

# **International Journal of Enterprise and Innovation Management Studies (IJEIMS)**

**July - December 2009   Volume. 1   No. 1**

**ISSN : 0976-2698**

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# International Journal of Enterprise and Innovation Management Studies

July – December 2009 Vol 1. No 1

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# BUSINESS EXCELLENCE THROUGH INTEGRATION OF TQM AND HRM

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## ABSTRACT

*Purpose – This paper seeks to examine employees’ perceptions of business excellence or High Performance Work System (HPWS) and its relationship with TQM/HRM practices within software industry in India. Despite extensive research on TQM/HRM practices and HPWS, none examines this scope of investigative study. Therefore, the proposed model was developed with the intention of examining this relationship.*

*Design/methodology/approach – Original research using self-completed questionnaires, distributed to employees of software industry, is thoroughly reported. The study sample consisted of 324 employees, resulting in a response rate of 81 percent. A questionnaire was developed and administered to ascertain the level of influence by TQM/HRM practices on HPWS. Data were analyzed by employing correlation.*

*Findings – The results revealed that HRM, organization culture, quality of work life, empowerment are high involvement TQM/HRM practices which are positively associated with employees perceptual outcomes and process quality management, benchmarking and others are low involvement TQM/HRM practices which are required for the cost efficiencies and operative outcomes of HPWS. Further, the result of the analysis supports the proposed model based on the empirically validated TQM/HRM instruments, which are reliable and valid.*

*Originality/value – The findings make a significant contribution by using software industry that proves to be useful as an example of a methodology that might be used to track the extent of TQM/HRM effects on HPWS. An organization could use this instrument to do a pre-test baseline measurement, and then periodically re-administer it to identify changes associated with TQM/HRM efforts.*

*Keywords-Total quality management, Human Resource Management, High Performance Work System, software industry.*

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## I.INTRODUCTION

The relationship between TQM and HRM in relation with business excellence or performance of the organization is the concerned area for many researchers. There are many theories and researches, which explain this relationship and provide the practices, which are relevant for high performance work systems or business excellence. In the TQM literature there are some common practices described by many authors that contribute and leads to the business excellence. Dale (1999) explains that following TQM practices leads to the organizational excellence: leadership, training, involvement and participation of employees, co-operation and customer focus. These practices can also be described as HRM practices or activities. A part from that various researchers explicitly described the best practices for High Performance Work Systems or business excellence. Pfeffer (1994) describes 16 ‘high performance practices for high performance work systems. ‘Information’, ‘high wages’, job security, motivated and flexible work force are amongst them. While Arther (1994) stresses on other practices like decentralization, participative leadership and excellent wages. Dalery and shaw (2002) states that a proper mixing and application of best practices as staffing, appraisal, compensation and job design will leads to high performance work systems (see figure 1). The high performance work system models described in relation to international quality standards (like ISO, CMM, Six sigma etc.) developed best practices from TQM point of view (Blackburn and Rosen, 1993; Puay et al, 1998). Thus it is clear that TQM and HRM both are very much required for business excellence or high performance work systems.

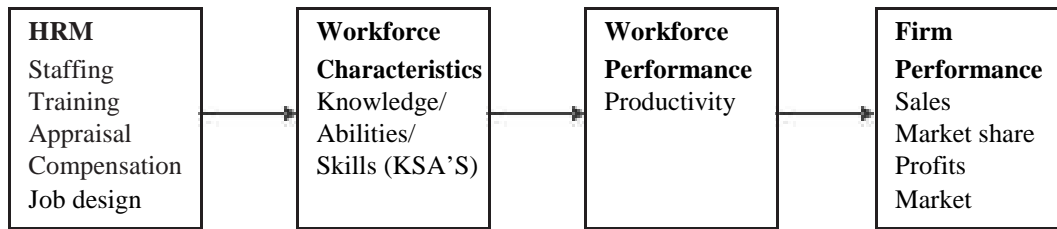


Figure 1: Theoretical Model

But, previous studies link the TQM/HRM with HPWS have had limited outcome in scope and also have methodological constrains. Most of the previous studies are theoretical in nature. In order to overcome mentioned limitations this study contributes to literature by attempting the clear need of an analytical study that examines the elements of TQM/HRM and linking them with HPWS using the appropriate statistical methods with in the Indian software industry.

In view of the absence of such research on these relationships, therefore, this paper reports the results of a survey that was designed to address these research questions :

- (1) What essential TQM/HRM practices should be developed that would lead to HPWS?
- (2) Is there any difference between the types of TQM/HRM practices, which lead to HPWS?
- (3) Which of the HRM outcomes are closely related to HPWS?
- (4) Does the perceptions of employees towards TQM/HRM practices affect HPWS?
- (5) To what extent are the effects of TQM/HRM practices visible on HPWS and HRM outcomes?

This research explores the degree of impact, the implementation of TQM/HRM practices poses to benefit the employees within software industry in India, and further measuring the relationship between TQM/HRM practices and High Performance Work Systems, apart from identifying problem areas, their possible remedies respectively and also prominent improvements.

The purpose of this investigation is four-fold. Firstly, to identify a set of TQM/HRM principles that would prove to be an effective guide in the implementation of HPWS. Secondly, to present a model as a systematic way to measure the extent of impact employees' perceptions have in relation to the implementation of TQM /HRM practices on HPWS. Thirdly, it is to explore the relationship between TQM/HRM practices and HPWS and lastly, to assess which TQM/HRM practice is strongly associated with HPWS?

## II.CONCEPTUALMODELFORRESEARCH

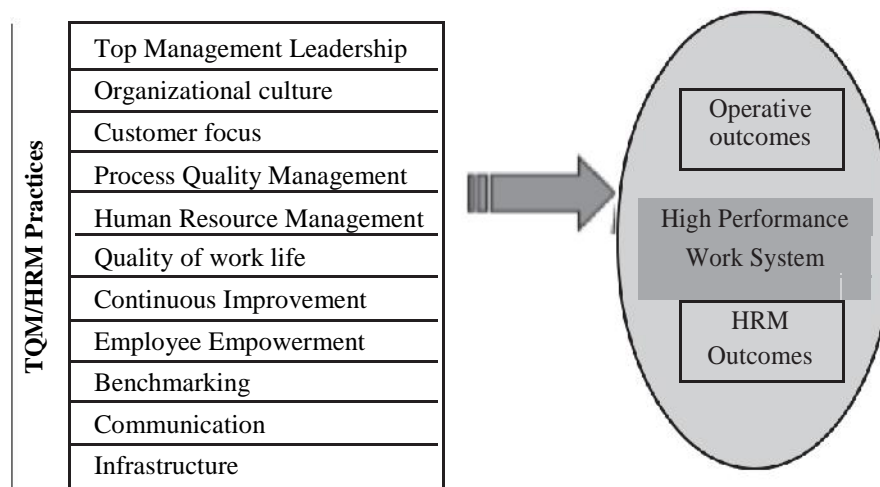


Figure 2: Conceptual model

The conceptual schema of this study focuses on the development of a theoretical HPWS model as a systematic way in implementing TQM/HRM practices within software industry in India. Examining the relationship between TQM/ HRM practices and HPWS should contribute to our knowledge of the complexity of the relationship that exist between them.

The link between TQM/HRM practices and HPWS is illustrated in Figure 2. In this theoretical framework, TQM/ HRM practices are independent variables and HRM outcomes and operative outcomes are dependent variables, which are the part of HPWS. The present study thus attempts to bridge the gap by providing a basis for a thorough and insightful discernment of TQM/HRM practices and HPWS.

### III.HYPOTHESIS

Based on the extensive study of previous research, it would therefore suggest that TQM/HRM practices improve HRM outcomes and operative outcomes. As such, the following hypothesis are proposed:

- H1. TQM/HRM practices are positively associated with operative outcomes within software industry.
- H2. TQM/HRM practices are positively associated with HRM outcomes within software industry.

### IV.METHDOLOGY

#### *Sample and procedures*

An initial list of constructs was prepared through literature survey and it was sent to the software engineers and academicians to verify it. They evaluate the list and also assess the relevance, understandability, clarity, and unambiguity of the questions. This ensures the validity of the questionnaire.

Data were collected from employees of various software organizations in India. The Companies were selected from the member list of NASSCOM.

The questionnaire survey was done for data collection. The questionnaires were sent to software developers and their managers who have more than 2 years of experience to 100 development centers of different software firms. They were sent through email or distributed through HR manager. Out of the 400 questionnaires sent, 324 questionnaires were returned, yielding a response rate of 81 percent, which is considered acceptable.

#### *Variable measurements*

##### *Independent variables:*

TQM/HRM practices. A total of 45 questions captured the 11 TQM/HRM variables under investigation. The questionnaires on TQM/HRM dimensions were grouped into 11 elements; namely, Top management leadership, Organizational culture, Customer focus, Process Quality Management, Quality of work life, Continuous Improvement, Human resource management, Employee Empowerment, Benchmarking, Communication. The importance of the 11 constructs of TQM/HRM practices are described below:

- (1) Top-Management Leadership (TML): The leadership of top management is very important and in central to the implementation of a TQM/HRM practices in any organization. Many researchers states that the quality improvement efforts in any organization should start from the top and flows down to the lower level.
- (2) Organizational Culture (OC): Quality cannot be achieved without the cooperation and coordination of everyone in the organization. A proper atmosphere should be created in the organization to imbibe and cultivate an organizational culture, which builds up the commitment of everyone to quality (Tenner 1991).
- (3) Customer Focus (CF): Many studies agree on what quality means, satisfaction of customer requirements. Customer focus leads to improved quality irrespective of anything. So, understanding of the client's requirements and maximizing his satisfaction are critical in the software industry also. The requirements of the customers (internal and/or external) should be satisfied at each stage of software development.
- (4) Process Quality Management (PQM): Quality performance depends on process management, measurement and analysis of data, and leadership. So, the quality of processes needs to be improved continuously for improving the quality of the product. "Process" is a key factor in software development. Improvement of processes helps to reduce the effort, development time, and defects in software (Jalote 2000).
- (5) Human Resource Management (HRM): Based on an empirical study, Paul and Anantharaman (2002) said that there is a positive relationship between human resources practices and organizational performance. The authors further

states that there is a significant difference in human resources practices across multinational and Indian software companies. Thus, it is evident that human resources practices are critical in software firms.

(a) *Reward and recognition*: This can be defined as monetary and nonmonetary benefits, such as increased salary, bonuses and promotion resulting from the review of performance, which is gave public acknowledgement of superior performance.

(b) *Recruitment, selection, and retention*: Recruitment, selection, and retention of employees with required skills are very important for any organization. The ability of the employee to develop as a member of the team as well as the organization is another important factor in the case of software industry. Employee turnover is a major issue faced by software companies that should be minimized.

(c) *Training and development*: Training brings about changes in knowledge, skills, attitudes, and social behavior of employees for doing a particular job, and it is a vital in continuous improvement. Training also helps to improve employee participation and involvement in quality programs by providing required knowledge and skills to them.

(d) *Teamwork*: Teamwork is an important tool associated with quality management. Most of the software projects involve the combined efforts of a number of people across various departments in the organization. Therefore, the success of a project depends on interdependence and coordination among the team members in a software firm.

- (6) Quality of Work life (QWL): An essential factor that decides the effectiveness of software employees is “conducive work environment.” Quality of work life is the general atmosphere and human relations at the workplace.
- (7) Employee Empowerment (EE): Empowerment means the assigning of responsibility with authority to the employees. High performance and high commitment require high levels of employee empowerment can be successfully used to transform organizations. Freedom for all team members to make suggestions during software development or project execution is a good practice for improving the software quality.
- (8) Continuous Improvement (CI): According to the TQM philosophy, the key to quality is satisfying the needs and expectations of the customer through a system wide continuous improvement strategy (Goyal and Islam 2001; Ahmed 2001). Therefore, superior quality demands the propagation of a culture of continuous improvement, driven by measurement and improvement (Lewis 1999).
- (9) Benchmarking (BM): Benchmarking is a term used to describe activities that are aimed to make comparisons against the best practices. Benchmarking is a common element of TQM implementation, irrespective of the nature of the organization (Zinovy et al. 1996). In the IT industry, the common benchmark themes are expenditures, operations, helpdesk activities, programming effectiveness, and efficiency (Cortada 1995).
- (10) Infrastructure and Facilities (IF): Infrastructure becomes very critical in the case of software companies, where technological advancement is rapid and its adaptation is compulsory for survival. The term “facilities” also includes sufficient conference rooms; training areas; physical resources such as furniture, computers, and application software; and communication technologies such as telephone, fax, and e-mail (Bahrami and Evans 1997).
- (11) Communication (COM): Communication helps to provide better control of processes, which in turn helps to improve quality. Communication helps to provide clarity of roles and responsibilities of each employee. Communication helps to improve quality through customer satisfaction by providing better service and quicker response to queries (Cortada 1995) opportunities. The internal consistency reliability coefficient for the scale is 0.79. Prepare

#### *Dependent variables:*

High Performance Work Systems (HPWS). HPWS include two elements, namely HRM outcomes and operative outcomes.

- (1) HRM outcomes: This includes the HR performance of the system. This can be divided in two:
  - (a) *Perception HRM outcomes*; e.g. employee satisfaction, employee motivation, employee trust, employee commitment, and employee loyalty.
  - (b) *Objective HRM outcomes*; e.g. employee turnover rate and absenteeism rate.
- (2) Operative Outcomes: This includes the productivity of the system. This includes:
  - (a) *Product Attributes (PA)*: The quality of software is estimated by many of its attributes such as reliability, integrity, maintainability, enhanceability (extensibility), usability, portability, and reusability. They affect the customer satisfaction so these can be treated as the indicator of quality product.



(b) *Return on Quality (ROQ)*: The returns (benefits) of quality implementation are measured by performance indicators such as the reduction of errors, better process management, decrease in production costs, decrease in rejects and wastage, reduction in rework, and decrease in customer complaints (Radovitsky and Gotcher 1996).

Measure	Items	Factor loading	KMO	Eigenvalue	Variance explained (%)	Reliability
Independent variables						
Top-Management Leadership	3	0.598-0.718	0.85	2.69	53.77	0.74
Employee Empowerment	4	0.531-0.955				0.70
Organizational culture	7	0.516-0.803				0.72
Communication	4	0.701-0.795				0.83
Customer Focus	4	0.510-0.755				0.80
Process Quality Management	4	0.588-0.728				0.83
Human Resource Management	8	0.541-0.955				0.76
Quality of Work life	4	0.516-0.813				0.76
Infrastructure and Facilities	3	0.703-0.796				0.81
Benchmarking	3	0.520-0.755				0.73
Continuous Improvement (CI)	3	0.599-0.718				0.74
Dependent variable						
HRM outcomes	5	0.653-0.797	0.84	2.34	46.47	0.79
Operative outcomes	5	0.721-0.794				0.82

## V.ANALYSISOFDATA

The statistical computer program used for the questionnaires data analysis was SPSS 11.0. Correlation studies were used to determine the relationship between the dependent and independent variables. TQM/HRM practices were regressed against HPWS. The multiple regression analyses confirmed the significance of the independent and dependent variables.

### A. Result of Surveys

Factor analysis and scale reliabilities:

*Table I. Factor analysis and scale reliabilities – independent variables*

Note: n =324

A principal component factor analysis with varimax rotation was conducted to validate the TQM /HRM practices (Table I). In interpretation, only a loading of 0.5 or greater on the factor and 0.35 or lower on the other factors is considered. Varimax rotated analysis showed the existence of 11 significant factors with eigenvalues (i.e. 2.69) greater than one that explained 53.79 percent of the variance. The KMO sampling adequacy test has 0.85 value for each item with sufficient intercorrelations with the Bartlett's test of sphericity was also found significant (Chi-square = 472:06, p , 0.001). Thus, the factors are considered adequate because they are less than 60 percent of the variance recommended in social sciences (Hair et al., 1998). The results of the factor analysis represented in Table I.

Similarly, another factor analysis was done to check the dimensionality of the dependent variables. The two factor analysis with eigenvalue of 2.34 showing 46.45 percent of variance in the data. The KMO measure of sampling adequacy was 0.84 indicating sufficient intercorrelations, while the Bartlett's test of sphericity was significant (Chi-square = 339:92, p, 0:01).

The reliability of the questionnaire was tested by Cronbach alpha. The reliability coefficient (alpha) of each element of TQM/HRM practices was as follows: top management leadership (74 percent), employee empowerment (70 percent), organization culture (72 percent), communication (83 percent), process quality management (83 percent), human resource management (76 percent), quality of work life (76 percent), infrastructure and facilities (81 percent), benchmarking (73 percent), and for continuous improvement (74 percent). The reliability for dependent variables i.e. HRM outcomes is (79 percent) and for operative outcome is (82 percent). The reliability coefficients of all the five elements of TQM were above 0.70, which concurs with the suggestion made by Nunnally (1978).

*B. Descriptive Statistical Analysis*

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
TML	3.76	0.55											
EE	3.92	0.61	0.53*										
OC	3.93	0.58	0.49 *	0.56 *									
Com	3.89	0.62	0.54 *	0.61 *	0.67*								
CF	3.74	0.57	0.42*	0.36 *	0.53*	0.62*							
PQM	3.70	0.58	0.41*	0.46 *	0.47 *	0.57*	0.57 *						
HRM	3.95	0.52	0.53*	0.65*	0.66*	0.57*	0.65*	0.63*					
QWL	3.90	0.55	0.49 *	0.56 *	0.54*	0.49*	0.57*	0.59*	0.60*				
I&F	3.69	0.56	0.54 *	0.61 *	0.67*	0.57*	0.56*	0.54*	0.54*	0.58*			
BM	3.67	0.61	0.42*	0.36 *	0.53*	0.62*	0.62*	0.59*	0.56*	0.60*	0.58*		
CI	3.74	0.59	0.41*	0.46 *	0.47 *	0.57*	0.57 *	0.56*	0.60*	0.61*	0.58*	0.55*	
HRMO	3.90	0.55	0.52*	0.70*	0.72*	0.68*	0.54*	0.46*	0.76*	0.60*	0.42*	0.44*	0.55*
OO	3.76	0.52	0.46*	0.66*	0.65*	0.57*	0.60*	0.67*	0.70*	0.57*	0.50*	0.60*	0.58*

Notes: n = 324; \*Correlation is significant at p, 0.01 level (2-tailed)

Table II. Correlations of TQM/HRM practices and HPWS

The correlation matrix in Table II further indicates that TQM/HRM practices were positively, moderately and low correlated with HPWS. There was a significant positive relationship between HRM and HRM outcomes ( $r = 0.76$ ,  $n = 324$ ,  $p, 0:01$ ), organization culture and HRM outcomes ( $r = 0.72$ ,  $n = 324$ ,  $p, 0:01$ ), employee empowerment and HRM outcomes ( $r = 0.70$ ,  $n = 324$ ,  $p, 0:01$ ), communication and HRM outcomes ( $r = 0.68$ ,  $n = 324$ ,  $p, 0:01$ ) and quality of work life and HRM outcomes ( $r = 0.60$ ,  $n = 324$ ,  $p, 0:01$ ). The positively moderate correlation was for continuous improvement and HRM outcome ( $r = 0.55$ ,  $n = 324$ ,  $p, 0:01$ ), customer focus and HRM outcome ( $r = 0.54$ ,  $n = 324$ ,  $p, 0:01$ ) and between top management leadership and HRM outcome ( $r = 0.52$ ,  $n = 324$ ,  $p, 0:01$ ). The weakest correlation was for process quality improvement and HRM outcome ( $r = 0.46$ ,  $n = 324$ ,  $p, 0:01$ ), benchmarking and HRM outcome ( $r = 0.44$ ,  $n = 324$ ,  $p, 0:01$ ) and between infrastructure and facilities and HRM outcomes ( $r = 0.42$ ,  $n = 324$ ,  $p, 0:01$ ).

While when we consider the correlations between TQM/HRM practices and operative outcomes (indicated in table 2) we find that there is a significant positive relationship between process quality improvement and operative outcome ( $r = 0.67$ ,  $n = 324$ ,  $p, 0:01$ ), benchmarking and operative outcome ( $r = 0.60$ ,  $n = 324$ ,  $p, 0:01$ ), continuous improvement and operative outcome ( $r = 0.58$ ,  $n = 324$ ,  $p, 0:01$ ) and customer focus and operative outcome ( $r = 0.60$ ,  $n = 324$ ,  $p, 0:01$ ) also along with the HRM and operative outcome ( $r = 0.70$ ,  $n = 324$ ,  $p, 0:01$ ) organization culture and operative outcomes ( $r = 0.66$ ,  $n = 324$ ,  $p, 0:01$ ), employee empowerment and operative outcomes ( $r = 0.65$ ,  $n = 324$ ,  $p, 0:01$ ), communication and operative outcomes ( $r = 0.57$ ,  $n = 324$ ,  $p, 0:01$ ). The positively moderate relationship was found between top management leadership and operative outcome ( $r = 0.46$ ,  $n = 324$ ,  $p, 0:01$ ), and between infrastructure and facilities and operative outcomes ( $r = 0.50$ ,  $n = 324$ ,  $p, 0:01$ ).

The correlation coefficients between the independent variables (i.e. TQM/HRM practices) and the dependent variable (i.e. HRM outcomes and operative outcomes) were less than 0.9, indicating that the data was not affected by a collinearity problem (Hair et al., 1998). These correlations are also further evidence of validity and reliability of measurement scales used in this research (Barclay et al., 1995; Hair et al., 1998). The results indicate that the most important TQM/HRM practice affecting HRM outcomes were HRM and employee empowerment (i.e. with the highest scores of correlation), which proves that HRM and empowerment were perceived as a dominant TQM/HRM practices, which improves HRM outcomes. But when we consider operative outcomes other practices, as process quality improvement is also very important.

## VI.DISCUSSION

The overall objective of this study was to investigate the relationship between TQM/HRM practices and HPWS within software industry. The results of this study revealed that the TQM/HRM practices could be categorized into three categories:



1. High Involvement TQM/HRM practices: e.g. HRM, empowerment, quality of work life, communication and organization culture with highest mean and correlation coefficient.
2. Moderate involvement TQM/HRM practices: e.g. continuous improvement, customer focus and top management leadership with moderate mean and correlation coefficient.
3. Low involvement TQM/HRM practices: e.g. benchmarking, infrastructure and facilities and process quality management with weakest mean and correlation coefficient.

In the contemporary HRM-business performance literature, high involvement work practices are typically measured by indexes that incorporate, or assign points to the extent of team-based work and/or other employee participation arrangements, employee training and development, formal performance management systems, variable pay, business information sharing with employees, targeted or selective recruitment and hiring, and certain other practices. Those entities –companies, service work groups -with high index scores can be said to practice what might be called “high high involvement” HRM; those entities with midlevel index scores can be said to practice what might be called “average high involvement” HRM; and those entities with low index scores can be said to practice what might be called “low high involvement” HRM. (Iewin 2004).

The results show that there is a strong relationship between high involvement TQM/HRM practices and HRM outcomes. This provides the evidence to Iewin and other researchers who states that high involvement practices are required for HPWS and leads to business excellence.

In contrast, there was a weak relationship between low involvement practices and HRM outcomes. Low involvement practices were found to have insignificant contributions towards HRM outcomes.

But, there is a significant and strong relationship is found between low involvement practices and operative outcomes. The result supports the findings from Iewin (2004), in which he found there is a significant relationship between the low involvement practices and business performance which is the called as ‘dual theory of business performance’. (Iewin 2004).

The dual theory of business performance states that “high involvement” type HRM (HIHRM) practices has significant positive effects on such business performance measures as market value, rate of return on capital employed, revenue growth, revenue per employee, productivity, product/service quality, and even organizational survival (see Iewin, 2004). That HIHRM practices “leverage” business performance appears to be well known to human resource (HR) executives.

HIHRM practices, however, constitute only one way of managing human resources to leverage business performance. Another way to achieve more business performance is by managing human resources by expense control. Consequently, certain “low involvement” HRM (LIHRM) practices may best fit some organizations and employees. Taken together, HIHRM and LIHRM practices form the building blocks for a dual theory of HRM and business performance (Iewin 2004).

### VII.PROPOSEDMODEL

On the basis of the findings from the study and Iewin’s dual theory we propose a model for HPWS.

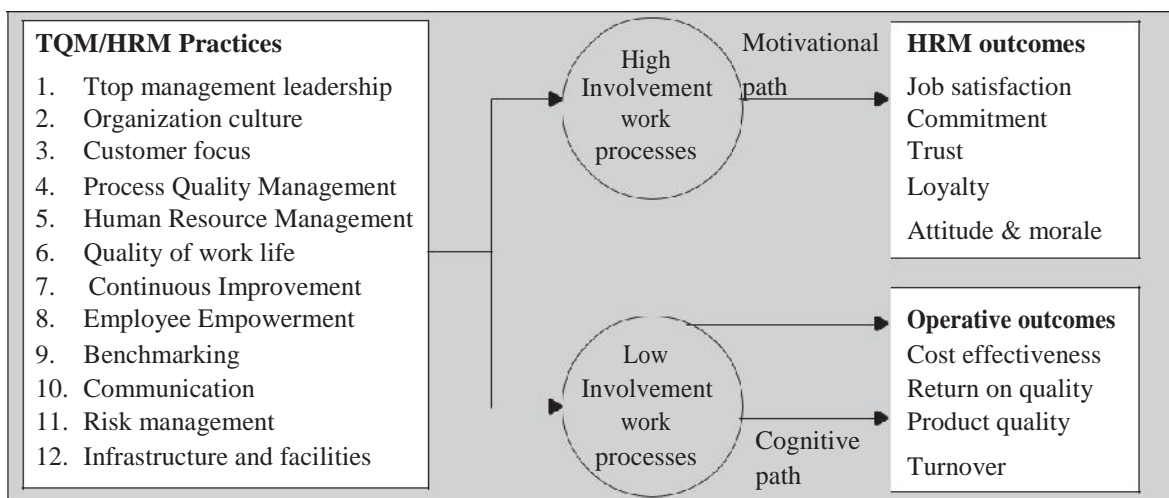


Figure 3. High Performance Work System

Figure 3 linked TQM/HRM practices to involvement processes and thence to worker psychological states, which leads to HR outcomes and measures of organisational effectiveness i.e. operative outcome. It proposes two paths: a cognitive path in which high-involvement processes take 'greater advantage of the skills and abilities' employees possess and a motivational path in which involvement processes increase HR outcomes (satisfaction, commitment etc.). This parallels Batt's (2002) identification of a 'direct' path (enhancing employee skill levels and firm-specific knowledge) (Boxall and Macky 2009) and an 'indirect' path (enhancing employee motivation and satisfaction, and lowering quit rates). The direct path, which includes low involvement processes, is important for enabling workers (individually and collectively) to solve work problems more effectively, and that leads to better operative outcome of the companies, and the indirect path is important to ensuring they want to do so and continue to take responsibility for doing so...

In other words, high-involvement work processes empower workers and positively affect job satisfaction, trust, commitment and employee loyalty. It also reduces the employee turnover and absenteeism. While low involvement work practices are related to motivational path only and give the cost advantages and enhance knowledge and employee abilities, motivations and opportunities to contribute. Improvements in knowledge enhance ability, while empowerment and information enhance the opportunity to contribute.

The kind of framework shown in Figure 3 takes us in a simple but important way beyond the counting of HR practices. It means that we are not restricted to understanding TQM only through certain specific practices. It measures each process dimension in relation to the HRM framework. Such a procedure measures the systemic impact of these processes on employee attitudes and organisational effectiveness. It is found that high-involvement processes do act positively through both (indirect) motivational and (direct) cognitive paths. Company performance is higher (measured by higher ROE and lower employee turnover), as is employee morale. It ensures that processes *as experienced by employees* are measured in the space between management.

A sustainable high involvement work practices also benefit firms or economically rational managers will shut down operations or relocate operations. Because, the value to firms is best demonstrated by the benefits and costs at the point of production (*i.e.* operational outcomes of an actual production process) and the proposed model measures the cost involved, ROE and other operative outcomes. So, the proposed model also measure that processes, which are beneficial, form the employer side.

### VIII.CONCLUSIONS,IMPLICATIONSANDRESEARCHLIMITATIONS

Like others, we found the difficulties in specifying the independent variable in HPWSs. The term itself gives no clue about the pathway of the desired goal. The linkage of HPWS and high involvement employment practices (Lewin 2004), are both more descriptive, more useful in identifying the main thrusts in a particular HR system. However, they are not equivalent. While higher involvement typically implies higher skill and is more rationally managed with high-involvement practices, but, the reverse is not always true.

The study of HIWSs has logical focus because it creates smarter working, to gain competitive advantage globalised software industries, are of vital interest to practitioners and policy makers in the developed economies. As the studies of MacDuffie (1995) and Appelbaum *et al.* (2000) states that the competitive response requires change to work systems. This study provides a theoretical rationale for particular practices by accompanying quality framework.

Focusing our independent variable on high-involvement work and linking it with TQM/HRM improve our theoretical modeling and practical measurements and will help to progress the evaluation in this area. The HIWSs implies that there are possibilities for win-win outcomes in certain contexts but not without careful management of both types of practices. On the employee's side, the high involvement practices provides motivation to them and leads to high HR outcomes in the form of better job satisfaction and high moral and less turnover. But on the other side low involvement practices required for the cost efficiency and better operative outcomes. However, the interaction between involvement and intensification is very critical. On the company's side, the caution should be taken with overgeneralised claims of economic benefits. This study will help us to know that *when* and *how* a high involvement system might perform, thus helping us with the contextual and causal questions that is the central to this line of research.

### REFERENCES

1. Ahmed, N. U. 2001. Incorporating environmental concerns into TQM. *Production and Inventory Management Journal* 1: 25-29.
2. Appelbaum, E., Bailey, T., Berg, P. and Kalleberg, A. (2000). *Manufacturing Advantage: Why High-Performance Work Systems Pay Off*, Ithaca: ILR Press.

3. Arthur J.B. (1994) 'Effects of Human Resource Systems on Manufacturing Performance and Turnover', *Academy of Management Journal*, 3(37): 670-87.
4. Bahrami, H., and S. Evans. 1997. Human resource leadership in knowledge based entities: Shaping the context of work. *Human Resource Management* 36: 23-28.
5. Barclay, D., Higgins, C. and Thompson, R. (1995), "The partial least square (PLS) approach to causal modeling: personal computer adoption and use as an illustration", *Technology Studies*, Vol. 2 No. 2, pp. 285-309.
6. Batt, R. (2002). 'Managing customer services: human resource practices, quit rates, and sales growth'. *Academy of Management Journal*, 45: 587-597.
7. Blackburn R. and Rosen B. (1993) 'Total Quality and Human Resources Management: Lessons learned from Baldrige Award winning companies', *Academy of Management Executive*, 3(7): 43-65.
8. Boselie & Wiele, High Performance Work Systems: "Research on Research" and the Stability of Factors over Time, ERS-2002-44-ORG
9. Boxall and Macky (2009). Research and theory on high-performance work systems: progressing the high involvement stream, *Human Resource Management Journal*, Vol 19. no 1, pages 3-23
10. Boxall, P., Macky, K. and Rasmussen, E. (2003). 'Labour turnover and retention in New Zealand: the causes and consequences of leaving and staying with employers'. *Asia Pacific Journal of Human Resources*, 41: 195-214.
11. Cortada, J. W. 1995. *TQM for information system management: Quality practices for continuous improvement*. New York: McGraw-Hill.
12. Dale B.G. (1999) *Managing Quality*, 3rd edition, Blackwell Publishers, Oxford.
13. Delery, J.E. and Shaw, J.D. (forthcoming in 2002) 'The Strategic Management of People in Work Organizations: review, synthesis, and extension', Vol. 20, *Research in Personnel and Human Resource Management*, edited by Ferris.
14. Goyal, S. K., and M. Islam. 2001. Total quality management through activity-based costing and cultural setting—A versatile tool. *Industrial Engineering* 30: 9-12.
15. Hair, J.F., Anderson, R.E., Tatham, R.L. and Black, W.C. (1998), *Multivariate Data Analysis*, Prentice-Hall, Englewood Cliffs, NJ.
16. Issac, Rajendran, and Anantharaman, Significance of Quality Certification: The Case of the Software Industry in India, QMJ VOL. 11, NO. 1, 2004, ASQ
17. Jalote, P. 2000. *CMM in practice*. Reading, Mass.: Addison- Wesley.
18. Lewin, D. (2004). HRM and Business Performance Research: Empiricism in Search of Theory. Paper presented to the 62nd Annual Meeting of the Academy of Management, Denver, CO, 2002, revised.
19. Lewin, D. (2004). The Dual Theory of Human Resource Management and Business Performance: Lessons For HR Executives, Prepared for Inclusion in The Future of HR: 50 Thought Leaders Call for Change, Edited by M. Losey, D. Ulrich, S. Meisinger and R. Narramore, New York: Wiley and SHRM, 2005
20. MacDuffie, J.P. (1995). 'Human resource bundles and manufacturing performance: organizational logic and flexible production systems in the world auto industry'. *Industrial and Labor Relations Review*, 48: 2, 197-221.
21. Nunnally, J.C. (1978), *Psychometric Theory*, 2nd ed., McGraw-Hill, New York, NY.
22. Ooi, and et.al., Does TQM influence employees' job satisfaction? An empirical case analysis, *International Journal of Quality & Reliability Management*, Vol. 24 No. 1, 2007, pp. 62-77
23. Paul, A. K., and R. N. Anantharaman. 2002. Business strategy, HRM practices and organizational performance: A study of the Indian software industry. *Journal of Transactional Management Development* 7: 27-51.
24. Pfeffer J. (1994) *Competitive Advantage Through People*. Boston: Harvard Business School Press.
25. Puay S.H., Tan K.C., Xie M. and Goh T.N. (1998) 'A comparative study of nine national quality awards', *The TQM Magazine*, 1(10): 30-9.
26. Radovitsky, Z. D., and J. W. Gotcher. 1996. Implementing total quality management: Statistical analysis of survey results. *International Journal of Quality and Reliability Management* 12: 10-22.
27. Tenner, A. R. 1991. Quality management beyond manufacturing. *Research Technology Management* 34: 27-32.
28. Zinovy, D., J. Radovitsky, W. Gotcher, and S. Slattsveen. 1996. Implementing total quality management-statistical analysis of survey results. *International Journal of Quality and Reliability Management* 13: 10-22.

# EMPLOYER BRANDING FOR SUSTAINABLE GROWTH OF ORGANISATIONS

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## I.INTRODUCTION

The concept of branding for products and services is well known. Employer branding may be the least known type of branding yet is becoming more important to organizations. The reason is changes in workforce demographics. The baby-boomers are retiring and the pool of new recruits is not sufficient to fill the gap. According to an Accenture survey, 60% of CEOs are very concerned about attracting and retaining people. The concept of Employer Brand has gained importance since 1990's or it is a result of Global manic competition but above all it has become a magnetic force, a catalyst, an accelerator and a prime factor which determines an organization success and future. Employer brand has overshadowed and synchronized all other factors which had their individual importance like customers, relationship, PR, networking, 2- way communication etc and is now the sole prima factor or the turnkey of success.

In the present job markets, where companies compete for attracting the best of the talent, employer brand, sometimes, becomes more relevant when compared to various critical factors like job profile and the compensation package. Employer brand is the image of an organization as a great place to work in the minds of its current employees and key stakeholders. It is the development of such an organizational culture which fosters a sense of belongingness with the company and encourages the employees to share organization's goals for success. In short, it is the value of the company in external marketplace. The goal of employer branding is to create loyal customers; the customers here being the employees.

From an HR point of view branding is very important. If your organization has a good brand image in the market, it will help you in getting right workforce at right time and at the same time you will have a control over the employee cost. An organization with no brand name has to shell out lots of money to attract and retain the right candidate.

This paper begins by defining the concept of Employer Branding practices carried out by the organisations to attract talents which help them to move towards their vision in a successful style. Types of Employer Branding, Branding Strategy and the benefits received by the organisation by adoption of the concept of Employer Branding in Indian context are then discussed.

## II.CONCEPTUALANALYSISOFEMPLOYERBRANDING

Brett Minchington (The Employer Brand Institute), defines employer branding as "the image of the organization as a 'great place to work' in the minds of current employees and key stakeholders in the external market (active and passive candidates, clients, customers and other key stakeholders)." It is the 'sum of a company's efforts to communicate to existing and prospective staff that it is a desirable place to work' (Lloyd 2002)<sup>2</sup>. Increasingly, it is likely to also be used to create what has in the popular business press recently been referred to as 'employment brands' building and sustaining employment propositions that are compelling and different. The moniker 'employer brand' appears to have first been coined by Ambler and Barrow (1996)<sup>3</sup>, who defined it as 'the package of functional, economic and psychological benefits provided by employment, and identified with the employing company'. The authors go on to suggest that, just like a traditional brand, an employer brand has both personality and positioning. Employment branding is therefore concerned with building an image in the minds of the potential labour market that the company, above all others, is a 'great place to work'. According to human resources consultants Hewitt Associates, there are four steps to developing a strong employer brand:

- (i) understand your organisation,
- (ii) create a 'compelling brand promise' for employees that mirrors the brand promise for customers,

- (iii) develop standards to measure the fulfilment of the brand promise,
- (iv) 'ruthlessly align' all people practices to support and reinforce the brand promise,

Moreover, it is posited that companies with strong employer brands can potentially reduce the cost of employee acquisition, improve employee relations, increase employee retention and even offer lower salaries for comparable staff to firms with weaker employer brands (Ritson 2002)<sup>4</sup>. Collins (1995)<sup>5</sup>, confirming prior research, suggest that early recruitment activities are indirectly related to intentions and decisions through two dimensions of employer brand image: general attitudes towards the company and perceived job attributes. Examples of employer brands, and indeed employer advertising, are becoming increasingly common.

Employer branding is the development and communication of an organization's culture as an employer in the marketplace. It conveys organisations "value proposition" - the totality of organisations culture, systems, attitudes, and employee relationship along with encouraging organization's people to embrace and share goals for success, productivity, and satisfaction both on personal and professional levels.

Employer branding is the essence of the employment experience, providing points that commence with initial employer brand awareness, and continuing throughout the tenure of employment, even extending into retirement. Employer branding is a distinguishing and relevant opportunity for a company to differentiate itself from the competition creating its branded factors as its USP for employee satisfaction and happiness resulting in retention, productivity and efficiency<sup>6</sup>.

### III. RISING IMPLICATION OF EMPLOYER BRANDING

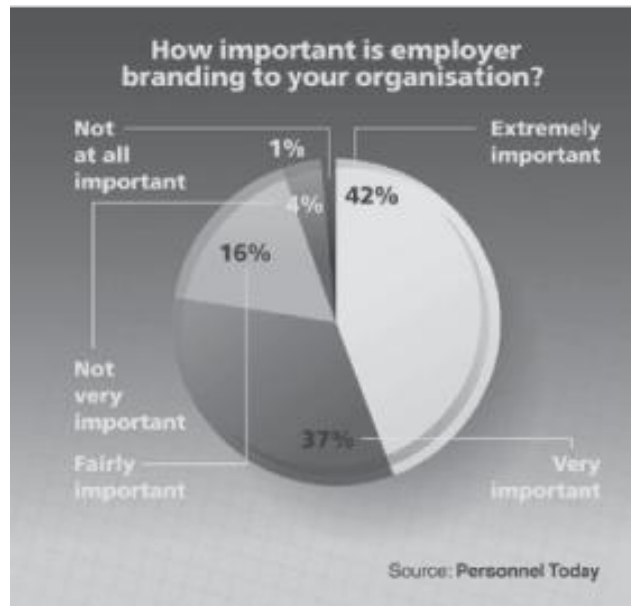
It is said that an unsatisfied customer tells ten people about his experience while an unsatisfied employee tells a hundred. Employer branding reflects the work culture in an organization. It has become more critical in today's times, as most professionals are looking at a stable career and establishing a long-term relationship with the company. Research shows that employees of industrial brands feel a much greater sense of pride, attachment and trust towards their employer. They are also significantly more likely to recommend their company to others and claim it treats employees well. Through right branding, the company can recruit the best talent and reinforce its positioning amongst its employees. It helps build trust and reliability. A good employer brand makes it easy to attract good talent and curb attrition. The strength of an organization's brand has a significant impact on the performance of its employees. Working with one of the largest or most innovative companies in a specific industry acts as a motivator too.

But as one moves higher in his career, brand name becomes of little significance as job role takes over. Brand name is the most important factor but at entry level only. When one is a fresher and embarks on one's career, the brand of a company matters. It helps in reflecting a stronger resume. With career growth, one places importance on things that are more meaningful to one's sense of purpose. It is also being argued that in most cases, companies treat employer branding as a mere short-cut for attracting the talent. Instead of self-analysis, the HR departments tie up with ad agencies to conjure up an image that may be attractive to their target market, even if not their own. While some argue that organizations like Google with strong employer brand hardly spend money in building the brand; instead they focus on living the brand. Sasken, for example, has a stated 'People First' policy to emphasize that employees are the focus. Fedex has a core philosophy of 'people - service - profit' to indicate what comes first. Bill Marriott of Marriott Hotels does not tire of repeating the founder's belief "Take care of the associates, and they'll take good care of the guests, and the guests will come back." These organizations reveal a high degree of trust in the management of the organization. Managements must understand that the core value offering of the organization is to engage employees towards being productive and responsive to customers. In the end, it is believed that if the company takes care of people, people will take care of the company. <sup>7</sup>

### IV. SURVEY RESULTS

An exclusive survey of 1,889 *Personnel Today* readers with responsibility for recruitment reveals that 95% of respondents believe employer branding is 'important' (Fig. A)<sup>8</sup>.



**Fig.**

### **V.BRANDING STRATEGY**

#### **A) Nature of Business**

Branding should be based on the nature of business. Like if an IT company goes for a fashion show, it may not yield the same results as it would have got by going to IT Fair or something similar. A real estate company may go for some road show on property market.

#### **B) Nature of Market**

It is always recommended to gauge the market before going for any project which involves market risk. Like if targeting to explore a financial market or banking and at the same time it is marred by some other factors like Inflation, you need to design your strategy which could help you in overcoming the negative trend.

#### **C) Reception Target**

It's always good to define the reception target or the audiences. The audiences under employer branding are the internal customers of the organisation. The attempt of employer branding boosts up the morale of the employees and thereby keep the employees feel satisfied.

#### **D) Long Term Mission of Organization**

Also the long term as well as short term goals of the organization should be kept in mind. If the organization does not have any long term goals in the target market or location, it's always recommendable not to go for branding or it is very much required go for a small, low budgeted branding event.

#### **E) Organizational Structure**

Organizational structure is also very vital part for deciding any strategy. Organizational structure is the strength of any organization and any event or branding can be done based on that. Like if the organization does not have lots of hierarchy steps, it can boast of Flatness and claim of equal behavior. And if it has different layers, it can market the clear definition of roles etc.

### **VI.EXTERNALBRANDING**

External branding refers to branding which is done by using external sources and which may (or may not) require some investment in monetary or other forms. The different means of doing external branding are;

- (a) **Use of Job Sites** – As HR the first thing which comes to the mind is recruitment, so Job sites also offer good branding opportunities through different means like Pop ups, pop ins etc. It's always better to go for pop ins as most of web browsers come with pop-up blockers.



- (b) **Banners** – Banners are also a good mean for branding. Banners can be of both types' means Online Banner and Street banners. By Online banner, your organization name will be flashed on different web pages as per your choice and price. Street banners are good for bigger requirements.
- (c) **Road Shows** – Road shows are also an important mean for creating brand awareness. Corporate can organize talks, presentations, seminars etc. for attracting people towards your organization.
- (d) **Corporate Social Responsibility** – Corporate social responsibility refers to corporate getting associated with society for some noble cause. The association can be in any mode either getting associated with a Charitable Trust or a NGO or some other public venture. Corporate can align and attach with any of these and share the stage. Always keep in mind that choose as per organization status meaning if its a small firm, do associate with a medium sized organization and if medium it can align with either of these- large or medium. Idea should be get a nice coverage in the popularity cake.
- (e) **Public Events** – Public events are one of the major ways of creating a brand image. An organization can participate in any of the public event and assuring that it does not get disappeared in the crowd of many brands or big names.
- (f) **Newspapers** – Branding can be done through newspapers as well. If you target the local public, you can go for advertisements considering the individual day circulation, target readers, rapport of newspaper, type of newspaper etc. If you target only to employ people for your workforce requirement, you can place job Ads which may seem expensive at the first glance but in terms of attracting the correct workforce, it can do magic.
- (g) **Email** – For mail ids related to job portals, you can create an auto reply which can contain brief description of the key aspects of candidate's and public interest and at the same time introducing your company to the public. It should be informative as well as crispy so that the audience reads it and just doesn't do Shift Delete.
- (h) **Tagline** – Create a nice, attractive tagline or a punch line for your brand and give it a significant visibility in all your branding efforts. The tag line should be in accordance with the organization values, goals, work etc. so that it reflects an overall image of the brand everywhere.
- (i) **Align with celebrity** – Aligning with a celebrity is also a good way of creating a brand image. But this may cost big bucks and ultimately increasing your cost dramatically. This is an expensive method of branding.

## VII.INTERNALBRANDING

Internal Branding is comparatively a cheaper way of branding. Organisation can use its internal organizational staff for this purpose.

- (a) **Front Office** – Always pay attention to your front office because first impression is last impression. It should be kept neat and clean with a pleasant receptionist who always maintains freshness and welcomes the guests with courtesy.
- (b) **Stays Interview** - HR can always conduct stay interviews in which they can interact with the employee and ask them regarding their career prospects, there alignment with the company, there feedback regarding their concerned departments, etc. These feedbacks can be analyzed and used for different purposes by which you can create an internal brand image of the country.
- (c) **Exit Interview** – An exit always carries a fair chance of initiating the chain reaction among the employees so always be very careful in analyzing the exiting reasons so that you can overcome the justified ones in the future.
- (d) **Employee Satisfaction** – Employee satisfaction is always very important for any organization to grow. A satisfied employee is a productive employee. If your employee is satisfied, you can relax because they will create a good and positive rapport for the company in the market outside.
- (e) **Policy Information** – Always design your policies very strategically. A policy should be designed in such a way that it holds good even after a long period of time. A frequent internal policy change sends a message to the outer world that the company is not consistent and knowledgeable and reliable.
- (f) **Customer Orientation** – Customers are always the most important factors. Always keep your workforce motivated towards delivery of customer oriented services. Customers can be of either type, internal or external.
- (g) **Employee Participation** –Ensure the maximum participation from the employee side, either in terms of internal events participation or external events.
- (h) **Trained Employees** – Always ensure proper training of employees before they are engaged in work. The training should be in all the aspects like policies, vision, mission, organization. This will project a good picture of organization on the new employee 9.

### VIII.EMPLOYERBRANDINGININDIA

“The Employer Branding—A Strategic Tool to Attract, Recruit and Retain Talent” highlights that HR uses the employer brand for three main reasons: 1) organizational culture and employee fit; 2) positive outcomes for recruiting; and 3) retaining talent with corporate values and a team-based culture. At its most effective, the employer brand is a long-term strategy with a transparent message that promotes the organization as an employer of choice. The increasing focus on competitive advantage is leading many firms to rethink their employer brand.<sup>10</sup> “India, Inc.”—a common term used in India to refer to India’s corporate sector—aims to positively build on opportunities as the world economy strengthens, and the employer brand is a prime example of a progressive HR practice in India. The fit between employer and employee is important for hiring compatibility. Yet, research shows that Indian companies do not always intentionally develop employer branding interventions. “Infosys, Wipro and TCS did not intentionally build their brands; rather, they focused on building a productive workplace, resulting in happy employees, and their brands were the result of that foundation,” “For other organizations in India, such as RMSI and Google, which already have strong employer brands, their goal is to ‘live’ the brand.” As Indian firms focus on strategies of turnaround, diversification, expansion and internationalization, human resources and human capital performance in India have become increasingly important. Consequently, HR’s role in effectively using the employer brand has tremendously expanded and grown in importance. Employer branding becomes a tokenism when it doesn’t fit in the DNA of the company. And, there needs to be a lot of self-sustained and conscious effort needed to create such a fit; to ‘become oneself’. The Tatas would never like to become like Reliance, or vice-versa. The brand as an employer must provide a long-term advantage. And this advantage comes only when the profile of the candidate fits well with the profile of the company. Also, one must also appreciate that employer branding works mainly at the entry-level since the middle level workforce and upwards look at other things, such as job profile, career enhancement et al.<sup>11</sup>

### IX.OUTCOMEOFEFFECTIVEEMPLOYERBRANDING

Employer branding gives an organization a competitive advantage. Employer branding is a tool to attract, hire, and retain the “right fit it also has an impact on shareholder value, creating positive human capital practices, contribute to bottom-line. Strong employer brands have employer value propositions (EVP’s) which are communicated in company actions and behaviors and evoke both emotive (e.g. I feel good about working here) and tangible benefits (this organization cares about my career development) for current and prospective employees. These organizations segment and communicate EVP’s which reflect the image that the organizations want to portray to its target audience. Employer Value Proposition (EVP) is a set of associations and offerings provided by an organisation in return for the skills, capabilities and experiences an employee brings to the organisation. A company’s employer brand is reflected in the actions and behaviors of leaders and is affected by company policies, procedures, and practices and the same when well planned and implemented results in profitability of organizations. Thus to retain talents inside the organisation not only during the bliss of the organisation but also in its tough times employer branding strategy plays a vital role.

### X.CONCLUSION

Thus it can be concluded that not only there is a need of creating a satisfaction in minds of employees (Internal customers) but there is an urgent need of creating this positivism in the minds of external customers and stakeholders. The created image has to be monitored and sustain in such a way so that it will help in increasing profits as well as would create belongingness, pride, self actualization and true commitment in true words and spirit.

