

Management Research – To-Do or Not-To-Do

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Measuring Impact of Time Management Habits on the Academic Result of the Students of Commerce and Management

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An Analysis of Accreditation Scenario of Indian Institutions

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Attitude of Agricultural Extension Educationists towards Computer Application

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COMMODITY MARKET – A Study on Financial Health of India's largest Commodity Exchange

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Information Technology Act, 2000 and CYBER Law in India

**Subhash Joshi**



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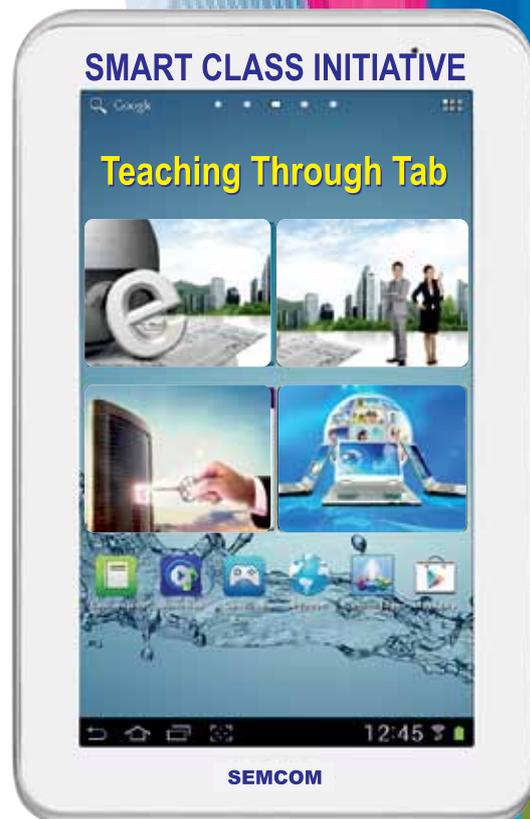
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## Editorial

Deepavali Greetings to all....!!

I am delighted to see the way SMTR is gaining momentum and here is the third issue coming to you with all afresh insightful reflections from learned academicians. As always, the journal contains the variety of discussions on topics from Finance, General Management, Information and Communication Technology, Quality Education, Marketing Management, E-Commerce for small Businesses, Issues related to SMEs and MSMEs, Banking and Telecom, Corporate Social Responsibility and Research in Management.

As E-Commerce pervades in all spheres of life, predictive model for E-commerce value studies the importance of e-commerce as an effective marketing tool perceived by Entrepreneurs of SMEs. A study on Entrepreneurs' mind-set about using website as a marketing tool for business expansion and opportunity identification is an eye opener for developing country like India. Much has been said on SMEs in this issue. A dire need of Integrating Information & Communication Technologies (ICT) by SMEs in India discusses dearth areas among SMEs with regard to use of technology and shows lot of scope for SMEs to get into global economy through digitization. A Study of leadership styles in MSMEs deliberates on improvising general management for better performance. Information technology Act 2000 and cyber law in India is an attentive effort for e-businesses and online customers to be watchful while dealing through internet. Corporate social responsibility is one more dimension to contemplate and to show our concern towards environment and societal development. The paper in this issue discusses how changing time needs changing approaches towards CSR.

A Study on financial health of India's largest commodity exchange shows financial as well as statistical analysis of financial performance of multy commodity exchange which is India's top most commodity exchange and it provides electronic market place for trading of various commodities. Credibility governance model of managing non-profit organization through a case study of NGO of blind people's association poses serious concern towards corporate governance. It studies the nature and scope of the non-profit organizations, the challenges and issues related to their governance, and build the credibility governance model for the good governance with the help of specific case study of NGO of Blind Peoples' Association. The paper on exchange rate forecast techniques discusses forecasting technique for envisaging exchange rate. The study also compares two methods of checking forecast techniques validity.

An exclusive outlook on marketing management is presented by the study on influence of children on family buying and an experiential exploration of hotel facilities and hoteliers' efforts to know how customer relationship management [CRM] can be used for improved performance of hotels.

Banking and Telecom are two lifelines of any economy. Evolving a universal service policy for India post – issues and challenges and a comparative study on usage and satisfaction of ATM Banking by customers are two more deliberations on these thriving sectors.

Measuring impact of time management habits on the academic result of the Students, attitude of agricultural extension educationists towards computer application and NAAC accreditation scenario in India are growing academic concerns as they talk about students' study habits, use of IT in education and quality education.

Research in Management is a discourse on why research is important and that too for the academic fraternity, emphasising its need and significance. An eminent researcher has taken painstaking efforts in explaining useful points about management research, current trends in management research and research traps.

At last, my heart-warming gratitude to all these contributors. The Editorial Team appreciates the time and effort devoted by the different contributors and would like to thank them all.

