As the investigator has divided the questionnaire in relation to the different aspects one of the major aspect of concern was related to the Teachers qualification and their background.

All the teachers were found to be holding degrees or qualification related to computers like:

1) Diploma in Computer Application (DCA)
2) Post Graduate Diploma in Computer Application (PGDCA)
3) DOE "A" level
4) Master in Computer Software and Engineering
5) Advance Diploma in Software and Engineering
6) Hardware, Networking Professional Certificate Course in Tally, Web Page Designing, DTP

It was also found that out of the sample **86 percent** of the teachers of commerce stream teachers were from science background as the schools have appointed only one teacher for teaching in both the streams. From the above graph based on the student's response it is seen that out of the total sample of students **61.33 percent** responded that the teacher is from science background.

2. IN-SERVICE TRAINING

66.85 percent responded that there was no in-service training provided to them and remaining **33.15 percent** to whom the training was provided responded that the training period was about 1 to 2 weeks.

3. INSTRUCTIONAL PROCESS

It was found by the investigator from the responses for the teacher and the students that majority of the teachers adopted lecture method, sometime the demonstration for teaching practical. No other teaching aid was been utilized by the teachers in teaching Computer Education. Even teachers responded they are not allowed to use the internet for teaching the chapter of internet and E-commerce.

4. EVALUATION STRATEGY

From the responses it was found that the schools have their own criteria's for evaluating students. The student's performance is evaluated on the basis of the oral, practical and written. On an average it was found that **72.69 percent** schools are giving 20 percent weightage to Oral, 40 percent weightage to practical and 40 percent to written. Also very few teachers give the assignments which are project based having problem solving approach to evaluate the students learning.

5. TIME ALLOTMENT FOR THE THEORY AND PRACTICAL

Time allotted for the theory and the practical differs from school, to school but on an average majority of the teachers were satisfied and felt the period allotted were adequate. On an average two periods in a week were given to the students for the practice.

6. DIFFERENCES FOUND IN THE BASIC PRINCIPLES OF COMMERCE WHILE TEACHING CONCEPTS OF COMMERCE IN COMPUTER EDUCATION

It was found that the **100 percent** sample of the teachers responded **yes** to the question related to the difference found between the basic principles of Commerce in the commerce books and the principles of commerce education which creates lots of confusion in the minds of the teachers and the students. Also as stated above it was found that out of the sample **86 percent** of the teachers of commerce stream were from science background as the schools have appointed only one teacher for teaching in both the streams, due to these the teachers were not totally in the position to clear the concepts of the basic principles of commerce of the students of the commerce stream.

ANALYSIS OF THE PROBLEMS ON THE BASIS OF THE RESPONSES OF THE STUDENTS IN RELATION TO THE FACILITIES PROVIDED AND THE LEVEL OF THE SATISFACTION

In terms of the infrastructural and other resource facilities provided, which becomes a hindrance in the effectiveness of the teaching learning process 73.48 percent of the students responded that there are no separate labs for the commerce stream and the science stream and also other standards in the schools. On an average 30 to 40 students are handled at a time in the computer lab only by one teacher. Because of this 72.56 percent of the students responded that the teachers are not in the position to pay personal attention on them and so students face difficulty in solving their doubts. Even while during practical the teacher is not in the position to handle each and every student and so many times just ask students to read from the text book and do the practical by self rather then following the demonstration method.

75.69 percent of the students responded that there is the same teacher to teach theory and the practical while remaining 24.31 percent responded that there are two different teachers to teach the theory and the practical. 56.67 percent of the student found the lack of co-ordination between the theory and the practical taught. Even there is no proper co-ordination seen between the commerce subject's teachers and the computer teacher. The subject like Accountancy, statistics are not taught by using computer programs it is only by blackboard method. Students found lot of difference in the basic concepts and the principles of the accountancy and the statistics when taught in the commerce classes and the computer education classes.

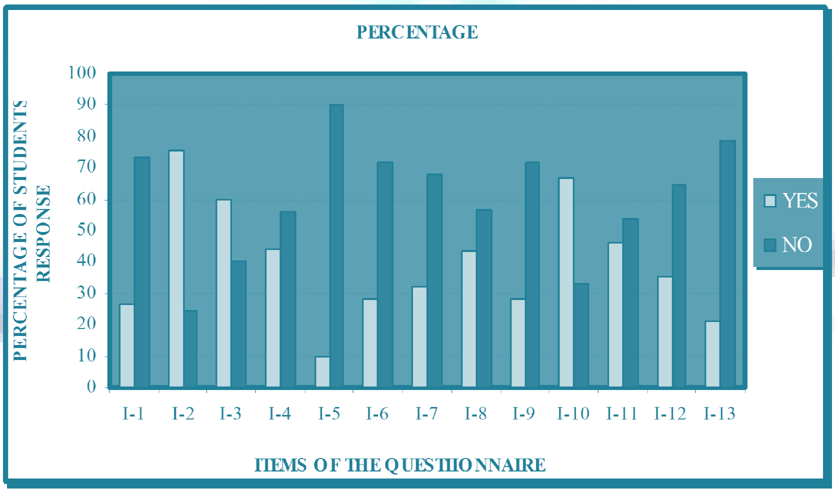
Also in item number 5, 6 and 7, 90.06 percent of the students responded that there is no use of any kind of the teaching aid while teaching the subject of computer education teachers lack in the pedagogical aspects because of which they are not in the position to develop the interest towards the computer education. Even 71.82 percent responded that the teacher make no use of other reference books apart from the text book, due to which students gets less exposure.

67.96 percent of the students responded that there is no availability of the reference books in the school library too so students finds the library to be of less use for getting more information and enhancing their knowledge about the Computer education.

More focus is in teaching the theory, some of the chapters like Internet, E-commerce wherein the computer practical is the must to understand the concepts are taught without any practical exposure. 67.96 percent of the students responded that they are not allowed to use internet even once in a year. 71.82 percent of them responded that they are never taught to develop the web page. They do not have the clear concepts of E-commerce like advertising, online reservations, banking, filing tax returns on online, house tax and the education tax on online and collaborative businesses connected to the private networking.

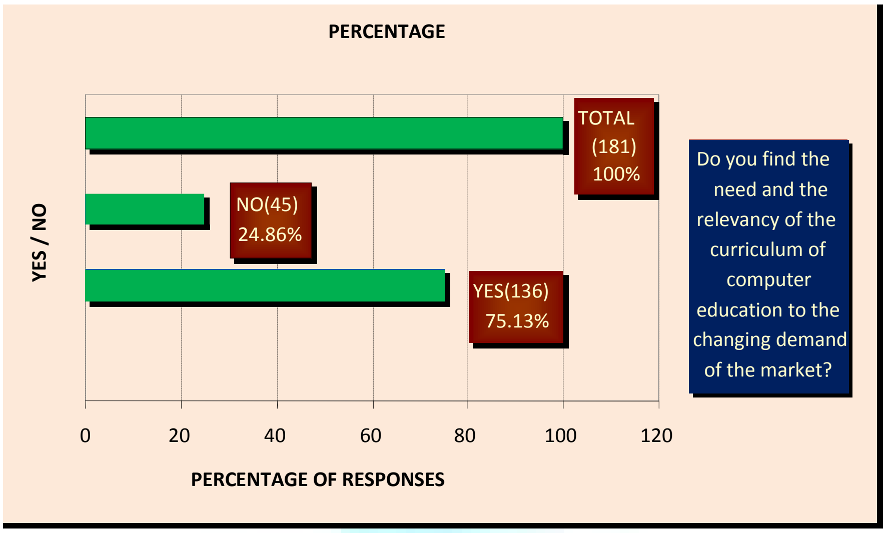
Items (10, 11 and 13) in the table 4.2.2 shows the satisfaction of the students with relation to the presentation of the content in the text book (33.15 percent were not satisfied), satisfaction with the way in which the computer education provided (53.60 percent were not satisfied), and the satisfaction with the rate of consumables provided (79.01 percent were not satisfied) they were not provided with the sufficient CDs, stationery and even the printing facilities. Even students don't know how to use the printer.

GRAPH 1: GRAPHICAL PRESENTATION OF THE PROBLEMS ON THE BASIS OF THE RESPONSES OF THE STUDENTS IN RELATION TO THE FACILITIES PROVIDED AND THE LEVEL OF THE SATISFACTION



Analysis of the responses of the students in relation to the relevancy of the curriculum to the changing demands of the commercial market situation showed that 76.24 percent of the students felt that the topics taught o them are related to the commerce but the content covered in the topics is not up to mark and also the way they have been transacted do not suffice the need of commerce at large. 79.56 percent of the students responded that the Computer Education has an important place in the commerce curriculum but needs certain change so as to fulfill the demands of the commercial market situations.

GRAPH 2: GRAPHICAL PRESENTATION OF THE NEED AND THE RELEVANCY OF THE CURRICULUM OF COMPUTER EDUCATION



The graph presented shows the need and the relevancy of the curriculum of computer education to the changing demand of the market. 75.31 percent of the students responded that the computer education in the commerce stream should be such that the student's are in a position to deal with the reality of the commercial market.

DISCUSSION

Computer Education plays an important role in all the disciplines. It has a special role for the commerce stream students as these students are preparing themselves for the real commercial market and today's world being the world of Computers where all the commerce and trade has found a tremendous development. There is a need to bring a qualitative change in the Computer education in commerce stream.

The investigator found that the overall quality of the text book of the computer education in commerce stream needs change to keep pace with the changing situations of the commercial world. Gohil, H (2004-05) also reported that "the content of the textbook was not appropriate and in logical manner and needs to incorporate latest topics as per the changes in the fields."

It was found that the more focus was on the theory and also the students were evaluated more on the basis of the theory which was also reported by Shah, R. (2002) that "more weightage on the theory than the practical in the evaluation."

There is no use of the teaching aids while imparting the transaction in majority of the school. Majority of the teachers just make the use of the text book for transaction TOJET (2007) studied the attitude of the teachers and reported that "the teacher does not need a computer to complete his tasks. Teachers felt that chalk and talk method is the best method of teaching.

There was no standard criterion and eligibility decided by the GS&HSEB for the selection of the computer teacher for the commerce stream and majority of the teachers teaching in commerce stream were found to be of the science background.

Looking to some of the concerns listed above and more to bring the required change in the quality of Computer Education in Commerce Stream the investigator came across many of findings has given suggestions for the change in the content, for improving the teaching learning process and improving the facilities provided by the schools, attitude of the students, teachers, parents and the society more specific the overall quality of the computer education in commerce stream

MAJOR FINDINGS OF THE STUDY

1. Majority (approx. 90 percent) of the schools are offering computer education as a subject compulsory in their school curriculum instead of optional subject.
2. There is no specific guideline from GS&HSEB for eligibility of computer teachers for commerce stream. Most of the teachers were found to be from the science background and so they were not in a position to clear the commercial concepts of the students.
3. On an average fees charged by the commerce stream students for computer education is Rs. 750/- But students are not satisfied by the way in which computer education is imparted in the schools. Nor they are satisfied with the facilities provided by the schools in terms of availability of the consumable.
4. Majority of the teachers just make the use of the text book for transaction.
5. Student found lack of co-ordination between the theory and the practical taught.
6. Majority of the schools it was found that there is no availability of the reference books in the school library.
7. On an average one hour in a week is given to the students for practical. Most of the students opined that the practical hours should be more and desired to enjoy more facilities than existed.
8. More focus is in teaching the theory, some of the chapters like Internet, E-commerce wherein the computer practical is the must to understand the concepts of commerce and trade are taught without any practical exposure. Students opined to have a good exposure to internet.
9. Teachers in the majority of the schools are not allowed to use the internet.
10. Need is to make the text book of computer education for XI commerce good, above average in terms of the selected topics, content covered, presentation, type and the level of the examples and the illustrations, printing, quality of the physical aspects of the text book, errors and the mistakes, etc. It should cater to the needs of the changing commercial market.
11. On an average there are 22 to 25 numbers of computers in the schools computer lab where 2 to 3 are found not in the working conditions. On an average 30 to 40 students are handled at a time in the computer lab only by one teacher.

SUGGESTIONS FOR QUALITATIVE IMPROVEMENT IN THE COMPUTER EDUCATION IN COMMERCE STREAM

1. There should be specific criteria (Eligibility) established by the board for the selection and the appointment of the computer teachers for the commerce stream. The teacher should have the commerce background along with the degrees and qualifications related to computer.
2. Time allotted for the computer education should be adequate. Board should specify the number of periods to be allotted by the schools for practical and the theory.
3. Teachers training should be increased in computer education, methodology of teaching computer in regards with commerce education; instructional programmes should be the area of focus.
4. The computer education text book needs to be changed in terms of the content relevancy with the real commercial world should be there. Illustrations and the examples should be related to commerce.

5. Time allotted for Practical should be increased to develop the skills amongst the students. Students should be taught to develop their own web page and place it on the net. They must be allowed to use internet under certain terms and conditions. The teacher role is to keep a check on the students work.
6. Students should be encouraged to collect the data from the webs which enable him to develop self and the school at large. This will develop the skill in him of recognizing the best product placed on the web from varieties.
7. Proper references related to the computer education more focusing on the commercial aspects should be made available in the school library.
8. Syllabus of the computer education should be designed in such a way that it becomes flexible for modifications according to the speedy change in the demands of the commercial world and the society at large.
9. There should be a separate computer lab established for the commerce stream students.
10. The subject teachers should make the use of the computer while teaching the concepts of accountancy and statistics. There should be an integrated approach established in teaching the different subjects of commerce and the computer education. This will lessen the doubts in the minds arise due to the difference seen in the commerce subject and the computer education.
11. Number of the teacher providing computer education in the commence stream should be increased so as to keep the personal attention on the students and to be in the position to solve the difficulties of the students. School should appoint at least two teachers having commerce background and provide them with the satisfactory salary. They should be given the position of the subject teacher in the commerce stream.
12. Students should also be given a minor knowledge of the hardware along with the software's.
13. Schools should install the latest software and remove the outdated ones.

SUGGESTIONS FOR FUTURE RESEARCH

A research investigation can never be exhaustive and final. It raises further problem, queries and issues to be tackled. The present study will encourage, stimulate and even provoke further researches in the area of the problems in the computer education of commerce stream.

1. The study of the problems faced by the students in commerce stream opting for computer education offer and valuable direction and the contribution to the development of the future commercial world of computer.
2. Comparative view of the computer education imparted in commerce stream and science stream.
3. Study of the opportunity cost paid by the students of commerce steam at higher secondary level opting for computer education leaving the subject of Secretarial Practice and Commercial Correspondence.
4. The study on the problems faced by the students due to lack of the infrastructural facilities, due to inadequate library facilities, insufficient availability of the consumable, the selection criteria of the teacher by the school, the evaluation process, the teaching learning process and the teachers.
5. Integration of the different subjects of commerce and the computer education.
6. Study of the expectations of the students, teacher, parents and the commercial world- the society at large.

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AN EVALUATION OF ETHICS IN INSURANCE SECTOR

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ABSTRACT
The financial services sector has an increasingly difficult task balancing the demands of a lengthening list of 'stakeholders' – shareholders, the community, investors and pressure groups. So, it is not surprising that the sector is subjected to so much public scrutiny. A firm that demonstrates a good standard of ethical behavior can generate loyalty internally. Furthermore, promulgation of that stance throughout its business dealings can significantly raise staff awareness of ethical issues, which in turn can lead to early identification of problems and have cost and reputation savings for the firm.

KEYWORDS
Ethics, Loyalty, Stakeholders, Pressure group, Promulgations.

INTRODUCTION
Financial services are the economic services provided by the finance industry, which encompasses a broad range of organizations that manage money, including credit unions, banks, credit card companies, insurance companies, consumer finance companies, stock brokerages, investment funds and some government sponsored enterprises.

The term "financial services" in a broad sense means " mobilizing and allocating savings". Thus, it includes all activities involved in transformation of savings into investment.

The financial service can also be called financial intermediation. It is a process by which funds are mobilized from a large number of savers and make them available to all those who are in need of it and particularly to corporate customers. Thus financial sector is the key area and it is very vital for industrial developments. A well developed financial service industry is absolutely necessary to mobilize the savings and to allocate them to various investable channels and thereby promoting the national industrial development. Financial service industry can be traditionally divided into Capital market and money Market Intermediaries.

The term "financial services" became more prevalent in the United States partly as a result of the Gramm-Leach-Bliley Act of the late 1990s, which enabled different types of companies operating in the U.S. financial services industry at that time to merge. Companies usually have two distinct approaches to this new type of business. One approach would be a bank which simply buys an insurance company or an investment bank, keeps the original brands of the acquired firm, and adds the acquisition to its holding company simply to diversify its earnings. In the other style, a bank would simply create its own brokerage division or insurance division and attempt to sell those products to its own existing customers, with incentives for combining all things with one company.

The primary operations of banks include: Keeping money safe while also allowing withdrawals when needed, Issuance of checkbooks, payments, Provide personal loans, commercial loans, and mortgage loans, Issuance of credit cards, processing of credit card transactions and billing, debit cards, Automatic Teller Machines (ATMs), Electronic fund transfers, Standing orders and direct debits, overdraft, Provide internet banking system, Deposits of customer and the credit facilities to them. Other types of bank services that includes Private banking, high net worth individuals. Capital market bank - for underwrite debt and equity, assist company deals (advisory services, underwriting and advisory fees), and restructure debt into structured finance products. Bank cards - include both credit cards and debit cards. Credit card machine services and networks - Companies which provide credit card machine and payment networks call themselves "merchant card providers". Foreign exchange services including Currency exchange, Foreign Currency Banking, Wire transfer, Investment services.

Insurance is the equitable transfer of the risk of a loss, from one entity to another in exchange for payment. It is a form of risk management primarily used to hedge against the risk of a contingent, uncertain loss. An insurer, or insurance carrier, is a company selling the insurance; the insured, or policyholder, is the person or entity buying the insurance policy. The amount to be charged for a certain amount of insurance coverage is called the premium. Risk management, the practice of appraising and controlling risk, has evolved as a discrete field of study and practice. The transaction involves the insured assuming a guaranteed and known relatively small loss in the form of payment to the insurer in exchange for the insurer's promise to compensate the insured in the case of a financial or personal loss. The insured receives a contract, called the insurance policy, which details the conditions and circumstances under which the insured will be financially compensated. Other financial services Intermediation or advisory services - These services involve stock brokers or private client services and discount brokers. Stock brokers assist investors in buying or selling shares. Primarily internet-based companies are often referred to as discount brokerages, although many now have branch offices to assist clients.

Debt resolution is a consumer service that assists individuals that have too much debt to pay off as requested, but do not want to file bankruptcy and wish to pay off their debts owed. This debt can be accrued in various ways including but not limited to personal loans, credit cards or in some cases merchant accounts. There are many services/companies that can assist with this.

FINANCIAL SERVICES OPPORTUNITIES
Franchise Opportunity: From business ideas to inception, entrepreneurs need a financial management advisor to help get their business in financial order. With these financial service opportunities for sale, One can make money servicing small business loans, grants, cash flow statements, and other services to small business owners and start own financial service business today.

Growth Opportunity: Emerging markets around the world offer considerable opportunities for banks, insurance companies, and fund managers to increase their global market share. According to International Monetary Fund estimates, the economies of such countries "… are expected to grow two to three times faster than developed nations like the U.S.

While many emerging markets are still addressing poverty, their higher-than-average economic growth rates are fueling the emergence of an educated middle class that aspires to achieve a more affluent lifestyle in which traditional depository, credit, insurance, and investment products play an important role. The expansion of this middle class is expanding global demand for financial services from established providers and could represent a new opportunity for financial services companies looking for growth.

To help financial services companies around the world better understand and assess the opportunities, challenges, and risks that emerging markets present, the Deloitte Center for Financial Services presented a global research project that focuses on six countries in the Asia-Pacific region: China, India, Indonesia, Malaysia, Thailand, and Vietnam.

Post Retail Distribution Review Opportunity: Commission payments to financial advisers will be abolished under new rules that came into effect at the end of 2012. The rules also require financial advisers to hold qualifications equivalent to the first year of a degree course rather than A' level equivalents. They are part of the Financial Services Authority (FSA) Retail Distribution Review (RDR) reforms, which could be an opportunity for financial service providers to build more direct relationships with their customers and prospects.

The FSA hopes that the RDR will promote openness in a part of the financial services sector that for some consumers is shrouded in mystery. This is all the more important given the pivotal role it will have in ensuring that UK adults responsibly provide for themselves in later life through pension and savings investments products – products often sold via an independent financial adviser (IFA).

Impact of RDR reforms in brief: Under the RDR reforms, the consumer will pay the IFA's fee, not the investment product provider – around a quarter of IFAs were still being paid commission this year. Peers in the House of Lords are among the critics of this particular reform, arguing that it will lead to a wider advice gap that could leave poorer consumers without access to financial advice.

It is thought that the level of fees chargeable for many investment requirements (circa £500 for an initial fee) will discourage IFAs to service some of their less affluent investors and/or for these investors to feel that the advice is not worthwhile if they can invest in different ways, for example online.

The RDR requirement for IFAs to have higher qualifications could see an estimated 15-20% of IFAs exit the industry as they lose a revenue stream and/or decide not to sit additional exams in return for reduced commissions. While this may not be great news for either IFAs or 'lower level' investors who are quite possibly going to become 'orphaned', there is an opportunity for investment firms to build direct relationships with their customers of all levels; both current and future.

RDR is of course not something which has appeared as a surprise; in June 2006 the FSA created the program. . As a result, financial institutions have been planning for life in the RDR world. Predicting the effect of this change and how to deal with it though has been difficult, particularly at a time of great change in the financial services sector.

The investor/IFA relationship will not disappear completely, and new technology solutions such as web-based aggregator platform swill support both investors and advisers.

Opportunities for direct relationships with consumers: Then there is 'direct'. What is the case for building direct relationships between consumers and financial providers, even though those same consumers have not previously needed to engage with what has been seen by some as an 'intimidating' sector?

In short, it is growing. Building on both the requirement to communicate as is legally required (with for example statements), but also to help build trust and understanding around what is available from these organizations and how they can help 'look after' their investors – be they now 'orphaned' or still have the luxury of access to an IFA.

A partnership opportunity for the DMA: This is where the DMA can support those investment firms who either already uses 'direct' or are considering doing so, in order to build a supportive, direct relationship with their customers and prospects.

The resources available to an organization through DMA membership mean that there is a huge amount of experience available to help support brands in building direct relationships using a multitude of approaches, communications channels and creative messages; all designed to engender loyalty and proactive, ongoing relationships that show a return on their cost of implementation and management.

In hand with the networking opportunities that are available with peers and the extremely important work that the DMA drives to support the direct marketing sector in government, the opportunities that the DMA offers to support a 'direct' strategy are many.

With some research showing that as few as 12% of investors even know that RDR is here, there is an opportunity to build a direct relationship with investors and so help support and educate consumers on the benefits of investing responsibly for their own futures.

CHALLENGE FACING THE FINANCIAL SERVICE SECTOR

The finance service sector has to face many challenges in its attempt to fulfill the growing financial demands of the economy. Some are listed below

1. Lack of Qualified Personnel: Te Financial service sector is fully geared to the task of financial creativity. However this sector this sector has to face many challenges. The qualified and trained personnel is an important impediment in its growth.

2. Lack of Investors awareness: The introduction of new financial products and instruments will be of no use unless the investors are aware of advantage and uses of use and innovative products and instruments.

3. Lack of transparency: The whole finance system is undergoing a phenomenal change in accordance with required national and global environments. It is high time that the sector should give their orthodox attitude of keeping in a highly secret manner

4. Lack of specialization: In Indian sense each intermediary seems to deal in different financial service lines without specializing in one or two areas. In other words, each intermediary is acting as a financial supermarket delivering so many financial products and intermediaries like Newton, Solomon Brothers etc.

5. Lack of recent data: Most of the intermediaries do not spend more on research. It is very vital that one should build up a proper database on the basis of which one could embark upon financial creativity.

6. Lack of efficient risk management system: With the opening of the economy to multinationals and the exposure of Indian companies to International competition, much importance is given to foreign portfolio flows. It involves the utilization of multi currency transaction which exposes the client exchange rate risk, interest rate risk and economic and political risk.

The above challenges are likely to increase in number with the growing requirements of the customers. Te financial services sector should rise up to the occasion to meet the challenges by adopting new instruments and innovative means of financing so that it could play a very dynamic role in the economy.

ETHICAL ISSUES IN THE FINANCIAL SERVICES SECTOR

Ethical issues in the financial services industry affect everyone, because even if you don't work in the field, you're a consumer of the services. Duska discussed five reasons why these misdeeds may happen.

1) Self-interest sometimes morphs into greed and selfishness, which is unchecked self-interest at the expense of someone else. This greed becomes a kind of accumulation fever.

2) Some people suffer from stunted moral development:

3) Some people equate moral behavior with legal behavior disregarding the fact that even though an action may not be illegal, it still may not be moral.

4) Professional duty can conflict with company demands.

5) Individual responsibility can wither under the demands of the client.

ETHICAL ISSUES IN INSURANCE

The central ethical issue in the insurance industry centers around money over customer support. Several facets differentiate those who see insurance as a vocation and those who view the profession as a means to a financial end. If an insurance agent enters into the profession without a strong ethical foundation he may quickly discover that people would rather not do business with him.

❖ **Issues of Honesty**

Honesty in the insurance industry plays a central role in continued success and growth. According to the Insurance Journal, a single dishonest act by an insurance agent can spell doom for his business career and taint his reputation for years to come. Insurance agents and agencies must look at the value of selling clients effective policies that may not net as large a return over selling them unnecessary coverage for short-term financial gains. An insurance agent must decide whether he wants to dishonestly chase the dollar or treat his clients with honesty and respect.

❖ **Personal Property**

An insurance agent must understand that he works to protect the assets and even the health of his clients. The health and well being of a client and the protection of his assets should play a central role in his thinking. An insurance agent who ignores the needs of his clients in favor of his own financial gain enters into an ethical conflict with the demands of his profession. Ignoring the needs of clients can manifest in the casual manner in which the agent deals with emergencies or the lack of timely processing of claims when the client suffers adverse effects to his livelihood.

❖ **Customer Versus Client**

An insurance agent in the business solely for monetary gain is nothing more than a mercenary according to the Insurance Journal. These individuals often look at those who purchase policies with them as customers--mere purchasers of goods and services. An ethical, professional insurance agent views policy purchasers as clients--someone who has entered into a support pact with them. Professional insurance agents have an ethical obligation to support clients in the client's time of need in accordance with the client's policy.

OTHER ETHICAL ISSUES ARE

- Insufficient legal authority to perform professional services in an ethical manner
- Failure to get adequate ethics training program
- Ignorance of code of ethics
- Complaints or disputes arising out of failure to provide correct and adequate information on insurance contracts
- Tendency of management to disregard actuarial judgment in making managerial decision
- Churning or inducing a policy owner to replace an existing policy with a new one with lower assumed interest rate
- Lack of internal ethics policy and/or effective compliance Officer
- Failure to do socially responsible investment
- Failure to provide products and services of the highest quality in the eyes of the consumer
- Failure to improve transparency of accounting by actuaries
- Misrepresenting or concealing limitations in sales force’s abilities to provide services
- Failure to recommend products and services that meet consumers needs
- Lack of transparency of governance structure of insurance companies
- Failure to provide prompt, honest responses to customer inquiries and requests
- Being passive to socially responsible activities
- Offering rebate or soliciting incomplete sale by sales force
- Lack of necessary knowledge or skills by sales force
- Making disparaging remarks about competitors, their products, or their employees
- Unjust asset management such as preferential loan to the affiliated company, insider trading
- Excessive uses of business expenses
- Failure to provide products and services of the highest quality in the eyes of the customer Issue
- Failure to provide prompt, honest responses to customer inquiries and requests
- Making disparaging remarks about competitors, their products, or their employees or agent
- Misuse of proprietary information
- Misuse of sensitive information belonging to others
- Improper methods of gathering competitors’ information
- False or misleading representation of products or services in marketing, advertising or sales efforts
- Conflicts between opportunities for personal financial gain (or other personal benefits) and proper performance of one’s responsibilities
- Conflicts of interest involving business or financial relationships with customers, suppliers or competitors that influence, or appear to influence, one’s ability to carry out his or her responsibilities
- Conflicts of interest involving the marketing of products and services competing with those of one’s own company
- Conflicts of interest that involve working for a competitor, customer or supplier without approval
- Misuse of company assets/property
- Insider trading/other security trading problems
- Giving excessive gifts or entertainment
- Receiving excessive gifts or entertainment
- Offering or soliciting payments or contributions for the purpose of influencing customers or suppliers
- Offering or soliciting payments or contributions for the purpose of influencing government officials
- Offering or soliciting payments or contributions for the purpose of obtaining, giving or keeping business
- Offering or soliciting payments or contributions for the purpose of persuading employees of another company to fail to perform, or improperly perform, their duties
- Offering or soliciting payments or contributions for the purpose of influencing legislation or regulations.
- Inaccuracy of books, records or reports Issue 22 Abuse of expense accounts **
- Antitrust issues
- Relations with local communities
- Office/agency closings and layoffs
- Discrimination
- Drug and alcohol abuse
- Employee theft
- Lack of knowledge or skills to competently perform one’s duties
- Failure to identify the customer’s needs and recommend products and services that meet those needs
- Failure to be objective with others in one’s business dealings
- Misrepresenting or concealing limitations in one’s abilities to provide services

CONCLUSION

The competitors are likely to have engaged in illegal or unethical activity in order to be successful. In order to meet the smooth claims by the claimants, transparency must be maintained in such a manner that, there will be no unethical or illegal activity. IRDA must evolve such a mechanism which can regulate the insurance services more ethical and lawful in its operations. Insured must also be honest enough and should disclosed the matters in a crystal clear manner which helps the insurer to follow ethics in the matters of Insurance.

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COMPARATIVE STUDY OF ADVERTISING MEDIA EFFECTIVENESS IN NAVSARI CITY

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ABSTRACT

The objective of this study is to compare various advertising media for effectiveness of advertising among literate people of Navsari city of Gujarat State. Different parameters like attention seeking ability, remembrance ability, deception, celebrity impact, flexibility, dramatisation effect and demonstration effect were taken to study effectiveness of media for advertising. Effectiveness of different media source for different types of products is also studied. This study also tries to find out correlation among age and television viewing habits and newspaper reading habits of consumers.

KEYWORDS

advertising media, media effectiveness.

INTRODUCTION

The history of advertising in India parallels the history of the Indian Press. During the early days the newspapers announced births, deaths, appointments, arrival and departure of ships and sale of furniture. By the beginning of the 19th century the power of advertising increased rapidly with the growth in trade and commerce. Advertising expenditure in the 1950s was estimated at $US 300,000. The first advertising appeared on television in 1976. Having seen the entry of globalisation, businesses have grown rapidly across borders. This saw the rise in promotional expenditure of the company mainly in the form of advertising. Organised form of advertising started with print media and then gradually as technology advanced, it entered into broadcasting media like radio, television and later through internet. Consequently, this study aims at studying the effectiveness of various advertising media.

LITERATURE REVIEW

The media includes newspapers, magazines, TV, radio, billboards telephone, fax, and internet (http://dictionary.reference.com/browse/media, 12/5/2011). Media carries advertisements and brings it to individuals (Sissors and Baron, 2002). Media users then decide which media they will use based on the kind and quality of the entertainment, information and advertisements the media provide.

Consumer's perceptions of advertising are linked with advertising effectiveness and the strategies that companies follow (Anderson et al., 1978). The major elements of how to determine effective advertising include the perceptions that people carry of advertising as a source of product information and as a source of pleasure and as a social role. These factors can have an impact on general attitudes toward advertising, which in turn could have an impact on advertising effectiveness (Mehta, 2000).

Advertising value is highly related with the informativeness of advertising information when the advertisement is transmitted by traditional media vehicles (Ducoffe, 1995). Stewart and Pavlou (2002) pointed out that interactive media such as internet allows "the customer to acquire real-time account information that was previously not available." This study concluded that information is considered as an added value by the consumer and the consumer may even be ready to pay for it in few cases.

The programs in media are designed to entertain (DeVito, 1994). This is done in order to gain the attention of maximum people Media providers do this in order to gain the attention of the advertisers which is major reason why mass communication exist (DeVito, 1994). Enjoyable experience of people is responsible for their attitude towards advertisements (Shavitt et al., 1998). Online advertising is more positively evaluated by consumers. They have a higher intention to revisit the homepage compared with websites with no entertaining features (Raney et al., 2003).

Credibility of an advertising medium can be defined in terms of consumers' perceptions of the believability of a medium's advertising content (Kiousis, 2001). Each medium has its own image and personality (Aaker and Brown, 1972), therefore, it can be claimed that each channel has an intrinsic value in terms of credibility. Research has shown that the advertising medium influences consumers' perceptions of the advertisements.

An online survey of 5,000 US adults, conducted by Nielsen reveals that respondents rate newspapers (in print and on the internet) as the most effective advertising media. The study measured advertising effectiveness across various parameters, with print newspapers leading ahead of radio, internet, and TV. Breaking the media types down into different segments, the local paper topped the ratings for likelihood to purchase and propensity to notice ads. The results – which put TV at the bottom of the list for overall advertising engagement and effectiveness – are interesting in that they contrast with numerous previous surveys which show TV to be the most influential advertising medium. Typically, newspapers tend to be seen as more effective by older consumers.

Nagar K. (2009) studies advertising effectiveness in different media. This paper presents the results of a survey focusing on a comparison between the effectiveness of advertisements in two different media, namely the Internet/Web and television. The paper tests the 'value' of advertising on the dimensions of informativeness, attention, emotions, precipitating action, attitude, entertainment, irritation, and deceptiveness.

IMPORTANCE OF STUDY

Customers obtain information related to any product or service through various advertising media. Companies are investing millions of dollars on advertising to market their product and to come close to the customers. Due to increase in the number of media sources, customers have a choice to make informed decisions. This makes it imperative to study the effectiveness of different media among the customers. If we compare them on various grounds and check their effectiveness, it will not only benefit customers but also the companies.

OBJECTIVES

- To study the effectiveness of various advertising media for different products.
- To study the effectiveness of advertising media among customers on the basis of parameters like attention seeking ability, remembrance ability, awareness, information, desire creation ability, interesting, boringness, misleading, celebrity impact, flexibility, dramatisation effect and demonstration effect.

RESEARCH METHODOLOGY

This research study incorporates a descriptive research design. Sampling design was planned keeping in mind non-probability sampling using judgment and convenience method. The study was undertaken in Navsari city with sample size being 200 and the sample units were literate consumers of Navsari city. Primary data was collected through a pre-constructed structured questionnaire and secondary data was limited to web sources. Primary data was statistically analysed through percentages, averages, correlation etc and the results were tabulated.

DATA ANALYSIS AND INTERPRETATION

TABLE NO. 1: IMPORTANCE OF PERSONAL SOURCES

Personal Sources	
Categories	**Frequency**
Friends	135
Family	31
Work group	18
Relatives	6
Neighbours	2
Others	8

Interpretation: From the table 1, we can say that 67.5% of the respondents have chosen friends as their most important personal source to find out the information about the product/service that they are going to purchase and only 1% of the respondents collect information from the neighbours.

TABLE NO. 2: AGE-WISE CLASSIFICATION OF COLLECTING INFORMATION FROM PERSONAL SOURCES

Age Group	Personal Sources					
	Friends	**Family**	**Workgroup**	**Relative**	**Neighbours**	**Others**
Upto 20	**67**	16	1	1	1	2
21 to 30	**54**	12	12	2	0	1
31 to 40	**4**	2	2	2	1	2
41 to 50	**2**	2	2	2	0	2
Above 50	**3**	2	2	0	0	1

Interpretation: From the above table it is clear that all the age group of respondents are giving Friends as their most important personal source.

TABLE NO. – 3: BROADCASTING MEDIA SOURCE

Broadcasting Media	Frequency
Television	131
Radio	12
Internet	57
Total	**200**

Interpretation: From the table 3, we can interpret that the respondents are more active for television advertising as far as the broadcasting media is concerned. 65% of the respondents go for the television media to gather information for the product /service to be purchased.
Similarly print, commercial and experiential media sources generated following results;

TABLE NO. – 4: PRINT MEDIA

Print Media	Frequency
Newspapers	154
Magazines	26
Posters & Banners	20
Total	**200**

TABLE NO. 5: COMMERCIAL MEDIA

Commercial Media	Frequency
Salesperson	24
Packaging	35
Displays	46
Websites	95
Total	**200**

TABLE NO. 6: EXPERIENTIAL SOURCES

Experiential Sources	Frequency
Handling the product	11
Examining the product	46
Using the product	143
Total	**200**

TABLE NO. 7: ATTENTION GENERATING MEDIA SOURCE

Media	Ranking Score*
Television	1029
Radio	464
Internet	806
Newspapers & Magazines	771
Posters & Banners	525
Word of Mouth	605

***Calculation of Ranking Score:**
Here is the procedure given how the Ranking Scores are calculated given above. First of all the respondents' responses in the form of ranks are calculated for each Media category.

Media (e.g.)	**Rank**					
	1	2	3	4	5	6
Television	108	45	29	10	2	6

Now after getting the total for each rank now do as shown below:

Media (e.g.)	**Rank**						
	1(*6)	2(*5)	3(*4)	4(*3)	5(*2)	6(*1)	Total
Television	108*6 =648	45*5 =225	29*4 =116	10*3 =30	2*2 =4	6*1 =6	**1029**

Now the total that you have got above is the Ranking Score for the Television. This way score was calculated for all the other media sources.

TABLE NO. 8: ATTENTION CONSUMERS GIVE TO DIFFERENT MEDIA SOURCES

Media	**Ranks**
Television	**1**
Internet	**2**
Newspapers & Magazines	**3**
Word of Mouth	**4**
Posters & Banners	**5**
Radio	**6**

TABLE NO. 9: EFFECTIVENESS OF DIFFERENT MEDIA SOURCES FOR DIFFERENT TYPES OF PRODUCTS

Products	**Media**						
	T.V.	Newspapers	Magazines	Radio	Internet	Posters & Banners	Word of Mouth
Mobile Phones	**82**	11	2	3	64	1	38
Food Products	**72**	20	15	7	5	13	70
Electronic Products	**74**	31	16	3	58	9	9
Cosmetic Products	**81**	22	37	7	9	14	29
Home Appliances	**70**	46	18	0	29	8	25
Garments	35	37	24	5	24	**39**	35
Footwear	**60**	25	24	2	28	29	45
Stationary Products	39	49	21	2	14	23	**55**
Pharmacy	**49**	35	23	10	36	15	33

TABLE NO. 10: REMEMBRANCE OF ADVERTISEMENT

Media	**Time Period (Approximately)**					
	Few hours	One Day	One Week	One Month	More than the Month	Not Sure
Television	**43**	26	42	20	42	27
Radio	**65**	35	34	10	8	48
Newspapers & Magazines	18	59	**60**	22	29	12
Internet	33	33	31	32	**39**	32
Posters & Banners	**47**	38	42	20	25	28
Word of Mouth	30	20	20	29	49	**52**

Interpretation: From the above table following interpretation can be had about how much the respondents remember the advertisements of various media:

- Consumers remember internet advertisements for longer period of time
- Word of mouth does not indicate any clear trend.