### REFERENCES

1. Minchington.B (2010) “Employer Brand Leadership- a Global Perspective, Collective Learning Australia.
2. Lloyd. S, (2002) ,”Branding from the inside out’, Business Review weekly, Vol 24 No 10, pp 64-66
3. Ambler T and Barrows (1996), “The Employer Brand– Attract, Engage , Retain, Collective Learning Australia
4. Ritson (2002), “ Employer Branding and Retention” ,www.mbs.edu
5. Collins, J 1995), Built to Last, Random House, UK
6. Vijit Chaturvedi, “Employer Branding: A Ripple effect for organizational effectiveness”, www.indianmba.com
7. www.naukrihub.com
8. www.personneltoday.com
9. Rohit Minton, “ Employer Branding – A New HR Arena”, www.contentwriter.in
10. Minchington.B(2006), Your Employer Brand – Attract, Engage, Retain, collective Learning Australia
11. Madhukar Shukla, Employer Branding is tokenism in India, www.economictimes/indiatimes.com

## DIVIDEND ANNOUNCEMENT IMPACT ON INDIAN BOURSES

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### ABSTRACT

*Investors have experienced superior gains from stock markets all around the world during the past one decade. Investors have two ways to make profits with stocks: capital appreciation and annual income in the form of dividend. Capital appreciation is possible in bullish trend. But in bearish market, the capital appreciation is not possible; the other way to gain profit is dividend. Investors assumed to consider dividend is more important source when there is no capital appreciation in stocks. Using an event study methodology we find that despite of investors do not gain significant value in the period preceding as well as on the dividend announcement day, yet they can gain value in the post announcement period. Investors do shift their security positions at the time of dividend announcement, which indicate that in post announcement period there is a possibility of information content in dividend announcement in NSE. The dividend announcement conveys information to market traders; one would expect the impact of event on the market's valuation of the company's share. It depends on the magnitude of the unexpected component of the dividends. The present study attempts to contribute positively to the understanding of the behavior of Indian stock prices in relations to dividend announcement*

**Keywords :** Dividend, Investors, Market, NSE

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### 1.INTRODUCTION

Investors have experienced superior gains from stock markets all around the world during the past one decade. Investors have two ways to make profits with stocks: capital appreciation and annual income in the form of dividend. Capital appreciation is possible in bullish trend. But in bearish market, the capital appreciation is not possible; the other way to gain profit is dividend. Investors assumed to consider dividend is more important source when there is no capital appreciation in stocks. The present study attempts to contribute positively to the understanding of the behavior of Indian share prices in relation to the dividend announcements. This study analyzes the impact of dividend announcement in the Indian stock market. The dividend is the cost of equity capital to equity shareholders/investors in the market place. The announcement has an impact on the market price of the shares; the market will react positively, if the dividend is upto the expectation level of the equity investors. At the same time if the dividend announcement is not the expectation level of the shareholders, the market reaction will in bear trend for that particular scrip.

### 2.STATEMENT OF THE PROBLEM

This study investigates the stock market reaction to cash dividend announcements for the period from January-2009 to December-2009. In particular, this paper examines the stock price response to company announcements about dividend to shareholders. As a matter of fact dividend announcements usually are considered as the positive signal to the shareholders and its positive impact on the share prices is also expected. Using an event study methodology we find that despite of investors do not gain significant value in the period preceding as well as on the dividend announcement day, yet they can gain value in the post announcement period. Investors do shift their security positions at the time of dividend announcement, which indicate that in post announcement period there is a possibility of information content in dividend announcement in NSE. In a country like India where the economy is emerging, the issue is still unresolved and there is a diverse substantiation over the matter which has encouraged us to examine the impact of dividend announcement over share price, which may carry valuable information to the investors, researchers and policy makers.

### 3.NEED FOR THE STUDY

Perhaps no other area of finance has been subject to so much empirical investigation during the last four decades as the behavior of stock prices. Interestingly enough, the early empirical work was used to develop a theory, to be specific, the Efficient Market Hypothesis – rather than the normal procedure of first developing a theory and then its empirical testing. The empirical work on market efficiency is divided into three categories: (1) Weak-form tests – test for predictability of future returns on the basis of past returns, (2) Semi-strong form tests – test for stock price adjustment

to publicly available information, and (3) Strong form tests – test for the extent to which stock prices reflect unpublished information. Though a large part of the international finance journals during the past several years has been devoted to examining the behavior of stock prices in relation to all the conceivable publicly available price-sensitive information, no noteworthy research has been undertaken for the Indian Capital Market.

The price of a share may be said to depend upon the future earnings and dividend stream of a company. The information concerning a specific company may affect only that particular company's share. The dividend announcement conveys information to market traders; one would expect the impact of event on the market's valuation of the company's share. It depends on the magnitude of the unexpected component of the dividends. The present study attempts to contribute positively to the understanding of the behavior of Indian stock prices in relations to dividend announcement and market movement.

#### **4.OBJECTIVESOFTHESTUDY**

The main purpose of the study is

- \* To examine the behavior of stock prices around and on the date of dividend announcement.
- \* To investigate if any strategies found in dividend announcement could be used to outperform the market.
- \* To find the correct path of future trends based on the announcement effect.

In this context, the behavior of stock prices has been examined in the prior and post announcement periods in relations to the unexpected dividend announcement.

#### **5.RESEARCHMETHODOLOGY**

##### **5.1.SAMPLEANDDATA**

The present study covers a period of one calendar year from January 2009 to December 2009 and the results are based on a sample of Nifty stocks, listed in the National Stock Exchange. The data set contains daily data from the different sectors of 10 dividend paying stocks over the 10 window period i.e. -4 day to +4 day relative to the dividend announcement, which is listed on the National Stock Exchange for the period of January 2009 to December 2009. Three basic time series data have been employed in this study. These are, dividend announcement dates for the whole sample period, daily closing stock prices for the period [-4, to +4] around each dividend announcement day of every stock, prices of the NSE Nifty Index in the [-4, to +4] time window for each dividend announcement day of every stock and number of shares traded each day for each company in the sample period.

##### **5.2.SELECTIONOFSAMPLE**

The selection of sample has primarily been guided by two factors, availability of dividend announcement for the sample period, and the time to time revision and replacement of stock in the NSE Nifty. Often some existing stocks were replaced by new stocks in the Nifty index. This is also considered in the present study.

##### **5.3.TOOLSANDTESTINGPROCEDURE**

The most widely event study methodology is used in order to determine the stock price behavior of the company as a result of announcement of dividend. The event study methodology has been adopted to analyze the mass data. The supporting statistical tools can be used for simplification and application of the data analysis. Event study is followed for testing the market efficiency. At the outset it is useful to discuss the structure of an event study. The initial task of conducting an event study is to define the event of interest and identify the period over which the security prices of the firms involved in this event will be examined – the event window. For example, if one is looking at the information content of dividend with daily data, the event will be the dividend announcement and the event window will include one day of the announcement. It is customary to define the event window to be larger than the specific period of interest. This permits examination of periods surrounding the event. Hence for this study, return on four days prior to the event day and four days return after the event day are considered for analysis. Here, the abnormal returns can be used to draw conclusion during the study period. Abnormal return means the excess of security return over the index return on a particular date. The abnormal returns will be calculated for the entire period. In addition to that to test the market efficiency the time series analysis and necessary statistical tools applied.

Event studies examine the behavior of firm's stock price around corporate or economic events such as dividend announcements. The event study has many applications. In accounting and finance research, event studies have been

applied to a variety of firm specific and economy wide events. Some examples include mergers and acquisitions, earnings announcements, issues of new debt, or equity and announcements of dividends which is the case in this paper.

#### **5.4.METHODOLOGYOFEVENTSTUDIES**

The methodology of event studies is fairly standard and proceeds as follows:

##### **1. Collect a sample of firms that had a surprise announcement (the event)**

What causes prices to change in an announcement that is a surprise to investors? For many studies, such as an announcement of a merger, announcement of bonus shares or dividends, any announcement can be treated as a surprise. For other studies, such as the impact of dividend announcements, it is more complicated. For those studies, it is necessary to define a surprise. This is normally done by comparing announcements to what was expected as reflected in the average estimate of professional analysts. A number of services provide these data. To form a sample or surprises one first separates out a group of firms where the announcement is significantly different from what is being forecast. Since positive and negative surprises would affect price differently, this group is further separated into two groups, one for positive and one for negative earnings surprises.

##### **2. Determine the precise day of the announcement and designate this day as zero**

Most current studies use daily data, but in early days monthly data adopted. The use of monthly data made measurement much more difficult because there are many surprises in a month besides the announcement effect being studied. Thus, for measuring market efficiency, it is important to measure the impact of the announcement using the smallest feasible intervals. A number of recent studies have used intraday data.

##### **3. Define the period to be studied**

The present study, we studied 9 days around the event, the we would designate -4, -3, ..., -1 as the 4 days prior to the event, 0 as the event day, and +1, +2, ..., +4 as the 4 days after the event.

##### **4. Computation of the return on each of the days being studied for all stock**

In this study 9 days (4 days before the event plus the event day, plus 4 days after the event) returns are calculated from 10 days prices along with the benchmark index values are also collected.

##### **5. Computation of abnormal return for each of the days being studied**

Abnormal return is actual return less the expected return/ market return. Different authors use different models for expected return. In this study we used the return on the benchmark index as the expected return.

##### **6. Examination and discussion of the results**

Having performed the analysis the abnormal returns are examined and conclusions drawn.

#### **5.5.EVENTSTUDIESINSEMI-STRONGFORM**

According to the semi-strong form of the market, the security prices reflect all publicly available information within the purview of the efficient market hypothesis. In this state, the market reflects even those forms of information which may be concerning with the announcement of a firm's most recent dividend forecast and adjustments which will have taken place in the prices of security. The investors in the semi-strong form of the market will find it to earn return on the portfolios which is based on the publicly available information in excess of the return which may be said to be commensurate with the risk. Many empirical studies have been made to test the semi-strong form of the Efficient Market Hypothesis. In the semi-strong form market, any new announcement would bring reaction immediately to the company. This reaction could be even prior to the announcement in the market. This reaction prior to or immediately after the announcement would be caused by the additional information which is not anticipated by the stock exchange participants. This information also would not be disclosed to the market participants. But the semi-strong form of the efficient market hypothesis would immediately indicate a change in the price of the securities but the price would be adjusted immediately by the market participants and in this way, the participants remove any possibility for abnormal returns in the future.

#### **6.LITERATUREREVIEW**

Semi-strong form of EMH was empirically tested in 1969, by Fama, Fiscer, Jensen and Roll. "They considered the behavior of abnormal security returns at the announcement of stock split". In a stock market a stock splits generally indicates increased dividends payouts. Stock split announcement contain economic information. The average cumulative abnormal security return for thirty months upto the month of announcement was in excess of 30%. This shown that the



return was far above the normal rate of return which was achieved by the method of buying and holding a portfolio for a long-term investment of similar risky securities. The behavior of the security prices in the market after the split announcement should exactly the predictions of the EMH. After the public announcement the investors could achieve in abnormal returns on the basis of the information of stock split. The average cumulative abnormal return which was going higher and increasing just before the announcement stopped increasing or decreasing in any significant manner in the following period after the split announcement was made.

In 1972, Scholes conducted a study to observe, "The reaction of security prices to the offer of secondary stock issues". The research study showed that the price of security decreases when the issuer belongs to a company which indicated to the market that such an offer contained some bad news. But secondary, offering by investor, banks and insurance companies were not viewed in a negative manner and the security prices did not significantly fall. Price change which was associated with the secondary offering occurred usually within six days of issue and showed that these changes were more or less permanent. The price behavior of secondary issues lent support with the market just to a new price of information in an unbiased manner and almost immediately.

Kraus and Stoll also conducted a research study in the same year as Scholes to examine, "the effect of large block traders on the behavior of security prices". According to them, the study showed that there was a temporary effect, on share prices which were associated with the block trade. The traders which were known to effect large transactions were shown by a decrease in price but the price rose almost immediately and was totally reactionary by the end of the day. But the price did not return to the previous position because the market had received information which was negative to the image of the security. There was also no price behavior which could be predicted after the day on which the block trade occurred. This was constant with the semi-strong form of the EMH. Pettit and Watts examined the market reaction when an announcement was made about changes in dividends. They found that there was no evidence that the firms dividend announcement. Wauds further made an examination relating to the size and the direction of changes in the Federal Reserve discount rate. The price change on the date of announcement was significant and the manner in which it could be predicted. But after the event three days there was no indication of price change.

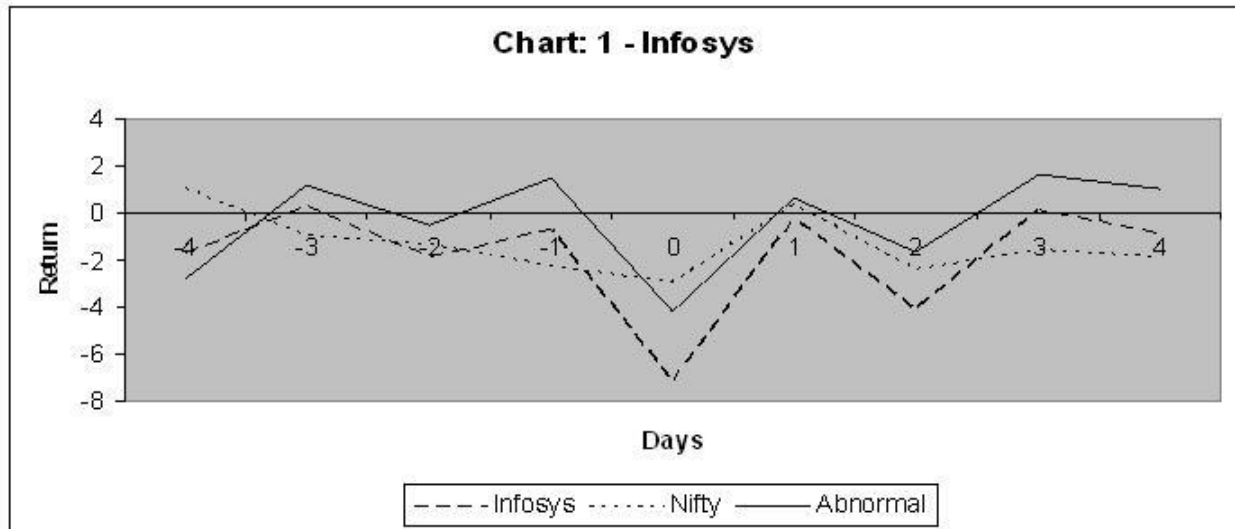
Another study conducted by Beaver which looked into the information with the announcements of annual earnings and the speed of changes in security prices. He examined the levels of the trading volume and the size of price changes. According to him, the absolute values of price changes and levels of trading were significantly higher during the announcement week. In the week of following the announcement week, it returned to pre-announcement levels. The market announcement effect was also studied by Patz and Boatsman. Both of them examined the reaction of market counting principles and they boldly release of a memorandum which was concerned with the cost centre used by some oil companies for accumulating certain material cost. They found that there was no significant reaction in the market to announcement and it was consistent with the efficient market hypothesis that the market saw the changes in keeping with temporary announcement leaving no great economic impact. This was further tested by Foster. He tested the preliminary estimates made by company officials and the market's reaction to it. He also found that the volume of trading increased in the week of announcement but went back to the pre-announcement level in the next week. All the above results indicate that price changes accompany with the announcement but abnormal returns cannot be made after following the announcement.

## **7. CALCULATING AND ANALYSING OF ABNORMAL RETURNS**

Using capital market data, an event study measures the impact of a specific event on the market. The usefulness of such a study comes from the fact that given rationality in the market place, the effect of an event will be reflected immediately in security prices. Thus a measure of the event's impact can constructed using security prices observed over a relatively short period. In this study, the problem of calculating and analyzing abnormal return is considered. The abnormal return is calculated using actual return of a stock less the market return on the same day. This facilitates the use of abnormal returns around the event day in the analysis. The fashion of abnormal return for both positive growth and negative growth firms are similar trend. The abnormal return occurs in the pre as well as in post-announcement period. That is, stock price reaction to the firm's dividend is not instantaneous, which contradicts the efficient market hypothesis.

For analysis purpose, the companies are categorized into two type's i.e. positive growth and negative growth companies. This can be concluded with previous year dividend or current year interim dividend. If the current year dividend is higher than the previous dividend announcement is designated as positive growth and if lower than the previous announcement is called as negative growth.

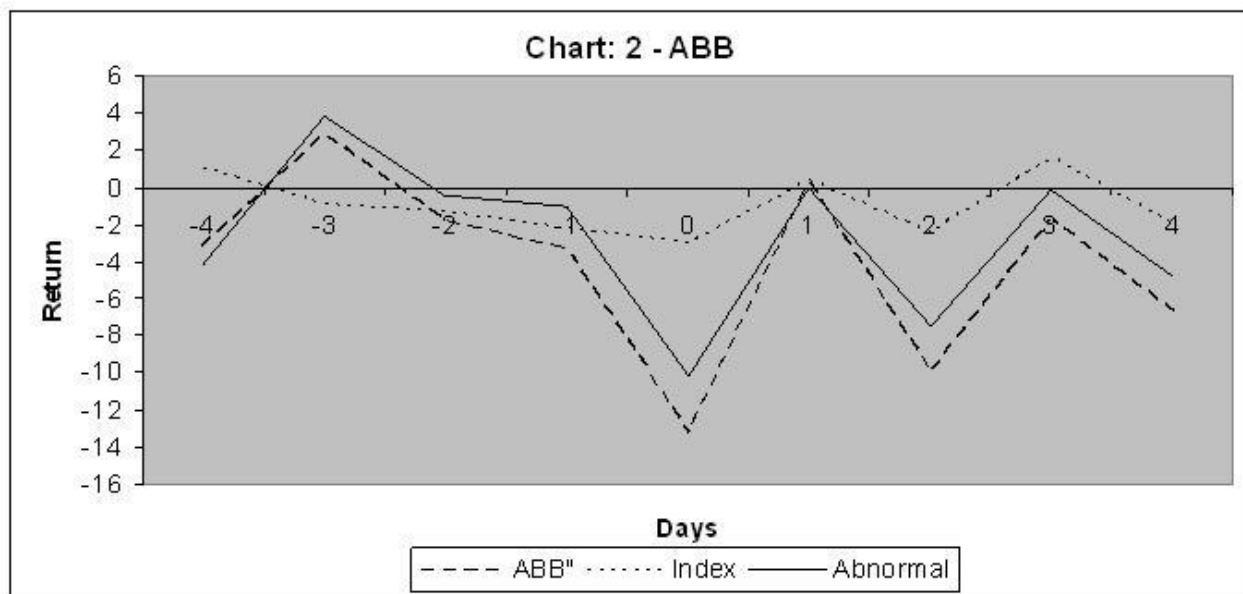




Source: [www.nse-india.com](http://www.nse-india.com)

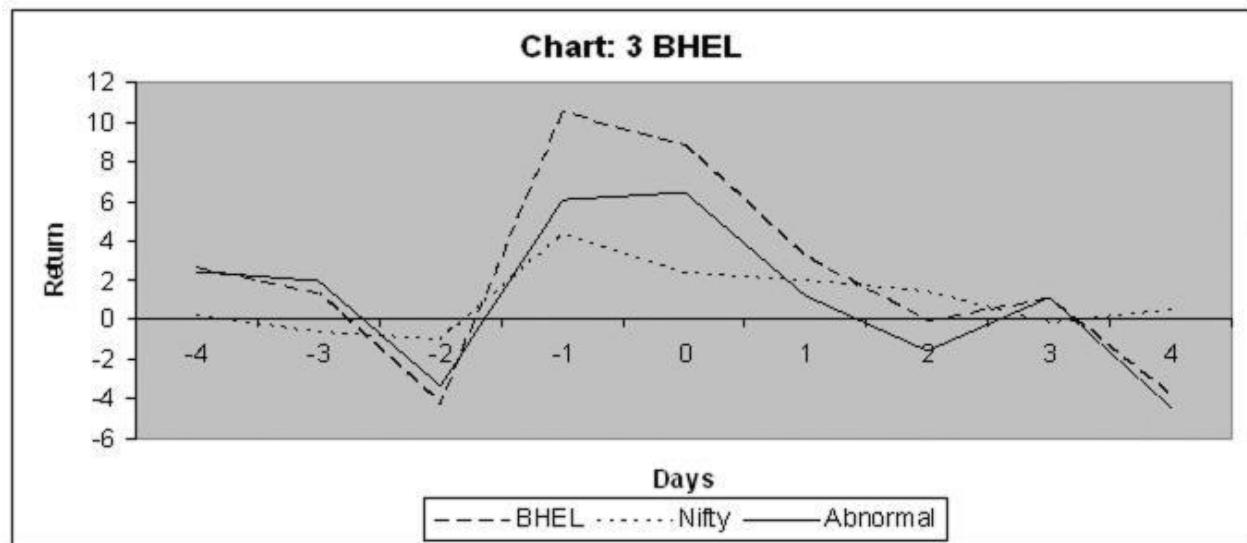
Almost Infosys return does not differ from the market return. The return behavior of this company prior to the event day and after the event day is consistent with the market index. The price path on the event day also followed with the market movement. The dividend announcement of the company doesn't seem to have any influence in the price. By this news, one can earn little amount of return but it doesn't fulfill the transaction cost.

#### ABB



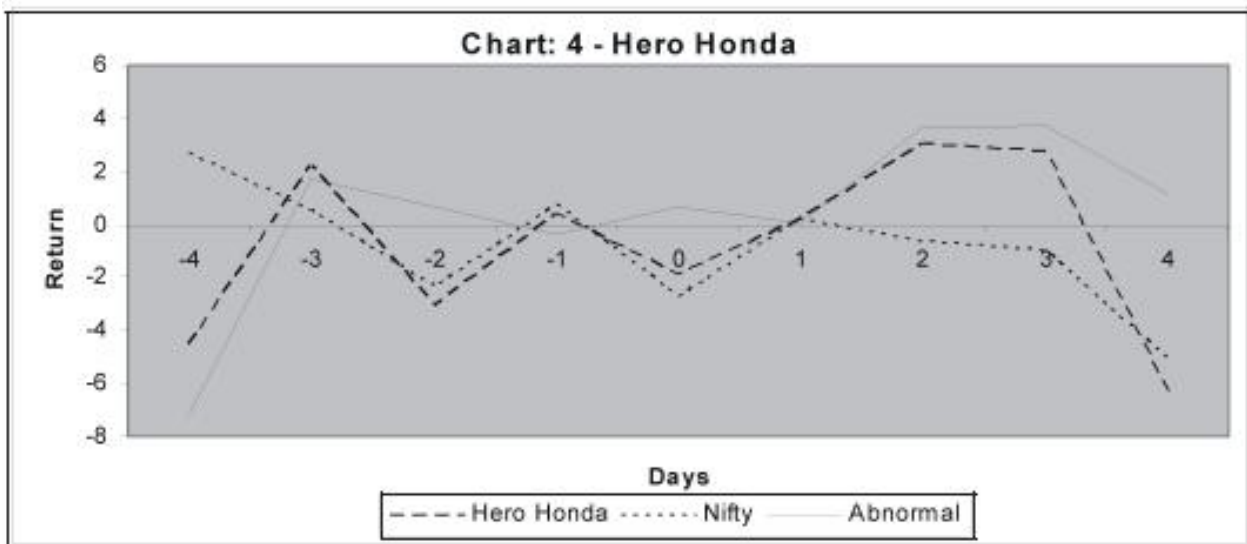
Source: [www.nse-india.com](http://www.nse-india.com)

ABB return curve movement is almost same with the market movement, but at the same time it involved with heavy loss than that of the market index. There is no positive abnormal return found pre as well as post announcement period. The above chart proves the scrip movement is parallel with the market movement.

**BHEL**

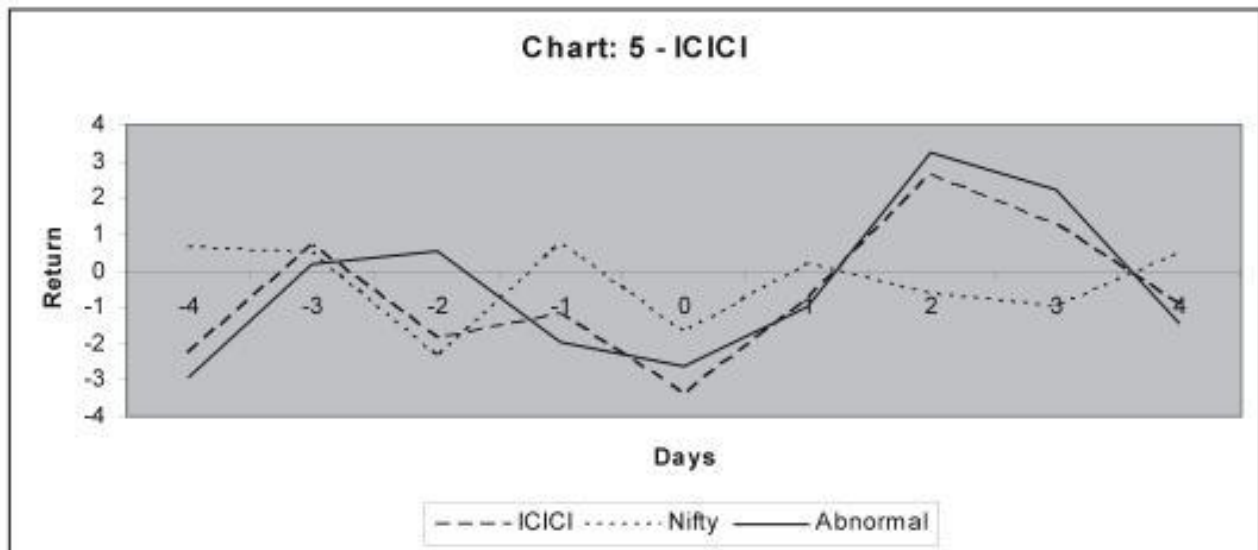
Source: [www.nse-india.com](http://www.nse-india.com)

A little abnormal return is found in pre-announcement period but from the event day onwards scrip movement correlated with the market. There is no opportunity exists to earn superior return from the market. This announcement cannot yield handsome returns to the market participants.

**HEROHONDA**

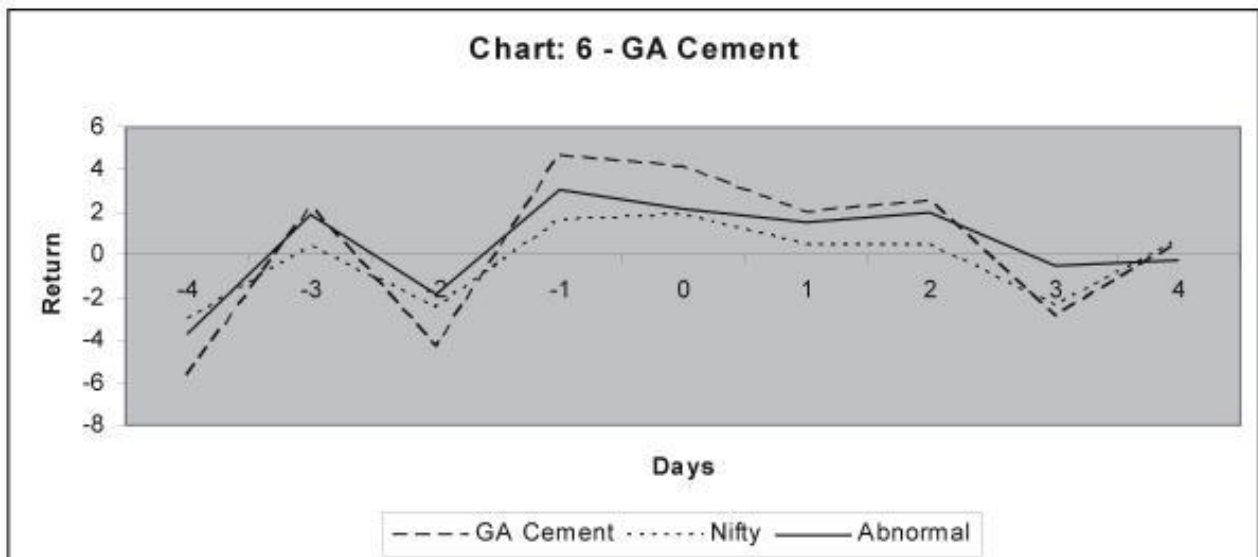
Source: [www.nse-india.com](http://www.nse-india.com)

Almost the scrip movement is correlated with the market performance. A little abnormal return is found during the first four days after the announcement of dividend results. Thereafter market return is decreased considerably along with scrip return. On the event day, market and the company share price is also ended with red.

**ICICI**

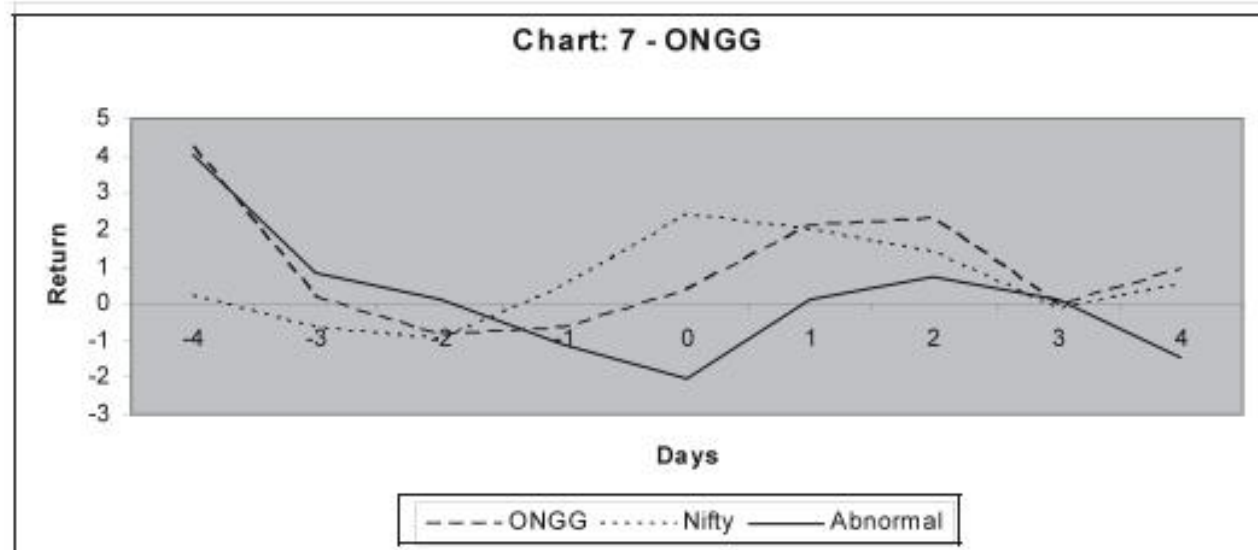
Source: [www.nse-india.com](http://www.nse-india.com)

It is clear from the above chart, scrip and market movement were almost same prior to the announcement of dividends. After the result announcement, scrip generated a little return to the market traders. But at the same time there was no return found during the day of dividend announcement. It is hard to believe that abnormal return found because of announcement or any other surprise news of the company.

**GA Cement**

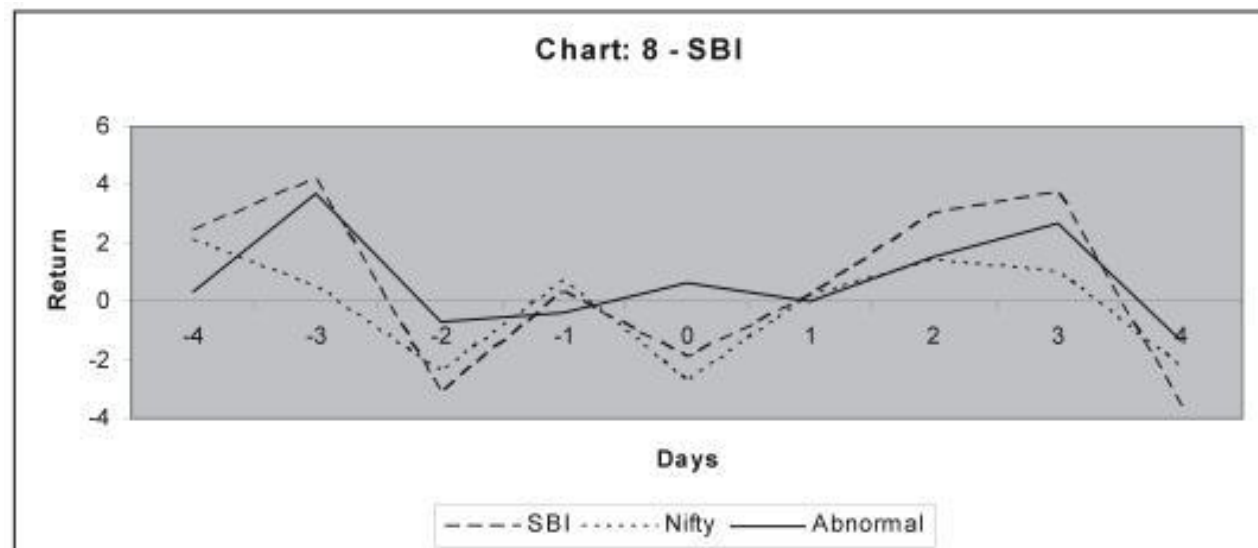
Source: [www.nse-india.com](http://www.nse-india.com)

It is evident from the above chart; the scrip started giving abnormal return prior one day to the dividend announcement to two days after the announcement. Based on this dividend announcement, one could not earn superior returns from the market. Almost all the curve movements are same pattern.

**ONGG**

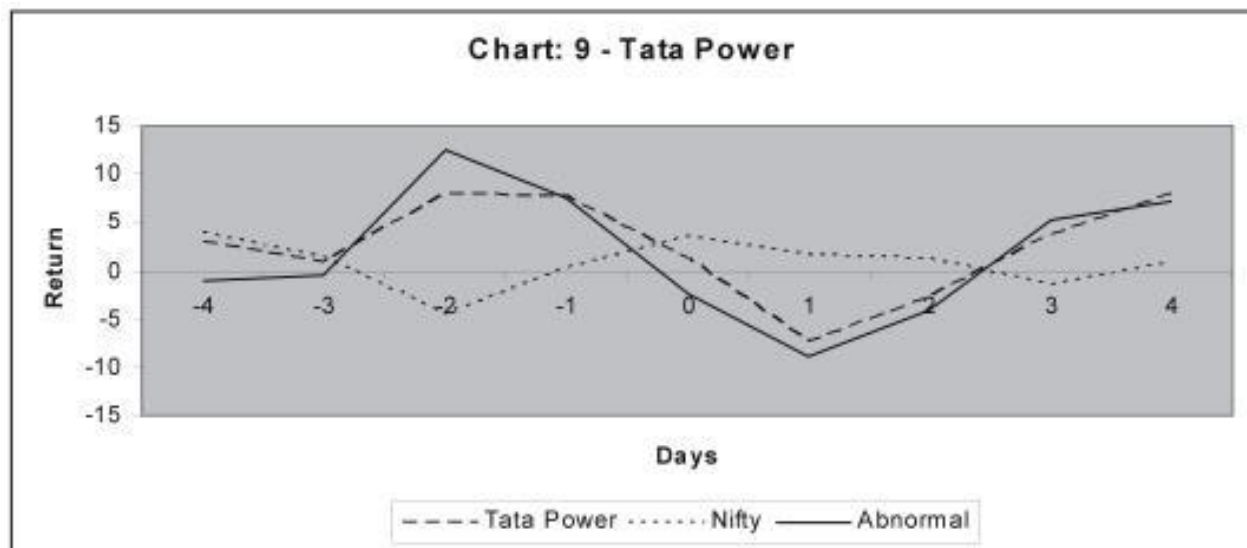
Source: [www.nse-india.com](http://www.nse-india.com)

The return behavior of this company is correlated with the index return in pre-event period and also in the post event period. There is no chance to earn abnormal return, by taking this announcement. Hence the announcement of dividends doesn't have any impact on the price of the script.

**SBI**

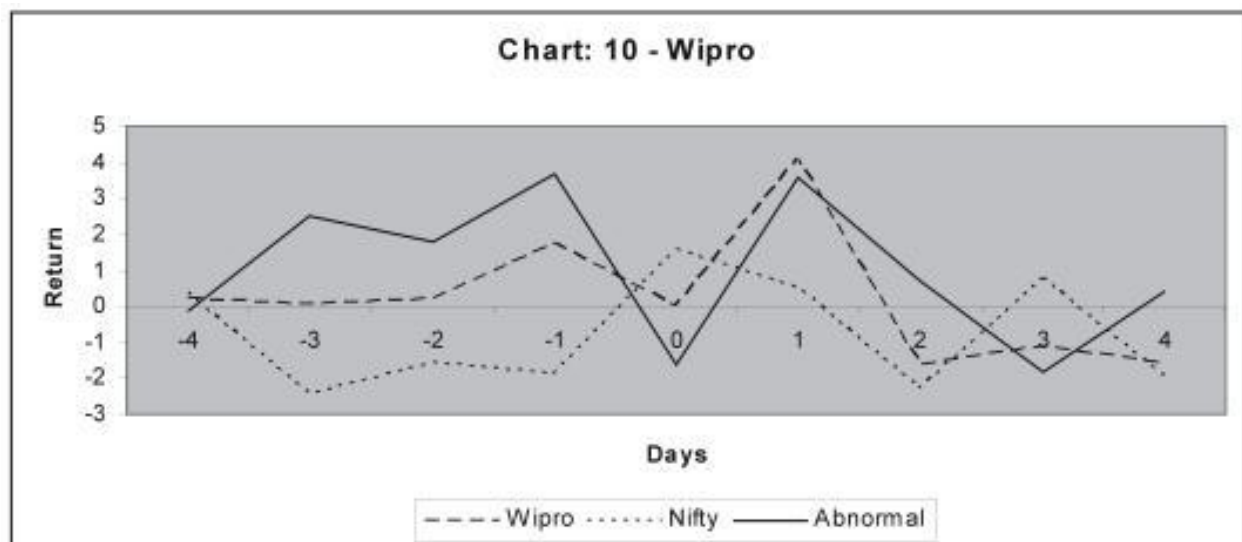
Source: [www.nse-india.com](http://www.nse-india.com)

This company's return does not differ from that of the market return. The return behavior of the company, prior to the event day and after the event day is consistent with the market return. The big dividend announcement of the company does not have any influence on the price of the share.

**TATAPOWER**

Source: [www.nse-india.com](http://www.nse-india.com)

The above chart reveals, there is no correlation between the scrip movement and index movement. But during the event day market and scrip movement coincides diminutive. Based on this news drift, it is difficult to earn abnormal return, which is also clear from the above chart.

**WIPRO**

Source: [www.nse-india.com](http://www.nse-india.com)

From the above chart, prior to the event day company return is correlated with the market return. The same trend continued even after the event day. Opportunity exists in both the periods to earn abnormal return. Hence the announcement of result does not have any impact in the market.

**8.SUMMARYANDCONCLUSION**

The findings of the present study basically highlight as to how the market evaluates equity returns. It is simply not true, that dividend announcement data can provide a profitable guide to investment timing or improve a portfolio's rate of return. Information is reflected in stock prices so rapidly that published data tells the investor virtually nothing about the future change in stock prices. Not only do stock returns reflect the firm's dividend data when published but they also

anticipate future dividend growth to some extent. The growth factor is taken in terms of percentage which increase profit over the previous year performance, was supposed to be an important performance indicator that is likely to affect the stock returns.

The study was undertaken to find out whether the announcement of dividend result is having any influence on the stock return. There are variety of factors that influence the movement of share price and hence the return. The performance of the company as disclosed by the dividend result is one among them. In this study it was tested whether the announcement of result is having any influence in the company return. Normally a higher dividend than the previous year dividend should be welcomed by the market. This should be associated with greater return after the result is announced. All higher return after the announcement cannot say to be due to the dividend results. To find out the impact of results on returns, the impact of other factors in returns is to be segregated. The impact of other factors in return is taken from the index which is nothing but the market return. The announcement of dividend is unique and specific to a company. To study its impact on the market place, the impact of other factors is removed, that is why the period is limited to 10 days and the return is calculated for 9 days.

From the stock return behavior of 10 companies studied, the return behavior of only one company does not move with the market return. At the same time, the chance to earn abnormal return is found only in 3 companies. The announcement of results is said to have an impact only when there is an abnormal return after the announcement of dividend results. Then only an investor can formulate a trading strategy to outperform the market. In the absence of abnormal return caused by the dividend announcement, no trading strategy will help an investor to outperform the market.

Hence it can be concluded that the announcement of corporate dividend result does not have any impact on the stock return behavior of companies. By taking this announcement of dividend results, no one can outperform and there is no strategy exists in the market. Also it is clear from the above analysis; it seems very difficult to find future path based on the announcement effects.

## 9. REFERENCES

1. Ball, R, "The Earnings and Dividends - Price Anomaly, Journal of Accounting and Economics", 15, 1992, 319-345.
2. Ball, R. and E. Bartov, "How Naive is the Stock Market's Use of Dividend Information?" Journal of Accounting and Economics, 21, 1996, 319-337.
3. Ball, R. and P. Brown, "An Empirical Evaluation of Accounting Income Numbers", Journal of Accounting Research, 6(2), 1968, 159-178.
4. Bernard, V.L. and J.K. Thomas, "Post Earnings and Dividend Announcement Drift: Delayed Price Response or Risk Premium?", Journal of Accounting Research, 27, 1989, 1-48.
5. Brown, S.J. and J.B. Warner, "Measuring Security Price Performance", Journal of Financial Economics, 8 (3), 1980, 205-258.
6. Brown, S.J. and J.B. Warner, "Using Daily Stock Returns: The Case of Event Studies", Journal of Financial Economics, 14, 1985, 3-31.
7. Chaturvedi, H.Om, "Empirical Anomalies Based on Unexpected Earnings: The Indian Experience", ICFAI Journal of Applied Finance, 6 (1), 2000, 52-64.
8. Fama, E.F., L. Fisher, M.C. Jensen and R. Roll, "The Adjustment of Stock Prices to New Information", International Economic Review, 10 (1), 1969, 1-21.
9. Fama, E.F, "Efficient Capital Markets II, Journal of Finance, 46 (5), 1991, 1575- 1617.
10. Foster, G., C. Olsen and T. Shevlin, "Earnings Releases, Anomalies, and the Behaviour of Security Returns", Accounting Review, 59 (4), 1984, 574-603.
11. Fuller, R. J. and J.L. Farrell, Jr., Modern Investments and Security Analysis, 1987, McGraw Hill Book Co., Singapore.
12. Iqbal, "Efficiency of Indian Stock Market: A Study of Stock Price Responses to Earnings Announcements of Selected Companies Listed on Bombay Stock Exchange", Unpublished PhD Thesis Submitted to Mangalore University, 2005.



13. Lo, A. W., and MacKinlay, A. C. (1988): "Stock market prices do not follow random walks: Evidence from a simple specification test". *Review of Financial Studies*, vol. 1, no. 1, 41-66.
14. Lukose, J. and S.N. Rao, "Market Reaction to Stock Splits – An Empirical Study", *ICFAI Journal of Applied Finance*, 8 (2), 2002, 26-40.
15. Mallikarjunappa, T. and Iqbal, "Stock Price Reactions to Earnings Announcement", *Journal of IAMD and IUCBER*, 26 (1), 2003, 53 – 60.
16. Manickaraj, N, "Information Content of Quarterly Earnings and Efficiency of Indian Capital Markets", *Proceedings of the International Conference, 2004 on Business and Finance*, 2, 2004, 36-54.
17. Mohanty, P, "Who Gains in Share Buy Back?" *ICFAI Journal of Applied Finance*, 8 (6), 2002, 19-30.
18. Obaidullah, M, "Stock Price Adjustment to Half-Yearly Earnings Announcements – A Test of Market Efficiency", *Chartered Accountant*, 38, 1990, 922-924
19. Patell, J.M. and M.A Wolfson, "The Intra day Speed of Adjustment of Stock Prices to Earnings and Dividend Announcements", *Journal of Financial Economics*, 13, 1984, 223-252.
20. Rao, K.C., and M. Manickaraj, "Information Content of Financial Statements and Equity Stock Prices in India", *Finance India*, 7 (2), 1993, 333-343.
21. Sharpe, W.F, "A Simplified Model for Portfolio Analysis", *Management Science*, 9 (2), 1963, 277-293.
22. Srinivasan, R, "Security Prices Behaviour Associated with Rights Issue-Related Events", *ICFAI Journal of Applied Finance*, 3 (1), 1997, 50-62.
23. Watts, R.L, "Systematic Abnormal Returns After Quarterly Earnings Announcements", *Journal of Financial Economics*, 6, 1978, 127-150.

## BRAND EQUITY- THE RULER

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### ABSTRACT

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*Globally, the brand equity is given more significance by corporate. The article highlights the importance of brand equity and analyses the reasons behind the importance of brand equity in firms.*

**Keywords - Brand, Brand equity, Management and Corporate**

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**Brand equity** refers to the marketing outcome that accrue to a product with its brand name compared with those that *would* accrue if the same product did not have the brand name. In other words, consumers' knowledge about a brand makes manufacturers/advertisers respond differently or adopt appropriately adept measures for the marketing of the brand. The study of brand equity is gaining importance globally as some researchers have concluded that brands are one of the most valuable assets of the company. Brand equity is one of the main factors which can increase the financial value of a brand to the brand owner. Elements that can be included in the valuation of brand equity also includes: changing market share, profit margins, consumer recognition of logos and other elements, brand associations made by consumers, consumers' perceptions of quality and other relevant brand values.

There are many ways to measure a brand. The levels are listed below

#### **; Firm Level**

Firm level approaches measure the brand as a financial asset. In short, a calculation is made regarding how much the brand is worth as an intangible asset. For instance, if you were to take the value of the firm, as derived by its market capitalization - and then subtract tangible assets and "measurable" intangible assets- the residual would be the brand equity.

#### **Product Level**

The classic product level brand measurement example is to compare the price of a unbranded or private label product to an "equivalent" branded product. The difference in price, assuming all things equal, is due to the brand. More recently a revenue premium approach has been advocated.

#### **Consumer Level**

This approach seeks to map the mind of the consumer to find out what associations with the brand the consumer has. This approach seeks to measure the brand awareness and brand image. Brands with high levels of awareness and strong, favorable and unique associations are high equity brands.

A brand equity is the positive effect of the brand on the difference between the prices that the consumer accepts to pay when the brand known compared to the value of the benefit received.

There are two schools of thought regarding the existence of negative brand equity. One school of thought states brand equity cannot be negative, hypothesizing only positive brand equity is created by marketing activities such as advertising, PR, and sales promotion. A second perspective is that negative equity can exist, due to catastrophic events to the brand, such as a wide product recall or continued negative press attention. The term "negative brand equity" may be used to describe a product or service where a brand has a negligible effect on a product level when compared to a no-name or private label product. The brand-related negative intangible assets are called "brand liability", compared with "brand equity".

The brand management and product management divisions of a company actively seeks strong brand equity in the marketplace. One common method of gaining equity is through advertising campaigns that promote the brand. Messages that are delivered through advertising are created by the company, with the assistance of facilitating agencies unlike other factors which are beyond corporate control.

Publicity and consumer reviews of a brand are aspects of brand equity not managed by the company. Depending on the source, the effects of these factors may affect the brand perception positively or negatively. While companies actively pursue positive reviews and articles, they can be damaged by negative press or media coverages. Companies or products with the strongest equity tend to be those with the highest market share and profits.

Brand equity influences customer loyalty. The recent research findings clearly showed, according to the Pearson correlation conducted between the consumer perception of the product equity and the consumer loyalty, a positive significant relationship on an intermediate-high level. In other words, the higher the consumer evaluates the brand equity, the greater his loyalty becomes. Namely, as a product has higher perceived importance in the consumer's opinion, he searches for additional added value beyond his brand perception.

In addition, positive significant relationships were found between all the indices of the variable of brand equity and all the indices of the variable of customer loyalty. The level of relationships was intermediate high. The strongest positive relationship, relatively, is between real assets and repeat purchase, while the weakest relationship, relatively, was found between the non-real assets and recommendation to the friends.

Additional findings reinforce the importance in the creation of brand equity. It is also found that the brand equity contributes significantly to the prediction of the consumer loyalty.

To conclude, in light of the scientific literature and the research findings, that there is a positive relationship between brand equity and consumer loyalty. This relationship is stronger as the level of involvement is lower. In other words, the more the brand is familiar and established and perceived by the consumer as stronger, the more the consumer will develop loyalty to it and there is a greater chance of the repeat purchase of the product.

## REFERENCES

1. Aaker, David A. (1991), *Managing Brand Equity*. New York: The Free Press
2. Keller, Kevin Lane (2003). "Brand Synthesis: The Multidimensionality of Brand Knowledge," *Journal of Consumer Research*, 29 (4), 595-600
3. Leuthesser, L., C.S. Kohli and K.R. Harich (1995). "Brand Equity: The Halo Effect Measure," *European Journal of Marketing*, 29 (4), 57-66.
4. Ailawadi, Kusum L., Donald R. Lehmann, and Scott A Neslin (2003). "Revenue Premium as an Outcome Measure of Brand Equity," *Journal of Marketing*, 67 (October), 1-17
5. Keller, Kevin Lane (1993). "Conceptualizing, Measuring, and Managing Customer-Based Brand Equity," *Journal of Marketing*, 57 (January) 1-22
6. Lassar, W., B. Mittal and A. Sharma (1995). "Measuring Customer-Based Brand Equity," *Journal of Consumer Marketing*, 12 (4), 11-19
7. Neumeier, Marty (2006). *The Brand Gap: How to Bridge the Distance Between Business Strategy and Design*, Berkekeley, CA : New Riders Publishing.
8. Grannell, Chris (2009). "Untangling Brand Equity, Value and Health", *Brandchannel*, Fall 2008
9. Chu, Singfat and Hean Tat Keh (2006). "Brand Value Creation: Analysis of the Interbrand-Business Week Brand Value Rankings," *Marketing Letters*, 17, 323-331
10. Aaker, David A. (1996), "Measuring Brand Equity Across Products and Markets," *California Management Review*, 38 (Spring), 102-120.
11. Aaker, David A. (1991), *Managing Brand Equity*. New York: The Free Press

## ERP APPLICATION IN INDIA: AN OVERVIEW

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### ABSTRACT

*Enterprise resource planning (ERP) systems are among the most important enablers for business intelligence and planning functionality in supply chains. This paper provides an overview of ERP research and its development and implementation in India. The paper describes the current market, challenges and future trends for ERP software in India. Cases are provided where ERP implementations have been used to enhance supply chain management of major companies. One of the (not unexpected) findings is that not only analytical data concepts play an important role in successful ERP implementations in India but also cultural and language aspects.*

**Keywords - Enterprise Resource Planning, Information Systems, MRP, Supply Chain Management**

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### I. INTRODUCTION

An enterprise resource planning (ERP) system is a highly integrated enterprise information system to manage all aspects of the business operations of an enterprise (especially regarding transactional data) including production, purchasing, engineering design, manufacturing, sales, marketing, distribution, accounting and customer service, etc. Once ERP systems are successfully implemented, significant benefits such as improved customer service, better production scheduling, and reduced manufacturing costs can be gained. However, the successful implementation rate can be accounted for as still quite low and many firms that have gained some benefits from ERP systems have yet to exploit the full potential benefits in their organizations.