TABLE NO. 11: RATING OF MEDIA SOURCES ON VARIOUS PARAMETERS

Parameters	**MEDIA**					
	T.V.	Radio	Newspapers & Magazines	Internet	Posters & Banners	Word of Mouth
Creates more awareness	106	13	27	37	1	16
Provides more information	37	14	35	104	3	7
Generates true desire to purchase	52	7	39	34	10	58
Leads to take actions towards buying	48	12	28	41	16	55
More interesting	77	10	20	65	18	10
More boring	7	98	31	20	24	20

TABLE NO. 12: MISLEADING MEDIA SOURCES

Media	**Options**			
	Yes	No	To some extent	Not sure
Television	64	51	**73**	12
Radio	25	**100**	42	33
Newspapers & Magazines	44	**80**	55	21
Internet	48	**82**	50	20
Posters & Banners	48	**64**	50	38
Word of Mouth	47	**70**	30	43

Interpretation: From the above table we can say that television media source is more misleading compared to other media sources.

TABLE NO. 13: IMPACT OF MEDIA SOURCE

Media	Ranks
Television	1
Internet	2
Newspapers & Magazines	3
Posters & Banners	4
Radio	5

Interpretation: From the above table we can say that Television ranks at the top as far as celebrity impact on various media sources is concerned follow. Radio makes the least impact of celebrity.

TABLE NO. 14: PERCEPTION WHETHER ADVERTISEMENTS ON BUSES, TRAINS AND AUTO RICKSHAWS (TRANSIT MEDIA) CAN CREATE AN IMPACT ON BUYING BEHAVIOUR OF CONSUMERS

Options	Frequency
Yes	95
No	30
To some extent	60
Not sure	15
Total	**200**

Interpretation: From the above graph and table we can analyse that 47% of the respondents believe that advertisements through transit media does make an impact on buying behaviour of consumers. 15% say that it doesn't make any impact on buying behaviour. 30% were of the view that it affects to some extent. 8% of the respondents were not sure about it.

TABLE NO. 15: FLEXIBILITY OF ADVERTISING MESSAGE DESIGN

Media	Ranking Scores*
Television	867
Radio	378
Newspapers & Magazines	601
Internet	687
Posters & Banners	422

Interpretation: From the above graph and table we can interpret that Television has more flexibility as far as the advertising message is concerned, while Radio has the least flexibility for the same.

TABLE NO. 16: DRAMATISATION EFFECT OF MEDIA

Media	Frequency
Television	160
Radio	15
Newspapers & Magazines	5
Websites	13
Posters & Banners	7
Total	**200**

Interpretation: From the above table it can be interpreted that Television is the media that can create better "Dramatisation Effect".

TABLE NO. 17: DEMONSTRATION EFFECT OF MEDIA

Media	Frequency
Television	96
Radio	19
Newspapers & Magazines	29
Websites	49
Posters & Banners	7
Total	**200**

Interpretation: From the above table we can conclude that Television is the medium that can create better "Demonstration Effect".

TABLE NO. 18: CORRELATION BETWEEN AGE AND TELEVISION VIEWING HABIT

Age	No. Of Respondents	Television Viewers
11-20	88	67
21-30	81	58
31-40	13	8
41-50	10	10
51-60	8	3
Total	**200**	**146**

Age X	% of Tel. Viewers Y	dx (X-35)	dy (Y-75)	dx2	dy2	dx.dy
15	76	-20	1	400	1	-20
25	72	-10	-3	100	9	30
35	62	0	-13	0	169	0
45	100	10	25	100	625	250
55	38	20	-37	400	1369	-740
Total	-------------	**0**	**-27**	**1000**	**2173**	**-480**

Coefficient of correlation 'r = - 0.34

From the above calculation we can say that the Age & Television Viewing habit are Negatively Correlated.

TABLE NO. 19: CORRELATION BETWEEN AGE AND NEWSPAPER READING HABIT:

Age	No. Of Respondents	Newspaper Readers
11-20	88	35
21-30	81	25
31-40	13	5
41-50	10	5
51-60	8	3
Total	**200**	**73**

Age X	% of Newspaper Readers Y	dx (X-35)	dy (Y-40)	dx2	dy2	dx.dy
15	76	-20	0	400	0	0
25	72	-10	-9	100	81	90
35	62	0	-2	0	4	0
45	100	10	10	100	100	100
55	38	20	-2	400	4	-40
Total	-------------	**0**	**-3**	**1000**	**189**	**150**

Coefficient of Correlation r = 0.35

From the calculation we can say that the Age and Newspaper Reading habits are Positively Correlated.

MAJOR FINDINGS OF THE STUDY

- Television is the most attention seeking media.
- Following table shows most effective media for different types of products.

Media	Products
Television	Mobile phones, Food products, Electronic products, Cosmetic products, Home appliances, Foot wear, Pharmacy products.
Posters & Banners	Garments
Word of Mouth	Stationary products

- Respondents remember advertisements on internet the most.
- Media that creates more Awareness & is more Interesting: - *Television*.
- Internet as a medium is more informative.
- Media that generates true desire to purchase & leads to take action towards buying is Word of Mouth. Radio is perceived to be boring.
- 47% of the respondents believe that the advertisements on Buses & Trains/Rickshaws create an impact on buying behaviour of consumers.
- Television has more Listenership Power as compared to Radio and better flexibility in designing advertising message. Television also has better dramatisation and demonstration effect. It has greater celebrity impact. But this medium may mislead at times.
- As per the Correlation Analysis it is clear that Age and Television Viewing habits are negatively correlated and Age & Newspaper Reading habits are Positively Correlated.

CONCLUSION

Friends are the most important personal source for respondents for collecting product information. Television is the most effective broadcast media. Newspapers & Magazines is the most effective media in Print sources. In Commercial media Websites is the most effective one. Use of different media for different products is an ideal situation. Even for different parameters different media may prove effective like for Awareness it is Television, for Information it is Internet etc. Direct marketing through Mobile messages & E-mails disturb most of the respondents whether male or female. There is the only media which may mislead customers even though it is most effective is Television. And lastly Television is the most effective media based on different ground like, Attention, Awareness, Interesting, Celebrity Impact, Reach, Listenership Power, and Flexibility in the design of advertising message, Dramatisation & Demonstration Effect etc.

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DHARMA ENSURING WELFARE & TRANSPARENCY IN CORPORATE GOVERNANCE

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ABSTRACT

An organisation which can be called Dharmic or a truly ethical organisation or the one pursuing business ethics in its day-to-day practice is the one which tries to ensure to the extent possible, the welfare of all its stakeholders. The true purpose of an organisation as highlighted by a number of studies is to Pareto optimise the welfare of the organisational stakeholders, as they are the ones, who in reality contribute towards the long-term growth and sustenance of the organisation. 'To ensure the welfare of all concerned' has been the endeavour and a part of the Indian culture and tradition right from the very beginning. The Indian scriptures have always hailed the ideal of Sarvajana Hitaya, Sarvajana Sukhaya (for the benefit and welfare of all). The excerpt from the Kaivalya Upanishadgiven below gives an insight into the all encompassing approach of the Indian culture which has enabled the Indian civilisation (the longest and the only surviving ancient civilisation) to survive the last 5000 years and more. "business should not be swayed by excess profits and wealth maximisation for a few, but should realise the significance of social responsiveness. Therefore, orporate philosophy should be guided by dharma (righteousness). A business organisation is to be treated as a place of worship, wherein the entire workforce, by means of sincere work, offers worship to god."

KEYWORDS
Dharma, transparency, corporate sector.

INTRODUCTION
Globalization has increased the competition in which the corporate world operates, therefore it has become increasingly important for the management to make the corporate business more transparent and institutionally sound. A Company has an adopted set of practices for achieving its objectives through legal, regulatory and institutional environment. Further the Company intends to make business practices more and more transparent and accountable to the Stakeholders. It can be said that the relationship with the Stakeholders creates a social contract whereby the Company is morally obliged to take account of the interest of these groups.

CONCEPT OF CORPORATE GOVERNANCE
To conceptualize Corporate Governance we need to understand the term governance. The term governance is not a word of business but is of political science and now days being debated under public administration. Governance is a set of minimum framework of rules necessary to tackle problems guaranteed by a set of institutions. The following are the characteristics of governance when applied in the context of a country

1. It is the exercise of political economic and administrative authority in the management of resources.
2. The capacity of governments to design, formulate and implement policies and discharge functions.
3. It comprises mechanisms, processes and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences.
4. It includes formal institutions and regimes empowered to enforce compliance, as well as informal arrangements that people and institutions either have agreed to or perceive to be in their interests.

The term 'corporate' according to the Webster Dictionary means a body having the nature of, or acting by means of a corporation. A 'corporation' in turn means 'a legal entity that exists independently of the person or persons who have been granted the charter creating it and that is invested with many of the rights given to the individual. Applying the concept of governance in the corporate world, what we get is the term, 'Corporate Governance'. The corporate world comprises of institutions, like companies, firms, proprietorships, etc. According to Maw: 'Corporate Governance is a topic recently conceived, as yet ill- defined and consequently blurred at edges' Corporate Governance is defined as the distribution of rights and responsibilities among different participants in the organization, such as, the Board, managers, Shareholders and other Stakeholders, and spells out rules and procedures for making decisions on corporate affairs. Corporate governance is concerned with establishing a system whereby the Directors are entrusted with responsibilities and duties in relation to the direction of a company's affairs. It is founded on the system of accountability primarily directed towards the Shareholders in addition to maximizing the shareholders welfare. An effective corporate governance system provides mechanisms for regulating the Director's duties in order to restrain them from abusing their powers and to ensure that they act in the best interest of the company in a broad sense. Corporate Governance is also concerned with wider accountability and the responsibility of the Directors towards other Stakeholders on the corporation. These Stakeholders include the Company's employees, consumers, suppliers, creditors and the wider community. Sheridan and Kendall have advocated the definition of the term Corporate Governance, they believe that good corporate governance consists of a system of structuring, operating and controlling a Company in order to achieve the following objectives.

- To fulfil the long term strategic goals of the owners, which, may consist of building the share holder value or establishing a dominant market share or maintaining a market lead in a chosen sphere;
- To consider and care for the interest of the employees, past present and future, including planning future needs, recruitment training and working environment, severance and retirement procedures through to looking after pensioners;
- To maintain good relations with customers and suppliers, in matters such as quality of service, considerate ordering and account settlement procedures;
- To take account of needs of the environment and the local community, in terms of the physical effects of the company's operation on the surrounding area and the economic and cultural interaction with the local population;
- To maintain proper compliance with all the applicable legal and regulatory requirements under which the Company is carrying out its activities. In 1992,

the Cadbury Committee on the financial aspects of Corporate Governance considered inter alia the concept of Corporate Governance. It defined the concept as the system of which companies are directed and controlled. The Board of directors is responsible for the governance of the Companies. The Shareholders' role in governance is to appoint the directors and the Auditors to satisfy themselves that an appropriate governance structure is in place

HISTORY OF CORPORATE GOVERNANCE
The seeds of modern Corporate Governance were probably sown by the Watergate scandal in the United States. As a result of subsequent investigations, US regulatory and legislative bodies were able to highlight the control failures that had allowed several major Corporations to make illegal political contributions and to bribe government officials. This led to the development of the Foreign and Corrupt Practices Act of 1977 in USA that contained specific provisions regarding the establishment, maintenance and review of systems of internal control. This was followed in 1979 by the Securities and Exchange Commission of USA's proposals for mandatory reporting on internal financial controls. In 1985, following a series of high profile business failures in the USA. the most notable one of which being the Savings and Loan collapse, the Tread way Commission was formed. its primary role was to identify the main causes of misrepresentation in Financial Reports and to recommend ways of reducing incidence thereof. The Treadway Report published in 1987 highlighted the need for a proper control environment, independent Audit Committees and an objective Internal Audit function. It called for published reports on the effectiveness of internal control. It

also requested the sponsoring organizations to develop an integrated set of internal control criteria to enable companies to improve their controls. Accordingly COSO (Committee of Sponsoring Organizations) was born. The report produced by it in 1992 stipulated a control framework, which has been endorsed and refined in the four subsequent UK reports: Cadbury, Rutteman, Hampel and Turnbull. While developments in the United States stimulated a debate in the UK, a spate of scandals and collapses in that country in the late 1980s and early 1990's led the Shareholders and Banks to worry about their investments. These also led the Government in UK to recognize that the then existing legislation and self-regulation were not working. The issue of corporate governance became particularly significant in the context of globalisation because one special feature of the late 20th' century / 21 st century globalisation is that in addition to the traditional three elements of the economy, namely physical capital in terms of plant and machinery, technology and labour, the volatile element of financial capital invested in the emerging markets and in the third world countries is an important element of modern globalisation and has become particularly powerful. Thanks to the ubiquitous application of information technology, at the touch of a computer mouse, it is possible now to transfer billions of dollars across borders. The significance and the impact of the volatility of the financial capital was realised when in June 1997 the currency of South East Asian countries started melting down in countries like Thailand, Indonesia, South Korea and Malaysia. It was realised by the World Bank and all investors that it is not enough to have good corporate management but one should have also good corporate governance because the investors want to be sure that the decisions taken are ultimately in the interest of all stake holders. Honesty is the best policy is a fact that is now being re-discovered. In practical terms, corporate governance has meant that there should be at the board level non-official directors who are professionals and who have no conflicting interests and who can particularly operate the two key committees, the Ethics Committee and the Finance Committee to see that there is greater transparency in the management of the enterprise. Corporate governance ultimately has to come to mean better transparency in the operations without sacrificing business strategy or business secrets which are necessary for success in the market place, and absolutely ethical behaviour where the con-duct of the company will not only be legal but also ethical. The increase in the size and proportion of organisational activities over the last century, should have actually led to a proportional increase in the organisations' responsibility towards the various constituents who contribute towards the survival, success and growth of the organisation. However this has not happened. As seen from the corporate debacles that have occurred across the globe in the last decade and more, the focus of the top management became skewed as they started focussing only on one of their constituents *i.e.,* the shareholders. As a result of this skewed focus, organisations neglected other constituents of the organisation such as customers, employees, suppliers, local community and society, government, environment and the like who are integral to society and hence critical for the organisation's survival, growth and success. In other words importance of Dharma is not realised in Corporate Governance.

THE HUMAN BODY — AN IDEAL EXAMPLE

The best example to illustrate the need for a holistic approach to business is the human body. Just as the hands, legs, head, face, stomach and other external and internal organs are all parts of human body, the various stakeholders of an organisation are parts of the society. Just as these organs are all equally responsible for the effective functioning and good health of the body, the well-being of all the stakeholders appropriately is necessary for a successful organisation and a good society. If we focus only on and take care of the face alone because it is most visible and neglect the other body parts, it would be no good and rather damaging. The human body itself is an example of perfect integration in this regard. When a thorn pricks the foot, the eye waters, though they are so distant. This is because the whole body is one whole and each part reacts to the pain and joy of the other. Similarly the whole corporate organisation should be treated as an integrated whole and the welfare of all the organisational constituencies should be taken care of for the effective functioning and growth of the organisation.

ETHICS

The recognition of issues related to Corporate Governance is at times it is appalling when we come across so many instances of well regarded Corporate looting their Share holders for the personal gains of the Managers or the Owners. That brings us to the basic issue of what will be the ethical issues in Corporate Governance. Honesty is the best policy. This means that there has to be absolute integrity in all operations.

Integrity is of three types:

- Financial integrity
- Moral integrity
- Intellectual integrity

Corporate Governance and ethical behaviour have a number of advantages. Firstly, they help to build good brand image for the Company. Once there is a brand image there is greater loyalty, once there is greater loyalty, there is greater commitment to the employees, and when there is a commitment to employees; the employees will become more creative. In the current competitive environment, creativity is vital to get a competitive edge. Another area where corporate governance and ethical issues may arise is at the time of the Annual Report and particularly preparing the Annual Balance Sheet. There may always be a tendency to do what is called, window dressing and to show that the results were better than what were projected. I think a stage has come when it is better to be transparent and not do much of financial engineering but be straight because this may prove to be better in the long run. Especially now, in the context of the liberalization, and the opening up of the Indian companies for foreign competition, an issue will also be raising about the accounting practice. Ethics has got a major role to play in realizing the value for your efforts. But what are ethics? Not going anywhere else, if we look at the age-old Indian philosophical tradition we can derive certain values, they are also consistent with the value system of other civilizations. They are:

- **DHARMA (RIGHTEOUSNESS):** the right path, which will uphold the family, organizational, and the social fabric.
- **LOKA SANGRAHA (PUBLIC GOOD):** work not just for private gain, but also for public good. Practice of Swartha Prartha (self plus others) seeking ones own gains and also catering to the welfare of others.
- **KAUSALAM (EFFICACY):** optimum utilization of resources efficiently and productively. Judicious use of resources and preserving the resources for future generations.
- **VIVIDHTA (INNOVATION):** Beyond survival, Business has to be the engine of innovation constantly seeking more effective solutions to meet economic and social expectations. Such innovation is required in processes, products, materials, machines, organization, strategies, systems and people.
- **JIGYASA (LEARNING):** change and continuity will coexist. So the corporates have to keep learning from the feedback loop from society and through internal processes of question, challenges, debates and training

Dharma, the most difficult to define. Dharma has been explained to be that which helps the upliftment of living beings. Therefore that which ensures welfare is surely dharma. Its origin can be traced as solution to eternal problems confronting the human race, originating from natural human instincts.

MANU SAYS

AKASMAY KRIYA KASCHDRISHAYATE NEH KAHINCHIT, YADVATI KURUTE KINCHHIT TATTKAMASSE CHESTITAM.

It means that there is no act of man, which is free from desire; whatever man does is the result of desire. The force behind every action of human being is his desire, which is Kama. There is natural desire to have enjoyment and wealth i.e. material pleasure, which is Artha. But artha and kama are however subject to dharma. The propounders of dharma did appreciate that fulfilment of desires of human beings was an essential aspect of life but were of opinion that unless the desires were regulated by law, it is bound to give undesirable results. Therefore all the propounders of Dharma were unanimous that for existence of an orderly society, in this case an orderly market economy, the desires (Kama) for material enjoyment, and pleasures (Artha) should always conform to Dharma.

IN GITA: - TSMACHASTRNM PRAMANAM TE KARYAKARVAVYASTHITAO, GYATVA SHASTRAVIDHANOKTAM KARM KURTUMIHAHIRSI.

Which means, let the shastras be your authority in deciding what you should do and what you should desist from doing. In this case the shastras are nothing else but the Codes of best practice developed by various institutions however what is needed is uniformity in those Codes. When we say that why we should observe Dharma then it is necessary to cite Manu where he explains the necessity of scrupulous practice of Dharma. He says*:*

DHARMA AEV HATO HANTI DHARMO RAKSHATI RAKSHITA
TASMADHARMO NA HANTAVYO MA NA DHARMO HATOVIDHIT.

Dharma protects those who protect it. Those who destroyed dharma get destroyed. Therefore dharma should not be destroyed so that we may not be destroyed as a con-sequence thereof. The concept of dharma sankata is well known in the Hindu religion. Narova Kunjarova (human or elephant) was the situation where Yudhistra in Mahabharata Lied. For the sake of getting a short-term benefit, resorting to lies or straying from the straight and narrow path ultimately leads to a long-term failure. I would, therefore, suggest that even at the cost of sacrificing short-term benefits, it is better for an enterprise to adopt healthy practices. There is an excellent example of Alacrity, an enterprise concerned with building houses as NBCC. They have adopted the policy, though in the private sector, that will deal only with cheques and there will be no cash trans-actions. This has brought such a reputation to Alacrity that even the public servants who normally take bribes in Chennai when they come across an employee of Alacrity, do not ask for bribes. Can we not create through, at least our public sector enterprises, an environment in which there will be no underhand dealings and no violations from the path of integrity and corporate transparency? The pillars of the Indian philosophical tradition, which have explicitly provided for proper conduct in public and private life, need to be incorporated in our dealings with other people even though be of political or economic in nature. Now moving on from the occidental jurisprudence towards the orientalist, we see that there is not a vast difference in the theme. Max Weber talked about the protestant ethic as being a strong work oriented culture with a high sense of commitment and responsibility, but that's about work. Governance can be ethical only when it rests on the core values of Honesty, Integrity, Respect, Fairness, Purposefulness, Trust, Responsibility, Citizenship and Caring. These values are not to be lost sight of by anyone and under any circumstances irrespective of the goals that re intended to be achieved and to achieve the ends of good governance, the means are as important as the ends. There has been a length of debate over the corporate ethics and their implication over Corporate Governance, safe and fair play is always ethical, so I believe that "don't do something that you would be ashamed of, if it becomes public" In a social setting, this can be considered as the *Dharma* of the organisation.

DHARMA AND DHARMIC MANAGEMENT

The word '*Dharma'* is a Sanskrit word and has no exact equivalent in the English language. It defies a simple translation into English. Though sometimes it is used as an equivalent for the word 'religion', it is not only that. A number of words come very close to explaining its meaning. These include — right action, truth in action, righteousness, morality, virtue, duty, the dictates of God, code of conduct and others. Hawley (1993) defines *Dharma*, *Dharmic* and *Dharmic Management* in his landmark work 'Dharmic Management'. He states, 'The concept of *Dharma* is affixed to integrity, drawing to it the energies of goodness, spirit, and fearlessness, creating a sort of super integrity. The word *Dharmic* is Sanskrit for deep, deep integrity — living by your inner truth. *Dharmic Management* means bringing that truth with you when you go to work every day. It's the fusing of the spirit, character, human values and decency in the workplace and in life as a whole.' Dharma is not the same for all. It differs based on one's age and stage in life. The ancient Indian scriptures highlight a large variety of differences in the nuances of Dharma based on **DESHA-KALA- PARISTHITI** (place, time and circumstance). These various types of Dharma are :

- *Vyakti Dharma* — Related to the individual
- *Grihastha Dharma* — Related to the family life
- *Samajika Dharma* — Related to the society
- *Rajya Dharma* — Related to the nation
- *Ashrama Dharma* — Related to the stage in life *viz.* student, householder or renunciant
- *Varna Dharma* — Related to one's profession
- *Kula Dharma* — Related to one's lineage
- *Mata Dharma* — Related to one's religion
- *Aapat Dharma* — To be followed in times of danger/crisis
- *Manava Dharma* — One's duty as a true human being

Hawley in the same seminal work makes his observations in this context. He states, "Dharma is personal. It is not a one-size-fits-all set of ethical standards. It's an inner formula for only the individual. We each have our own law, or Dharma, peculiar to ourselves. It's as much a part of us as our body is, probably more. As with any law, we have to comply with it or suffer the consequences."

Again, one's Dharma is determined by one's stature and status in one's organisation and in society and one is expected to act in accordance with that for efficient functioning of the society as a whole. In this regard Hawley states that one's present status and level of achievement, or role in life, also affect one's Dharma. An individual's Dharma differs according to where he or she is in life. The Dharma of the CFO, for example, is different from the Dharma of the accountant. It's not that the accountant is inferior and the CFO superior. It's just that they are in different places in life at this moment. This will change with time. For now, the differing responsibilities and leverage that each brings to the table of life earn each of them a distinct Dharma.

Whatever may be one's stature or status, position or situation in life, true perfection is excellence in action. The Bhagavad Gita, one of the most revered spiritual texts of India also highlights this. It states — '**YOGAHA KARMASU KOUSHALAM'**, which means 'True Yoga is Perfection in Action'.

No matter what one's duty in life, one must do it and do it well. Whether one is a minister or a clerk, no matter what one's particular role, one must carry it out to the absolute limit of one's capacity for excellence.

INDIVIDUAL DHARMA AND ORGANISATION DHARMA

This *Individual Dharma* can be extended to the organisation as a whole and be termed as *Organisational Dharma*. This is because an organisation is nothing but a collection of individuals working together towards achieving certain common goals and objectives. Each of these are bound by certain rules and regulations based on the roles and responsibilities allocated to them and they have to achieve the commonly chalked out goals which are in the larger interest of the organisation keeping these in mind. In this light the organisation can collectively be said to have a *Dharma*.

The collective traits/virtues of an organisation, which are its unique features and characteristics are in recent times represented as the organisation's vision, mission and core values statements. They are the essential fabric of the organisation and form the core of its culture. Many organisations have a credo or an organisation charter which they adhere to and follow at all times and under all circumstances. One such example is of the Johnson & Johnson credo which the company follows and sticks to even in times of the famous Tylenol crisis.

MANAGEMENT DHARMA

Just as the organisation has its own *Dharma*, so do the managers working within it have theirs. Their *Dharma* as individuals differs from their *Dharma* as managers working in the organisation. As managers, they are the representatives of the collective value system of the organisation and they are trustees of the organisational wealth. Hence, they too have a *Dharma.* Hawley expresses a similar opinion. He highlights the fact, "*There is a particular Dharma for managers because they are in the responsibility seat. Their actions impact other humans and affect the economic and physical well-being of the organisation and, beyond that, the well-being of the environment and even the planet. With that power comes a greater measure of accountability. Management Dharma, like individual Dharma, matches one's life station. Managers can't expect to take the bigger jobs and not take on a broader Dharma. The manager's Dharma is more demanding, more obligated to rightness, more careful (i.e., more full of care).*" The recent concept of Servant-Leadership coined and defined by Robert Greenleaf highlights the same fundamental. It emphasises the role of a leader as a steward of the organisations' resources (human, financial and others). It encourages leaders to serve others while staying focussed on achieving results in line with the organisation's values and integrity.

A DHARMIC ORGANISATION AND TRIKARANASHUDDHI

An organisation which can be called Dharmic or a truly ethical organisation or the one pursuing business ethics in its day-to-day practice is the one which tries to ensure to the extent possible, the welfare of all its stakeholders. The true purpose of an organisation as highlighted by a number of studies is to Pareto optimise the welfare of the organisational stakeholders, as they are the ones, who in reality contribute towards the long-term growth and sustenance of the organisation.

'To ensure the welfare of all concerned' has been the endeavour and a part of the Indian culture and tradition right from the very beginning. The Indian scriptures have always hailed the ideal of *Sarvajana Hitaya, Sarvajana Sukhaya* (for the benefit and welfare of all). The excerpt from the *Kaivalya Upanishad*given below gives an insight into the all encompassing approach of the Indian culture which has enabled the Indian civilisation (the longest and the only surviving ancient civilisation) to survive the last 5000 years and more.

SWASTI PRAJABHYA PARIPALAYANTAAM
NYAYENA MARGENA MAHIM MAHISHAM
GOU BRAHMANEBHYA SHUBHAMASTU NITYAM
LOKA SAMASTA SUKHINO BHAVANTU

[May all the Subjects and their Rulers be prosperous; May the Rulers rule on the Righteous Path; May the cows (resources) and the *Brahmins* (individuals desirous of right living) be safe always; May all the beings in all the worlds be happy.] The great leaders who got freedom to India and laid down their lives for such a glorious cause and the founding fathers of the Indian Constitution, believed in such noble approach to existence. The following scriptural injunction has been engraved on the entrance wall of the Indian Parliament:

AYAM NIJAH PAROVAITI GANANA LAGHU CHETASAM
UDARA CHARITAANAAM TU VASUDHAIVA KUTUMBAKAM

(It is only petty-minded individuals who fail to rise above selfishness and keep counting that this is mine and that is yours; on the other hand the largehearted ones treat the entire humanity as members of their own family.) In the light of the above it can be said that the complete accord in the corporation's thought, word and deed — '**TRIKARANASHUDDHI'** *i.e.,* its intention of ensuring stakeholders' welfare, framing policies commensurate with the aforementioned and communicate the same across the organisation, and ultimately undertake activities for realising this intention, is the righteous conduct of the organisation — the *Dharma* of the company. The Vedic scriptures declare: **'MANASYEKAM, VACHASYEKAM, KARMANYEKAM MAHATMANAAM'** which means, 'A great individual is the one whose thought, word and deed are in complete unity.' The same can be extended to a great corporate entity. An organisation whose intentions, communication and actions are in complete unison can truly be called a Dharmic Organisation. It is such scriptural injunctions which inspire and prompt one and all to set high standards of righteous conduct and put into practice these exaltations in day-to-day lives, thereby ensuring the welfare of all concerned — whether at home or at work.

GOOD GOVERNANCE

A question arises that what is actually good Corporate Governance, is it more governance or less governance? The situation we face, what we call that of bad governance, is not actually bad governance but is that of "crisis of governability." The crisis we face now as a result of over regulation and under performance of both the public and private sectors of the economy over so long period is a crisis of Governance Short-term gains had taken over the long term vision and goal. Corporates have tried to capitalize on such grounds, which are proper from one angle but unethical from another, and finally land in a situation called Dharma Sankata. The concept of dharma sankata is well known in the Hindu religion. Narova Kunjarova (human or elephant) was the situation where Yudhistra in Mahabharata lied. For the sake of getting a short-term benefit, resorting to lies or straying from the straight and narrow path ultimately leads to a long-term failure. I would, therefore, suggest that even at the cost of sacrificing short term benefits, it is better for an enterprise to adopt healthy practices. Governance is about not merely ownership; even an owner has to learn to govern'. Corporate Governance is a way of life and not a set of rules. A way of life that necessitates taking into account the shareholders interest in every business decision. A key element of good governance is transparency projected through a code of good governance, which incorporates a system of checks and balances between key players- Board, Management, Auditors and Stakeholders. Transparency in turn requires enforcement of right to information and the nature, timeliness and integrity of the information produced at each level of interface. All of which can only succeed when the responsibilities of each entity and their interface is defined by great clarity an understood by all. Good governance at any level will crucially depend on greater simplicity in the process of governance combine with much stronger checks and balances, clarity of roles, the assignment of responsibilities and obligation, which will enhance accountability where it is due.

CONCLUSION

The word governance when it gets attached with the corporates term that evolves makes the corporates necessarily to be committed to the people. People, meaning thereby specially the stakeholders. We see on a larger platform, pluralism of values and a broad definition of stakeholding. Therefore a framework needs to be constructed out of a series of key common principals and conceptual issues regarding ethics in Corporate Governance. We need to strike a broad indication of balance between impact oriented and self-standing values and needs to be stated as per the organization's mission. A policy towards consistent and transparent corporate behavior should be adopted, including public justification of major strategic decisions. Dharma, lok sangrah, kausalm, vividhta and jigyasa, the core values of the rich Indian philosophical tradition. These should not be mere rhetoric but should become the guiding forces towards good governance. These are the various benchmarks on which an ethical best practice is based upon.However, if one fails to observe such a practice, then he must remember what Manu had I said in the famous verse of Dharmo Rakshati Rakshita that means Dharma protects those who follow Dharma simultaneously Dharma destroys those, who try to play with it. That is why minimum ethical practices are advocated. We need to create ethically informed governance and mechanisms for consistently monitoring of organizational ethics. Maintaining transparency in their practice and accountability to people within and out. Then only we can achieve the end of Good Governance

To sum it up, *"*BUSINESS SHOULD NOT BE SWAYED BY EXCESS PROFITS AND WEALTH MAXIMISATION FOR A FEW, BUT SHOULD REALISE THE SIGNIFICANCE OF SOCIAL RESPONSIVENESS. THEREFORE, ORPORATE PHILOSOPHY SHOULD BE GUIDED BY DHARMA (RIGHTEOUSNESS). A BUSINESS ORGANISATION IS TO BE TREATED AS A PLACE OF WORSHIP, WHEREIN THE ENTIRE WORKFORCE, BY MEANS OF SINCERE WORK, OFFERS WORSHIP TO GOD."

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A STUDY ON VALUE GENERATION IN LEVERAGED BUTOUT'S

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ABSTRACT

Leveraged Buyout's (LBO) have become very attractive as they usually represent a win-win situation for the financial sponsor and the banks. The financial sponsor can increase the returns on his equity by employing the leverage; banks can make substantially higher margins when supporting the financing of LBOs as compared to usual corporate lending, because the interest chargeable is that much higher. A leveraged buyout (LBO) is an acquisition of a company or a segment of a company funded mostly with debt. A financial buyer (e.g. private equity fund) invests a small amount of equity (relative to the total purchase price) and uses leverage (debt or other non-equity sources of financing) to fund the remainder of the consideration paid to the seller. The LBO analysis generally provides a "floor" valuation for the company, and is useful in determining what a financial sponsor can afford to pay for the target and still realize an adequate return on its investment.

KEYWORDS

Consideration, Leverage, Return on investment, Valuation.

INTRODUCTION

A leveraged buyout is a financing technique in which the acquisition is substantially financed through debt & **involves converting public company to private**. Debt typically forms 50% or more of the purchase price. The consideration for LBO is a mix of debt & equity components with higher gearing. Debt is obtained on the basis of company's future earnings potential. Much of the debt may be secured by the assets of the acquired company (Asset based lending). Internal cashflows & sale of assets are used to repay the original owners of LBO. LBO mechanism allows new breed of entrepreneurs the opportunity to create wealth.

Leveraged Buyout (Highly –Leveraged Transaction (HLT), or "bootstrap" transaction means mobilizing borrowed funds based on the security of assets and cash outflows of the target company (before its takeover) and using those funds to acquire the target company. A leveraged buyout (LBO) is when a company or single asset (e.g., a real estate property) is purchased with a combination of equity, plus, significant amounts of borrowed money – structured in such a way that the target's cash flows or assets are used as the collateral (or, "leverage") to secure and repay the money borrowed to purchase the target-company/asset. As financial sponsors increase their returns by employing a very high leverage (i.e., a high ratio of debt to equity), they have an incentive to employ as much debt as possible to finance an acquisition. This has in many cases led to situations, in which companies were "over levered"

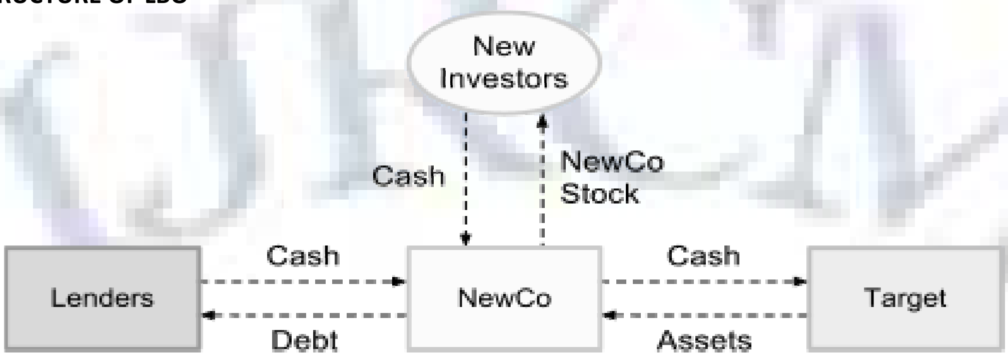
A company for acquisition via LBO should possess the following attributes:

- It must have a good position in the industry with sound profit history.
- It should have a relatively low level of debt and high level of "bankable" assets.
- It must have stable and predictable cash flows that are adequate to meet interest and principal payments on the debt and provide adequate working capital.

CHARACTERISTICS OF LBO

1. **Stable cash flows:** One of the very important features of LBO candidate is the presence of stable cash flows. Greater the variability of historical cash flows, higher will be the risk to the lender. High variability of cash flows can worry the lender.
2. **Stable and experienced management:** Lenders feel secured when the existing management is experienced and stable.
3. **Room for significant cost savings:** As the debt content is huge, lenders will look for significant cost savings after the LBO is through. This will help the company to reduce the costs and improve its debt servicing capacity.
4. **Equity investment of managers:** Equity investment of managers and outsiders acts as a cushion to protect lenders. Higher the equity, greater the security to the lenders.
5. **Ability to cut cost:** There should be significant areas where the cost can be cut without damaging the business of the division.
6. **Separable non-core business:** If the LBO candidate owns non-core business, it can be sold-off quickly to reduce the debt of the division.

TRANSACTION STRUCTURE OF LBO



The amounts of debt banks are willing to provide to support an LBO depends on:

- The quality of the asset to be acquired (stability of cash flows, history, growth prospects, hard assets)
- The amount of equity supplied by the financial sponsor
- The history and experience of the financial sponsor
- The economic environment

Depending on the size and purchase price of the acquisition, the debt is provided in different tranches.

- **Senior debt:** This debt is secured with the assets of the target company and has the lowest interest margins
- **Junior debt (usually mezzanine)**: This debt usually has no securities and bears thus a higher interest margins

In larger transactions, debt is often syndicated, meaning that the bank who arranges the credit sells all or part of the debt in pieces to other banks in an attempt to diversify and hence reduce its risk. Another form of debt that is used in LBOs is seller notes (or vendor loans) in which the seller effectively uses parts of the proceeds of the sale to grant a loan to the purchaser. Such seller notes are often employed in management buyouts or in situations with very restrictive bank financing environments. Note that in close to all cases of LBOs, the only securities available for the debt are the assets and cash flows of the company. As a rule of thumb, senior debt usually has interest margins of 3–5% and needs to be paid back over a period of 5–7 years, junior debt has margins of 7–16%, and needs to be paid back in one payment (as bullet) after 7–10 years.

ISSUES THAT ARE CONSIDERED IN AN LBO TRANSACTION

INDUSTRY CHARACTERISTICS

- Type of industry
- Competitive landscape
- Cyclicality
- Major industry drivers
- Potential outside factors (politics, changing laws and regulations, etc.)