Comprehensive studies related to the economical evaluation of information systems in general and those of ERP systems in particular still seem to be in their infancy to date. More specifically, if one cares about specific cultural and language barriers (including not even language differences but also considerations regarding character sets different from those used in most of the countries as they can be found related studies need to investigate additional aspects not yet included in general ERP adoption and innovation diffusion models.

One of the major concerns in today's globalization is the transformation of countries like India or China. 'More than any other country, India is being transformed by its application of IT, from a poor and isolated society to a major force in the global economy.' What makes India a somewhat special case is the great variety of ownership structures including state-owned, foreign invested and privately-held companies? That is, the role of ownership can be studied in relatively greater depth there than elsewhere.

In this paper we focus on ERP system applications in India. While some studies exist in this respect, they seem to be completely isolated and even expressing contradictory results at places. Therefore, we provide an expository survey on existing literatures and studies related to ERP applications in India. That is, specific studies with India focus related to various systems including MRP based and ERP systems from the literature are put into perspective. Moreover, this is moderately interleaved with some reasoning based on an empirical analysis conducted by the researcher based on an online survey investigating some 25 enterprises which are currently or were implementing ERP systems in India. The outcomes of this paper may provide a more comprehensive picture of current ERP implementations in India especially regarding the provided references and facilitate organizations to respective literatures and to avoid obstacles for future adoption.

### II. ERP SYSTEM ADOPTIONS: GENERAL ISSUES

ERP systems are rated among the most important information systems towards achieving competitive advantage especially for manufacturing firms. As IT and supply chain management continue to improve and modeling applications expand, it is expected that more and more companies implement various systems including those that interest us here. ERP systems may be regarded as those information systems enabling to manage a company's transactional data on a continuous, real-time basis, i.e., standardizing data and information systems for order entry, financial accounting,

purchasing, and many other functions, not only within a single location of a firm but also across multiple facilities and business units.

The most prominent basics of ERP utilize ideas from materials requirements planning (MRP) and its successor, manufacturing resource planning (MRP II). Here net requirements of raw materials and intermediate products to be manufactured or ordered from vendors to meet demand for finished products are calculated (MRP). Moreover, capacity considerations are taken into account (MRP II). Supply chain management (SCM) became a major management issue in recent decades. The ability to instantaneously exchange information together with increased computational power has enabled the use of sophisticated optimization software, although one has to admit that appropriate planning functionality has not yet come to its full extent despite the mouthwatering advertisements of most SCM software vendors. Nevertheless, ERP systems and the availability of transactional data are at the core of enabling SCM while supply chain planning and integration remain a critical issue

Introducing information systems and especially ERP systems is closely related to organizational change. Taking the view of a company, say, a manufacturing firm, introducing an ERP system refers to innovation, change (management) and reshaping through the use of IT. That is, an interesting topic related to innovation management is the question how to justify ERP system adoption and related investments.

Besides some general discussion, specific surveys and case studies are provided in many references including those mentioned and beyond. For instance, the importance of proper project management is based on a study of about 70 ERP system implementations. Most importantly, one may conclude that critical success factors (CSF) for implementing ERP systems are somewhat in line with those of other types of information systems.

A special interest in ERP system adoption accounts for certain cultural backgrounds, language specifics, and alike, especially when it comes to supply chain integration. That is, especially language barriers and certain historical paths in shaping companies may greatly influence the way of ERP system adoption.

Firstly this paved way for more prospects in ERP market. The demand and supply gradually transformed from general to enterprise resource market. Once this got stabilized there was no looking back. It was well evident that ERP market could boom and give the necessary impetus to stakeholders. However this did not mean that mediocre could survive in the market. There was demand only for top notch services and professionals.

This naturally led to improvement in the quality of services offered. Such an improvement increased the competition among various players. The end user was getting assured that he would be receiving the best services for the money invested. Case ERP in India got more and more competitive. The ERP implementation in India demanded more than the custom ERP India module.

### **III. CURRENT STUDIES WITH INDIA FOCUS**

Most empirical studies in the literature conduct a survey on a limited sample with a specific focus, e.g., a certain industry or a specific region/country. As mentioned above, India takes a somewhat special role as different ownership structures can be found side-by-side. This includes state-owned enterprises (SOE), foreign-invested enterprises, and privately-held companies. Moreover, larger companies as well as major internationally operating companies may be distinguished from small and medium sized companies (SME). That is, the role of size and ownership can be studied in relatively greater depth there than elsewhere. Another topic which makes India an interesting source is the rapid change also with respect to modern forms of corporate governance

#### **ERP Implementation and Development in India**

ERP system application can be followed back for more than two decades with many national programs in India supporting IT developments. Earlier research and development programs like, e.g., more than 750 Program on computer integrated manufacturing (CIM) systems, was launched in March 1995. It strongly supported research, development and application of MRP/MRP II based systems, ERP and other systems for many years, and allowed to accumulate comprehensive practical experiences. On a high level one may classify the development of ERP implementations into three phases.

¼ Phase I : MRP adoption (with limited effects of application)

¼ Phase II: Developing MRP II/ERP

¼ Phase III: Maturity of the ERP market

From the late 1990s, MRP II, ERP and SCM became more and more popular; many industrial enterprises have upgraded their ERP solutions or have directly applied new ERP systems of that time, such as SAP/R3, Oracle, and BAAN IV/V. Meanwhile, Chinese ERP software companies were active in extending their MRP II software products to ERP systems, the functionality of their ERP software became more and more powerful, and they started to replace some of the foreign dominators of the market.

Government also continues to support the ERP system's development. Since 2001, the policy of using IT technologies to speed up industrialization has been widely implemented in India. At the same time, several large scale national projects on IT applications in industrial enterprises also have been launched. Up to 2003, more than 3000 industrial enterprises, have applied ERP systems. Moreover, SME as emerging market entities rise quickly, and request new ERP solutions to meet their demands. All of these demonstrate the maturity of the ERP market in India.

Table 1 provides a snapshot of the as yet not stabilized percent market share of new license revenues for ERP software in India for the years 2008 and 2009. (100% in these cases refer to 74.7 and 95.4 millions of dollars for 2008 and 2009, respectively.) Earlier numbers can be found.

Vendor	2008 (%)	2009 (%)
SAP	18.0	22.5
Oracle	4.5	8.0
PeopleSoft	25.1	22.5
JD Edwards	2.0	1.8
BaaN	14.8	12.7
QAD	3.2	2.0
SSA	4.3	3.7
Ramco	4.1	4.7
Others	24.0	22.1

**Table 1: Market share of ERP software in India**

While common understanding is that mathematics and respective models are universal, many other things like culture or language are not. A thought provoking question for software vendors refers to the markets and the possible use of ERP systems. As supply chains become global we continue to encounter boundaries that are literally beyond planning in our sense, i.e., a more quantitative one. Interesting entries into some literature, e.g., considering questions of the use of MRP, MRP II, and ERP systems in this respect in, say, India.

Before 2003, about 90% of the ERP implementations were late or over budget and the ERP implementation success rate was only about 33%. While these numbers may hold in general, the success rate of the implementation of ERP systems in India was just 10%, much lower than that in Western countries.

The main reasons, among others, include the following challenges faced by Indian enterprises:

- ¾ Data maintenance and integration problems
- ¾ Involvement of consultants in respective projects
- ¾ Vendor selection
- ¾ Little implementation experience
- ¾ Weak IT infrastructure
- ¾ Access knowledge and human resource etc.



### Specific Studies

An explanatory study of R/3 users in India had been conducted in Winter 2008. A very comprehensive questionnaire had been distributed among the users of R/3 using the customer list of SAP Indian clients culminating in some 80 usable questionnaires, corresponding with a response rate of about 74%. The researcher identifies crucial implementation process and context variables related to general issues of IT-enabled organizational change. It was found that project governance, specifically the role and decision making style of the steering committee, can be associated with a broad set of outcome variables after controlling for ownership and other important context factors. While it turns out that ownership is strongly associated with implementation process characteristics, the association of ownership structures with implementation results is much less pronounced.

In a broader context the study reveals that an overall motive for ERP adoption is to improve management control and to standardize business processes. This may help management to obtain basic transactional data on company operations. ERP implementations are often used to reduce the degree of managerial discretion and process variability. One may argue whether in the era of SCM the underlying rationale of an ERP system is to enable more decentralized or more centralized decision making.

Only the most advanced companies are beginning to build inter-organizational systems on the back of successful ERP implementations. In this study and its conclusions are extended into devising business oriented electronic commerce development strategies.

In 2009, the researcher conducted a survey on a group of executives from 150 enterprises over 20 provinces in India. The researcher received some 79 usable returns. Ten were from large SOE while the remaining were from SME. The major findings are related to CSF, ERP benefits and ERP obstacles. The major ERP benefits are related to SCM issues and constitute related benefits as cost reduction, business strategies' support and alike. Among the CSF he concludes that executive support is the key success factor for ERP, followed by SCM as an important component and BPR as another CSF. Moreover ERP is more of a concept than software. ERP obstacles are found around common challenges such as 'ERP is too expensive' or 'ERP is too complicated' as well as some firm specific challenges. In that respect main obstacles seem to be IT infrastructure in India, lack of well-trained workers, lack of incentives at SOE, and differing corporate culture.

Additional studies with independent results can be found as follows. For instance reports about a questionnaire which was published in an ERP professional website and mailed to the listed companies in the Bombay stock exchange. Depending on the questions between 90 and 118 responses were accounted for as useful, i.e., according to the source 90 enterprises have completely finished or partly finished their ERP implementation project.

Among those companies about 81% used external consultants during the ERP adoption. Among the possible consultants the vendor's consultants were mostly selected and they were involved in at least 50% of the work. Among the purpose for involving consultants we mostly found (multiple answers possible) as reasons to obtain support regarding project design and advice as well as the provision of knowledge transfer and appropriate training. Arguing in favor of the consultant selection we mainly found as reasons the expertise with the product to be implemented, a strong experience in higher education and the availability of specific personnel. While we do not assume to be comprehensive with respect to our study, we still like to emphasize the aspect of higher education. It may deserve further investigation as it seems to be a factor which is not yet fully studied.

### IV.IMPLEMENTATIONIMPLICATIONSININDIA

So far, we have provided a brief overview of the history of ERP implementations in India, and analyzed some of the currently available main references. As can easily be deduced, ERP system success still depends on the knowledge, personnel, infrastructure, etc. At the same time we accumulated some useful pointers for successful ERP implementations, such as paying attention to top management involvement, teamwork, customization, communication etc.

Based on the observations in the previous subsections the study deduces a number of CSF for domestic vendors of ERP software on the Indian market as follows:

- ¾ **Low price** : An SAP application easily costs more than more than 10 lakhs, while some domestic systems cost as little as several thousands. Even with their 'high quality' image in India, SAP vendors have difficulties to customize the product especially in the emerging SME Indian market.

- ¾ **Customer service:** Domestic vendors can reflect the market quite quickly while foreign vendors may find it difficult to provide adequate and comprehensive customer support on time due to the shortage of on-time communication and technical personnel.
- ¾ **Reporting format and content:** India's accounting standards are different from international accounting standards. This requires foreign vendors to modify their financial accounting modules to generate the correct formats to meet local requirements. Many foreign vendors might encounter difficulties to do this appropriately while their Indian competitors took this advantage.

### V.PRESSURESMOUNTONTHEINDIANINDUSTRY

As discussed earlier ERP was initially restricted to back office functions and later spread its wings to all the operations in the enterprise. This naturally meant that the ERP manufacturers and vendors had to increase the functionalities and scope of the application. There are practical difficulties when it comes to this issue.

The ERP experts will definitely be able to restructure the ERP systems with the help of resources and expertise available with them. However doing it all on sudden is a difficult task. They must have been working with different requirements till then. Compelling them to suddenly change will land things in a mess because there will be lot of confusions for the vendors, manufacturers and end-users. The unrealistic deadlines and time pressures further add agony to this menace.

#### Finance

This is another important determinant of ERP market in India. Some bigger companies still hesitate to invest in ERP due to the exorbitant costs. It is indeed encouraging to find that a vast majority of them have realized its benefits and have determined to go for it. However some of them are keeping quiet due to the risks involved besides the unforeseen expenses and losses.

#### Technical factors

Thirdly ERP in the nation calls for a restructuring in the technical aspects. This is definitely appreciable. The fate of the businesses that have already implemented and deployed ERP remains a big question mark. No doubt change is inevitable and an element for growth. However it would be next only to impossible to change even before the current change has stabilized in the market.

### VI.FUTURETRENDS

#### Future developments in ERP software need to be analyzed in the light of two contexts.

The first relates to the enhancement of technical and functional capabilities of the ERP software. ERP packages now provide Web-enabled functionalities and e-business suites for use in B2B and B2C transactions. In this context, SAP has launched mySap.com, Baan has a product called iBaan, and Oracle has incorporated e-business functionalities into their new ERP software called Oracle Moreover, many ERP vendors have positioned themselves as one-stop vendors for different integration requirements, and are adding CRM and SCM functionalities into their software. This is in response to integration problems that organizations have had when they have tried to interface different best of breed solutions. Therefore, basic ERP packages are expected to serve as the back-end transaction-processing database, to which e-business modules incorporating functions relating to e-procurement, CRM and SCM would be added.

**Future research efforts** would therefore need to be directed at analyzing ERP adoption as part of an overall framework for adoption of e-business, along with the implementation of other packaged software such as CRM and SCM. The study of ERP adoption by SMEs and the accompanying specific problems and issues is another area of potential investigation

Future research is still in dire need for more comprehensive empirical data. For instance, one might add a few issues that have not been widely addressed, especially when comparing the ERP application in different countries. It would be useful to investigate the significance of the interaction between firm size and financial health for ERP adopters compared to non-adopters with respect to measures such as return on investment, return on assets and return on sales.

### VII.CONCLUSION

**Over the last few years,** many organizations in India have benefited from improved processes and better information availability as a consequence of the implementation of ERP solutions. For many others, the adoption of ERP has resulted in a very painful transition and adaptation period, while the benefits have not been immediate or tangible.

This model presents a general conceptual framework and serves as a useful starting point from where the ERP experience of Indian companies can be analyzed. It also presents some practical implications for managers for managing and controlling relevant aspects of different stages of the implementation process. The generality of the framework has been further enhanced because of the number of industries covered in the study. The framework can be used for organizations in other developing societies, as well as in SMEs.

During implementation most companies are looking for consulting assistance with ERP system vendors themselves becoming the most popular consultants during the implementation. Nevertheless, some consulting companies with special experience have a considerable growth share. For the selection of appropriate consulting companies, price seems not the main influencing factor, but reputation and practical experience. Despite all the advances, there is still a considerable way to go for India regarding ERP implementation, and for improving their operational as well as their management level.

### **VIII. RESEARCH HIGHLIGHTS**

The main objective of this paper focuses on ERP system applications in India. While some studies exist in this respect, they seem to be completely isolated and even expressing contradictory results at places. Therefore, we provide an expository survey on existing literatures and studies related to ERP applications in India. That is, specific studies with India focus related to various systems including MRP based and ERP systems from the literature are put into perspective. Moreover, this is moderately interleaved with some reasoning based on an empirical analysis conducted by the researcher based on an online survey investigating some 25 enterprises which are currently or were implementing ERP systems in India. The outcomes of this paper may provide a more comprehensive picture of current ERP implementations in India especially regarding the provided references and facilitate organizations to respective literatures and to avoid obstacles for future adoption.

The major research highlights of this paper focus on:

- ⌘ General adoption issues before considering the specific case of India
- ⌘ ERP implementation Implications in Indian Market
- ⌘ Future trends of ERP adoption.

### **REFERENCES**

1. Oliver D., Romm C., 2002, Justifying enterprise resource planning adoption, *Journal of Information Technology*, 17, 199-213.
2. Kumar V., Maheshwari B., Kumar U., 2002, Enterprise resource planning systems adoption process: a survey of Canadian organizations, *International Journal of Production Research*, 40, 509-523.
3. Rao R., 2004, Can more effective communication improve the success of ERP implementation: Evidence from enterprise implemented ERP in China, *The Eighth Pacific Asia Conference on Information Systems, PACIS*, Shanghai, 1875-1881.
4. Kostopoulos, K.C., Brachos D.A., Prastacos G.P., 2004, Determining factors of ERP adoption: An indicative study in the Greek market, *Proceedings of the International Engineering Management Conference, IEEE*, 287-291.
5. Zhang L, Li Y.C., 2006, Theory and practice of systems methodology in ERP implementation, *Systems Research and Behavioral Science*, 23, 219-235.
6. Hunton J.E., Lippincott B., Reck J.L., 2003, Enterprise resource planning systems: Comparing firm performance of adopters and non-adopters, *International Journal of Accounting Information Systems*, 4, 165-184.

# STRESS MANAGEMENT WITH SPECIAL REFERENCE TO PUBLIC SECTOR BANK EMPLOYEES IN CHENNAI

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**Key Words - Public Sector ,Bank Employee, occupational stress, causes of stress, attributes , initiatives**

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## I.INTRODUCTION

Today workplace stress is becoming a major issue and a matter of concern for the employees and the organizations. It has become a part of life for the employees, as life today has become so complex at home as well as outside that it is impossible to avoid stress. Selye [1936] defines stress as “a dynamic activity wherein an individual is confronted with an opportunity, constraint or demand”. Organisational stress arises due to lack of person-environment fit. When organizational stress is mismanaged, it affects the human potential in the organization. It further leads to reduced quality, productivity, health as well as wellbeing and morale.

Thus, Stress is inevitable in our society. Researchers on stress make it clear that, to enter in to the complex area of stress, especially in to the area of occupational stress, is very difficult. Stress is an unavoidable consequence of modern living. With the growth of industries, pressure in the urban areas, quantitative growth in population and various problems in day to day life are some of the reasons for increase in stress. Stress is a condition of strain that has a direct bearing on emotions, thought process and physical conditions of a person. Steers [1981] indicate that, “Occupational stress has become an important topic for study of organisational behaviour for several reasons.” 1. Stress has harmful psychological and physiological effects on employees, 2. Stress is a major cause of employee turn over and absenteeism, 3. Stress experienced by one employee can affect the safety of other employees, 4. By controlling dysfunctional stress, individual and organisation can be managed more effectively.

During the past decade, the banking sector had under gone rapid and striking changes like policy changes due to globalisation and liberalisation, increased competition due to the entrance of more private (corporate) sector banks, downsizing, introduction of new technologies, etc. Due to these changes, the employees in the banking sector are experiencing a high level of stress. The advent of technological revolution in all walks of life coupled with globalisation, privatisation policies has drastically changed conventional patterns in all sectors. The banking sector is of no exemption. The 1990s saw radical policy changes with regarding to fiscal deficit and structural changes in India so as to prepare her to cope with the new economic world order. Globalisation and privatisation led policies compelled the banking sector to reform and adjust to have a competitive edge to cope with multinationals led environment. The implications of the above said transformations have affected the social, economical and psychological domains of the bank employees and their relations. Evidence from existing literature states that more than 60% of the bank employees have one or other problem directly or indirectly related to these drastic changes. All the factors discussed above are prospective attributes to cause occupational stress and related disorders among the employees. Although a lot of studies have been conducted on the psychosocial side of the new policy regime in many sectors, there are only few studies, as far as the banking sector is concerned, while the same sector has been drastically influenced by the new policies.

In this juncture, the present study is undertaken to address specific problems of bank employees related to occupational stress. This throw light in to the pathogenesis of various problems related to occupational stress among bank employees.

## II.REVIEWOFLITERATURE

According to Douglas [1980], stress is defined as any action or situation that places special physical or psychological demand upon a person.

Van Fleet [1988], stress is caused when a person is subjected to unusual situations, demands, extreme expectations or pressures that are difficult to handle.

Cobb (1975) has the opinion that, "The responsibility load creates severe stress among workers and managers." If the individual manager cannot cope with the increased responsibilities it may lead to several physical and psychological disorders among them. Brook (1973) reported that qualitative changes in the job create adjustmental problem among employees. The interpersonal relationships within the department and between the departments create qualitative difficulties within the organisation to a great extent.

Miles and Perreault (1976) identify four different types of role conflict: 1. Intra-sender role conflict 2. Inter sender role conflict. 3. Person- role conflict; 4. Role over load. The use of role concepts suggests that job related stress is associated with individual, interpersonal, and structural variables (Katz and Kahn, 1978; Whetten, 1978). The presence of supportive peer groups and supportive relationships with super visors are negatively correlated with R.C. (Caplan et al., 1964).

There is evidence that role incumbents with high levels of role ambiguity also respond to their situation with anxiety, depression, physical symptoms, a sense of futility or lower self esteem, lower levels of job involvement and organisational commitment, and perceptions of lower performance on the part of the organisation, of supervisors, and of themselves (Brief and Aldag, 1976; Greene, 1972).

Ivancevich and Matteson (1950) indicate, "Lack of group cohesiveness may explain various physiological and behavioural outcomes in an employ desiring such sticks together." Workplace interpersonal conflicts and negative interpersonal relations are prevalent sources of stress and are existed with negative mood depression, and symptoms of ill health.

Occupational stress is an increasingly important occupational health problem and a significant cause of economic loss. Occupational stress may produce both overt psychological and physiologic disabilities. However it may also cause subtle manifestation of morbidity that can affect personal well-being and productivity (Quick, Murphy, Hurrell and Orman, 1992). A job stressed individual is likely to have greater job dissatisfaction, increased absenteeism, increased frequency of drinking and smoking, increase in negative psychological symptoms and reduced aspirations and self esteem (Jick and Payne, 1980). The use of role concepts suggests that occupational stress is associated with individual, interpersonal and structural variables (Kutz and Kahn, 1978; Whetten, 1978).

Studies on burnout found that, it is related to exhaustion and work over load factors in various organisations (Green and Walkey, 1988; Chermis, 1980; Freudenberger, 1977, 1980). Stress on the job is costly for employers, reflected in lower productivity, reduced motivation and job skills, and increased and accidents.

The purpose present study is an attempt to investigate and to compare the level of stress experienced by the employees of the Nationalised banks in Chennai. The study aims to ascertain the level of stress and to analyse the various attributes which influence organizational stress on bank employees.

### **III.SCOPE OF THE STUDY**

United States National Institute of Occupational Safety and Health has defined workplace stress as "The harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker. Job stress can lead to poor health and even injury." Workers who are stressed are also more likely to be unhealthy, poorly motivated, less productive and less safe at work. Their organizations are less likely to be successful in a competitive market. Stress can be brought about by pressures at home and at work. Employers cannot usually protect workers from stress arising outside of work, but they can protect them from stress that arises through work. Stress at work can be a real problem to the organization as well as for its workers. Good management and good work organization are the best forms of stress prevention. This study is helpful in assessing the extent of stress experienced by the employees.

### **IV.OBJECTIVE OF THE STUDY**

¾ The primary aim for the study is to analysis the job stress among the public sector bank employees in Chennai

### **V.SECONDARY OBJECTIVE**

- ¾ To examine what is the effect of stress on work factors (e.g., morale, job satisfaction, task effort, organizational commitment, etc) when people are under high stress.
- ¾ To assess the extent of experienced distress and consequent quality of life among the employees
- ¾ To identify different methods and techniques to reduce job-related stress.

## VI. METHODOLOGY OF THE STUDY

### A] POPULATION

The population selected for this particular study is employees from public sector units in Chennai. Public sector comprise of Union Bank of India, Vijaya Bank and the State Bank of India. Questionnaire were distributed and collected personally by the researcher.

### B] RESEARCH DESIGN

The study is explorative as well as descriptive in nature.

### C] SAMPLE DESIGN

The particulars of sample design,

1. TYPE OF UNIVERSE : Finite.
2. SAMPLING UNIT : Chennai
3. SOURCE LIST : Public Sector Employees
4. SIZE OF SAMPLE: 100
5. PARAMETER OF INTEREST: In estimating the number of persons being stressed in their jobs.

### D] TOOL OF DATA COLLECTION

A pilot testing was conducted initially by administering the questionnaire on around 10 numbers of respondents. The information was collected from the bank employees at all the levels. Interviews were conducted with the employees for gathering information on their perception about their organization and the problems which they face both directly and indirectly in the discharge of their responsibilities. The respondents were questioned on the issues affecting the stress levels of the employees, impact of family pressures on their work, expectations from their roles, up to what extent they are satisfied and possible suggestions for overcoming the adversities of stress by evaluating the individual initiatives and organizational initiatives.

### E] SOURCES OF DATA

The study will consist of both primary and secondary data. The primary data was collected by direct interview through questionnaire. The secondary data was collected from research publications, standard journal and periodicals including the government organizations and from respective records about the job related occurrence.

### F] RESEARCH INSTRUMENT-QUESTIONNAIRE METHOD

The instrument will be administered in the workplaces of each group. Data will be collected from the employees. Data will be collected using a structured questionnaire, which will be distributed in the workplace to employees and in Chennai city.

### G] ANALYSIS OF DATA

The data will be analyzed to determine any differences between the stress levels of employees and their impact on reducing stress.

## VII. RESULTS AND DISCUSSIONS

This paper also includes an analysis of data collected by representing it in tabular form along with interpretations. The information collected were analysed for arriving at proper conclusion on the topic.

**TABLE NO : 1**

PERCENTAGE OF RESPONDENTS WHO FELT THAT THEY WERE STRESSED	
Category	% of Respondents
Stressed	97
Not Stressed	03



From the table 1, it is indicated that majority of the respondents working in public sector banks were stressed, whereas only few respondents felt that they were not stressed.

**TABLENO:2**

CAUSESOFSTRESS	
Causes of Stress	% of Respondents
Work overload	21
Lack of Acceptability	04
Time Management	08
Lack of Support	06
Feeling of Inequality	08
Job Difficulty	14
Inadequacy of Role Authority	03
Impatient customer	19
Stress due to technological problem	17

From Table 2, it is inferred that major causes of stress among the bank employees are excess of work load [21%] and lack of cooperation among the impatient customer [17%].

Hence it was found that employees felt that they were facing severe work pressure, as they were expected to handle multiple roles and responsibilities. Time stress is created by a real or imaginary deadlines; encounter stress is created by contact with other people [both pleasant and unpleasant], and in this study, the employees suffer from stress because of lack of support from the management and colleagues.

**TABLE NO : 3**

VARIOUSATTRIBUTESOFSTRESS	
Various Attributes of Stress	% of Respondents
Communication Gap	14
Lack of skills	05
Work Life Imbalance	46
Work Environment	14
Unmatched Expectations	08
Economic Status	07
Resource Inadequacy	06

The above table depicts the various attributes related to stress; work life imbalance is one of the major attribute which contribute to stress for an employee. This can be regarded as a factor building up stress because a lot of employees complained that they were unable to balance both the personal and professional fronts successfully. Extra work pressures and demands from work environment at times led to neglect of personal front.

**TABLE NO : 4**

INITIATIVES FOR HANDLING THE STRESS LEVEL OF THE BANK EMPLOYEES	
Initiatives of Stress	% of Respondents
Good Ambience	16
Recognition	18
Continuous Training	13
Effective Communication	15
Programme on stress management	15
Meditation	23

From the above table, it is interpreted that Meditation form an integral part of the science of Yoga, has a direct, positive impact on the mind giving it the strength and power to resist stress. Moreover, around 18 percent of the respondents expected that they required recognition as acknowledging people's value is especially important in times of stress. Based on the analysis; the initiatives taken by the banks to reduce stress are by providing good ambience, continuous training, proper communication and conducting effective stress management programmes.

#### **VIII.FINDINGS OF THE STUDY**

About 97 % of the respondents believed that they face high level of stress, which may be due to both professional and personal reasons

The respondent were overburdened with work load in their work place

Work life imbalance is one of the major attribute which contribute to stress for an employee.

The researcher identified few initiatives for effectively handling stress. Meditation was found to be the integral part of life to reduce stress.

#### **IX.IMPLICATION OF STRESS**

1. Physical problems and health problems like heart diseases, ulcers, arthritis, increased frequency of drinking and smoking, cardiovascular, gastrointestinal, endocrine and other stress related disorders
2. Psychological and behavioural problems: psychological problems like change of moods, inferiority complex, widespread resentment, reduced aspirations and self esteem, reduced motivation and job skills,
3. Organisational: job dissatisfaction, behavioural problems, production turn over, increased absenteeism, increased accidents, lower productivity,

#### **X.SUGGESTION AND RECOMMENDATIONS**

1. Organize a Stress Management Program that focuses on different leave categories of employees at all hierarchical level.
2. Take adequate steps to redesign jobs, which are taxing to employees' abilities and capacities.
3. Adequate role clarification to be made whenever necessary to eliminate role ambiguity.
4. Introduce more job oriented training programs, which improve employees skill and their confidence to work effectively.
5. Encourage open channel of communication to deal work related stress.
6. Undertake stress audit at all levels in the organization to identify stress area improving conditions of job and alleviating job stress.
7. Introduce 'Pranayam' (Brain Stilling and control of Vital Force) as a holistic managerial strategy to deal with occupational strategy.

8. Provide counseling on work related and personnel problems and support from a team of welfare health and counseling staff.
9. Attractive system of reward and recognition of good work.

### **XI.CONCLUSION**

The problem of stress is inevitable and unavoidable in the banking sector. A majority of the employees face severe stress- related ailments and a lot of psychological problems. Hence, the management must take several initiatives in helping their employees to overcome its disastrous effect.

Since stress in banking sector is mostly due to excess of work pressure and work life imbalance the organization should support and encourage to take up roles that help them to balance work and family.

The productivity of the work force is the most decisive factor as far as the success of an organisation is concerned. The productivity in turn is dependant on the psychosocial well being of the employees. In an age of highly dynamic and competitive world, man is exposed to all kinds of stressors that can affect him on all realms of life. The growing importance of interventional strategies is felt more at organisational level. This particular research was intended to study the impact of occupational stress on Nationalized Bank employees. Although certain limitations were met with the study, every effort has been made to make it much comprehensive.

### **REFERENCES**

1. Albrecht K [1979], Stress and the Manager, Englewood Cliffs; Prentice Hall, Nj.
2. Jyothi Budhraj, “ Causes of stress among insurance employees: An empirical study; The ICFAI journal of Marketing research, Vol.VII, No.10, 2008 pp7-14.
3. Gender Difference in stress among bank officers of Private and Public Sector; The ICFAI journal of Marketing research, Vol.VIII, No.2, 2009 ,pp63-69.
4. Selye, H. (1974). “Stress without Distress.” Harper and Row Publications, U.S.A.
5. Bajpai, B.L. (1992). “Stress management.” Financial Express, Bombay, June.
6. Vijayashree. L. & Dr. Katyayani .J, Gender perspective towards stress factors: Retail employees, Bangalore; Sona Journal of Marketing Research, Vol 1 , Issue 1, January 2009, pp 57-65.

# EVALUATION OF THE PERCEPTION, ATTITUDE AND PRACTICE OF SELF MEDICATION AMONG BUSINESS STUDENTS IN 3 SELECT CITIES, SOUTH INDIA

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## ABSTRACT

**Objective :** This study was undertaken to determine the knowledge, attitude and practice of self-medication among first-year under graduate business students of 3 universities in South India. **Subjects and Methods:** Out of the 1017 respondents, 605 (59.48 %) were male and 412 (40.52%) were female respondents. This was an anonymous, questionnaire-based, descriptive study. Questionnaire, containing open-ended and close-ended questions, was administered to the subjects. Data were analyzed and the results expressed as counts and percentages. **Results:** Of the 1017 respondents, 815 (80.13%) practiced self medication. The respondents' knowledge about appropriate self-medication was poor, but knowledge of the benefits of self-medication was adequate. The respondents found self-medication to be time-saving, economical, convenient and providing quick relief in common illnesses. The majority (85%) of the respondents had a positive attitude favoring self-medication. The most common indications for self medication were headache (35%), fever (36%), and cough, cold and sore throat (20%). **Conclusion:** Knowledge about appropriate self-medication was poor, attitude towards self-medication was positive and the practice of self-medication was quite high and often inappropriate. Educating students in particular and the public at large, about the dangers of indiscriminate use of drugs; the physicians being more judicious in prescribing and also insisting on drugs being supplied by the chemist only on a valid prescription; implementation of a proper statutory drug control rationally restricting the availability of drugs to the public are the three measures suggested by the study.

**Key Words -** Self-medication . Business Students . Self-care . Health

*policy \*This study is part of the Research Thesis of the Scholar.*

## I.INTRODUCTION

Every day people throughout the world act on their own for their health; they practice self-care. In some instances, they do so through self-medication, which is now increasingly being considered as a component of self-care (Hughes CM, 2001). Self medication is defined as the use of medication by a Patient on his own initiative or on the advice of a Pharmacist or a lay person instead of consulting a medical practitioner (WHO guidelines, 2000). Studies done on self-medication reveal that it is a fairly common practice, especially in economically deprived communities. It is a growing trend of 'self-care' which has its positive and negative aspects (Geissler PW et al., 2000) Unfortunately, especially in developing countries, professional health care is relatively expensive and in some cases not readily available thereby making self medication an obvious choice of healthcare service (Chang, 2003) Furthermore, it has been noted that purchase of drugs and many drugs that can only be purchased with prescription in developed countries are OTC in developing countries. Also, lax medical regulation has resulted in the proliferation of counter free drugs that are in high demand for the treatment of highly prevalent diseases (Shakoor, 1997)

Some governments are increasingly encouraging self-care of minor illnesses, including self-medication. While responsible self medication, which is limited to over the counter (OTC) drugs, may generate substantial net benefit flows to economies through saving in travel and consultation time and the direct financial cost of treatment (Porteous, 2005). Major problems related to self medication is wastage of resources, increased resistance of Pathogens, and generally entails serious health hazards such as adverse reaction and prolonged suffering. Antimicrobial resistance is a current problem world wide particularly in developing countries where antibiotics are often available without a prescription (Pagane, 2007). Self-medication is an area where governments and health authorities need to ensure that it is done in a responsible manner, ensuring that safe drugs are made available over the counter and the consumer is given adequate information about the use of drugs and when to consult a doctor (World Health Organization,1995)

The reasons for self medication mentioned in the literature are mild illness, previous experience of treating similar illness, economic considerations and a lack of availability of healthcare personnel. The most common medications used for self medication are analgesics and antimicrobials (Hughes, 2001 & Shankar et al., 2002). Another study on self medication shows that it is influenced by many factors such as education, family, society, law, availability of drugs and exposure to advertisements (Monastruc JL, 1997 & Habeed, 1993). A high level of education and professional status has been mentioned as predictive factor for self medication (Martins, 2002).

## II. SUBJECTS AND METHODS

This study was an anonymous, questionnaire-based survey, undertaken between September to November 2010. A self-developed, pre-validated questionnaire consisting of both open-ended and close-ended items was used. The study population comprised of first-year Under Graduate Business students of University of Madras, Chennai, Thiruvalluvar University, Vellore and Bharathiar Univeristy, Coimbatore. Students pursuing B.Com., and B.B.A., in 10 colleges affiliated to each of the 3 universities were the respondents of the study. These were young men and women who had recently joined the Arts & Science College. All first-year business students who were willing to participate in the study were enrolled. A briefing was given about the nature of the study, and the procedure of completing the questionnaire was explained. Consenting participants anonymously completed the questionnaire in the classroom.

For the purpose of the study, certain operational terms were defined. Self-medication was defined as the use of over-the-counter or non prescription drugs, whether modern or traditional, for self-treatment, without prior consultation with a doctor. A doctor was defined as any person who is medically qualified to prescribe medications. It included practitioners of modern scientific medicine as well as practitioners of other healthcare systems. Medication was defined as any substance used for treatment or prevention of disease. It included modern scientific medications as well as medications from other healthcare systems.

Samples of 1189 students were selected randomly from the colleges affiliated to the three institutions of South India. The inclusion criteria for the selection of students was 17 years and above. Out of all, 172 students were excluded in accordance with the exclusion criteria like incomplete information. The questionnaire consisted of questions on reason for self medication, indications of self medication, source of drug information etc. The results are based upon the data obtained from 1017 (85.5%) students. The prevalence of self medication was reported as percentages. The survey was descriptive and data was summarized as counts and percentages, some of the questions had multiple options to choose from.

## III. RESULTS

### (A) Baseline characteristics of participants

All the students (n=1189) responded to the questionnaire, of whom 172 were excluded in accordance with the exclusion criteria like incomplete information. Remaining 1017 (85.5%) students' questionnaire were considered for evaluation.

#### *Perception*

The respondents perceived several advantages of self-medication (**Table 1**). The most important advantages were saving time (56.63%), being economical (17.69%) and providing quick relief (12.58%).

**Table 1**  
**Reason for self-medication**

Reasons stated by the respondents	Respondents, %
Time-saving	56.63
No need to visit doctor for minor illness	3.44
Economical	17.69
Quick relief	12.58
Ease and convenience	8.09
Crowd avoidance	1.57

**Attitude**

The majority (85%) of the respondents had a positive attitude towards self-medication and favored self-medication saying that it was acceptable, while 15% felt it was unacceptable. When asked about the influence of pharmacists on their attitude towards self-medication, 64.2% felt that the pharmacists played a major role in the self medication of the non-prescribed medicines purchased over the counters.

**Practice**

Of the 1017 respondents, 815 (80.13%) practiced self medication, which included 45.1% of females and 44.2% of males. The remaining 202 respondents preferred consulting a doctor by going to a private clinic (20.2%), a primary healthcare center (31.3%), a referral hospital (48.5%). The most important reasons quoted for not consulting a doctor were previous experience (45.5%), mild illness (40.3%) and shortage of time (32.1%); rarely, it was advice from a friend (5.2%) and non availability of a doctor (4.5%). There were several indications for self-medication (**Table 2**): the most common indications were headache, fever, and cough, cold and sore throat.

**Table 2**  
**Indications for self medication**

INDICATIONS	RESPONDENTS, %
Headache	35
Cough, cold, sore throat	20
Stomach ache	3
Fever	36
Vomiting	1
Skin symptoms	0.27
Eye symptoms	0.73
Ear symptoms	2
Diarrhea	2

**Drug information**

80.82% students learned self medication from doctors' prescriptions provided during their prior illness. Friends, pharmacist, advertisements and books comprised 36.98%, 31.2%, 13.11% and 7.0% respectively, which provided/guided students for self medication (**Table 3**)

**Table 3**  
**Drug information**

Sources of Drug information	RESPONDENTS, %
Doctors' prescriptions provided during prior illness	80.82
Friends	31.2
Pharmacist	36.98
Advertisements	7
Books	13.11



#### IV.DISCUSSION

##### *Perception*

The respondents had a fairly good knowledge of the advantages and disadvantages of self-medication. Many of them correctly perceived self-medication as time-saving and economical, doing away with the need to go to a doctor for minor illness and providing quick, easy and convenient relief. These perceptions are similar to those reported by the WHO that self-medication provides a cheaper and convenient alternative for treating common minor illnesses [WHO Report, 1995 & Kafle, 1993]. These are important factors favoring self-medication and have been reported in other studies [Hughes, 2001 & Shankar, 2002]. However, this could also mean that health services need to be improved so that treatment becomes more accessible and the patient's waiting time is minimized. Length of waiting time for medical consultation has been identified as one of the predictive factors for self-medication [Martins, 2002]. The most important deterrents for self-medication were fear of adverse drug reactions, risk of making a wrong diagnosis and risk of using a wrong drug (fear of the unknown), similar to an earlier study [Hughes, 2001] .

##### *Attitude*

The majority of the respondents had a positive attitude towards self-medication, saying that it was acceptable. Unlike other aspects of self-care, self-medication involves the use of drugs, and drugs have the potential to do good as well as cause harm. In this context, the pharmacist has an important role (Hughes CM & WHO Report, 1998)

##### *Practice*

In this study, more than 80% of the respondents practiced self-medication. Those with a previous experience and with mild illness were more likely to practice self-medication. This has implications, because many diseases have similar symptoms, and a person using previous experience may be exposed to the dangers of misdiagnosis and consequently wrong treatment. The commonest illnesses that led to self-medication in this study were usually self-limiting 'minor illnesses' that have been widely reported in studies on self-medication as the most common indications (Shankar, 2002).

It is acknowledged by the researcher that this type of study, using a self administered questionnaire, is largely dependent upon information given by respondents. Although students were encouraged to complete the questionnaire independently, mutual influence between pupils could not be entirely ruled out. However, given the high level of response, the results should closely approximate the behavior of the adolescent students in South India. Few students consulted pharmacists for information on drugs. The pharmacist's role is mainly seen as that of a drug salesman rather than that of a healthcare provider. Patient education and awareness campaigns are necessary to promote the role of the pharmacist in India. Students with a previous experience and with mild illness were more likely to practice self medication. This has implications, because many diseases have similar symptoms and a person using previous experience may be exposed to the dangers of misdiagnosis and consequently wrong treatment.

Major reasons of self medication at student level were time saving, perception that there was no need to visit/get advice from the prescriber for minor illness, self medication found to be economical and fear about the crowd at clinic. Most of the respondents had positive attitude in self medication for minor illness. However, minor illness symptoms may cause major illness if not diagnosed properly as most of the fatal diseases have symptoms like fever, body ache, and headache.

#### V.CONCLUSION

This descriptive survey shows that the majority of the students had poor knowledge about appropriate self-medication while the knowledge of the benefits and risks was not adequate. Thus, to avoid or minimize the dangers of self medication, the students should be educated about the dangers of indiscriminate use of drugs. Secondly, the physicians should be more judicious in prescribing and must insist on drugs being supplied by the chemist only on a valid prescription. Thirdly, a proper statutory drug control must be implemented, rationally restricting the availability of drugs to the public. These three measures would definitely reduce the incidence of drug-related mishaps and help in maintaining good health of the individual and society.

#### REFERENCE

1. Hughes CM, McElnay JC, Fleming GF: Benefits and risks of self medication. Drug Safety. 2001; 24: 1027–1037.
2. WHO guidelines for the regulatory assessment of medicinal products for use in self medication, 2000. Available from [www.who.int/medicines/library/qsm/whoedm-qsm-2000-1/who-edm-qsm-00\\_1.htm](http://www.who.int/medicines/library/qsm/whoedm-qsm-2000-1/who-edm-qsm-00_1.htm).

3. Porteous T, Bond C, Hannaford P, Sinclair H: How and why are non-prescription analgesics used in Scotland? *Fam Pract* 2005; 22: 78–85.
4. Geissler PW, Nokes K, Prince RJ, Achieng RO, Aagaard-Hansen J, Ouma JH: Children and medicines: self-treatment of common illnesses among Luo school children in western Kenya. *Social Science Medicine* 2000; 50: 1771–1783.
5. Pagane JA, Ross S, Yaw J, Polsky D. Self medication and health insurance coverage in Mexico. *Health Policy* 2007; 75:170-177.
6. World Health Organization: Report of the WHO Expert Committee on National Drug Policies 1995. <http://www.who.int/medicines/library/dap/who-dap-95-9/who-dap-95.9.shtml>.
7. Chang F, Trivedi PK, Economics of self medication: theory and evidence. *Health Economics* 2003; 12: 721-739.
8. Shakoor, O, Taylor RB, Behraus RH. Assessment of the incidence of substandard drugs in developing countries. *Tropical medicine and International health* 1997; 2: 839-845.
9. Shankar PR, Partha P, Shenoy N. Self medication and nondoctor prescription practices in Pokhara Valley, Western Nepal: a questionnaire-based study. *BMC Family Practice* 2002; 3:17.
10. Monastruc JL, Bagheri H, Gerard T, Lapeyre MM. Pharmacovigilance of self medication. *Therapie* 1997; 52: 105 -110.
11. Habeeb GE, Gearhart JG. Common patient symptoms: pattern of self treatment and preventions. *J Miss state Med Assoc* 1993; 34: 179-181.
12. Martins AP, Miranda AC, Mendes Z, Soares MA, Ferreira P, Nogueira A. Self medication in a Portuguese urban population: a prevalence study. *Pharmacoepidemiol Drug Safety* 2002; 11: 409-414.
13. Kafle KK, Gartulla RP: Self-medication and its impact on essential drugs schemes in Nepal: a sociocultural research project 1993. <http://www.who.int/medicines/library/dap/whodap-93-10/who-dap-93-10.shtml>

# GEN X AND Y GO MOBILE – EXPLORING THE FACTORS AFFECTING THEIR ADOPTION AND USAGE

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## ABSTRACT

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*It is a Meta analysis study, which is to investigate the adoption and usage of mobile phones among Generation X and Y customers. The recent growth of mobile phone usage is an observable fact that crosses all age and gender boundaries. Generation X and Y have taken different purchase decision, especially the product mobile. Meta analysis study helps to analyze review and identify the overall trends in adoption and usage of mobile phones among generation X and Y. The reviews are collected from the past eight years data (2000 - 2009) since it is only during these years the mobile phone users have spread widely. [The mobile phone users were 0.5 billion in 2000 and are expected to increase to 1.5 billion in 2010]. This study aims to provide a framework for understanding how Social, Demographic, cultural and technological factors change overall trends in adoption and usage of mobile phones among generation X and Y customer segment.*

**Keywords :** Meta Analysis, Mobile, Customer Segment

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## 1.INTRODUCTION

The mobile phone has become part of our lives and part of our identity. The device itself, the ring tone, the screen images and the assortment of accessories all help define who we are to the outside world. Mobile phones nowadays are not luxury items anymore but necessities because of the various benefits and advantages the mobile phones offer, they became a very important part of society. Mobile phones have become a part of everyday life for many individuals and some could not even manage to last an hour without them. This is also the fashion trend nowadays. Mobile phones have even become the timepieces as people are more likely to check the time in their handsets. This device calculates, wakes people up, and reminds them of all occasions and appointments.

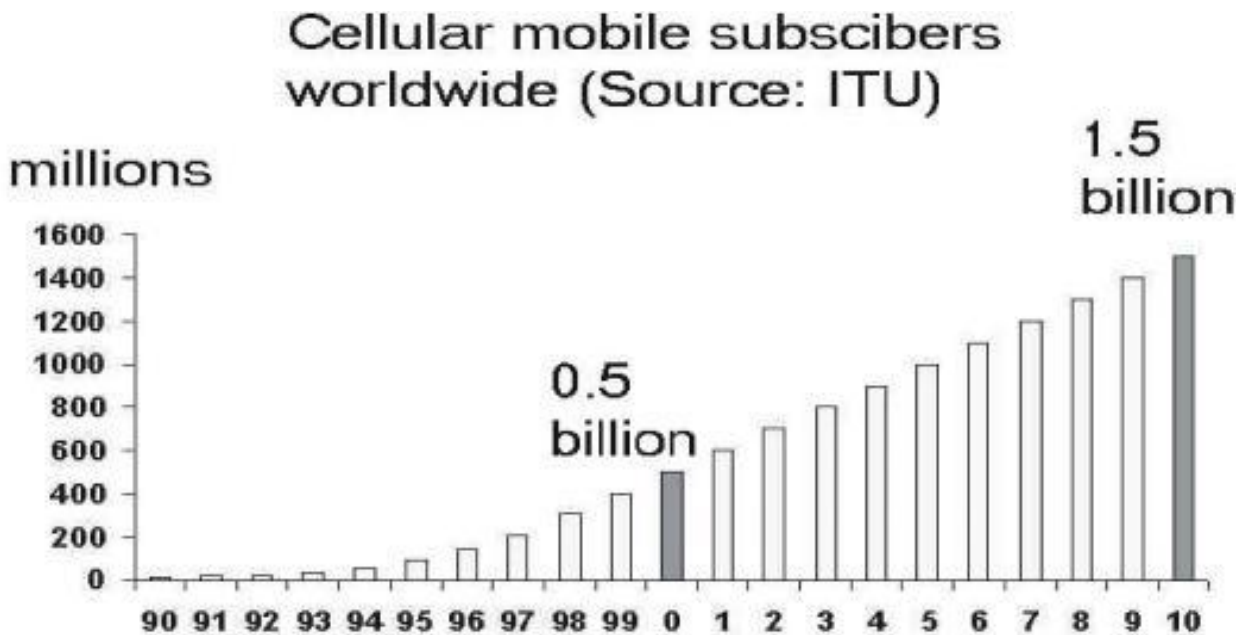
The rapid adoption and usage of mobile phones around the world has changed the way people communicate, interact and socialize with one another. *Overall, consumers are choosing mobile phones over landlines. In fact, more than four out of five U.S. adults (85 percent) own a mobile phone (i.e., cell phone and/or smart phone), compared to only about seven in ten (71 percent) who have a landline or home phone. (SAN FRANCISCO, June 26 /PRNewswire/ — Ingenio, Inc., Copyright PR Newswire Association LLC Jun 26, 2007)*

## 2.OBJECTIVE

The focus is to ascertain the influencing attributes that will affect the behavior of the consumers in the long run, highlight the differences due to market evolution and observe the specific socio-economic, personal, cultural and technological variables among mobile phone customers in Chennai city. From the above discussion it is clear that there should be great interest in researching the consumer behaviour in connection with mobile phone adoption and usage on the part of Generation X and Y customers in the city of Chennai. These two generations needs to be sufficiently researched so as to increase the understanding of the attitudes and behaviour of the people towards mobile phones. This is necessary in order to devise an effective way to market to this group. It is important to investigate this group because Generation X and Y, as opposed to the general population of Chennai, exhibits different attitudes and behaviours towards, and an acceptance of the mobile phone. To summarise the problem statement is to determine the behaviour patterns of Generation X and Y consumers as they are a growth market, and not enough is known about their consumer behaviour patterns regarding the adoption and usage of mobile phones in Chennai.

**63 percent of mobile phone users agree that their phones are very personal to them and 44 percent believe that their phones have strengthened their personal relationships. (SAN FRANCISCO, June 26 /PRNewswire/ — Ingenio, Inc., Copyright PR Newswire Association LLC Jun 26, 2007).** Younger mobile phone owners are especially likely to feel that their phones have strengthened their personal relationships (60 percent of those ages 18-34 vs. 37 percent of those

ages 35+). (SAN FRANCISCO, June 26 /PRNewswire/ — *Ingenio, Inc.*, Copyright PR Newswire Association LLC Jun 26, 2007). While nearly one-half of mobile phone owners (49 percent) currently use their phones for more than just making and receiving phone calls, the study finds that, in the next three years, 57 percent of mobile phone owners anticipate using their phones for more than just making and receiving phone calls.



(Source: Wireless Mobile Telephony – Dr. Arian Durrezi, 1998)

(SAN FRANCISCO, June 26 /PRNewswire/ — *Ingenio, Inc.*, Copyright PR Newswire Association LLC Jun 26, 2007) 2010: A Mobile Odyssey.)

### 2.1. Generation X Statistics

In India the term, Generation X (born between 1961 to 1981) is used for the younger generation of people who present a hip image. They are westernized, upwardly mobile and against the old Indian traditions of their parents. They are career minded and value money. They are not involved in social issues and have no ideals, except that of getting ahead.

During the past three months, 69 per cent of Generation Xers have shopped online and 65 per cent used online banking—more than any other group

21% of Gen X are now reading a blog once per month compared to 15% last year

61% of mobile subscribers text compared to 49% in 2007

(TMCnet Editor - Forrester Report Details IT Use Among Gen X, Y Members – By Michael Dinan July 21, 2008)

### 2.2. Generation Y Statistics

Generation Y (born between 1980 to 1994) is not a homogeneous group, rather made up of three distinct groups: Generation Y kids, teens and adults. It comprises of two specific groups: Generation Y kids and teens as one group and Generation Y adults comprise the second group. The rapid adoption and usage of mobile phones around the world has changed the way people communicate, interact and socialize with one another. It helps to identify the need to market to both of these groups in their own distinct manner.

90% of Gen Y own a computer and 82% own a mobile phone

72% of Generation Y mobile phone users send or receive SMS messages

They spend more time online than they do watching television, with 42% watching online video at least once per month

(TMCnet Editor - Forrester Report Details IT Use Among Gen X, Y Members – By Michael Dinan July 21, 2008)

Hulme and Peters (2001:2) find that “the mobile acts on many levels, as a fashion statement, as a communicator, as a badge of identity and as a decoder.” Furthermore according to Leps (2003) the “mobile me” ethos has become so established amongst youngsters that regularly updating their mobile phone profiles has become second nature; from the look and feel of the handset (bright colours and funky patterns) to how the mobile phone sounds, the graphics it displays and how it helps users organise their lives on the move are just a few of the profiles used by the youth.

Economists have slashed Indian economic growth forecasts for this year and the stock market is in the doldrums. There is no sign of a slowdown yet: figures to be released later are expected to show that new subscriptions in January 2009 reached a record 11 million. (Eric Bellman Feb 9, 2009)

“Gen Y is the audience that most companies are struggling to understand right now because it’s key to their future revenue growth,” (Charles Golvin July 22, 2008)

“One of the questions that is been asked most frequently is the difference between Gen Y and Gen X, and this year’s data clearly shows the distinction. Gen Xers use technology when it supports a lifestyle need, when it intersects with a personal need or fulfills a desire. While technology is so deeply embedded into everything Gen Yers do that they are truly the first native online population.” (Jennifer Netherby July 24, 2008)

### **3.THE ORITICAL BACKGROUND**

Various factors that influence mobile phone usage have been identified over time [Davis, 1989; Venkatesh et al., 2003; Rogers, 2003]. The following determinants of mobile phone adoption and usage have been identified;

#### **3.1. Social factors**

A customer’s buying behaviour is also influenced by social factors, where People use technology to satisfy social needs. Social interactions are the focus of human existence and therefore, in order to be successful, technology must eventually support socialization [Ark and Selker, 1999]. Cell phone has brought some social changes and be able to stay in touch with family and friend is one of the foremost social advantages the cell phone is providing. As [Schofield and Sithole, 2006] say, “it has become quicker to communicate with friends and relatives.”

In the context of social factors, Campbell and Russo [Campbell and Russo, 2003] distinguish between technological determination and social constructivism as two perspectives in viewing technology, and describe them as follows:

Technological determinism maintains that macro-level changes in the social order are primarily caused by new technologies, which then exert micro-level influences on how people perceive and use technology.

Social constructivism maintains that humans shape technology and not the other way round.

Campbell and Russo reject technological determinism in the favour of social constructivism but acknowledge a reciprocal relationship between people and technology by saying: “just as new technologies influence the ways people live their lives, the ways people live their lives influence how they think about and use technologies.”

Mobile phones are often seen as fashion items [Green et al., 2001] where fashion is a form of communication as well as an indicator of status and power [Katz and Sugiyama, 2005]. Some user groups even create their own language as a playful, creative expression of personal style [Page, 2005]. The location-free nature and huge growth of mobile phone usage have established a new social order that can be described as a shift from place-to-place communication to person-to-person communication [Khalil and Connelly, 2005a]. [Geser, 2004] states that mobile phones do not cause worldwide convergences and homogenization in social behaviour, as stating that “by supporting rather traditional and particularistic social settings, mobile phones are more likely to accentuate differences rather than communalities between various population segments, social institutions or ethnic culture”.

#### **3.2. Demographic Factors**

This section deals briefly with some of the demographic factors that have been found to influence mobile phone usage. Age has been the most widely applied demographic variable characterising differences in the adoption of mobile end-user services [Kwon and Chidambaram, 2000; Pedersen, 2003; Kleijnen et al., 2004]. The needs of people vary according to their age group [Coen et al., 2002]. Teenagers use mobile phones for accessibility, display and entertainment [Ling, 2001; Gilbert and Kendall, 2003], and socialisaion [Ling, 2001]. Parents use mobile phones to coordinate family activities and to check on their children’s safety [Campbell and Russo, 2003], while older people use them for safety and security purposes [Ling and Haddon, 2001; Coen et al., 2002].



[Wilska, 2003] also found gender-related differences in mobile phone use. For example, 'addictive' use of the phone with heavy spending and a trendy, are connected to the female gender, while technology enthusiasm and trend-consciousness is linked to 'hard' values, a 'trendy' consumption style and the male gender. Gender difference is also supported by a study by [Wei et al., 2006] who found that women rely on mobile phones to show affection to their families while men tend to use them predominantly for information-seeking purposes. The findings of the study by Nickerson and Isaac [Nickerson and Isaac, 2006], concerning the influence of gender on mobile phone use was inconclusive and therefore it seems as though the issue of gender influence has not been resolved. It has also been found that young people are increasingly using and adapting mobile phones not only to interact with their own words, but to create and structure their worlds [Spero and Stone, 2004:154].

Mobile phone usage is also influenced by education and income levels [Ho and Kwok, 2003; Bina and Giaglas, 2005], and national culture has been identified as a moderating factor that may influence mobile phone use [Nickerson and Isaac, 2006]. Better-educated people were found to use mobile phones more frequently and have a more positive attitude towards using a mobile phone [Bina Giaglis, 2005; Adomi, 2006].

[Kleijnen, Wetzels et al., 2004] investigated the effect of computer skills, mobile technology readiness, and social influence on technology adoption and found them all to be relevant in mobile phone usage. [Cheskin, 2001:9] notes that "Technology has become a great facilitator of teen and young adults' social needs, building on their peer fixation and enhancing their ability to communicate with one another."

### 3.3. Cultural Factors

Culture is the most fundamental determinant of a person's want and behaviour. Cultural factors have a significant impact on customer behaviour. The context of mobile user includes user culture and the influence of culture on mobile phone use [Urbaczewski et al., 2002; Teo and Pok, 2003a; Jones and Marsden, 2005a]. This necessitates a review of culture as an essential part of understanding users and the factors that influence mobile phone usage.

[Ford, 2005] defines culture in the context of Human-computer interaction (HCI) as 'the patterns of thinking, feeling, and acting that influence the way in which people communicate among themselves and with computers'. This definition is also applicable to mobile interaction and he consequently adapted it for the purpose of this study to consider culture as 'the patterns of thinking, feeling, and acting that influence the way in which people communicate among themselves and use mobile devices'. [Judy van Biljon and Paula Kotzé, 2008] supports the fact that culture influence mobile phone adoption and usage.

The mobile device market has widened to a global scale and consequently mobile devices are distributed throughout the world [Kim and Lee, 2005]. As the use of mobile phones pervades the world, the globalization of mobile device user interface is becoming more crucial to business success and building a loyal customer base. Communication technologies are entirely dependent on a social network for adoption and use, and therefore the diffusion of these technologies within a culture should be studied [Urbaczewski, et al., 2002]. According to [Palen et al., 2000] deployment of mobile telephony varies dramatically internationally and even among western countries. In general, usability studies aim to make technology more useful. Cultural usability goes further and aims to make technology fit in with the user's lifestyle [Sun, 2004]. In order to be effective, designers therefore have to understand and be aware of the cultural priorities and the value system of users, i.e. they must identify factors that are relevant and sensitive to cultural differences.

Hofstede proposed a model with international variables to show subjective culture affects human mental programming [Hofstede 1995]. Hofstede further encompassed this model within the pyramid metamodel that comprises of three levels [Hofst 1996; Hofstede 2001]

Human nature is common to all human beings, it is inherited and not learned.

Culture is specific to a group of people and is learned, not inherited.

Personality is attributed to an individual and this attribute is both learned and inherited

### 3.4. Technological Factors

Technology adoption involves the user, the technology and the context [Humphreys, 2005]. Various models for understanding technology adoption have been proposed. [Pedersen, 2003] list Roger's innovation diffusion model, the domestication model and the technology acceptance model (TAM) as the three most commonly applied.



Roger's innovation diffusion model is founded in sociology but also has been applied to the world of marketing where users are seen as economic entities, the world provides an approach to understanding how a particular population adopts innovations [Rogers, 2003].

[Silverstone and Haddon, 1996] proposed the domestication model where users are seen as social entities and the model aims to provide a framework for understanding how technology innovations change and are changed by their social contexts.

The technology acceptance model was developed by [Davis, 1989] to explain the determinants of computer acceptance and usage behaviour.

While Rogers' innovation diffusion model focuses on marketing and sales processes, the domestication approach deals with a more global analysis of adoptions *ex post facto* and the TAM focuses on technology adoption in organisations [Ling, 2001].

TAM postulates several conceptually independent determinants of a person's attitude toward using new technology (Davis, 1989; Davis, Bagozzi, & Warshaw, 1992). The determinants are as follows:

**Usefulness:** Usefulness was defined as the extent to which an individual perceives that using a mobile phone is beneficial to their lives [Davis, 1989].

**Ease of use:** Ease of use was defined as the extent to which a person believes that using the system will be free of effort [Davis, 1989].

**Pleasure of use:** Pleasure of use was defined as the extent to which users believe that using a mobile phone is pleasurable in its own right [Davis et al., 1992]. This construct includes hedonic qualities of mobile phones such as attractiveness, aesthetics, and entertainment.

**Association with satisfaction:** Traditionally, HCI research and other disciplines adopted "satisfaction" as a subjective measure of the product quality, defined as an affective state that is the emotional reaction to a product or service experience [Oliver, 1980; Spreng, MacKenzie, & Olshavsky, 1996]. User satisfaction has been recognized as a key measure of system success in the information systems area [Bailey & Pearson, 1983; Baroudi, Olson, & Ives, 1986]. Therefore, user satisfaction can be used as a surrogate measure for overall mobile phone quality.

[Balaji et al., 2005] itemize four components of a successful mobile product: Business model that fits the service's natural usage pattern; mobile phone that deliver new features aimed at customer needs; device-level applications that leverage the new features; and the mobile content designed for utilization within mobile usage scenarios. According to [Ali-Vehmas and Luukkainen, 2005], the most influential factors determining service adoption include: complexity of the product and the service (including usability and configurability), compatibility with other relevant services and relative advantage of the new service compared to the original ways of doing the similar tasks.

#### 4. DISCUSSION

The findings of the study support the fact that influencing factors [Social, Demographic, Culture, and Technology], affects the behavior of the Generation X and Y in adoption and usage of mobile phones.

First, this study put forward the fact that Generation X are influenced in a great degree by social factors since mobile phone satisfies their social needs, as social interactions are the main focus of human existence and mobile phones allow them to keep in touch with their family and friends. Then the other major factor that influence this generation is the demographic factor where Generation X, which is composed of 29- to 42-year old people use mobile for safety and security purpose of their children's and themselves. Generation X are also influenced by technological factor, where these generations choose to adopt a technology only when it fits in with their personal need or desires. Some of the determinants that affect Generation X's attitude towards using new technology are 'usefulness' (the extent to which an individual perceives that using a mobile phone is beneficial to their lives) and 'ease of use' (the extent to which a person believes that using the system will be free of effort).

Second, the study confirms that Generation Y the other major group of this study are influenced to a greater extent by social factors taking into considerations the fact that these generations see Mobile phones as fashion items which indicates their status and power. Next, age has been the most widely applied demographic variable where the needs of people vary according to their age group. Generation Y is a generation of 18- to 28-year olds, which mainly consist of

teenagers and young adults who mainly use mobile phones for accessibility, display and entertainment. The next important factor that plays a crucial role in influencing Generation Y is technology as this generation sets the pace for technology adoption. While technology matures, ring tones, cameras, GPS features, music, and multiple other features will be added to the hardware, the software on phones will progress to include easier web access, advertisements, news downloads, and easier chat and email features which makes the mobile phone a mini-computer. The other determinant of the technological factor that influence this generation is 'pleasure of use' where Generation Y feels, using a mobile phone is pleasurable in its own right.

In general, both Generation X and Y are commonly influenced by certain determinants, such as social factors in usage of mobile phones as it enables social interactions, which is a main focus of human existence. Since almost both the generations are literates mobile phone adoption is also influenced by education and income levels which is one of the main dimensions of the demographic factors that have been found to influence mobile phone adoption and usage. Cultural factors have a significant impact on these generations as cultural usability aims to make technology fit in with the user's lifestyle. Since mobile phones do not cause worldwide convergences and homogenization in social behaviour, it is more likely to emphasize differences rather than communalities between various population segments and ethnic culture, which makes culture as an essential part of understanding users and the factors that influence mobile phone usage. The other main dimension of technological factor, which affect generation X and Y in common, is 'association with satisfaction' where user satisfaction has been recognized as a key measure of system success in the information systems area and therefore, user satisfaction is used as a surrogate measure for overall mobile phone quality.

## 5.CONCLUSION

Based on the findings of the study it is clear that, Generation X and Y consumers will most probably exhibit different mobile phone usage patterns. This is in view with the fact that they are influenced by different factors but they are similar to one another because of globalization. Generation X and Y are the most important demographics shaping the landscape of consumer behaviour. The findings will indicate that this research will be a viable model for the study of consumer behavior as it relates to mobile phones.

This study on knowing the factors that affects the adoption and usage of mobile phones between Generation X and Y will enable marketers and advertising agencies to have a good rapport with these segments of population in a personalized way to yield enormous results and more business opportunities. Understanding the way in which Generation X and Y consumers have incorporated the mobile phone into their everyday lives will be of relevance for all future applications. Mobile Phone companies will ultimately succeed if they custom design their products and services in order to serve these unique segments of the market and if they tailor their companies around the Generation X and Y consumers. The growing number of studies finds cross-cultural similarities in mobile phone use by these generations

## REFERENCES

- [1] Adomi, E. E. (2006). Mobile phone usage patterns. *Electronic journal of Academic and special librarianship*, Vol. 7: 1-11
- [2] Ali-Vehmas, T., & Luukkainen, S. (2005). Service Diffusion Strategies for Push to talk over Cellular. In *International Conference on Mobile Business (ICMB'05)*. 427-433: IEEE
- [3] Ark, W. S., & Selker, T. (1999). A look at human interaction with pervasive computers. *IBM Systems Journal*, 38(4):504-507.
- [4] Bailey, J. E., & Pearson, S. W. (1983). Development of a tool for measuring and analyzing computer user satisfaction. *Management science*, 29(5), 530-545.
- [5] Balaji, T. S., Landers, B., Kates, S. J., & Moritz, B. (2005). A carrier's Perspective on creating a mobile multimedia service. *Communications of the ACM*, Vol. 48: 49-53
- [6] Baroudi, J. J., Olson, M. H., & Ives, B. (1986). An empirical study of the impact of user involvement on system usage and information satisfaction. *Communications of the ACM*, 29(3), 232-238.
- [7] Bina, M., & Giaglis, G. M. (2005). Exploring Early Usage Pattern of Mobile Data Services in *International conference on Mobile Business (ICMB'05)*:363-369: IEEE
- [8] Campbell, S. W., & Russo, T. C. (2003). The Social Construction of Mobile Telephony: An application of the Social Influence model to Perceptions and Uses of Mobile Phones within Personal Communication Networks. *Communication Monographs*, 70(4):317-334.

- [9] Charles Golvin (July, 2008) – *Forrester techno graphics benchmark survey - Gen Y a generation apart*  
Source: Forrester Research Inc. – Forrester principal analyst).
- [10] Cheskin (2001) *the wireless future, a look at youth unplugged*
- [11] Coen, A., Dai, L., Herzig, S., Gaul, S., & Linn, V. (2002). *The Analysis: Investigation of the cellular phone industry*. Retrieved 2006/08/25 from, <http://web.syr.edu/~spgaul/Final%20Essay%204.1.doc>
- [12] Davis, F. D. (1989). Perceived Usefulness, Perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3):319-340
- [13] Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1992). Extrinsic and intrinsic motivation to use computers in the workplace. *Journal of Applied Psychology*, 22(14), 1111-1132.
- [14] [Davis, Bagozzi et al. 1992] Davis, F. D., Bagozzi, R. P., Warshaw, P. R.: “Extrinsic and Intrinsic Motivation to Use Computers in the Workplace”; *Journal of Applied Social Psychology* 22, 14 (1992), 1111 - 1132.
- [15] ERIC BELLMAN. (Feb 9, 2009). The wall street Journal. Digital network - *Rural India Snaps up Mobile Phones*
- [16] Ford, G. (2005). Researching the effects of culture on usability, Thesis (M.Sc) – University of South Africa, University of South Africa, Pretoria
- [17] Geser, H. (2004). *Towards a Sociological theory of the Mobile Phone*. Retrieved 2006/03/21, from file:///C:/aPhD/ Referenced\_Mobile /Geser.pdf
- [18] Gilbert, A. L., & Kendall, J. D. (2003). A marketing model for mobile wireless services. *Proceedings of 36th Annual Hawaii International Conference on System Sciences* (HICSS'03), 3(Track 3)
- [19] Green, N., Harper, N. H. R., Murtagh, G., & Cooper, G. (2001). Configuring the mobile user: sociological and industry views. *Personal and Ubiquitous computing*, 5(2):146-156
- [20] Ho, S. Y., & Kwok, S. H. (2003). The Attraction of Personalised Services for users in mobile commerce: An empirical study. *ACM SIGecom Exchanges*, 3(4):10-18
- [21] Hofstede, G. (1995). The business of international business in culture. In *Cross-cultural management*, T. Jackson (Ed): 150-154. London: Butterworth-Heinemann.
- [22] Hofstede, G. (2001). *Culture's Consequences: Comparing Values, Behaviours, Institutions and Organisations Across nations* 2nd ed. Thousand Oaks, CA: Sage Publications Inc.
- [23] Hoft, N. (1996). Developing a cultural model. In *International user interfaces*, E. del Gado and J. Nielsen (Eds.): 42-72. New York: John Wiley and Sons.
- [24] Humphreys, L. (2005). Cell phones in public: social interactions in a wireless era. *News Media & Society*, 7(6):810-833
- [25] Jennifer Netherby July 24, 2008 *Gen Y lead the Way on Technology Use —The State Of Consumers And Technology: Benchmark 2008* Source: Forrester Research Inc. – Forrester principal analyst
- [26] Jones, M., & Marsden, G. (2005a). *Mobile Interaction Design* Hoboken, NJ: John Wiley and Sons. In the *proceedings of the 7th international conference on Human computer interaction with mobile devices and services*, 111(369-370). Salzburg, Austria: ACM Press, New York, NY
- [27] Judy van Biljon & Paula Kotzé (2008). Cultural Factors in a Mobile Phone Adoption and Usage Model *Journal of Universal Computer Science*, vol. 14, no. 16 (2008), 2650-2679 submitted: 9/7/07, accepted: 15/10/07, appeared: 28/ 8/08 © J.UCS
- [28] Katz, J. E., & Sugiyama, S. (2005). Mobile phones as fashion statements: The co-creation of mobile communication's public meaning. In *Mobile communications: Re-negotiation of the social sphere*, R. Ling & Pedersen (Eds.): 63-81. Surrey, UK: Springer
- [29] Khalil, A., & Connelly, K. (2005a). Context-Aware Configuration: A study on improving Cell Phone Awareness. *Lecture notes in Computer Science: Modeling and using context*, 3554:197-209, Springer-Verlag.
- [30] Kim, J. H., & Lee, K. P. (2005). *Cultural differences and mobile phone interface design: Icon recognition according to level of abstraction*. Paper presented at the proceedings of the 7th international conference on Human-Computer Interaction with mobile devices and services, 111: 307-310, ACM Press, New York, NY, USA.

- [31] Kleijnen, M., Wetzels, M., & De Ruyter, K. (2004). Consumer acceptance of wireless finance: *Journal of Financial Services Marketing*, 8(3):207-217
- [32] Kwon, H. S., & Chidambaram, L. (2000). A test of the technology acceptance model: The case of cellular telephone adoption. In *proceedings of the 33<sup>rd</sup> Hawaii International Conference on System Sciences*, 1 (1-10). Hawaii: IEEE Computer Society.
- [33] Ling, R. (2001). The diffusion of mobile telephony among Norwegian teens: A report from after the revolution (No. Presented at ICUST). Paris: Telendor R&D
- [34] Ling, R., & Haddon, L. (2001, 18-19 April). *Mobile telephony, mobility and the coordination of everyday life*. Paper presented at the Machines That Become Us, New Brunswick, New Jersey: Leto
- [35] Michael Dinan (July 21, 2008) TMCnet Editor - Forrester Report Details *IT Use among Gen X, Y Members*.
- [36] Nickerson, R. C., & Isaac, H. (2006). "Am I disturbing you?" A research model for investigating the use of mobile phones in social settings. In *Proceedings of the International Conference on Mobile Business*, 1(1):35: IEEE Computer Society.
- [37] Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(November), 460-469.
- [38] Page, C. (2005). Mobile research strategies for a global market. *Communications of the ACM*, 48(7):42-48
- [39] Palen, L., Salzman, M., & Youngs, E. (2000). Going wireless: behaviour & practices of new mobile phone users. Paper presented at the proceedings from the 2000 ACM Conferences on Computer Supported cooperative work., Philadelphia, Pennsylvania:201-210, ACM Press.
- [40] Pedersen, P. (2003). Adoption of mobile Internet services: An exploratory study of mobile commerce early adopters. *Journal of Organisational Computing and Electronic Commerce*, 15(3):203-222
- [41] Rogers, E. M. (2003). *Diffusion of Innovation* 5th ed. New York: The Free Press
- [42] Schofield A, Sithole H, Universal Service Agency Achievement of the Telecommunication Act Objectives Analysis of the extent to which the objectives of the telecommunications Act (103 of 1996), as amended were achieved (in the period 1997 to 2004) Last Accessed Jan 2006 [Online]. Barendse, A 2003, 'Innovative regulatory and policy initiatives at increasing ICT connectivity in South Africa', *Journal of Telematics and Informatics*, vol.21, no 1, pg 49-66
- [43] Silverstone, R., & Haddon, L. (1996). Design and Domestication of information and communication technologies: Technical change and everyday life. In *Communication by Design: The Politics of Information and Communication Technologies*, R. Silverstone and R. Mansell (Eds.): 44-74. Oxford: Oxford University.
- [44] Sun, H. (2004). Expanding the scope of Localization: A cultural usability perspective on mobile text messaging use in American and Chinese Contexts, Doctoral dissertation, Rensselaer Polytechnic Institute, New York.
- [45] Spero, I. & Stone, M. (2004) Agents of change: *how young consumers are changing the world of marketing*. *Qualitative Market Research* 7(2): 153-159.
- [46] Spreng, R. A., MacKenzie, S. B., & Olshavsky, R. W. (1996). A reexamination of the determinants of consumer satisfaction. *Journal of Marketing*, 60(July), 15-32.
- [47] Teo, T. S. H., & Pok, S. H. (2003a). Adoption of the internet and WAP-enabled phones in Singapore. *Behaviour & Information Technology*, 22(4):281-289, Taylor&Francis
- [48] Urbaczewski, A., Wells, J., & Sarker, S. (2002). Exploring Cultural differences as a means for understanding the Global *Mobile Internet: A theoretical basis and program of research*. Paper presented at the proceedings of the 35<sup>th</sup> Hawaii International Conference on System Sciences: IEEE computer society.
- [49] Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: toward a unified view. *MIS Quarterly*, 27(3):425-478.
- [50] Wei, R., & Lo, V. (2006). Staying connected while on the move: cell phone use and social connectedness. *News media & Society*, 8(1):53-72
- [51] Wilska, T. (2003). Mobile Phone Use as Part of Young People's Consumption Styles. *Journal of Consumer Policy*, 26(4):441-463.



## MULTI-DIMENSIONS OF UNIT LINKED INSURANCE PLAN AMONG VARIOUS INVESTMENT AVENUES

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### ABSTRACT

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*Unit linked insurance plan, simply called as ULIP, is a new kind of life insurance product that gives the benefit of life insurance protection and comprise the features investment. The premium invested in unit linked insurance plan is subdivided into units and invested in the funds selected by the policyholder; such part is called as Net Asset Value (NAV). The fund value under this policy varies according to the market movement of the portfolio. After deducting the allocation charges and all other contingency costs from the premium, the remaining portion gets invested in the units. Unit is the component in a fund; a fund consists of many companies usually called as portfolio. Hence the return from this unit linked insurance plan depends upon the portfolio performance in the market. Generally ULIP policies contain several funds i.e, diversified funds, equity funds, debt funds, money market funds, growth funds, income funds etc. it is varied from company to company. Plenty of benefits are associated with this policy but the important consideration is the risk in the investment portfolio is generally borne by the policyholder. ULIPs are designed with lot of innovative ideas and different from the traditional insurance plans. It provides flexibility in the life protection, investment and savings, adjustable life cover, fund options, transparency in charges, options to take additional cover against death due to accident or disability and liquidity through partial withdrawals etc. it is not possible in traditional package plans.*

*Key words used - Unit Linked Insurance Plan, flexibility, fund options, diversification, professional fund management, fund switching, reinstatement of policy, rider options, foreclosure of policy, Top-up, free look period.*

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### 1.INTRODUCTIONANDNEEDFORTHESTUDY

There is a bewildering range of investment avenues available for the investing community, varied from financial assets to physical assets. Both the asset class has its own features. Among the two investment outlets, insurance is an inevitable tool, and no financial product can rival against insurance. Before the year 2001, insurance was sold in the form of term, endowment, whole-life, and money-back policies by the monopoly insurer LIC. After the entry of private players in 2001 and growth of equity prices captured the attention of all investors to insurance segment. Traditional plans do not offer the return in the line of equity market. In order to satisfy existing customers and to capture more prospects, the life insurers introduced some plans with innovative features to strengthen and maximize premium income. Such kind of innovative ideas comes in the form of Unit Linked Insurance Plan. The private sector life insurance companies added extra fuels in this arena.

A unit-linked insurance plan is a multi-featured product that combines the benefit of insurance, risk sharing and investment. The investment in a unit linked insurance plan works like a mutual fund and does not come with guaranteed returns, unlike money back, whole-life or endowment policies. Hence a unit linked insurance plan combines the features of investment and life protection. The premium of the customer can fetch life insurance cover and a part of it gets invested in specific investment funds of the customers' choice in the form of units. A Unit is the component of the fund and its performance is depends upon the performance of capital market. Under this plan, the policyholders have the choice of investing their premiums in a single premium / regular or limited premium mode and in addition to that monthly, quarterly, half-yearly and annually payment method is extended to regular and limited premium payments. The premium alteration is also allowed in the tenure of the premium payment period. For example, the customers of this plan are allowed to park their excess money in this scheme. Conversely, if any policyholder faced liquidity problem, it is allowed to pay lower premium. Shifting of the funds from one fund to another funds or fund options.

## II. HOW ULIP DIFFERS FROM TRADITIONAL PLANS?

Unit linked insurance plan and traditional plans work very differently. While the risk is borne by the insurer in case of a traditional plan, but in case of unit linked insurance plan it is borne by the customer. The traditional plan mixes insurance and investment and assures the customer a certain sum at the end of given period. It includes sum assured and vested bonus. If the customer does not survive the policy term, the policyholder family gets the sum assured plus bonuses. Traditional plans are best for those with low financial discipline. They can consider including endowment plans in their insurance portfolio. For such investors, many private sector insurers have innovations that have worked on features, bonus payments structuring and riders. In an endowment plan, the big change has been in the structuring of bonus payments. Reversionary bonus is accumulated until the death or maturity of the life insured and paid whichever takes place first. The non-reversionary bonus if the policyholder is allowed to encash it.

Premiums in excess of the risk cover are invested as per the choice of the policyholder and go to a common fund and are then invested as decided by the insurer unlike in a unit linked insurance plan, where the return or the yield depends on the movement of the market and the risk is to be borne by the policyholder. The premium paid by the policyholder, net of premium allocation charge is invested in fund(s) chosen and units are allocated depending on the price of units for the fund(s). The fund value is the total value of units that the policyholders hold in the fund(s).

## III. ULIP AND ITS MULTI-FACE

Now the unit linked insurance plan satisfies the needs of all segments, child, adult and senior citizens. It serves as child plan, protection plan, savings plan, protection against loan, pension plan, etc., to the investing community. The unit linked policy gives varied benefits to the life insured and it includes, life protection, investment and savings, flexibility, adjustable life cover, fund options, transparency in charges, options to take rider cover against death due to accident or disability or critical illness, liquidity in the form of partial withdrawals, switching etc. While considering the long term, unit linked insurance plan gives higher return than the traditional package. However, the unit linked plan customers to bear in mind that higher return come with greater risks.

## IV. HOW DOES ULIP WORK?

Vimal is a thirty-year old, he interested to invest in a unit linked insurance policy. He interested to invest Rs. 100 per year for 10 years subsequently in an equity fund. Based on this premium, the sum assured works out to Rs 1000. Based on the current NAV of the plan that Rajeev chooses to invest in, he is allotted units in the scheme. Then, the charges are deducted by canceling the units in the investment portfolio.

The charges in the first year include a 20 per cent premium allocation charge, and policy administration charge of Rs. 5 p.a. along with other charges, which are deducted monthly. Besides, mortality charges or the charges for the life cover are also deducted. Fund management fee and brokerage are also charged. This cost is built into the calculation of net asset value.

On maturity - that is, after 10 years - Rajeev would receive the sum assured of Rs. 1543.45 or the market value of the units whichever is higher. Assuming the growth rate in the market value of the units to be 6 per cent per annum, Rajeev would receive Rs. 1231.05; assuming that if the growth rate is 10% as per the IRDA regulation, Rajeev would receive Rs. 1543.45.

In case of Rajeev's untimely death at the end of the ninth year, his beneficiaries would receive the sum assured of Rs. 1231.05 or the market value of the units whichever is higher. Assuming the growth rate in the market value of units is 6 per cent per annum, the value of investment would be Rs. 1214.15

### Sample Benefit Illustration

Name	: Vimal	Age	: 30	Gender	: M
Proposal No.	: 10000001	Policy No.	: 123456789		
Sum Assured	: Rs. 1000	Policy Term	: 10 Years	Premium term	: 10 Years
Fund opted for	: Equity fund	Mode of Premium Payment	: Yearly	Amount of Premium	: Rs. 100



Statement of various charges along with growth of the fund expected over the duration of the policy with assumed rate of interest is mentioned (All charges in Rupees)

Policy Year	Annual premium	Premium allocation charge	Investment Amount	Policy Administration Charge	Mortality Charge	Fund Management Charge	Fund Value	Surrender Value	Death Benefit	Mortality charge	Fund Management Charge	Fund Value	Surrender Value	Death Benefit
1	100	20	80	5	2.00	1.00	76.80	NA	1000.00	1.89	1.23	79.88	NA	1000.00
2	100	20	80	5	1.80	1.25	161.55	NA	1000.00	1.78	1.32	185.68	NA	1000.00
3	100	5	95	5	1.68	1.35	285.25	285.25	1000.00	1.65	1.46	312.58	312.58	1000.00
4	100	2	98	5	1.54	1.40	410.25	410.25	1000.00	1.58	1.57	489.25	489.25	1000.00
5	100	2	98	5	1.20	1.45	589.25	589.25	1000.00	1.15	1.62	611.25	611.25	1000.00
6	100	2	98	5	0.89	1.50	789.85	789.85	1000.00	0.95	1.64	825.65	825.65	1000.00
7	100	2	98	5	0.55	1.55	912.57	912.57	1000.00	0.59	1.72	985.34	985.34	1000.00
8	100	2	98	5	0.00	1.60	1058.69	1058.69	1058.69	0.00	1.89	1198.69	1198.69	1198.69
9	100	2	98	5	0.00	1.65	1214.15	1214.15	1214.15	0.00	1.95	1354.73	1354.73	1354.73
10	100	2	98	5	0.00	1.75	1231.05	1231.05	1231.05	0.00	2.08	1543.45	1543.45	1543.45

INTHISPOLICY,THEINVESTMENTRISKISBORNEBYTHEPOLICYHOLDERANDTHEABOVEINTERESTRATES AREONLYFORILLUSTRATIONPURPOSE

Signature of Policyholder

Signature of the Sales Representative

Date

Place

Source: bajajallianzlife.co.in

## V. MULTI-DIMENSIONS OF ULIPs

### 1. Protection for Life

Unit linked insurance policy gives maximum life insurance cover to the life insured, usually 50 times or 100 times of premium size is considered for life protection cover. It enable the life insured to secure protection for their family in the event of untimely death and simultaneously provides the life insured, an opportunity to earn a return on the premium paid towards this policy. In the event of the life insured untimely demise, facilitates to the nominees to receive an amount that is the higher of the sum assured or the value of the funds in case of Type – I policies and in some cases under type – II policies both amount will be given.

### 2. Flexibility

There are three types of Unit Linked Insurance Plans in two category, selling in the insurance market – single premium (SP), limited premium (LP) and regular premium (RP). In the single premium policy, a single lump-sum premium payment is allowed to pay. The life cover (sum assured) is the minimum of 125% and maximum of 500% of the premium. But under income tax rules, if the premium paid for a policy is more than 20 percent of the sum assured in a year, and then deduction from taxable income will be allowed only up to 20% of the sum assured. In other words, to get the entire premium deducted from taxable income under section 80C, make sure the cover is at least five times the premium. In LP/ RP plans premium payments are made in the form of annual, semi-annual, quarterly and monthly. The life cover starts with a minimum of five times of annual premium and maximum subject to the limit prescribed by underwriters. The customers are allowed to choose the sum assured according to their premium size and their income earning capacity as prescribed by the insurance act. The sum assured is the death cover; it protects the unfortunate demise of the policyholder.

The existing structure of all Unit linked plans from any insurer allows two variants. But, this variation is applicable only in the event of death of the policyholder. Under one variant, called Type-I Ulips, if the individual dies during the

term of the policy, the dependant or nominee receives the sum assured or the value of the fund which is higher. In the other variant, called Type-II Ulips, dependants receive both the sum assured and the value of the fund, making the amount larger. In both the variants, the maturity value or the benefit on surviving the term of the policy remains the same – value of the fund as per returns from the market.

### 3. Safety of Capital

The Unit linked schemes offer different types of guarantees. In some of them, the amount of premiums paid minus the total charges is guaranteed at maturity of the policy or death during the policy term. In others, a return on the premium paid is guaranteed to the investor. In few others, the entire first year premium is paid back on maturity along with certain additions. The top-up amount paid is also guaranteed as per the basic premium. At present, some insurance companies offer, return shield option to some plans, if this option is opted, the return earned on basic policy and top-up premium paid during the month will be transferred to Return Shield Fund at the end of the month. The capital guarantee and return shield option safeguards the capital as well as the monthly return earned in the market. But all such value added services comes with a cost to the customers. Hence here safety assured for the premium invested.

### 4. Fund Options and its risk profile

There are a lot of fund options that insurers provide to customers, these range from pure equity to pure debt and money market funds and can be chosen to suit investment objectives, risk profile and time horizons. Different funds have different risk profiles. The potential for returns also varies from fund to fund.

The following are some of the common types of funds available in the market. The risk-return characteristic of each of these funds is also indicated here.

**Equity Funds/ Sector Based Funds :** These primarily invest in company stocks with the general aim of capital appreciation. The risk-reward ratio is high in these funds.

**Balanced Funds :** These funds combine equity investment with fixed interest instruments. The risk-reward ratio is medium in these funds.

**Debt Funds :** These invest in corporate bonds, government securities and other fixed income instruments. The risk-return is moderate to this fund

**Cash or Money Market Funds :** These invest in cash, bank deposits and money market securities. Risk and return level is low to this fund.

There may be other fund options, but they are broad combinations of the above-mentioned asset classes. Returns on any of these fund options are not guaranteed and the investment risk is borne by the policy owner. Depending upon the performance of the funds selected by the life insured, the policy enjoys gains or loss on its investments. It is also important to know, the past performance of a fund is not an indication for future.

### 5. Switching Facility

The policyholder can switch some or all of the fund value between different unit-linked funds or fund options. The company will give effect to the switch by canceling units in the existing fund and allocating units in the proposed new fund at the next following unit price. At a maximum of 52 free switches are offering some insurers in the market, switches beyond this limit will attract fixed fees. The fund switching request received before 3.00 p.m. in a day, the closing NAV price of the day shall be applicable. Otherwise the closing NAV price of next business day shall be applicable. The free switches of one year not allowed carrying forward to next year.

### 6. Diversification and Professional Fund Management

One of the biggest benefits of unit linked plans is that they provide the means for individual investors to achieve broad diversification in their investment portfolios. Diversification is process of spreading the investment in numerous assets. Ulips are large diversified portfolios and thus provide automatic diversification within their respective asset classes ranging from equities to fixed income securities. This scheme will spread the funds of investor across a variety of asset classes; this activity increases the diversification size and decrease the market risk. A well stated diversification greatly reduces and can even eliminate the specific risk. The funds of unit linked plans generally administered by the professionally trained and well experienced fund managers. The fund manager duty is to analyze the potentiality to earn profit from the shares and employs the suitable portfolio techniques to preserve the funds invested by the policy owners.

## **7. Flexibility of Premium Holiday**

Many private insurers offer this service to its customers, if the policyholder unable to pay premiums after paying all the due premiums for three consecutive years, the policy will not lapse immediately but the policyholder will be put on a premium holiday of two years to pay any due but unpaid policy premiums. During these two years, all applicable charges shall continue to be deducted from the fund value till the surrender value falls to one regular annual premium. If the policyholder failed to recommence paying premiums within two years from the date of the first unpaid regular premium, the owner of the policy may write to the company to continue the policy, on policy continuation option subject to the company approval (this facility available in Tata-Aig Life insurance company). Upon such request from the policy owner, the policy will be continued so long as the fund value does not fall below an amount equivalent to one annual regular premium. If failed to inform, the company may return the surrender value.

## **8. Transparency**

The main feature of Ulips is their flexibility. ULIP policy provides transparency in insurance protection, fund investment, alteration in life insurance cover, varied fund options and the charges. Also the premium proceeds are invested as per the policyholder instruction and charges are informed through benefit illustration at the time of making application.

## **9. Partial Withdrawal & Surrender**

Here liquidity is possible through partial withdrawal and surrender of the policy. Unit linked plans are allowing its customers to make partial withdrawals and after 3 years from inception. There would be a 3 years lock-in period on the basic plans and top-up premiums paid; if any. The minimum partial withdrawal is allowed from Rs. 5,000 and the maximum limit does not exceed 20% of the fund value at the time of withdrawal. The policyholders are allowed to surrender the policy after completing 3 policy years. Some plans attract cost for this surrender in initial years.

## **10. Foreclosure of Policies**

Foreclosure is allowed in respect of fully paid up policies (regular premium policies wherein all the premiums during the premium payment period have been paid) and policies under which the premium is being paid, if the fund value in a particular point of time is less than the mortality and policy administration charge of the next month, the policy will be foreclosed by paying the fund value immediately.

## **11. Grace Period**

If the policyholder has failed to make the payment of Limited Premium/ Regular Premium due before the due date, the company shall give a grace period of 30 days for premium frequencies other than monthly and 15 days for monthly premium mode. If premium of the policy are not paid within the days of grace, it is considered as lapse.

## **12. Reinstatement – revival of lapsed policy**

In Ulips, the policyholders have the option of discontinuing of premiums. Unlike traditional plans, they may not pay the premiums for the entire term in these plans. However, the effect of stopping payment of premiums is different depending on whether premiums have been paid in the first three years. Here are some of the possibilities.

### **Discontinuance within three years of commencement**

If the premium has not been paid for at least three consecutive years from the inception of the policy, the insurance cover shall close down immediately. The policyholder provided an opportunity for revival within the period allowed; if the policy is not revived within that period, surrender value shall be paid at the end of the period allowed for revival.

### **Discontinuance after three years of commencement**

If the policy is not revived, at the end of the period allowed for revival, the contract shall be terminated after the surrender value is paid to the policy owner. But in certain cases, the insurance company may offer to continue the insurance cover with the levy of same mortality cost. It is continuing up to when the fund value reaches an amount equivalent to full premium of a year.

## **13. Guaranteed additions or bonus**

This, as a percentage of premium or fund value added to the policyholder kitty at fixed interval. Some insurers offer 1 per cent of the fund value every year from the sixth year onwards and some insurer's offer 50 per cent of first year's basic premium at interval of every five years from 10th year till policy is in force. Most of the guaranteed additions or

loyalty bonus begins after the completion of five year and it ensures the policyholder stay for a long-term. The guarantee bundled with these policies comes at cost. The guarantees are denied in case of death or lapse or premature surrenders. Also choosing higher term can add more guarantees to the fund value. Usually these are attached to the fund performance; the bad market swing will not give such additions.

#### 14. Rider Options

Rider is a condition that is added on a basic policy providing an additional benefit, with lowest cost. For example, if accidental death rider selected, the sum assured would be double at the event of death of the life insured. Riders can be with regard to additional payments on disability or sickness, or waiver of future premiums, partly or fully, under certain conditions. Today insurers find it convenient to have a small number of basic plans, with riders being offered as options, so that effectively the prospect has a number of options to choose from. Some of the riders being offered by insurers in India are the following:

**Term life insurance benefit rider:** It provides additional death benefit cover in case of life insured death, depending on the sum assured selected under the rider but usually not allowed to exceed basic policy sum assured.

**Accidental death and Total and Permanent Disability rider:** It enables additional death/disability benefit cover, if death/disability caused to the life assured as a result of an accident.

**Premium Waiver rider :** This is allowed in juvenile policies, if the parent dies before maturity date or in the case of permanent disability and sickness caused to the parent. The policy continues by paying premium by the insurance company.

**Critical Illness rider :** As against to some ailments like cancer, cardiac or cardiovascular surgeries, stroke, kidney failure, major organ transplants, and major burns, total blindness caused by illness or accident, this rider will compensate the loss up to the rider cover limit.

**Major surgical benefit rider :** It gives lump sum amount to cover surgical expenses from disease like, Open Heart Surgery, Kidney Transplant, Cornea Transplantation, Transplant of Lungs and many more.

#### 15. Tax Benefits

Life insurance plan offers two kinds of tax benefits at the entry and exit stage. At the time of making investment in insurance, the customers are provided three types of tax benefits according to the plan selection. The first is, as per section 80C of Income Tax Act, life insurance premium shall qualify actual premium paid or 20% of sum assured whichever is less. Sum assured shall not include bonus or any premium agreed to be returned. It also extended to the lives of spouse and children policies. Section 80CCC allows a maximum of Rs. 10,000 for deduction while computing tax liability, but it only applicable for pension or annuity plans. Contribution made to medical insurance premium or rider cover can fetch a maximum benefit Rs. 10,000. This benefit is enhanced to Rs. 15,000 for senior citizens. The proceeds at the maturity are completely exempted from the tax under section 10 (10D).

#### 16. Top-up

If the policy permits, the policyholder can invest additional contribution over and above the regular premium, this known as top-up facility. Top-ups are normally used to increase the investment portion of plans without any change in the insurance cover. The top-up amount is treated as a premium and is subject to a lock-in period of three years.

#### 17. Free look Period

In case the policy holder disagrees or dissatisfied with any of the terms and conditions of the policy, he may return the policy to the insurance company within the 15 days of receipt of the policy document. The company makes refund of the premium paid after deducting mortality charges for that coverage period and the expenses incurred on medical examination for health check-up and stamp duty charges. The prevailing net asset value is paid as the refund value to the policyholder.

#### 18. Settlement Option

Usually the maturity proceeds are paid in the form of lump sum amount, here the ULIP has a special privilege and the customers are allowed to take their maturity proceeds in the form periodical receipts. While making proposal to the insurance company, the life insured can select this settlement option. On maturity the fund value directed to debt fund and it is paid equal installments for a period of 5 years. During this settlement period, there will be no life insurance cover provided to the life to be insured.

## **19. Expenses Charged in a ULIP**

It is important to know the other side of ulip; it attracts high cost while comparing with other outlets. Insurance companies allot units on the portion of the premium remaining after providing for various charges and deductions. Broadly, the different types of fees and charges are given below. However, it may be noted that insurers have the right to revise fees and charges over a period of time.

### **19.1. Premium Allocation Charge**

This is a percentage of the premium paid towards charges before allocating the units policy owner. Premium allocation charge normally consists, underwriting charges, medical examination cost and the commission paid to the agents of the insurance company. The Actuarial funded policies will fetch up to 100% of the first year premium as premium allocation charge. The ordinary policies attract a maximum of 30% as premium allocation charge in the first year and the second year onwards the premium allocation charges ranged from 1% to 15%. It depends upon the term and size of premium and varies from company to company.

### **19.2. Mortality Charges**

This provides for the cost of the insurance cover under the plan. Mortality charges levied on the basis of age of the life to be insured, amount of sum assured and state of health of the life insured. Initially, the mortality charge is applied on the entire sum assured. Over a period of time, as the fund value increase, mortality expenses decrease. This is because the mortality is actually charged on the difference between the sum assured i.e. life insurance cover and the fund value. This concept is popularly known as the sum at risk.

### **19.3. Fund Management Fees**

Fund management is comes with a nominal cost and the same is deducted monthly basis by cancellation of units. It is the fee charged for managing the pool of funds, the most important charge in an ULIP is the fund management charge. The lesser charge is better for the fund value growth. The fund management charge varied from 0.95% to 2.00% according to the funds selected by the policyholder.

### **19.4. Policy Administration Charge**

It is levied for administration of the plan and deducted by cancellation of units. It is deducted from the fund value and not from the premium paid by the policyholder. This is charged at flat rate throughout the policy term and sometimes varies as per the conditions specified under a policy.

### **19.5. Surrender Charge**

The surrender charge is deducted in the case of premature of policy, partial withdrawal and full encashment of units (surrender). Usually, Ulips do not charge this if the policy has run for at least 10 years. It is mainly expressed as a percentage of the fund value prevailing at the time of surrender.

### **19.6. Fund Switching Charge**

Fund switching allowed with certain conditions some policy offers, limited number of fund switches among the different funds without any fee for a policy year. Then a minimum cost like Rs. 100 or more levied for subsequent switches. Now this switch is allowed through online in addition to offline request by filling up requisite forms.

### **19.7. Service Tax Deductions**

The appropriate service tax is deducted from risk portion of the premium before allotting of units to a policyholder.

### **19.8. Other Charges**

These are deducted by canceling the units and include charges for the basic life insurance cover, premium redirection and other add-on rider benefits. The amount to be charged will depend on the level or type of insurance cover chosen as well as other factors, such as age, sex and smoking status.

After deducting all charges including mortality charge is utilized for purchasing units. Ulips are usually more transparent than other plans in disclosing the charges levied. On a fixed interval – usually one policy year – the policy statement is sent to the policyholder and it contains all the charges deducted so far.

## VI.CONCLUSION

The purpose of purchasing life insurance is to replace an income that is lost when the income earner dies. Every investment have some benefits, some investments like bank deposits, provident funds offer fixed rate of return without any risk. Many investments like mutual funds, equity shares, and derivatives of stock, currency and commodity, venture capital funds, real estate properties give high return but the risk profile also very high. But among the various investment alternatives, none of the asset can compensate for the unfortunate demise of the investor. Life insurance ensures life protection in the form of sum assured to the diseased person's nominee along with the fund value. If the policyholder survives until the maturity, the maturity proceeds are definitely high. The Unit Linked Products are bundled product that combines life insurance protection and investment. ULIPs offer the double benefits of providing life protection cover and systematic investment. They are more flexible than other financial and real assets and also ensures maximum transparent. Now many life insurer offers with minimum premium of Rs. 4000, it is the cost effective way and suitable vehicle for generating wealth to the low income caters. Before going to invest in market linked plans, the first things that the investors need to set a financial goal – retirement, securing children's future, buying a house. This will give exact idea about selecting right plan. It is optimum and advisable to include unit linked insurance plan in the investment portfolio.