COMPANY-SPECIFIC CHARACTERISTICS

- Strategic positioning within the industry (market share)
- Growth opportunity
- Operating leverage
- Sustainability of operating margins
- Potential for margin improvement
- Level of maintenance CapEx vs. growth CapEx
- Working capital requirements
- Minimum cash required to run the business
- Ability of management to operate effectively in a highly levered situation

MARKET CONDITIONS

- Accessibility and cost of bank and high yield debt
- Expected equity returns

STAGES/ELEMENTS OF LBO OPERATION

1ST STAGE – ARRANGEMENT OF FINANCE

- The first stage of the operation consists of raising the cash required for the buyouts and working out a management incentive system.
- Usually around 10% of cash put up by the company's top management &/or the buyout specialists. Management share around 30% of the equity share in the LBO. Outside investors like merchant bankers, venture capitalists and commercial banks then arrange to provide the remaining equity.
- Usually, 50% to 60% of the required cash is raised by borrowings against company's assets in secured bank acquisition loans from commercial banks. This portion of the debt is sometimes also taken from insurance companies, pension funds or from limited partnerships specializing in venture capital investments.
- Rest of the cash is obtained by issuing certain debts in a private placement, usually with Pension funds, Insurance companies, Venture capital firms or Public offerings through high-risk high-yield junk bonds.

2ND STAGE – TAKING PRIVATE

- This stage involves making the firm private. The company can be made private either in a stock purchase format where all the shares of the company are purchased or in an asset purchase format where all the assets are the company is purchased.
- In an asset purchase format the buying group forms new privately held corporations. Some of the parts of the business are sold off by the new management to reduce the debt.

3RD STAGE – RESTRUCTURING

- In this stage, the new management would try to increase the profits and cash flows by reducing certain operating costs and changing the marketing strategy. For this operation, it may adopt any of the given policies,
    - It may strengthen & restructure production facilities.
    - Change product quality.
    - Alter product mix.
    - Improved customer service.
    - Improve inventory control & accounts receivables management.
    - Trimming employment through attrition.
    - Reduce the expenditure on research & development as long as these are necessary to meet the payment on the huge borrowings.

4TH STAGE – REVERSE LBO

- Under this stage, the investor group may take the company to public again. If the restructured company has become stronger and the goals set by the LBO groups have already been achieved.
- This is known as the process of 'Reverse LBO' or the process of 'Going Public', where the process is affected through public offerings. The sole purpose of this exercise is to create liquidity for existing shareholders.

RETURNS

In LBO transactions, financial buyers seek to generate high returns on the equity investments and use financial leverage (debt) to increase these potential returns. Financial buyers evaluate investment opportunities with by analysing expected *internal rates of return* (IRRs), which measure returns on invested equity. IRRs represent the discount rate at which the net present value of cash flows equals zero. Sponsors also measure the success of an LBO investment using metric called "cash-on-cash" (CoC). CoC is calculated as the final value of the equity investment at exit divided by the initial equity investment, and is expressed as a multiple.

RISK

Equity holders – In addition to the operating risk assumed risk arises due to significant financial leverage. Interest costs resulting from substantial amounts of debt are "fixed costs" that can force a company into default if not paid. Furthermore, small changes in the enterprise value (EV) of a company can have a magnified effect on the equity value when the company is highly levered and the value of the debt remains constant.

Debt holders – The debt holders bear the risk of default equated with higher leverage as well, but since they have the most senior claims on the assets of the company, they are likely to realize a partial, if not full, return on their investments, even in bankruptcy.

Candidates for LBO - Usually, the candidates for implementation of an LBO strategy are the possible target firms threatened by takeover proposals from outside. The targets include the following:

1. If the company does not have share holdings more than 51%.
2. If the company is over leveraging with the debt components nearing to maturity.

3. If the company has diversified into unrelated areas and thus facing problems.
4. If the company is earning low operating profits due to poor management and there is a possibility of turn around.
5. If the company is having an asset structure which is grossly under utilized.
6. If the company's present management is facing managerial incompetence.

LBO AND VALUE GENERATION

Since the assumption clearly reflects the position of value creation through an LBO operation, one must identify the sources of value so generated. The sources are as follows:

Firstly reduction in agency cost is the most important source of value in an LBO.

- An LBO refers to take a public corporation to private. In case of pub. Corp., the mgt. is different from its owners.
- When public corp. goes private, the mgt. and the owners are the same and in all cases, the mgt. takes decisions which are not only cost effective, but also for the growth of the organization.
- An LBO exercise tries to eliminate the agency cost which is considered as a value gain for a restructured firm.

Secondly the source of value gain is associated with efficiency.

- It is argued that a private firm is much more efficient in taking decision in relation to changing environment than that of a public corporation, where every decision is not required to be ratified by the general body before implementation.
- It is this efficiency in decision-making which creates value for an LBO. Again production and portfolio efficiencies are perceived with an LBO operation because of the involvement of specialized LBO firms.
- Such efficiencies create benefits of synergy, which ultimately generate value.

Thirdly the source of value gain in case of an LBO is tax benefits as in such an operations, the source of leverage is debt and in this connection, the interest obligation of the private firm is exposed to certain tax benefits.

Finally, it is understood that management or investors in an LBO deal have more information on the value of the firm, than the ordinary shareholders. It is this information which adds value to an LBO and because of this value; the buy-out investors do not mind paying large premiums on such deals.

ADVANTAGES OF LEVERAGED BUYOUT

- Flexible structure of financing
- Tax shield
- Discipline of debt helps leads to- divesting non-core business- cost cutting
- Synergy and efficiency gains

DISADVANTAGES OF LEVERAGED BUYOUT

- Larger levels of debt-increased risk
- Too high a price asked for by a seller
- Layoffs increase
- Long-term growth disrupted as company focuses on short term goal of reducing debt at the cost of R&D
- Dilution in equity and increase in number of owners raises conflict in management.

FACTORS AFFECTING PRE-BUYOUT RETURNS

- Premium paid to target firm shareholders frequently exceeds 40%
- These returns reflect the following (in descending order of importance):
    - Anticipated improvement in efficiency and tax benefits
    - Wealth transfer effects (e.g., from bondholders to shareholders)
    - Superior Knowledge
    - More efficient decision-making

FACTORS DETERMINING POST-BUYOUT RETURNS

Empirical studies show investors earn abnormal post-buyout returns due to

- Full effect of increased operating efficiency not reflected in the pre-LBO premium.
- More professional management, tighter performance monitoring by owners, and reputation of financial sponsor.
- Studies may be subject to "selection or survival bias," i.e., only LBOs that are successful are able to undertake secondary public offerings.
- Abnormal returns may also reflect the acquisition of many LBOs 3 years after taken public.
- Properly timing when to exit the business.

CONCLUSION

Despite of an LBO as an effective corporate restructuring mechanism to prevent hostile takeovers, the exercise is criticized on several other grounds. Because of heavy deployment of debts in financial restructuring, the cost of debt capital increases in the capital market, making difficult for other firms to raise debts for their needs. Many old and experienced employees of the target firm are threatened of loosing their jobs because of streamlining of the new management in the post-buyout scenario. Since the new mgt. in the post-buyout scenario concentrates on short-term goals like reduction of debt burden at the cost of research and development expenditure, the long term growth of the restructured firm is disrupted. In case of incapability of the restructured firm to redeem the debt, the firm is exposed to bankruptcy.

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DOES THE OWNERSHIP MAKE A DIFFERENCE IN PERFORMANCE?: AN ASSESSMENT ON PUBLIC AND PRIVATE INSURERS IN INDIA

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ABSTRACT

Insurance is a shield against financial loss arising on the occurrence of an unexpected event. Insurance may be depicted as a social device to reduce or eliminate risk of loss to life and property, when it becomes somewhat impossible for a man to bear by himself 100% loss to his own property or interest arising out of an unforeseen incident. Insurance is a system or process, which distributes the burden of the loss on a number of persons within the group formed for this particular purpose. At the same time insurers have to perform well and generate more business to compensate the loss of insured. Considering this, the present study focused on the performance of insurers based on their ownership pattern. For the purpose of analysis seven (Growth in number of offices, Growth in number of individual agents, Average Number of Individual Policies Sold by Individual Agents, Average Individual New Business Premium by Individual Agents, Growth in Number of Corporate Agents working in Life Insurance, Average Number of Individual Policies Sold by Corporate Agents and Average Individual New Business Premium by Corporate Agents) parameters considered for a period of five years from 2007-08 to 2011-12. It was found that the ownership makes the difference in the performance of insurers in India.

KEYWORDS
public insurers, private insurers, insurance.

I INTRODUCTION

Life insurance is a contract between an insurance policy holder and an insurer, where the insurer assures to pay the beneficiary a sum of money (the "benefits") upon the death of the insured person. In India many Life Insurance companies are operating with variety of products to serve all the needs of the customer. Life Insurance in India was nationalized by incorporating Life Insurance Corporation (LIC) in 1956. All private life insurance companies at that time were taken over by LIC. LIC enjoyed monopoly in life insurance till 2000. In 2000 "Insurance Regulatory and Development Authority Act" was passed which allowed Private Players and FDI in Life Insurance Sector in India. Private players are also facing problems because of strong market hold by LIC. Since liberalization, this is one of the fastest growing sector in India.

Insurance is a shield against financial loss arising on the occurrence of an unexpected event. Insurance may be depicted as a social device to reduce or eliminate risk of loss to life and property. While it becomes somewhat impossible for a man to bear by himself 100% loss to his own property or interest arising out of an unforeseen incident, insurance is a system or process, which distributes the burden of the loss on a number of persons within the group formed for this particular purpose. Insurance provides people with a reasonable degree of protection and assurance to life or non-life, that they will be protected in the event of a disaster or failure of any kind. Insurance policy helps in not only mitigating risks but also provides a financial cushion against adverse financial burdens experienced. Insurance policies cover the risk of life as well as other assets and valuables such as home, automobiles, jewelry etc. Under the plan of insurance, a large number of people connect themselves by sharing risks attached to individuals (Pathak, 2011). Any risk contingent upon these may be insured against at a premium proportionate with the risk involved. Thus, shared bearing of risk is insurance. Insurance policies can be classified into two categories like, Life Insurance Policy and General Insurance Policy.

Insurance is a federal subject matter in India. The insurance sector has gone through a number of stages and amendments since 1999, when the government unwrapped the insurance sector by allowing private companies to solicit insurance and allowing foreign direct investment of up to 26%, the insurance segment has been a booming market. However, the biggest life-insurance company in India is still possessed by the government (Nagree-Mahtani, 2002).

Innovative products, smart marketing, and aggressive distribution have facilitated fledgling private insurance companies to signal up Indian customers faster than anticipated. Indians, who had always taken life insurance as a tax saving device, are currently turning to the private sector and snapping up the new innovative products on proposal. Some of these products include investment plans with insurance and good returns (unit linked plans), multi – purpose insurance plans, pension plans, child plans and money back plans.

At this background, this study has been undertaken to measure the performance of insurance sector by comparing the private and public insurers in India. The rest of this article is articulated as review of previous studies in Section II, objectives of the study in the Section III, Hypotheses of the study in Section IV, Data and methodology in Section V, analysis and interpretation in Section VI and finally Conclusion.

II LITERATURE REVIEW

Husain (2010) attempted to examine the growth of LIC of India in the competitive scenario. On his study, it was found out that after privatization of the insurance sector more than twenty life insurance companies have entered the business. Therefore, monopoly of LIC of India has ended and the Corporation has to perform in a competitive environment.

Chaudhary & Kiran,(2011) prepared a paper to study the recent life insurance scenario. Considering growth in total number of offices of life insurers, growth in number of individual agents working in life insurance industry, number of products and riders, growth of life insurance business and premium income, lapse / forfeiture ratio and settlement of death claims in Indian life insurance industry.

Bedi & Singh (2011) analyzed the status, volume of competitions and challenges faced by the Life Insurance Corporation of India over the period 1980 to 2009. The study revealed that there is a tremendous growth in the performance of Indian Life Insurance industry and LIC due to the policy of LPG.

M & S, (2011) researched about the insurance penetration in the Indian economy. It focused on the premium variation in different categories with respect to various economic factors. It was found that there is no correlation between Insurance penetration with investment equity and trade balance and a very low correlation between balances of payment. The analysis undertaken for this project shows that the global crisis is likely to bring the Indian Economy down considerably.

Shinde, Bhalerao, & Patil, (2011) studied the growth of Indian Insurance sector and the role of Regulatory framework of IRDA on the market potential for insurance business. The major drivers in the growth of life insurance in the coming decade include sound economic fundamentals, a rising middle-income class, an improving regulatory framework, and rising risk awareness. State owned insurance companies still have dominant market positions. However, this would probably change over the next decade.

Kumar & Kumari, (2012) compared the performance of the insurance industry in India considering fresh insurance premium, total insurance premium, and market share. It was found that LIC is dominating with high market share and fresh insurance premium but total insurance premium is high in private insurance companies in the year 2009-10.

Reddy & Kumar, (2012) analysed the past & present status of the Indian insurance sector in general and life insurance in particular. It also discussed about the future of the Indian insurance sector. A comparison of benefits offered by different products revealed that the benefits are more in LIC products and hence, the people are coming forward to take policies with LIC only.

Srivastava, Tripathi, & Humar, (2012) contributed a paper on the growth of the insurance sector in India. The insurance industry has undergone a massive change over the last few years and the metamorphosis has been noteworthy. Offering a diversified product portfolio and excellent services the many insurance companies in India have managed to make their way into almost every Indian household.

Das (2012) in his paper made an effort to study the current issues and challenges faced by the life insurance business houses in India. It is observed that high operating cost, delayed break even, convergence of accounting standard etc are the major issues of Life insurance companies in India.

Based on the above studies it is clear that the continuous analysis on the insurance companies are very important to know the contribution made by both private and public sector insurers India. None of the previous studies have used ANOVA to assess the performance of insurers in India from the ownership perspective.

III OBJECTIVES OF STUDY

The objectives of the present study are:

- To analyze the performance of Public and Private Life Insurance Companies in India.
- To compare the performance of Public and Private Life Insurance Companies in India.
- To study the growth of Public and Private Life Insurance Companies in India.

IV HYPOTHESES OF STUDY

For the purpose of this study following null hypotheses are formed.

- There is no significant difference in the growth rate of number of offices between public and private life insurance companies in India.
- There is no significant difference in the growth rate of number of individual agents working in public and private life insurance companies in India.
- There is no significant difference in the average number of individual policies sold by Individual agents between public and private life insurance companies in India.
- There is no significant difference in the average individual new business premium by individual agents by public and private insurance companies in India.
- There is no significant difference in the growth rate of number of corporate agents working in public and private life insurance companies in India.
- There is no significant difference in the average number of individual policies sold by corporate agents by public and private life insurance companies in India.
- There is no significant difference in the average individual new business premium by corporate agents by public and private insurance companies in India.

V DATA AND METHODOLOGY

There are 23 Life Insurance Companies operating in India, out of which LIC is the only public company and rest of the 22 are private companies. Therefore, every company is included in the study. The data required for the analysis is taken from published annual reports of respective companies and from IRDA.

Other information related to the industries have been collected from the economics times, financial express, R.B.I. Bulletin, other periodicals, journals and other various documents of companies. The variables considered for the present study includes Growth in number of offices, Growth in number of individual agents, Average Number of Individual Policies Sold by Individual Agents, Average Individual New Business Premium by Individual Agents, Growth in Number of Corporate Agents working in Life Insurance, Average Number of Individual Policies Sold by Corporate Agents and Average Individual New Business Premium by Corporate Agents.

VI ANALYSIS AND INTERPRETATION

In 1993 the Government of Republic of India appointed RN Malhotra Committee to lay down a road map for privatization of the life insurance sector. While the committee submitted its report in 1994, it took another and legislation was passed in the year 2000, legislation amending the Insurance Act of 1938 and legislating the Insurance Regulatory and Development Authority Act of 2000. The same year the newly appointed insurance regulator - Insurance Regulatory and Development Authority IRDA—started issuing licenses to private life insurers. Life Insurance is the fastest growing sector in India since 2000 as Government allowed Private players and FDI up to 26%.

Since 2000, 22 life insurance companies have set up the operations in India. Most major multinational insurers are represented through joint ventures (the only option for foreigners). Life Insurance Corporation (LIC) still holds a significant majority of market share.

The Table 6.1 depicts information about the private insurers in Indian insurance industry. It also gives us the information about the date on which it came into existence in India. The Table 6.2 reflects the market share enjoyed by public and private insurers in India as on 31st March 2012.

TABLE 6.1: INFORMATION ABOUT THE PRIVATE INSURERS IN INDIAN INSURANCE INDUSTRY

Sr.No.	Registration No.	Date of Registration	Name of the Insurer
1	101	23/10/2000	HDFC Standard Life Insurance Company
2	104	15/11/2000	Max New York Life Insurance Company
3	105	24/11/2000	ICICI Prudential Life Insurance Co Ltd.
4	107	10/01/2001	Kotak Mahindra old mutual Life Insurance
5	109	31/01/2001	Birla Sun Life Insurance Co. Ltd
6	110	12/02/2001	TATA AIC Life Insurance Co. Ltd
7	111	30/03/2001	SBI Life Insurance Co. Ltd
8	114	02/08/2011	ING Vysya Life Insurance Co. Ltd
9	116	03/08/2001	Bajaj Allianz Life Insurance Co. Ltd
10	117	06/08/2001	Met Life India Insurance Co. Ltd
11	121	03/01/2002	Reliance Life Insurance Co. Ltd
12	122	14/05/2002	Aviva Life Insurance Co. Ltd.
13	127	06/02/2004	Sahara India Life Insurance Co. Ltd
14	128	17/11/2005	Shriram Life Insurance Co. Ltd.
15	130	14/07/2006	Bharati AXA Life Insurance Co. Ltd
16	133	04/09/2007	Future Generali Indian Life Insurance Co. Ltd
17	135	19/12/2007	IDBI Fortis Life Insurance Co. Ltd.
18	136	08/05/2008	Canara HSBC Oriental Bank of Commerce Life Insurance Co. Ltd
19	138	27/06/2008	Aegon Religare Life Insurance Co. Ltd
20	140	27/06/2008	DLF Pramerica Life Insurance Co. Ltd
21	142	26/12/2008	Star Union Dai-ichi Life Insurance So. Ltd.
22	143	05/11/2009	India First Life Insurance Co. Ltd.

TABLE 6.2: MARKET SHARE AS ON 31st MARCH 2012

Year	LIC	Pvt insurers
2000-01	99.98	0.02
2001-02	99.46	0.54
2002-03	97.99	2.01
2003-04	95.32	4.68
2004-05	90.67	9.33
2005-06	85.75	14.25
2006-07	81.9	18.1
2007-08	74.39	25.61
2008-09	70.92	29.08
2009-10	70.1	29.9
2010-11	69.78	30.22
2011-12	70.68	29.32

Source: Handbook of Indian Insurance Statistics 2011-12

The above Table 6.2 reveals that, LIC has the strongest market base in comparison with all the other life insurance companies in India, with a total market share of about 99.98% in the year 2000-01 to 70.68% in the year 2011-12. It is still the leader in life insurance market extending its services to more than 200 million people in India. It is further found in the table that there exist a continuous progress in the market share enjoyed by the private insurers between 2000-01 (0.02%) and 2011-12 (29.32%).

Table 6.3 exhibits the statistical analysis on the selected parameters from the insurance industry to measure the performance of public and private insurer in India. The results of ANOVA shows that, at 5% level of significance all the hypotheses except one rejects the null hypotheses of the selected parameters. It means that there exist a difference between LIC and Private insurers on the selected parameters. In the case of average number of policies sold by corporate agents the result shows insignificant relationship between LIC and Private insurers at 5 % level of significance. It means that the null hypothesis is accepted, that is average number of policies sold by both the insurers (LIC and Private) are same.

TABLE 6.3: ANALYSIS OF SELECTED PARAMETERS FROM INSURANCE INDUSTRY USING ANOVA

Parameters	H_o	Insurers	2007-08	2008-09	2009-10	2010-11	2011-12	F Test Result @ 5% Level
Growth in number of offices	PVT=LIC=IND	PRIVATE	6391	8785	8768	8175	7712	Significant
		LIC	2522	3030	3250	3371	3455	
		INDUSTRY	8913	11815	12018	11546	11167	
Growth in number of individual agents	PVT=LIC=IND	PRIVATE	13.27	15.93	15.75	13.02	10.81	Significant
		LIC	11.94	13.45	14.03	13.37	12.78	
		INDUSTRY	25.21	29.38	29.78	26.39	23.59	
Average Number of Individual Policies Sold by Individual Agents	PVT=LIC=IND	PRIVATE	7	6	4	4	3	Significant
		LIC	32	28	28	26	27	
		INDUSTRY	20	16	15	15	16	
Average Individual New Business Premium by Individual Agents	PVT=LIC=IND	PRIVATE	1.62	1.1	1.01	0.99	0.81	Significant
		LIC	4.22	3.1	3.59	3.75	3.14	
		INDUSTRY	2.94	2.02	2.21	2.34	2.03	
Growth in Number of Corporate Agents working in Life Insurance	PVT=LIC=IND	PRIVATE	2070	2091	2420	1870	642	Significant
		LIC	345	415	510	295	240	
		INDUSTRY	2415	2506	2930	2165	882	
Average Number of Individual Policies Sold by Corporate Agents	PVT=LIC=IND	PRIVATE	1798	1857	2289	1976	2533	Insignificant
		LIC	1905	2190	1606	1708	2194	
		INDUSTRY	1815	1908	2172	1933	2474	
Average Individual New Business Premium by Corporate Agents	PVT=LIC=IND	PRIVATE	453.1	443.79	492.59	594.82	399.55	Significant
		LIC	207.81	232.84	235.62	313.42	444.9	
		INDUSTRY	414	411.21	448.84	550.36	403.84	

VII CONCLUSION

The present study is to measure the performance of insurance industry by using seven parameters like Growth in number of offices, Growth in number of individual agents, Average Number of Individual Policies Sold by Individual Agents, Average Individual New Business Premium by Individual Agents, Growth in Number of Corporate Agents working in Life Insurance, Average Number of Individual Policies Sold by Corporate Agents and Average Individual New Business Premium by Corporate Agents. It is found that, there is a difference in the performance of both public and private insurers in India during the period under study. It means that the ownership plays major role in the performance of insurance companies in India.

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ANNEXURE

ANOVA - Growth in number of offices

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows	161101876.93	2	80550938.47	274.55	0.00	4.46
Columns	8453315.73	4	2113328.93	7.20	0.01	3.84
Error	2347131.07	8	293391.38			
Total	171902323.73	14				

ANOVA - Growth in number of individual agents

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows	602.69	2	301.35	215.98	0.00	4.46
Columns	38.02	4	9.50	6.81	0.01	3.84
Error	11.16	8	1.40			
Total	651.87	14				

ANOVA - Average Number of Individual Policies Sold by Individual Agents

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows	1368.93	2	684.47	955.07	0.00	4.46
Columns	43.07	4	10.77	15.02	0.00	3.84
Error	5.73	8	0.72			
Total	1417.73	14				

ANOVA - Average Individual New Business Premium by Individual Agents

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows	15.06	2	7.53	322.73	0.00	4.46
Columns	1.62	4	0.40	17.35	0.00	3.84
Error	0.19	8	0.02			
Total	16.86	14				

ANOVA - Growth in Number of Corporate Agents working in Life Insurance

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows	9270374.53	2	4635187.27	32.89	0.00	4.46
Columns	3212038.93	4	803009.73	5.70	0.02	3.84
Error	1127475.47	8	140934.43			
Total	13609888.93	14				

ANOVA - Average Number of Individual Policies Sold by Corporate Agents

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows	82260.13	2	41130.07	0.91	0.44	4.46
Columns	600765.07	4	150191.27	3.31	0.07	3.84
Error	362568.53	8	45321.07			
Total	1045593.73	14				

ANOVA - Average Individual New Business Premium by Corporate Agents

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows	103680.14	2	51840.07	9.95	0.01	4.46
Columns	32507.99	4	8127.00	1.56	0.27	3.84
Error	41673.89	8	5209.24			
Total	177862.02	14				

REASSESS OF CAPITAL STRUCTURE THEORIES

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ABSTRACT

This study presents a review of major capital structure fiction. Capital structure decision is important for companies because it helps to increase firm value by ensuring that the company has enough resources to carry out planned investments using as much as possible the cheapest cost of capital. It therefore involves choices between the different sources of capital such as debt, equity and hybrid capital. The different sources of finance available to companies are also influenced by the quality and maturity of the financial system and the overall risk of operating in that environment. The paper identified a host of capital structure theories that are key contemplation in the financing structure of firms around the world. This review will help companies in emerging and underdeveloped economies identify the peculiarities in the choosing the appropriate blend of capital.

KEYWORDS

Capital structure, Cash flows, Financial risk, Principles, Theories.

1. INTRODUCTION

This paper presents a review of the creative writing on financing decisions of companies. There are various theoretical dimensions to capital structure theories however our discussion will be focussed on (i) value maximization principles, (ii) capital structure propositions, and (iii) theories of capital structure.

Capital structure can be distinct as a 'Mix of different securities issued by a firm' (Brealey and Myers 2002). Simply vocalizations, capital structure mainly contains two elements, debt and equity. The term capital structure is used to represent the proportionate relationship between debt and equity. Capital structure refers to the way a corporation finances its assets through some combination of equity, debt, or hybrid securities. A firm's capital structure is the composition or 'structure' of its liabilities. Gearing Ratio is the proportional of the capital employed by the firm which comes from outside of the business, such as by taking a short term loan. Debt comes in the form of bond issues or long-term notes payable, while equity is classified as common stock, preferred stock or retained earnings. Short-term debt such as working capital requirements is also considered to be part of the capital structure.

The theory of capital structure always searches for optimal capital structure, which requires a trade-off. Ahmadinia et al. (2012) studied a comprehensive review on different theories and hypothesis in regard with achieving an optimal capital structure. DeAngelo and Rol (2013) discussed a comprehensive analysis of capital structure stability over long horizons.

2. OBJECTIVES OF THE STUDY

The objectives of the study are as follows:

- To know business risk, financial risk and trade-off between these risk.
- To know optimal capital structure.
- To know benefits and costs of debt financing and significance of both debt and equity financing.

3. THE VALAUE OF MAXIMIZATION PRINCIPLES

In general accepted that the foundation of modern financial theory lies in the value maximization principle (Jensen 2002). The value maximization principle states that managers should make all decisions so as to maximize the total long-run market value of the firm. Therefore, the objective of maximizing the total market value of the firm can be substituted by that of maximizing the market value of existing owners' equity.

The long-run value of a firm is determined by the size of the company together with the timing and risk level of expected cash flows generated by the company (Brigham et al. 1999). The risk level of the expected cash flow is reflected in the cost of capital (discount rate) and the timing (time value of money) is taken into account in the discounting process. Therefore, the cost of capital in a firm will depend on many factors that are related to (i) financial, (ii) investment and (iii) dividend payout decisions.

These interdependences are in turn affected by the quality and maturity of the financial system and the overall risk of operating in that environment. However, in underdeveloped economies such as Nigeria, most of the financing sources available to companies are grossly limited. For instance, hybrid capital such as; factoring, convertible bonds and warrants, rarely exists and if they do, they are yet to be fully developed. On the other hand, even in the developed economies where these sources exist, they may not be available for all projects and for all firms. For example, a start-up company can rarely obtain funds through initial public offers, but may be able to attract venture capital or qualify for government grants. In like manner, it could be relatively easy to finance the purchase of new machinery through debt capital but may be difficult to obtain bank loans to carry out research and development activities.

Additionally, companies may have different debt capacity either due to differences in collateral, flexibility and/or risk levels. Indeed, risk is the fundamental factor in financing decisions given that the value of an investment depends on its risk-return characteristics. Risk can impact on all areas of corporate activity because of the uncertainty surrounding the outcome of future events. It can also assume many forms both financial and non-financial. Each category of risk (financial and non-financial), regardless of its underlying characteristics exposes a firm to the possibility of loss and will consequently affect the shareholders' value. Under the value maximization principle, the choice of capital structure affects the return earned by shareholders as well as the business and financial risks incurred by them.

Business risk is the type of risk often associated with business related factors, such as the characteristics of the industry. It is influenced by factors that include variability of sales volume or prices over the business cycle, variability of input costs, the degree of market power and the level of the firm's growth prospects. These factors will potentially affect the revenues, costs and asset operation of firms. Other features that also affect business risk are (i) efficiency and improvement in the manufacturing process (ii) effective advertising (iii) changes in interest rates that influence product demand and (iv) government actions that create uncertainty in companies' operations.

Financial risk is the risk arising from commitments to use expected cash flows to service creditors and taxing authorities. Since creditors stand in line ahead of shareholders, additional risk may result from promises and requirements for payments of interest and principal as part of debt obligation and the tax environment. It thus becomes a source of additional variability in returns to shareholders if the financial structure of the firm contained debt instruments. Therefore, financial risks will include uncertainty about interest rates and a change in interest payments. This may be worrisome for companies that have (i) debt securities with variable rate of interest, (ii) plans to raise more debt in the future and (iii) fear that the taxing authorities may change the existing tax rates.

4. CAPITAL STRUCTURE PROPOSITIONS

There are broadly two schools of thought that gave birth to capital structure theory. The *first* school, acting on the assumptions of a perfect market '*ideal world*', believes that the composition of firms' financing mix does not affect the cost of their capital. Hence, the costs of capital are the same irrespective of the composition, so capital structure would be irrelevant in the valuation of a company. The *second* school believes that the cost of capital is determined by the composition of the capital structure of a firm. The suggestion is that an optimal capital structure will occur at a level where the overall cost of capital is lowest; hence the overall capital structure in a firm would contribute to its market value. For the purpose of this study we concentrate on the first school that argued on the irrelevance of capital structure, in particular the Modigliani and Miller (1958) proposition.

The key members of this school are Modigliani and Miller (1958) who argued that the composition of the capital structure is an irrelevant factor in the market valuation of a firm. They introduce a behavioural dimension into the capital structure debate which is based on seven assumptions. These are *first*, there are no corporate or personal taxes; hence the impact of tax shields associated with debt is the same *second*, there are no bankruptcy costs, therefore the assets of a bankrupt company can be sold at their economic value without incurring any liquidating and legal expenses; this statement eliminates any bias in favour of an unlevered (*firm with zero debt*) firm due to the existence of bankruptcy costs *third*, the firm is allowed to issue and repurchase any amount of debt or equity and these transactions can be executed instantly without any time lag, thus implying that securities are infinitely divisible *fourth,* the composition of capital structure can be changed without any transaction costs like issue expenses and under pricing *fifth*, the firm consistently follows the policy of 100% dividend pay-out, therefore the possible impact of dividend policy on the valuation of the firm is eliminated *sixth*, that all investors in the market have the same expectations (homogenous) of the expected future earnings of all the firms. Consequently, the expected value of the subjective probability distributions of the anticipated future earnings (operating income) is identical for all the investors and *seventh*, the operating earnings of the firm are expected to remain constant for all future periods. Hence there is neither any growth nor decline in expected future earnings. However, these assumptions were later modified and relaxed.

5. CAPITAL STRUCTURE THEORIES

In their paper, Modigliani and Miller (1958) showed the assumptions under which financing decisions do not affect the value of the company, thus completely stating which factors should influence financing decisions. Miller and Modigliani theory is based on several assumptions, such as, perfect and frictionless markets, no transaction costs, no default risk, no taxation, both firms and investors can borrow at the same interest rate. In order to provide a systematic picture of capital structure determinants, Sander (2007) categorized them into three layers. Layer 1 included fundamental factors such as *returns, risk,* and *value.* Layer 2 comprised classical theories including *tax* theory, *bankruptcy costs* and *agency costs* among others, and layer 3 included practical factors, such as *legal regulation, the life cycle of a company, human psychology, market conditions, credit ratings, shareholder preferences* and *risk management consideration.* However, discussion in this section will concentrate on the classical theories of corporate capital structure which underpinned many of the previous studies in this area. For ease of exposition, these theories will be presented under the following headings: (i) tax theory, (ii) bankruptcy costs, (iii) agency costs, (iv) trade-off theory, (v) signalling theory, (vi) pecking order theory and (vii) asymmetric information theory. Each of these factors will be dealt with in turn.

5.1 THE TAX THEORY

The tax theory is the first market imperfection to be studied in terms of its impact on corporate capital structure choices. The introduction of a tax element brings complexity to capital structure theory. Hence the assumption of no taxes was relaxed to test the validity of Modigliani and Miller (1958) hypothesis. It was pragmatic that the interest payable on debt is a tax deductible item whereas retained earnings and dividends payable on equity enjoy no such fiscal benefit. Hence, whenever a firm employs debt in its capital structure, it gets a certain tax shield. This makes the amount available for distribution to equity holders to be more in the case of a levered firm than in an unlevered firm. However, the utilization of the tax shield by a firm might be uncertain since the taxable income of the firm may decline or the firm may incur some losses. In such a scenario the firm would part with the benefits of the tax shield. Similarly, the rate of corporate tax might be reduced in the future. This would result in a lesser tax shield or, if the firm is liquidated the tax shield would have no realizable value like other assets. Mehrotra and Mikkelson (2005) observed that other alternative tax shelters, like leasing, depreciation and investment allowances could be made available to the firm which would also make the tax shield redundant. The uncertainty associated with tax shield benefits may dilute the value of the tax shield.

The element of uncertainty with regard to the tax shield further leads to the incorporation of the personal tax factor under the assumption that the presence of personal income taxes may reduce the value of the tax shield. This is because capital gains are generally taxed at a lower rate than regular income and if a firm decides to retain the entire earnings, the equity holder would have no tax liability since tax on capital gains is payable only when the security is sold. However, Miller (1977) maintained that capital structure is irrelevant even in the presence of corporate and personal taxes. Hence, changes in the capital structure would have no impact on valuation of the firm. This argument was based on the assumption that, since different investors have different rates of personal income tax, investors who are tax exempt would prefer to invest in debt instruments while investors in the higher tax brackets would prefer equity investments.

Therefore, if the capital market is in a state of disequilibrium, companies will alter their capital structures to align with the tax incidence of the investors. For this reason, supply of debt securities will increase as companies increase the quantum of debt in their capital structure. This will exhaust the capacity of the tax exempt 'clientele' (investors) to absorb debt and companies will chose to market their debt to investors in the next tax bracket. This process will continue until companies cover the class of investor in the tax bracket that is equal to the corporate tax rate. This implies that the market will reach its equilibrium when the personal tax rate of the investors is equal to the tax rate on corporate income. At this point, it would no longer be possible for the company to increase its valuation by altering its capital structure.

This barney was extended by De Angelo and Masulis (1980) by taking into account the existence of non-identical marginal tax rates among different firms and the impact of tax shield items other than interest expenses. These include some balance sheet items such as depreciation, oil depletion allowances, and investment tax credits that are actually non-cash charges and therefore provide a non-debt tax shield. They predicted that the level of debt in a firm would have a positive relationship with its effective tax rate and negative relationship to the amount of non-debt tax shields available to them. Since then theoretical and empirical work has been done in this area by Graham and Smith (1999), Fan et al. (2003), Booth et al. (2001), Alti (2006) and Delcoure (2007).

5.2 BANKRUPTCY COST THEORY

Bankruptcy cost theory is the assumption of Modigliani and Miller (1958) of a perfect capital market suggests that all the assets of a firm can be sold at their economic value without incurring any liquidating expenses. But in reality this is not so because of the *direct* and *indirect* costs of bankruptcy. Direct costs involve costs such as the payment of lawyers' fees, accountancy fees, management fees and loss of tax credit. On the other hand, indirect costs include among others disposal of assets at uneconomic prices, foregone investment opportunities, loss of sales due to forced reduction in the scale of operation, and uncertainty in customers', suppliers and employees' minds about dealing with the firm. Bankruptcy costs therefore become substantial to the extent that lenders assume the *ex post* bankruptcy costs, but they will pass on *ex ante* bankruptcy costs to the firm in the form of higher cost of debt. In the end, shareholders have to bear the burden of *ex ante* bankruptcy costs and the consequences of lower valuation of the firm. Therefore, a highly indebted company will seem to have greater chances of being bankrupt than a firm with a low level of debt. As observed by Barclay et al. (1999), though direct expenses associated with the administration of the bankruptcy process appear to be quite small relative to the market value of companies, the indirect cost can be substantial.

5.3 AGENCY COSTS THEORY

Agency costs theory popularized by Jensen and Meckling (1976) and Myers (1984) suggests that the separation of ownership and control in a modern corporation may lead to array of conflicts from several sources. For instance, the separation of ownership from control in large public corporations may induce conflicts between creditors and the firm and between managers and shareholders. This may pitch the owners (principals) against the management (agents) given that managers as agents are not entitled to 100% of the residual claims resulting from their professional responsibilities and expertise in running the affairs of the business. They, however, bear the entire costs of these activities and, in the event of financial distress or corporate takeovers, they will be the first in the firing line. It is assumed that faced with this situation, managers of corporations may therefore put less effort into value enhancement activities in the firm through sub-optimal investments.

In addition, they may even try to maximize their private gains by lavish perquisites, plush offices, 'empire building' and other inefficiencies. In order to reduce this conflict, the principals can limit the divergence from their interest by establishing appropriate incentives for the agents to limit the aberrant activities. Some of these measures may include the proper use of debt and an offer of incentives such as share purchase options or by devising an Economic Value Added (EVA) reward where a management compensation package would depend on the firm's stock price performance.

Conflicts may also occur between creditors and shareholders, or between shareholders and other stakeholders such as customers, suppliers, employees, and competitors. As suggested by Myers (1977, 1993), conflict between shareholders and creditors may emerge as a result of underinvestment or overinvestment practices by the firm's management. For instance, conflict between existing shareholders and creditors could be magnified if future investment financed with debt yield high returns (higher than the cost of debt). In this scenario, equity holders may benefit more from the profits generated by the firm since they are entitled to all the extra gains. However, if such investment failed completely, debt holders would suffer the losses given the limited liability clause of the equity holders. Either way, equity holders' benefit from investing in risky projects even if they are value decreasing since value decreasing investments may also reduce the value of debt.

The loss in the value of equity from poor investments can be more than offset by the gains in equity value at the expense of the lenders. To protect themselves against expropriation lenders may impose certain restrictions *(protective covenants*) on the firm. Some of these covenants may include restrictions on the level of dividend paid to shareholders, the level of indebtedness in the firm and the disposal of a major asset. This may remain in force until all the debts are repaid and such restrictions could lead to sub-optimal performance of the firm.

Furthermore, lenders do put in place some strong monitoring and corrective mechanisms to enforce the debt covenants. The monitoring and enforcement costs are then passed on to the firms in the form of higher premium on debt. These costs together with the cost of inefficiencies (due to the covenants) add up to the agency costs. As observed by Hill (1998), agency costs may be virtually non-existent at low levels of leverage until they reach a doorsill point. After this point, lenders will start to perceive the firm as significantly risky. This may result in a disproportionate increase in the agency costs due to the need for extensive monitoring. Consequently, the level of agency cost would eventually depend, among other things, on statutory common law and human ingenuity in devising the contract.

5.4 TRADE-OFF THEORY

Trade-off theory is one of the two most influential theories of capital structure along with the pecking order financing theory. This theory argues that companies may trade-off the benefits of debt financing, including tax deductibility of interest with the expected costs of bankruptcy and agency costs of additional debt in the firm. It also suggests that corporate should consider a reasonable debt ratio and tries to achieve this goal in a long term and a firm can benefit greatly by using of debt as a cheap source of financing. Jensen (1986) proposed that extra profit generated by the company '*free cash flow*' may entice managers to develop the propensity to expand the scale of the firm's activities, including value decreasing projects. These types of investment will reduce shareholders' value yet increase management status, power and publicity. Therefore, in order to restrain management inclination to invest in projects with little or no returns, shareholders can force the firm to increase their indebtedness by taking on more debt. Thus, by shifting the capital structure towards more debt, the regular payments for debt services will absorb any 'spare' cash held within the company thus minimizing the misuse of shareholders funds. The trade-off theory postulates that companies would balance the potential benefits of debt financing against the costs of bankruptcy risk, and the agency cost of additional debt. According to Graham and Lemmon (1998) the risk of bankruptcy may become the main drawback with debt financing even though high gearing may imply a huge tax shield, yet would correspond to a high cost of financial distress. Hence, a high level of debt in a firm would most probably serve as a control measure and check against excesses of the management.

Furthermore, Shyam-Sunder and Myers (1999) suggested that under the trade-off model, leverage will be inversely related with the rate of investment. Similarly, Nolan (2002) argued that the chances of financial distress might be higher for start-up businesses and those with high growth ventures. He observed that such firms are exposed to the risk of erratic cash flow streams since their tangible asset base is low. This suggests that such firms should not rely on having much debt in their capital structure. On the other hand, the theory seems to recommend that firms with a stable income stream and sound asset base may face lower risk of bankruptcy. Therefore, they can apply relatively higher levels of debt in their capital structure if they choose.

5.5 PECKING ORDER THEORY

Pecking order theory is the second most influential capital structure theory after the trade-off preposition. It was developed by Myers and Majluf (1984). They argue that firms follow a specific order of preferences in financing decisions and tend to prefer internal financing by using the retained earnings for external financing of any sort and if they must obtain external finance, they have a preference for debt over equity. Among the benefits of using retained earnings is the assumption that firms can keep away new shareholders, especially if the company has sufficient cash generating ability. If the shareholder and management interest are aligned, they would prefer to jointly benefit from the new investment and would like to avoid the equity issue as much as they can. Using internal funds (retained earnings) would also save the firm from the other inconveniences involved in trying to extract investors' money. These include, among others, the need to provide a formal prospectus and the scrutiny of investors in justifying the need for extra funds. Thus, it is after internal funds are insufficient to finance the proposed investments that companies may resort to external financing.

The pecking order financing theory further argued that, even if firms are confronted with external financing needs, they will choose to rank their financing. They will prefer financing that is less sensitive to information such as the retained earnings, followed by varieties of debt securities including preference shares, convertible instruments, and hybrid financing. According to this theory, the least preferred source of financing is equity issue. Pecking order financing theory, as observed by Shyam-Sunder and Myers (1999) is a corporate financing activity that causes the least inconvenience to the management. In effect, management will often take the financing path of least resistance. However, there are some criticisms of the theory; for example one of the observable implications of the theory is that it does not suggest a well defined target debt/equity ratio which a firm should aim to achieve .Similarly, Bagley et al. (1998) argue that the pecking order theory does not explain how a firm's static trade-off would affect the pecking order behaviour; neither does it specify the barriers that should be set by a firm concerning fluctuations in the debt ratio or the leverage adjustments to be made when certain barriers are reached.

5.6 ASYMMETRIC INFORMATION THEORY

Asymmetric information theory is the proposition of Modigliani and Miller (1958) seems to suggest homogenous expectations from all classes of investors, but in reality contracting parties have different information. It is generally thought that there are informational asymmetries between borrowers and investors which may affect the financing decisions of companies. The management of firms may have superior information than investors and shareholders concerning the performance and future prospects of their companies. This is because much of their time is spent on analyzing a firm's products markets, strategies and investment opportunities. They thus acquire more timely information about current operating performance and also have greater access to information that is useful in forecasting the short-run earnings of a firm.

Information lop-sidedness may sometimes be used by some people who have insider information and know that there is an above-average probability of certain favourable price movements and use that to trade. Other parties may have insider information regarding the below-average probability of a favourable price move, and may well decide to hold off trading. In this way, the better informed investors will obtain a trading advantage over and above that of an average investor and further worsen the imperfections of financial markets. Therefore capital structures should be designed to ease the inefficiencies of the financial markets that are caused by information asymmetries.

Myers and Majluf (1984) argued that debt could be used to avoid the inefficiencies in a firm's investment decisions which would otherwise result from information asymmetries to the extent that managers know more about their companies' prospects, risk and value than outside investors. The possession of such valuable information may cause the stocks of the firm to be under priced by outside investors. Therefore, if the management objective is to maximize the return to shareholders, the net effect is that new investors will obtain higher capitalized cash flow from this investment than pre-existing shareholders. According to Prasad et al. (2001) and Rock (1986), this may lead to rejection of the project even if it had a positive Net Present Value (NPV). However, some firms may have profitable investment opportunities that are above their retained earnings. Such companies may not wish to give up such prospects; hence they would choose to search for external financing.

5.7 SIGNALLING THEORY

As with agency theory, the signalling theory is frequently cited in the capital structure literature. Ross (1977) developed an incentive signalling model which provided a theory for the determination of the financial structure of a firm. The theory argues that, given the presence of information asymmetries between companies and outside investors on the current value of the firm, managers may be confronted by situations in which they would like to communicate this information to the market. Unfortunately, this task is not as easy as it sounds since virtually all managers would like their stock prices to be higher than they are. Therefore simply announcing that their firms are undervalued may not carry much weight as suggested by Rajan and Zingales (1998). Given that the risk of the firm's return is unknown to investors, they are forced to rely on noisy signals such as the firms' level of leverage in order to determine the risk of their investment. Therefore, managers who wish to convey positive information to the market about their firms must identify a credible mechanism to signal this information. The economic theory of information suggests that information disclosed by an obviously biased source, like the management in this case, might be credible only if the costs of communicating false information are large enough to induce managers to reveal the truth. Among the many potentially effective signalling devices available to managers are changed in their leverage and dividend choices.

Stock markets, particularly in the developed economies, often react when managers announce major corporate decisions. For example, if a company announces a change in its capital expenditure or research and development, investors will draw some inference from this announcement about the profitability of the firm's investment opportunities and adjust the stock price. Similarly, an announcement of an equity offer may sometimes be received by the market as a signal that the firm is overvalued and may thus drive down the price as the company will be perceived as too risky to invest in. On the other hand, debt issue by a firm could prompt investors to think that the stock of the company is under-valued, hence move in to invest. This rush may also raise the share price of the firm.

As a result, Ross (1977) suggested that companies that believe that their shares are undervalued may choose to issue more debt in order to differentiate themselves from the lower valued firms who are overvalued by the market. In response to this, the overvalued (lower) firms could contemplate manipulating their information by also issuing more debt in order to retain the perception of higher value by the market. It is inferred that a firm can change the perception of outside investors and the market at large through unambiguous signals by manipulating its financing decisions either through the issue of equity or through raising more debt unless appropriate sanctions are provided against communicating false information to the market.

Substantiation from our review of literature has shown the importance of capital structure theories in financing decision of companies. It also gives an insight on the key considerations in the financing decision of companies. It also indicates that capital structure determinants of companies may largely depend on factors such as the quality of the business environment, the type of firm (small or large, listed or non-listed).

6. CONCLUSIONS

While as regards to a firm's capital structure, the Modigliani-Miller theorem opened a prose on the basic nature of debt versus equity. The capital structure of a firm is the result of the dealings with various suppliers of finance. In the perfect capital markets world of Modigliani and Miller, the costs of different forms of financing do not fluctuate in parallel and as a result there is no extra expand from opportunistically choosing among them. Nevertheless, financing clearly matters that as a consequence of taxes, differences in information and agency costs. The various theories of capital structure differ in their construal of these factors. Each emphasizes some cost and payback of alternative financing strategies, so they are not designed to be general. According to the standard trade-off theory, taxes and bankruptcy account for the corporate use of debt. According to the standard pecking order theory, adverse selection accounts for the corporate use of debt. Both theories having weak parts, it is not surprising that there is active research on this matter. In the market timing theory, there is no most advantageous capital structure, so market timing decisions amass over time into the capital structure conclusion. From this point of view, the market timing theory appears to have the most explanatory significance.

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A STUDY OF ICT APPLICATION IN THE LIBRARIES AT THE TERTIAL LEVEL IN SIKKIM

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ABSTRACT

The present paper endeavours to focus on the current scenario of ICT application in the higher education library in Sikkim. The transitional transformation is attributed to the splendid changes being brought about by the information communication technology to the domain of the information management and dissemination. The effectiveness of communication technology depends how well it provides its client with information rapidly, economically and authentically.

KEYWORDS

ICT, Information System, Library Automation, Sikkim University, Sikkim Manipal University.

INTRODUCTION

Information communication technology has been affecting every walk of our life. It has a pervading influence. Across the past twenty years the use of ICT has fundamentally changed the practices and procedures of nearly all forms of endeavor within business and government. Information technology will be one of the key factors driving progress in the 21st century. It will transform the way live learn work and play.

Importance of library resources and Information services in higher education libraries all over the world is undergoing tremendous transformation especially with advent of Information and communication technology as tool and end abler. ICT has good impact on libraries, Library Automation, development of digital libraries and application of innovative ICT have tremendously increased because it provides enhanced user satisfaction, cost effectiveness, rapid response and easier operational procedures. Library has been employing ICT and electronic information resources and services to satisfy the diverse information needs of their users. E-Journals, CD-ROM databases, online database, eBooks, and web based resources and varieties of other electronic media are fast replacing the traditional resources of libraries.

Academic institutions play major roles in the manpower development of any nation since they provide the high as well as middle level manpower needed for the social, economic and political advancement of a nation. This is done through their programmes of teaching, learning, research and community services. The central place of academic libraries is called into play because it is the duty of these libraries to provide the necessary information to the lecturers and students to achieve their teaching learning and research needs in the easiest, fastest and most comprehensive way. This central place of the library in academics has resulted over the years in the necessity for academic libraries to continue to evolve and move with the times so that they can deliver on the requirements of academic libraries in meeting the academic needs of their clientele in the tertiary institutions. This need has resulted over the years in the libraries in higher institutions in Sikkim displaying different stages of development in the application of Information and Communication Technologies (ICT), to library services.

Higher education libraries in Sikkim are now only a shadow of ICT glory. In India most of the state's awareness to ICT's started gathering momentum two decades ago.

WHAT IS ICT?

Information Technology:-Information Technology is the science and skill of all aspects of computing, data storage and communications. It is a new, rapidly growing area that is radically changing the world by making possible new ways of doing business, making entertainment and creating art.

According to UNDP: " ICT are basically information handling tools-a varied set of goods, applications and services that are used to produce, store, process, distribute and exchange information. They include the "old" ICT of computers, satellite and telephone and applications, these tools are now able to work to gather, and combine to from a" network world"-a massive infrastructure of interconnected telephone services, standardized computing hardware, the Internet, radio and television- which reaches into every corner of the globe"

Advantage of ICT: Before discussion of the application of ICT in higher education library, it is need to understand the advantage of ICT library:

- Enable better management of library a librarian there by improving the productivity of the tutor as well as the taught;
- To storage and retrieval of information for the information seeker
- ICT provide browsing and retrospective search service to the users;
- ICT encourage networking and resource sharing;
- Management of database in IT devices and disseminate that information;
- ICT encourage the development of Knowledge
- To have access a large number of national and international e-journals and e-books those are being published only in machine-readable form;
- It is help in digitization of document for preservation
- Automation and house keeping operation
- Enable optimum utilization and sharing of resources among institutions thereby reducing the cost of implementing ICT solutions.

OBJECTIVES

- To assess the impact of ICT on the work environment in libraries.
- To analyze the Impact of ICT on information formal access and delivery.
- To recognize the ICT services to meet the information requirements of users.
- To assess and compare Infrastructure available in the libraries.
- To ascertain the automated service being provided by the libraries.
- To assess services available for greater and easier access information.
- To compare the ICT facilities (Human Resources) available in different institution.
- To study the status and problems of the use of ICT in libraries.
- To study future plan and programmes for use of ICT in different institutions.

PLACE OF RESEARCH

Sikkim is a beautiful mountains state in the north east part of the country. Sikkim is the second smallest state in India, covering an area of 7096 Sq. Km in the Eastern Himalaya. Sikkim is a repository of two values: Harmonizing among fellow human beings and harmony with nature and those are interrelated. While, there are no consensus about the exact time. There is a legend that some time in the Middle Ages the leaders of a section of Bhutans from Tibet and Lepcha chief of Kabi signed an agreement by drawing blood from their respective bodies, to the effect that they and their descendants would live in mutual respect and amity through eternity. Harmonization with the nature is reflected in a number of mountain peaks, rocs and groves, lakes and waterways being regarded as sacred. There are innumerable examples of interface between harmony in nature and harmony in human relations. Sikkim became a protectorate of India in 1950 and a state in 1975. Because of its location, it has political and strategic importance out of proportion to its size. The state has four districts, north east, south and west. The north district covers about 60 per cent of the area of the state. The east district is most populated with nearly 45 per cent of the state's population. It is bordered by the independent mountain kingdoms of Nepal to the west, Bhutan to the east, by the Tibet Autonomous Region of China to the north and north east, and the state of West Bengal to the south. Capital Gangtok is about 125 Km from the nearest airport at Bagdogra and 113 Km from the railhead at Siliguri both in West Bengal.

SCOPE OF STUDY

There are so many higher education institutions in Sikkim. It's having 5 universities (Sikkim University, Sikkim Manipal University, Vinayaka Mission Sikkim University, ICFAI, ELIEM University) and 4 Research Institutions. Sikkim University is a central university and university 9 affiliated colleges. Sikkim Manipal University has only two technical Institution-Sikkim Manipal Institute of Medical Science and Sikkim Manipal Institute of Technology . Sikkim has one agriculture engineering college. Researcher has adopted two universities- Sikkim University and Sikkim Manipal University, due to the ICT involvement.

METHODOLOGY

There are so many techniques for data collection. To achieve the aforesaid objectives, the questionnaire method is adopted. The questions were designed on various aspects with multiple choice options. In some of the cases, the personal interviews were also conducted to collect the information.

SAMPLE OF RESEARCH

Sikkim University: Sikkim University established in 2007(A central University by an Act of Parliament of India in 2007) and the library established in May2008. The University library is functioning in a separate four- storied building besides of NH-31A. The Sikkim University library covering in the field of Microbiology, Geography, Sociology, International relation, Law, Psychology, Peace and Conflict, Physics, Earth Science, Music, Nepali, Chinese and other discipline. University has also procured about 1200 Braille books in various disciplines.

In order to promote research activities and broad based teaching practices, University library is in the process of acquiring the publications of various multilateral and national institutions. So far the library has procured the latest publications of UNO, UNU, ILO, UNESCO, WTO, WB, OECD, FAO, WB, IMF and various Governmental Institutions/ Ministries.

The library is also in collaboration with Inter-University Centre (IUC) of UGC and Information and Library Network Centre, connected with Information and Library Network (INFLIBNET), a network that allows free access to e-journals published from India and abroad. Through INFLIBNET, now the Library can access journals listed in e-resources like American Chemical Society, American Institute of Physics, American Physical Society, Annual Reviews, Blackwell Publishing, Cambridge University Press, Economic & Political Weekly, Elsevier Science, Emerald, Institute of Physics, ISID, JCCC, JSTOR, MathSciNet, Nature, Oxford University Press, Portland Press, Project Euclid, Project Muse, Royal Society of Chemistry, SIAM, Springer Link and Taylor & Francis. Apart from these e-resources, University is also enlisted in DelCON, a e-resources consortium for biological sciences in North East India under Department of Bio-Technology, Govt of India.

Through INFLIBNET and DelCON connectivity, University has got access to more than 5000 e-journals available in Microbiology, Bio-Technology, Zoological, Chemical, Environmental, Social, Humanities and Life Sciences. About 25 computers in the library are dedicated to access INFLIBNET based e-resources. University is in the process of extending this connectivity to other academic buildings for maximum utilization by various stakeholders. The University Library is also subscribing leading international, national journals, magazines, news papers in various disciplines.

The University is also has an institutional membership with American Library, Kolkata and in the process of getting memberships in various libraries across the country. Library opening time is 9.30am to 6pm in all working day and close on national holiday.

Sikkim University has 9 affiliated colleges but Harkamaya College of Education has computerized library.

Harkamaya College of Education (Gangtok): Harkamaya college library was setup along with the establishment of college in 2003. Library is functioning in college building from 9am to 5pm. The college library is closing in all state and national holiday. This library designed to support the information needs of college faculty, students and also researchers those who education field.

Harkamaya college library is an eminent library in education field in Sikkim. Besides of education this college library has computer science books, History English, Geography, Sociology, Library and Information Science, Political Science and other discipline.

The Library Collection consists of 9541 Books and more than 30 Periodicals covering all aspects. The library has a one reading room for students and one for faculty and research scholar. Harkamaya College of Education library has at present 10 computers and using SOUL 2.0 software for library automation and DDC 21st for classification.

***Sikkim Manipal University*:** The Sikkim Manipal University was established in 1995. It is the first government-private institution in the region. SMU is recognized by the University Grants Commission and approved by the Government of India. Sikkim Manipal University offers quality education to the students from North and North Eastern parts of India.

The University was established in accordance with the Sikkim Manipal University of Health, Medical and Technological Sciences Act, 1995 (Act No. 9 of 1995); with the aim of imparting exemplary educational opportunities and healthcare services in the State of Sikkim and country wide. It is the first of its kind in the country with a collaboration of private and public sector.

Sikkim Manipal Instutute of Medical Sciences (SMIMS): Sikkim Manipal Institute of Medical Sciences (SMIMS), located at Tadong, is a constituent college of the Sikkim Manipal University (SMU). SMIMS offers MBBS, B.Sc. Nursing and Physiotherapy courses, besides M.Sc Programs in Microbiology, Biochemistry, Physiology and Anatomy. The Central Referral Hospital and STNM Hospital in Gangtok offer clinical training opportunities to students. SMIMS library has 11500 books and approx 105 journals and 200 e-journals. Library provides 36 computers with 512mbps speed broadband connection for library users and 6 newspapers. The library opens from 9 am to 8pm in all working. During holydays and Sundays it works from 9am to 2pm and close only national holyday.

Sikkim Manipal Institute of Technology (SMIT): The Sikkim Manipal Institute of Technology was established in 1997 as a constituent college of Sikkim Manipal University and is approved by AICTE. SMIT has the distinction of prestigious accreditation for engineering disciplines by National Board of Accreditation (NBA)/ACCR-860/06 dated 22 January 2008. SMIT has ISO 9001 accreditation vide NS-EN ISO 9001:2000 for all its courses. The Engineering College has its own campus at Majitar, Rangpo East Sikkim. The institute's location on the banks of river Teesta, surrounded by green hills, adds to the vibrancy of the campus and makes it an ideal place for learning.

As per CSR – GHRDC Ranking, published in Competition Success Review, August 2010, SMIT has achieved 6th position in East & Central region amongst top engineering colleges ranked by region, 15th amongst top engineering colleges of excellence and 29th in the overall ranking of top engineering colleges in the country. SMIMS library has 50000 books and approx 400 journals and 50 e-journals. Library provides 20 computers with 512mbps speed broadband connection for library users and 8 newspapers. The library opens from 9 am to 8pm in all working. During holydays and Sundays it works from 9am to 2pm and close only national holyday.

ICT APPLICATIONS

Automation Activities: The Sikkim University library, Harkaamaya College of Education library, SMIMS library and SMIT library all are automated. For the automation of Sikkim University library using SLIM-21 software, library SMIMS is using the ESYLIB software, Harkamaya college of Education is using SOUL2.0 and SMIT library is using ESYLIB software. Now the all library is planning campus networking through LAN. SMIMS and SMIT has departmental library but not automated.

Internet Facilities and Networking: All libraries are providing internet facilities to all users of library. Sikkim University is connected with the National Knowledge Network and providing the internet with 150gbps speed, So that Sikkim university library users are taking more advantage compare than other university library users. SMIMS, Harkamaya College of Education has access to the internet using 512 mbps broadband connectivity. The SMIMS library using e-journals through the science direct.

IT Infrastructure: In this time Sikkim University library has 25 computers and using RFID for library security , SMIT library has 20 computers, Harkamaya College of education has 12 computers and SMIMS has 25 computers, which contains open server on LINUX platform with CD-ROM and others devices. By the IT devices the all library staffs are handling the library in a good way. Users are taking the more advantage by the IT devices. Sikkim University is using the close circuit camera and fingerprint devices for mange the library.

HRD: Sikkim University has one young dynamic librarian, 6 professional staffs and 6 non professional staffs are providing the library services. SMIMS has 6 professional and 5 non professional staffs, Harkamaya college of Education 2 professional and 2 non professional staffs and SMIT has 6 professional and 4 non professional staffs are doing the all types of technical and non technical work. They are time to time going for training and refresher course on library automation and others technical work.

Service for library users: In new era IT devices are very helpful in research and other educational work. SMIMS, Harkamaya college of Education and SMIT library provides the CAS and SDI services. Sikkim University central library is providing the online journals and other information related to North East. Some ICT related services being provided to the users by the library are:-

E-mail Services and Internet Services
INFLIBNET Database
UGC-Infonet e-journals
X-rox
CAS and SDI Services
Translation Services etc

Plan and Proposal: - The Sikkim University library has planning to set up cloud computing, Web OPAC and global networking system.
The SMIMS, HCE and SMIT have planning to provide the online services among the staffs. HCE library proposed the Barcode and RFID for library.

CONCLUSION

Development of IT is planning a crucial role in restructuring of the library. Maximum library in this state are not automated and not connected with the any professional bodies. The study reveals only shadow of ICT on the library in Sikkim state. IT requires an imaginative, intelligent planning and huge investment of fund including the skilled human resources.

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THE INTERPLAY OF ORGANIZATIONAL DYNAMICS ON CORPORATE GOVERNANCE IN THE FACE OF A PERFORMANCE CONTRACTING IN KENYA

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ABSTRACT

This study sought to examine how sound corporate governance plays a vital role for good corporate governance to protect the interests of investors, mantain financial order, regulate the development of capital markets and strengthen the confidence of investors. Strategies are reviewed all the time due to the constant changes and during this period, several parties are affected resulting in politics in one way or another. Politics itself determine organisational policies. There is also the politics of the state which is a factor that determines the policies that will be employed in managing the organization to be able to attain organizational objectives. The objective of the study is to identify the Organizational dynamics as an element in Corporate Governance that needs to be considered if the organization is to succeed in the performance contracting in a dynamic business environment. The methodology involved interviewing several Senior Officers from:- (1) the Private Sector, (2) Government run public organizations and (3)Government run semi-private sector at length, and linking this information to published and unpublished documentation. Given the sensitivity of the subject all requested complete anonymity and I have endeavored to comply. The findings were that the Organizational dynamics may be both positive and negative in the sense that constructive politics contributes to the good of the organization while negative politics is detrimental to the attainment of organizational objectives.The study thus discloses that there is a positive relationship between cabinet approach towards business and board perspective and board compositions.

KEYWORDS
Corporate Governance, Performance Contracting, Board Composition.

1.0 INTRODUCTION

1.1 DEFINITION OF PERFORMANCE CONTACTING

A mechanism under Public Sector Reforms that aims at improving performance of the Public Sector through; setting clear objectives, setting SMART(Simple, Measurable, Accurate, Realistic and Time-bound)targets, specifying agent performance in terms of results (*outputs*) & assigning accountability for those results, increasing the transparency of the accountability relationship in public institutions, establishing clear reporting, monitoring and evaluation mechanisms of the projects & providing a basis for assessment of performance. It also provides a basis for renegotiation for the performance (*The first three Public Institutions in every category is given presents as a reward*).The Performance Contracting process is normally done on quarterly basis. At the end of every quarter, each Institution should submit their quarterly reports and finally annual report to their reporting agency. A feedback with comments on the report is normally sent back to the Institution for improvement. The targets are majorly derived from the Institutions Strategic Plan especially the implementation matrix section in which it is expected that the time-frame for each activity is outlined.

The Performance Contracts make performance indicators clear to Kenyan citizens, who are then empowered to demand accountability from their public officials. This type of involvement has begun to restore public trust in government. One indication of this is citizens' increasing willingness to pay taxes. Indeed, the Government's tax collections grew at a yearly average of 13.6 percent during the span of 2001-2007. This increase in the public coffers has contributed to (a) the Kenyan Government's ability to enhance around 95% of its budget from internal sources and (b) the Kenyan GDP growth rate's rapid turnaround from negative levels in the 1990s to 6.1 percent by 2006 (Muthaura, 2007).

Performance Contracting outlines: (a) what the institution does, (b) what services users can expect, (c) the standard of services to be provided, and (d) the timeframe within which the service will be provided. Aside from this, it also informs citizens:- (a) of their need to pay or submit requirements and (b) how they may seek redress if service provided is unsatisfactory or subpar in comparison to the institution's commitments (Muthaura, 2007).

The state corporations have tremendous governance problems. Some of the state corporations have folded up partly as a result of governance problems as observed in South Africa by (Kyereboah and Biekpe, 2006). In Kenya, a parastatal is a State Corporation under State Corporation Act Cap 446 (1987).

The paper observes that the introduction of performance contracting in State Corporations is meant to assist Government participate through close supervision and ensure accountability with appropiate independence or authority State Corporations through which government participation in closer supervision on accountability with perhaps appropriate independence or autonomy. The paper underlines the need to implement performance contracting by State Corporations with a view to improve the overall performance of the Semi Autonomous Government entities.

2.0 LITERATURE REVIEW

2.1 THE CONCEPT OF PERFORMANCE CONTRACTING

The term performance contracting can be traced from France in the late 1960's and other countries including India, Pakistan and Korea (OECD, 1997). It has been adopted in developing countries in Africa, including Nigeria, Gambia, Ghana and now Kenya (Kobia and Mohamed, 2006).Prior to this period the business environment was rather stable and therefore strategic planning was entrusted in the hands of the top management of the organization. This practice was counterproductive as managers who were implementers of the strategic plans were not involved at the formulation stage.

The Kenyan government does acknowledge that over the years there has been poor performance in the public sector, especially in the management of public resources which has hindered the realization of sustainable economic growth (GoK, 2005). The government reiterates in the Economic Recovery Strategy (ERS) some of the factors that adversely affect the performance of the public sector. These include excessive regulations and controls, frequent political interference, poor management, outright mismanagement and bloated staff establishment. To improve performance, the government has continued to undertake a number of reform measures. However, these measures have not provided a framework for guiding behavior towards attainment of results or ensured accountability in the use of public resources and efficiency in service delivery. The initiatives for instance lack the performance information system, comprehensive performance evaluation system and performance incentive system (GoK, 2005).

The governments of the newly independent states built on this, developing public enterprises and nationalized industries in order to 'maintain a high degree of public control over national resources as a means of facilitating national growth' and promote social justice (Ikiara, 2000, p. 44–5).
Many African states, Kenya included, considered 'nationalization' an essential element of economic survival. The Kenyan government developed parastatals to provide services of a monopolistic nature and to Africanize the sector and redistribute regional income: As such, the growth of parastatals in Kenya can be attributed to economic as well as social and political objectives. Given that there was a shortage of local entrepreneurs with adequate capital and skills at independence, the government considered it necessary to be involved both directly and indirectly in the economy. (Mwaura, 2007, p. 43)

2.2 PERFORMANCE MEASUREMENT.

Performance measurement is often taken to be crucial to the delivery of improved services as part of New Public Management. Emphasis on performance management for delivery of results is undoubtedly influenced by the basic assumption of performance management which lies in its professed ability to unite the attention of institution members on a common objective and galvanize them towards the attainment of this objective (Balogun, 2003).
Performance Contracts were first introduced in kenya on 1st October 2004, in (sixteen) 16 largely commercial State Corporations. In 2005/2006, all the then 35 Government Ministries/Departments, 116 State Corporations and five pilot Local Authorities signed Performance Contracts and were evaluated in September 2006. In 2006/2007, all the 38 Government Ministries/Departments, 127 State Corporations and 175 Local Authorities signed Performance Contracts and were evaluated in October, 2007. During2007/2008 all the 38 Government Ministries/Departments, 130 State Corporations and 175 Local Authorities signed Performance Contracts and were evaluated in October 2008. Evaluation of performance in respect of the Financial Year 2008/2009 involved 45 Ministries/Departments, 139 State Corporations, 175 Local Authorities and 68 Tertiary Institutions.
To transfer monopoly from the public to the private sector. The same inefficiency that characterized public enterprises could then resurface in privatized firms. With little interest in entrepreneurship but a large appetite for looting public assets, these elite would soon sell the assets so acquired and move their wealth elsewhere, thereby undermining capital formation in the economy. (Anyang'Nyong'O et al., 2000, p. viii)

2.3 THE COMMONWEALTH PERSPECTIVE ON CORPORATE GOVERNANCE

As regulatory barriers between national economies are removed and global competition for capital increases, investment capital will follow the path to those countries and corporations that have adopted efficient governance standards. These standards include acceptable levels of investor protection and board practices as well as satisfactory accounting and disclosure standards. It was in this milieu that the requirement for determining a set of guidelines, or principles that could appropriately represent the Commonwealth approach to corporate governance was identified and formulated. However, it was clearly recognised that the notion of a "one size, fits all" type of universal code was not only inappropriate but undesirable. In any event, a number of Commonwealth member nations where the private enterprise sectors are relatively developed have individually established national codes to address their own special requirements – namely, United Kingdom (Cadbury, Greenbury and Hampel Reports), Australia (Bosch Report), South Africa (King Report), Canada (Dey Report), India and Malaysia.
"The proper governance of companies will become as crucial to the world economy as the proper governing of countries." James D. Wolfensohn, President of the World Bank c. 1999.

2.4 THE INCLUSIVE APPROACH

Within the Commonwealth, therefore, the primary issue surrounds the role of the director – whether of a private sector or state-owned enterprise. Nonetheless, given the particular circumstances and requirements of the many economies comprising the Commonwealth, equally relevant are the issues surrounding the responsibility of such business enterprises and their directors towards the broader constituency of stakeholders – namely, employees, the community, bankers and other suppliers of finance such as international funding agencies, the environment, health and safety, securities exchange and financial market regulators, and others. The Common Wealth Association for Corporate Governance advocates an inclusive approach to corporate governance.
In Kenya, Performance contracting is a freely negotiated performance agreement between a government, acting as the owner of a public agency and the management of the agency. It is used in the Kenyan public to measure performance. Local authorities face pressure to improve service delivery, lower costs become more accountable, customer focused and responsive to stakeholder needs.

2.5 THE BOARD AS STIPULATED IN STATE CORPORATION

The Board in kenya fulfills its fiduciary obligations to the shareholders by maintaining control over the strategic, financial, operational and compliance issues of the Organization. Whilst the Board provides direction and guidance on strategic and general policy matters and remains responsible for establishing and maintaining overall internal controls over financial, operational and compliance issues, it has delegated authority to the Managing Director to conduct the day-to-day business of the Organization.
For the Board to exhibit real executive leadership, one must be a visionary, a trailblazer, a strategist, a communicator, a coach, a diplomat and a politician. The world's most successful leaders are able to focus on the big picture and uphold high standards while wearing many hats.
The most critical component of corporate excellence and success is excellent leadership. Unfortunately without sound institutions of governance, that defines the rules of the game and facilitates the emergence, development and maintenance of "effective and accountable leaders", no "leadership will be sustainable". Hence the Government of Kenya introduce Performance Contracting to supervise the supervisors.

2.6 CORPORATE GOVERNANCE IN KENYA

Consultative Corporate Sector seminars held in November 1998 and March 1999 resolved that a Private Sector Initiative for Corporate Governance be established to: Formulate and develop a code of best practice for corporate governance in Kenya; Explore ways and means of facilitating the establishment of a national apex body [the National Corporate Sector Foundation to promote corporate governance in Kenya; Co-ordinate developments in corporate governance in Kenya with other initiatives in East Africa, Africa, the Commonwealth and globally.
On October 8, 1999 the Corporate Sector at a seminar organized by the Private Sector Initiative for Corporate Governance formally adopted a national code of best practice for Corporate Governance to guide corporate governance in Kenya, and mandated the Private Sector Initiative to establish the Corporate Sector Foundation, and collaborate with the Global Corporate Governance Forum, the Commonwealth Association for Corporate Governance, the African Capital Markets Forum, Uganda and Tanzania in promoting good corporate governance.
Corporate Governance is concerned with the establishment of an appropriate legal, economic and institutional environment that would facilitate and allow business enterprises to grow, thrive and survive as institutions for maximizing shareholder value while being conscious of and providing for the well-being of all other stakeholders and society.
Good Corporate Governance requires that the State puts in place and maintains an enabling environment in which efficient and well-managed companies can thrive. It is therefore expected that companies will continue to play their part in encouraging dialogue between the public and private sectors in promoting good public governance and an enabling business environment.
It is the responsibility of the owners of the corporation to elect competent directors and to ensure that they govern the corporation in a manner consistent with their stewardship.
Good corporate governance dictates that the Board of Directors governs the corporation in a way that maximizes shareholder value and in the best interest of society. It is neither in the long-term interest of the enterprise or society to short-change customers, exploits labour, pollutes the environment nor engages in corrupt practices.

3.0 ANALYSIS AND FINDINGS

3.1. IMPACTS OF PERFORMANCE CONTRACTING IN KENYA

Implementation of the Process of Performance Contracting began only in 2004. The real impact of the process is now becoming visible. However, according to Kobia and Mohammed, (2006), there is clear evidence of some radical improvement particularly in the following aspects of the management of Public Service:(i) Remarkable and unprecedented improvement in profit generation for commercial state Corporations(ii) Significant improvement in service delivery and operations by the Government Ministries such as Immigrations and Registration of Persons, Agriculture, Provincial Administration and Internal Security, Health, finance and Water.(iii) Significant improvement in the operations and services by some local authority bodies e.g. Nairobi City Council, Kisumu and Nakuru Municipalities.(iv) Unprecedented improvement in service delivery and operations by the bulk of state Corporations and statutory boards, among them, KenGen, Kenya Power and Lighting Company Limited, Kenya Ports Authority, Kenya Utalii College, National Oil Corporation of Kenya, KICC etc.

3.2 SIGNIFICANCE OF PERFORMANCE CONTRACTING IN KENYA

Helps in fast-tracking; Institutions Strategic Plan, the aligned Sector Plan, Kenya's Medium -Term Plan 2008- 2012 and the Kenya's Vision 2030.

For achievement of the set targets, the institutions have to develop intense monitoring and evaluation system hence ensuring proper coordination of projects. It has instilled discipline to Public Institution' Management by ensuring adherence to work-plans, Strategic Plans, Sector Plans and the Vision 2030.Enhanced accountability in the pubic service as it defines who does what, when and how. It has led to enhancement of the efficiency in service delivery as the Institutions set higher targets every contract period. It gives room for recognition of the Public Servants hence improves the performance. Some Public Institutions have realized that working to achieve the set targets does not only help them perform better but also aid in the institutions' operations. It has led to a competitive Public Service as compared to the old fashioned style and also enhanced their growth and development.

There are a range of initiatives being taken in the field of corporate governance that bears the potential of affecting positively the improvement of corporate governance standards in general. Some of these corporate governance reform initiatives are on a national level; some are regional, while others are pan-African in scope.

3.3 KEY ISSUES ON CORPORATE GOVERNANCE IN RELATION TO PERFORMANCE CONTRACTING

3.3.1 SHAREHOLDERS

1. How well do Company objectives reflect shareholder expectations?
2. Is there full and accurate reporting on Company affairs to the shareholders?
3. What is the state of relationship with the shareholders?
4. What are the Board's relationships with monitoring agencies?

3.3.2 THE COMPANY

1. Is the level of strategic planning of sufficient quality and content?
2. How accurately is the strategic plan reflected at an operational level in the business plan?
3. Does the Board review the Company's performance against the business plan?

3.3.3 THE DIRECTION OF THE COMPANY

1. How satisfactory is the Board's monitoring of the Company?
2. Are the important issues being identified?
3. How well are these analyzed and discussed?

3.3.4 THE CEO

1. How well is the CEO's job Description defined?
2. Is the CEO satisfactorily supported by counsel from the Board?
3. Is the CEO's performance monitored and appraised satisfactorily?
4. Is the Board avoiding excessive intrusion in the CEO and/or management's responsibilities?

3.3.5 BOARD MEETINGS

1. Is the information supplied to the Board appropriate and relevant?
2. Is preparation and planning for Board meetings satisfactory?
3. Is the frequency and style of meetings appropriate?
4. Is Board attendance and participation working well?
5. Is the Board and Committee structure still appropriate?
6. Are accurate and timely minutes made and maintained?
7. Is there follow up on actions necessary and/or reports to the Board on actions taken?

3.3.6 INDIVIDUAL BOARD MEMBER CONTRIBUTIONS

1. Is the Chairman carrying out his role satisfactorily?
2. Is there recognition and use of individual Board members' particular skills?
3. Is the Board contributing contacts and generating business?
4. Is the Board making other special contributions to the success of the Company as a whole?

3.4 COMMONALITIES IN THE STUDY

A common finding in this study shows that, the Boards in kenya embraces the principles of good governance as set out in the a number of governance frameworks; including the Capital Markets Authority Guidelines on Corporate Governance Practices by Public Listed Companies in Kenya, the Kings Code on Corporate Governance Report and the Principles for Corporate Governance in Kenya issued by the Center of Corporate Governance.

3.5 ROLE AND FUNCTIONS OF THE BOARD

The Board specifically exercise leadership, enterprise, integrity and judgement in directing the organization so as to achieve continuing prosperity for its shareholders/principal shareholder. The Board shall at all times act in the best interests of organization in a manner based on transparency, integrity, accountability and responsibility.