## REFERENCES

1. Ajay Sharma, Unit linked insurance plan and equity market, Seminar paper presented in Industrial Park, Mumbai 2006.
2. Balachandran.S, IC 33 - Life Insurance, Insurance Institute of India, June 2006.
3. Chakravarthi.D, Marketing of Unit Linked Insurance Plan in India, Reliance Life Insurance Company limited. 2008.
4. Elias T Paul, Life insurance and it benefit to investors, Journal of Business and Finance, 89-111, 1998.
5. Sivaprakash.R, Multi-Role of ULIP in Life Insurance, RLIC, 2008.
6. Sunil Dhawan, Best ULIPS, Outlook Money, December 17, 2008.
7. [www.hdfcinsurance.com](http://www.hdfcinsurance.com)
8. [www.reliancelife.com](http://www.reliancelife.com)
9. [www.birlasunlife.com](http://www.birlasunlife.com)
10. [www.bajajallianzlife.co.in](http://www.bajajallianzlife.co.in)



# IMPACT OF TRANSFORMATIONAL LEADERSHIP OF ENGINEERS WORKING IN AUTOMOBILE SECTOR IN INDIA ON THEIR OWN CREATIVITY

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## ABSTRACT

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*To create competitive advantage, leaders must commit to bringing all members in an organization into a true partnership in the innovation process. Those who have studied creative process understand that latent abilities are present in an individual. Children usually pick their own team leaders naturally and almost all of them show creativity in one form or another. Leadership is about the ability to lead. It is about creating the vision, structures, systems, trust and clarity that inspire people in the organization to achieve its strategy and apply their creativity to the things they do in their work.*

*Creative thinking and Leadership are in such high demand in business today that we need a clear understanding of how they are related. We need to discover the latent factors playing important roles in creative leadership. This paper is an empirical study of engineers in automobile sector to understand the latent factors which predominantly reflect leadership traits represented by Charismatic, Inspirational, Intellectual Stimulation & Individual Consideration and creativity traits represented by Idea Fluency, Originality, Creative Flexibility & Problem Sensitivity.*

**Keywords - Creativity, Transformational leadership, factors, Automobile Industry**

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## 1. INTRODUCTION

Organizations, especially technologically-driven ones, need to be more creative and innovative than before to survive, to compete, to grow, and to lead (Jung et al., 2003; Tierney et al., 1999).<sup>[1]</sup> To create competitive advantage, leaders must commit to bringing all members in an organization into a true partnership in the innovation process. Those who have studied creative process understand that latent abilities are present in an individual. Children usually pick their own team leaders naturally and almost all of them show creativity in one form or another. Leadership is about the ability to lead. It is about creating the vision, structures, systems, trust and clarity that inspire people in the organization to achieve its strategy and apply their creativity to the things they do in their work.

### 1.1 Literature Survey

Considerable evidence indicate that employee creativity can fundamentally contribute to organization and innovation, effectiveness and survival (Ambalgie 1988, Madjar, Oldham & Pratt, 2002, Shally, Gilson & Blum, 2000, Zhou & Shally, 2003)<sup>[2]</sup>

Many organizations rely on employee creativity for competitive advantage, adaptation and survival (Nonaka, 1991; Zhou, 2003).<sup>[3]</sup> Not surprisingly then, understanding the dynamics of creativity in organizations is a high priority for research in organizational behavior. [Zhou & Shalley 2008] <sup>[4]</sup>

Some researchers believe that employee creativity will flourish when a supervisor provides transformational leadership (Shin & Zhou, 2003)<sup>[5]</sup> and when employees have a learning orientation (Redmond, Mumford, & Tech, 1993).<sup>[6]</sup>

Jaussi and Dionne (2003) found little empirical support for the notion that transformational leadership positively influence creativity in a laboratory study with student subjects. However, in the first field study of transformational leadership and employee creativity, Shin and Zhou (2003) reported that the two related positively. <sup>[7]</sup>

Researchers have studied the effect of transformational leadership on the performance of followers and organizations in the past decade (e.g., Dvir et al, 2002, Howell and Avolio, 1993; Lowe et al, 1996).<sup>[8]</sup> Several studies report that transformational leaders empower their followers (e.g. Jung and Sosik, 2002)<sup>[9]</sup> and establish an innovative climate (Jung et al, 2003).

Literature survey suggests that most of the Researchers are interested in finding influence of various leadership style on followers creativity rather than investigating relation between leadership style and creativity of same individual. This study investigates the impact of transformational leadership of Engineers working in automobile sector in India on

their own creativity. However, available research does not examine the effect of components of transformational leadership on creativity of Individual.

## 1.2 Transformational Leadership

Transformational Leadership involves anticipating future trends, inspiring followers to understand and embrace a new vision of possibilities, developing other to be Leader or better leader, and building the organization or group into a community of challenged and rewarded learners. [10] Gibson et. al (1997) defines Transformation Leadership as a leader that motivate followers to work for transcendental goals instead of short term self interest and for achievements and self actualization instead of security.[11] The employee's reward is internal the leader's vision provides the follower with motivation for hard work that is self rewarding. The transformational leader overhaul the entire philosophy, system and culture of the organizations.

Burns (1978) introduces the transformational leadership theory. Bass and Avolio (1995) further developed the theory.[12] Transformational leadership has four components; Idealized Influence, inspirational motivation, intellectual stimulation and individualized consideration.

### 1.2.1 Inspirational Motivation (L1)

This Involves behaviors and communication that guide followers by providing them with a sense of meaning and challenges. Transformational leaders displays great enthusiasm and optimism, which carries over into the lives of followers and fosters a sense of team spirit. Inspirational motivation is about motivating the entire organization to follow a new idea.[13]

### 1.2.2 Intellectual Stimulation (L2)

Intellectual Stimulation is the encouragement given to followers to be innovative and creative. Transformational leaders urge followers to question assumption, explore new ideas and methods and approach old situation with new perspectives.[13]Intellectual stimulation involves responding to the specific, unique needs of followers to ensure they are included in the transformation process of the organization.[14]

### 1.2.3 Idealized Influence(L3)

Transformational leaders demonstrate the behaviors that followers strive to mirror. Followers typically admire, respect and trust such leaders. Idealized Influence is about building confidence and trust and providing a role model that followers seek to emulate [15]

### 1.2.4 Individualized consideration (L4)

Individual consideration involves responding to the specific ,unique needs of followers to ensure they are included in the transformation process of the organization [16]

## 1.3 Creativity

The literature includes several definitions of creativity and innovation. A widely accepted definition states that creativity is the production of novel and useful ideas, and innovation is the successful implementation of creative ideas within an organization (Amabile, 1983, 1998; Amabile et al., 1996) [17] Thus, creativity is at the individual level, while innovation is at the organizational level (Oldham and Cummings, 1996).

The cognitive components of design creativity have been defined based on Treffinger's creative learning model .The cognitive aspects in Treffinger's creative learning model are fluency, flexibility, originality, elaboration, and cognition and memory. We replaced cognition and memory with problem sensitivity, and identified four components of creativity such as Idea fluency, Creative flexibility, Originality, and problem sensitivity [18]

### 1.3.1 Idea Fluency (C1)

This term simply means that a person can pile up a large number of alternative solutions to a given problem in a given time. The value of this lies in the fact that the more ideas you have, the greater your chances of finding a usable one; the more plentiful your opportunities to get out of the same old ways of doing things. Idea fluency depends largely upon personal mental habits. It is an attribute that can be developed or improved by nearly every person who will consciously apply himself to it.[19]. Fluency is an ability to make multiple answers to the same given information in a limited time[20] and quantity of meaningful solutions.[21]

### 1.3.2 Originality (C2)

The originality required of the business executive is more likely to be that of finding new ways to vary existing conditions, or new ways to adapt existing ideas to new conditions or a new modification of something that will fit in an

existing condition. The creative attribute of originality can also be developed, or at least simulated, to the point where it meets the requirements of successful business operation. The secret is in the systematic use of questions.[19] Originality is rarity in the population to which the individual belongs; its probability of occurrence is very low [20,21].

### 1.3.3 Creative Flexibility (C3)

The quality of creative flexibility is largely that of being willing to consider a wide variety of approaches to a problem. This, in turn, is largely a matter of attitude. Rather than confining onto one particular idea, or a single approach to a problem, the flexible person starts out by remembering that if one solution won't work, he can always approach the problem from another angle. This is also called "creative expectancy" - meaning, the creative person just plain expects to solve the problem, no matter how many failure temporarily delay the solution.[19]

Creative Flexibility is an adaptability to change instructions, freedom from inertia of thought and spontaneous shift of set [20]. That is the mode changing categories[21]

### 1.3.4 Problem Sensitivity (C4)

This dimension depicts the ability to understand & recognize an existing problem. This ability enables a person to identify the root causes of problem like misunderstanding, misconception, lack of facts, or any other obscuring cause[19] Problem Sensitivity is an ability to find problems and to aware needs for change or for new devices or methods [20].

## 1.4 Research methodology

The research methodology was based upon Questionnaire administration to Engineers working in automobile sector of India and thereafter detailed statistical analysis using SPSS software.

### 1.4.1 Questionnaire Administration

Approximately 500 set of questionnaires were sent to various organizations of Automobile sector to get the response of Engineers working in those organizations. We have received total 169 responses from Engineers.

### 1.4.2 Measuring instrument

Measuring Instruments consists of set of questionnaire out of 81 items for leadership style & 50 items for creativity measurement. Transformation leadership was measured using the multifactor leadership questionnaire. The four behavioral components of transformative leadership were measured by 81 items rated on a five point Likert Scale, with possible answer ranging from '1 = strongly disagree', '2 = disagree', '3 = neither agree, nor disagree', '4=agree', '5 = strongly agree'.

Creativity was measured using four dimensions i.e. Problem sensitivity, Idea Fluency, Originality, Creative Flexibility, with the help of 50 set of questions rated on a five point Likert Scale, and were rated ranging from '1 = strongly disagree to '5 = strongly agree'.

## 1.5 Statistical analysis

Factor Analysis (Maximum likelihood method with varimax rotation) was applied to the eight components of transformational leadership (L1, L2, L3, L4) & Creativity. (C1, C2, C3, C4) defining the leadership and creativity as defined above. The purpose was to find the latent factors representing the eight factors so listed in the study, specifically for employees in the automobile sector.

**Table 1 : Descriptive Statistics**

	Mean	Std. Deviation	Analysis N
C1	2.2544	.45184	169
C2	2.3680	.56985	169
C3	2.3592	.58293	169
C4	2.1787	.49403	169
L1	2.1285	.38303	169
L2	2.1248	.44234	169
L3	1.9555	.33092	169
L4	2.1750	.43057	169

Descriptive statistics shows that the average has been overing around 1.9 to 2.5 .The highest trait observed as per the means (Table 1) is that of C2, i.e. originality which means the employees have a lot of original ideas or possible solutions for their day-to day problems. The minimum trait observed was of L3(Intellectual Stimulation) i.e. questioning the assumptions which implies that though creativity is there but there is a tendency of accepting whatever has been believed earlier and we embark on new idea based on those assumptions.

**Table 2: Correlation Matrix**

		C1	C2	C3	C4	L1	L2	L3	L4
Correlation	C1	1.000	.941	.975	.967	-.146	-.171	-.044	-.069
	C2	.941	1.000	.982	.970	-.109	-.112	-.036	-.076
	C3	.975	.982	1.000	.982	-.129	-.142	-.049	-.075
	C4	.967	.970	.982	1.000	-.104	-.135	-.061	-.049
	L1	-.146	-.109	-.129	-.104	1.000	.398	.343	.076
	L2	-.171	-.112	-.142	-.135	.398	1.000	.188	-.022
	L3	-.044	-.036	-.049	-.061	.343	.188	1.000	-.035
	L4	-.069	-.076	-.075	-.049	.076	-.022	-.035	1.000
Sig. (1-tailed)	C1		.000	.000	.000	.029	.013	.287	.185
	C2	.000		.000	.000	.078	.073	.321	.164
	C3	.000	.000		.000	.047	.033	.266	.166
	C4	.000	.000	.000		.088	.040	.214	.263
	L1	.029	.078	.047	.088		.000	.000	.162
	L2	.013	.073	.033	.040	.000		.007	.386
	L3	.287	.321	.266	.214	.000	.007		.327
	L4	.185	.164	.166	.263	.162	.386	.327	

From the correlation matrix (Table2) we observed that at 0.01 level of significance correlation among the leadership traits (L1, L2, L3, L4) is low (less then 0.45) while correlation among creativity traits (C1, C2, C3, C4) are exceptionally high(above 0.9).Which means all traits of creativity are highly interrelated with each other.

**Table 3 : KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.787
Bartlett's Test of Sphericity	Approx. Chi-Square	1708.646
	Df	28.000
	Sig.	.000

The Kaiser Meyer Olkin Measures of sampling adequacy and Bartlett's test of spherecity confirm that the sample is adequate and we can proceed for analysis.

**Table 4 : Communalities**

	Initial	Extraction
C1	.962	.984
C2	.971	.990
C3	.988	.993

C4	.971	.973
L1	.267	1.000
L2	.190	.190
L3	.150	.118
L4	.033	.011
Extraction Method: Maximum Likelihood.		

From table 4, we infer that all the traits C1, C2, C3, C4 & L1 barring L3 & L4 are explained well by the factors considered initially and after the extraction also. In fact the leadership trait L1, Inspirational motivation is completely explained by extracted factors.

**Table 5 : Total Variance Explained**

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.976	49.699	49.699	1.362	17.024	17.024	3.862	48.269	48.269
2	1.572	19.656	69.355	3.825	47.811	64.836	1.321	16.519	64.788
3	1.010	12.629	81.984	.072	.902	65.738	.076	.950	65.738
4	.810	10.121	92.105						
5	.544	6.794	98.899						
6	.057	.717	99.617						
7	.022	.273	99.889						
8	.009	.111	100.000						
Extraction Method: Maximum Likelihood.									

From table 5, we infer that there are only three latent factors that explain the eight variables taken into consideration and are explaining 82% of the variance observed in the behavior of the sample of automobile industry. On extraction the factors could explain 65% of the total behavior and can be considered significant to retain these three factors only.

**Table 6 : Factor Matrix<sub>a</sub>**

	Factor		
	1	2	3
L1	1.000	.018	.000
L2	.399	-.083	.154
L3	.344	.003	-.003
L4	.077	-.062	-.035
C3	-.147	.985	-.011
C4	-.122	.979	-.025
C2	-.127	.979	.129
C1	-.163	.963	-.173
Extraction Method: Maximum Likelihood.			

From the tables 6&7 & we infer that the three factors so identified had typical characteristics. The factor F1 was a good fit for all the creativity traits and instead of mentioning the traits separately we can mention creativity only. The Factor F2 was a good fit on only one factor of leadership and that is L1 and the Factor F3 was not a good fit on any of the factors and is insignificant also.

**Table 7: Factor Transformation Matrix**

	Factor			
	1	2	3	
1	-.035	.993	-.112	
2	.998	.039	.040	
3	-.044	.111	.993	
Extraction Method: Maximum Likelihood. Rotation Method: Varimax with Kaiser Normalization.				

**Table 8 : Rotated Factor Matrix<sup>a</sup>**

	Factor			
	1	2	3	
C3	<b>.989</b>	-.109	.045	
C4	<b>.982</b>	-.085	.028	
C2	<b>.976</b>	-.073	.181	
C1	<b>.975</b>	-.143	-.116	
L1	-.017	<b>.993</b>	-.112	
L2	-.103	.410	.104	
L3	-.008	.341	-.041	
L4	-.063	.071	-.046	
Extraction Method: Maximum Likelihood. Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 4 iterations.				

Table 8 depicts that only two factors are important in defining creativity & leadership among the engineers of automobile sector ,they are four components of creativity i.e. Idea Fluency, Originality, Creative Flexibility& Problem sensitivity and other is Inspirational motivation(L1)

### 1.6CONCLUSION

Among all traits of Creativity the highest trait observed as per the means is originality(C2) which means the employees have a lot of original ideas or possible solutions for their day-to day problems. we also observe that there is high correlation among the traits of creativity .This study reveals that though eight traits have been analyzed of creativity and leadership, we discover that only Two latent factors of Transformational Leadership & Creativity shows strong interdependency with each other. We can conclude in another way that the Inspirational motivation (component of transformational leadership style) has major impact on all four creativity traits i.e Idea Fluency, Originality, Creative Flexibility& problem sensitivity.

### REFERENCES

1. Jung DI,Chowc,wu A.The role of Transformational Leadership leadership in enhancing organizational leadership in enhancing organizational innovation hypothesis and some preliminary finding, leadership Quarterly 2003; 14:525-4 Tierny p,Farmer sm graen gb. An Examinationof leadershipand employee Creativity: The relevance of traits and relationship's: personnal psychology 1999;52:591-620
2. Zhou,j.(2003). When the presence of creative coworkers is related to creativity : Role of supervisor's close monitoring, development feedback, and creative personality. Journal of applied psychology, 88, 413-422
3. Hirst Gites, Dicu Rolfran, Knippenberg, Dgan Van A social identity perspective on leadership and employee creativity, journal of organization behavior, Vol 30, 30, P-963-982, 2009
4. Zhou, J., & Shalley, C.E. (2008). Expanding the scope and impact of organization creativity research. In J. Zhou, & C.E. Shalley, (Eds.), Handbook of organization creativity (pp, 347-368). New York: Lawrence Erlbaum.
5. Shin, S.J., & Zhou, J. 2003. Transformational leadership, conservation, and creativity: Evidence from Korea. Academy of Management Journal, 46: 703-714.



6. Redmond, M.R, Mumford, M.D., & Teach, R. 1993. Putting creativity in work: Effects of leader behavior on subordinate creativity, organization behavior and Human Decision Process. 55: 120-151
7. Gong. Yaping, Hunag. Jia-chi,, Farh, Jung-Lin Employee Learning orientation, Transformational Leadership, and employee creativity: The mediating role of employee creativity self-efficiency.
8. Dvir. T, Eden D, Avolio BJ, Shamir B, Impact of transformational leadership on follower development and performance: a field experiment *Academy of Management Journal* 2002; 45 (4): 735-44
10. Anderson, T.D. *Transforming Leadership; Equipping yourself and challenging others to build the leadership organization*, 2<sup>nd</sup> ed Boca Raton, FL: CRC Press, 1998.
11. Gibson,J.L.,J.M. Donnely, J.H.(1997).*Organizations: Behavior,Structure,Process.usa*: Rob Zwetter,pp.315-319
12. Burns JM. *Leadership*, New York: Harper & Row 1978, Bass BM, Avolio BJ. MLQ, Multifactor Leadership Questionnaire, 2<sup>nd</sup> ed Redwood City, CA. Mind Garden; 1995.
13. Avolio, B.E. *Full Leadership Development: Building the Vital Forces in Organizations*, Thousand Oaks, CA: Sage Publication, 1999, 43-49; Bass, B.M. *Transformational Leadership: Industry, Military, and Educational Impact*. Mahawah, NJ: Lawrence Erlbaum Associates, 1998
14. Kelly,,M.L.(2003) Academic advisers as transformational leaders.The mentor.Retrieved August 3 2006 from [http:// www.psu.edu/dus/mentor/3010](http://www.psu.edu/dus/mentor/3010)
15. Bono,J.E. &Judge,T.A.(2004).Personality and Transformational and Transactional leadership :a meta analysis.*Journal of Applied psychology*,89(5),pp901-910
16. Simic,I.(1998)Transformational leadership-the key to successful management of transformational organization changes.*Facta University*,1(6),pp.49-55
17. Amabile TM. How to win creativity? *Harvard Business Review* 1998; 76 (J): 7787, Amabite TM, Cotir, Coon H, Lazenby J, Herron M. Assessing the environment For creativity, *Academy of Management Journal* 1996; 9 (5) 1154-84.
18. Treffinger, D. J. (1980) *Encouraging Creative Learning for the Gifted and Talented*, Ventura County Schools/LTI, Ventura, CA.
19. Timple A.Dale (2005)"Creativity"Jaico Publishing House,pp.13,16,17
20. Guiford,J.P.and Hoepfner,R.*The analysis of Intelligence*,McGrawHill,NewYork.
21. Urban,K.K.(1995) Creativity :A component Approach Model. In *Proceedings of the world conference on the Education for the Gifted and Talented*, Hong Kong.

# DETERMINATION OF LOT SIZE IN THE CONSTRUCTION OF SIX SIGMA BASED SAMPLING PLANS

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## ABSTRACT

*Six Sigma is a concept, a process, a measurement, a quality philosophy, and a management strategy used to improve the systematized quality of an organization, which when applied reduce the number of defects to 3.4 or less per million opportunities in the long run, a concept suggested by Motorola in 1980. The main aim of Six Sigma is to reduce costs/wastages as much as possible and improve the quality of the product to the maximum satisfaction of the consumer. Focusing on reduction of non-conformities will result in enhanced quality with more satisfaction and profit. The concept of Six Sigma can be applied in the process of quality control in general and Acceptance Sampling in particular. Various sampling plans have been designed focusing on the sample size only but not on the lot size. It is also unconvincing to say that the lot is accepted or rejected based on a fixed sample size irrespective of the huge lot size.*

*In this paper an attempt is made to determine the size of the lot (N) of a Six sigma based single sampling plan with Poisson distribution as a base line distribution. Tables are also constructed for the easy selection of the plan for various values of sample size (n) and Average Outgoing Quality (AOQ) with probability of acceptance  $1 - 3.4 \times 10^{-6}$ .*

**Key words**—Six sigma, Single Sampling Plan (SSP), rectifying inspection, Sample size (n), Lot size (N), Lot quality (p), Average Outgoing Quality (AOQ).

## 1.INTRODUCTION

Six Sigma is the most popular tool to convert management problem to a statistical solution then convert it to a management solution. Six Sigma has a measurement of standard in product variation can be traced back to the 1920's when Walter Shewart showed that three sigma from the mean is the point where a process requires correction.

Rectifying inspection programs were among the earliest of sampling inspection schemes. The plans developed by Harold F. Dodge and Harry G. Romig (1942) at the Bell Telephone Laboratories were rectifying inspection plans. Later their ideas on rectifying inspection have been extended by G.A. Barnard and F.J. Anscombe (1949). Initially programs of rectifying inspection were associated with lot-by-lot acceptance sampling, but in 1943 Dodge also proposed a rectifying scheme for continuous production. Radhakrishnan and Sivakumaran (2008) constructed six sigma sampling plan indexed through Six Sigma Quality Level (SSQL) with Single Sampling Plan as a reference plan. All the plans suggested by them are for infinite lot size only.

### A. Average Outgoing Quality (AOQ)

**AOQ** is the average quality of outgoing product including all accepted lots or batches plus all rejected lots or batches after the rejected lots or batches have been effectively 100 percent inspected and all defectives replaced by non – defectives.

### B. Glossary of symbols used

P : Proportion defective / lot quality.

N : lot size

n: sample size

d: number of defectives counted

c: acceptance number

P<sub>a</sub> : Probability of acceptance of the lot quality p

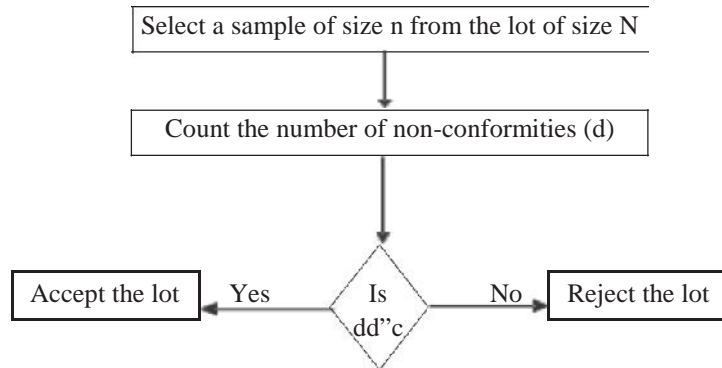
AOQ : Average Outgoing Quality

### C. Operating Procedure

The operating procedure of a Single Sampling Plan (SSP) is given below with a flowchart 1:

- Step 1 : Take a random of size  $n$  from the lot of size  $N$  and count the number of non-conformities (say  $d$ ).  
 Step 2 : If  $d \leq c$ , accept the lot.  
 Step 3 : If  $d > c$ , reject the lot.

**Flowchart 1**



### D. Conditions for Application

1. Production is steady, so that results of past, present and future lots are broadly indicative of a continuing process.
2. Lots are submitted sequentially in the order of their production.
3. Inspection is by attributes, with the lot quality defined as the proportion defective.
4. Human involvement should be less in the manufacturing process.

### E. OC Function

Associated with each sampling plan there is an OC curve, which portrays the performance of the sampling plan against good and poor quality. The probability that the lot will be accepted under a given sampling plan is denoted by  $P_a(p)$  and a plot of  $P_a(p)$  against given value of the lot quality  $p$  will give the OC curve.

OC function of the SSP is

$$P_a(p) = \sum_{x=0}^c \frac{[e^{-np} (np)^x]}{X!},$$

### F. Determination of the Lot Size

By fixing the probability of acceptance  $P_a(p)$  of the lot as  $1-3.4 \times 10^{-6}$  with Poisson Distribution as the basic distribution the value of  $np$  is obtained for  $c=0$  and  $c=1$  and finally the lot size is determined using the formula

$$AOQ = \frac{p \cdot P(N-n)}{N}$$

provided by Duncan (1986) and are presented in Table 1 and Table 2 for various values of  $n$  and AOQ using Excel packages.

### Example 1

For a given  $n=350$  and  $AOQ=0.95 \times 10^{-6}$ , the value of the lot size can be obtained from table 1 as  $N=15868$ . The selected Single Sampling Plan (SSP) based on six sigma quality is  $N=15868$ ,  $n=350$ ,  $c=0$ . The OC curve for the suggested plan is presented in figure 1.

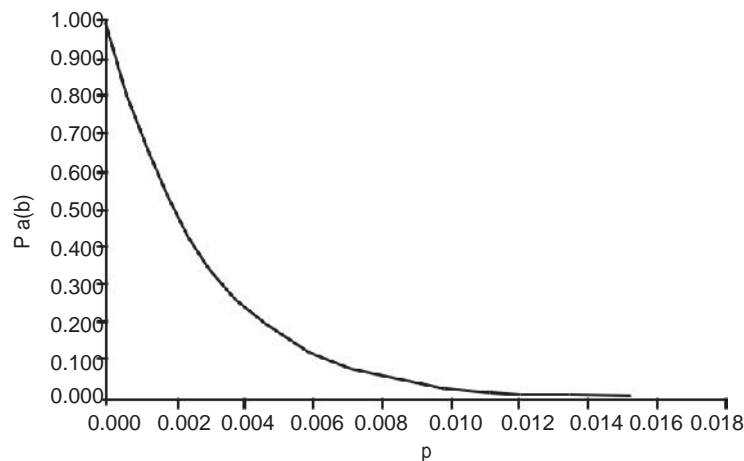
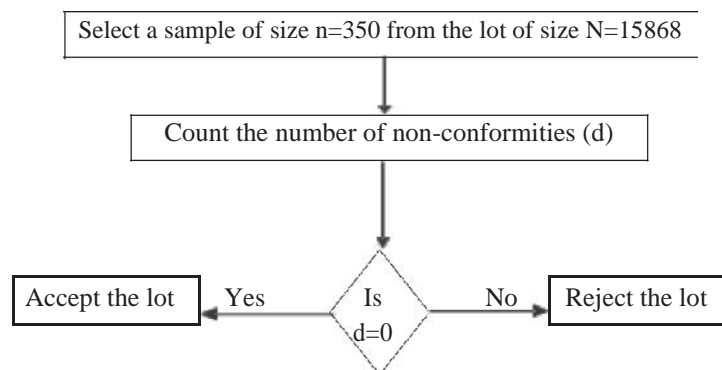


Figure 1 OC curve for SSP (n=350,c=0)

### Explanation

In the manufacturing company if the consumer fixes AOQ as  $0.95 \times 10_{(-8)}$  (95 non conformities out of 10 crores) and for a sample size 350 the lot size is 15868. In a lot of 15868 items select the sample of 350 items and count the number of nonconformities. If the number of nonconformities is zero then accept the lot otherwise reject the lot and inform the management for corrective action. It is presented with following flowchart 2.

Flowchart 2



### Example 2

For a given  $n=250$  and  $AOQ=1.03 \times 10_{(-5)}$ , the value of the lot size can be obtained from table 2 as  $N=26009$ . The selected Single Sampling Plan (SSP) based on six sigma quality is  $N=26009$ ,  $n=250$ ,  $c=1$ . The OC curve for the suggested plan is presented in figure 2.

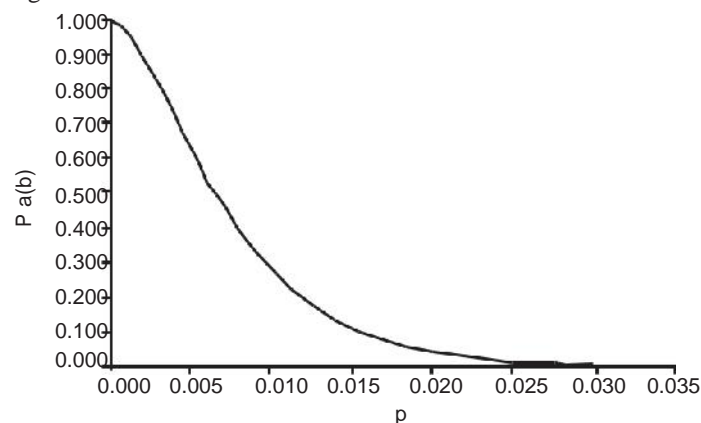
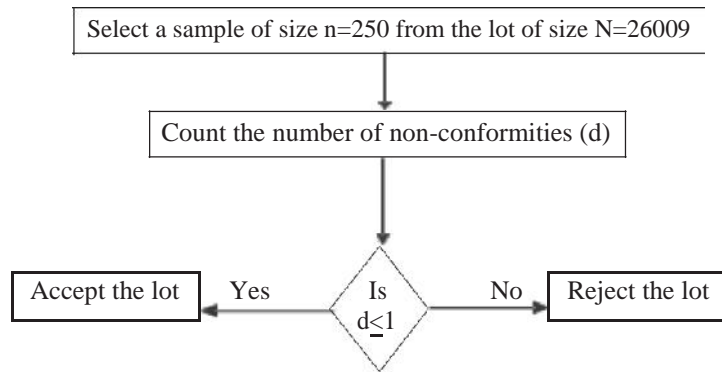


Figure 2 OC curve for SSP (n=250,c=1)

**Explanation**

In the pump manufacturing company if the consumer fixes AOQ as  $1.03 \times 10^{-5}$ , that is (103 non conformities out of 10 crores) and a sample size of 250 the lot size is 26009. In a lot of 26009 items select the sample of 250 items and if the number of nonconformities is less than or equal to one then accept the lot otherwise reject the lot and inform the management for corrective action.

**Figure 3. Flowchart 3****TABLE1**

**VALUES OF THE LOT SIZE FOR  $C=0$ , VARIOUS VALUES OF THE SAMPLE SIZE  $n$  AND AOQ**

$\frac{n}{\text{AOQ } (10^{-8})}$	500	450	400	350	300	250	200
0.10	586	519					
0.20	708	612	523				
0.35	1030	838	680	547			
0.40	1214	956	756	595			
0.45	1478	1113	850	652			
0.50	1889	1330	971	721	537		
0.55	2615	1654	1133	807	583		
0.60	4250	2186	1360	915	638		
0.65	11334	3221	1700	1058	703		
0.70		6120	2267	1253	785	515	
0.75		61214	3400	1535	887	557	
0.80			6800	1983	1020	607	
0.90				4760	1457	739	
0.95				<b>15868</b>	1855	829	
1.00					2550	944	
1.05					4080	1097	523
1.10					10201	1308	567
1.20						2125	680
1.25						3091	756
1.30						5667	850
1.35						34008	971
1.55							2267
1.60							3400
1.65							6800

TABLE2  
VALUES OF THE LOT SIZE N FOR C=1, VARIOUS VALUES OF THE SAMPLE SIZE N AND AOQ

$\frac{n}{AOQ(10^{-5})}$	500	450	400	350	300	250	200
0.10	619	544					
0.19	788	670	565				
0.39	2000	1385	1000	737	545		
0.47	5200	2412	1444	953	655		
0.49	8667	2962	1625	1028	690		
0.50	13001	3343	1733	1071	709		
0.51	26005	3836	1857	1117	729		
0.55		9361	2600	1348	821	531	
0.56		14627	2889	1422	848	542	
0.57		33437	3250	1504	876	553	
0.62			8667	2116	1054	619	
0.63			13001	2304	1099	634	
0.64			26006	2528	1147	650	
0.71				7914	1660	788	
0.72				11376	1773	813	
0.73				20226	1902	839	
0.74				91080	2053	867	
0.84					9751	1300	565
0.85					15603	1368	578
0.86					39017	1444	591
1.01						8668	897
1.02						13002	929
1.03						<b>26009</b>	963
1.17							2000
1.26							6501
1.27							8668
1.28							13003
1.29							26011

## 2.CONCLUSION

In this paper an attempt is made to determine the lot size of Six Sigma based single sampling Plans which has the probability of acceptance  $P_a(p)$  of the lot as  $1-3.4 \times 10^{-6}$  using Poisson distribution as a base line distribution, acceptance numbers  $c=0$  and  $c=1$  and AOQ values for various values or a specified AOQ and sample size  $n$ . This will help the floor engineer to suggest on the size of the lot to be submitted for inspection for a fixed sample size and acceptance number. This work can be extended for other sampling plans having finite lot size. These plans are more suitable for the industries that are practicing Six Sigma methodologies.

## 3.REFERENCES

- [1] AMERICAN NATIONAL STANDARDS INSTITUTE/AMERICAN SOCIETY FOR QUALITY CONTROL (1987) Standard A2, 'Terms, Symbols and Definitions for Acceptance Sampling (Milwaukee, WI, American Society for Quality Control).



- [2] Ansscombe, F.J. (1958), 'Rectifying inspection of continuous output, Journal of Royal Statistical Society, 53, p702.
- [3] Dodge, H.F. and Roming, H. G. (1942), 'Army service forces tables, Bell telephone laboratories, United States.
- [4] Duncan A. J. – Quality control and industrial statistics: Fifth edition, Irvin, Homewood, Illinios (1986).
- [5] Hald, A.(1981), 'Statistical Theory of Sampling Inspection By Attributes, Academic Press London.
- [6] Ng, E.Tsung, F. and So, R. (2005), 'Six Sigma approach to reducing fall hazards among cargo handlers working on top of cargo containers: a case study, Int. J. Six Sigma and Competitive Advantage, Vol. 1, No. 2.
- [7] R. Radhakrishnan, and P.K. Sivakumaran,"Construction and Selection of Six Sigma Sampling Plan indexed through Six Sigma Quality Level", International Journal of Statistics and Systems, Vol. 3, No. 2, pp. 153-159, (2008).

**Websites**

- [8] General Electric Company: <http://www.ge.com/>
- [9] Honeywell Company: [www.honeywell.com/](http://www.honeywell.com/)  
<http://www51.honeywell.com/>
- [10] Motorola: <http://www.motorola.com/>  
*Official website:* <http://fonszter.com/>
- [11] Process Sigma Calculation: <http://www.isixsigma.com/>

## BUYER BEHAVIOUR TOWARDS ELECTRONIC GOODS

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### ABSTRACT

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*Buyer behavior is the outcome of both individual and environmental influences' –BOONE KURTZ.*

*Buyer behavior is a study of how individuals make decision to spend their available resources (time, money and effort) on consumption related items (what they buy, why they buy, When they buy, Where they buy, How often they buy and use a product or service).*

*With the increasing disposable income population, their percapita consumption of electronic goods and other products is increasing. They are desirous of improving their standard of living with the hygienic and reasonably high quality products and get ride of the spurious and sub- standard products being supplied to them. They deserve quality products, correct information about a product and a door step delivery. It is remarked that the markets were developed not because of the initiatives of Indian marketers but the "PULL" from the consumers consuming system itself.*

*In earlier times, marketers could understand consumers through the daily experience of selling to them. But the growth in the size of firms and markets has removed many marketing decision makers from direct contact with customers.*

*Despite the basic characteristics of consumers the behavior pattern of consumers are more or less similar to each other, particularly in the aspects like quality, preference and decision making. However it is evident that the present approaches to draw the attention of customers are not adequate. The consumers are particular about the appropriate system of distribution and hence there is a great need for change in the distribution system. It may not be always correct to say that consumers behave in the same way as it much depends on type of products, quality of the products and price of the products. Therefore the producer must be paid special attention at least with regard to price and distribution system to cover the large number of customers. This is mainly because of the fact that the buying capacity of the consumers may not be equal to the buying capacity.*

*Key words - 'Buyer behaviour, outcome of both individual, environmental, influences', –BOONE KURTZ.*

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### I.INTRODUCTION

Buyer behaviour is a study of how individuals make decision to spend their available resources (time, money and effort) on consumption related items (what they buy, why they buy, When they buy, Where they buy, How often they buy and use a product or service).

With the increasing disposable income population, their percapita consumption of electronic goods and other products is increasing. They are desirous of improving their standard of living with the hygienic and reasonably high quality products and get ride of the spurious and sub- standard products being supplied to them. They deserve quality products, correct information about a product and a door step delivery. It is remarked that the markets were developed not because of the initiatives of Indian marketers but the "PULL" from the consumers consuming system itself.

Marketing manager who intend to develop the markets have to consider and examine distribution logistics, location, concentration of demand, dealers attitude and motivation, consumer motivation and buying habits and organizational alternatives identification selection of target markets should be taken in developing marketing mix. Once this is completed appropriate product mix strategies should be developed. It is a usual practice with many markets to sell the same production the markets. This policy does not yield good results. Appropriate changes in tangible and intangible features of the product should be made. The price mix is another critical marketing decision area. The price should tally with the ability to pay by the marketers. Appropriate adjustment should be necessarily made in quantity size packages etc. A different approach is needed for the markets to find a solution to distribution problems and promotion problems. Alternative distribution channels and method of promotional programmes are to be devised. Branding and packaging are important tools used in markets.

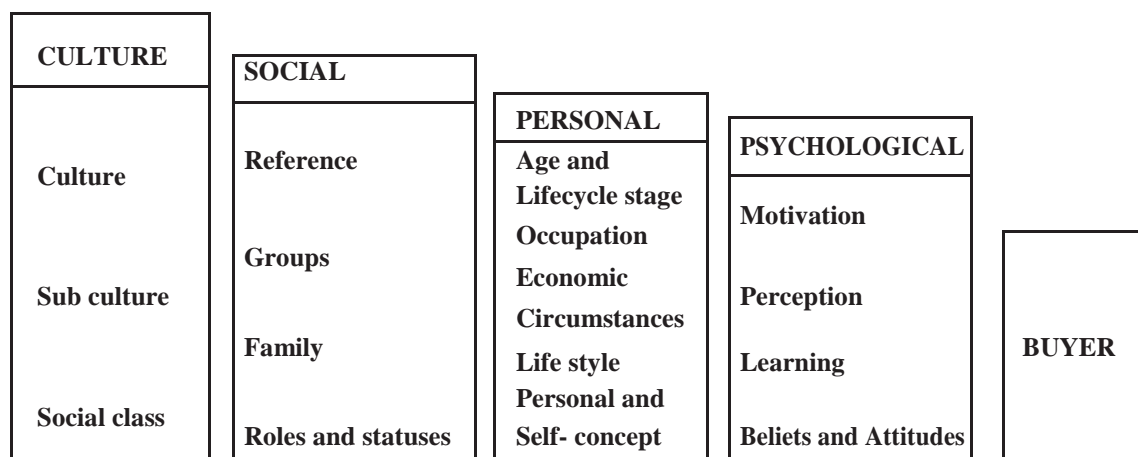
In earlier times, marketers could understand consumers through the daily experience of selling to them. But the growth in the size of firms and markets has removed many marketing decision makers from direct contact with customers. Increasingly, managers have had to turn to consumers research for answers to the most important questions about any marketing called the seven O's of the market place.

Who constitutes the market?	Occupants
What does the market buy?	Objects
Why does the market buy?	Objectives
Who participates in the buying?	Organizations
How does the market buy?	Operations
When does the market buy?	Occasions
Where does the market buy?	Outlets

Of central interest is the question, How do consumers respond to various marketer-controlled stimuli? The company that understands how consumers will respond to different product features, prices, advertising appeals, and so on will have an enormous advantage over its competitors. Therefore, business and academic marketing researchers, have invested much energy in researching the relationship between marketing stimuli and consumer response.

## II. FACTORS INFLUENCE BUYER BEHAVIOUR

The major factors influencing buyer behaviour are cultural, social, personal and psychological.



## III. BUYING ROLES

For many products, it is fairly easy to identify the buyer. Many other products involve a decision making unit consisting of more than one person. Five roles people might play in a buying decision.

1. Initiator: A person who first suggests the idea of buying the particular product or service.
2. Influencer: A person whose views or advice carries some weight in making the final decision.
3. Decider: A person who decides on any component of a buying decision. Whether to buy, what to buy, how to buy, or where to buy.
4. Buyer: The person who makes the actual purchase.
5. User: A person who consumes or uses the product or service.

A company needs to identify these roles because they have implication for designing the product, determining and allocating the promotional budget.

### Types of buying behaviour

Consumer decision making varies with the type of buying decision. Assail distinguished four types of consumer buying behaviour based on the degree of buyer involvement and the degree of differences among brands.

	High involvement	Low involvement
Significant differences Between brands	Complex buying behaviour	Variety seeking buying behaviour
Few differences Between brands	Dissonance-reducing Buying behaviour	Habitual buying behaviour

### Stages in the buying decision process

Based on examining many consumer reports of buying episodes, proposals have been made by consumer behaviour researchers for “stages models” of the buying process. The consumer passes through the five stages of buying decision process: Need recognition, Information search, Evaluation of alternatives, Purchase decision and post purchase behaviour.



### IV. PURCHASE DECISION

In evaluation stage, the consumer forms preferences among the brands the choice set. The consumer may also form a purchase intention to buy the most preferred brand.

### V. RESULTS AND DISCUSSION SOCIAL-ECONOMIC CONDITION OF THE RESPONDENTS Table 1 : Age wise classification of respondents

S.NO	AGE	NO OF RESPONDENTS	
		MALE	FEMALE
1.	Upto 20 years	12 (22)	10(14)
2.	20 Years to 30 Years	25 (46)	30(43)
3.	30 Years to 40 Years	13 (24)	20(29)
4.	40 Years and above	5 (9)	10 (14)
	TOTAL	55(100)	70(100)

Sources: Primary data

It could be seen from the table 1 that 46 percent of the male respondents and 43 percent of female respondents belonged to the category of 20 years to 30 years.

**Table 2 : Education status of sample respondents**

S.NO	EDUCATIONAL QUALIFICATION	NO. OF RESPONDENTS	PERCENT TO THE TOTAL
1.	MATRIC/ SSLC	18	14.4
2.	HSC/PUC	30	24.07
3.	GRADUATE/DIPLOMA	37	29.67
4.	POSTGRADUATE	23	18.4
5.	ILLITRATE	17	13.6
	TOTAL	125	100%

Sources: Primary data

From the above table it is known that 29.67% of the respondents were Graduate/Diploma and 13.6% were Illiterates. 24.07% of the sample respondents were HSC/ PUC.

**Table 3 : Classification of Occupational status**

S.NO	OCCUPATIONALSTATUS	NOOFRESPONDENTS	PERCENTAGE
1.	AGRICULTURAL	10	8.0
2.	BUSINESS	37	29.6
3.	EMPLOYED	61	48.8
4.	RETIRED	8	6.4
5.	OTHERS	9	7.2
		125	100

Sources: Primary data

It was observed from the Table3. That 48.8 percent of the sample respondents are employed, 29.6 Percent of the respondents are doing business.

#### **VI.BRAND AWARENESS AND PURCHASE DECISION**

**Table 4 : Media Creating Awareness**

S.NO	MEDIA	NOOFRESPONDENTS	PERCENTS
1.	Magazine/Newspapers	26	20.8
2.	Television	52	41.6
3.	Radio	18	14.4
4.	Others	3	2.4
5.	Magazine/ Newspapers and Television	17	13.6
6.	Television and Radio	9	7.2
		125	100

Sources: Primary data

It was inferred from the Table 4 that 41.6 percent of respondents were aware of the electronic goods through the advertisement in television, 20.8 percent of the respondents were aware of the electronic goods through the advertisement in the media of Magazine and Newspapers.

**Table 5: Opinion on source of influence on purchasing Electronic goods**

S.NO	SOURCE	NOOFTHERESPONDENTS	PERCENTAGE
1.	Manufactures	25	20.0
2.	Dealers	16	12.8
3.	Salesman	20	16.0
4.	Friends and Relatives	64	51.2
		125	100

Sources: Primary data

It was evident from the above table that out of the total respondents taken for the study, 51.2 percent of the respondents had been influenced by Friends and Relatives to purchase the Electronic Goods.

**VII.POSSESSIONOFELECTRONICGOODS****Table 6 : Details of Electronic Goods possessed**

S.NO	LISTOFGOODS	NOOFTHERESPONDENTS	PERCENTAGES
1.	Television	119	95.2
2.	Radio & FM	41	32.8
3.	VCD and DVD	85	65.6
4.	Washing machine	43	34.4
5.	Refrigerator	38	30.4
6.	Air cooler	47	37.67
7.	Iron box	113	90.47
8.	Room Heater	116	92.8
9.	Mixie	79	63.2
10.	Wet grinder	67	53.6
11.	Water Heater	41	32.8

Sources: Primary data

It was inferred from the table 6 that 95.2 percent of the respondents were possessing Television and in addition to that 92.8 percent were possessing Room heater. This indicated that Television plays a major role in mass media in Nilgiris.

**Table7 : The factors considered by the respondents for their goods**

S.NO	REASONS	NOOFRESPONDENTS	PERCENTS
1.	Time Saving	36	28.8
2.	Convenience	16	12.8
3.	Economy	12	9.6
4.	Less Exertion	6	4.8
5.	Entertainment	27	21.6
6.	Time Saving and Entertainment	28	22.4

Sources: Primary data

The above table clearly shows that 28.8 percent of the respondents have stated time saving as the reason 22.4 percent of the respondents have stated time saving and entertainment as the reason.

**Table 8: Showing Occupational status and Time taken to decide on purchase**

S.NO	OCCUPATIONALSTATUS	IMMEDIATELY	TIME	TAKEN		TOTAL
			LESSTHAN ONEMONTH	TWO MONTH	MORE THAN TWO MONTHS	
1.	Agriculture	5	2	2	1	10
2.	Business	18	11	5	3	37
3.	Employed	21	19	16	5	61
4.	Retired	3	2	2	1	8
5.	Others	1	3	1	4	9
	TOTAL	48	37	26	14	125

Sources: Primary data



The calculated value of Chi-Square is 26.046 and the tabulated value of Chi-Square with 12 degrees of freedom at 5% significant level is 21.026. Since the calculated value is greater than the tabulated value the hypothesis is rejected. The above analysis infers that the occupational status has no significant association over the time taken to decide on purchase.

**Table 9 : Occupational status and mode of purchase**

S.NO	OCCUPATIONALSTATUS	MODE OF PURCHASE			TOTAL
		CREDIT	CASH	BOTH	
1.	Agriculture	2	7	1	10
2.	Business	12	20	5	37
3.	Employed	13	34	4	61
4.	Retired	4	2	2	8
5.	Others	1	1	7	9
	TOTAL	32	64	29	125

Sources: Primary data

The calculated value of Chi-Square is 24.43 and the tabulated value of Chi-Square with 2 degrees of freedom at 5% significant level is 5.991.

Since the calculated value is greater than the tabulated value the hypothesis is rejected. The above analysis infers that the occupational status has no significant influence over the mode of purchase.

**Table 10 : Occupational status and media creating awareness**

S.NO	OCCUPATIONALSTATUS	Media creating	Awareness			Total
		Magazine/Newspaper	Television	Radio	Others	
1.	Agriculture	4	15	1	1	21
2.	Business	32	31	8	7	78
3.	Employed	38	49	15	10	112
4.	Retired	11	9	5	3	28
5.	Others	8	3	4	3	18
	Total	93	107	33	24	257

Sources: Primary data

The calculated value of Chi-Square is 15.629 and the tabulated value of Chi-Square with 12 degrees of freedom at 5% significant level is 21.026. Since the calculated value is less than the tabulated value the hypothesis is accepted. The above analysis infers that the occupational status has no significant influence over the media creating awareness.

**Table 11 : Occupational status and Items possessed**

S.NO	OCCUPATIONALSTATUS	A	B	C	D	E	F	G	H	I	J	K	TOTAL
1.	Agriculture	21	16	21	15	11	21	45	35	15	21	9	230
2.	Business	38	8	15	8	9	9	23	25	19	18	8	180
3.	Employed	34	7	19	9	8	8	19	19	14	11	12	160
4.	Retired	12	6	14	5	7	5	21	27	16	10	8	131
5.	Others	8	4	13	6	3	4	11	10	15	7	4	85
	Total	113	41	82	43	38	47	119	116	79	67	41	

Sources: Primary data

The calculated value of Chi-Square is 147.394 and the tabulated value of Chi-Square with 40 degrees of freedom at 5% significant level is 55.758. Since the calculated value is greater than the tabulated value the hypothesis is rejected. The above analysis infers that the occupational status has no significant association over the item possessed.

### **VIII.CONCLUSION**

Despite the basic characteristics of consumers the behavior pattern of consumers are more or less similar to each other, particularly in the aspects like quality, preference and decision making. However it is evident that the present approaches to draw the attention of customers are not adequate. The consumers are particular about the appropriate system of distribution and hence there is a great need for change in the distribution system. It may not be always correct to say that consumers behave in the same way as it much depends on type of products, quality of the products and price of the products. Therefore the producer must be paid special attention at least with regard to price and distribution system to cover the large number of customers. This is mainly because of the fact that the buying capacity of the consumers may not be equal to the buying capacity.

### **REFERENCES**

1. PHILIP KOTLER, "Marketing Management" Reprint(2001) Himalaya Publishing House, Mumbai.
2. PHILIP KOTLER, "Principles of Marketing." Reprint(2001) Himalaya Publishing House, Mumbai.
3. B.S. Rathor, "Advertising Management"- Reprint(2001) Himalaya Publishing House, Mumbai.
4. Primary data.

## COTTON CULTIVATION AND MARKETING – A STUDY ON PROSPECTS AND PROBLEMS IN TIRUPUR DISTRICT

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### ABSTRACT

*Agriculture is fundamentally different from industry and it plays a significant role in the economic development of a country. In the line of attack, India's prosperity depends upon the agricultural prosperity. There are many kinds of agricultural products produced in India like Cotton, Tobacco, Paddy, Wheat, and Sugarcane etc. The marketing of all these farm products generally tends to be a complex process. Agricultural marketing involves many operations and processes through which the food and raw materials move from the farm to the final consumers. Agriculture provides goods for consumption and exports and manufacturing sectors. The suitable marketing system should be designed so as to give proper reward or return to the efforts of the tiller of the soil. Hence the researcher is intended to identify the existing and emerging prospects in cultivation and production of Cotton in Tirupur district as well as to analyze the emanated and enlarging problems in marketing of Cotton to arrive at appropriate authentication and respective rejuvenation.*

**Key words - Agriculture, Cotton Cultivation, Marketing, Rejuvenation, Paddy.**

### I.INTRODUCTION

Agriculture is the backbone of an agriculture country, like India. On the other hand, in India, the middlemen **enjoy the cream** at the cost of disability, illiteracy etc, of the poor Indian farmers. A **small part of the price** paid by buyers **reaches the farmers** while the **big part is sucked** by the middlemen. Farmers are **handicapped** mainly in securing a **fair and reasonable price** for their produce. The reasons are many-lack of regulated markets, ungraded produce, no Agmark, inadequate storage and warehousing facility etc. At present, the conditions have been greatly improved. Today, agriculture being modernized, leads to **manifold productions**. The role of marketing is **fast changing**. Hence the researcher is attempted to analyze the **prospects and problems** in marketing of cotton in Tirupur district as it is one of the **leading and traditional agricultural products** in India.

### II.OBJECTIVESOFTHESTUDY

The study is carried with the following specific objectives:-

- ¾ To analyze the production and marketing of Cotton in Tirupur district.
- ¾ To study the existing marketing practices of the Cotton cultivators in Tirupur district.
- ¾ To identify the factors influencing the cotton cultivation and problems faced by the Sample respondents in the study area.
- ¾ To offer suggestions based on the results of the study for effective marketing of cotton.

### III.SCOPEOFTHESTUDY

The study specifically deals with the prospects and problems in marketing of cotton with reference to Tirupur district. The study intends to know the profile of the farmers who are cultivating cotton and problems faced by the farmers in marketing their cotton. The findings from this study will help the government to look after the problems of farmers who are cultivating cotton. The guidelines given by the researcher will be more suitable to overcome the problems faced by the farmers who are cultivating cotton.

### IV.METHODOLOGYOFTHESTUDY

The present study is based on the field survey conducted with the help of a well-structured questionnaire and interviews with farmers who are cultivating and marketing cotton. The study is confined to Tirupur district and the primary data was collected from 150 respondents.

### V.LIMITATIONSOFTHESTUDY

The study is the cause to experience with the following limitations.

- ¾ Only 150 respondents have been taken into consideration
- ¾ The study is restrained to Tirupur district.
- ¾ The respondents might not have been disclosed the actual facts due to their busy schedule and hence the findings may not be applicable to the whole universe.

#### VI.HYPOTHESIS OF THE STUDY

In tune with the objectives of the study, the following hypothesis were formulated and tested.

- ¾ There is no significant relationship between Educational Qualification and Quantity of Cotton Supplied.
- ¾ There is no significant relationship between Possession of Land and Quantity of Cotton Supplied.
- ¾ There is no significant relationship between Distance of Market Yard and Quantity of Cotton Supplied.
- ¾ There is no significant relationship between Experience in Cultivation of Cotton and Quantity of Cotton Supplied

#### VII.ANALYSIS AND INTERPRETATION

##### Tools applied for the study

The following statistical tools were applied for this research and interpretations were also made.

- ¾ Percentage analysis
- ¾ Chi-square analysis
- ¾ Ranking analysis

##### Percentage Analysis

Table A

Educational Qualification	No. of Respondents	%	Age	No. of Respondents	%
Illiterate	51	34.0	Below 30 yrs	36	24.0
Primary School level	32	21.3	30 – 40 yrs	68	45.4
High School level	35	23.4	Above 40 yrs	46	30.6
College level	32	21.3	<b>Total</b>	<b>150</b>	<b>100</b>
<b>Total</b>	<b>150</b>	<b>100</b>	<b>Distance</b>	<b>No. of Respondents</b>	<b>%</b>
<b>Type of Holding land</b>	<b>No. of Respondents</b>	<b>%</b>	Below 5 kms	61	40.6
Own Land	73	48.7	5-10 kms	54	36.0
Leased Land	36	24.0	Above 10 kms	35	23.4
Both Own and Leased Land	41	27.3	<b>Total</b>	<b>150</b>	<b>100</b>
<b>Total</b>	<b>150</b>	<b>100</b>	<b>Transportation Arrangements</b>	<b>No. of Respondents</b>	<b>%</b>
<b>Mobilization of Fund</b>	<b>No. of Respondents</b>	<b>%</b>	Own arrangement	39	26.0
Own fund	51	34.0	Commission agents	29	19.3
Borrowings from financial institutions	36	24.0	Regulated market	48	32.0
Borrowings from market intermediaries	63	42.0	Co-operative marketing societies	34	22.7
<b>Total</b>	<b>150</b>	<b>100</b>	<b>Total</b>	<b>150</b>	<b>100</b>
<b>Prospects</b>	<b>No. of Respondents</b>	<b>%</b>	<b>Problems</b>	<b>No. of Respondents</b>	<b>%</b>
Cropping finance	40	26.7	Loss of weight	49	32.7
Procurement of inputs	3	2.0	Wastage during handling	12	8.0

Transport arrangements	20	13.3	Improper fumigation service	25	16.7
Supply of packing materials	9	6.0	Damage by rats	26	17.3
Storage facility	52	34.7	Wet due to rain	23	15.3
Pledge loan facility	15	10.0	Poor maintenance	15	10.0
Immediate payments	8	5.3	<b>Total</b>	<b>150</b>	<b>100</b>
Market information	3	2.0			
<b>Total</b>	<b>150</b>	<b>100</b>			

Source: Survey Data

### **Educational Qualification of the Respondents**

It could be observed from the above A that 34.0% of the respondents are illiterates, 21.3% of the respondents are having primary school level of education and collegiate level and 23.4% of the respondents are having higher secondary school level of education. It is concluded from the above analysis that majority of the respondents are illiterates.

### **Age of the Respondents**

It is noted from the above A that 24.0% of the respondents are belonging to below 30 years of age group, 45.4% of the respondents are belonging to 30-40 years of age group and 30.6% of the respondents are belonging to above 40 years of age group. It is concluded from the above analysis that majority of the respondents are belonging to 30-40 years of age group.

### **Position of Land Holdings of the Respondents**

It is identified from the above A that 48.7% of the respondents are having own land, 24.0% of the respondents are having leased land and 27.3% of the respondents are having both own and leased land. It is concluded from the above analysis that majority of the respondents are having own land.

### **Distance of Market Yard from the Place of Respondents**

It is observed from the above A that 40.6% of the respondents are having below 5 kms of distance from their field, 36.0% of the respondents are having 5-10 kms of distance from their field and 23.4% of the respondents are having above 10 kms of distance from their field. It is concluded from the above analysis that majority of the respondents are having below 5 kms of distance from their field.

### **Sources of Financial Needs**

It is highlighted from the above A that 34.0% of the respondents are having own fund, 24.0% of the respondents are borrowings from financial institutions and 42.0% of the respondents are borrowings from market intermediaries. It is concluded from the above analysis that majority of the respondents are borrowings from market intermediaries.

### **Marketing Facilities offered by the Intermediaries**

It is identified from the above A that 34.7% of the respondents are opined that the intermediaries arranging storage facility, 26.7% of the respondents are opined that the intermediaries arranging cropping finance, 13.3% of the respondents are opined that the intermediaries arranging transport arrangement and remaining 10.0% of the respondents are opined that the intermediaries arranging pledge loan facility. It is concluded from the above analysis that majority of the respondents are opined that the intermediaries arranging storage facility.

### **Problems in Storing the Cotton in the Godown**

It is noted from the above A that 32.7% of the respondents are facing the problem of 'loss of weight' while in storing their cotton, 8.0% of the respondents are facing the problem of 'wastage during handling' while in storing their Cotton, 16.7% of the respondents are facing the problem of 'improper fumigation service' while in storing their Cotton, 17.3% of the respondents are facing the problem of 'damage by rats' while in storing their Cotton, 15.3% of the respondents are facing the problem of 'wet due to rain' while in storing their Cotton, and remaining 10.0% of the respondents are facing the problem of 'poor maintenance' while in storing their Cotton,. It is concluded from the above analysis that majority of the respondents are facing the problem of 'loss of weight' while in storing their Cotton.

**Chi-Square Analysis****Table B**

Educational Qualification	Quantity of Cotton Supplied			Total	Possession of Land	Quantity of Cotton Supplied			Total
	Low	Medium	high			Low	Medium	high	
Illiterate	5(16.7)	19(38.0)	27(38.6)	51	Own Land	19(63.3)	25(50.0)	29(41.4)	73
Primary	13(43.3)	6(12.0)	13(18.6)	32	Leased Land	9(30.0)	16(32.0)	11(15.7)	36
High School	6(20.0)	15(30.0)	14(20.0)	35	Both Own & Leased Land	2(6.7)	9(18.0)	30(42.9)	41
Collegiate	6(20.0)	10(20.0)	16(22.9)	32	<b>Total</b>	<b>30</b>	<b>50</b>	<b>70</b>	<b>150</b>
<b>Total</b>	<b>30</b>	<b>50</b>	<b>70</b>	<b>150</b>	<b>Experience</b>	Quantity of Cotton Supplied			<b>Total</b>
	Quantity of Cotton Supplied					Low	Medium	high	
<b>Distance</b>	<b>Low</b>	<b>Medium</b>	<b>high</b>	<b>Total</b>	<b>Upto 5 years</b>	<b>8(26.7)</b>	<b>26(52.0)</b>	<b>42(60.0)</b>	<b>76</b>
Upto 5 kms	10(33.3)	14(28.0)	37(52.9)	61	6-10 years	18(60.0)	19(38.0)	21(30.0)	58
6-10 kms	14(46.7)	23(46.0)	17(24.3)	54	Above 10 years	4(13.3)	5(10.0)	7(10.0)	16
Above 10 kms	6(20.0)	13(26.0)	16(22.9)	35	<b>Total</b>	<b>30</b>	<b>50</b>	<b>70</b>	<b>150</b>
<b>Total</b>	<b>30</b>	<b>50</b>	<b>70</b>	<b>150</b>					

Source: Survey Data

**Chi-Square Test****Table C**

No Association Between	Calculated Chi- Square Value	Degree of freedom	Table Value	Result
Educational Qualification and Quantity of Cotton Supplied	13.986	6	12.592	Rejected
Possession of Land and Quantity of Cotton Supplied	18.337	4	9.488	Rejected
Distance and Quantity of Cotton Supplied	10.235	4	9.488	Rejected
Experience and Quantity of Cotton Supplied	9.778	4	9.488	Rejected

Source: Survey Data

**Educational Status and Quantity of Cotton Supplied**

It could be concluded from the Table C that the calculated Chi-Square value is more than the table value and the result is rejected at 5 percent level. Hence, there is significant relationship between Educational Qualification and Quantity of Cotton Supplied.

**Possession of Land and Quantity of Cotton Supplied**

It could be identified from the Table C that the calculated Chi-Square value is more than the table value and the result is rejected at 5 percent level. Hence, there is significant relationship between Possession of Land and Quantity of Cotton Supplied.

**Distance of Market Yard and Quantity of Cotton Supplied**

It could be noticed from the Table C that the calculated Chi-Square value is more than the table value and the result is rejected at 5 percent level. Hence, there is significant relationship between Distance of Market Yard and Quantity of Cotton Supplied



### Experience in Cultivation and Quantity of Cotton Supplied

It could be inferred from the Table C that the calculated Chi-Square value is more than the table value and the result is rejected at 5 percent level. Hence, there is significant relationship between Experience in Cultivation and Quantity of Cotton Supplied

### Ranking Analysis Reasons for Cultivating Cotton for a Long Period

**Table D**

S.No.	Reasons	Mean Score	Total score	Rank
1.	Highly profitable	53.9	8082	I
2.	Better marketing facilities	52.1	7819	III
3.	Traditional crop	52.8	7923	II
4.	Able to store for a longer period	48.0	7198	V
5.	Less labour work	50.1	7522	IV
6.	Able to wait for a better price	43.0	6447	VI

Source: Survey Data

The above table D shows the reason for cultivating cotton for a long time by the farmers. The first and best reason for cotton cultivation is 'Highly profitable' with Garrett scored as 8082 points. The second reason for cotton cultivation is 'traditional crop' with Garrett scored as 7923 points. The third reason for cotton cultivation is 'better marketing facilities' with Garrett scored as 7819 points. The fourth reason for cotton cultivation is 'less labour work' with Garrett scored as 7522 points. The fifth reason for cotton cultivation is 'Able to store for a longer period' with Garrett scored as 7198 points and final reason for cotton cultivation is 'Able to wait for a better price' with Garrett scored as 6447 points. It is concluded from the above analysis that majority of the respondents are doing the cotton cultivation for the major reasons are 'Highly profitable' and 'traditional crop'.

### Problems Faced by the Respondents

**Table E**

S.No.	Problems	Mean Score	Total Score	Rank
1.	Insufficient pledge loan facility	36.42	5463	XV
2.	Price fluctuation	44.72	6708	XIV
3.	Poor post storage facilities	48.82	7323	X
4.	Non-existence of Agmark Lab.	52.99	7949	V
5.	Lack of market information	52.77	7916	VI
6.	Improper method of sale	53.91	8087	II
7.	Unscientific weighing machines	48.79	7318	XI
8.	Delay in unloading services	50.56	7584	IX
9.	High marketing cost	46.36	6954	XIII
10.	Unauthorized Deductions	48.65	7298	XII
11.	Poor customer relationship	50.63	7594	VIII
12.	Location of banks	53.77	8066	III
13.	Insufficient godown facility	51.41	7712	VII
14.	Poor quality of packing materials	53.45	8018	IV
15.	Poor government supports	54.65	8197	I

Source: Survey Data

The above table E shows the problems faced by the respondents in cultivation of cotton. The first and the highest problem for cotton cultivation is 'Poor government support' with Garrett scored as 8197 points. The second and third problems are 'Improper method of sale' and 'Location of banks' with Garrett scored as 8087 and 8066 points. The fourth and fifth problems are 'Poor quality of packing materials' and 'Non-existence of Agmark Lab' with Garrett scored as 8018 and 7949 points. It is concluded from the above analysis that majority of the respondents are faced the major problems are 'Poor government supports' and 'Improper method of sale'.

## VIII.FINDINGS,SUGGESTIONSANDCONCLUSION

### Percentage Analysis

- ¾ The majority of respondents are illiterates.
- ¾ The majority of respondents are belonging to 30-40 years of age group.
- ¾ The majority of respondents are having own land.
- ¾ The majority of respondents are having below 5 kms of distance from their field.
- ¾ The majority of respondents are borrowings from market intermediaries.
- ¾ The majority of respondents are opined that the intermediaries arranging storage facility.
- ¾ The majority of respondents are facing the problem of 'loss of weight' while in storing their cotton.

### Chi-Square Analysis

- ¾ There is significant relationship between Educational Qualification and Quantity of Cotton Supplied.
- ¾ There is significant relationship between Possession of Land and Quantity of Cotton Supplied.
- ¾ There is significant relationship between Distance of Market Yard and Quantity of Cotton Supplied
- ¾ There is significant relationship between Experience in Cultivation and Quantity of Cotton Supplied

### Ranking Analysis

- ¾ The majority of respondents are cultivating cotton for the two major reasons 'Highly Profitable' and 'Traditional Crop'.
- ¾ The majority of respondents faced the major problems are 'Poor government support' and 'Improper method of Sale'.

## IX.SUGGESTIONS

Based on the major findings, followings are the suggestions offered to make the study more useful and appreciable.

- ¾ It is noticed that the prices prevailing in the cotton markets are highly fluctuating which affects the margin of the farmers. In order to avoid this situation, a steady demand for the cotton has to be identified by expanding the global market for cotton which would boost the sales volume as well as the price in the local market.
- ¾ If the cotton is stored for more than three months in the godowns then the fumigation process is essentially needed. The fumigation process should take place within a time schedule and it has to maintain proper records about fumigation services.
- ¾ The packing materials in the form of gunny bags supplied by the commission agents are of good quality and they provide transportation, loading and unloading facilities. Whereas regulated market and co-operative marketing societies do not supply the facilities. This problem leads to loss of arrivals of cotton and sale of the same in co-operative marketing societies and regulated market. The authorities of regulated markets and co-operative marketing societies should concentrate on these facilities and rectify the problems which would attract more farmers to have more transactions with regulated markets and co-operative marketing societies.
- ¾ At present the transactions of cotton are taking in two different market places ie., regulated market and commission agents' association. In order to avoid this unhealthy environment, a common market place has

to be established by the government, which would promote cotton trade in the state. The common market place should be equipped with all infrastructure facilities. The establishment of such a place would solve many of the problems prevailing in the cotton trade. From the government point of view, this provision would facilitate mobilizing regular income in terms of service charges, rent for buildings and also make it easy to monitor the trading activities.

- ¾ The lack of storage facility for cotton, affects the farmers to protect their cotton in a proper way. If the authorities of the markets notify the problems, farmers may be benefited more by the way of timely sales.
- ¾ The other equally important inference of the study is finance related problem. To safeguard the grower-sellers from the exploitative activities emerging out of lack of adequate finance, the grower-sellers may be given the necessary financial assistance by the Regulated and the Co-operative Marketing societies at nominal rates of interests.
- ¾ The study revealed facts that the care taken by the regulated and co-operative marketing society in protecting the stored cotton in their godowns is satisfactory comparing to the care taken by the commission agents. In this context the authority concerned may take extra efforts and satisfy the storage needs of the cotton cultivators.

### **X.CONCLUSION**

Since India is the home for cultivating cotton, the government can encourage the farmers to export directly to other countries to enable them to have a fair share of the profit earned through international trade and foreign exchange. The demand for cotton can be assessed through the export promotion council in and also abroad. The government could come forward to extend the credit facilities to the farmers in accordance with their requirements even by accepting the pledging of their future cultivation and production of cotton.

### **REFERENCES**

- ¾ Ahmedabad Textile Industry Research Association and Ahmedabad Institute of Management Association. 1984. Inter-firm comparison of costs, productivity, and damage (composite mills). July to September, Ahmedabad, India
- ¾ Annual Survey of Industries (ASI), 2000-01. Ministry of Statistics and Programme Implementation, Central Statistical Organisation (CSO), Kolkata, India
- ¾ Apparel Export Promotion Council (AEPC), various issues, Handbook of export statistics, Ministry of Textiles, Govt. of India, New Delhi.
- ¾ Association of Man Made Fibre Industry of India, Various reports, Mumbai, India.
- ¾ Association of Synthetic Fibre Industry, Handbook of Statistics on Man-Made Synthetic Fibre/Yarn Industry, Part-I, Mumbai, India.
- ¾ Ahmedabad Textile Industry Research Association (ATIRA), Bombay Textile Research Association (BTIRA), Northern India Textile Research Association (NITRA), South India Textile Research Association (SITRA). 1991. Norms for the textile industry. India.
- ¾ Bedi, Jatinder S. and Banerjee, Purnendu K. 2007. "Discrepancies and Validation of data of Various Segments of Indian Manufacturing Sector: Factory Sector & Non-Factory Sector and Small, Medium & Large Scale Manufacturing Sector." Economic and Political Weekly, March.
- ¾ Chatterjee, C. 2006. Textile times, February-March, New Delhi: CITI.
- ¾ CRISIL report in Vision for Indian Textiles and Clothing Industry, 2007–2012, Confederation of Indian Textile Industry document, 2006.
- ¾ Cotton Textile Export Promotion Council. various issues. Handbook of export statistics. Bombay, India
- ¾ Directorate General of Commercial Intelligence and Statistics (DGCI&S), various issues, Foreign Trade Statistics, Ministry of Commerce, Kolkata, India
- ¾ Directorate of Cotton Development (Kipas Vikas Nideshalay, Mumbai), Department of Agriculture and Cooperation, Ministry of Agriculture. India.
- ¾ East India Cotton Association, Mumbai, India

- ¾ Economic Survey, 2004-05, 2005-06, 2006-07, 2007-08, Government of India, Ministry of Finance, Economic Division, New Delhi.88
- ¾ Federation of Indian Textile Engineering Industry (FITE), various issues, Mumbai.
- ¾ Gherzi Eastern Limited. 2002 & 2006. Cost Benchmarking Study: India viz a viz Bangladesh, Indonesia, China, Sri Lanka, and Pakistan. Mumbai, India.
- ¾ Indian Cotton Mills' Federation. 2004. Handbook of statistics on cotton textile industry. New Delhi: Author.
- ¾ International Textile Manufacturing Federation(ITMF), various issues, Werner International Inc. Management Consultants. Brussels, Belgium.
- ¾ South India Mills Association. Various issues. Coimbatore, India.
- ¾ South India Textile Research Association. Various issues. Coimbatore, India.
- ¾ Suri, K. C. 2006. Political economy of agrarian distress. Economic and Political Weekly, April 22.
- ¾ Synthetic and Rayon Textile Exports Promotion Council, Man Made Fibers Textiles Exports Statistics, 2006-07.Mumbai, India.Tamhene, V. K. 2005. Labour issues in textiles. Textile Times.
- ¾ World Bank. 2005. World Development Report 2005. Oxford University Press, New Delhi
- ¾ World Trade Organization. International Trade Statistics, Various Issues. Geneva. Available at:www.statistics@wto.org.
- ¾ Kothari C.R., "Research Methodology", Wishwa Prakasham, New Delhi, 2003.
- ¾ Gupta, S.P., "Statistical Methods", Sultan Chand and Sons, New Delhi, 1990.
- ¾ Mamoria, C.B., "Agricultural Problems of India", Kitab Mahal, Allahabad, 1995.

# IMPACT OF MICROFINANCE - AN EMPIRICAL STUDY ON THE ATTITUDE OF SHG LEADERS IN KANYAKUMARI DISTRICT – TAMILNADU

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## ABSTRACT

*Microfinance is a powerful tool to alleviate poverty and empowerment of rural women and it is effective in bringing social and economic changes in the rural India with improved managerial abilities of women. Microfinance and self help groups are found to be successful in promoting empowerment of women leading to development. This paper analyses the impact of microfinance on the empowerment of SHG leaders in psychological, economic ,social aspects, managerial skills and their attitudes in Kanyakumari Disrtict.*

**Keywords - Microfinance-SHG-Poverty alleviation- empowerment- psychological-economical-social and Managerial.**

## 1.INTRODUCTION

The structure of rural financial market in India has both formal and informal financial intermediaries. It is widely accepted that formal financial sector is not effectively serving the rural poor in developing countries. The performance of formal financial institutions in India especially in lending the poor, has been unsatisfactory. There are a number of constraints viz. limited land and small economic activity but the demand for credit has been increasing with the growing family size, higher consumption expenditure and social obligation and so on.

Poverty and unemployment are the major problems of any underdeveloped countries, and India is no exception. In India about 26 percent of the population is living below poverty line. In the rural area 27.1 percent of the population is living under poverty. The overall unemployment rate is 7.32 percent. The female unemployment rate is 8.5 percent. The rate of growth of women unemployment in the rural area is 9.8 percent. This is because of the low growth rate of new and productive employment.

## 2.REVIEWOFPREVIOUSSTUDIES

Impact of Microfinance on women were addressed by researchers and some important studies are presented here..Hashemi, Schuler, Riley (1996) and Kabeer (1998) reported that microfinance empowered women in Bangladesh, Makumbe et al (2005) found that microfinance has a positive impact on decision making in Tanzania, Hulma and Mosley (1996) found growth of microfinance borrowers in Indonesia, India, Bangladesh and Sri Lanka. Sridhar Krishna(2004) advocated for giving legal status of SHGs. Nataraju et al (2005) indicated that more financial support does not help the members and recommended that they should be provided with institutional support in Karnataka. Rajendran et al (2010) concluded that there is s definite improvement of psychological, economical, social; and managerial skills.Among the SHG leaders in Vellore district of Tamilnadu.

## 3.MICROFINANCE

Microfinance refers to small savings, credit and insurance services extended to socially and economically poor segments of society. It is defined as provision of thrift, credit and other financial services and products of very small amounts distributed to the poor in rural and semi urban or urban areas, for enabling them to raise their income levels and improve living standards. At present a large part of micro finance activity is confined to credit only. Women constitute a large number of users of micro credit savings and services.

## 4. ORIGIN AND CONCEPT OF SHGs

The origin of Self Help Groups (SHGs) is the brainchild of Grameen Bank of Bangladesh, founded by Prof. Mohammed Yunus in 1975, who tried out a new approach to rural credit in Bangladesh. Grameen gave loans without

asking borrowers either to provide collateral or engage in paper work. It pioneered what has come to be known as group based living. In India NABARD initiated SHGs in the year 1986-87 But the real effort was taken after 1991-92 from the linkage of SHGs with the banks. A SHG is a small economically homogeneous affinity group of the rural poor voluntarily coming forward to save a small amount of money regularly, which is deposited in a common fund to meet the members' emergency needs and to provide collateral free loans decided by the group. The SHGs have been recognised as useful tool to help the poor and as an alternative mechanism to meet the urgent credit needs of poor through thrift. In Tamilnadu the SHGs were started in 1989 at Dharmapuri District. At present Four lakh groups are functioning with 23.83 lakh members in Tamilnadu. There are some men SHGs are also functioning.

### 5. WORKING OF SHGs

The SHGs are working in a democratic manner. The upper limit of members in a group is restricted to 20. Among them a member is selected as an 'animator' and two members are selected as representatives. The animator is selected for a period of two years. Members of the group meet every week. They discuss social and community programmes, group savings, rotation of funds, bank loan and repayment of loan.

From the previous studies it is widely believed that microfinance is a powerful tool to alleviate poverty and empowerment of rural women, it is an effective tool in bringing social, physiological and economic changes in the rural areas with improved managerial abilities of women. SHGs and microfinance are found to be successful in promoting empowerment of women leading to development. It has been accepted that microfinance plays a vital role in reducing poverty since it paves the way for employment and empowerment which leads to economic development. Poverty can be eradicated only by employment opportunities and the employment seeker and worker should become a job provider and it is possible through microfinance coupled with minor enterprises. Empowerment of women through microfinance benefits individual women, her family and the community as a whole through collective action for development. Group formation, provision of collateral free credit, participatory efforts for income generating self employment, knowledge and awareness, leadership, group management and skill development have improved the socio economic conditions of rural poor.

### 6.OBJECTIVE OF THE STUDY

The objective of the present study is to analyse the impact of microfinance on the attitudes of the SHG leaders in Kanyakumari District.

### 7.METHODOLOGY

So far no study has been undertaken in Kanyakumari District (Tamilnadu) about the impact of microfinance among the leaders of the SHGs and hence the study was undertaken in Kanyakumari District. Leaders of the SHGs registered with Panchayats from Thovalai and Thiruvattar blocks were selected for the study. Accordingly 30 SHGs from Thovalai block and 26 SHGs from Thiruvattar block, in total 56 SHGs were included in the study from two village panchayats. Leaders of the groups were interviewed with a well structured and pre-tested interview schedule during the month of September and October 2010. The schedule included questions related to the general information and psychological, economic and social empowerment as well as managerial skill of the respondents. Simple statistical tools like percentage analysis, mean, standard deviation were used to draw conclusions in addition to ANOVA. Scores were allotted on Likert's five point scale.

### 8.ANALYSIS AND DISCUSSION

The impact of microfinance on the SHG leaders (respondents) has been measured through the Likert's scale constructed on the basis of 36 variables. The responses have been quantified with the help of a scoring scheme. A high score of '5' was allotted to strongly agreed responses and a low score of '1' was given to strongly disagreed responses.

**Table - I Salient features of the study area**

Block	No. of SHG	% to total SHGs within District	% of population below poverty line
Thovalai	1067	7.37	29.08
Thiruvattar	1672	11.56	29.55
District	14463	100	28.84

Source : DRDA – Kanyakumari District.



### 9.SOCIO-ECONOMICPROFILEOFTHERESPONDENTS

The study reports that out of the total 56 samples selected for the study, three respondents (5.4 percent) are in the age group of 20 to 25 years. Six respondents (10.7 percent) are in the age group of 26 to 30 years. Eleven respondents (19.6 percent) are in the age group of 31 to 35 years. Thirteen respondents (23.2 percent) are in the age group of 36 to 40 years and 23 respondents are in the age group of above 40 years. Of the total respondents 56, 4 respondents (7.1 percent) are coolies, 38 respondents (67.9 percent) are housewives, 7 respondents (12.5 percent) are agricultural labourers and 7 respondents (12.5 percent) are engaged in other household activities and small trading. Regarding literacy level 20 respondents (35.7 percent) have studied upto SSLC, 12 respondents (21.4 percent) studied upto HSC and 14 respondents (25 percent) are graduates, 6 (10.7 percent) are post graduates and 4 respondents (7.1 percent) have other qualification like ITI, Polytechnic and the like. Regarding monthly income of the total sample 56, 43 respondents (76.8 percent) are in the monthly income group of less than Rs. 2500, 9 respondents (16.1 percent) are in the income group of Rs. 2500 to 3000. Three respondents (5.4 percent) are in the income group of Rs. 3001 to 3500 and only one respondent is in the income of above Rs. 4000. Of the total 56 respondents 47 (83.9 percent) are married, 8 respondents (14.30 percent) are unmarried and one respondent (1.8 percent) is a widow. Of the total sample, 27 respondents (48.2 percent) have family members of 4, 15 respondents (26.8 percent) have family members of 5, 11 respondents (19.6 percent) have family members of 3 and 2 respondents (3.6 percent) have family members of 6 and only one respondent have family members of 2. 51 respondents (91.1 percent) live in their own houses and only 5 respondents live in rented houses.

### 10.IMPACTOFMICROFINANCE-ANALYSISANDDISCUSSION

The researcher has identified twenty six variables covering the impact of microfinance on psychological, economic and social aspects. The measurement was on Likert's five point scale and scores were assigned for each statement. A high score of '5' was allotted for strongly agreed statements and a low score of '1' was allotted to strongly disagreed statements. An analysis of impact of microfinance on the psychological, economical and social empowerment is presented in Tables 2, 3 and 4

**Table - II Impact of Microfinance on Psychological well being**

S. No.	Variables	Mean	Std. Deviation
1.	Improvement in Courage	4.96	0.19
2.	Improvement in Self confidence	4.95	0.23
3.	Improvement in Self worthiness	4.91	0.29
4.	Improvement in Skill development	4.43	0.68
5.	Improvement in Literacy level	3.38	1.09
6.	Awareness on Health and Sanitation	3.54	0.97
7.	Awareness on Children's Education	3.96	1.03
8.	Awareness on Food and Nutrition	3.82	1.21
9.	Awareness about the Environment	4.13	0.90
10.	Awareness about Peace in the family	4.16	0.62

Source – Primary data

#### 10.1 Improvements in psychological well being off rural women

The study reports that 54 respondents (97 percent) strongly agreed that microfinance brought courage among rural women. Fifty three respondents (95 percent) strongly opined that their self confidence improved by participating in microfinance. Fifty one respondents (92 percent) strongly agreed that micro finance has improved their self worthiness. Twenty eight respondents (50 percent) strongly agreed that there is a development of women's skill to generate income by using microfinance. Twenty six respondents (46.4 percent) agreed that by participating microfinance programme their literacy level of rural women improved. The study reports that 34 respondents (61 percent) agreed that microfinance has improved awareness about the education of their children, 25 respondents (45 percent) agreed that microfinance improved awareness on health and sanitation, 22 respondents (40 percent) strongly agreed that microfinance improved their

awareness on food and nutrition, 29 respondents (52 percent) agreed that micro finance programme increased some awareness about their environment and 41 respondents (74 percent) agreed that happiness in the family increased after the participation in microfinance programme.

**Table - III Impact of Microfinance on Economic Improvement**

S. No.	Variables	Mean	Std. Deviation
1.	Women are economically empowered	4.64	0.62
2.	Microfinance reduce poverty	4.63	0.59
3.	Microfinance improve rural savings	4.57	0.74
4.	Women under take IGA	3.80	1.05
5.	Increased employment opportunities	3.30	1.17
6.	Created assets in rural areas	3.05	1.17
7.	Increase the standard of living	3.82	0.97

Source – Primary data

### 10.2 Economic Improvement

The study reports that microfinance has some economic impact among rural women. After the participation in microfinance through the SHGs 39 respondents (70 percent) strongly agreed that women are economically and socially empowered. Thirty seven respondents (66 percent) strongly agreed that microfinance reduced poverty. Thirty eight respondents (68 percent) agreed that microfinance programme improved rural savings. Twenty nine respondents (52 percent) disagreed that microfinance induced income generating activities. Twenty three respondents (41 percent) disagreed that microfinance induced income generating activities. Twenty three respondents (41 percent) disagreed that microfinance increasing rural employment. Twenty seven respondents (48 percent) disagreed that microfinance created assets in rural areas and 32 respondents (57 percent) agreed that their standard of living has increased through microfinance.

**Table -IV Impact of Microfinance on Social aspects**

S. No.	Variables	Mean	Std. Deviation
1.	Managerial abilities of women	4.18	1.19
2.	Role in decision making	4.43	0.78
3.	Group management	4.16	0.87
4.	Awareness about training by NGO	3.45	1.23
5.	Micro enterprises	3.02	1.10
6.	Participation in democratic institutions	2.82	1.13
7.	Sustainability and cohesiveness of the group	3.41	1.06
8.	Freedom to express	3.80	0.86
9.	Independent movement	3.79	0.87

Source – Primary data

### 10.3 Social empowerment

The study reports that the micro finance programme has increased their managerial abilities of the leaders of SHGs. Thirty two respondents (57 percent) strongly agreed to this statement. Thirty respondents (54 percent) strongly agreed that their decision making abilities have increased. Twenty eight respondents (50 percent) agreed that participation in microfinance has enhanced their group management skill. Twenty one respondents (38 percent) disagreed with the statement that microfinance created awareness about training programmes organised by NGOs. Twenty eight respondents (50 percent) disagreed with the statement that microfinance brought some micro enterprises in the study area. Thirty five

respondents (63 percent) disagreed with the statement microfinance induced to involve in participation in democratic bodies, 40 respondents (71 percent) opined that microfinance programme has helped to increase the freedom of expression and 39 respondents (70 percent) agreed that microfinance programme helped their independent movement.

## 11. RESULTS

- A. Among the three dimensions of empowerment, psychological wellbeing ranks first followed by social aspects and economic aspects ranked last.

**Table - V**

Dimensions of empowerment	Mean	SD	Rank
Psychological	4.23	0.48	1
Social	3.97	0.37	2
Economical	3.71	0.46	3

- B. There is a significant difference between the blocks of Thovalai and Thiruvattar with respect to the psychological aspects of the respondents ( $F = 10.805$ ,  $P = 0.002$ ) at 0.05 level of significance. The respondents of Thiruvattar have better improvements (mean = 4.43, SD = 0.43) than the respondents belonging to Thovalai (mean = 4.05, SD = 0.45).

**C. Table - VI**

Dimensions of empowerment	Blocks	N	Mean	Std. Deviation
Psychological	Thiruvattar	26	4.43	0.43
	Thovalai	30	4.05	0.45
Social	Thiruvattar	26	3.98	0.31
	Thovalai	30	3.97	0.41
Economical	Thiruvattar	26	3.67	0.62
	Thovalai	30	3.75	0.27

**D. Table - VII ANOVA**

Dimensions of empowerment	Source of Variation	Sum of Squares	DF	Mean Square	F	P value
Psychological	Between Groups	2.100	1	2.100	10.805	0.002*
	Within Groups	10.497	54	0.194		
	Total	12.597	55			
Social	Between Groups	0.004	1	0.004	0.029	0.866
	Within Groups	7.388	54	0.137		
	Total	7.392	55			
Economical	Between Groups	0.088	1	0.088	0.406	0.527
	Within Groups	11.656	54	0.216		
	Total	11.743	55			

\* Significant at 5% level ( $P < 0.05$ )

- C. There is no significant difference between the blocks Thovalai and Thiruvattar with respect to the social aspects of the respondents ( $F = 0.029$ ,  $P = 0.866$ ) at 0.05 level of significance. The respondents of Thiruvattar have statistically insignificant better improvements (mean = 3.98, SD = 0.31) than the respondents belonging to Thovalai (mean = 3.97, SD=0.41).

- D. There is no significant difference between the blocks Thovalai and Thiruvattar with respect to the economical aspects of the respondents ( $F = 0.406$ ,  $P = 0.527$ ) at 0.05 level of significance. The respondents of Thiruvattar own statistically insignificant lesser improvements (mean=3.67,SD=0.62) than the respondents of Thovalai Block.

### 12.DEVELOPMENTOFMANAGERIALSKILL

A Self Help Group is a community based organisation, leaders of the groups need managerial skill to manage the SHGs. Therefore the impact of microfinance in developing managerial skill is analysed with the following ten variable.

**Table - XI Managerial Skills**

S. No.	Variables	Mean	Std. Diviation	Rank
1.	Planning skill	4.38	0.93	3
2.	Organising ability	4.52	0.85	2
3.	Coordination skill	4.54	0.85	1
4.	Technical skill	3.73	3.08	6
5.	Marketing skill	2.79	1.22	8
6.	Entrepreneurial skill	2.77	1.20	9
7.	Communication skill	3.71	1.02	7
8.	Financial management skill	4.05	0.82	5
9.	Decision making skill	4.36	0.67	4
10.	Leadership skill	4.52	0.71	2

Source : Primary data

While analysing the impact of microfinance on the managerial ability of the SHG leaders in the study area, co-ordination skill is ranked first, among the managerial skills with a mean score value of 4.54. Contributions to the organising ability and leadership skill of the SHG leaders ranked second with a mean scores of 4.52 each. Planning skill of the SHG leaders is ranked third with a mean score of 4.38, Decision making skill was ranked fourth with a mean score of 4.36, Financial management skill was ranked fifth and Technical skill was ranked sixth, Communication skill was ranked seventh, Marketing skill was ranked eight and entrepreneurial skill was ranked ninth with a minimum mean score of 2.77

### 13.CONCLUSION

The study concludes that microfinance has brought better psychological and social empowerment than economic empowerment. The respondents of Thiruvattar block possess better empowerment than the respondents belonging to the Thovalai block, even though both the blocks have same level of socio economic conditions. The impact of microfinance is commendable in courage, self-confidence, self worthiness, skill development, awareness about environment, peace in the family, reduction of poverty improving rural savings, managerial ability decision making process and group management. In other variables the impact is moderate. As a result of participation in microfinance through the SHG programmes there is observed a significant improvement of managerial skills, psychological well being and social empowerment. It is recommended that the SHGs may be granted legal status to enhance the performance.

### REFERENCES

- [1]. National Bank for Agriculture and rural Development(NABARD) 2008 *Annual Report 2007-08* Mumbai.
- [2]. Small industries Development Bank of India (SIDBI) 2009. *Annual Report 2008-09* Lucknow.
- [3]. The Hindu “*Microfinance, Macro challenges*” dt.01-11-2010
- [4]. Business Line “*Microfinance on test*” October 18, 2010.
- [5]. The Hindu “*Microfinance on severe stress*” November 1, 2010.

- [6]. Business Line “*Microfinance model to treat thalassemia patients*” dt. October 19, 2010.
- [7]. Jeyanthi Gayari R. 2002 “*SHGs in Kanyakumari District*” M.Phil dissertation- Alagappa University Karaikudi.
- [8]. Raj Mohan (2003) *Activities of SHGs In Virudhunagrs District- A study*. Tamilnadu Journal of Co-operation.
- [9]. Piyush Tiwari and S.M.Fahad (2006) “*Concept Paper- Microfinance Institutions in India*”
- [10]. Manimekalai N. and G. Rajeswari (2002) “*Gross Roots Entrepreneurship through self help group*” SEDMI Journal Vol.29.
- [11]. Impact of Microfinance- An empirical study on the attitude of SHG leaders in Vellore District.*Global Journal of Finance and management*. (2010) Volume 2 p.59.
- [12]. Government of India. Ministry of Agro and Rural Industries (2008) *Annual Report 2007-08*. New Delhi.

# **FINANCIAL PERFORMANCE ANALYSIS OF SELECTED SOFTWARE COMPANIES IN INDIA**

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## **1.1INTRODUCTION**

The Information technology industry consists of all software companies which provide software solutions to problems relating to business management namely production, marketing, finance and Human resource. Information technology has created a revolutionary change in the Indian economic scenario. Today software has come to stay as part and parcel of human life. The importance of software application was felt more after the globalization of the economy. This industry has created a revolution by employing large number of people, earning huge profit and joining the club of Multi National Corporations. The Indian software companies hold the distinction of advancing the country into the new-age economy. The growth momentum attained by the overall economy since the late 1990s to a great extent can be owed to the Information Technology sector, well supported by a liberalized policy regime with reduction in telecommunication cost and import duties on hardware and software. Today, India is the world leader in information technology and business outsourcing.

## **1.2STATEMENTOFTHEPROBLEM**

In recent years, Information technology industry has come to occupy a major chunk of the corporate sector. From the day of economic liberalization till recent days, India's information technology industry has registered a phenomenal growth in terms of numerical strength of software companies as well as investors. The industry contributes a lion's share to the growth of the corporate sector in terms of employment generation, revenue and entrepreneurial skills. Its amazing performance resulting in high rate of return to investors has attracted investors from within and abroad. Foreign Direct Investment and Foreign Institutional Investments have increased considerably in Information Technology industry. Indian software companies cater to the software requirements directly and through Business Process Outsourcing. As a result the country has become a knowledge centre of the world. So much so, the industry has made new rich class businessmen in a few years.

This situation raises the following issues :

- (1) Is the performance of Indian software companies sustainable?
- (2) Do all the software companies in India perform equally well?
- (3) If not, how are they different from others in terms of performance?
- (4) What are the factors influencing their performance?
- (5) Are the software companies investment worthy?

The present study will find the answers to the above questions apart from giving policy implications for the betterment of software companies in India.

## **1.3OBJECTIVESOFTHESTUDY**

1. To evaluate the overall financial performance of selected software companies in India.
2. To analyse the determinants of the Operational Efficiency of all the selected companies using Step wise Multiple Regression model.

## **1.4SIGNIFICANCEOFTHESTUDY**

The Indian software industry has been the growth engine of the Indian economy. Hence the benefits of the present study are varied. It would help the management to understand the strengths and weakness of a company. It would help the policy makers to decide on policy implications. It would be useful to the creditors in assessing the credit worthiness of a company to grant credit. The study will benefit the investors in making better investment decisions. The results of the financial analysis are also useful to the bankers, employees, researchers, academicians, customers and public in knowing the financial condition of the companies.



## 1.5 METHODOLOGY

### 1.5.1 Sampling design

The study is confined to the Indian Software Industry. The data for the study have been collected mainly from the Prowess database. From the total population of 396 software companies, the sample companies were selected based on the following criteria:

- (1) The company should have been listed with any of the stock exchanges in India.
- (2) The companies which have the required financial data for a continuous period of 10 years (1997-98 to 2006-07) have been selected, as the study has used 10 years data for the analysis. The companies for which the data was not available for one or more than one year in between or in the beginning or at the end of the study period have been ignored.

65 companies which satisfied the above conditions were selected as sample for the study.

### 1.5.2 Sources of data

The data required for the study is secondary in nature. The main source of the data for the present study is the Prowess database of the Centre for Monitoring Indian Economy and Capital line plus corporate database. Other sources of data were annual published reports of the companies, The Reserve Bank of India Bulletin, Annual survey of industries, Bombay Stock Exchange official Directory, C M I E monthly review of the Indian Economy and yearly reports on corporate sector, Kothari Industrial year book, Coimbatore Stock Exchange, Libraries of various institutions, Research publications, Dailies and periodicals such as Economic times, Financial Express, Business Standard, Dalal street, Capital Market, Business World, Business India, Business today and various news papers. Editing, classification, and tabulation of the financial data collected from the above mentioned sources have been done as per the requirements of the study.

### 1.5.3 Period of study

The period of study has been confined to one decade, from 1<sup>st</sup> April 1997 to 31<sup>st</sup> March 2007.

## 1.6 HYPOTHESIS

There is no significant influence of the independent variables on the Operating Profit

### 1.7 LIST OF COMPANIES SELECTED FOR THE STUDY

**Table 1** displays the list of selected companies along with their classification details.

**Table 1 : List of selected companies**

S.No	Company Name	Abbreviation for the name
1	Ace Software Exports Ltd	ASE
2	Aftek Infosys Ltd.	AIL
3	Asian CERC Information Technology Ltd	ACI
4	ASM Technologies Ltd	ASM
5	B2B Software Technologies Ltd	B2B
6	California Software Company Ltd	CSC
7	Choksh Infotech Ltd	CHK
8	Clio Infotech Ltd	CLI
9	CMC Ltd	CMC
10	Computech International Ltd	CIL
11	Cranes Software International Ltd	CRA
12	Cybertech Systems And Software Ltd	CSS
13	Dynacons Systems & Solutions Ltd	DSS
14	Financial Technologies (India) Ltd	FTL
15	Geometric Software Solutions Company Ltd	GSS

16	Goldstone Technologies Ltd	GLD
17	GTL Ltd	GTL
18	Hexaware Technologies Ltd	HEX
19	Hinduja TMT Ltd	HIN
20	IEC Softwares Ltd	IEC
21	ICSA ( India) Ltd	ICS
22	I-Flex Solutions Ltd	IFX
23	Infosys Technologies Ltd	IFY
24	Infotech Enterprises Ltd	IEL
25	Interworld Digital Ltd	IWD
26	Jetking Infortrain Ltd	JET
27	Lee & Nee Softwares (Exports) Ltd	LEE
28	Libord Infotech Ltd	LIB
29	Maars Software International Ltd	MAA
30	Magnum Ltd	MAG
31	Mangalya Soft-Tech Ltd	MAN
32	Mastek Ltd	MAS
33	Melstar Information Technologies Ltd	MIT
34	Millennium Cybertech Ltd	MIL
35	Mindtech (India) Ltd	MIN
36	Mphasis Ltd	MPH
37	Nettlinx Ltd	NET
38	Nucleus Netsoft GIS (India) Ltd	NNG
39	Nucleus Software Exports Ltd	NSE
40	Odyssey Technologies Ltd	ODY
41	Omega Interactive Technologies Ltd	OIT
42	Onward Technologies Ltd	ONW
43	Orient Information Technology Ltd	ORI
44	Panoramic Universal Ltd	PAN
45	Pentasoftware Technologies Ltd	PEN
46	Polaris Software Lab Ltd	POL
47	PVP Ventures Ltd(SSi Ltd)	PVP
48	RS Software India Ltd	RSS
49	Ram Informatics Ltd	RAM
50	Silverline Technologies Ltd	SIL
51	Sonata Software Ltd	SON
52	Svam Softwares Ltd	SVM
53	Synergy Log-In Systems Ltd	SYN
54	Tata Elxsi Ltd	TEL
55	Tech Mahindra Ltd	TML
56	Tera Software Ltd	TER

57	Trigyn Technologies Ltd	TRY
58	Twinstar Software Exports Ltd	TWN
59	Vakrangee Softwares Ltd	VAK
60	VMF Soft Tech Ltd	VMF
61	Watson Software Ltd	WAT
62	Wipro Ltd	WIP
63	Women Networks Ltd	WOM
64	Zensar Technologies Ltd	ZEN
65	Zigma Software Ltd	ZIG

### 1.8 STATISTICAL TOOLS

The Statistical tools used for the data analysis are

1. Summary Statistics (Mean, Standard deviation(S.D), Variance)
2. Step wise Regression model

### 1.9 SCOPE OF THE STUDY

The scope of the study is wider in nature. The study aims to make an analysis on the overall financial and operational efficiency of the selected software companies during the specific period based on selected financial variables representing liquidity, profitability, stability and turnover aspects of the companies. The study will bring to light certain factors influencing financial performance. The study aims at identifying the problems and prospects of the Indian software industry.

### 1.10 LIMITATIONS

The study has the following limitations :

1. Data used for the analysis is secondary in nature and it has been taken from the financial statements. Hence the study incorporates all the limitations that are inherent in the condensed published financial statements.
2. The findings cannot be generalized as the study is limited to selected 65 companies only.

While comparing the performances, industry structure, competitiveness and entry

### 1.11 ANALYSIS AND INTERPRETATION

Financial ratio analysis has been used as a yardstick for evaluating the corporate financial condition and performance. Analysis and interpretation of various accounting ratios gives skilled and experienced analyst a better understanding of the financial status of the firm.

Table 1.11.1 gives the details of the ratios selected for analyzing the financial performance. These ratios were selected on the basis of their proven performance in earlier studies. Further, the ratios are classified into various categories such as Liquidity, Stability, Turnover, Coverage, Share related and Profitability so that it covers the overall financial performance of the selected companies. Table 1.11.2 gives the results of the ratios for all the ten years covered during the period of the study.

Table 1.11.3 gives the summary statistics of the selected ratios followed by the interpretations. The table includes the computed mean values (industrial average) and the standard deviations of the selected companies. The ratio values of the companies are compared with that of the industrial average to get a better understanding about the industry's performance. To find out the variability of these ratios the coefficient of variations were computed and appropriate interpretations have been made.