3.6 GOOD CORPORATE

Good corporate governance practices must be nurtured and encouraged to evolve as a matter of best practice but certain aspects of operation in a body corporate must of necessity require minimum standards of good governance. In this regard Capital Market Authority expects the directors of every public listed company to undertake or commit themselves to adopt good corporate governance practices as part of their continuing listing obligations.

4.0 CHALLENGES

Although Performance Contracting has had these successes, it has also experienced some challenges. A major activity of the Performance Contracting exercise, at least from the view-point of the public, is the public announcement of the performance results of MDAs by H.E. the President and the Rt. Hon. Prime Minister. Over the last three periods of performance contracting, the public has raised dissatisfaction on the results as they do not relate to performance (service delivery) on the ground as perceived and received by the public. The dissatisfaction with the performance results was not only limited to members of the public. Ministries, Departments and Agencies have also challenged the announced results. Indeed, the public outcry over the results became so strong that the results for 2007 were never released.

The Government recognises the usefulness of Performance Contracting as a tool for improved service delivery following the apparent mismatch between the results generated by the Performance Contracting tool and the reality on the ground.

5.0 CONCLUSION

Given the limited focus of this paper, the conclusions and lessons to be drawn are similarly restricted to documented and views of the Interviewed Individuals, it is clear that there has been some improvement in the performance of the public service in Kenya and the related Government agencies(parastal). However for sustainability of the success achieved so far, the authors do recommend further analysis of the tool in used and a different approach in evaluating Government

Department from Government agencies. Further they do recommend that more studies need to be done with a view to establish the root cause of challenges facing performance contracting and Corporate Governances in Kenya.

From the various national codes of corporate governance that were analyzed, it is clear that standards of good governance are intimately intertwined with high standards of business ethics. The challenge that faces Kenyan enterprises is to translate this commitment to high standards of ethics into organizational practice. It is therefore imperative that these developments on the enterprise level should be reinforced with governance reform on the regulatory and political level.

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ANNEXURE

SAMPLE INSTITUONS INVTERVIEWED DURING THIS STUDY

A) PUBLIC SECTOR

S.No	Organizations	Number of Official
1	Kenya Ports Authority	1
2	Kenya Airport Authority	1
3	Kenya Bureau of Standards	1
4	Kenya Revenue Authority	1
5	Kenya Ferry Services	1

B) SEMI- PRIVATE SECTOR

S.No	Organizations	Number of Official
1	KENGEN	1
2	Commercial Bank of Kenya	1
3	National Bank of Kenya	1
4	Kenya Airways	1
5	Kenya national Shipping lines	1

C) PRIVATE SECTOR

S. No	Organizations	Number of Official
1	Bamburi Cement ltd	1
2	Grain Bulk ltd	1
3	Kenya Nuts Ltd	1

WHAT DOES SUSTAINABLE DEVELOPMENT REALLY MEANS? - A STUDY ON DIFFERENT DIMENSIONS OF SUSTAINABILITY

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ABSTRACT

Sustainable Development, although a widely used phrase, is a contested concept. In a wider sense, it is an attempt to combine growing concerns about environmental issues with socio economic issues of development. Sustainable development, while maintaining a sound economic base, must remedy social inequities and environmental damages. To have a clear understanding of the plurality of opinion and policies, this paper present a classification of different perspectives of sustainable development. This paper also stresses the need to adapt the existing institutions of all kind, including corporations, local and national governments, and transnational organisations to the requirement of sustainable development.

KEYWORDS

Environmental issues of development, Institutional requirement for sustainability, Intergenerational equity, Social component of sustainability, Sound economic base.

1.1. INTRODUCTION

During 19th and early 20th century, the imperial and colonial power dominated the world, gave little provision for economic and social advancement in what we now call the developing world. Imperial power utilised colonial region for raw material and cheap labour. By the end of Second World War policy had changed drastically. Economic and social improvement of the majority had become a major objective of the governments. With the crumbling of colonial power relations, this goal was extended to poorer nations. W.W. Rostow's concept "mass consumption" was widely accepted as the end goal of economic development. The less developed nations have started the initiatives to "take off" the economy from "traditional society" to "maturity" and to "high mass consumption". The primary goal of economic policy was to raise the living standard by providing more goods and services to an expanding population. After the Second World War IMF, World Bank and United Nations were specifically designed with this goal.

Meanwhile different approaches of development have been emphasized at different times. Original emphasis was on promoting agricultural and industrial production. In late 197o's emphasis was promoting education, nutrition, health, sanitation and employment of the poor. It inspired the creation of United Nation's Development Program's "Human Development Index (HDI). The HDI combines "life expectancy, adult literacy and school enrolment ratio, with percapita GDP in a weighted average to get an index between "0" and "1". The HDI clearly shows that development is a multi-dimensional process. Higher GDP does not necessarily mean higher overall welfare.

Since 1980's the focus shifted to "structural adjustments" including "liberisation of trade"," elimination of government deficit and overhauled exchange rates", and "dismantling inefficient parastatal organisations". The new marked oriented structural adjustment measures were viewed as a measure to correct the errors of the earlier government centered development policies. The market oriented measures, even though it resulted in improved economic efficiency, often lead to greater in equality and hardship for the poor. In the present decade, even though there have been areas of slow or negative growth especially in Africa, globally most countries have made significant advance both in GDP and in HDI measures.

Even in the context of improvement in GDP and in HDI, overall development on a world scale is open to two major criticisms:

- The benefits of development have distributed unevenly between rich and poor nations and between rich and poor groups in individual nation. The global number of extremely poor and under nourished have remained high and in some societies it has increased.
- The other major negative impact of development has been on the environment and on existing social structure. Many traditional societies have been devastated by development of forest, water system and intense of fisheries. Environmental damage of development, if unchecked, may undermine the achievement of development and even collapse of essential ecosystem.

The growing awareness of these challenges to traditional development thinking has led to the increasing acceptance of a new concept of development, sustainable development.

1.2. SUSTAINABLE DEVELOPMENT

As defined by World Commission on Environment and Development in 1987, sustainable development means the development which meets needs of the present without compromising the ability of future generations to meet their own needs. In the extensive discussion of the concept of sustainable development since then, there has been recognition of three aspects of sustainable development: economic, environment and social.

An economically sustainable system must be able to produce goods and services on a continuing basis to maintain manageable levels of government's internal and external debt and to avoid unhealthy sectorial imbalance which damage agriculture or industrial production. An environmentally sustainable system must maintain a stable resource base avoiding over exploitation of renewable resource system and depleting nonrenewable resources only to the extent that investment is made in adequate substitutes. It includes maintenance of bio diversity, atmospheric stability, and other ecosystem functions. A socially sustainable system must achieve distributional equity, adequate provision of social services including education and health, gender equity, and political accountability and participation.

These three elements of sustainable development raise the issue of how to balance objective and how to judge success or failure. For example, provision of adequate food and water supplies require changes which will decrease biodiversity. Nonpolluting energy sources are more expensive, thus increasing burden on the poor. Nonetheless, these three principles satisfy the criteria for sustainability and if we could move closer to achieving these three goals, the world would be a better place. Certainly these goals require insights of multidiscipline and therefore required to analyse in the perspective of economists' ecologists', and social scientists'.

2.1. ECONOMIC PERSPECTIVE OF SUSTAINABILITY

From the point of view of neoclassical economic theory, sustainability can be defined in terms of maximisation of human welfare over time. Maximisation of welfare can be identified as maximisation of utility derived from consumption. Of course, it includes the utility derived from the consumption of food, clothing, housing, transportation, health, education etc. For analytical simplicity, all these can be reduced to a measurable single dimensional indicator. According to standard economic theory, efficient resource allocation should have the effect of maximizing utility from consumption. If we accept this, sustainability appears to mean nothing more than efficient resource allocation. Now the question arises is efficient allocation among generations. When we consider issues such as soil erosion and building up of greenhouse gases, the most damaging impact are felt over generations. Thus to achieve intergenerational equity we must impose some kind of sustainability rule regarding resource use and environmental impact.

A related issue concerns the concept of natural capital, which consists of soil and atmospheric functions including natural resources and environmental services of the planet. Sustainable development can be operationalized in terms of the conservation of natural capital. This policy goal lead to two decision rule, one for renewable and the other for nonrenewable resources. The rule for renewable resource use is to limit the resource consumption to sustainable yield level and for nonrenewable the rule is to reinvest the proceeds from nonrenewable resource exploitation in to investment in renewable natural capital. Following these two rules will maintain a constant stock of natural capital.

The sustainability decision rule for natural capital is quite different from the standard neo classical approach which assumes substitutability of manmade and natural capital. It is in contrast to the assumption of the decision rule, manmade and natural capital is fundamentally complements and marginally substitutes. If natural capital has a special and unique importance then the so called neo classical economic efficiency will not suffice for sustainability.

The issue can be resolved by recognizing that some issue can be appropriately dealt with through neoclassical market efficiency while others require application of a “safe minimum standard” approach to protect essential resources and environmental functions. The concept of safe minimum standard can be applied to concerns about intergenerational fairness, resource constraints and human impact. The role of public decision making and the formation of social values are central to the safe minimum standards. In order to explore further implications of this approach we need to examine the ecological and social dimensions of sustainability.

2.2. ECOLOGICAL PERSPECTIVE OF SUSTAINABILITY

In an ecological perspective, sustainability must involve limits on population and consumption levels, whereas economic models provide no upper bound on economic growth. The limits apply to all biological system. While human may appear to evade them for a time, they must ultimately accept the boundaries of a finite planet. Humans consume a lion share of the basic energy supply for all terrestrial animals. A further growth in percapita consumption would lead little room for any other species on the planet.

Another important aspect of ecologists’ view on sustainability is the generation of generic diversity and the resultant process of evolution and change in species and ecosystem. Generic diversity gives rise to resilience in ecosystem. Resilience is a bounce back capacity which enables a system to respond to disturbance or damage. For example, a forest ecosystem may recover from a pest infestation through an increase in the population of predators which control the pest, an expansion of species unaffected by the pest, and possibly a development of pest resistance in affected species. The patterns of response will be widely variable, but the essential integrity of the ecosystem will be preserved. The key to resilience is the existence of a wide variety of species, interacting with each other and providing a reservoir of genetic forms which provide the potential to adapt to changing conditions.

Thus, for the ecologists, sustainability should be defined in terms of maintenance of ecosystem resilience. This view of sustainability is clearly different from the human centered conception put forwarded by World Commission on Environment and Development and the consumption based principles proposed by economic theorists. It implies that there may be no close relationship between economic sustainability and ecological sustainability. The importance of the ecological perspective is increasingly evident, as more of the critical problems facing humanity arise from failures of ecological resilience. The resurgence of diseases due to the development of antibiotic resistance, the disruption of ecosystems by introduced species, the formation of “dead zones” in coastal waters, and the multiple ecological threats related to climate change and increased climate volatility, all testify to the impacts of expanding human economic activity.

Therefore, sustainability is more than limits on population or restraint in consumption, though these are important. It means that in our choice of goods and technologies we must orient to the requirements of ecosystem integrity and species diversity. It also implies that an integration of economics and ecology is required and this can only be achieved with the assistance of the third element of the sustainability trial – the social perspective.

2.3. SOCIAL PERSPECTIVE OF SUSTAINABILITY

Advocates of sustainable development recognise the social component of development as an essential part of the new paradigm. In doing so, they are validating the importance of a much older perspective of human development approach, which emphasis the issues of needs and equity. As mentioned earlier, the focus on basic needs and equity in development has been represented by the United Nations Development Program’s series of Human Development Reports. In addition to calculating the Human development Index (HDI), the Human development Report focus each year on a different aspect of social and economic development such as democratic governance, gender equity and poverty. While the HDI does not explicitly include any environmental measures, many reports discussed the issue of sustainability and equity.

If the problem of environment and equity are clearly related, then the third world critics of the western development model see that the model itself is a significant cause of the problem. As we seek for models of sustainable and equitable development, the process will have to be democratised, decentralised and pluralistic. It will have to balance wealth creation with wealth distribution. And it will have to include a healthy skepticism about western models and modernizing effects of global market.

3.1. A SYNTHESIS OF PERSPECTIVES

In a broader perspective, the norms which must guide sustainable development policy should be the social and institutional process of setting social and environmental goals. To bring the argument down to earth and to get a sense of the principles for sustainable development, we can examine some sectorial specifics.

3.1.1 AGRICULTURE: The need to feed an expanding population at higher per-capita levels of consumption is straining global soil and water systems. The response to this must be twofold. On the production side, current high-input techniques which are leading to serious soil degradation and water pollution and overdraft must be replaced by organic soil rebuilding, integrated pest management, and efficient irrigation. This in turn implies much greater reliance on local knowledge and participatory input into the development of agricultural techniques. On the consumption side, both limits on population growth and greater equity and efficiency in food distribution are of central importance given probable resource limitations on production.

3.1.2. ENERGY: The accumulation of greenhouse gases, mean that it will be necessary to accomplish a transition away from fossil fuels well before 2050. A non-fossil energy system would be significantly more decentralized, adapted to local conditions and taking advantage of opportunities for wind, biogas, and off-grid solar power systems. This is unlikely to occur without a major mobilization of capital resources for renewable energy development in countries now rapidly expanding their energy systems.

3.1.3. INDUSTRY: As the scale of global industrial production increases several-fold over current levels, which themselves represent more than quadrupling over 1950 levels, it is apparent that “end-of-pipe” pollution control not be adequate. The new concept of “industrial ecology” implies the restructuring of whole industrial sectors based on a goal of reducing emissions and reusing materials at all stages of the production cycle. Corporate reform and “greening” as well as a broad cooperative effort between corporations and government will be needed to achieve goal.

3.1.4. RENEWABLE RESOURCE SYSTEM: World fisheries, forests and water systems are severely over-stressed. With even greater demands on all systems expected in the future, all levels of institutional management must be urgently reformed. Multilateral agreements and global funding are needed to conserve transnational resources. National resource management systems must be shifted from goals of exploitation to conservation and sustainable harvesting; and local communities must be strongly involved in resource conservation.

Each of these areas poses challenges which are social and institutional as well as economic. It is clear that the social component of sustainability is not just an idealised goal, but a necessity for achieving the economic and ecological components.

4.1. CONCLUSION

Development in its progression from traditional to modern mass consumption society has remained inequitable and has had growing negative environmental impact. Economic growth is clearly needed, but must be subject to global limit and should not be the prime objective for countries already at high levels of consumption. In pursuing these modified development goals, it will be necessary to recognise the limit of the market mechanism. While market may be excellent under some conditions at achieving economic efficiency, they are often counterproductive in sustainability. Existing institutions of all kinds, including corporations, local and national government, and transnational organizations, will have to adapt to the requirements of sustainable development, if all the problems which motivated the concept of development are not to grow worse. Democratic governance, participation, and the satisfaction of basic needs are thus an essential part of a new development synthesis.

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GREEN AUDIT: NEXT GENERATION'S HOPE

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ABSTRACT

As we have experienced the effects of the globalization and industrialization on mankind and society at large, it is noticed that there is a serious need to create a checkpoint to abet the exponential exploitation of the natural resources for the future generation. The current natural resources is also part of the wealth of the future generation and morally or legally exploiting the rights of the society for the personal benefit should not he granted at any cost. So there is a serious need to inculcate the principle of Green Audit within an organizational which will be benefiting the organization and society at large – not only in environmental terms but also in economic terms. This paper is a modest attempt to discuss on the concept, need and the role of the green audit to work as a checkpoint and prevent further devastation of the environment. The paper also outlines different steps of Green Audit. Finally the paper presents an overview of present status as well as challenges and future expectations of Green audit in India for the betterment of human life.

KEYWORDS
Corporate Environment Responsibility, Ecological System, Environmental Impact Assessment, Industrialization, Sustainable Development.

INTRODUCTION
It is now widely recognized that humankind is on the verge of an environmental catastrophe and perhaps very few options are left to avert the crises which have been looming large in the last four decades. In the face of such crisis, which is caused by our insatiable greed, it is necessary to re-examine by every nation whether the current pattern of consumption can be continued without any further considerations about the burden on the supporting environment. This is paramount because, on one hand, the material progress of the industrial society has taken a very serious toll on the capacity of our planet to bear the burden, while, on the other hand, the depletion of natural resources are eating into the vitals of many developing nations. Clearly, this requires Green Audit - a kind of check and balance or a dashboard which would tell us what is sustainable and what is not.

In the context of a developing country like India, it is important that national efforts are directed towards preservation of those vital resources. So far the Indian economy has been supported by the abundance of its natural resources. But the demands placed on the environment by the huge population of the country may far outweigh the capacity of the environment to sustain the additional burden put on it. Therefore, if India is to sustain its continued pursuit of economic growth, its natural environment must be preserved and enhanced.

In view of its importance, it is time that Green audit becomes a reality by now. Green audit is expected to give numbers to the environmental impact of development. India is in need of alternative indicators to measure true welfare improvement. Presently, the country does not have a system in place to factor in the environmental cost of industrial activity. There is a growing need to address this issue in the best interest of all of us to safeguard our mother earth.

Green audit can be defined as an audit of 'ecological system' of a particular habitat (country, state, local authority, office, home, school, public place etc) within a given period with an objective of assessing the biodiversity.

GREEN AUDIT - A CONCEPTUAL FRAMEWORK
Green Audit is a concept in its nascent stage which is a derivative of Corporate Environmental Responsibility which, again, is a derivative of Corporate Social Responsibility. To understand the actual impact of industry or any other item with environment and managing the consequential affect under existing legal framework of the state along with measures taken by the corporate bodies to mitigate such effect will be termed Corporate Environmental Responsibility. So the examination whether Corporate Environmental Responsibility has been met by the Corporate houses or not may be termed as Green Audit.

The major problem faced by the human society is the increase in pollution as the quality of life and survival of the human society is largely dependent on the amount of pollution. Pollution that is a major outcome of industrialization is affecting various natural resources like soil, water, air, etc. and it has a vast impact on the quality of the human life even for a decade or so.

There is an urgent need to keep a check on the activities of the industries, which is leading to such a kind of pollution, and so the concept of Green Audit has come into existence to work as a checkpoint and prevent further devastation of the environment.

For the betterment of human life Green Audit is considered as one of the best tools. Green Audit will be safeguarding the interest of the future generation wherein it will restrict the over-exploitation of the resources which is also the part of the wealth of future generations. Even the usage of chemical fertilizers for agriculture is reducing the quality and yield of the harvest in longer run, so people have started to focus on sustainable means by adopting organic farming wherein all the non-chemical fertilizers and pesticides have been applied to cultivate the crops and outstanding results have been obtained by adopting these new technologies. So one can say that the industrial growth of today is at the cost of tomorrow. Green Audit is a snapshot of the environmental resources being used at a specific venue during a specific time.

Green Auditing is "the systematic examination of the interactions between any business operation and its surroundings. This includes all emissions to air, land and water, legal constraints; the effects on the neighboring community, landscape and ecology, the public's perception of the operating company in the local area ... it does not stop all compliance with legislation. Nor is it a 'green-washing' public relations exercise ... Rather it is a total strategic approach to the organization's activities" (The Confederation of British Industry, 1990). It is "a methodical examination of environmental information about an organization, a facility or a site, to verify whether, or to what extent, they conform to specialized audit criteria. The criteria may be based on local, national or global environmental standards" (The World Bank). It is 'a management tool used by industry to evaluate its environmental performance" (United Nations Environmental Programme, 1989). Therefore, in a nutshell, green audit is a systematic and methodical assessment and review of the organizations activities and its services in relation to environmental green issues.

Green audit involves the inspection of a company to assess the total environmental impact of its activities, or of a particular product or a process. For example, a green audit of a manufactured product looks at the impact of production, including energy use, and the extraction of raw materials used in manufacture, use of the raw material which may cause pollution and other hazards, and waste disposal, potential of recycling. Hence the green audits are tools that organizations use to identify their environmental impacts and assess their compliance with applicable laws and regulations, as well as with the expectations of their various stakeholders. It also serves as a means to identify opportunities to save money, enhance work quality, improves employee health, safety and morale, reduce liabilities and achieve other form of business values.

GREEN AUDIT – CONTEMPORARY PHENOMENON
Public awareness of biodiversity loss is increasing, leading to consumer preferences and purchasing decisions. Some examples may be replacing halogen lamps and fluorescent lamps with Light Emitting Diode (LED), plastic carry bags with jute or paper bags, paper tickets with SMS tickets, electronic filing of document with government authorities, electronic funds transfer etc.

Financial institutions are also insisting for Environmental Impact Assessment Reports from the corporate houses before sanctioning loans. All businesses are directly or indirectly dependent on biodiversity and ecosystem services and they create some impact on the nature – positive or negative.
Commitment to manage biodiversity starts from the corporate culture, vision, mission and values of the business entity.
According to a study more than one-third of 1,103 species like mammals, birds, reptiles, insects and plants could become extinct in fifty years because of pollution and global warming (Singh, 2007).
It will not be rational to say Green Audit is confined to an entity or to industry as a whole. In broader scene, the country as a whole can access the environment. To address the environmental issues of a specific location or of whole country, the Supreme Audit Authority may plan Green Audit.

DRIVING FORCE BEHIND GREEN AUDITING

In the past, the main driving force behind Green Auditing were fear of prosecution and high penalties imposed by regulatory authorities. Now it is considered as an exercise to identify and reduce liabilities. Experts have identified different drivers of such auditing. Vinten (1996) categorized forces in three groups organization strategy, functional areas, operational functions. Hillary (1999) identified customers, local government, community, regulator, and employees etc. as most important drivers. FORGE Group (2002) identified four components as key drivers — strategy, management, operational performance and reporting.
World trade and globalization depend on responsible business practices, if they are to win public confidence and deliver global prosperity. That is where codes of conduct come in, whether towards the environment, labour or other ethical rules (Paramasivan, 2002). The practice of Green Auditing became popular and institutionalized in global context because of several charters, programmes and rules such as International Chamber of Commerce Business Charter, principles of Coalition of Environmentally Responsible Economies (CERES), European Eco-Management & Audit Scheme (EMAS), and International Organization for Standardization (ISO) etc. Worldwide different organizations have been certifying their operations and facilities using ISO's standards relevant for Green Auditing.
All of the world's 100 largest MNCs have issued environmental codes/ EHS (Environment, Health and Safety) policy statements. Major leading companies of different countries have incorporated such auditing framework into their business practices and get their operations/facilities certified by the Green Auditors. These include Dow Chemicals, Kodak, Shell, Tata Motors, ITC, Jindal Steel Works (JSW) and Reliance etc. Since 2000, there has been a perceptible increase in the number of Green Audits in ASOSAI member nations. Japan, Pakistan, Kuwait, Bhutan, Malaysia, New Zealand, Saudi Arabia, Turkey, Australia, Korea, China, India, Cyprus, Thailand, Azerbaizan, Bangladesh etc. countries have been conducting Green Audits.
India being a party to the United Nations Convention on Biological Diversity (CBD) held in Rio De Janerio on 5th June 1992, enacted 'The Biological Diversity Act', 2002, to meet the following main objectives set by the Convention.

- Conservation of Biological Diversity
- Fair and equitable sharing of benefits arising out of the utilization of genetic resources
- Sustainable use of the components of the bio diversity

'Sustainable Use' as per Section 2(o) of the Biological Diversity Act, 2002, means 'the use of components of biological diversity in such manner and at such rate that does not lead to the decline of the biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.'

GREEN AUDIT : MULTIPLE DISCRIMINANT ASSESSMENT

Like all audit programmes, Green Audit has to have a comprehensive format on the basis of which deep-probing exercises on various issues and the findings have to be put on a canvas for deriving knowledge of the status of each of them and the actions warranted to tie up the loose ends. Under MDA it would be relevant to list all the relevant item and assess their impact with particular reference to whether any of the listed items has exceeded the prescribed limits. The technicalities of each item listed in the programme could be graded with respect to their impact in segments or as a whole, and would require threadbare examination jointly and severally and discussion as respects their impacts net of both possible positive or negative effects over a specific time period. MDA would also highlight individual items, their current status and future effects.
A random selection of the items that could figure in the list for viewing the effects may be:

a. Greenhouse Effects
b. Climate Change
c. Carbon Releases
d. Felling Trees
e. Vanishing Flora and Fauna
f. Unclean Air
g. Sub-soil Water: Development Stock
h. Destruction of Aromatic and Medicinal Plants
i. Assessment of Points Raised Earlier
j. Rising River Beds
k. Release of Pollutants

Green audit include the following 5 components :

- The Office Survey
- The Office Survey
- The Carbon Footprint
- The onsite visit
- Final Green Audit Report

OBJECTIVES OF GREEN AUDIT

This concept has got its origin in recent past and suddenly got acceleration due to heavy industrial traffic which ends with unaccountable emission- resulting pollution. Due to growth in population, needs has increased. Needs of human beings can only be met by installing industries. The increase in industries has not only supplied the need of humans but also had been damaging the environment by emitting carbon components.
The provision for Environmental Impact Assessment prior to allowing an industry to set up is the first step to ensure that the project or industry will not harm the environment. But still the production and operation process will have some impact on environment. That post-production assessment of impact of environment is the motto of Green Audit.
Objectives of Green Audit Are :

- To ensure development along with safeguarding the environment.
- To reduce energy consumption to foster environment.
- To ensure compliance with present legislations of the State and other legal requirements.
- To physically ensure installation of devices that reduce pollution and authentication of such devices by competent authority.
- To ensure optimum utilization of resources:
- To see whether provisions are made for liabilities arising out of unintentional pollution related damages and their compliance in cases so arose.
- To ensure that sufficient precaution has been taken by the industry to protect the employees 'of the industries from pollution resulting from it.
- To suggest improvement in the system to promote safe and clean environment.

Green Auditing has become important because of the following reasons:

- Global Warming
- Ozone Layer Depletion
- Toxic Pollution
- Genetic Erosion and Biodiversity Loss
- Other Factors - Lending institutions often before financing a project may ask Green Audit report. Socially Responsible Investors (SRI) also seek to invest in environment-conscious companies which undertake responsible business. Consumers have become environment conscious. They always want environmental friendly products or services that take care of their hygiene and safety.

TYPOLOGY OF GREEN AUDIT

On the basis of scope, objectives, risk assessment Green Audit may be categorized as :

- Compliance Audit;
- Performance Audit;
- Transactional Audit;
- Product/Activity Audit;
- Issues Audit;
- Risks Audit;
- Energy & Waste Audit;
- Process & Safety Audit;
- Quality Audit;
- EMS Audit; and
- Baseline Audit / Future Scenario Assessment

SCOPE OF THE GREEN AUDIT

- Measuring key environmental parameters
- Analyzing raw and test data
- Reviewing purchase orders and invoices
- Interviewing employees, managers and executives
- Communicating with contractors, vendors, customers and regulators
- Examining policies, internal records, reports relating to the environment
- Comparing audit results with previous audits, as well as to industry standards and best practices.

SOME FOCUS AREAS OF THE GREEN AUDIT ARE

- Saving power,
- Saving Water,
- Greening the workplace
- Driving Green
- Build a Green Community

CONDUCTANCE OF GREEN AUDIT

Although various types of Green Audit appraise different issues, all should have the following stages of activities:

Stage 1 - Audit Planning / Pre-audit Stage

- Consider terms of engagement
- Understanding of entity and its system
- Decision on the scope and objectives
- Selection of audit criteria
- Selection of methodology
- Selection of team members and audit programme development
- Inform the facility and desktop review

Stage II - Onsite Audit Stage

- Site/Facility inspection
- Interview and documents review
- Close conference

Stage III - Analysis and Reporting Stage

- Analysis and final evaluation of findings
- Preparation of draft report
- Preparation of final Green Audit Report
- Follow-up review

GREEN AUDIT IMPLEMENTATION

The primary stage towards implementation of Green Audit is to educate the people about the same, wherein people should be made aware about the necessity of Green Audit and their responsibility towards the future generation. After generation of awareness among the people the next stage is to try to reduce the wastage as much as possible at each and every stage of the operations: The third and very important stage can be the stage of continuous improvement wherein the organization should continuously try to reduce their wastage by using new and innovative techniques and so improve on their process, which leads to least wastage. This stage improves efficiency and effectiveness of all the resources that ultimately provide better human life along with high productivity. Green Audit works as a tool to safeguard the environment and the society at large. It will not only help the contemporary society but will also keep a check on eradicating the practices having a devastating effect on the overall society in future.

GREEN AUDIT PROGRAMME

Like all audit programmes, Green Audit Programme is also required to be in detail. As it is a multidisciplinary approach, this programme has to be in segments relevant for all the disciplines represented in the TEAM. For the present purpose, TEAM is used as an acronym - T standing for togetherness, E for energizing, A for actuation, and M for measurement and control. In all, efforts are deliberately çlirected towards making them centripetal to the objectives. For each member of the team, discrete programmes may be drawn but, after completion of the inquiry, study and analysis of the situation, there may be detailed discussions leading to a consensus. Major issues thrown up by the study should naturally be analyzed so that the emerging consensus is realistic and practicable. The programme does not sacrifice technical sophistication but all terms used by the members belonging to different intellectual disciplines should be explained and adequately supported by the emerging data and information. The recommendations made by the TEAM must be duly supported by an Action Taken Report, details of which would call for a proper assessment of the quality of the implementation

Cost and management accountants (CMA) should invariably be made a member of the TEAM for enhanced effectiveness. To understand the relevance of each factor, CMAs can apply the technique of partial differentiation, along with others, to disaggregate the influence and contribution of each individual factor to the totality so that adequate corrective action can be initiated with respect to each factor as also the total. Application of both deductive and inductive reasoning can bring to the fore numerous issues that have not come to light so far while such reasoning can stall many an unwanted propensity.

QUALIFICATION OF GREEN AUDITOR

Green Audit is not mandatory in India. It is limited to submission of an annual statement (like a voluntary/self declaration statement) to the Central Pollution Control Board (Sen, 2012). As it is a specialized subject, in large project it is carried out by a team of experts drawn from various fields of science led by an auditor. These audits are carried out by trained and registered green auditors in countries like UK, USA and European Union (EU) etc. The Institute of Environment Assessment & Management (TEAM), an international body, provides registration to green auditors. There has been a long debate as to the fact- 'Who can be a green auditor? Study of Deegan, Shelly and Cooper (2003) revealed the following relative market shares of different categories of assurance providers for Green Audit:

Country	Percentage of Companies			No of Reporting Organization Surveying
	Accountants	Environmental Consultants	Others	
Europe (Excluding UK)	59.60	19.20	21.20	52
UK	22.90	54.20	22.90	48
Japan	37.50	6.30	56.30	16
Australia	16.70	40.00	43.30	30
Total	36.30	33.60	30.10	146

LEGAL ASPECTS OF GREEN AUDIT

Though it is at nascent stage, there has been a long list of international treaties, conventions or multilateral agreements on environment considering different themes - atmosphere, biodiversity, chemical and waste, land, oceans and seas etc. Under these ambits the countries have entered into agreements to preserve tits and bits the environment.

Iso 14000 i.e. standard for environment, focus on the process of producing the product rather than the product. Which directly finds how the production process has minimum effect to the environment and how it complies all legal requirements related to environment and also improvement in both above.

In Indian context, we do have huge number of legislations in the interest of environment. In broad categories they are to protect the environment from air pollution, water pollution, pollution from solid waste, to protect the bio-diversity etc. Article 48A of our Constitution (under Directive Principles of States) suggests making endeavor to protect environment. In recent past The National Green. Tribunal Act, 2010, has been framed to expedite the environmental protection and with the objective to dispose off the cases on environment and also to redress the issues of liability and compensations for victims of pollution or any other environmental damages as resolved in United Nations Conference on Environment and Development.

GREEN AUDITS IN INDIA

C&AG have conducted many environmental audits in India which maybe industry specific or not. The Supreme Auditing Authority in India has divided these issues into five categories - Air, water, waste, biodiversity, Environment Management System.

As a whole, considering the gravity of the pollution, C&AG can order and conduct an audit in the interest of environment of any part of India. Some Environmental Audits carried by C&AG are Thermal Power Stations of Bthar State Electricity Board, Transport Department of Mizoram, Thermal Power Stations of Andhra Pradesh and Gujarat etc.

The flagship audits under the water issues were the audit of "Ganga Action Plan", measures to control pollution in Yamuna River in 2004, provision for safe drinking water in Madhya Pradesh in 2004, performance audit of arsenic alleviation programme in West Bengal in 2005, conservation & management of Dal Lake in Jammu & Kashniir in 2006 etc.

CAG, in 2006, conducted audit of 'Conservation & Protection of Tiger in Tiger Reserves in India' ic 28 tiger reserves all across India. On biodiversity issues, it conducted audits of preservation of wild life in Meghalaya in 1996, forest management in Delhi in 2001, functioning of zoos and wildlife sanctuaries iii Rajasthan in 2002 etc.

CAG's Report Nb. 17 (2010-11) indicates that % of the sanctioned projects didn't achieve their 'Greening India' objectives. In biodiversity area, National Biodiversity Authority (NBA) was established by Indian government in 2003. Its efforts were found to be inadequate because it could prepare lists of endangered species only in 7 out of 28 states till that date. Works undertaken under 'Ecocity Programme' of Central Pollution Control Board (CPCB) remained incomplete in all selected 6 cities and INR 1.88 crore was lying unspent with State PCB for over 7 years.

The Institute of Cost Accountants of India (ICAI) has been issuing and publishing research papers and guidelines on Green Audit related issues. In 2008, it issued Management Accounting Guidelines (MAG) - III on Implementing Corporate Environmental Strategies' which guides Green Audit from various perspectives.

ACHIEVING COMPETITIVE ADVANTAGES THROUGH GREEN AUDITING FRAMEWORK

Many people consider Green Auditing exercise "an action without benefit". Incorporating Green Auditing would cost an entity in both time and money - e.g. salaries of the environmental units' experts and staffs, fees of the auditors etc. if approached properly, the entity can recover these costs and achieve direct and indirect cost savings. For example, if Green Audit helps organization to segregate the waste streams into harmful and less harmful then it can save effluent treatment and discharge cost. Organization may also he able to feed some of what was waste back into its operations and save on raw materials cost. Its stringent application reduces penalties, interests, legal costs, compensation charges and environment failure costs etc. It helps to reduce wastage and associated costs, increases product quality etc.

Sen's Theory of Societal, Environmental and Stakeholders of Competitive Advantage (2006) states that a healthy mix of four kinds of factors : (a) Push (license to exist), (b) Pull (motivate to grow), (c) Pressure (legitimacy to grow), and (d) support for sustenance are needed for competitive advantage. Societal and environmental drivers contribute substantially to a firm's performance in a variety of ways. Tangible contributions of Green Auditing include risk reduction and profitability improvements, while intangible contributions lead to brand equity. The environment receives benefits through cleaner process and products, local community is benefited by socio-economic development, employees gain better working conditions and consumers receive quality products with less impact on the environment. All tangible and intangible benefits and cost savings are the keys to achieve competitive advantages. Competitive advantage helps to place the products into the markets, achieve market growth and gain confidence of the customers and socially responsible investors (SRI).

GREEN AUDIT AND SUSTAINABLE DEVELOPMENT

The organizations which are focusing to sustain in this competitive era of cutthroat competition need to focus on the concept of Green Audit because, by emphasizing on Green Audit, organizations can reap unprecedented gains not only in environmental and societal terms but also in financial terms.

Different countries have shifted their focus on sustainable development rather than economic development - so now there is prime focus and urgent need to implement Green Audit so malpractices and negligence of the organizations, which leads to massacres, can be reduced at time and devastating effect on mankind can be reduced.

GREEN AUDIT - CHALLENGES

- There is no standard accounting policy or methodology unlike Financial and Cost Audit
- Collection of data may be cumbersome and expensive
- Awareness by the business groups and public is limited
- It is a long term exercise — hence auditing in short term may not yield desired results
- It is difficult to quantify the entire data in financial terms as most of them are intangible.

FUTURE EXPECTATIONS

Green Audit is undoubtedly a very sensitive and critical area. If business is required with all its skill at planning and innovation, it is surely in the area of environment. it is a fact that costs, lack of legitimacy, poor supportive environment, confidentiality, lack of skills and technical expertise etc. act as barriers to this audit. Governments of different countries have done splendid jobs in Green Audit areas. In spite of lack of regulations and standards, many organizations have been conducting it absolutely on voluntary basis, In present changing scenario it is expected that Green Audit will no longer remain an 'option' but will become as essential and vital as financial audit.

CONCLUSION

Green audits can be highly valuable tool for organizations in a wide range of sectors to improve their environmental and economic performance while reducing regulatory burden, liabilities and operating costs. Organizations who start early in green audits by undertaking pro-active environmental measures often are those who set the regulatory standards against which their competitors are judged.

Ecological imbalance and economic growth are two different aspects. Ensuring reduction in ecological imbalance, without denting economic growth, thereby balancing between ecological imbalance and economic growth is an authentic challenge. The key objective of Green Audit is to ensure equilibrium between economic growth and sustainable use of components of biodiversity.

Only legislation and enforcements can never bring radical change in the system and the environment will not be free from effluents. It only requires awareness among every citizen as well as among the corporate houses. It is not possible to ignore Green Audit.

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AN ANALYTICAL STUDY FOR FINANCIAL MANAGEMENT OF FLAT GLASS INDUSTRIES IN INDIA

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ABSTRACT

Indian Flat Glass Industries is one of the core and fast developing industries of india. Flat Glass Industries produces flat glass for residential,commercial construction and automotive industries comprises significant 80% market share.The purpose of this study is to comparative study of financial performance of india leading flat glass industries.The most common tools for financial analysis is various Ratio as used.it is concluded that selected flat glass industris are not equally financial sound. A general conclusion that could be made from the analysis is that, in all the measures, there was a significant improvement in the Indian Flat Glass industries. It is concluded that overall financial performance of flat glass industries are satisfactory in Profitability level,short term liquidity position. Appropriate suggestions have also been provided by the researcher for selected flat glass companies towards the effectiveness of the profitability,working capital Ratio among the selected large, medium and small sized companies.

KEYWORDS
Comparative study, efficiency,Flat Glass Industries,Financial Management,profitability.

INTRODUCTION

Despite of facing challenges in competitive market and turbulent external environment flat glass industries of india have made 2010-11 successful years, with achieving desired rate of growth and some of them achieving a double digit gains in profits.