Among the various measures of financial performance, profitability plays a very important role. Hence, at the end of this chapter an attempt has been made to identify the variables that influence the corporate profitability i.e., the operational efficiency of the selected software companies. For this, the operating profit has been considered as the dependent variable. The independent variables which may have an influence on the operating profit have been identified

carefully after making a preliminary correlation analysis. Finally Net Sales, Networth, Current Liabilities, Long term debt, Total Fixed assets, Operating expenses, Net working capital, Employee cost and Retained earnings were selected as independent variables. Stepwise multiple regression analysis has been carried out to find out the influence of the independent variables on the operating profit and the results were appropriately interpreted.

**Table 1.11.1 : Ratio variables used for measuring the financial performance**

S.No	Category	Ratio	Abbreviation used for further analysis
1	I. Liquidity Ratios	Current Ratio	CR
2		Liquid Ratio	LR
3	II. Stability Ratios	Debt equity Ratio	DER
4		Net Worth to Fixed Assets ratio	NW/FA
5		Net Worth / Total Assets ratio	NW/TA
6		Total Outsider's Liabilities / Net Worth	TOL/NW
7		Proprietary Ratio	PR
8	III Coverage Ratios	Interest Coverage Ratio	ICR
9	IV. Turnover Ratios	Debtors Turnover Ratio	DTR
10		Current Assets Turnover Ratio	CATR
11		Total Assets Turnover Ratio	TATR
12		Net Sales / Fixed assets	FATR
13		Net Sales to Net Worth ratio	NS/NW
14		Working Capital Turnover Ratio	WCTR
15	V. Share related Ratios	Price Earning Multiple or ratio	PER
16		Earnings Per Share	EPS
17		Market Price Per Share	MPS
18	VI. Profitability Ratios	Return on Shareholder's funds	ROSH
19		Return on Net Worth	RONW
20		Return on Total Assets	ROTA
21		Earnings Before Interest and Tax/ Net Sales	EBIT / NS
22		Net Profit after Tax / Net Sales	NP/NS
23		Dividend Payout ratio	DPR
24		Return on Investment	ROI

The computed ratios are shown in tables 1.11.2 and 1.11.3 followed by the interpretations on various financial parameters that describes the financial performance.

**Table 1.11.2 : Results of the financial performance measured by selected ratios during the period 1998-2007 (in absolute terms)**

RATIO	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
CR	6.887	8.612	8.7	7.351	8.664	6.786	8.746	8.4	9.029	8.993
LR	6.013	7.505	8.42	6.613	8.331	7.336	8.447	8.602	8.999	8.67
DER	1.024	0.539	0.131	0.126	0.156	-0.033	0.203	0.185	0.178	0.273
NW/FA	6.874	5.255	6.108	5.504	4.063	3.743	3.754	6.834	4.65	4.189
NW/TA	0.704	0.595	1.358	1.026	0.792	0.834	0.851	0.844	0.889	0.971
TOL/NW	2.099	1.613	1.195	1.198	1.229	1.087	1.299	1.27	1.236	1.433
PR	0.733	0.84	0.956	0.919	0.925	0.925	0.893	0.877	0.852	0.825
ICR	20.36	59.41	33.94	91.26	435	15.43	59.93	91.76	236.2	193.8
DTR	3.335	3.135	2.746	3.426	2.776	3.311	2.647	3.126	3.207	3.333
CATR	1.38	1.192	1.109	1.39	1.195	1.368	1.258	1.521	1.491	1.409
TATR	1.121	1.015	1.119	0.923	0.685	0.682	0.674	0.742	0.83	0.795
FATR	3.624	4.44	6.578	4.645	3.323	3.604	4.268	4.838	6.252	4.817
NS/NW	2.478	1.608	1.403	1.198	0.939	0.475	0.756	0.827	0.788	1.189
WCTR	2.757	2.995	4.184	1.817	-0.03	2.67	2.546	3.378	3.928	1.571
PER	40.27	103.8	411.4	34.95	23.33	15.76	25.25	30.55	40.37	56.34
EPS	6.48	8.67	10.06	11.66	8.87	8.29	7.97	6.43	6.64	13.68
MPS	140.6	406.5	308.2	155.6	181.5	207.3	139.1	168.8	200.2	266.7
RONW	0.237	0.186	0.16	0.144	0.447	0.484	0.202	0.164	0.386	0.229
ROSH	0.142	0.212	0.244	0.153	0.635	-0.393	0.018	0.106	0.064	0.108
ROTA	0.359	0.634	0.786	0.236	3.024	-0.106	0.162	0.227	0.172	0.134
EBIT / NS	-0.16	0.759	1.273	-0.06	0.119	-0.99	-0.32	0.938	-0.72	0.442
NPAT/NS	0.427	0.098	1.04	0.115	0.439	1.085	0.527	0.392	0.094	0.599
DPR	0.281	0.281	0.3	0.196	0.134	-0.082	0.058	0.134	0.111	0.147
ROI	0.127	0.163	0.176	0.144	0.071	-0.092	0.059	0.494	0.752	0.163

**Table 1.11.3 : Analysis of financial performance based on the results of the selected 24 ratios (in absolute terms)**

RATIO	Min	Max	Industrial Average	S.D	C.V	<IA*		> IA	
CR	6.786	9.029	8.217	0.865	10.53	45	69.2	20	30.8
LR	6.013	8.999	7.894	0.985	12.48	49	75.4	16	24.6
DER	-0.033	1.024	0.278	0.299	107.51	44	67.7	21	32.3
NW/FA	3.743	6.874	5.097	1.207	23.68	50	76.9	15	23.1
NW/TA	0.595	1.358	0.886	0.206	23.24	35	53.8	30	46.2
TOL/NW	1.087	2.099	1.366	0.296	21.66	43	66.2	22	33.8
PR	0.733	0.956	0.875	0.065	7.45	35	53.8	30	46.2

ICR	15.43	434.97	123.71	131.3	106.15	34	52.3	31	47.7
DTR	2.647	3.426	3.104	0.281	9.04	36	55.4	29	44.6
CATR	1.109	1.521	1.331	0.136	10.25	39	60	26	40
TATR	0.674	1.121	0.859	0.176	20.51	46	70.8	19	29.2
FATR	3.323	6.578	4.639	1.077	23.22	45	69.2	20	30.8
NS/NW	0.475	2.478	1.166	0.571	48.92	46	70.8	19	29.2
WCTR	-0.029	4.184	2.582	1.231	47.7	33	50.7	32	49.2
PER	15.76	411.4	78.21	119.7	153.02	30	46.1	35	53.8
EPS	6.43	13.68	8.88	2.36	26.6	36	55.4	29	44.6
MPS	139.07	406.5	217.44	85.85	39.48	48	73.8	17	26.2
RONW	0.144	0.484	0.264	0.126	47.95	41	63	24	36.9
ROSH	-0.393	0.635	0.129	0.251	194.7	40	61.5	25	30.7
ROTA	-0.106	3.024	0.563	0.902	160.22	45	69.2	20	1.5
EBIT / NS	-0.99	1.273	0.128	0.727	567.16	36	55.4	29	44.6
NPAT/NS	0.094	1.085	0.482	0.355	73.76	37	56.9	28	43.1
DPR	-0.082	0.3	0.156	0.117	74.75	45	69.2	20	30.8
ROI	-0.092	0.752	0.206	0.241	117.35	47	72.3	32	27.7

\* IA – Industrial Average

The interpretations of the computed ratios are discussed below to know the financial efficiency of the selected software companies.

#### 1.11.1 Analysis of the liquidity position of the selected software companies

The term liquidity means the extent of quick convertibility of the current assets into cash to meet out the short term obligations. These ratios are also termed as short-term solvency ratios or working capital ratios. A firm must have adequate working capital to run its day-to day operations. Inadequate working capital may lead the entire business operation to a grinding halt because of the inability of the firm to pay for its regular expenses.

##### (1) Analysis and Significance of Current Ratio (CR)

**Current ratio establishes the relationship between Current Assets and Current Liabilities.** From the table 1.11.3, it can be understood that there has been a wide variation in the current ratio among the selected companies. The current ratio has ranged between 6.786 and 9.029. Through out the study period, the current ratio is found to be more than the ideal norm. This confirms the strong liquidity position of the selected software companies. But very high values have indicated that the some of the selected companies have underutilized the current assets i.e., it indicates the idleness of current assets. A high industrial average of 8.217 has been observed among the selected companies. However majority (45 companies, 69.2%) of the companies have shown a lower ratio than the industrial average. A low standard deviation of 0.865 and a coefficient of variation of 10.53 % indicate that there is high level of consistency among the selected companies.

##### (2) Analysis and Significance of Liquid Ratio (LR)

**Quick ratio explains the relationship between the quick / liquid assets and the current liabilities.** The table 1.11.3 shows that the quick ratio has ranged between 6.013 and 8.999 indicating a very good liquidity position of the companies. A high industrial average of 7.894 has been observed in small group of companies. Nearly 49(75.4%) companies are having a ratio lower than the industrial average and 16(24.6%) of the companies are having values more



than the industrial average. If there is wide variation between the current ratio and liquid ratio, it indicates overstocking by the concern. It is clear from the above table that the current ratio and liquid ratio are in the same range which indicates that there were no such overstocking of inventory. The consistency among the selected companies has been proved by a very low standard deviation of 0.985 and a co-efficient of variation of 12.48%.

### **1.11.2. Analysis of the long term solvency position of the selected software companies**

Long term solvency can be measured by stability ratios. These ratios are also called as solvency ratios or leverage or capital structure ratios. Solvency indicates the sound financial position of a firm to carry on its business smoothly. These ratios are used to find out the capacity of the companies to meet its long term obligations. Long term liabilities include debenture, long-term loans and long term creditors. Some of the important stability ratios are discussed below:

#### **(1) Analysis and Significance of Debt Equity Ratio (DER)**

Debt equity ratio is computed by dividing the Total long term debt by Share holder's funds. The debt-equity ratio is determined to ascertain the soundness of the long-term financial policies of the company. It is also known as "External –Internal" equity ratio. From the table 1.11.3, it can be inferred that the debt equity ratio values range between - 0.033 and 1.024. An industrial average of 0.278 has been recorded. Nearly 44(67.7%) companies have registered values less than the industrial average and 21(32.3%) companies have registered ratios higher than the industrial average. This indicates that majority of the selected companies are trading on equity. i.e., the companies make use of their own funds rather than borrowed funds. A very high coefficient of variation of 107.51 % explains the high level of inconsistency among the selected companies during the study period.

#### **(2) Analysis and Significance of Net Worth to Fixed Assets ratio (NW/FA)**

**It explains the relationship between Net worth and Fixed assets.** From the table 1.11.3, the industrial average of this ratio has been found to be 5.097. This indicates that all fixed assets are financed through owner's funds. The minimum and the maximum values of the ratio are 3.743 and 6.874 respectively. This indicates that the companies have used owners funds to finance the fixed assets. So the solvency position of the selected companies has been found to be good. This ratio is an important one because it helps the companies to know about the sources of financing the fixed assets. A low coefficient of variation of 23.68% and a low standard deviation of 1.207 observed among the companies proves their high degree of consistency over the study period.

#### **(3) Analysis and Significance of Net Worth / Total Assets ratio (NW/TA)**

**It is computed by dividing the Net worth by Total assets.** Table 1.11.3 shows that the Networth to Total Assets ratio range between 0.595 and 1.358. This indicates that the major portions of the total assets are financed by owners funds. The companies are not dependent on the outsider's funds. An industrial average of 0.886 is observed among the companies. This indicates the efficiency of the companies in managing their fixed assets. 46.2% of the companies have recorded values more than the industrial average. A very low coefficient of variation of 23.24% has been observed among the companies which illustrates a high level of consistency among the selected companies.

#### **(4) Analysis and Significance of Total Outsider's Liabilities / Net Worth (TOL/NW)**

**It is computed by dividing Total Outsider's Liabilities by Net worth.** This ratio has negative correlation with earnings i.e. higher ratios lead to lower earnings. From the table 1.11.3, it can be observed that the TOL / NW ratio range between 1.087 and 2.099. This implies that the selected companies rely more on their own funds and are not dependent on the outsiders funds to a greater extent. An industrial average of 1.366 has been recorded and this confirms that the companies have effectively managed their business without much leverage. Nearly 22(33.8%) companies have managed without much of the borrowed funds. A low standard deviation of 0.296 and a coefficient of variation of 21.66% explain the consistency of the selected companies over the study period.

#### **(5) Analysis and Significance of Proprietary Ratio**

**It is computed by dividing Total Shareholder's Funds by Total Assets.** The table 1.11.3 shows that the proprietary ratio ranges between 0.733 and 0.956. As the minimum value (73.3 %) and the maximum value (95.6%) are more than 50%, the situation is not alarming. The industrial average of the selected companies has been 0.875. This again vouches for the protection of creditors. 35(53.8%) companies fall below the industrial average and 30 (46.2%) companies have registered values more than the industrial average.

### 1.11.3 Analysis of the coverage ability of the selected software companies

The coverage ability of the selected companies can be found out with the help of coverage ratios. These ratios indicate the extent to which the interests of the persons entitled to get a fixed return (interest, dividend) or a scheduled repayment as per the agreed terms are safe. The higher the coverage, better it is. The coverage ratio used in this study is given below:

#### (1) Analysis and Significance of Interest Coverage Ratio (ICR)

**This is computed by using the formula: Earnings before interest and tax / Interest.** From the table 1.11.3, it can be observed that the Interest coverage ratio of the selected group of companies range between 15.43 and 434.97. This indicates that the earnings of the selected groups are sufficient enough to meet out the interest liabilities i.e., the ability of the companies to pay the contractual interest payments is very high. In general, this ratio is used to find out whether the borrowing policy has an influence on the earnings or not. This ratio is also having a significant role in finding out the imbalances, if any, in the capital structure. A very low ratio says that the company cannot meet out the interest liability which in turn leads to sickness. A high industrial average of 123.71 has been observed and this shows that the selected companies are capable of repaying the interest without any difficulty. But a high degree of inconsistency has been inferred from the high values of standard deviation (131.32) and coefficient of variation (106.15%). This implies that there exists wide variation in the borrowing policies of the selected companies or the financial structure of the selected companies may have lot of variations.

### 1.11.4. Analysis of the turnover efficiency of the selected companies

These ratios are also called as Activity ratios. Turnover means the number of times the assets are converted or turned over into sales. These ratios indicate the efficiency with which the capital employed is rotated in the business. The financial performance of the business depends on two factors viz., rate of return on capital employed and turnover i.e., the speed at which capital employed in the business rotates. Higher the rotation, the greater will be the profitability.

#### (1) Analysis and Significance of Debtors Turnover Ratio (DTR)

**It is computed by dividing Net Sales by Debtors.** It can be observed from the table 1.11.3, that the Debtor's turnover ratio ranges between 2.647 and 3.426. A high ratio indicates that the firms are more efficient in managing the receivables and vice versa. The companies have registered an industrial average of 3.104 and this indicates that the debtors are turned over 3 times within a year. 36 (55.4%) companies have registered values lower than the industrial average. High degree of consistency has been observed from the lower values of standard deviation of 0.284 and coefficient of variation of 9.04%.

#### (2) Analysis and Significance of Current Assets Turnover Ratio (CATR)

**This is computed by using the formula: Net Sales / Current Assets.** It can be inferred from the table 1.11.3 that current assets turnover ratio ranges between a minimum value of 1.109 and a maximum value of 1.521 for the study period. A high ratio indicates optimum utilization of the current assets whereas a low ratio means the companies are not making maximum use of the current assets. An industrial average of 1.331 has been observed among the selected companies. Nearly 26 (40%) companies fall above the industrial average category. This shows that the companies managed their current assets very effectively.

#### (3) Analysis and Significance of Total Assets Turnover Ratio (TATR)

**It explains the relationship between Net Sales and Total Assets.** From the table 1.11.3, it can be observed that the total assets turnover ratio ranges between 0.674 and 1.121. The minimum value is 0.674 which indicates that the some of the selected companies are not making the maximum utilization of their fixed assets. It has been found that the industrial average has recorded a value of 0.859. Majority (70.8%) of the companies have recorded a lower ratio than the industrial average. On the other hand 29.2 % of the companies have registered above industry average. The performance of the selected companies with regard to this ratio is highly consistent and this has been revealed by a very low standard deviation and coefficient of variation of 0.176 and 20.51% respectively.

#### (4) Analysis and Significance of Net Sales to Fixed Assets (NS/FA)

**It is the relationship between Net Sales and Fixed assets.** A high ratio of net sales to fixed assets will indicate higher efficiency in the use of fixed assets. A low ratio is indication of under utilization of fixed assets. It can be observed from the table 1.11.3, that the Net Sales to Fixed assets ratio ranges between a minimum and a maximum value of 3.323 and 6.578 respectively. An industrial average of 4.639 has been observed among the selected companies. This indicates

favourable performance of the companies. 45 companies have registered a lower value than industrial average and 20 companies registered higher values than the industrial average

#### **(5) Analysis and Significance of Net Sales to Net Worth ratio (NS/NW)**

**It explains the relationship between Net Sales and Net Worth.** This ratio indicates the utilisation of owner's funds in generating sales. From the table 1.11.3, it can be inferred that the range of the Net Sales / Net Worth is between 0.475 and 2.478. The industrial average has been 1.166 and this indicates that the funds invested generate 1.166 times of Sales. This means that the companies have effectively converted their funds into sales. A high coefficient of variation of 48.92 indicates that the selected companies are highly inconsistent with respect to this ratio. This ratio has significant relationship with profitability. i.e., higher the ratio more is the profitability of the companies.

#### **(6) Analysis and Significance of Working Capital Turnover Ratio (WCTR)**

This is also known as working Capital Leverage ratio. **The ratio is computed by using the formula: Net Sales / Working capital.** From the table, 1.11.3 it has been observed that the Working Capital Turnover ratio ranges between a negative value of -0.029 and 4.184. The industrial average has been 2.582. 32 companies fall above the industrial average category which indicates that the companies are managing their working capital effectively. The remaining companies have registered values less than the industrial average. A high coefficient of correlation of 47.7% indicates that the companies are highly inconsistent during the study period.

#### **1.11.5. Analysis of the Share related performance of the selected software companies**

The share or the market related metrics help to assess the performance of the companies in the market. These ratios are of specific importance to the shareholders as they are interested in assessing the performance of the companies to make decisions related to their investment in the company's shares. The following are some of the share related ratios:

##### **(1) Analysis and Significance of Price Earning Ratio (PER)**

**Price earning ratio is the ratio between the Market Price per share and Earnings per share.** It can be inferred from the table 1.11.3, that the Price Earning ratio range between 15.76 and 411.42. This indicates that the investors expect future earnings to stabilize when compared to current level. The Price earning ratios are higher for firms with sound financial prospects other things held constant. A high industrial average of 78.21 indicates that the selected companies are financially sound. It means that market value of every one rupee of earning is 78.21 times or Rs.78.21. 35 companies have registered more than the industrial average and 30 companies have recorded values less than the industrial average. A high coefficient of variation of 153.02 shows the high level of inconsistency among the selected software companies over the study period.

##### **(2) Analysis and Significance of Earning Per Share (EPS)**

**This is calculated as follows: Net Profit after Tax and Preference Dividend / Number of equity shares.** It can be observed from the table 1.11.3 that the Earnings per share range between 6.43 and 13.68. An industrial average of 8.880 indicates that the companies have stable earnings on per share basis over the study period. The coefficient of variation of 26.6% indicates that the selected companies are consistent in their performance over the study period.

##### **(3) Analysis and Significance of Market Price per Share (MPS).**

**This is the quoted market price of the share.** It can be observed from the table 1.11.3 that the Market Price per Share ranges between a minimum value of 139.07 and a maximum value of 406.5. The Market price per share indicates the investors expectation about that particular firm. It can be inferred from the table that the standard deviation (85.9) and coefficient of variation (39.48%) values are high. This indicates that the inconsistency level is high with regard to this ratio among the selected companies. The industrial average has been 217.4. This indicates that the companies have shown good performance in the market.

#### **1.11.6. Analysis of the profitability position of the selected software companies.**

Profitability of the companies can be analysed with the help of profitability ratios. The term profitability means the earning capacity of any business activity. Profitability ratios are used to measure the overall efficiency or financial performance of a business. Higher the profits, more is the financial and operating efficiency of the companies. Some of the important profitability ratios are discussed below:

**(1) Analysis and Significance of Return on NetWorth (RONW)**

It is also called as Return on Equity. Return on Networth indicates how well the company has used the resources and **it is calculated as: Net Profit after Tax / Networth**. From the Table 1.11.3, it can be inferred that the Return on Net worth range between 0.144(14.4%) and 0.484 (48.4%). This shows that the selected companies are having favourable performance over the study period. An industrial average of 0.264 has been observed which indicates that the companies are making an average return of 26.4 % over the study period. But Majority (41) of the companies have registered values less than the Industrial average which indicates that majority of the companies are having less than the average performance. Moreover the coefficient of variation of 47.95 proves the inconsistency of the performance over the study period.

**(2) Analysis and Significance of Return on Shareholder's funds (ROSH)**

**This ratio is calculated by using the formula: Net Profit after Interest and Tax / Total Shareholder's funds.** Table 1.11.3 presents the minimum value and the maximum value of Return on shareholders fund as - 0.393 and 0.635 respectively. The Industrial average has been 0.129. Majority of the companies are having values less than the industrial average. The coefficient of variation is 194.7 %. This shows that the companies are highly inconsistent.

**(3) Analysis and Significance of Return on Total Assets (ROTA)**

**Total assets turnover examines the relationship between the Net Profit after tax / Total assets.** It is observed from the table 1.11.3, that the highest value of Return on total assets is 3.024 and the lowest value is a loss of -0.106 among the selected companies. The coefficient of variation is 160.22. This indicates that there is high level of inconsistency among the selected companies. The Industrial average has been 0.563 and majorities (69.2%) of the companies have registered values less than industrial average.

**(4) Analysis and Significance of EBIT/ Net Sales (EBIT/NS)**

**This is computed by using the formula: Earnings Before Interest and Taxation / Sales.** From the table 1.11.3, it can be observed that the minimum, maximum and the industrial average of this ratio are -0.99, 1.273 and 0.128 respectively. The Coefficient of variation is 567.16% which illustrates that the sample companies are highly inconsistent over the study period. Further, majority of the selected companies have shown below average performance.

**(5) Analysis and Significance of Net Profit after Tax / Net Sales (NPAT/NS)**

**This ratio is expressed as the relationship between Net Profit after tax and Net Sales.** From the table 1.11.3, it can be observed that the minimum and the maximum values are 0.094 and 1.085 respectively. The Industrial average has been found to be 0.482. 43 % of the companies have shown values higher than the Industrial average. The selected companies have shown high level of inconsistency. This has been confirmed by a Coefficient of variation of 73.76%.

**(6) Analysis and Significance of Dividend Payout Ratio (DPR)**

This ratio indicates that proportion of the Earning Per Share which has been used for paying the dividend. **The ratio can be calculated as:**

$$\text{Dividend Payout ratio} = \frac{\text{Dividend per Equity Share}}{\text{Earning per Equity Share}}$$

The table 1.11.3 presents the minimum and maximum value as -0.082 and 0.3 respectively. The Industrial average has been 0.156. But majority of the companies have shown below average values. This indicates that only few companies have distributed their profits as dividend to the share holders. The companies are highly inconsistent with a high coefficient of variation of 74.75%.

**(7) Analysis and Significance of Return on Investment (ROI)**

It is also called as overall profitability ratio or Return on Capital Employed. **It is computed by (Net Operating Profit before Interest and Taxation / Total capital employed).** It is observed from the table 1.11.3, that ROI ranges between a minimum value of -0.092 and a maximum value of 0.752 among the selected companies over the study period. The industrial average has been found to be 0.206. 47 companies have registered below average performance. The companies are highly inconsistent with a high coefficient of variation of 117.35%.

### 1.11.7. Analysis of the determinants of the Operational Efficiency of all the selected companies using Step wise Multiple Regression model.

Profitability is an indication of the operational efficiency with which the operations of the business are carried on. It is the major contributor to the financial performance of a company or industry. If the rate of return is high then it can be concluded that the firm has effectively managed its finance and vice versa. Poor operational performance may indicate poor sales and hence poor profits. A lower profitability may arise due to the lack of control over the expenses. Owners, Bankers, financial institutions, investors, creditors and other interested parties look at the profitability ratios as an indicator of the firm's earning potentiality. So, it may be useful to analyse the variables influencing the ROI.

ROI is measured by dividing Earnings before Interest and Tax by Total Capital employed. EBIT is the excess of the firm's operating revenues over its operating expenses. It is also termed as Operating Profit since it represents the operating income of the business. Operating profit explains the company's financial strength i.e., the company's ability to meet out its interest and tax liabilities. Moreover, it indicates the operational efficiency and earnings power of the companies. The more the Operating profit, better is the performance of the companies i.e. ROI will be higher for companies which have huge amount of Operating Profit (Earnings before interest and tax).

This part of the analysis has been performed to identify the variables that influence the profitability position of the selected software companies. Hence, in order to identify the variables which influence the ROI, Step Wise Multiple Regression analysis has been performed. Operating Profit (EBIT) has been taken as the dependent variable. After making an initial correlation analysis, nine independent variables capable of influencing the ROI were identified. They are Net Sales, Total Assets, Current Assets, Current Liabilities, Long term debt, Fixed assets, Operating expenses, Net working capital, Employee cost and Retained earnings. Based on the F value of the model the significance of these variables were tested and reported. The results of the regression analysis has been displayed in table 4.1.4. To ascertain the relationship between the operating profit and its determinants, the following Null Hypothesis ( $H_0$ ) has been constructed.

#### Null Hypothesis ( $H_0$ )

There is no significant influence of the independent variables on the Operating Profit (EBIT)

#### Alternate Hypothesis ( $H_a$ )

There is significant influence of the independent variables on the Operating Profit (EBIT)

**Table 1.11.4 : Regression Analysis for all the selected companies Dependent Variable: EBIT**

	B	Std. Error	t	Sig.	Correlations
(Constant)	1.830	3.475			
Net sales	0.06702	.032	2.122	*	.952
Net worth	-.427	.099	-4.314	**	.949
Current Liabilities	-0.06754	.055	-1.235	Ns	.881
Long term debt	-.136	.068	-2.010	*	.107
Total fixed assets	-0.0480	.033	-1.457	Ns	.879
Operating Expenses (Selling & Admin.)	.162	.077	2.116	*	.810
Net Working Capital	.127	.025	5.152	**	.879
Employee Cost	.267	.047	5.686	**	.952
Retained Earnings	.521	.103	5.042	**	.952

R	R Square	F	Sig.
0.968	.938	1058.659	**

\*, \*\* Significance at 5% and 1% level respectively



Table 4.1.4 examines the determinants of operating profit for all the selected companies. From the table 4.1.4, it can be observed that the multiple correlation values and the  $R^2$  values are high and the model has been proved to be significant. The multiple correlation and the  $R^2$  values has been 0.968 and 0.938 respectively. The model explains 93.8% variations in its operating profit (EBIT). It indicates that there is a strong relationship between the dependent variable operating profit (EBIT) and the independent variables taken together. Both positive and negative values of regression coefficient have been observed. The 'F' ratio, with its value 1058.659 shows that the regression model with the simultaneous effect of all the independent variables is statistically significant at one percent level.

The 't' values reveal that Net Sales, long term debt and Operating Expenses influence operating profit (EBIT) at 5% level of significance. Whereas Net Worth, Net Working Capital, Employee Cost, Retained Earnings influence operating profit (EBIT) at 1% level of significance. Moreover Current liabilities and Fixed Assets do not have significant influence on operating profit (EBIT). As the 'F' ratio proves that the regression model is statistically significant, the null hypothesis is rejected.

#### 4.1.12 CONCLUSION

The above ratio analysis has been performed for the selected 65 software companies and the summary statistics has been analysed to find out the overall financial performance. The results of the analysis show that above analysis shows that some of the selected ratios have shown inconsistent performance in liquidity, solvency, efficiency, coverage, share related and profitability ratios. DER, ICR, PER, ROSH, ROTA, EBIT/NS, NPAT/NS, DPR, ROI have exhibited inconsistency whereas all the other ratios have exhibited consistency throughout the study period.

All the selected sample companies have been considered for the analysis i.e., Size wise classification has not been done before performing the ratio analysis and this may be one of the reason for the inconsistency of some of the ratios as size may be one of the factor that influences the financial performance. Another important reason for the inconsistency may be the financial policies followed by the companies i.e. the selected companies have followed different financial policies.

With the help of Multiple Regression analysis, it has been found that the Return on Investment of the selected companies has been influenced by the variables like Net Sales, long term debt, Operating Expenses, Net Worth, Net Working Capital, Employee Cost, Retained Earnings influence operating profit. Moreover Current liabilities and Fixed Assets do not have significant influence on the operating profit.



# “ROLE OF BEHAVIOURAL FINANCE – A STUDY”

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## ABSTRACT

*This study aimed to provide a brief introduction to behavioral finance and this paper is motivated by the new tendencies of research in future. It provides good information's to the rational investors to functioning in efficient markets. There are two building blocks of behavioral finance that are one is cognitive psychology (how people think) and another one is the limits to arbitrage (when markets will be inefficient).*

**Keywords - Disposition effect, Decision making, Investor's Behaviour and Financial markets**

## 1.INTRODUCTION OF THE STUDY

Behavioral finance is a concept that has become widely popular in recent years. Even though the concept has just recently found its place in the literature, and it would not be wrong to say that behavioral finance has had its place in the subconscious of human since the time humans started to be engaged in Investment and consumption activities.

Behavioural finance focuses on how investor's interpret results in order to make investment decisions based on information and how they act with their investment decisions.

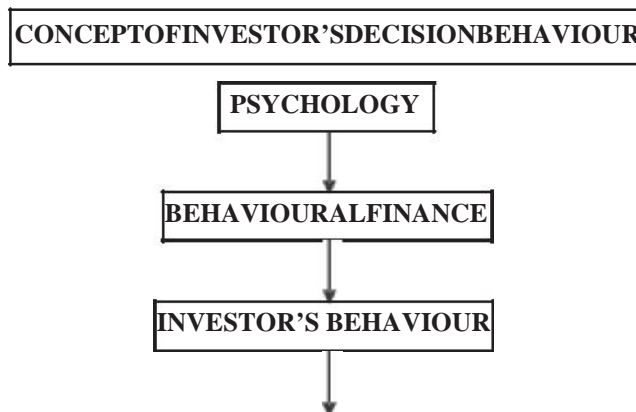
Behavioural finance has recently emerged in academic studies as a new paradigm to explain the anomalies found when empirically testing the efficient market hypothesis, but it has emerged so firmly it seems it is going to stay for a long; in fact; some waves of opinion point it out as a new discipline in the near future.

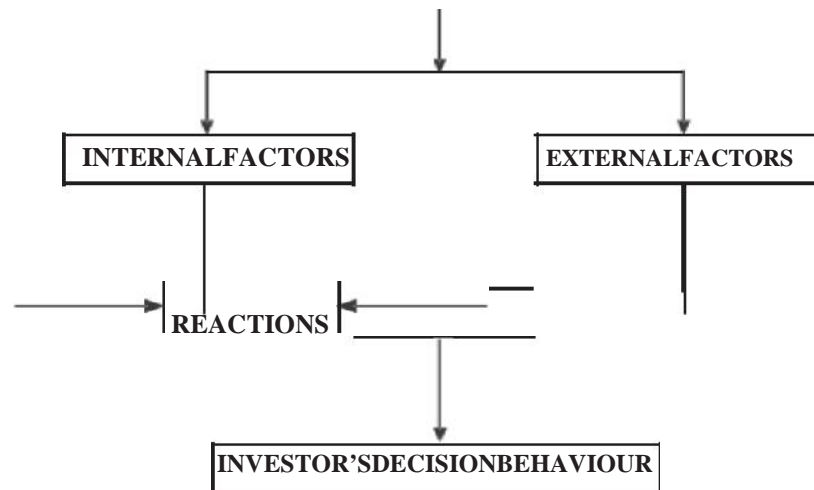
Behavioural finance is the new paradigm where financial markets are studied using models, and it is to study the influence of psychology on the behaviour of financial markets and investors. It is very interesting subject why because it helps, explain why and how markets might be inefficient.

In contrast, behavioural finance assumes that in some situations, financial markets are informationally inefficient. Not at all devaluations are caused by psychological biases, however and some of them due to temporary variations or changes in demand and supply.

Behavioural finance using models in which some middleman's are not fully rational, either because of their preferences and choices, example for assumption about preferences is that people are gain, loss and it will make people to feel better and worse, mistaken beliefs are due to people are bad Bayesians.

The concept of decision-behaviour as clearly indicated through following diagram.





The above diagram is clearly explained the decision behavior system of the investor and it is affected by both internal and external factors. So based on the reactions they will go for the decisions making process and reactions included both positive and negative factors.

## 2.OBJECTIVESOFTHESTUDY

To study the role of behavioral finance in the financial markets.

To identify the changing behavior of the people while taking decisions according to the cognitive psychologist. To study the decision behavior system of the investor's based on reactions.

To know the role or actions of the rational investor's in efficient markets in different situations.

If it is easy to take positions of the shares based on the situations that is selling overvalued shares or buying undervalued shares, and the wrong valuations are certain to be corrected over a short period, then arbitrageurs will take positions and to avoid these mispricing before they become large. But if it is difficult to take these positions, because of sales constraints, for instance, or if there is no guarantee that the mispricing will be corrected within a reasonable time, then arbitrage will fail to correct the mispricing indeed, arbitrageurs may even choose to avoid the mistakes where the mispricing is most severe, because the risks are too great.

On the other hand behavioral finance is comparing with the status of leading paradigm on par by means of neoclassical paradigm. But there are not long used while the study deals with mutual funds, trades by the clients of a single brokerage firm, huge contributions, they lack several aspects in market dynamics because the various investor groups behave in different situation of extreme potentiality to come out from stress. In the height of the above discussion, how the different classes of investors get decisions under different situations and how they route or process their information in the stock market.

In a modern world behavioural finance has building blocks in the efficient markets hypothesis. So EMH played major role in deciding the markets are rational. It argues that competition between investors seeking abnormal profit drives the prices to their correct value. The assumption of the EMH that all investors are not rational, but it assumes that markets are rational. It does not assume that markets can foresee the future, but it assumes that markets make unbiased forecast of the future.

## 3.COGNITIVEBIASES

Some of the patterns and procedures are indicated by cognitive psychologist regarding the behaviour of the people as follows.

### a) *Heuristics*

This type of decision system used by the investors to find things out of themselves usually by the trial and error method.

***b) Over - confidence***

There are so many dimensions to the confidence and it gives more braveness, and it is known as a benchmark to the success. People are over confident in their abilities and capabilities. They are having very cautious and analytical mind to solve difficult problems and to make successful decisions and others have to withdraw.

Investors have over-confidence in themselves and that they have to make their guess in between limits that are narrower than they are supposed to be.

***c) Mental Accounting***

It uses prospect theory to explain how individuals or investors and households are keep track their finances and investments. The peoples are mentally dividing their money according to their requirement that is food, rent, electricity, and entertaining etc.

Here mental accounting played vital role in the series of the day to day activities and money is not essential necessity between different mental accounts. So each people will try to avoid losses, and dividing them against gains.

***d) Disposition effect***

This refers to the method that people seeks to realize paper gains and to ignore the realize paper losses. This effect manifests itself number of small gains are realized and few small losses. In fact, people act as if they are trying to maximize their returns. They clearly had known the effects of stock trading volume. For example trading volume grows in the bull market and fall in the bear market due to systematic risk by the brokerage firms commission business.

They major drawback of the behavioural finance is that by selecting which bias to persist, one can predict either over reaction or under reactions of the market. This drawback is known as “Model dredging”.

***e) Representativeness***

The decision making tendency of the investors to make it based on the previous experiences is called as stereo type. The recent success of the investors tends to continue in to the future also. When equity returns have been high for many years, many people begin to believe that high equity returns are normal.

***f) Conservatism***

In this situation, when things are change, people might under react because of the conservatism bias, but they will take more time to possibly overreact. At that time of changing things when people are pick up on the changes slowly. In other words ‘anchor’ on one trait or piece of information when decision making and this is the situation that conservatism bias is at fight with the representativeness bias.

***g) Framing***

Framing is the important notion that how a concept is offered to individuals matters. For example, restaurants may advertise “early-bird” specials. They get more income through business if people feel they are getting a discount at low-peak times rather than paying a surcharge at peak periods, even if the prices are identical.

**4.LIMITATIONSOFTHEARBITRAGE**

Misevaluations of financial assets are common, except it is not easy to reliably make abnormal profits of these misevaluations. Why? Misevaluations are of two types: those that are recurrent or arbitrage able, and those that are no repeating and long-term in nature. For the repeated misevaluations, trading strategies can constantly make money. Since of this, hedge funds and others zero in on these, and keep them from ever getting too big. Thus, the market is attractive efficient for these assets, at least on a relative basis. For the long-term, no repeating misevaluations, it is impossible in real time to identify the peaks and troughs until they have passed. Getting in too early risks losses that wipe out capital. Even worse, if limited partners or other investors are supplying funds, withdrawals of capital after a behind streak may actually result in buying or selling force that exacerbates the inefficiency.

Presently who are these investors who create markets efficient? Well, one clear class of Investors who are trying to make money by identifying misevaluations is hedge funds. A Relative value hedge fund takes long and short positions, buying undervalued securities and then finding highly correlated securities that are overvalued, and shorting them. A macro hedge fund, on the other hand, takes speculative positions that cannot be easily hedged.

How well do efforts by arbitrageurs to make money work in practice at making markets more efficient? As Shleifer and Vishny argue in their 1997 "Limits to Arbitrage" article, the efforts of arbitrageurs to make money will make some markets more efficient, but they won't have any effect on other markets.

### 5.APPLICATIONSTOBEHAVIORALFINANCE

The behavioural finance discuss about the situation of IPO's are underpriced.

Prospect theory can be seen as feeling more stress in the case of loss than the happiness in the case of a possible return. Individuals tend to give a bigger weight to their losses than they do their gains and thus try to avoid risks. However, when a loss is incurred, they tend to become risk takers.

The tendency to avoid selling an investment that incurs losses in order not to feel any grief or pain and to have extreme self confidence regarding for which one has a certain degree of knowledge. This theory focuses on changes in wealth, where as expected utility theory focuses on the level of wealth. Gains and losses are measured relative to a reference point. Prospect theory also assumes loss aversion.

If an IPO's under priced, pre-issue stock holder are worse off because their wealth has been diluted.

### 6.SUMMARYANDCONCLUSIONS

It is very difficult to find trading strategies and techniques that reliably make the money. This does not insist that financial markets are informationally efficient; however, low frequency misevaluations may be large, without offering any opportunity to reliably make money. Most of these short sellers, who were right in the long run, were wiped out before the misevaluations started to disappear. Thus, the forces of arbitrage, which work well for high frequency events, work very poorly for low frequency events.

Behavioral finance is, relatively speaking, in its infancy. It is not a separate discipline, but instead will increasingly be part of mainstream finance. Behavioural financing decisions are entirely based on the EMH. If information's are effective investors always will take better decisions and if any cognitive bias in the information's their decision is not good.

### REFERENCES

1. Hirshleifer, David, 2001. "Investor psychology and asset pricing." *Journal of Finance* 56, 1533-1597.
2. Loughran, Tim, and Jay R. Ritter, 2002. "Why don't issuers get upset about leaving money on the table in IPOs?" *Review of Financial Studies* 15, 413-443.
3. Modigliani, Franco, and Richard Cohn, 1979. "Inflation, rational valuation and the market." *Financial Analysts Journal* 35, 24-44.
4. Siegel, Jeremy J., 1998. *Stocks for the Long Run, Second Edition* McGraw-Hill, New York.
5. Barber, Brad, and Terry Odean, 2001. "Boys will be boys: Gender, overconfidence, and common stock investment." *Quarterly Journal of Economics* 116, 261-292.
6. Barberis, Nicholas, and Richard Thaler, 2003. "A survey of behavioral finance." in G. Constantinides, M. Harris, and R. Stulz (editors) *Handbook of the Economics of Finance* North-Holland, Amsterdam.
7. Benartzi, Shlomo, and Richard Thaler, 2001. "Naive diversification strategies in defined contribution savings plans." *American Economic Review* 91, 79-98.
8. Froot, Kenneth A., and Emil A. Dabora, 1999. "How are stock prices affected by the location of trade?" *Journal of Financial Economics* 53, 189-216.
9. Shiller, Robert J., 2000. *Irrational Exuberance* Princeton University Press, Princeton.
10. Shleifer, Andrei, and Robert Vishny, 1997. "The limits of arbitrage." *Journal of Finance* 52, 35-55.
11. Ritter, Jay R., and Richard Warr, 2002. "The decline of inflation and the bull market of 1982- 1999." *Journal of Financial and Quantitative Analysis*. 37, 29-61.
12. Shefrin, Hershey, 2000. *Beyond Greed and Fear* Harvard Business School Press, Boston.

# STRATEGIES FOR STRENGTHENING CONSUMER AWARENESS

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## ABSTRACT

*Consumers have a meaningful oversight about the awareness, the consumers must face the three major situations. First, the consumer community must be clever at “giving voice” to its values. Second, the government environment must support a healthy consumer role by “transmitting” the consumer perspectives to points in the society where they can expect influence. At last the professionals who can manage the program must be practiced at “listening.”*

**Keywords :** *Stragetisia, Consumer, Transmiting, Listening.*

## I.INTRODUCTION

Consumer awareness is the idea that a consumer should have about his/her legal rights and duties. It is a must for a consumer to follow these rights. It is implemented for the protection of the consumer, so that the consumer is not exploited by the seller of the products.

“There is an urgent in increasing necessity to educate and motivate the consumer to get awareness about the quality of the products, and also the possible deficiency in the services of the growing sector. [1]” The consumer has right to reject any product or services provided by any manufacturer in the market and can select the products or goods of their choice. Consumer is unaware of their rights and they cannot know their responsibilities. At present the consumer movement in India is like childhood. Most of the majority people are not even aware about consumerism and its movement closely connected with the safeguard of their interest. Until and unless these provisions are availed of by the consumers, the protection of consumer becomes inevitable. By recognizing the importance of the consumer problem, the Government of India and State Government have taken serious steps to introduce agreement in put right mechanism by way of Consumer Protection Act.

## II.CONSUMER AWARENESS

### A. Rise of consumer Awareness

Consumers should be aware of the sale and purchase of each goods, regarding the health and security aspects also. Now a day consumers must ensure the safety of food items which ever sold in the market is essential. Legal procedures for consumer safety, awareness must be the same, and crystal clear in terms of prices, quality, and stock of goods. Consumers must have the tools to fight against malpractice and protect their rights. Consumer awareness is a must for a consumer to follow these rights. Awareness is the knowledge to a consumer is to know about his/her legal rights and duties. It is implemented for the protection of the consumer, so that the consumer is not exploited by the seller of the products.

### B. The Common Methods of Exploitation

1. Under weight and under measurements - not measured or weighed correctly
2. Substandard Quality - defective home appliances and medicines beyond expiry date
3. High prices - charging above the retail price
4. Duplicate Articles - mixing duplicate goods in market in the name of the original
5. Corruption and Infection – for earn higher profits in the competition
6. Lack of safety Devices - absence of inbuilt safeguards in appliances

7. Artificial Scarcity - hoarding and black marketing
8. False and Incomplete Information – creating roamer in market about the quality, durability, and safety of goods.
9. No satisfaction in after sales Service - high cost items like electronics and cars require regular service to maintain quality of product.
10. Forceful behavior and unwarranted conditions - irritation in getting LPG connection or a telephone connection.

### C. Factors Causing Exploitation of Consumers

1. Limited Information - essential information like safety measures and secure usage should be provided.
2. Limited Supply – when stocks of goods are short in number the price of goods is higher.
3. Limited Competition - single producer may control the market in terms of price and stocks.
4. Low Literacy - illiteracy leads to exploitation. Hence Consumer Awareness is essential.

## III.THERIGHTSOFTHECONSUMER

The **Consumer Protection Act 1986**, [2] assurance the following statutory rights to the consumers-

1. ***The right to be protected*** besides the marketing of goods and services which are dangerous to life and property: To simplify this it can be said that it is the duty of the manufacturers and the distributor not to supply any goods to the consumers which fails to comply with the general safety requirements in all circumstances.
2. ***The right to be informed*** about the quality, quantity, effectiveness, clarity, standard and price of goods or services, as the case may be, so as to protect the consumer against unfair trade practices; by simplifying this right it can be said that consumers are given the right to information. This is planned to save the consumers from unfair trade practices like artificial and confusing descriptions about the nature and quality of goods, exaggerated statements about their power or potency, for example, that the hair oil is capable of promoting hair growth or preventing hair loss where there is no such power to an appreciable extent.
3. ***The right to be assured*** where possible, access to a mixture of goods and services at competitive prices; For the convenience of the consumers the Central Council has been charged with the responsibility of bringing about the organization of markets and market practices in such a way that all dealers are supplied with a variety of goods for the benefit of the consumers and that the goods with a variety are being offered at competitive prices. It is only then the consumers will have access to range and will be able to enjoy the benefit of competitive prices.
4. ***The right to be heard***, assured that consumer interest will accept due to fear at appropriate forums; Right to be heard is not only the foremost right of consumers it is a principle of natural justice also. The Central Council is stimulated with the responsibility of assuring to consumers that they would be heard as of right by appropriate forums and **consumers** will receive due attention and consideration from such forums.
5. ***The right to look for truth against unfair trade practices or restrictive trade practices or unscrupulous exploitation of consumers*** the **consumers** has been given the right to seek redress against restrictive/unfair trade practices or unscrupulous exploitation.
6. ***The right to consumer education***. The right of consumer is most important because once the people are rendered conscious of their power, they may perhaps, feel energized to struggle against exploitation by manufacturers and traders [3].

However, **consumer's strongest and the most precious right**, which he keeps to the last, is the '**refusal to buy**' and withdraw the patronage from the seller who always craves for it because, without it, he has none to sell.

### A. Duties of Consumers

1. Consumers should get bill for every purchase and also the Warranty card whichever applicable.
2. Check the ISI mark or Agmark on the goods
3. Form consumer awareness groups
4. Make a complaint on genuine grievances.
5. Consumers must know to exercise their rights.



#### IV.CONSUMERRESPONSIBILITY

Consumer responsibilities play a very important role in not only checking the market but also in restrict unnecessary expenditure. It is not a sole responsibility of the market or the government to offer consumers with detailed information [5]. A consumer in his part must make all effort to inform himself of the product or service. For example, if consumers consume a health product, he must make efforts to inform himself in move forward about its possible side-effects, and must also exercise caution regarding his eating habits, diet and physical exercise, to take full advantage of the product.

Consumer responsibility is based on ethics and rationale. There is no perfect set of consumer responsibilities and a consumer must exercise restraint in consumption to consume responsibly. For example, protection of the environment cannot be forced upon consumers but a consumer must make a conscious effort to reduce consumption, choose environment friendly alternatives and conserve energy.

##### A. Responsibility towards safe waste disposal

Mostly often we consume without any careful thought for what is going to be left behind as waste. More and most percentage of waste generate in urban areas consists of non-biodegradable waste. Urban consumers are in need of using plastic paper and cardboard packaging, disposables batteries, plastic throw-away pens, use and throw nappies ,empty cans etc are becoming a common feature of an urban dustbin. India's urban population is around 300 million. By 2011, the total quantity of solid wastage cause in urban areas is expected to cross 56 million tones, creating a waste management crisis for urban India." Consumers are in need to become accountable for their usage model and their serious environmental and economic implications. The 4R's of consumption are (Reduce, Recycle, Refuse and Reuse) just a consumer privilege but also his consumer responsibility

##### B. Responsibility to endorse safer products Eco labeling

Eco-friendliness is an important measure in judging a product possibility. It is a way of judge how much damage a product has caused to the environment. 'Eco-mark' is one way of knowing which products be conventional to environmental standards and more environment -friendly than others. Ecolabelling is a methodology process which practiced in many countries, including India in the world.

#### V.CONSUMERPROTECTION

Consumer protection laws [4] are planned to make sure reasonable competition in the free flow of correct information in the market. The laws are considered to stop businesses that engage in scheme or specified unfair practices in advance for better benefit in competition and may provide additional security for the weak and those unable to take care of themselves. Consumer Protection laws in a form of government regulation which protects the interests of consumers."

##### A. Consumer protection Measure

###### 1. Legislation concerning Consumer Rights

The Consumer Protection Act 1986 provides the consumer disputes redressed at the state and national level. With the help of law the agencies can solve complaint in a immediate, simple at reasonably price A separate department for consumer affairs was set up by state and central government. The three level systems of consumer courts are National, State and District levels.

###### 2. Public Distribution System

To protect the reduce in raise of price and black market the government food security to the poor by supplying essentials through the ration or Fair price shops.

###### 3. Standardization of Products

These are done to assure the quality of products. The ISI stamp is placed in all goods by the Bureau of Indian standards. This is to provide the industrial and consumer goods. These goods are expected for the specific standards. Agmark is meant for Agricultural products. In the International level the International Organization for Standardization (ISO) is located in Geneva frames a common standard. The FAO and WHO provide food standards.

#### VI.CONSUMERDECISIONMAKING

Consumer takes a decision in purchase goods according to their taste and preference in accordance to their budget. It may be large or small.

- A. Need Awareness:** Awareness creates advertising to place advertiser in “top of mind”, mind share building.
- B. Need Assessment:** Benefits oriented to advertising is to shift a needful solution toward advertising company offer.
- C. Data Collection:** Benefits oriented in education advertising, information and contrast print in collateral such as brochures, flyers, directs mail.
- D. Data Evaluation:** Information and contrast print brochures, spec sheets, flyers direct mail.
- E. Decision to Purchase:** Sales in price point oriented advertising, direct mail and point-of-purchase.
- F. Actual Purchase:** Point of sale materials, posters, and Add-on offers will increase in up selling incentives.
- G. Buyer’s Remorse:** Awareness by advertising, again need customer service, follows up, direct mail.