The Indian glass industry is more than hundred years old. Today, the glass industry is estimated to be more than US $2.5 billion. The growth of the Indian economy has given a fillip to the growth of glass industry in India. India has been able to maintain stable GDP growth rate despite global downturn. Some of the factors which have contributed to such growth are:

· Huge geographic & demographic spread
· Rising middle class population
· Increasing disposable income especially in the rural–agriculture sector
· Increasing employment opportunities specially in Service sector
· Easier availability of finance
· Booming Infrastructure & reality sector, especially through PPP route

Majority of raw materials required by the industry are available indigenously, providing excellent scope for growth and development.

In the recent years, the demand for flat/float glass has outpaced real GDP growth during the last few years. This is the result of growing Indian economy, where demand is boosted by the booming automotive and construction sectors. Innovations have extended the range of uses for
glass and allowed it to play a greater role in the world in which we live. In a country like India where temperatures vary from 00 centigrade to over 450 centigrade, in many cities, usage of laminated and glazed glass play an important role in conserving energy.

In addition to, factors like increasing demand from emerging markets of India and China, rising cosmetic sales, changing lifestyle, increasing per capita income are also driving the growth of glass industry.

DEVELOPMENT AND GROWTH

Indian glass industry is at the early stage of maturity, but demand for glass is growing steadily. Aggressive and organized efforts on the part of manufacturers and processors are expected to achieve higher levels of awareness among glass specifies and users. In the next five years, the Indian float glass market will move to higher maturity levels. Further, constant technical innovations by manufacturers are keeping customers constantly interested in glass and glass products. The growth of organized retail, infrastructural growth moving in tandem with the growth in the Indian economy has acted as catalyst for glass industry. It has increased the growth rate of packaging industry as well as the requirement of infrastructural materials. Glass being chemically inert, impermeable, FDA approved and environment friendly has distinct advantages over other forms of material. Also due to the constant lifestyle changes and the growing consumer consciousness about health, hygiene and eco-friendly products, glass is expected to grow at a higher rate in coming years.

The glass industry is still estimated to grow at a healthy rate largely driven by rapid Indian economic growth of 7-8% per annum, growing export potential to Europe, America and rest of the world (Increasing demand of superior packaging standards for the international market) and improved technologies being adopted by the glass manufacturing companies who are investing in innovative and state of the art technology for world class products.

A study was conducted to assess the financial management and efficiency of eleven flat glass companies of india are categorized in to three main segments Float glass, Figured glass and sheet glass.

The Global market for flat glass in 2005 is approximately 40 million tones. Around 70% of flat glass consumed in window for buildings,10% in glazing products for automotive applications, and 20%used in furniture and other interior applications. Almost half of the world's glass is consumed in Europe and North America. Just four companies Pilkington, Saint-Gobain, Asahi and Guardian, Produce 60% of the world's high quality float glass. Much of the world's lower quality float and sheet glass production is being replaced by high quality float. This segment of the glass industry is still at the nascent stage with just 8 float glass lines compared to China having 196 lines.

India's total installed capacity for flat glass is around 3639.33 tons per day with worth around US $0.75 billion. There has been an increase in demand for float glass as a result of increased investment from the construction and automotive sectors. Flat glass manufacturers are gearing up to meet this demand and are planning to increase their installed capacities. It has been growing with a CAGR of 13% over the last five years. The major source of revenue comes from Architectural-85 per cent, Automotive-10 per cent and others-5 per cent. The flat glass market of India has huge growth potential. It is seen that general awareness about glass as a building material is increasing. The construction and automobile sectors which are the largest users of float glass are expected to grow with CAGR of 20% and 15% respectively.

REVIEW OF LITERATURE

Roger Kennedy (1997), has made an attempt for study of The History and Future of the Flat Glass Industries. He analyzed that market of glass today is as unique as our individual cultures and customer bases. To prepare for the future, we simply have to listen to the needs of our customers and respond with the kinds of innovations that have characterized our industry for the past 3500 years. He elaborated that Using a wide variety of batch combinations, we take glass from our float lines and coat, bend, shape, laminate, and temper it. The resulting products provide us with year-round comfort, protect our fabrics from fading, reduce

our energy costs, block sound transmission, improve our security, and allow us to replace walls of brick and mortar with panoramas of light and natural beauty. Flat glass products also support leading edge technologies such as flat-panel displays, liquid crystal, and computerization.
Pilkington and the Flat Glass Industry (2010) discussed about growth of flat glass industries around the world and discussed that Over the long term, demand for float glass is growing at almost 5 percent per annum. This growth is fuelled by the demand for building glass and automotive glass, which in turn is driven by economic growth. The world flat glass market is expected to recover to over 57 million tonnes in 2010, including 2 million tonnes of rolled glass, from the recession-hit 2009 level of 52 million tonnes.
The goal of corporate finance usually includes wealth maximization, profit maximization, managerial reward maximization, behavioral goal, social responsibility. Modern managerial finance theory operates on the assumption that the primary goal of the business is to maximize wealth of its stack holder, which translates into maximize the price of the firm's common stock. The other goal mentioned above also influence the company's policy but are less important than stock price maximization.(Financial Management, Third edition, by Jaek. shim and Joel G. siegel.)
In past various research was done in the field of Financial Management of various industries have been reviewed during the literature review. Research was done in past for the topic of glass industries, but very few have talked about financial management.

RESEARCH METHODOLOGY

OBJECTIVE
To examine the financial management of sample units of flat glass.
HYPOTHESIS
All the sample units of the flat glass industries are not equally financial managed/sound.
PERIOD OF STUDY
Sample for five financial years i.e.2006-07, 2007-08, 2008-09,2009-10 and 2010-11 have been used for the purpose of present research work. A study of five years seems to be appropriate for establishing a trend.
STATISTICAL TECHNIQUES USED
The present study has analyzed the financial management of Nine flat glass companies. In order to evaluate and compare the financial management of selected industries Ratio analysis techniques and average mean has been used.
DATA COLLECTION
The present study is mainly based on secondary data which were collected from the annual reports, published research reports by various flat glass industries, and related websites.

RESULT AND DISCUSSIONS

(A) Inter company Analysis
(I) Profitability Ratio
(A)Net profit Ratio

TABLE 1: NET PROFIT RATIO

Years	ASAHI INDIA GLASS LIMITED	BHARAT GLASS TUBE LIMITED	GOLD PLUS GLASS INDUSTRY LIMITED*	GOPAL GLASS WORKS LTD	GUJARAT BOROSIL LIMITED	GUJARAT GUARDIAN LIMITED	HNG FLOAT GLASS LTD*	SAINT GOBAIN GLASS INDIA LIMITED**	TRIVENI GLASS LIMITED
2006-07	4.82	(0.13)	-	2.87	9.02	22.92	-	4.56	(13.72)
2007-08	1.16	0.37	-	3.34	6.03	17.68	-	-	(45.88)
2008-09	(3.08)	1.77	(9.59)	0.70	6.62	17.72	(225.97)	5.02	(48.25)
2009-10	0.08	(8.12)	(8.73)	2.53	(1.10)	12.87	(78.03)	8.45	(29.64)
2010-11	0.93	2.49	(25.11)	1.09	(22.18)	3.23	(13.98)	10.87	(52.36)

*Started commercial production in 2008-09
** Accounts prepared for 15 months from 1st January 2008 to 31st March 2009 in year 2009.

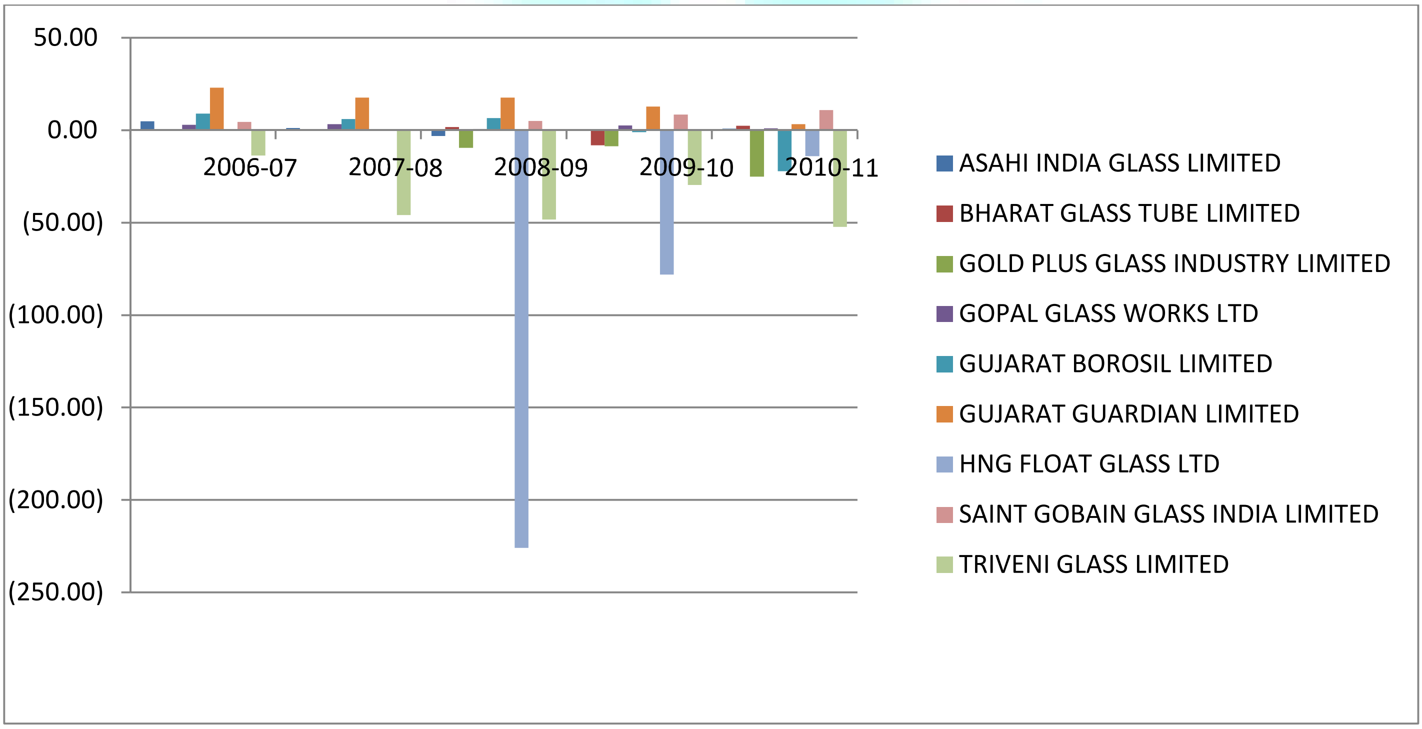


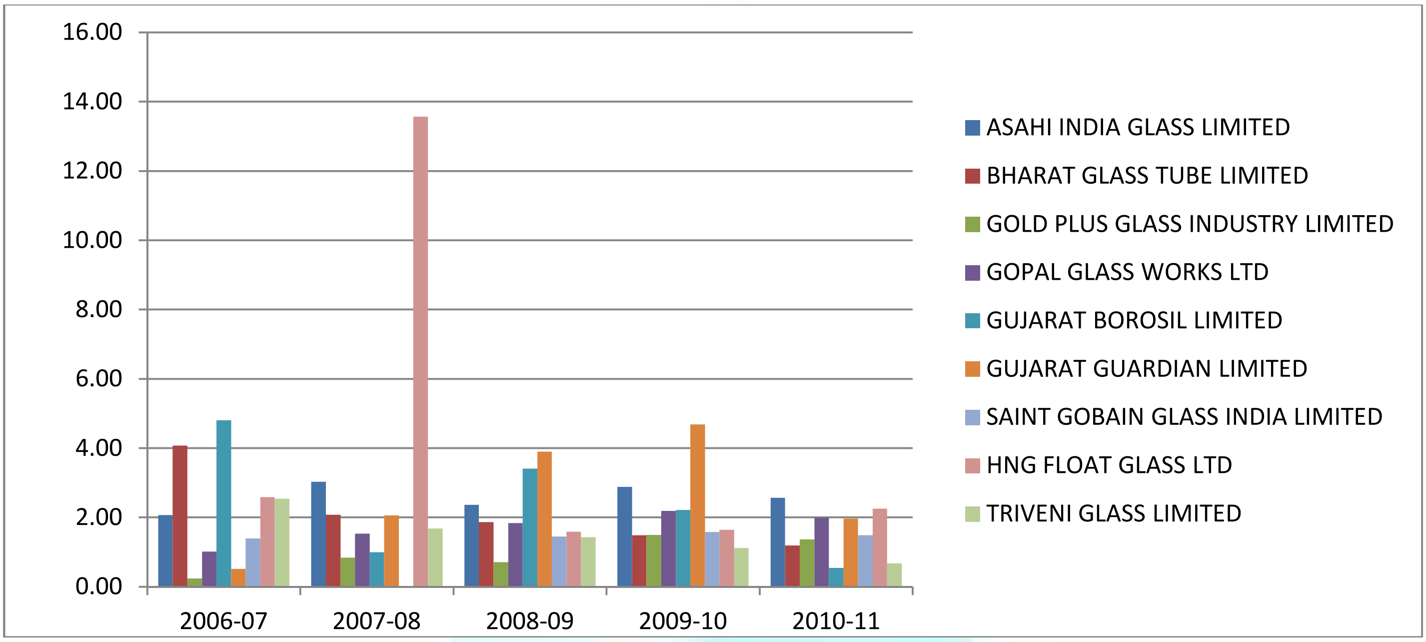
Table: 1 shows the Net Profit ratio of selected units of flat glass Industries. It shows that that the %age of Net profit is declining in each year other than M/S Saint Gobain Glass India Ltd.

(II)Financial Position

(A) Current Ratio

TABLE 2: CURRENT RATIO

Years	ASAHI INDIA GLASS LIMITED	BHARAT GLASS TUBE LIMITED	GOLD PLUS GLASS INDUSTRY LIMITED	GOPAL GLASS WORKS LTD	GUJARAT BOROSIL LIMITED	GUJARAT GUARDIAN LIMITED	SAINT GOBAIN GLASS INDIA LIMITED	HNG FLOAT GLASS LTD	TRIVENI GLASS LIMITED
2006-07	2.07	4.08	0.24	1.01	4.81	0.52	1.40	2.59	2.54
2007-08	3.03	2.08	0.84	1.53	1.00	2.06	-	13.57	1.68
2008-09	2.36	1.87	0.71	1.84	3.41	3.90	1.45	1.59	1.43
2009-10	2.88	1.49	1.50	2.19	2.22	4.68	1.58	1.64	1.12
2010-11	2.57	1.19	1.36	2.00	0.54	1.97	1.49	2.26	0.67



Current Ratio is the study of current assets and current liability. Current Ratio of the company is 2 is good, less than 1 which is show's that current assets of company is insufficient to discharge it's current liabilities. Table 2 shows that Asahi India Glass Ltd has adequate current ratio.

ACID TEST RATIO

TABLE 3: ACID TEST RATIO

Years	ASAHI INDIA GLASS LIMITED	BHARAT GLASS TUBE LIMITED	GOLD PLUS GLASS INDUSTRY LIMITED	GOPAL GLASS WORKS LTD	GUJARAT BOROSIL LIMITED	GUJARAT GUARDIAN LIMITED	SAINT GOBAIN GLASS INDIA LIMITED	HNG FLOAT GLASS LTD	TRIVENI GLASS LIMITED
2006-07	1.00	3.30	0.24	0.63	4.03	0.35	0.83	2.59	1.32
2007-08	1.25	1.55	0.84	0.90	0.82	1.36	-	13.45	1.18
2008-09	1.12	1.07	0.27	1.34	2.82	1.87	0.84	1.53	1.03
2009-10	1.43	0.98	0.61	1.49	1.56	1.39	0.95	1.14	0.97
2010-11	1.25	0.77	0.64	1.43	0.29	1.08	0.85	1.35	0.54

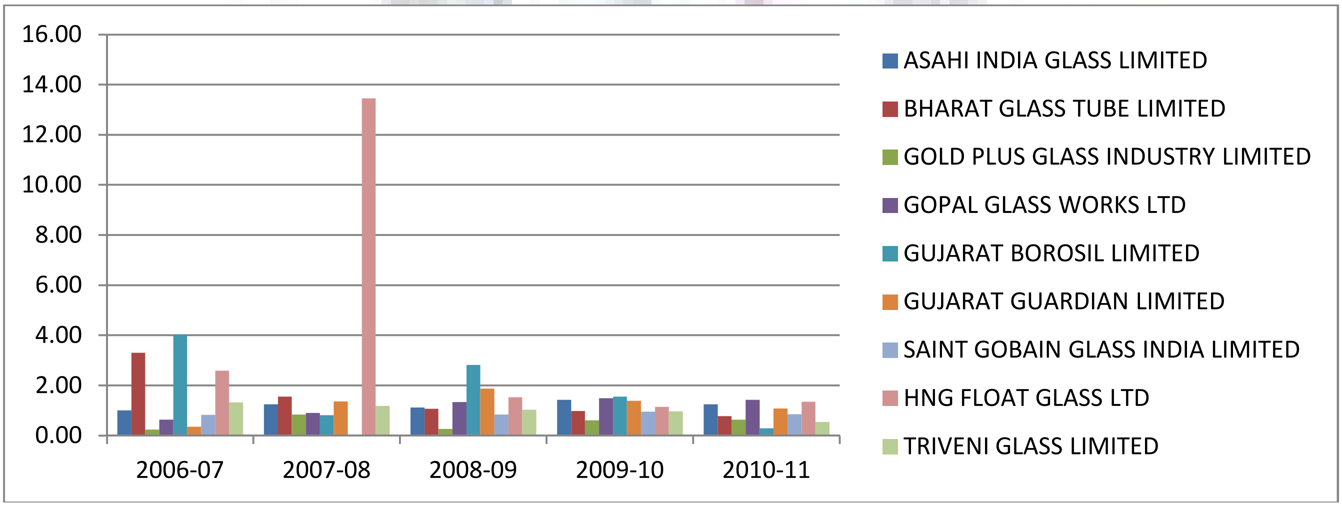
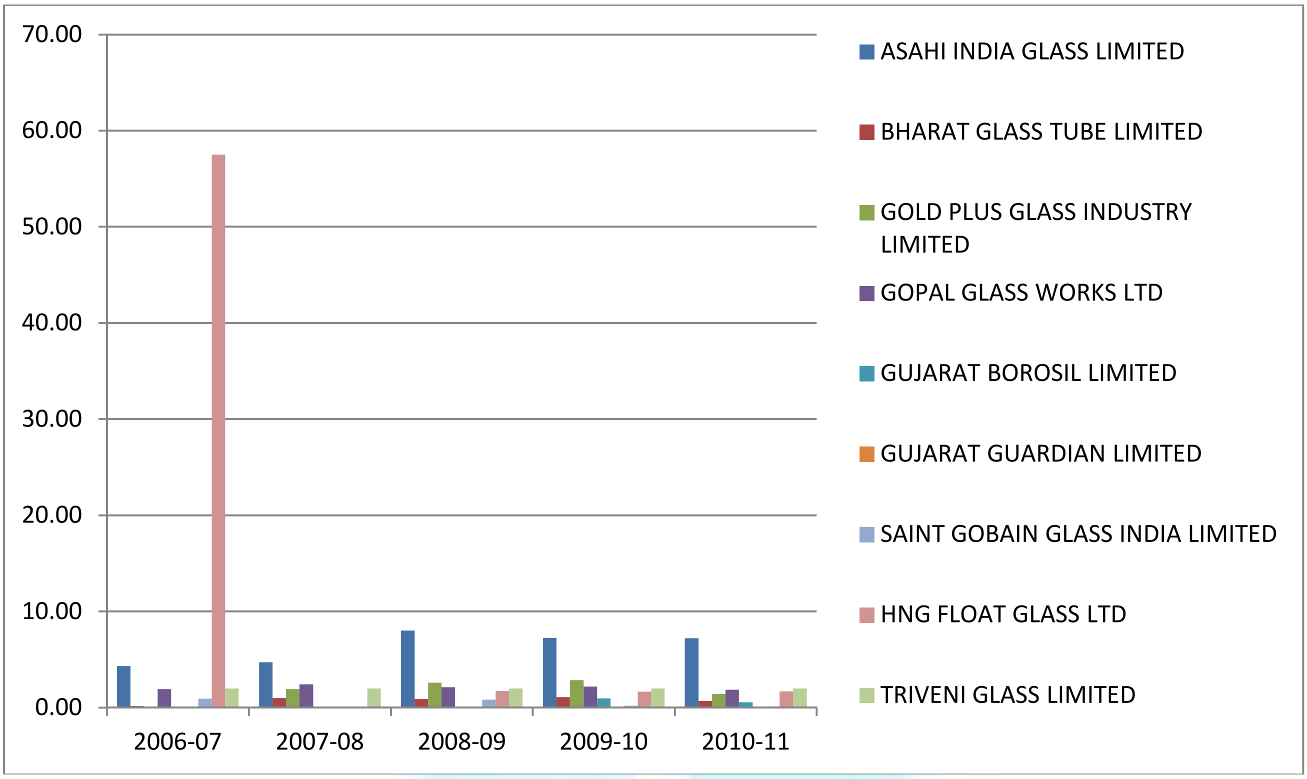


Table: 3 shows that all the companies has sufficient quick ratio, almost all companies' liquidity position is good. Asahi India Glass Ltd has sufficient quick Ratio and liquidity position is sound in comparison of other companies.

DEBT EQUITY RATIO

TABLE 4: DEBT EQUITY RATIO

Years	ASAHI INDIA GLASS LIMITED	BHARAT GLASS TUBE LIMITED	GOLD PLUS GLASS INDUSTRY LIMITED	GOPAL GLASS WORKS LTD	GUJARAT BOROSIL LIMITED	GUJARAT GUARDIAN LIMITED	SAINT GOBAIN GLASS INDIA LIMITED	HNG FLOAT GLASS LTD2	TRIVENI GLASS LIMITED
2006-07	4.32	0.16	0.00	1.91	0.00	0.01	0.92	57.52	2.00
2007-08	4.73	0.99	1.92	2.42	0.02	0.01	-	0.00	2.00
2008-09	8.01	0.89	2.58	2.13	0.06	0.00	0.84	1.72	2.00
2009-10	7.24	1.08	2.85	2.19	0.97	0.00	0.20	1.66	2.00
2010-11	7.20	0.68	1.42	1.85	0.56	0.00	0.14	1.69	2.00

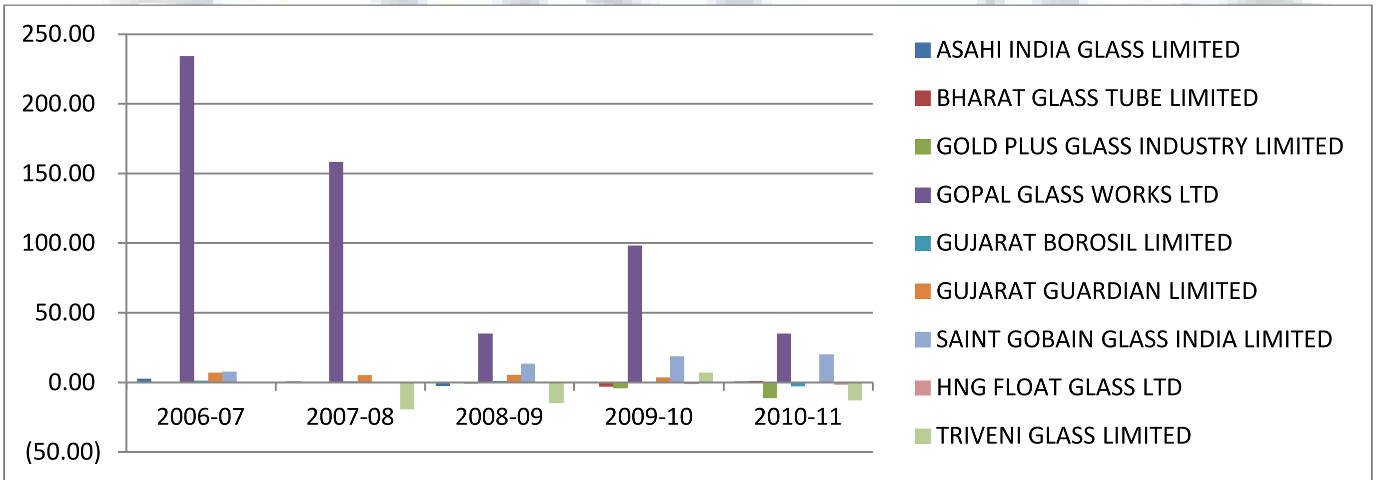


Debt –equity Ratio indicates proportion of debt-equity of the company is using to finance its assets. Debt-equity Ratio of Asahi India Glass Ltd and Triveni Glass Ltd is too high and company arrange fund from debt. In case of debt equity Ratio of Bharat Glass Tube Ltd and Saint Gobain Glass India Ltd is low.

EPS RATIO

TABLE 5: EARNING PER SHARE

Years	ASAHI INDIA GLASS LIMITED	BHARAT GLASS TUBE LIMITED	GOLD PLUS GLASS INDUSTRY LIMITED	GOPAL GLASS WORKS LTD	GUJARAT BOROSIL LIMITED	GUJARAT GUARDIAN LIMITED	SAINT GOBAIN GLASS INDIA LIMITED	HNG FLOAT GLASS LTD	TRIVENI GLASS LIMITED
2006-07	2.63	(0.03)	-	234.30	1.40	7.07	7.72	0.00	(0.24)
2007-08	0.83	0.05	-	158.25	0.82	5.16	0.00	0.00	(19.44)
2008-09	(2.54)	0.74	(0.89)	35.03	1.00	5.43	13.41	(0.40)	(14.70)
2009-10	0.08	(3.12)	(4.28)	98.36	(0.14)	3.59	18.76	(1.23)	7.08
2010-11	0.95	0.98	(11.29)	35.13	(2.77)	0.71	20.18	(1.69)	(12.83)

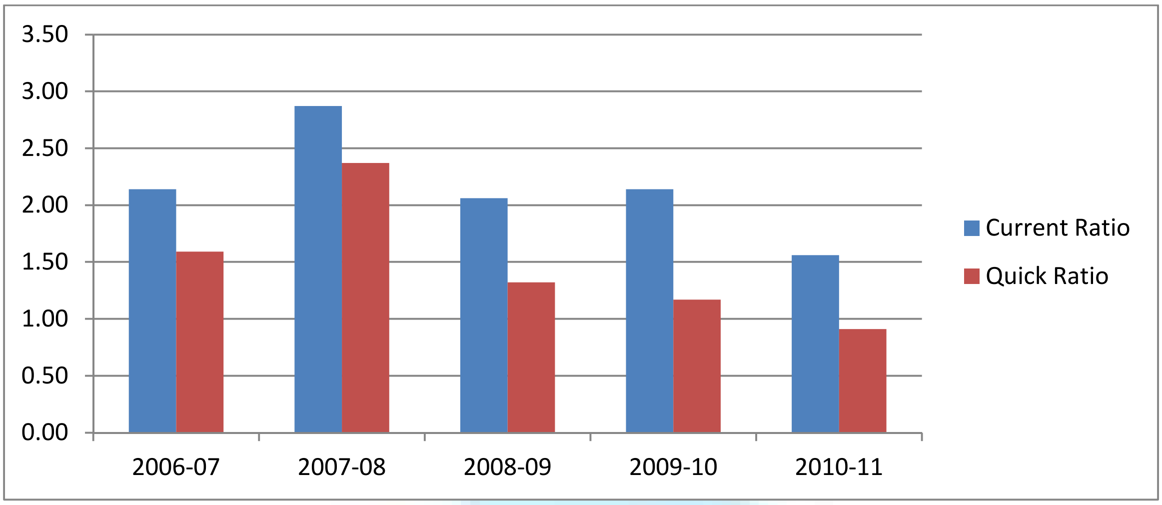


EPS ahows the earning/share for share holders.Table 5 shows that in year 2006-07 to 2010-11 EPS of Gopal Glass Ltd was highest.

INDUSTRY ANALYSIS INTRA ANALYSIS

TABLE: 6

Years	Current Ratio	Quick Ratio
2006-07	2.14	1.59
2007-08	2.87	2.37
2008-09	2.06	1.32
2009-10	2.14	1.17
2010-11	1.56	0.91

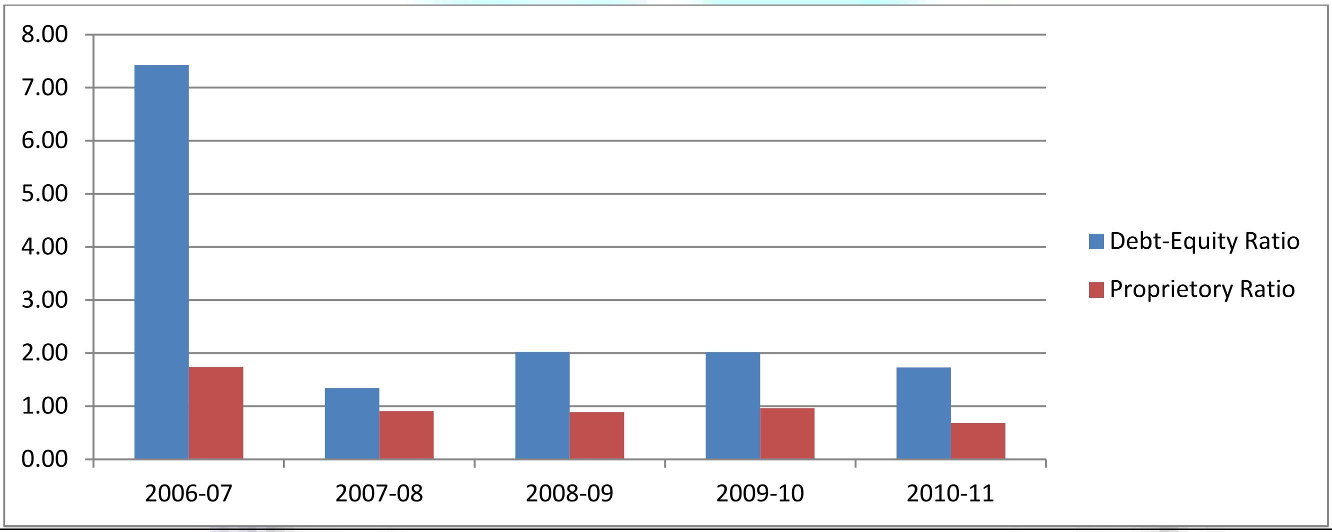


Current Ratio of the company 2:1 is satisfactory, which shows that all companies current assets are sufficient to pay off the current liabilities. A quick Ratio of 1:1 is considered satisfactory. All companies Quick Ratio is satisfactory.

SOLVENCY ANALYSIS

TABLE 7: SOLVENCY RATIO

Years	Debt-Equity Ratio	Proprietary Ratio
2006-07	7.43	1.74
2007-08	1.34	0.91
2008-09	2.03	0.89
2009-10	2.02	0.96
2010-11	1.73	0.68

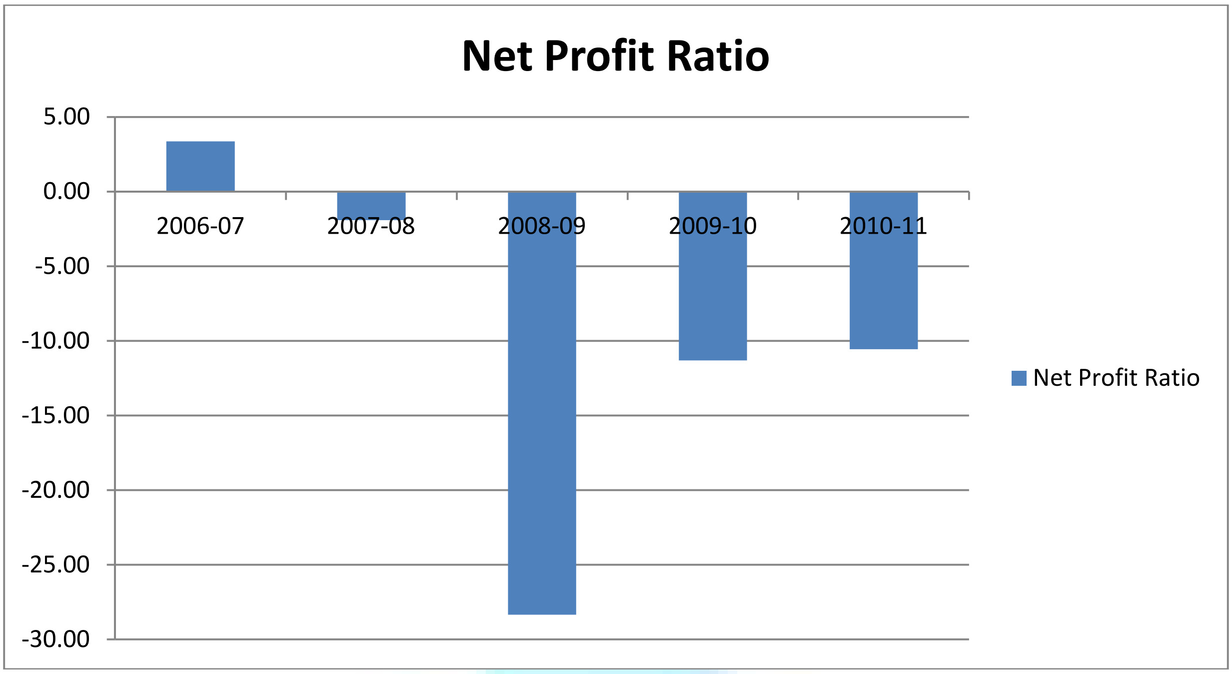


The overall solvency Ratio is unfavorable from shareholder point of view. Debt is higher in comparison of own Investment.

PROFITABILITY RATIO

TABLE 8: PROFITABILITY RATIO

Years	Net Profit Ratio
2006-07	3.37
2007-08	-1.92
2008-09	-28.34
2009-10	-11.30
2010-11	-10.56

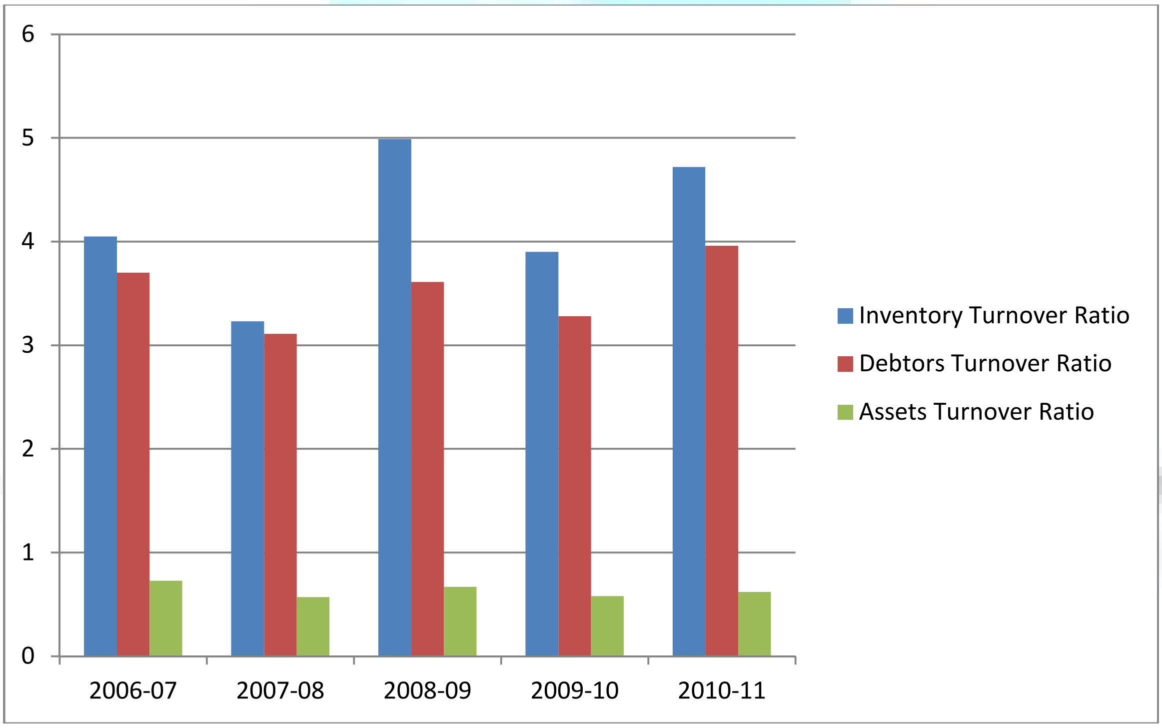


The Net profit Ratio is Negative in all years except 2006-07.The Net Profit indicates that the overall Profit in the industries is decreasing which indicates weak financial position of Flat Glass Industries.

EFFICIENCY RATIO

TABLE 9: EFFICIENCY RATIO

Years	Inventory Turnover Ratio	Debtors Turnover Ratio	Assets Turnover Ratio
2006-07	4.05	3.70	.73
2007-08	3.23	3.11	.57
2008-09	4.99	3.61	.67
2009-10	3.90	3.28	.58
2010-11	4.72	3.96	.62



In 2010-11the stock turnover ratio is very high, which indicates Flat glass Industries has a less investment in Inventories. The Higher Debtors Turnover Ratio Indicates that debtors are more liquid, which is highest in year 2008-09.The total Assets turnover ratio shows the efficiency of fixed assets.

FINDINGS

The observations and findings of present study are as under:

1. Profitability: Decline
2. Working Capital: Satisfactory managed.
3. Solvency: Not Good.
4. Financial Strength: Not Satisfactory.

On the basis of the analysis of profitability ,working capital and solvency, It can be concluded that the overall performance of selected Nine companies of flat glass profitability is decline, short term financial position of satisfactory, company able to manage its working capital cycle satisfactorily and solvency position of selected companies are not up to mark.

CONCLUSION
Indian Flat Glass Industries is independent industry. Industry has a mix of indian and multinational companies. It has a large domestic and export market. The main problems with Flat glass industries in india are relating to high cost of Raw Material like Soda ash, fuel prices, Cheaper import from China which require immediate imposition of anti dumping duty to safeguard domestic industries. One main causes of losses in this industries is turbulent Internal/external environment and thought competition which results in decrease in selling prices. Form the above study we can concluded that All Units of Flat Glass Industries of India are not equally Financially sound.