## VII.CONCLUSION

Now a day’s consumers are challenged by increase in amounts of information and wider choices of products. To make good choices in ever more competitive markets, they must develop a greater range of skills and knowledge. This is to establish consumer rights; responsibilities in the country, main concern should be given first to aware and to educate the people through awareness program and sufficient training to the consumers as well as to all the productive sectors, food trainer, suppliers and food business persons. There is still a need to increase the consumer’s awareness of the different alternative providers and for the take up of new innovative services which can help in business growth.

## REFERENCES

- [1] R. Dhir, *Consumer Protection Rights in India: Awareness and Attitude of Selected Consumers and Marketer*, M.Sc. thesis, Punjab Agricultural University, Ludhiana, Punjab. 1995.
- [2] Terrence O’Brien, *stages of Consumer decision making Journal of Marketing Research*, Vol. 8, No. 3 pp. 283-289. Aug., 1971.
- [3] B.C. Neelkanta and H.B. Anand, “*Educating the Consumer*”. *Social Welfare*, 37(11-12): 5-6, 1992.
- [4] K.R.Parmwshvar, *Protect Consumer against quality trichsters*. *Yojana*, 32(5): 29-31, 1988.
- [5] J.E Sabin and N. Daniels, *Strengthening the consumer voice in managed care: I. can the private sector meet the public-sector standard? Psychiatric Services* 52:461-462; 464, 2001.

# OPINION OF CUSTOMERS ABOUT DEALERS' SERVICE IN INDANE GAS – A STUDY WITH SPECIAL REFERENCE TO SIVAKASI TOWN

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## I.INTRODUCTION

There are various traditional as well as modern sources of energy used for cooking purpose. Yet, it is very obvious that many go for LPG. The preference for LPG by the people of both urban and rural areas may be due to its salient features like economy and speedy. Till the end of 20<sup>th</sup> century it has been moved towards buyers' market. This is mainly due to the incoming of private agencies supplying LPG cylinders. Among the three government agencies supplying LPG such as Indian Oil Corporation, Bharat Petroleum and Hindustan Petroleum, it is the Indian Oil Corporation which introduced LPG in the name "Indane" for the first time in India. Customers' opinion on dealer's trade practices will eventually affect their attitude towards the product on which the dealer provides various services. Therefore, it is necessary to study and analyses customer's opinion on dealer's trade practices. Generally when customers have favorable opinion on dealers' trade practices in relation to the product they will have positive attitudes towards the product. That is why, this study has been undertaken by the researcher to get know the reasons why customers prefer indane gas and to know about their opinion towards the services rendered by dealer.

## II.OBJECTIVESOFTHESTUDY

The specific objectives of the present study are

1. To know about the customers' opinion about the dealers service of indane gas.
2. To offer valuable suggestions on the basis of the findings of the study

## III.METHODOLOGY

In this study the researcher has adopted convenience sampling technique for selecting 75 sample customers. Care was taken to see that different types of customers such as businessmen, professionals, salaries people and agriculturists were included in the survey. Primary data was collected from the customers by using questionnaire during the period from January 2010 to March 2010. The questionnaire was pretested with 10 customers and revised in the light of the experience gained from the pre test. Secondary data were collected from the text books, journals and periodicals.

## IV.PROFILEOFRESPONDENTS

### AGEOFTHECUSTOMERS

Age is identified as one of the variables that has significant relationship with level of opinion among the customers. Table 1 shows the age wise classification of the sample customers of the study.

**TABLE1:AGEWISECLASSIFICATIONOFCUSTOMERS**

Age group	No. of Respondents	Percentage to total
Below 30 years	10	13
30-40	17	23
41-50	21	28
Above 50 years	27	36
Total	75	100

Source: Primary data

It is significant to note that most of the sample customers are aged, as they fall under the age group of 41 – 50 and above 50.

### V. EDUCATIONAL STATUS OF THE CUSTOMERS

Education is said to be an important factor which influences the opinion of customers. Table 2 shows the educational status of the customers

**TABLE 2: EDUCATIONAL STATUS OF THE CUSTOMERS**

<b>Educational status</b>	<b>No. of Respondents</b>	<b>Percentage to total</b>
Illiterate	10	13
High school	5	7
Diploma/ degree	15	20
Master degree	20	17
Professional	25	33
Total	75	100

Source: Primary data

It is important to note that out of 75 respondents, 25 of the respondents (33%) are professionals and 5 of them (7%) have completed matriculation.

### VI. OCCUPATION OF THE CUSTOMERS

Occupational status of the customers is considered to be an important factor in influencing the opinion of the customers. Table 3 shows the occupational status of the customers.

**TABLE 3: OCCUPATION WISE DISTRIBUTION OF RESPONDENTS**

<b>Occupation</b>	<b>No. of Respondents</b>	<b>Percentage to total</b>
No occupation	10	13
Private / Government employee	5	7
Business man	15	20
Agriculturist	20	17
Housewife	25	33
Retired person	19	25
Total	75	100

Source: Primary data

Out of 75 respondents, 4 (6%) have no occupation and 25 (33%) respondents belong to the category of businessmen and 12 (16%) respondents are housewives.

### VII. INCOME OF THE CUSTOMERS

Income is one of the important variables having significant relationship with the level of opinion of the customers. In the present study the monthly income of the customers is classified into five categories as mentioned in table 4.

**TABLE 4: INCOME OF THE CUSTOMERS**

<b>Income group</b>	<b>No. of Respondents</b>	<b>Percentage to total</b>
Below Rs. 2000	32	43
Rs. 2001 - 4000	12	16
Rs. 4001 - 6000	20	27
Rs. 6001 – 8000	6	8
Above 8000	5	16
Total	75	100

Source: Primary data

Out of 75 respondents, 32 (43%) respondents are having their monthly income of below Rs. 2000 and only 6 (8%) respondents are having their monthly income of 6001 to 8000.

### VIII.TENUREOFUSAGE

The tenure of using indane gas is shown in table 5.

**TABLE5:CLASSIFICATIONOFCUSTOMERSBYTENUREOFUSAGE**

Tenure	No. of Respondents	Percentage to total
Less than 5 years	10	13
5 – 10 years	20	27
11 – 15 years	15	20
More than 15 years	30	40
Total	75	100

Source: Primary data

Among 75 respondents, 30(40%) respondents have been using indane gas for more than 15 years and only 10 (13%) respondents belong to the category of less than 5 years.

### IX.TYPEOFFAMILYOFCUSTOMERS

Type of family of customers is considered to be an important factor in influencing the attitude of the customers.

**TABLE6:CLASSIFICATIONOFCUSTOMERSBYTYPEOFFAMILY**

Type of family	No. of Respondents	Percentage to total
Joint	35	47
Nuclear	40	53
Total	75	100

Source: Primary data

Out of 75 respondents, 35 (47%) respondents belong to joint family and 40 (53%) respondents are belonging to nuclear family.

### X.RESULTSANDINTERPRETATION

This section deals with customers opinion on various trade practices such as supply of fresh cylinder, replacement of gas cylinder, after sales service and the like rendered by the dealer.

#### OPINIONONNEEDFORRECOMMENDATIONFORGETTINGNEWCONNECTION

Table 7 shows the need for recommendation for getting new connection.

**TABLE7:CUSTOMERS'OPINIONNEEDFORRECOMMENDATION**

Need for recommendation	No. of Respondents	Percentage to total
Needed	20	27
Not needed	55	73
Total	75	100

Source: Primary data

Out of 75 respondents, most of the respondents (73%) felt that the recommendation is not necessary to get new connection.

**OPINION ON WAITING TIME TO GET THE SECOND CYLINDER**

Table 8 shows the customers opinion on waiting time to get the second cylinder.

**TABLE 8: OPINION ON WAITING TIME TO GET THE SECOND CYLINDER**

Need for waiting	No. of Respondents	Percentage to total
Needed	50	67
Not needed	25	33
Total	75	100

Source: Primary data

Out of 75 respondents, most of them (67%) are of the opinion that they need to wait for a long time to get the second cylinder.

**OPINION ON PURCHASING STOVES AND ACCESSORIES FROM THE DEALER**

Table 9 shows the customers' opinion on purchasing stoves and accessories from the dealer.

**TABLE 9: OPINION ON PURCHASING STOVE AND ACCESSORIES FROM THE DEALER**

Opinion	No. of Respondents	Percentage to total
Purchasing	45	60
Not purchasing	30	40
Total	75	100

Source: Primary data

Out of 75 respondents, most of the respondents (60%) are of the opinion that they have bought the accessories from the dealers.

**OPINION ON FREQUENCY OF WAITING TIME TO GET THE FRESH CYLINDER**

The customers' opinion on frequency of waiting time to get the fresh cylinders is given in table 10.

**TABLE 10: OPINION ON FREQUENCY OF WAITING TIME TO GET THE FRESH CYLINDER**

Opinion	No. of Respondents	Percentage to total
Less than 7 days	5	7
7 – 13 days	15	20
14 – 20 days	10	13
21 – 27 days	20	27
More than 27 days	25	33
Total	75	100

Source: Primary data

Out of 75 respondents, 25 of them (33%) have to wait for more than 27 days to get fresh cylinder and 5 of them (7%) only get the cylinder within 7 days.



**OPINION ON MODE OF APPROACHING THE DEALER TO OBTAIN THE FRESH CYLINDER**

The customers' opinion on mode of approaching the dealer to obtain the fresh cylinder is shown in table 11

**TABLE 11: OPINION ON MODE OF APPROACHING THE DEALER TO OBTAIN THE FRESH CYLINDER**

Mode of approach	No. of Respondents	Percentage to total
Phone	33	44
Mail	6	8
Messenger	6	8
Personal visit	30	40
Total	75	100

Source: Primary data

Out of 75 respondents, 33 of them (44%) use phone to contact the dealer to get the fresh cylinder and only 6 of them (8%) use mail and messenger to approach the dealer for getting the fresh cylinder.

**OPINION ON EFFECTIVENESS OF VARIOUS MODES OF APPROACHING THE DEALER**

Table 12 shows the customers' opinion on the dealers.

**TABLE 12: OPINION ON EFFECTIVENESS OF VARIOUS MODES OF APPROACHING THE DEALER**

Mode of approach	No. of Respondents	Percentage to total
Phone	30	40
Mail	4	5
Messenger	5	7
Personal visit	36	48
Total	75	100

Source: Primary data

Out of 75 respondents, 36 of them (48%) are having the opinion that personal visit is more effective mode to approach the dealer and only 4 of them (5%) are having the opinion that sending mail is the effective mode to approach the dealer.

**OPINION ON DEFECTS IN THE CYLINDER**

Table 13 depicts the customers' opinion on defects in the cylinder.

**TABLE 13: OPINION ON DEFECTS IN THE CYLINDER**

Opinion	No. of Respondents	Percentage to total
Defects	22	29
No defects	53	46
Total	75	100

Source: Primary data

Out of 75 respondents, 53 of them (46%) are of the opinion that there is no defect in the cylinder supplied by the dealer and only 22 of them (29%) are of the view that they find defects in the cylinder supplied.

**OPINION ON DEALERS' AFTER SALES SERVICE**

The customers' opinion on after sales service provided by the dealer is shown in table 14.

**TABLE 14: OPINION ON DEALERS' AFTER SALES SERVICE**

Opinion	No. of Respondents	Percentage to total
Provided	37	49
Not provided	38	51
Total	75	100

Source: Primary data

Out of 75 respondents, 38 of them (51%) are of the opinion that they are not provided any after sales service.

**OPINION ON THE WAY OF INCURRING COST OF AFTER SALES SERVICE**

Table 15 shows the customers' opinion on the way of incurring the cost of after sales service.

**TABLE 15: OPINION ON THE WAY OF INCURRING COST OF AFTER SALES SERVICE**

Opinion	No. of Respondents	Percentage to total
At cost	27	36
Free of cost	48	64
Total	75	100

Source: Primary data

Out of 75 respondents, 48 of them (64%) are of the opinion that they are provided the after sales service at free of cost.

**XI. SUGGESTIONS**

The following suggestions were given on the basis of the findings of the study.

1. There should be one more dealer in Sivakasi so as to distribute gas cylinder quickly.
2. Gas cylinder godowns may be installed in few more places as the study area is vast.
3. There should be a periodical checking up of the cylinder. If any defect is found in any place, the dealer should send immediately a mechanic to rectify the defect in the gas cylinder.
4. Gas cylinder for commercial purpose may be in different color so as to avoid irregularities in cylinder distribution.

**XII. CONCLUSION**

This study has been undertaken for identifying the customers' opinion towards indane gas dealers' trade practices. Most of the customers are of the opinion that there is a delay in providing cylinder. It is suggested that there should be one more dealer in Sivakasi so as to distribute gas cylinder quickly. Majority of the customers prefer indane gas for the reasons like economy, convenience, time saving and cleanliness. As LPG has been moved towards buyers market, the dealer should provide better customers service than his competitors in order to have repeated sales, increased clientele and eventually sustainable development.

**REFERENCES**

1. Claire Selthiz, Research Methods in Social Relations, Methuen & Co. Ltd., London, 1965.
2. Grewal, P.S., Methods of Statistical Analysis, Sterling Publishers Private Limited, New Delhi.
3. Gupta, S.P., Statistical Methods, Sultan Chand & Sons, New Delhi, 1991.
4. Nalini Prava Tripathy, "An Application of Factor Analysis Approach Towards Designing Insurance Products in India", Insurance Chronicle, February 2006.
5. Nalini Prava, "An Application of Factor Analysis Approach Towards Designing Insurance Products in India", Insurance Chronicle, The ICFAI University Press, Hyderabad, February 2006.
6. Sudarshana Reddy, G., "Customer Perception Towards Private Life Insurance Companies Policies with Reference to Bangalore City", Indian Journal of Marketing, April, 2005.

# KINDNESS IS THE GREAT INVESTMENT OF BUSINESS

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## I.INTRODUCTION

Back in the “day,” if you wanted to be successful in business, it was all about kindness and the way people felt after leaving your establishment or after a business transaction. That is what truly kept them coming back, even if your product was mediocre. Let’s face it, we all want to be treated kindly in every circumstance of our life. But this seems to have gotten lost in the technologically advanced and fast-paced corporate world.

Kindness as a value in the workplace, because it is a simple concept-too simple, on first impression, to provide a solution to the complex and serious challenges businesses are currently facing. It is precisely this simplicity, however, that gives this initiative the power to affect change at all levels, both with individuals and organizations.

### Expert’s thoughts

“The best portion of a good man’s life - his little, nameless, unremembered acts of kindness and love” says William Wordsworth

The face of business has forever changed and the Kindness Makeover Challenge will help professionals and businesses adapt successfully. “People are increasingly choosing to do business with people they know, like, and trust. The key to success now is to be who people turn to.” says Kristin Tillquist

“Kindness is the highest form of intelligence.” - Wayne Teasdale

“Act with kindness, but do not expect gratitude” says Confucius

### Kindness changes our life

Imagine someone doing something nice for you right now. A sincere compliment or holding the elevator for you. It’s a good feeling, isn’t it? Kindness has the ability to change us, and our emotions, immediately. The pursuit of a sustainable lifestyle goes beyond just ‘greening’ your life. Personal sustainability is a mindset change that shifts the personal value drivers in daily activities. As a professional and sustainability consultant, I see how kindness, generosity and willingness are intrinsically linked to a sustainable lifestyle or green living. While we are here on this planet, at this precise time in history, many of us want to make a difference in the way we treat our environment. Many of us want to make a significant contribution to the role business takes in shaping our economy, society, and environment.

### Positive impressions are like seeds

Every time you smile at a messenger, laugh at a coworker’s joke, thank an assistant, or treat a stranger with graciousness and respect, you throw off positive energy. That energy makes an impression on the other person that, in turn, is passed along to and imprinted on the myriad others he or she meets. Such imprints have a multiplier effect. And ultimately, those favorable impressions find their way back to you. That doesn’t mean the waiter you tipped well will one day found a Fortune 100 company and offer you stock options (unless it was one hell of a tip). The results of the power of nice are rarely that direct. In fact, you may not notice any impact on your life for years, apart from the warm glow it gives you inside. Nonetheless, we have found that the power of nice has a domino effect. You may not ever be able to trace your good fortune back to a specific encounter, but it is a mathematical certainty that the power of nice lays the groundwork for many opportunities down the road. These positive impressions are like seeds.

### Nice must be automatic

A friend recently told us the story of three consulting companies vying for a very large contract. One was summarily dropped, even though the firm did a terrific presentation. Why? they wondered. It turned out that when the prospective client arrived at the airport, an executive from one of the consulting firms neglected to help with her bags. He lost the contract right there. She was miffed at his rudeness and lack of manners, and decided that she didn’t want to do business with them. Here their team had worked day and night to give the client a knockout presentation, and the entire account was lost over a suitcase.

The negligent executive certainly knew the client was a VIP. So why didn't he pick up the bag? Simple: He wasn't skilled in the art of being nice. If it had been part of the way he treated everyone, the oversight never would have occurred. Picking up the bag for the client would have been second nature, instead of a once-in-a-while gesture granted only to clients and bosses and other important people. He would have understood that such small gestures and actions can have an enormous impact.

### **It's the stuff of urban legend and myth**

In what has become the stuff of urban legend, there is a story of an individual who had a death in the family. Upon cleaning out their loved one's home they discovered many unopened boxes of Zappos shoes. Not knowing what to do, the person called Zappos. Without a receipt or knowing how long the shoes had been sitting in the closet, the customer service rep arranged to have the shoes picked up at no charge and a refund was made. Seems kind enough, but the individual who was dealing with a death in the family also received flowers and a note of condolence from Zappos the following day.

Where do you think that person religiously buys all of their shoes now? How often do you think that story gets told to family and friends? How many times has that story transcended this person's social graph to mass media outlets like this or to the online world? Does Zappos get it right 100 per cent of the time? Doubtful. Do consumers always feel like every brand interaction they have with the company is one of kindness? Probably not. Does being kind get people talking about, buying from, and loving a company like Zappos? Absolutely

## **II.BENEFITSOFKINDNESS**

1. **Improved Morale:** The Kindness to Colleagues program umbrella is uniquely effective in improving morale as it is founded on a solid framework for building meaningful relationships and an inspiring corporate culture.
2. **Reduced Turnover:** Organizations are well aware of the costs associated with turnover, and a creative health promotion program can be a valuable "carrot" to keep employees from taking their intellectual capital to competitors. The Kindness to Colleagues program has strong implications for even further reducing turnover because its relationship-focused model builds friendships and loyalty, proven factors for retaining the best and brightest.
3. **Increased Recruitment Potential:** Creative health promotion programs can serve as a valuable recruitment incentive. The Kindness to Colleagues™ program, however, can take this one step further by offering a framework with which to unite all organizational initiatives in the areas of employee wellbeing, management style and strategy, rewards and recognition, community contribution, and environmental responsibility. The simplicity of the concept has the ability to provide a more powerful and unified presence that will have a higher impact in the recruiting and retention process.
4. **Reduced Absenteeism:** Health promotion programs have the direct benefit of reducing the costs associated with absenteeism. They also reduce the stress in organizations and work teams caused by having to cover for missing workers. The Kindness to Colleagues™ program adds another dimension to reducing absenteeism when physical illness is not the only reason for employee absenteeism. The focus on building relationships and proactively promoting kind acts on a day to day basis can have dramatic effects on absenteeism due to stress associated with bullying, intolerance, poor communication skills, or the lack of attention to the simple, yet critical, factors for nurturing healthy relationships in the workplace.
5. **Health Care Cost Containment:** Containing costs associated with certain health problems is an important benefit of any health promotion initiative. A comprehensive wellness program such as Kindness to Colleagues™ which integrates a variety of initiatives under one comprehensive roof can offer further cost containment benefits in all areas of the organization by fostering a cross-pollination of ideas, creativity, and communication at all levels.
6. **Improved Employee Health Status:** Research is growing in support of well-designed health promotion initiatives that impact negative behaviors such as smoking, high-risk alcohol use, lack of exercise, poor nutritional habits, seatbelt usage and stress. Although little research has been conducted at this point, the Kindness to Colleagues™ program is capable of producing tangible, measurable improvements in employee health status by directly addressing the physical, mental, emotional and social aspects of wellness. A workforce that addresses health issues on all fronts will benefit from increased energy, performance, creativity, and productivity which, in turn, translate into a healthy return on investment for the organization.

**Negative impressions are like germs**

Whenever you're aloof to someone who you think "doesn't matter," people unconsciously react to that. You might get a better table if you scream at a waitress for service, but we can assure you that your date will silently be saying, "Check, please." Just as positive actions are like seeds, rude gestures and remarks are like germs—you may not see the impact they have on you for a while, but they are there, silently infecting you and everyone around you.

**III.CONCLUSION**

I believe kindness is the highest form of intelligence because when employed it infiltrates the deepest cockles of the heart and mind and accomplishes the impossible where normal human efforts have failed. I have witnessed its power and I know it works. It should be applied in business and it should be applied in our family lives and in every relationship we have. If we do so we will experience personal empowerment on a level never before realized. So here's to being kind. Kindness is empowering the business.

**REFERENCE**

1. Fred, Luthans. 2001. Organizational behavior, New York: McGraw Hill.
2. Sagini, Meshack M. 2009. Organizational behavior, New Delhi: Overseas press.
3. Khan M, 2007. Consumer behavior, New Delhi: New age international.
4. Kotler, Philip. 1996. Marketing management, New York, Prentice Hall.
5. <http://www.google.com>

# CUSTOMER RELATIONSHIP MANAGEMENT IN BANKING SECTOR

## (An Empirical Study with reference to Banks in Thiruvannamalai District, Tamil Nadu)

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### ABSTRACT

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*It is felt that Modern Banking has become wholly customer – driven and technology driven. During the last decade, technology has been dramatically transforming the banking activities in India. Driven by challenges on competition, rising customer expectation and shrinking margins, banks have been using technology to reduce cost. Apart from competitive environment, there has been deregulation as to rate of interest, technology intensive delivery channel like Internet Banking, Tele Banking, Mobile banking and Automated Teller Machines (ATMs) etc have created a multiple choice to user of the bank. The banking business is becoming more and more complex with the changes emanating from the liberalization and globalization. For a new bank, customer creation is important, but an established bank it is the retention is much more efficient and cost effective mechanism. Customer Relationship Management (CRM) would also make Indian bankers realize that the purpose of their business is to create and keep a customer and to view the entire business process as consisting of Highly Integrated effort to discover, create and satisfy customer needs. But it is surprising to note that much of the activities of the banking and financial remain focused on customer creation not retention.*

*It is revealed in the National Survey that the most effective media for increasing awareness of the bank products is publicity through friends and relatives of potential savers. In rural areas, there is a tremendous potential for deposits and advances, but most of the potential is left untapped due to lack of awareness of basic products scheme. A satisfied customer is silent advertiser for banks products. Under these situations it has been thought fit to conduct a study and CRM in banking sector.*

*The research work is an empirical study intended to explore the technological revolution that the commercial banks witnessed and how far it has benefited banks to build better customer relationship management (CRM) services of public sector banks with private sector banks. Further more, a comparison would also be made to find out the expectations of the customers from the banking stream and on various technical and structural fronts.*

**Keywords - Customer, Management, Banking sector, CRM**

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### I.INTRODUCTION

Banking Industry in India has undergone a rapid changes followed by a series of fundamental developments. Most significant among them is the advancement in Information Technology as well as communication system. This has changed the concept of Traditional Banking activities and has been an instrumental behind broadening the dissemination of financial information along with lowering the cost of many financial activities. Information technology and communication networking systems have revolutionized the functioning of Banks. Secondly increasing competition among a broad range of domestic and foreign institutions in product marketing area becomes a prevalent practice. Thirdly, inline with the increase in overall economic activities, financial institutions too, have modified themselves accordingly in all spheres including customer service

The customers are now demanding more on price (interest rate) financial security, quick service, convenience, attractive yield, low cost loan, professional service, advice/ counseling, Easy access, simple procedure, Friendly approach, and variety of product.

The whole service sector is now metamorphosed to become customer specific. Until the implementation of the Narasimhan Committee recommendations, banks in India operated under protected environment. Even after 1993 saw the emergency of a new breed of banks called new private sector Banks and opening of most foreign banks in India. The nature of competition that characterizes the banking industry before 1993 is shown in the following table.



In a service industry like banking, the customer is and would continue to be a prime factor and the customer service would be one of the factors for improving profitability. Banks are conscious of the relative cost of acquiring new customer. In the wake of increasing competition, the banks realized that 'customer is king' and keeping or retaining a customer is less expensive than creating a new customer for their products. According to Sam Walton, "There is only one boss. He is the customer; he can fire everybody in the company from the chairman down the line, simply by putting somewhere else". It was the growing realization of these paradigm shifts that led banks to veer towards CRM which believes that.

- Y When you lose a customer, you lose his life time value.
- Y Satisfied customer is the best advertisement for a product.
- Y A 5% increase in customer loyalty will result in profit increase of more than 25%.
- Y 80/20 principal – In nearly every industry, 20% of the customers account for 80% of the profit.
- Y A satisfied customer brings in 100 potential new customers whereas one dissatisfied customer prevents 1000 potential new customer.

In the recent years, CRM has emerged as one of the most widely prescribed solutions for increasing market chase and growth of many industries in general, banking sector in particular. CRM is a simple philosophy which places the customer at the heart of the business organizations process, activities and culture with as intention to improve customer satisfaction. In other words, CRM is described as the establishment, development, maintenance and optimization of the long term mutually valuable relationship between the customer and the organization. From the organizations competitive advantage to boost the profits.

## **II.REVIEWOFLITERATURE**

Kamath (1979) in his thesis entitled "Marketing of bank services with special reference to branches in Bombay city of syndicate bank" has concluded that quicker and better service offered by bank will be the most important variable in attracting and retaining customer.

S.G Shah (1985) in his article has stated that quality of customer service in bank has to very sunk to very low and poor levels because of two vastly different reasons. The first is that even the simple routine service have broken down. The second area in which customer service is lagging is that of special situation.

T.S Ravisankar in his study "Marketing strategies and planning for business growth in banks stressed that the marketing plan for banking service be supported by appropriate marketing strategies. He suggests that the marketing strategy for banks must be oriented to customer – current and potential.

John Brooks former president and chairman of the council of the chartered institute of Bankers, London states "Customer care is emerging as a critical factor in the banking industry and bankers are fully conscious of the need for attaining international standard for service".

Dr. B.C. Saraswathy (2006) in her article has stated that the main objectives of CRM are building long term, sustaining relations with customers by delivering superior customer value and satisfaction. Instead of trying to maximize profit for each every transaction, CRM focuses on maximizing profits over the lifetime value of customers. Undoubtedly, CRM is a potential tool in sustaining and boosting sales in this era of hyper competitive world.

## **III.OBJECTIVESOFTHESTUDY**

- 1) To study the perception of the customers as to CRM of the banks with respect to service quality management,
- 2) To study the perception of the customers as to CRM of the banks with respect to customer interaction management,
- 3) To study the perception of the customers as to CRM of the banks with respect to customer retention management.

## **IV.METHODOLOGY**

This research work will depend on both primary and secondary data. Primary data will be collected by ways of well structured questionnaire that will be administered by the researcher on banks in Thiruvannamalai District of Tamilnadu. secondary data will be collected from published records of RBI and other Bank authorities, standard text book and published research papers.

The required primary data will be collected from the bank branches in Thiruvannamalai District. A minimum of 8 branches will be approached, apart from collecting information from banks, the general public who holds accounts with the banks in the District.

The researcher followed multi-stage sampling in the selection of sample. Public and Private sector banks operating in Tiruvannamalai of Tamil Nadu. The sample for the study was selected through a three-stage sampling procedure. The first stage involved the choice of banks. As it was felt that it would be useful to attempt a comparative study between Public and Private Banks, two public sector banks (SBI, IOB, ICICI Bank and TMB).

The random selection of bank branches constituted the second stage of the sampling process. Two branches for each of the chosen public sector banks and two branches for each of the Private sector banks were selected for this study.

Judgment sampling method was adopted initially 50 customers from each branch were targeted for data collection needed for the study. Thus the final sample for the study consisted of 8 banks branches (four from public sector banks and four from private sector banks) which generated 210 customers for studying customer relationship management in banks of Tiruvannamalai District. The bank wise number of respondents is show below.

SBI	- 53 respondents
IOB	- 54 respondents
ICICI	- 51 respondents
TMB	- 52 respondents
<b>Total</b>	<b>- <u>210 respondents</u></b>

## V.ANALYSIS

Delivering high quality service is an important strategy that attracts and retains customers and enhances customer relationship in banks. High quality in service pleasing and creating delightful customers and not just simply and not just simply preventing them from getting annoyed service quality itself comprises of several dimensions like empathy, reliability, responsiveness, tangibility, communication etc.

### Customers' perception of empathy dimension of service quality

The empathy dimensions of service quality and its items in public and private sector banks are compared.

**Table :1 : Sector-wise mean ratings of empathy dimensions items of service quality**

Empathy Dimension items	Types of Banks	
	Public Sector Bank (n=107)	Private Sector Bank (n=103)
	<i>mean</i>	<i>mean</i>
Banks gives individual attention	3.170	3.250
Convenient operating hours	3.520	3.710
Employees understand specific needs of the customers	3.141	3.080
Customer is made to feel important	3.260	3.150
Dimension mean	3.270	3.300

Source : computed

Table 1. shows that the empathy dimension mean of public sector banks is 3.270 and that of private sector banks is 3.300.

This clearly shows that private sector banks are rated slightly higher than public sector banks.

In both public and private sector banks, the mean ratings of Individual attention, understanding the specific needs of the customers and importance given to the customers are lower than their respective dimension mean values.

Comparison of empathy dimension means in public and private sector banks :

**Table :2**

Types of Bank	Mean	S.D	No	t	df	Table value	Sign
Public Sector Banks	3.270	0.67	107	0.313	419	1.966	Vs
Private Sector Banks	3.300	0.80	103				
All sectors	3.290	0.74	210				

Source : computed

Vs. not significant

The calculated t- test value at 0.313 which is less than the table value of 1.966 at 5% level of significance, shows that there is no significant difference between the service quality of public sector banks that of private sector banks in terms of empathy dimension. Hence, the hypothesis is accepted.

Customer interaction management in public sector and private sector banks

The customer interaction management is an intensive interaction between the bankers and the customers and it leads to relationship building

**Table – 3 : Comparison of customers perception of customer interaction management is presented in the table -3**

S.No	Customer Interaction Item	Public Sector Banks (N=107) Mean	Private Sector Banks (n= 103) Bank
1	Skill to recognize individual	3.450	3.390
2	Skill to educate	3.330	3.180
3	Ability acquire interpersonal traits	3.120	3.110
4	Skill to motivate	3.290	2.990
5	Skill to fulfill the needs	3.350	3.100
6	Ability to respect sentimentals	3.240	3.050
7	Skill to speed up response	3.090	3.050
8	User friendly services skills	3.110	2.960
9	Ability to operate under technical environment	3.240	2.960
10	Skill to work under varies situations	3.170	2.890
	Dimension rate	3.139	3.068

Table-3 shows that the dimension means as public sector bank is 3.139 and that of private sector bank is 3.068-. The comparison of customer interaction management skills of both the banking sectors reveals that the mean rating of all the skills in the public sector banks is rated higher than the positive sector banks and that the public sector banks are well interaction with their customers.

#### **Customer retention management in public and private banks**

Customer retention management is concerned with the keeping customer in the customer inventory for an unending period by meeting their needs and exceeding their expectation it is an approach of converting a casual customers into a committed loyal customer.

**Table : 4 Sector-wise mean ratings of customers retention management**

S.no	Customer retention management items	Public sector banks (n = 107)	Private sector banks (n = 103)
1.	Market leader in strategies	3.510	3.660
2.	Innovative services	3.340	3.610
3.	Individual customer programmer	3.050	3.260
4.	Customer-centric approach	3.090	3.200
5.	Value added services	3.010	3.200
6.	Total employees involvement	3.110	3.070
7.	Low charges	3.140	2.790
	Dimension mean	3.178	3.255

Table : 4 reveals that the dimension mean of customers retention management of public sector is 3.178.

Customers' perception of customer retention management in both the banking sector is almost the same.

#### **VI.FINDINGS**

1. In both public and private sector banks, the mean rating of individual attention understanding the specific needs of the customers are lower than their respective dimension mean values.
2. Public Sector banks is rated higher than the positive section banks and the public section banks are well interactive with their customers perception of customer retention management practices in public and private sectors is almost the same.

#### **VII.SUGGESTIONS**

The customers perception of service quality is lower in private sector banks. So it is suggested that private sector banks may take steps to improve their service quality, strategies, customer interaction management strategies customer retention management strategies.

#### **VIII.CONCLUSION**

The present study provides some guidelines for customer relationship management satisfied customers are loyal customer, their retention rate is much higher and so is their overall profitability for the bank. CRM offers the most holistic route for banks to enhance customer relationships.

Banks can enhance customer retention, profitability and loyalty and get an increased share of banks from their customers.

Banks need to embrace CRM as a principle and adopt a strategy for managing customer relationships that effectively addresses three key areas, customers, processes and technology.

Finally banks should take actions such as recognition and delegation of work, freedom to handle customer's grievances and management's approval to take decision according to the situations.

#### **REFERENCES**

1. Bateson J.E.G. (1995) Managing Service Marketing
2. Berry L.C. and Parasuraman A. (1991) Marketing services
3. Andicine .P (1995), The Essence of services Marketing, New Delhi
4. Kotler,P.(1999), Marketing Management:
4. The millennium edition,
5. Quality on the Line Harvard Business Review

## Impact of Indian overseas Bank Finance to Small Scale Industry

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### ABSTRACT

Indian Overseas Bank provides customer and commercial Banking services extending their aims to obtain a radical change that can cause reinforcement in economy. It inculcates in every one to buy or sell or transfer money conferring to diverse facts and figures. The overseas Bank ensures a good way of tackling the intensification evolving currency. Finance is an important input for an industry. For a small scale industry the need for finance is very essential due to its limited resources. The sources of finance for small scale industries are of two types-internal and external. The role of commercial banks in the process of economic development is well recognized. The year 1969 was a major turning point in Indian financial systems when 14 major banks were nationalized. Different national and state level institutions operating in the country for meeting the credit requirements of the SSIs sector include Small Industries Development Bank of India, Commercial Banks, Regional Rural Banks, Co-operative Banks (State, Central and Primary), State Financial Corporations/ State Industrial Investment Corporations, State Small Industries Development Corporation, National Bank for Agriculture and Rural Development, statutory bodies (KVIC, COIR Board, Handloom Board and Handicraft Boards), National Small Industries Corporations Limited and the like. This Paper focus on impact bank finance to Small Scale industry. Indian overseas Bank lending to the small-scale industries in Salem district to the Private sector the priority sector lending. The trend values showed that the target has increased faster than the actual amount of advances. The recovery rate of the SSI advances is a maximum of 69% in Salem district.

**Keywords: Banks; Small-scale industries; IOB Bank Lending Services , Economic development Sources of Finance.**

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### 1.Introduction

The Banking sector in India has always been one of the most preferred avenues of employment. In the current decade, this has emerged as a resurgent sector in the Indian economy. Banking industry being a service industry should offer speedy, timely and courteous service. Marketing of such service very much depends on the quality, quantity and the cost that satisfies the customer's wants and needs. Banks must continuously assess their performance in this regard and must continuously strive to satisfy the new and emerging customer's specifications. The improvements in customer service are a necessary concomitant of a progressive growth of the banking industry. This is probably due to the fact that hitherto banks have been operating in seller's market and public is not articulated or organized. In olden days Banks have not much cared for the needs of the customers, they were in the sellers' market. After nationalization of banks, there is acceleration in the growth of business with all extensive range of services and a wide variety of customers. In order to grow and prosper and even to survive, banks are keeping abreast of changing customer needs and preferences apart from knowing the strategies of competing banks in the area of product innovation and customer service. In banking industry, customer service is complex in nature and dynamic in action.

### 2. Customers Orientation Banks

Bank cannot exist without customers. The bank's operation is invested to serve customers and not vice versa. A customer looks for certain values like product, quality, reliability, superior services, state of the art technology, low cost, a premium image, etc, while purchasing anything. In service sector like bank, customer service should not only a critical function, but a way of life also. Banks can be said as being customer oriented if its various organizational activities like organizational restructuring, staffing, co- ordination are geared to fulfill customers' need. So, total customer satisfaction should be the focal point. That alone serves the banks objective of maximization of profit. It is obvious that a bank cannot think of making profit without customers.

## 2.1 Significance of the Study

It's highly essential for banks to collect customer's feedback on the varied banking services; this would stand useful in enabling banks take positive steps to maintain a competitive edge in today's banking industry provide high level of loan facilities to Small scale industry. Indeed, the bank's overall efficiency in future will definitely count on the self-evaluation of their performance.

## 2.2 Statement of the Problem

Different national and state level institutions operating in the country for meeting the credit requirements of the SSIs sector include Small Industries Development Bank of India, Commercial Banks, Regional Rural Banks, Co-operative Banks (State, Central and Primary), State Financial Corporations/State Industrial Investment Corporations, Indian overseas Bank, State Small Industries Development Corporation, National Bank for Agriculture and Rural Development, statutory bodies (KVIC, COIR Board, Handloom Board and Handicraft Boards), National Small Industries Corporations Limited and the like In Salem district there are several financial institutions and commercial banks which provide all sorts of financial assistance to the SSI units. Of these the State bank of India, a leading government owned bank is playing a predominant role. Hence the present study, "Impact Bank Credit to Small-Scale Industries in Salem district– A study with reference to Indian Overseas Bank."

## 2.3 Objectives of the Study

- To identify the services that is offered by IOB bank to suit the Small Scale Industry in Salem District.
- To analyses the problems which is encountered by the Small Scale Industry in Banker's service.
- To make suggestions for improvements in Industry services.
- To analyze the extent of the financial assistance given by the Indian Overseas bank of India to the SSI units in Salem district.

## 2.4 Methodology of the Study

A descriptive research design was adopted for the study. It accounts for both primary and secondary data. Primary source of data were collected from Small Scale Respondents through structured interview schedule by way of personal interview in addition to this, personal interactions have been made with the Bank manages, office bearers of IOB Branches in Salem District to get some first-hand information on Industry service. Secondary data were collected from books, journals and Websites. Sampling convenient sampling method is used. The researcher has taken 150 samples from Small Scale Industry Respondents of IOB in Salem District Tamilnadu.

## 3. Sources of Industry Finance

Finance is an important input for an industry. For a small scale industry the need for finance is very essential due to its limited resources. The sources of finance for small scale industries are of two types-internal and external. The internal sources consist of initial capital and profits reinvested. The external sources consist of loans and other assistance from the institutional and the non-institutional sources. This paper attempts to study the extent of bank finance made available to small-scale industries at National level, Tamil Nadu level and Salem district. Customer satisfaction is an elusive area especially in service sector since offerings are intangible. In fact, it has been said that intangibility is the key to determine whether or not an offering is a service or a product. Customer satisfaction is the sum total of the customers' expression of the service quality.

## 4. Financial Institutions Services

In spite of the thrust accorded through the administrative machinery of the government and financial assistance extended by financial institutions and commercial banks, the growth of the SSIs sector has been much below the expected level. At the end of the Tenth Plan, (March 2007), the small-scale industries produced goods worth Rs. 790759 crore against the target of Rs. 880805 crores. They exported goods valued at Rs. 202017 crore against the Tenth Plan target of Rs.233079 crores. Though the SSIs sector contributed significantly to the economy of the country, it has not emerged as an engine of exponential growth and rapid economic transformation of the semi-urban, rural and backward areas. The liberalization and reform process initiated in India since, 1991 has enlarged the problem areas of the SSIs sector. While notable advances were made in exports and use of high technologies the general state of many small units continues to be critical. The role of commercial banks in the process of economic development is well recognized. The year 1969 was a major turning point in Indian financial systems when 14 major banks were nationalized. Thereafter there was re-orientation of credit flows, so as to benefit the till then neglected



sectors such as agriculture, small Scale industries and small borrowers. The Government has constituted several committees from time to time to improve the credit delivery system of commercial banks and Indian Overseas Bank towards SSIs. Accordingly, at present SSIs have been recognized as a priority sector by commercial banks and they lend liberally to SSIs units.

## 5. Review of Literature

**Gupta (2004)**, in their book on “Financing of small industry” also pointed out the inadequacy of institutional credit. They concluded that only 5.1% of the borrowers were financed by institutional finance.

**Kopardekar (2004)**, attributes excess capacity remaining unutilized in small firms was due to the lack of adequate finance. The lack of adequate finance especially in meeting working capital requirement leads to inefficient utilization of the installed capacity, which in turn leads to inconsistent operation of the units. Many units are not in a position to apportion funds to fix and working capitals.

**Moorthy (2005)**, focused his attention on the financing of the small-scale industries in the particular region of Andhra Pradesh. His emphasis was on the role of the government agencies, financial institutions and the commercial banks in augmenting adequate finance for the small-scale sector.

**Chaudhary (2007)**, in his article entitled “Success in Urban Small Entrepreneurship”, pointed out that creation of political awareness among the present day entrepreneurs was desirable, though not essential. This would help to carry out their entrepreneurial activity successfully since business and politics had inter-acting relationship.

**Natarajan (2006)**, in his study entitled, “A Study of Utilization of Incentives by Small-Scale Industrial Units in Madurai District”, measured the extent of utilization of incentives by small-scale industrial units in Madurai district. The study also highlighted the factors influencing the utilization and the impact of incentives on the industrial units.

**George Verghese (2007)**, in his paper “Leading Issues in Credit flow to SSIs Sector is Finance for Small Enterprise in India” stated that focus on the limited impact of policies on the SSIs sector in India was mainly due to the isolated treatment accorded to the SSIs sector, the SSIs sector needs a renewed thrust enhancing credit flow by drastically improving the problem areas of administration personal, entrepreneurial development and infrastructure in dispensation of credit.

**Harinath Reddy (2000)**, Study on Working Capital Management in Small-Scale Industries, indicating improper controls on the working capital funding. The preparation of periodical working capital reports at least once a month, better planning to overcome shortages and over trading are some of the steps suggested and above all banks to monitor working capital utilization to detect early signs of sickness.

### 5.1 Period of the Study

The secondary data relating to advances in India and Tamil Nadu were obtained for a period of 2 years from 2007-08 to 2008-2009.

### 5.2 Limitations of the Study

- This study is only restricted to Indian Overseas Bank only.
- The result of the study may not be applicable to any other banks.

## 6. Development of Banks before Nationalization

- Money deposits in savings account.
- Grant loan to its customers and Small scale industry under various schemes.
- Gives credit card systems to its customer.

- Operates its branches in rural and urban areas so as reach all its service to farmers and villagers and Business Man.
- Its service is also useful for small scale industries.

#### **Development of Banks after Nationalization In India,**

- Bank services are flexible to all and banks are functioned without the interruption of a particular person. 2. Management of banks area is controlled by well-experienced person and skilled persons.
- Its services are helpful to small scale industries development.
- Banks are helpful for industrial development.
- It is also useful for new business beginners.
- Exporters are benefited by its services.

#### **LOAN POLICY FOR MSE SECTOR**

Micro and Small Enterprises plays vital role in the economic well being of the country due to their ability to generate employment, foster entrepreneurship. They provide depth to the industrial and commercial base of the economy. They also contribute in significant measure to the GDP and exports from the country. Government of India, is attaching great importance to this sector and taking various policy measures to enhance the flow of credit to MSME sector. To ensure systematic and smooth growth of the MSME sector, the Government of India enacted the Micro, Small and Medium Enterprises Development Act 2006 (MSMED Act 2006) on 16.06.2006, which came into effect from 02.10.2006. The act replaced the concept of tiny/small scale industries sector with the expanded Micro, Small and Medium Enterprises Sector which includes Micro, Small and Medium manufacturing as well as service enterprises.

##### **MSE Funding Policy**

The problems of the MSE sector are multifarious and credit related issues are diverse, which call for multi-pronged, integrated, and balanced approach on the part of the bank. Hence it is necessary to have a comprehensive liberal and forward looking policy on funding of MSE enterprises. RBI advised all Banks to formulate a loan policy governing the extension of credit to MSE sector in the light of recommendations of the working group and BCSBI 's code of commitment to Micro and Small Enterprises.

##### **Type of Credit Facilities to MSE Units**

- Term Loans
- Project Finance
- Working Capital Finance
- Purchase and discounting of Bills
- Negotiation of Bills
- Non fund based facilities such as LC and LG
- Pre shipment/Post shipment finance
- 

##### **Manufacturing Enterprises**

The Micro and Small enterprises engaged in the manufacture or production of goods 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 and machinery.

##### **Loans for food and agro processing**

Loans for food and agro processing will be classified under Micro and Small Enterprises, provided the units satisfy investments criteria prescribed for Micro and Small Enterprises, as provided in MSMED Act, 2006.

## **Service Enterprises**

Bank loans upto Rs. 2 Crores per unit to Micro and Small Enterprises engaged in providing or rendering of services and defined in terms of investment in equipment under MSMED Act, 2006. Export credit to MSE units (both manufacturing and services) for exporting of goods/ services produced by them.

### **Indirect Finance To MSE Sector**

- Loans to persons involved in assisting the decentralized sector in the supply of inputs to and marketing of outputs of artisans village and cottage industries.
- Loans to cooperatives of producers in the decentralised sector viz., artisans village and cottage industries
- Loans sanctioned by banks to MFIs for on lending to MSE sector as per the conditions specified in paragraph VIII of this circular

### **Scope and Coverage**

This policy covers credit facilities to micro and small enterprises. (both manufacturing and services sector) and all related issues such as assessment of credit, margin norms, security requirements, coverage under Credit Guarantee Scheme etc.,

### **Guidelines on MSE Finance**

Advances to MSE sector will be assessed like any other advance (except for the specific relaxations and concessions given in this policy) and credit decisions will be taken based on viability, merits and commercial judgment in each case as per general norms of lending. The credit appraisal will be made in a transparent and non-discriminatory manner. All genuine and just requirements of the MSE units will be considered and adequate amount of credit will be sanctioned to ensure that the unit does not suffer for want of funds at a later date.

### **Pricing and Credit Rating of MSE Advances**

As per Risk Management Policy of the Bank, all borrowal accounts with credit limits of Rs.1 crore and above to Large Corporates, Traders, SME and Infrastructure (Road and Power) must be rated under Risk Assessment Model (RAM) before sanction. Pricing of all loan facilities of Rs.1 crore and above is to be made based on the rating obtained. A relaxation will be made for MSE borrowal accounts in this regard and MSE accounts for credit facilities upto Rs.2 crores need not be rated under RAM. Pricing of MSE credit facility upto Rs. 2 crores will be based on internal scoring model. Bank will continue to prescribe separate and favourable interest rates for MSE credit in order to encourage the MSE sector.

### **Delayed Payments To MSME Units**

As a measure to assist the MSE units to get the payment from large corporates without delay, suitable sub-limits will be fixed within the overall working capital limits sanctioned to large borrowers (borrowers enjoying working capital limits of Rs.10 crores and above from the banking system) specifically for meeting the payment obligations to MSE enterprises (and Medium Enterprises) for goods supplied or services rendered

### **MSE sector, the bank will adopt the strategies:**

- Branch Managers and other officials handling MSE credit will be imparted training to enable them to properly understand the nuances of MSE finance and opportunities in the sector. Efforts will be made to inculcate positive mindset amongst the officers towards financing MSE units.
- MSE credit processing centres will be set up at key locations to ensure prompt and efficient processing for all MSE credit applications.
- Simplified loan application forms in bilingual formats will be made available for loans to Micro Enterprises.

## **7. Conclusion**

The role of service sector plays a vital role in economic development of the country. In rural area, the banks services are very important to improve the rural development Small Scale Industry. There is lack of banking habits among the rural people. The saving and investment and Lending facilities are considered very important to make a country economically sound. The effective mobilization of saving lives is in the hands of banking sector. Therefore banks

must provide necessary services to its customers and Industry can attract the potential customer also. Hence, banks especially commercial banks like Indian Overseas Bank should provide satisfactory services to its customer. In order to attain balanced development, the role of rural banks is important, the present study's result is customers of IOB bank satisfied from the services rendered from the banks. The Small Scale Industry expect more services from the Indian Overseas bank for Business Growth and Economic Development of the country.

## References

- [1] Laghu Udyog Samachar (2005) Government of India.
- [2] Singh I, Gupta NS (1997) Financing of Small Industry. Chand S & Co Ltd, New Delhi.
- [3] Kopardekar, Sharad D (2004) Financing of Working Capital in Small-Scale Industries. S.Chand & Co. Ltd, New Delhi.
- [4] Moorthy GK (2005) Financing of Small-Scale Industries in Rayalaseema Region. Ph.D. Thesis submitted to Sri Venkateshwara University, Thirupathi.
- [5] Chaudhary KVR (2007) Success in Urban Small Entrepreneurship. Khadi Gramodyog 32: 10-473.
- [6] Natarajan K (2006) A Study of Utilization of Incentives by Small-Scale Industrial Units. Ph.D. Thesis of Madurai Kamaraj University, Tamilnadu, India 135
- [7] Verghese GK (2007) Leading Issues in Credit Flow to SSI Sector in Finance for Small Enterprise in India. ISED Cochin.
- [8] Reddy H (2000) Working Capital Management in Small-Scale Industries. Thesis Submitted to Sri Venkateswara University, Thirupathi, AP, India.
- [9] Khar J (2000) Credit Repayment by Small-Scale industries. Prajnan 18: 33-41.
- [10] UmaRani N (2007) Export Potential of SSIs in India: A Study. Southern Economist 46:10-12.
- [11] Karthihaselvi V, Neelamegam R, Magesan AA (2010) Significance of Small-Scale Industries. Southern Economist, Tamilnadu, INDIA.
- [12] Pamphlets from the SBI, Madurai Regional Office, Madurai.
- [13] Bagchi AK (2003) The Era of Imperial Bank of India. Sage Publication, New Delhi, India.
- [14] Ibid page No. 17.
- [15] Bagchi A K Op cit page No. 15.