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SECURITY ISSUES IN DBMS

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ABSTRACT

As data is very important for an organization so its security is very sensitive issue. In this paper these security issues and threats are discussed. As there are four major concepts related to the security of data which are confidentiality, integrity, authentication and non-repudiation. After that security issues are discussed like daily Daily Maintenance, Varied Security Methods for Applications, Post-Upgrade Evaluation, Split the Position, Application Spoofing, Manage User Passwords, Windows OS Flaws, Site failure, Network problems are considered . We have discussed just a few of the database security problems that exist within organizations. The best way to avoid a lot of these problems is to employ qualified personnel and separate the security responsibilities from the daily database maintenance responsibilities. There is a vast scope of research in this field. I have tried to raise the issues only.

KEYWORDS

Application spoofing ,authentication confidentiality, integrity, and non-repudiation.

INTRODUCTION

The importance of data varies from one organization to another. Data can be classified as sensitive, confidential, private, proprietary and public. There are four major concepts related to the security of data: confidentiality, integrity, authentication and non-repudiation. Confidentiality means keeping a secret. Integrity means preserving the contents of a message between the sender and he receiver. Authentication means identifying a user or a system before they can access any data. Non-repudiation means preventing the denial of an action. Security can be achieved by using cryptography, an art of codifying data/messages. Cryptography involves encryption and decryption. In encryption, a readable message is transformed into an unreadable format.

THREATS AND RISKS OF DATA

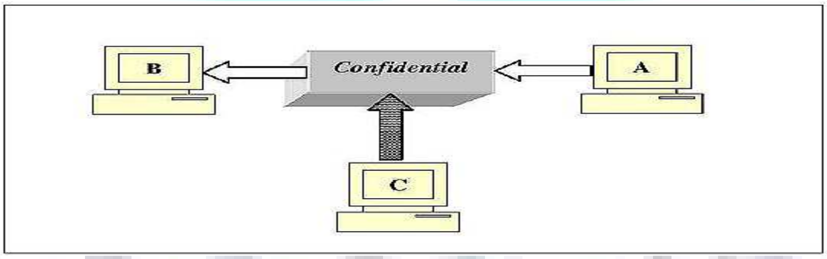
There are certain principles of security. If these principles are broken, then the security of the information is under threat. It then poses significant risks to the information. Let us assume that person A wants to send a paper check worth Rs 10000 to person B. What are the factors that A and B will think of in such a case? Person A will write the check for Rs10000, put it inside an envelope, and send it to B.

- Person A would like to make sure that no one except B gets the envelope, and even if someone does they do not get to know about the details of the check. This is the principle of **confidentiality**.
- Persons A and B would like to ensure that no one can tamper with the contents of the check (such as the date, amount, signature and payee details). This is the principle of **integrity**

CONFIDENTALITY

The principle of *confidentiality* specifies that only the sender and the intended recipient(s) should be able to access the contents of a message. Confidentiality gets lost if an unauthorised person is able to access the contents of a message. An example of compromising the confidentiality of a message is illustrated in figure 1. As we can see, user A has sent a message to user B. Another user, C (an *attacker*), somehow accesses this message, which is not desired and therefore defeats the purpose of confidentiality. This type of attack is called **interception**.

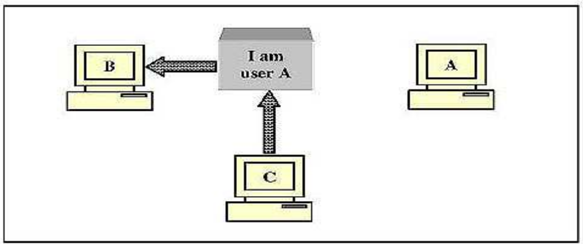
FIGURE 1: LOSS OF COFIDENTIALITY



AUTHENTICATION

Authentication helps establish proof of identity. The authentication mechanism ensures that the origin of a message or document is correctly identified. For instance, suppose user C sends an electronic document over a computer network to user B by posing as user A. How would user B know that the message has come from user C, who is posing as user A? A real-life example of this could be a case of user C, posing as user A, sending a purchase request to merchant B. The merchant might willingly send the goods to C thinking that user A has requested for the goods! This concept is shown in figure 2.This type of attack is called **fabrication**.

FIGURE 2: ABSENCE OF AUTHENTICATION



INTEGRITY

When the contents of a message are altered after the sender sends it, but before it reaches the intended recipient, we say that the *integrity* of the message is lost .For example, suppose a check for Rs10000 is issued to pay for some order. However, when the issuer sees his next account statement, he is amazed to see that the check has resulted in a payment of Rs 100000 This is a case of loss of message integrity. This type of attack is called **modification**.

NON-REPUDIATION

There are situations where a user sends a message and later denies having sent it. For example, suppose user A sends a funds transfer request to bank B. After the bank executes the funds transfer as per the instructions A says that the funds transfer instruction to the bank was never sent. Thus, A repudiates, or denies, the funds transfer instruction. The principle of *non-repudiation* defeats possibilities of denying something after having done it

*Distributed databases allow sharing of data across cities, states, countries, and continents. It is truly a magnificient technology, which was unthinkable even a few years ago.*Several problems arise while dealing with concurrency control and recovery issues in distributed database systems. These problems are specific to distributed databases, and are not observed in centralised database systems due to multiple entry points , exchange of encryption keys over network and corrupted nodes . Some of the main problems are listed below.

DATABASE SECURITY ISSUES

- **Daily Maintenance:** Database audit logs require daily review to make certain that there has been no data misuse. This requires overseeing database privileges and then consistently updating user access accounts. Different types of access control for different users and assesses new programs that are performing with the database can be provided by the database security manager. If these tasks are performed on a daily basis, you can avoid a lot of problems with users that may pose a threat to the security of the database.
- **Varied Security Methods for Applications:** More often than not applications developers will vary the methods of security for different applications that are being utilized within the database. This can create difficulty with creating policies for accessing the applications. The database must also possess the proper access controls for regulating the varying methods of security otherwise sensitive data is at risk.
- **Post-Upgrade Evaluation:** When a database is upgraded it is necessary for the administrator to perform a post-upgrade evaluation to ensure that security is consistent across all programs. Failure to perform this operation opens up the database to attack.
- **Split the Position:** Sometimes organizations fail to split the duties between the IT administrator and the database security manager. Instead the company tries to cut costs by having the IT administrator do everything. This action can significantly compromise the security of the data due to the responsibilities involved with both positions. The IT administrator should manage the database while the security manager performs all of the daily security processes.
- **Application Spoofing:** Hackers are capable of creating applications that resemble the existing applications connected to the database. These unauthorized applications are often difficult to identify and allow hackers access to the database via the application in disguise.
- **Manage User Passwords:** Sometimes IT database security managers will forget to remove IDs and access privileges of former users which leads to password vulnerabilities in the database. Password rules and maintenance needs to be strictly enforced to avoid opening up the database to unauthorized users.
- **Windows OS Flaws:** Windows operating systems are not effective when it comes to database security. Often theft of passwords is prevalent as well as denial of service issues. The database security manager can take precautions through routine daily maintenance checks.
- **Site failure**: There are situations when one or more sites in a DDBMS fail. In such situations, it is important that the DDBMS continues functioning. When the sites resume functioning, they must be brought back to the state of the other sites. In other words, the consistency and integrity of the database must be restored.
- **Network problems**: Many times, the communication network fails, causing one or more sites to be cut off from the rest of the sites in a DDBMS environment. An extreme case is when the sites in a DDBMS environment are cut into two portions. This is called **network portioning**. In this case, a site can communicate with other sites that belong to the same side of the partition, but not with any site that belongs to the other side of the partition.

CONCLUSION

Distributed database systems are a reality. Many organizations are now deploying distributed database systems. Therefore, we have no choice but to ensure that these systems operate in a secure environment and integrity. Security is concerned with the assurance of confidentiality, integrity, and availability of information in all forms. There are many tools and techniques that can support the management of distributed database. We have discussed just a few of the **database security** problems that exist within organizations. The best way to avoid a lot of these problems is to employ qualified personnel and separate the security responsibilities from the daily database maintenance responsibilities. We are in the process of investigating schemes by which the performance of high security level transactions can be improved without compromising with the security. Further we are looking to secure real time distributed systems by which the performance of high security level transactions can be improved without compromising the security.

FURTHER SCOPE

1. There are various issues in database security in an organization. These issues can be considered one by one and solution can be found. Here , I have only discussed the issues and technical solution of these is matter of research.
2. New and effective algorithms for daily maintenance of distributed databases.
3. Methods to find solutions which can provide high level security to databases during access.
4. To find secure real world to distributed databases.

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A STUDY OF MOTIVATIONAL FACTORS FOR THE EMPLOYEES OF A POULTRY INDUSTRY

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ABSTRACT
The study aims at bringing out the factors which motivate the managerial and office level employees of the service industry, which is a poultry firm. The study was conducted by means of a questionnaire covering twenty-five motivational factors and fringe and benefits present and expected from the firm. Samples were obtained from one hundred one employees and the sampling method adopted is proportionate stratified random sampling. The study has thus successfully brought out the motivational factors already prevalent in the firm and the factors which would motivate the two categories of employees further.

KEYWORDS
motiovation, poultry industry.

INTRODUCTION
MOTIVATION
The term 'motivation was originally derived from the Latin word 'movere' which means to move (straub, 1999). However, this one word is obviously an inadequate definition for our purposes here. Hence, motivation can be defined as the process that account for an individuals intensity, direction and persistence of effort toward attaining a goal (Robbins, 2002).

Motivation is the key to organizational effectiveness. Managers in general has to get the work done through others. These 'others' are human assets or resources. Human resources are the total knowledge, skill talents and creative abilities motivating means stimulating all the above assets for the best possible use for accomplishing the organizational objectives (Nirmal, 2001).

Significance of motivation:

The importance of motivation is heightened by the fact that every human right from the childhood craves for motivation. Just take the case of a child making its first step. When his loved one stretches out the hand he is motivated to take small steps to reach the target. Thus knowingly or unknowingly motivation has been playing a significant role in our lives over the years (Richard and Lyman, 1979).

The basic definition of a manager is a person who gets things done through others. But for the success of modern business, this definition has to be modified to, "a person who gets things done through others by maintaining their satisfaction level. This is indeed a very difficult task and here comes the role of motivation. (Thad, 2001)

MOTIVATIONAL FACTORS
This brings us to the question as to what are motivational factors. Several theories have been formed over the years to indicate these factors. But the factors vary to some extent from one organization to another. In this study the researcher has tried to collect data from the three categories of employees – managers and office staff to see what motivates each category. This was done by considering around twenty-five motivational factors described in a questionnaire having about 150 questions.

NEED FOR THE STUDY
Through several theories of motivation have originated over the years, difficulty arises with the fact that motivational factors vary from organization to organization and among individuals. This it was essential to conduct the study and to find what motivates the three categories of employees in the organization.

RELEVANCE OF THE STUDY IN THE POULTRY FIRM
The study was conducted in a leading poultry firm based in Madhya Pradesh having around one hundred twenty branches all over India. It is a vast expanding and diversifying organization with around three thousand employees. In this scenario the role of human resource is very much improving in the organization. Due to the throat-cut and fierce competition and wide range of opportunities available, the employees are looking for better openings and thus the relevance of finding the existing motivation level in the organization and also finding the factors which should further motivate the employees.

SCOPE OF THE STUDY
Pertaining to certain factors which can be specific to the organization, the rest could be generalized. Thus the findings of the study could be generalized to get a whole view of the motivational aspect pertaining to the employees in any organization, especially in the managerial and office staff levels.

OBJECTIVES OF THE STUDY
To find the various factors motivating the managerial and office staff and worker levels of employees in the organization.

MOTIVATIONAL FACTORS
Twenty factors have been considered in the questionnaire along with sub-factors to being out the motivational aspects of the employees. These factors are:
1. Training and Development;
2. Learning opportunities;
3. Team work;
4. Compensation;
5. Growth;
6. Goal;
7. Recognition for good work done;
8. Rewards;
9. Job security and welfare;
10. Change;
11. Relational;
12. Team Work;
13. Work;
14. Feed Back

15. Company policy and Administration
16. Fringes and Benefits;
17. Opportunity for promotion;
18. Comfortable working conditions
19. Good Supervision
20. Personal growth and Development

METHODOLOGY

The sampling method adopted is proportionate stratified random sampling where data was obtained from 25% of the total managers (31), and office staff (70) adding to a total of one hundred one employees. The questionnaire followed the facts five point rating scale. The analytical tools are the arithmetic mean and the cross tabulations.

ANALYSIS AND INTERPRETATION

Analysis was done based on the data provided by the employees based on the five point scale for each of the one hundred fifty questions. This is further condensed to fit the various motivational factors. Three tables are given to the motivational factors and the fringes and benefits present and expected from the organization.

The table below shows the satisfactory level of the two categories of employees. The percentage of the employees who are satisfied with the twenty five motivational factors and their sub-factors are indicated here.

TABLE 1

Factors	Managers (%)	Office staff (%)
1.Administrative policies	11.5	42.6
2.Change	20.3	36.5
3.Goals-participative Decision making	37.2	34.5
4.Goals-specific targets	37.2	34.5
5.Goals-responsibility	64.5	63.3
6.Growth-status and power	64.6	83.3
7.Growth-Respect	80.5	68.7
8.Growth-Drive to succeed and advancement	82.5	80
9.Growth-Self fulfillment and creativity	64.5	67.5
10. Team work	82.6	70.5
11. Compensation	67.5	75.7
12. Reward-Promotion	8.2	22.0
13. Reward-specific	64.7	54.7
14. Learning opportunities	56.2	72.4
15. Training	55.4	76.9
16. Relational-Customers	96.8	53.2
17. Relational-Supervisors	89.9	76.7
18. Work-Environment	82.6	90.8
19. Work-Freedom and standard	64.5	77.7
20. Job security and welfare	38.5	21
21. Recognition for good work done	28.7	45.6
22. Personal growth and development	37.5	27.8
23. Good supervision and comfortable working conditions.	51.9	39.5
24. Feed Back-customers and employees	46.5	64.2
25. Feed Back-others	56.6	70.3

The motivational level of both the managers and the office staff are seen from the above table. High rating is obtained concerning the motivational factor 'relation with the customers' but not so in the case of factors like 'Reward-Promotion'. It is also seen that the satisfaction levels are low and medium in most of the cases

Table 2 shows the percentage of managers and office staff who satisfied that the organization provides them the following fringes and benefits. These benefits were taken after discussions and consulting the top management of the organization and finding what are the fringes and benefits already provided to the employees.

TABLE 2: FRINGES AND BENEFITS-PRESENT IN THE ORGANIZATION

Benefits	Managers	Office-staff
Petrol Allowances	74.9	68.5
TA and DA	62.4	51.7
Bonus	76.6	90
Medical Allowances	63.2	32.5
Employee Provident Fund	80.9	80
House Loan Allowance	70.6	56.3
Company Conveyance	50.5	30.5
Personal Loans	71.5	62.3
Gratuity	75.2	35.9
Festival Allowance	20.5	72.5
Group Insurance	72.3	68.2

Thus, the percentage of managers who avail these benefits are more when compared to that of the office staff. Majority of the employees obtain the benefits like the provident fund but lacks benefit like festival allowances

Table 3 shows the percentage of managers and office staff who expects the following fringes and benefits from the organization. These benefits were taken by comparing those benefits offered in other organizations of the same nature.

Thus, it can be seen that the employees are not much inclined towards other allowances but would prefer benefits of monetary nature like allowances. Majority of the employees do not prefer sports and games but would like to obtain benefits like medical insurance and yearend profit sharing.

FINDINGS

From the above tables several findings are brought out in relation to each twenty five motivational factors and the fringes and benefits as described below:

ADMINISTRATIVE POLICIES

- Office staff are more happy with the administrative policies when compared to that of the managers.

CHANGE

- Both the managers and the office staff are dissatisfied in their opinion concerning the change in the organization.

GOALS

- Majority of the employees in both the categories are neutral in their opinion concerning the specificity of the goals and the challenging targets.
- Both categories of employees are neutral in their opinion concerning goals-responsibility.

GROWTH

- Only about 65% of the managers are satisfied with the status of their position. Whereas more than 80% of the office staff are satisfied with the status.
- Managers are very much satisfied with the respect they obtain from the organization whereas office staff are not very much satisfied.
- All the managers and most of the office-staff feel they are capable of advancing further in their carriers.
- Both the categories of employees are not much satisfied with the creativity and self-fulfillment.

TEAM WORK

- Majority of both categories of employees feel there exists adequate team work in the organization.

COMPENSATION

- The Percentage of office staff who are satisfied with the compensation is much higher than that compared to managers.

REWARDS

- Almost all managers and half of the office staff are dissatisfied with the promotion provided.
- Employees are looking for more promotional opportunities.
- Managers would be greatly encouraged if specific awards are introduced.

LEARNING OPPORTUNITIES

- Managers are not much satisfied regarding the learning opportunities provided to them when compared to the office staff.

TRAINING

- Both the managers and the office staff are happy with the training and development provided especially, induction and job related training.

RELATION

- Majority of the managers and the office staff are happy with the relation existing between the customers and the office staff. But the managers are more satisfied when compared to that of the office staff.
- Concerning relation existing with the co-workers, office staffs are more satisfied when compared to that of the managers.

WORK

- Majority of the managers and the office staff are satisfied with the work environment in the organization.
- Majority of the managers and the office staff are neutral in their opinion regarding work environment and freedom of work.

JOB SECURITY AND WELFARE

- Most of the managers and the office staff are not satisfied with the job security and welfare they obtained in the organization.

FEED BACK

- Majority of the managers feel that no regular feed back exists among themselves and from the customers.
- Both the managers and the office staff are happy with the feed back obtained from others.

FRINGES AND BENEFITS

- Managers and the office staff are provide with petrol allowances, Bonus and Employees provident fund.
- Most of the employees do not avail company conveyance.
- Half the managers get loans for the purchase of vehicles and house but majority of the office staff do not get it.
- Free or subsidized lunch are not being provided to neither of the categories.
- Managers prefer medical insurance to a large extent.

RECOMMENDATIONS

The following recommendations are given based on the findings obtained from the study.

ADMINISTRATIVE POLICIES:

- Managers should be involved in the selection criteria in selection the employees of his own Department/Branch.

CHANGE

- Variations could be provided in terms of job rotation to the office staff in their own levels.
- Exposure to different branches/departments. Could be provided for some time to the employees.
- National Wise seminars and meetings could be help for the employees so that they get more exposure.

GOALS

- Each branch could be considered as an intact work group and weekly meetings could be conducted where common goals could be taken and frequent review of these goals occurs.

GROWTH

- Target related awards and specific awards like the Best Department/Branch could be considered for managers to improve their status.
- Frequent evaluation of performance of office staff could be done and adequate recognition could be provided to boost their morale and henceforth distinguish from the performer and the non-performer.
- Specific training programmes to aid creativity and personality development could be organized to improve their career growth in the organization.

TEAM WORK AND RELATIONS

- Facilities could be provided for interaction with other employees like frequent get together and seminars.

COMPENSATION

- Performance appraisal based compensations could be provided to all levels of employees.
- Monetary incentives and increments have to be provided to all levels of employees based on the cost of living and the industrial standards available.

LEARNING OPPORTUNITIES

- Managers could be sent personality development programmes and nations wide seminars which would provided them more exposure. They could also be given frequent transfer to other branches so that they could mingle with new faces and get to know what is happening in other branches. This would help them in better decision-making.
- Opportunities could be provided for the managers where they could pursue their higher studies along with their jobs.

TRAINING

- Training should be provided for stress management and psychologically motivating aspects.

- Technological oriented training could be provided to the managers.

WORK

- Recreational activities could be provided to the employees like television sets, soft music in the background to bring down the stress filled atmosphere in the organization.

FEED BACK

- 360 degree performance appraisal system could be introduced in the organization where feedback can be exchanged among all categories of employees.
- Feedback survey can be conducted among the regular customers.

JOB SECURITY AND WELFARE

- A grievance cell could be formed where employees could freely tell their grievances problems and complaints. Regular job satisfaction surveys, attitude surveys and surveys to find the morale of the employees should be conducted.

FRINGES AND BENEFITS

- Personal loans should be provided to the employees especially the managers.
- Medical insurance should be provided to the office-staff.
- Leave facilities for office staff could be improved by providing them options like leave travel concessions.
- TA and DA should be provided to all the employees.
- House Loan allowance and employee get together should be provided.

CONCLUSION

The study reveals that the employees are satisfied with team work, relation existing among the various levels of employees, training and development, feedback and work environment. Employees are neutral in their opinion concerning the growth aspects, rewards, goals, change, administrative policies, job security and welfare. Employees are very much dissatisfied with the Reward-Promotion they got in the organization.

Hence it is concluded from the study that the employees could be motivated by providing the factors relating to Promotion, Welfare, Job security, Change, Recognition for good work, Personal growth and development.

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AN ANALYSIS OF WORKING CAPITAL MANAGEMENT EFFICIENCY IN INDIAN TEXTILE INDUSTRY

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ABSTRACT

The objective of Working Capital Management is to make certain that the firm is able to carry on its operations and that it has enough cash flow to satisfy both maturing short-term debt and upcoming operational expenses. In order to improve the working capital management practices, it is essential for the finance managers to adopt a proper approach of working capital decisions making to drive their respective firms towards success in order to generate the value for the shareholders. Textile Industry in India is the second largest employment generator after agriculture. The industry employs about 35 million people and contributes to approximately 4% of the GDP of India and 17% of the country's export earnings. Indian textiles industry also contributes nearly 14% of total industrial production of the country. Therefore, in this paper investigates the Effective management of working capital in Indian Textile Industry. The data required for the study was collected from Annual report of the company, financial statements of the SHREE NARAYAN SILK HOUSE PVT. LTD. for the period of 4 years, from 2008 to 2011.

JEL CODE
G3

KEYWORDS
liquidity, profitability, Textile Industry, Working Capital Management.

INTRODUCTION

Textile Industry in India is the second largest employment generator after agriculture. It holds significant status in India as it provides one of the most fundamental necessities to the people. Textile industry was one of the earliest industries to come into existence in India. In fact Indian textile industry is the second largest in the world. The Indian Textile Industry is as diverse, large, colorful yet full of complexity like the country itself. The industry employs about 35 million people and contributes to approximately 4% of the GDP of India and 17% of the country's export earnings. Indian textiles industry also contributes nearly 14% of total industrial production of the country. Textile industry is unique in the terms that if is an independent industry, from the basic requirement of raw materials to the final products, with huge value addition at every stage of processing. Textile industry in India has vast potential for creation of employment opportunities in the agricultural, industrial, organized sectors and rural and urban areas, particularly for women and disadvantaged. Indian textile industry is constituted of the following segments: Readymade Garments, Cotton Textiles including Handlooms, Man-made Textiles, Silk Textiles, Woolen Textiles, Handicrafts, Coir, and Jute. Till the year 1985, development of textiles sector on India took place in terms of general policies. In 1985, for the first time the importance of textile sector was recognized and a separate policy statement was announced with regard to development of textile sector. In the year 2000, National Textiles Policy was announced. Its main objective was: to provide cloth of acceptable quality at reasonable prices for the vast majority of the population of the country, to increasingly contribute to the provision of sustainable employment and the economic growth of the nation, and to compete with confidence for an increasing share of the global market.

STRENGTHS OF INDIAN TEXTILE INDUSTRY

India has rich resources of raw materials of textile industry. It is one of the largest producers of cotton in the world and is also rich in resources of fibers like polyester, silk, viscose etc.India is rich in highly trained manpower. The country has a huge advantage due to lower wages rates. Because of the low labor rate the manufacturing cost in textile automatically comes down to very reasonable rates. India is highly competitive in spinning sector and has the presence in almost all processes in the value chain. Indian garment industry is very diverse in size, manufacturing facility, type of apparel produced, quantity and quality of out put, cost, requirement for fabric etc. It comprises suppliers of readymade garments for both, domestic or export markets.

WEAKNESSES OF INDIAN TEXTILE INDUSTRY

Indian textiles industry is highly fragmented in industry structure, and is led by small scale companies. The reservation of production for very small companies that was imposed with the intention to help out small scale companies across the country, led substantial fragmentation that distorted the competitiveness of industry. Smaller companies do not have the fiscal resources to enhance technology or invest in the high-end engineering of processes. Hence they lose in productivity.

- Import of cheap textiles from other Asian neighbors.
- Use of outdated manufacturing technology.
- Huge unorganized and decentralized sectors.
- High production cost with respect to other Asian competitors.

LITERATURE REVIEW

Sagan in his paper (1955), perhaps the first theoretical paper on the theory of working capital management, emphasized the need for management of working capital accounts and warned that it could vitally affect the health of the company. He realized the need to build up a theory of working capital management. He discussed mainly the role and functions of money manager inefficient working capital management.

Welter, in his study (1970), stated that working capital originated because of the global delay between the moment expenditure for purchase of raw material was made and the moment when payment was received for the sale of finished product.

Chakraborty (1973) approached working capital as a segment of capital employed rather than a mere cover for creditors. He emphasized that working capital is the fund to pay all the operating expenses of running a business. He pointed out that return on capital employed, an aggregate measure of overall efficiency in running a business, would be adversely affected by excessive working capital.

Lambrix and Singhvi (1979) adopting the working capital cycle approach to the working capital management, also suggested that investment in working capital could be optimized and cash flows could be improved by reducing the time frame of the physical flow from receipt of raw material to shipment of finished goods, i.e. inventory management, and by improving the terms on which firm sells goods as well as receipt of cash.

Vijaykumar and Venkatachalam (1995) studied the impact of working capital on profitability in sugar industry in Tamil Nadu by selecting a sample of 13 companies; 6 companies in co-operative sector and 7 companies in private sector over the period 1982-83 to 1991-92. They applied simple correlation and multiple regression analysis on working capital and profitability ratios.

Samiloglu F.and Demirgunes K (2008), studied that the effect of working capital management on firm profitability. In accordance with this aim, to consider statistically significant relationships between firm profitability and the components of cash conversion cycle at length, a sample consisting of Istanbul Stock Exchange (ISE) listed.

Beneda, Nancy; Zhang, Yilei (2008), studied impact of working capital management on the operating performance and growth of new public companies. The study also sheds light on the relationship of working capital with debt level, firm risk, and industry. Using a sample of initial public offerings (IPO's), the study finds a significant positive association between higher levels of accounts receivable and operating performance. The study further finds that maintaining control (i.e. lower amounts) over levels of cash and securities, inventory, fixed assets, and accounts.

Raheman and Nasr (2007), studied the effect of different variables of working capital management including average collection period, inventory turnover in days, average payment period, cash conversion cycle, and current ratio on the net operating profitability of Pakistani firms. They selected a sample of 94 Pakistani firms listed on Karachi Stock Exchange for a period of six years from 1999 - 2004 and found a strong negative relationship between variables of working capital management and profitability of the firm. They found that as the cash conversion cycle increases, it leads to decreasing profitability of the firm and managers can create a positive value for the shareholders by reducing the cash conversion cycle to a possible minimum level.

Falope and Ajilore (2009), used a sample of 50 Nigerian quoted non-financial firms for the period 1996 -2005. Their study utilized panel data econometrics in a pooled regression, where time-series and cross-sectional observations were combined and estimated. They found a significant negative relationship between net operating profitability and the average collection period, inventory turnover in days, average payment period and cash conversion cycle for a sample of fifty Nigerian firms listed on the Nigerian Stock Exchange. Furthermore, they found no significant variations in the effects of working capital management between large and small firms.

Ghosh and Maji (2003), attempted to examine the efficiency of working capital management of Indian cement companies during 1992 - 93 to 2001 - 2002. They calculated three index values - performance index, utilization index, and overall efficiency index to

Measure the efficiency of working capital management, instead of using some common working capital management ratios. By using regression analysis and industry norms as a target efficiency level of individual firms, Ghosh and Maji [8] tested the speed of achieving that target level of efficiency by individual firms during the period of study and found that some of the sample firms successfully improved efficiency during these years.

PROBLEM STATEMENT

Working capital is the fund invested by a firm in current assets. Now in a cut throat competitive era where each firm competes with each other to increase their production and sales, holding of sufficient current assets have become mandatory as current assets include inventories and raw materials which are required for smooth production runs. Holding of sufficient current assets will ensure smooth and uninterrupted production but at the same time, it will consume a lot of working capital. Here creeps the importance and need of efficient working capital management. Working capital management aims at managing capital assets at optimum level, the level at which it will aid smooth running of production and also it will involve investment of nominal working capital in capital assets."The problem generally explains that, less attention has been paid to the area of short-term finance, in particular that of working capital management. Such neglect might be acceptable were working capital considerations of relatively little importance to the firm, but effective working capital management has a crucial role to play in enhancing the profitability and growth of the firm. Indeed, experience shows that inadequate planning and control of working capital is one of the more common causes of business failure."

OBJECTIVES

The following are a few straight forward goals which I have tried to fulfil in this paper:

1) To study the various components of working capital.
2) To study the size of working capital.
3) To analyze the working capital trend.
4) To appraise the utilization of current asset and current liabilities and find out short-comings if any.
5) To suggest measure for effective management of working capital.

HYPOTHESIS

1) The firm is facing difficulty in paying short-term debt.
2) The firm is not properly managing the sundry debtor.
3) The current liabilities are increasing than current assets year by year.

RESEARCH METHODOLOGY

Research methodology is a systematic approach in management research to achieve pre-defined objectives. It helps a researcher to guide during the course of research work.

SOURCES OF DATA COLLECTION

The data required for the study was collected from Annual report of the company, financial statements of the SHREE NARAYAN SILK HOUSE PVT. LTD. for the period of 4 years. I.e. from 2008 to 2011.The data collection was aimed at study of working capital management of the company.

STATISTICAL TOOLS USED FOR DATA ANALYSIS

The various statistical tools used for data analysis is as follows:

a) Tables
b) Bar-chart
c) Graphs
d) Correlation

ANALYTICAL TOOLS USED

The analytical tools used for data analysis is as follows:

a) Ratio analysis
b) Schedule of change in working capital
c) Cash flow statements

RATIO ANALYSIS

Ratio analysis is the powerful tool of financial statements analysis. A ratio is define as "the indicated quotient of two mathematical expressions" and as "the relationship between two or more things". Ratio analysis is one of the best possible techniques available to management to impart the basic functions like planning and control. As future is closely related to the immediately past, ratio calculated on the basis historical financial data may be of good assistance to predict the future. As the ratio analysis is concerned with all the aspect of the firm's financial analysis liquidity, solvency, activity, profitability and overall performance, it enables the interested persons to know the financial and operational characteristics of an organization and take suitable decisions.

- **Liquidity Ratio:**Liquidity refers to ability of a concern to meet its current obligations as and when these become due.
- **Current Ratio:**Current assets include cash and those assets which can be converted in to cash within a year, such marketable securities, debtors and inventories.

CURRENT RATIO = CURRENT ASSET/ CURRENT LIABILITIES

- **Quick Ratio or Acid Test:** Quick ratios establish the relationship between quick or liquid assets and liabilities.

QUICK RATIO = total liquid asset/ total current liabilities

- **Absolute liquid Asset:** Even though debtors and bills receivables are considered as more liquid then inventories, it cannot be converted in to cash immediately or in time.

ABSOLUTE LIQUID RATIO=absolute liquid asset/ total current liabilities

- **Efficiency Ratio:** Funds are invested in various assets in business to make sales and earn profits. The efficiency with which assets are managed directly affects the volume of sale.
- **Debtors Turnover Ratio:** Receivable turnover ratio provides relationship between credit sales and receivables of a firm.

DEBTORS TURNOVER RATIO= SALES/ AVERAGE ACCOUNT RECEIVABLES.
AVERAGE A/C RECEIVABLES= opening trade debtor+ Closing trade debtor/2
AVERAGE COLLECTION PERIOD= (365/DTR) days
Or RECEIVABLES * 365/ sale

- **Working Capital Turnover Ratio:** It signifies that for an amount of sales, a relative amount of working capital is needed. The ratio measures the efficiency with which the working capital is being used by a firm

WORKING CAPITALTURNOVER RATIO=cost of sales/ net working capital

- **Current Asset Turnover Ratio:**

CURRENT ASSET TURNOVER RATIO= sales / current asset

INTERPRETATION & ANALYSIS

TABLE – 1: STATEMENT SHOWING CURRENT RATIO

YEAR	2007-08	2008-09	2009-10	2010-11
CURRENT ASSETS	41448434.67	58992470.00	60656134.11	96042936.68
CURRENT LIABILITIES	18302296.00	23752077.00	23495460.05	47408653.00
CURRENT RATIO	2.26	2.48	2.58	2.03

SOURCE: SECONDARY DATA FROM SNSHPL ANNUAL REPORTS

TABLE – 2: NET WORKING CAPITAL

Years	2008($)	2009($)	2010($)	2011($)
Net W.C (A-B)	23146138.67	35240393.00	37160674.06	48634283.68
W.C. Indices	100	152.25	160.54	210.11

SOURCE: SECONDARY DATA FROM SNSHPL ANNUAL REPORTS

FIGURE 1

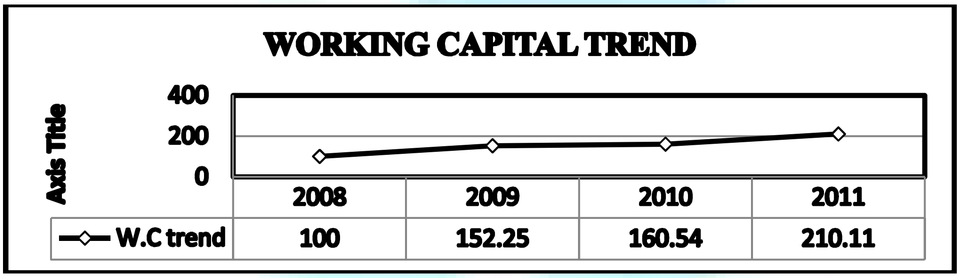
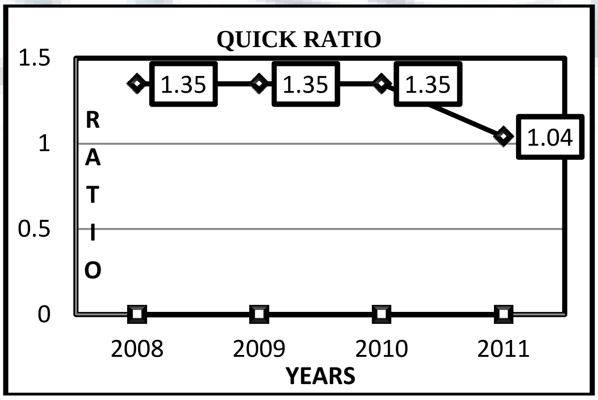


TABLE –3: STATEMENT SHOWING QUICK RATIO

YEAR	2007-08	2008-09	2009-10	2010-11
CURRENT ASSETS	41448434.67	58662470.00	60656134.11	96042936.68
STOCK	16659582	26706188	28872425.78	46834815
PREPAID EXPENSES	48798.00	63340.00	99714.00	155803.00
QUICK ASSETS	24788852.67	31956282.00	31783708.33	49208121.68
CURRENT LIABILITIES	18302296.00	23752077.00	23495460.05	47408653.00
QUICK RATIOS	1.35	1.35	1.35	1.04

SOURCE: SECONDARY DATA FROM SNSHPL ANNUAL REPORTS

FIGURE 2



SOURCE: SECONDARY DATA FROM SNSHPL ANNUAL REPORTS

TABLE –4: STATEMENT SHOWING DEBTORS TURNOVER RATIO

YEAR	2008-09	2009-10	2010-11
TOTAL SALES	201396422.80	216400747.87	254703004.00
OPENING DEBTORS	22744004.00	29901535.00	27607316.00
CLOSING DEBTORS	29901535.00	27607316.00	43705617.00
AVERAGE TRADE DEBTORS	37694771.50	43705193.00	49460124.50
DEBTOR TURNOVER RATIO	5.34	4.95	5.15

SOURCE: SECONDARY DATA FROM SNSHPL ANNUAL REPORTS

TABLE –5: DEBT COLLECTION PERIOD

YEAR	2008-09	2009-10	2010-11
DAYS	365	365	365
DEBT TURNOVER RATIO	5.34	4.95	5.15
DEBT COLLECTION PERIOD	68.35	73.74	70.87

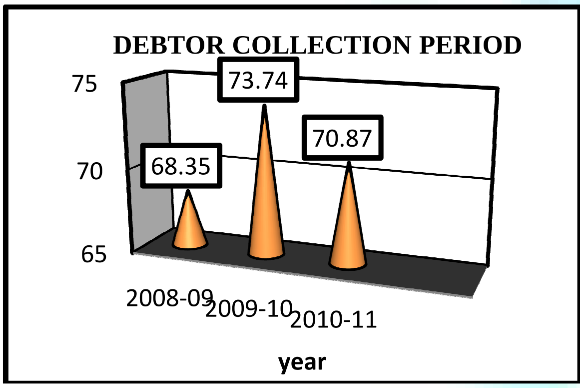
SOURCE: SECONDARY DATA FROM SNSHPL ANNUAL REPORTS

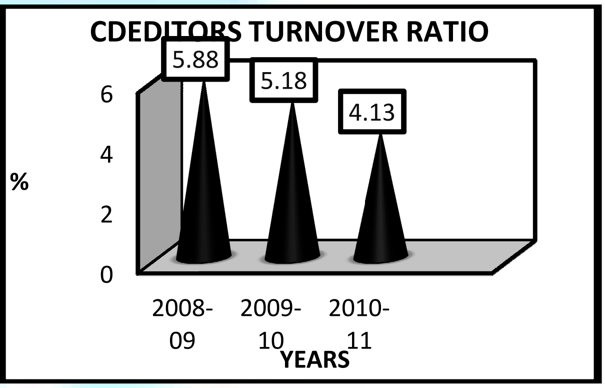
TABLE – 6: CREDITORS TURNOVER RATIO

YEAR	2007-08	2008-09	2009-10	2010-11
CREDIT PURCHASE	86415115.00	122701914.00	121187739.46	145166364.50
OPENING CREDITORS		18123500.00	23599500.00	23157931.05
CLOSING CREDITORS	18123500.00	23599500.00	23157931.05	47126235.00
AVERAGE TRADE CREDITORS		20861500.00	23378715.53	35142083.03
CREDITORS TURNOVER RATIO		5.88	5.18	4.13

SOURCE: SECONDARY DATA FROM SNSHPL ANNUAL REPORTS

FIGURE 3





SOURCE: SECONDARY DATA FROM SNSHPL ANNUAL REPORTS

TABLE –7: INVENTORY TURNOVER RATIO

YEAR	2008-09	2009-10	2010-11
SALES	201396422.80	216400747.87	254703004.00
OPENING INVENTORY	16659582.00	26706188.00	28872425.78
CLOSING INVENTORY	26706188.00	28872425.78	46834815.00
AVERAGE INVENTORY	21682885.00	27789306.89	37853620.39
INVENTORY TURNOVER RATIO	9.29	7.79	6.73
DAYS	365	365	365
INVENTORY TURNOVER RATIO	9.29	7.79	6.73
INVENTORY HOLDING PERIOD	39.29	46.85	54.23

SOURCE: SECONDARY DATA FROM SNSHPL ANNUAL REPORT

TABLE –8: WORKING CAPITAL TURNOVER RATIO

YEAR	2007-08	2008-09	2009-10	2010-11
SALES	132202310.00	201396422.80	216400747.87	254703004.00
NET WORKING CAPITAL	23146138.67	35240393.00	37160674.06	48634286.68
WORKING CAPITAL TURNOVER RATIO	5.71	5.71	5.82	5.24

SOURCE: SECONDARY DATA FROM SNSHPL ANNUAL REPORTS

TABLE –9 : GROSS PROFIT RATIO

YEAR	2007-08	2008-09	2009-10	2010-11
PROFIT BEFORE TAX	3783800.00	5091320.13	5695352.93	6439653.42
NET SALES	132202310.00	201396422.80	216400747.87	254703004.00
GROSS PROFIT RATIO	2.86	2.53	2.63	2.53

SOURCE: SECONDARY DATA FROM SNSHPL ANNUAL REPORTS

TABLE –10: ANALYSIS OF NET PROFIT RATIO

YEAR	2007-08	2008-09	2009-10	2010-11
NET PROFIT AFTER TAX & INTEREST	2584535.00	3460108.13	3932132.93	4398093.42
NET SALES	132202310.00	201396422.80	216400747.87	254703004.00
NET PROFIT RATIO	1.95	1.72	1.82	1.73

SOURCE: SECONDARY DATA FROM SNSHPL ANNUAL REPORTS

TABLE –11: Average Collection PERIOD

YEAR	Net Sales	Average Debtors	Ratio	Average Collection Period (365/DTR)days
2008	132202310.00	33194756.40	3.98	92
2009	201396422.80	37694771.50	5.34	69
2010	216400747.87	43705193.00	4.95	74
2011	254703004.00	49460124.50	5.14	72

SOURCE: SECONDARY DATA FROM SNSHPL ANNUAL REPORTS

TABLE –12: HYPOTHESIS: 1- THE FIRM IS FACING DIFFICULTY IN PAYING SHORT-TERM DEBT

Years	Average collection period (x)	Average payment period(y)	XY	X^2	y^2
2007-2008	92	67	6164	8464	4489
2008-2009	69	63	4347	4761	3969
2009-2010	74	71	5254	5476	5041
2010-2011	72	89	6408	5184	7921
	∑x= 307	∑ Y=290	XY=22173	∑ x2 =23885	∑ y^2 =21420

SOURCE: SECONDARY DATA FROM SNSHPL ANNUAL REPORTS

KARL PEARSONS'S COFFICIENT OF CORRELETION

$$r = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{n(\sum x^2) - (\sum x)^2}\sqrt{n(\sum y^2) - (\sum y)^2}}$$

From the calculation value of "r" come =17.17 which is a positive one. As the correlation came a positive one which ensures that the firm is facing difficulty in paying short-term debt. It is the case where current liabilities are increased throughout the financial years from, 2007-2008, 2008-2009, 2009-2010 and 2010-2011.

HYPOTHESIS 2: The Firm is not properly managing the sundry debtor.

TABLE –13

years	Average collection period (x)	sundry debtors (in crore)	Xy	X^2	y^2
2007-2008	92	337	31004	8464	113569
2008-2009	69	376	25944	4761	141376
2009-2010	74	437	32338	5476	190969
2010-2011	72	494	35568	5184	244036
	∑x= 307	∑Y=1644	XY=124854	∑ x2 =23885	∑ y^2=689950

SOURCE: SECONDARY DATA FROM SNSHPL ANNUAL REPORTS

KARL PERSON'S COFFICIENT OF CORRELETION

$$r = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{n(\sum x^2) - (\sum x)^2}\sqrt{n(\sum y^2) - (\sum y)^2}}$$

After putting the data "r" is found= **0.21** so the hypothesis is rejected. As the firm is able to manage the sundry debtor.

HYPOTHESIS 3: The Current Liabilities are increasing than current assets year by year.

TABLE –14

years	CURRENT LIABILITIES (in crore)	CURRENT ASSETS (in crore)	XY	X2	y^2
2007-2008	183	414	75762	33489	171396
2008-2009	237	589	139593	56169	346921
2009-2010	234	606	141804	54756	367236
2010-2011	474	960	455040	224676	921600
	∑x=1128	∑Y=2569	XY= 812199	∑ x2 = 369090	∑ y^2 = 1807153

SOURCE: SECONDARY DATA FROM SNSHPL ANNUAL REPORTS

KARL PERSON'S COFFICIENT OF CORRELETION:

$$r = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{n(\sum x^2) - (\sum x)^2}\sqrt{n(\sum y^2) - (\sum y)^2}} = 0.98$$

As the hypothesis is positive which ensures that the current liabilities of firm is increased at a speed than current assets. So the firm should have an eye to this one.

FININGS & OBSERVATIONS

a) The current ratio is a test of the short term solvency of the business enterprise since this ratio assumes current assets could be converted into cash to meet current liabilities.**It is often accepted that current assets should be 2 times the current liabilities.** Current ratio during the year 2007-08 was 2.26 and it increase 2.48 at 2008-09 and 2.58 by 2009-10 decreased to 2.03 by the year 2010-11. The standard norm for this ratio is 2:1 required. SNSHPL had maintained sufficient amount of current assets in order to maintain the standard form of current ratio.
b) The quick ratio in the year 2007-08 was 1.35 and it's remained same in the years 2008-09, 2009-10 and decreased to 1.04 in the year 2010-11. The standard norm for this ratio is 1:1, means for every 1 rupee of current liability, company must have 1 rupee of quick assets. SNSHPL had maintained sufficient amount of quick assets in order to maintain the standard form of quick ratio.
c) In the year 2008-09 the debt is higher 5.34 comparing to the other years. In the year 2009-10 it is 4.95 and in the year 2010-11 it is 5.15.
d) The debt collection period of SNSHPL in the 2008-09 was 68 days and in goes to 2009-10 it was increased in 73 days. In 2010-11 it decreased to 70.
e) The Creditors turnover ratio of SNSHPL was 5.88 in the year 2008-09, 5.18 in the year 2009-10, and 4.13 in the year 2010-11. 2008-09 has the greater Greater the CTR the more time firm has to pay to their creditors.
f) Inventory turnover of SNSHPL for 2008-09 was 9.29. In 2009-10 the inventory turnover ratio was decreased to 7.79 and it was lowest to6.73 in 2010-11.
Inventory Holding Period in the year 2008-09 was 39 days, it increased to 46 days in 2009-10, and it increased to 54 days in 2010-11, which was a not a good period, as Inventory holding period continuously increasing.
g) Working capital turnover ratio for the year 2007-08 & 2008-09 was 5.71 times. It is. was 5.28 in the year 2009-10, it was lowest in 2010-11 5.24 when compared to the last 3 years. The working capital management has to improve by more concentration on collection strategies.
h) Gross Profit Ratio of SNSHPL is 2.86 in the year 2007-08, it decreased to 2.53 in the year 2008-09, it again increase to 2.63 in the year 2009-10, it again decreased to 2.53 in the year 2010-11. Gross Profit Ratio was highest in the year 2007-08.
i) Net Profit Ratio of SNSHPL is 1.95 in the year 2007-08, it decreased to 1.72 in the year 2008-09, it again increase to 1.82 in the year 2009-10, it again decreased to 1.73 in the year 2010-11. Net Profit Ratio was highest in the year 2007-08.

CONCLUSION

Measures to Improve Working Capital Management in cooperatives: The essence of effective working capital management is proper cash flow forecasting. This should take into account the impact of unforeseen events, market cycles, loss of a prime customer and actions by competitors. So the effect of unforeseen demands of working capital should be factored by company. This was one of its reasons for the variation of its revised working capital projection from the earlier projection.
a) It pays to have contingency plans to tide over unexpected events. While market-leaders can manage uncertainty better, even other companies must have risk-management procedures. These must be based on objective and realistic view of the role of working capital.
b) Addressing the issue of working capital on a corporate-wide basis has certain advantages. Cash generated at one location can well be utilized at another.
c) An innovative approach, combining operational and financial skills and an all-encompassing view of the company's operations will help in identifying and implementing strategies that generate short-term cash. This can be achieved by having the right set of executives who are responsible for setting targets and performance levels. They could be then held accountable for delivering, encouraged to be enterprising and to act as change agents.
d) Working capital management is an important yardstick to measure a company operational and financial efficiency. This aspect must form part of the strategic and operational thinking. Efforts should constantly be made to improve the working capital position. This will yield greater efficiencies and improve customer satisfaction.
e) Cash should be managed properly.
f) Effort should be made to reduce the current liabilities and to increase the current asset.
g) Placing the responsibility for collecting the debt upon the centre that made the sale

LIMITATIONS

Following are the limitations of the study:
1) The topic working capital management is itself a very vast topic yet very important also. Due to time restraints it was not possible to study in depth in get knowledge what practices are followed.
2) Many facts and data are such that they are not to be disclosed because of the confidential nature of the same.
3) Since the financial matters are sensitive in nature the same could not acquired easily.
4) The study is restricted to only the Four Year data from Annual report of the company.

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AN ANALYSIS OF INCOME AND EXPENDITURES OF TAMIL NADU BASED PRIVATE SECTOR BANKS IN INDIA

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ABSTRACT

India has witness to a sea change in the way banking is done in the past more than two decades. Since 1991, the Reserve Bank of India (RBI) took steps to reform the Indian banking system at a measured pace so that growth could be achieved without exposure to any macro-environment and systemic risks. Some of these initiatives were deregulation of interest rates, dilution of the government stake in public sector banks, guidelines being issued for risk management, asset classification, and provisioning. Technology has made tremendous impact in banking. 'Anywhere banking' and 'Anytime banking' have become a reality. Increased competition, new information technologies and thereby declining processing costs, the erosion of product and geographic boundaries, and less restrictive governmental regulations have all played a major role for Public Sector Banks in India to forcefully compete with Private and Foreign Banks. It has become very mandatory to study and to make a comparative analysis of services of Scheduled Commercial Banks. The Indian economy exhibited clear momentum in recovery, and the GDP growth for the year 2010-11 has been estimated at 8.50%, up from 7.20% recorded in the previous year despite persistent global uncertainty.

KEYWORDS

Private sector banks, bankding reforms, banking sector.

INTRODUCTION

The Indian banking sector has recorded an impressive improvement in productivity over the last 15 years; many of the productivity/ efficiency indicators have moved closer to the global levels. There has been a particularly discernible improvement in banks' operating efficiency in recent years owing to technology up-gradation and staff restructuring. However, to sustain high and inclusive growth, there is a need to raise the level of domestic savings and channel those savings into investment. This implies that banks need to offer attractive interest rates to depositors and reduce the lending rates charged on borrowers - in other words, reduce the net interest margin (NIM). The NIM of the Indian banking system is higher than that in some of the other emerging market economies even after accounting for mandated social sector obligations such as priority sector lending and credit support for the Government's anti-poverty initiatives.

The Indian banking sector performed better in 2010-11 over the previous year despite the challenging operational environment. The banking business of Scheduled Commercial Banks (SCBs) recorded higher growth in 2010-11 as compared with their performance during the last few years. Credit grew at 22.9 per cent and deposits grew at 18.3 per cent in 2010-11 over the previous year. Accordingly, the outstanding credit-deposit ratio of SCBs increased to 76.5 per cent in 2010-11 as compared with 73.6 percent in the previous year. Despite the growing pressures on margins owing to higher interest rate environment, the return on assets of SCBs improved to 1.10 per cent in 2010- 11 from 1.05 per cent in 2009-10. The capital to risk weighted assets ratio under both Basel I and II frameworks at 13.0 per cent and 14.2 per cent, respectively in 2010-11 remained well above the required minimum of 9 per cent. The gross NPAs to gross advances ratio declined to 2.25 per cent in 2010-11 from 2.39 per cent in 2009-10, displaying improvement in asset quality of the banking sector. Though there was improvement in the penetration of banking services in 2010-11 over the previous year, the extent of financial exclusion continued to be staggering.

REVIEW OF LITERATURE

A handful of reviews are available analyzes of income and expenditures of commercial banks. A few of them are as follows:

Luther (1976) chaired the committee on Productivity, Efficiency & Profitability in Commercial banks, Bombay 1976 appointed by Reserve Bank of India to study the productivity, efficiency and profitability of commercial banks. In his report he analyzed the various issues related to the planning, budgeting and marketing in commercial banks.

Chidanbaram R.M and Alamelu(1994) published an article on "Profitability in Banks, a Matter of Survival" in The Banker, pp 1-3, May. They observed that the private sector banks have been registering both – high profit and high rate of growth with respect to deposits, advances and reserves as compared to the public sector banks.

A book written by Kapoor, G.P. (2004) on Commercial Banking published by AP.H. Publishing Corporation, New Delhi. In that book she analysed the performance of banks from 1981-1982 to 1999-2000 and revealed that the deposits, advances, total business. income, expenditure, net interest margin, working funds, branches and employees of the entire PSBs registered lower rates of growth in the post-reform period as compared to the pre-reform period.

Kanjana.E.N submitted her Ph.D Thesis on Efficiency, Profitability and Growth of Scheduled Commercial Banks in India at Bharathiar University, Coimbatore, 2007. She tested (1) whether the establishment expense was a major expense, and (2) out of total expense which is met by scheduled commercial banks is more due to more number of employees. In her empirical study, the earning factor and expense factor which are controllable and non-controllable by the bank.

The International Journal of Business Management 5(8): 113-118 contains an article on Performance evaluation of banking sector in Pakistan: An application of Bankometer prepared by Shar AH, Shah MA, Jamali H (2010a). He applies bankometer to analyze the capital inadequacy and solvency of banks before and after nationalization. The study confirms that majority of the big banks could not pass the solvency measure after nationalization using bankometer tool.

All the research work done failed to concentrate on Tamil Nadu Based Private Sector Banks. So the researcher makes an attempt to analyze the income and expenditure of Tamil Nadu Based Private Sector Banks.

OBJECTIVES

- To know the growth of income and expenditure of Tamil Nadu Based Private Sector Commercial Banks in India
- To compare the growth of income and expenditure of individual banks with other banks in the group

SCOPE OF THIS STUDY

The Scheduled Commercial Banks (86) in India comprises of Public (26), Private (20) and foreign (40) sector banks. The private sector banks are classified as old (13) and new (07) private sector banks. Among the thirteen old private sector banks in India, only four banks are having their registered office in Tamil Nadu.

They are City Union Bank Ltd. having its registered office at Kumbakonam, Karur Vysya Bank Ltd. having its registered office at Karur, Tamilnad Mercantile Bank Ltd. having its registered office at Thoothukudi and Lakshmi Villas Bank Ltd. having its registered office at Karur. The scope of this study is limited to these four banks which are collectively called as Tamil Nadu Based Private Sector Commercial Banks (TNBPSCB) in India.

METHODOLOGY

This research is based on the secondary data published in the annual report of individual bank and a profile of banks 2011-12 published by RBI. It covers a period of eleven years staring from 2001-02 to 2011-12. The Growth Rate, Compound Growth Rate (CGR), Mean, Standard Deviation (SD) and Co-efficient of Variation (CV) is used for analyzing the secondary data. In order to analyse the growth of TNBPSCB in India, the researcher selects interest income, other income, total income, interest paid, operating expenses, provisions and contingencies, total expenditures, net profit and operating profit of each bank under study.

ANALYSIS AND INTERPRETATIONS

INTEREST INCOME

The interest income consists of interest or discount on advances or bills, interest on investments, interest on balance with RBI and other interbank funds. The growth of interest income of TNBPSCB in India during the study period is given in Table 1.

TABLE 1: GROWTH OF INTEREST INCOME OF TNBPSCB IN INDIA (Amount in Crores)

Year	CUB	KVB	TMB	LVB
2001-02	212.14 ---	482.30 ---	432.88 ---	271.50 ---
2002-03	233.51 (10.07)	515.61 (06.91)	471.58 (08.94)	270.98 (-0.19)
2003-04	276.18 (18.27)	647.62 (25.60)	537.64 (14.01)	285.95 (05.52)
2004-05	290.67 (05.25)	590.77 (-8.78)	512.70 (-4.64)	298.20 (04.28)
2005-06	326.39 (12.29)	650.85 (10.17)	548.32 (06.95)	322.06 (08.00)
2006-07	400.05 (22.57)	867.40 (33.27)	637.99 (16.35)	429.18 (33.26)
2007-08	595.96 (48.97)	1134.03 (30.74)	761.01 (19.28)	506.06 (17.91)
2008-09	804.40 (34.98)	1446.09 (27.52)	977.15 (28.40)	657.61 (29.95)
2009-10	956.61 (18.92)	1757.95 (21.57)	1118.40 (14.46)	909.32 (38.28)
2010-11	1218.41 (27.37)	2217.70 (26.15)	1371.04 (22.59)	1064.84 (17.10)
2011-12	1696.77 (39.26)	3270.37 (47.47)	1882.40 (37.30)	1519.26 (42.67)
Average	637.37	1234.61	841.01	594.09
SD	483.64	880.75	457.94	409.98
CV in %	75.88	71.34	54.45	69.01
CGR in %	23.67	20.76	15.06	19.49

Source: Annual reports of individual banks

Note: The growth rates in percentage are given in brackets.

It is observed from Table 1 that the KVB has the highest mean of Rs.1234.61 crores and SD of Rs.880.75 crores. The CV of TMB is 54.45 per cent which is the minimum when compared with other banks under study. The growth rate of interest income of CUB is positive in all the years during the study period. There is a negative of 8.78 per cent, 4.64 per cent during 2004-05 in KVB and in TMB respectively. The growth rate of CUB increases 3.90 times, KVB 6.87 times, TMB 4.17 times and CUB increases 224.58 times in 2011-12 when compared with the growth rate in 2002-03.

OTHER INCOME

Other income includes commission, exchange and brokerage, profit less loss on sale of investments, profit less loss on revaluation, profit less loss on sale of fixed assets, demand draft and miscellaneous incomes. Table 2 shows the other income of TNBPSCB in India for the study period under study.

TABLE 2: GROWTH OF OTHER INCOME OF TNBPSCB IN INDIA (Amount in Crores)

Year	CUB	KVB	TMB	LVB
2001-02	48.02 ---	104.70 ----	62.47 ---	85.97 ---
2002-03	53.86 (12.16)	132.46 (26.51)	59.37 (-4.96)	84.23 (-2.02)
2003-04	66.50 (23.47)	74.25 (-43.95)	67.91 (14.38)	86.86 (03.12)
2004-05	33.44 (-49.71)	113.15 (52.39)	67.94 (00.04)	38.32 (-55.88)
2005-06	39.53 (18.21)	143.11 (26.48)	82.62 (21.61)	34.94 (- 8.82)
2006-07	54.09 (36.83)	119.15 (-16.74)	82.85 (00.28)	45.81 (31.11)
2007-08	90.29 (66.93)	155.30 (30.34)	130.70 (57.75)	82.48 (80.05)
2008-09	123.68 (36.98)	265.21 (70.77)	135.84 (03.93)	106.99 (29.72)
2009-10	143.50 (16.03)	246.98 (-06.87)	172.80 (27.21)	103.57 (-3.20)
2010-11	157.40 (09.69)	264.33 (07.02)	188.34 (08.99)	137.02 (32.30)
2011-12	207.13 (31.59)	350.15 (32.47)	231.65 (23.00)	157.93 (15.26)
Average	92.49	178.98	116.59	87.65
SD	57.31	87.78	59.45	38.74
CV in %	61.96	49.04	50.99	44.20
CGR in %	17.08	13.77	15.46	7.96

Source: Annual reports of individual banks

Note: The growth rates in percentage are given in brackets.

From Table 2 it is known that the average (Rs.178.98 crores) and SD (Rs.87.78 crores) of KVB is the maximum followed by TMB. The LVB has 44.20 per cent as CV which is lowest among the bank groups under study. The growth rate of other income of LVB increases 7.55 times in 2011-12 when compared to 2002-03. The amount of other income of TMB increases 3.71 times in 2011-12 while comparing with 2001-02. The growth rates of other income of KVB have a negative of 43.95 per cent in 2003-04, 16.74 per cent in 2006-07 and 6.87 per cent in 2009-10 respectively.

TOTAL INCOME

Total income is the combination of interest income and other income earned by a bank. Table 3 presents the growth of total income of TNBPSCB in India for the period under study.

TABLE 3: GROWTH OF TOTAL INCOME OF TNBPSCB IN INDIA (Amount in Crores)

Year	CUB	KVB	TMB	LVB
2001-02	260.16 ---	587.00 ---	495.35 ---	357.48 ---
2002-03	287.37 (10.46)	648.07 (10.40)	530.95 (07.19)	355.21 (-0.64)
2003-04	342.68 (19.25)	721.87 (11.39)	605.55 (14.05)	372.82 (04.96)
2004-05	324.11 (-05.42)	703.92 (-02.49)	580.66 (-4.11)	336.52 (-9.74)
2005-06	365.92 (12.90)	793.96 (12.79)	630.94 (08.66)	357.00 (06.09)
2006-07	454.14 (24.11)	986.55 (24.26)	720.84 (14.25)	474.99 (33.05)
2007-08	686.25 (51.11)	1289.33 (30.69)	891.71 (23.70)	588.54 (23.91)
2008-09	928.08 (35.24)	1711.30 (32.73)	1112.99 (24.82)	764.60 (29.91)
2009-10	1100.11 (18.54)	2004.93 (17.16)	1291.20 (16.01)	1012.88 (32.47)
2010-11	1375.81 (25.06)	2482.03 (23.80)	1559.38 (20.81)	1201.85 (18.66)
2011-12	1903.90 (38.38)	3620.52 (45.87)	2114.05 (35.57)	1677.18 (46.93)
Average	729.87	1413.59	957.60	681.73
SD	539.75	963.51	516.12	442.85
CV in %	73.95	68.16	53.90	64.96
CGR in %	22.64	19.72	15.11	17.51

Source: Annual reports of individual banks

Note: The growth rates in percentage are given in brackets.

Table 3 reveals the mean total income of KVB (Rs.1413.59 crores) is the highest amount followed by TMB with Rs.957.60 crores. Again the KVB has highest amount of Rs.963.51 crores as SD followed by CUB with Rs.539.75 crores. The CV of TMB is 53.90 per cent which is the minimum followed by LVB with 64.96 per cent. The total income of CUB is increased to Rs.1903.90 crores in 2011-12 which is 7.32 times more than in 2001-02. The growth rate of total income of LVB varies between negative of 0.64 per cent in 2002-03 and 46.93 per cent in 2011-12 which increases 73.33 times. The total income of KVB is Rs.3620.52 crores in 2011-12 which is increased 6.17 times more than in 2001-02.

INTEREST PAID

Interest paid includes interest on deposits, interest on RBI or interbank borrowings, interest on participating certificates and penal interest paid by a bank. The interest paid by TNBPSCB in India for the period under study is given in Table 4.

TABLE 4: GROWTH OF INTEREST PAID BY TNBPSCB IN INDIA (Amount in Crores)

Year	CUB	KVB	TMB	LVB
2001-02	157.55 ---	317.73 ---	289.48 ---	209.73 ---
2002-03	167.11 (06.07)	346.55 (09.07)	302.42 (04.47)	202.76 (-3.32)
2003-04	179.94 (07.68)	350.42 (01.12)	321.95 (06.46)	202.51 (-0.12)
2004-05	179.84 (-0.06)	334.07 (-4.67)	281.57 (-12.54)	191.54 (-5.42)
2005-06	186.61 (03.76)	367.96 (10.14)	302.33 (07.37)	216.56 (13.06)
2006-07	232.56 (24.62)	520.29 (41.40)	342.21 (13.19)	299.18 (38.15)
2007-08	396.18 (70.36)	765.35 (47.10)	498.80 (45.76)	381.93 (27.66)
2008-09	561.83 (41.81)	1035.68 (35.32)	643.43 (29.00)	504.07 (31.98)
2009-10	678.47 (20.76)	1193.05 (15.19)	743.85 (15.61)	660.19 (30.97)
2010-11	798.38 (17.67)	1450.84 (21.61)	827.15 (11.20)	699.84 (06.01)
2011-12	1197.02 (49.93)	2353.25 (62.20)	1232.02 (48.95)	1148.03 (64.04)
Average	430.50	821.38	525.93	428.76
SD	342.19	645.34	306.96	303.41
CV in %	79.49	78.57	58.37	70.77
CGR in %	23.71	22.60	15.59	19.40

Source: Annual reports of individual banks

Note: The growth rates in percentage are given in brackets.

It is understood from Table 4 that the interest paid by KVB has highest mean of Rs.821.38 crores followed by TMB. Also the SD of interest paid by KVB is the maximum of Rs.645.34 crores followed by CUB. The growth rate of interest paid by LVB is increased 19.29 times, TMB 10.95 times, CUB 8.23 times and KVB is increased 6.86 times in 2011-12 when compared with 2002-03. The amount of interest paid by KVB is Rs.2353.25 crores in 2011-12 which is increased from Rs.317.73 crores in 2001-02. The TMB has the lowest CV of 58.37 per cent followed by CUB with 70.77 per cent.

OPERATING EXPENSES

Operating expenses include payments to and provisions for employees, rent, taxes and lighting, printing and stationary, advertising and publicity, depreciation on bank property, directors fees, allowances and expenses, auditors fees and law charges, repairs and maintenance, insurance and postage. Table 5 presents the growth of operating expenses of TNBPSCB in India for the study period.

TABLE 5: GROWTH OF OPERATING EXPENSES OF TNBPSCB IN INDIA (Amount in Crores)

Year	CUB	KVB	TMB	LVB
2001-02	37.55 ---	107.52 ----	85.34 ---	70.38 ---
2002-03	39.93 (06.34)	104.10 (03.18)	92.81 (08.75)	72.40 (02.87)
2003-04	44.95 (12.57)	156.90 (50.72)	113.71 (22.52)	83.55 (15.40)
2004-05	62.60 (39.27)	170.62 (08.74)	124.88 (09.82)	90.28 (08.06)
2005-06	70.16 (12.08)	197.36 (15.67)	129.70 (03.86)	100.52 (11.34)
2006-07	90.10 (28.42)	192.48 (-2.47)	147.44 (13.68)	102.22 (01.69)
2007-08	109.91 (21.99)	216.22 (12.33)	168.51 (14.29)	116.44 (13.91)
2008-09	139.53 (26.95)	257.60 (19.14)	204.29 (21.23)	151.69 (30.27)
2009-10	165.85 (18.86)	348.65 (35.35)	231.45 (13.29)	186.48 (22.93)
2010-11	216.40 (30.48)	430.60 (23.50)	298.02 (28.76)	228.15 (22.35)
2011-12	132.98 (-38.55)	541.56 (25.77)	349.05 (17.12)	293.71 (28.74)
Average	100.91	247.60	176.84	135.98
SD	57.92	138.25	85.65	72.20
CV in %	57.40	55.84	48.43	53.10
CGR in %	18.91	16.79	14.70	14.95

Source: Annual reports of individual banks

Note: The growth rates in percentage are given in brackets.

Table 5 presents that the mean (247.60 crores) and SD (Rs.138.25 crores) of operating expenses of KVB is the highest one followed by TMB. The CV of 48.43 per cent is registered as lowest among the banks under study followed by LVB. Though the growth rate of operating expenses of CUB is decreased to a negative of 38.55 per cent in 2011-12 from 6.34 per cent in 2002-03, the amount of operating expenses are increased by 3.54 times. The operating expense of KVB varies from Rs.107.52 crores in 2001-02 to Rs.541.56 crores in 2011-12. The growth rate of LVB is increased 10.01 times in 2011-12 when compared with 2002-03.

PROVISIONS & CONTINGENCIES

The provisions and contingencies include all provisions made for diminution in the value of investments and transfer to contingencies. Table 6 summarizes the growth of provisions and contingencies of TNBPSCB in India for the study period under consideration.

TABLE 6: GROWTH OF PROVISIONS & CONTINGENCIES OF TNBPSCB IN INDIA (Amount in Crores)

Year	CUB	KVB	TMB	LVB
2001-02	36.63 ---	53.24 ----	65.18 ---	47.14 ---
2002-03	46.96 (28.20)	72.45 (36.08)	71.96 (10.40)	45.89 (-2.65)
2003-04	60.76 (29.39)	53.51 (-26.14)	89.21 (23.97)	45.70 (-0.41)
2004-05	35.35 (-41.82)	93.89 (75.46)	91.86 (02.97)	51.37 (12.41)
2005-06	52.78 (49.31)	93.29 (00.06)	97.72 (06.38)	17.45 (-66.03)
2006-07	59.67 (13.05)	113.77 (21.95)	125.42 (28.35)	56.00 (22.09)
2007-08	78.42 (31.42)	99.43 (12.60)	97.66 (-22.13)	64.90 (15.89)
2008-09	104.59 (33.37)	182.18 (83.22)	115.07 (17.83)	58.55 (- 9.78)
2009-10	103.03 (-01.49)	127.19 (-30.18)	131.37 (14.17)	136.54 (133.20)
2010-11	145.98 (41.69)	184.99 (45.44)	183.31 (39.54)	172.72 (26.50)
2011-12	147.00 (00.70)	223.99 (21.08)	219.52 (19.75)	128.42 (-25.65)
Average	79.20	117.99	117.12	74.97
SD	40.58	56.49	46.96	48.25
CV in %	51.23	47.87	40.10	64.35
CGR in %	15.27	14.53	10.94	14.79

Source: Annual reports of individual banks

Note: The growth rates in percentage are given in brackets.

It is clear from Table 6 that the highest mean of Rs.117.99 crores and SD of Rs.56.49 crores of provisions and contingencies exists in KVB. The lowest percentage of CV of 40.10 per cent exists in TMB. The LVB has more negative values of growth rate during the study period. Though the growth rate of provisions and contingencies of CUB and KVB reduces in 2011-12, the amount of the same increases sufficiently. The amount of provisions and contingencies of CUB increases 4.01 times, KVB 4.21 times, TMB 3.37 times and LVB increases 2.72 times in 2011-12 when compared with 2001-02.

TOTAL EXPENDITURES

TABLE 7: GROWTH OF TOTAL EXPENDITURES OF TNBPSCB IN INDIA (Amount in Crores)

Year	CUB	KVB	TMB	LVB
2001-02	231.73 ---	478.50 ---	440.00 ---	327.25 ---
2002-03	253.99 (09.61)	523.10 (09.32)	467.19 (06.18)	321.05 (-1.89)
2003-04	285.64 (12.46)	560.82 (66.47)	524.87 (12.35)	331.76 (03.33)
2004-05	277.79 (-02.75)	598.58 (06.73)	498.31 (- 5.06)	333.19 (00.43)
2005-06	309.55 (11.43)	658.61 (10.03)	529.75 (06.31)	334.53 (00.40)
2006-07	382.33 (23.51)	826.54 (25.50)	615.07 (16.11)	457.40 (36.73)
2007-08	584.52 (52.88)	1081.00 (30.79)	764.97 (24.37)	563.27 (23.15)
2008-09	805.95 (37.88)	1475.46 (36.49)	962.79 (25.86)	714.31 (26.81)
2009-10	947.34 (17.54)	1668.89 (13.11)	1106.67 (14.94)	982.21 (37.50)
2010-11	1160.76 (22.53)	2066.44 (23.82)	1308.48 (18.24)	1100.71 (12.06)
2011-12	1477.00 (27.24)	3118.80 (50.93)	1800.59 (37.61)	1570.16 (42.65)
Average	610.6	1186.98	819.88	639.62
SD	428.41	831.99	434.91	414.89
CV in %	70.16	70.09	53.05	64.86
CGR in %	21.81	20.42	14.70	17.86

Source: Annual reports of individual banks

Note: The growth rates in percentage are given in brackets.

Table 7 exhibits the average total expenses of Rs.1186.98 crores and SD of Rs.831.99 crores exists in KVB which is the highest among the bank groups under study followed by TMB. The CV of TMB is 53.05 per cent which is considered as lowest followed by LVB with 64.86 per cent. The amount of total expenses of CUB increases 6.37 times, KVB 6.52 times, TMB 6.09 times and LVB increases 4.80 times in 2011-12 when compared with 2001-02. There is a negative value of Rs.2.75 crores for CUB in 2004-05, Rs.5.06 crores for TMB in 2004-05 and Rs.1.89 crores for LVB in2002-03 regarding the total expenditures.

NET PROFIT

TABLE 8: GROWTH OF NET PROFIT OF TNBPSCB IN INDIA (Amount in Crores)

Year	CUB	KVB	TMB	LVB
2001-02	28.44 ---	108.51 ---	55.35 ---	30.22 ---
2002-03	33.37 (17.33)	124.97 (15.17)	63.76 (15.19)	34.16 (13.04)
2003-04	57.04 (70.93)	161.05 (28.87)	80.68 (26.54)	41.05 (20.17)
2004-05	46.32 (-18.79)	105.34 (-34.59)	82.35 (02.07)	03.34 (-91.86)
2005-06	56.37 (21.70)	135.35 (28.49)	101.19 (22.88)	22.47 (572.75)
2006-07	71.81 (27.39)	16.01 (-88.17)	105.78 (04.54)	17.58 (-21.76)
2007-08	101.73 (41.67)	208.33 (1201.25)	126.74 (19.81)	25.27 (43.74)
2008-09	122.13 (20.05)	235.84 (13.21)	150.21 (18.52)	50.30 (99.05)
2009-10	152.76 (25.08)	336.03 (42.48)	184.53 (22.85)	30.67 (-39.03)
2010-11	215.05 (40.78)	415.60 (23.68)	250.90 (35.97)	101.14 (229.77)
2011-12	280.00 (30.20)	501.72 (20.72)	313.46 (24.93)	107.02 (05.81)
Average	105.91	213.52	137.72	42.11
SD	80.94	147.61	81.91	32.98
CV in %	76.42	69.13	59.47	78.31
CGR in %	24.80	16.41	17.84	14.96

Source: Annual reports of individual banks

Note: The growth rates in percentage are given in brackets.

It is observed from Table 8 that there is a wide fluctuation in the growth rates of net profit of LVB during the study period. The amount of net profit of CUB varies between Rs.28.44 crores in 2001-02 and Rs.280 crores in 2011-12. The amount of net profit of LVB increases 3.54 times in 2011-12 even though the growth rate declined. The amount of net profit of TMB and KVB increases 5.66 times and 4.62 times respectively in 2011-12. The KVB has highest amount of mean (Rs.213.52 crores) and SD (Rs.147.61 crores) of net profit followed by TMB. The CV of net profit of TMB is 59.47 per cent which is the lowest percentage among the banks under study followed by KVB.

OPERATING PROFIT

Net profits of a bank before providing provisions and contingencies are called operating profits. This is an indicator of a bank's profitability at the operating level. Table 9 presents the operating profit of TNBPSCB in India for the study period.

TABLE 9: GROWTH OF OPERATING PROFIT OF TNBPSCB IN INDIA (Amount in Crores)

Year	CUB	KVB	TMB	LVB
2001-02	65.07 ---	161.75 ----	120.53 ---	77.36 ---
2002-03	80.33 (23.45)	197.42 (22.05)	135.72 (12.60)	80.05 (3.48)
2003-04	117.8 (46.65)	214.56 (08.68)	169.89 (25.18)	86.75 (8.37)
2004-05	81.67 (-30.67)	199.23 (-7.14)	174.21 (02.54)	54.71 (-36.93)
2005-06	109.15 (33.65)	228.64 (14.76)	198.91 (14.18)	39.92 (-27.03)
2006-07	131.48 (20.46)	129.78 (-43.24)	231.20 (16.23)	73.58 (84.32)
2007-08	180.15 (37.02)	307.76 (137.14)	224.40 (-2.94)	90.17 (22.55)
2008-09	226.72 (25.85)	418.02 (35.83)	265.28 (18.22)	108.85 (20.72)
2009-10	255.79 (12.82)	463.22 (10.81)	315.90 (19.08)	167.21 (53.62)
2010-11	361.03 (41.14)	600.59 (29.66)	434.21 (37.45)	273.86 (63.78)
2011-12	427.00 (18.27)	725.71 (20.83)	532.98 (22.75)	235.44 (-14.03)
Average	185.11	331.52	254.84	117.08
SD	120.61	195.56	128.04	75.83
CV in %	65.16	58.99	50.24	64.76
CGR in %	20.25	15.70	14.51	14.24

Source: Annual reports of individual banks

Note: The growth rates in percentage are given in brackets.

Table 9 highlights that the mean and SD of KVB are Rs.331.52 crores and Rs.195.56 crores which are considered as highest amount followed by TMB during the study period. The CV of TMB is 50.24 per cent which is the lowest among the banks under study followed by KVB. The amount of operating profit of CUB is increased by 6.56 times, KVB 4.49 times, TMB 4.42 times and LVB increased by 3.04 times in 2011-12. The minimum and maximum growth rates of TMB are negative of 2.94 per cent in 2007-08 and 37.45 per cent in 2010-11 respectively. There is a reduction in growth rates of operating profits of CUB in 2004-05, KVB in 2004-05 and 2006-07, TMB in 2007-08 and LVB in 2004-05, 2005-06 and 2011-12 respectively.

FINDINGS

While observing the mean of interest income, other income, total income, interest paid, operating expenses, provisions and contingencies, total expenditures, net profit and operating profit of TNBPSCB in India, the KVB and TMB secured first two places respectively.

Regarding the SD of other income, operating expenses, total expenses, net profit and operating profit, the KVB stands first followed by TMB. Again the KVB secured first place in SD of interest income, total income and interest paid followed by CUB. The SD of provisions and contingencies of KVB is the highest followed by LVB.

While go through the CV of interest income, total income, interest paid, operating expenses and total expenses of TNBPSCB in India, the TMB secured first place followed by LVB. Also TMB stands first in provisions and contingencies, net profit and operating profit followed by KVB. Regarding the CV of other income, the LVB leads first followed by KVB.

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