Nikhil Zaveri  
Chief Editor



## About **SEMCOM**

Sardar Gunj Mercantile Cooperative Bank Ltd. (Anand) English Medium College of Commerce and Management (S G M English Medium College of Commerce and Management) popularly known as **SEMCOM** was established in the year 1997 with the aim/vision to impart quality education to students who desire to graduate in commerce, management and IT. The college has successfully completed 16 years. Its alumni has established themselves in various walks of life across the globe. The college has been established by Charutar Vidya Mandal (CVM), an educational trust with a vision to regenerate society through education. **SEMCOM** was set up with the generous donation of Rs. 35 lakhs against the total project cost of Rs. 150 lakhs by Sardar Gunj Cooperative Bank Ltd. (Anand) on self-finance basis keeping in mind the changing policy of the government in inviting private institutions to supplement the government's efforts in higher education. The college has an ISO Quality System since 2004, which is upgraded to 9001:2008 in September 2009. The college is accredited grade "A" by NAAC with a CGPA of 3.18 on 4 point scale. The college, within a short span of time has made its presence felt in India and abroad.

*The college is affiliated to Sardar Patel University, Vallabh Vidyanagar.*

### Objectives / Goals

- To focus on integral development of students.
- To offer courses and programs in tune with changing trends in the society as a whole.
- To update the curriculum as per the need of the business and industry.
- To create unique identity in the educational world at the national as well as international level.
- To institutionalize quality in imparting education.
- To incorporate innovations on a continuous basis in the entire process of education at institutional level.
- To create platform for the students for exhibiting their talent and for development of their potentials.
- To generate stimulating learning environment for students as well as teachers.
- To build cutting edge amongst the students to withstand and grow in the competitive environment at the global level.



# Management Research – To-Do or Not-To-Do

**Bhavesh Patel**

## Abstract

This is a non-research paper on the Research in Management. The paper attempts to articulate why research in management is important and that too for the academic fraternity, emphasising its need and significance especially in India today. The paper explains these points by citing examples of development of management theories by eminent academicians, and consequential sustainability of businesses and value creation for society. The paper then goes into explaining useful points about management research, current trends in management research and research traps.

This is the evidence that the government wants every teacher to acquire research competency early on. This is perhaps a result of realization that without research India cannot grow and develop further. This is also a reason why regulators and academic administration have started demanding research output from every teacher of higher education. This paradigm shift must be recognized and appreciated from the bottom of the heart.

## Why research

There is a limit of development and growth of an agrarian economy. The economy has to adopt manufacturing for the further development, after which comes the growth of service sector. The economies that are growing with emphasis on services need to prepare themselves for the next phase of growth, which is always through innovations. Successful innovations are the result of out-of-box thinking, and new research.

Scientific research is important for laying foundation for the economic growth of a nation. However, a contextual management research is needed to provide a sustainability and adaptability to the commercial venture created around the scientific innovation.

## Introduction

It has been a widespread misconception in the society that research is done by scientists and researchers whereas teaching is done by teachers. However, if one puts the designations of teachers in higher education in historical as well as current perspective one would observe that research was expected of teachers before and more so now.

Previously the higher education had accepted designations like lecturer, reader and professor. In the initial career a teacher was expected to give lecture of some material given to him. Lecturing on the same topic again and again is likely build some amount of curiosity, which would lead to more reading beyond what is given. This is the stage at which a teacher would be designated as ‘reader’ and would be expected to read more than what is given. More reading is likely to generate questions in the mind and then one would be expected to reason out what is more appropriate, when and why. This is like ‘professing’ a topic, which is not possible without systematic inquiry, which is called research. That is a role of a ‘professor’. Thus, whether research was done or not, at some stage it was expected of a senior teacher.

After the Sixth Pay Commission report, the designations like lecturer and readers are dropped and now all are professors.

Without such support for sustainability economic growth would become erratic and vulnerable to the external competition. Management research is also important for ensuring the balance growth as well as distribution of fruits of growth to all sections of the society; let us say through social entrepreneurship.

## Current state of management research

The following three quotes would aptly sum up the state of management research in general and in India in particular:

Charlie and Christensen made a statement that the “Collective efforts of business academics have produced a paucity of theory that is intellectually rigorous, practically useful, and able to stand the test of time and changing circumstances.”

Kumar (2011) opined that the “State of Indian Management Research is dismal”.

Jairam Ramesh (2011) made a controversial statement that “IIT/IIM Faculty is not World Class”, which was supposedly in the context of research output and outcomes.

While the first quote is by professors in Boston University and Harvard University, in the context of management research in the world, especially in America, the other two are in the context of India.

The current state of management research in India in fact offers a great deal of opportunity.

### Management research: A need for India

India needs a research focus in the area of science and technology as well as social sciences. Without achieving the sustainable economic growth our dream of becoming a super-power cannot materialise. Some of us want India to provide a moral leadership to the world. The world will be better off with economic as well as moral leadership provided by a nation and India is positioned better for this role given her rich cultural heritage and latent human talent. Indian cultural heritage has a proven impact on management practices, which are hailed in some cases where Indian businesses have acquired businesses abroad. For example, Tatas in UK, though opposed initially, are now praised. They successfully turned around JLR, which Germans, Europeans and Americans could not do. They now provide the maximum number of employment. In addition it has been found in some researches that Indian businesses that have acquired foreign businesses have found better acceptability at all levels in the host country. This is possible only because of Indian management style and ethos, much less researched but well-practiced with the help of deep-rooted culture and values that we carry. But do we find any model in Management literature? Many Universities study Indian cases... How many Indian Universities do so?

It is interesting to look at the pictorial presentation prepared by GS Global ECS Research for the 'next 11 emerging economies and the major developed economies', given in Figure 1:

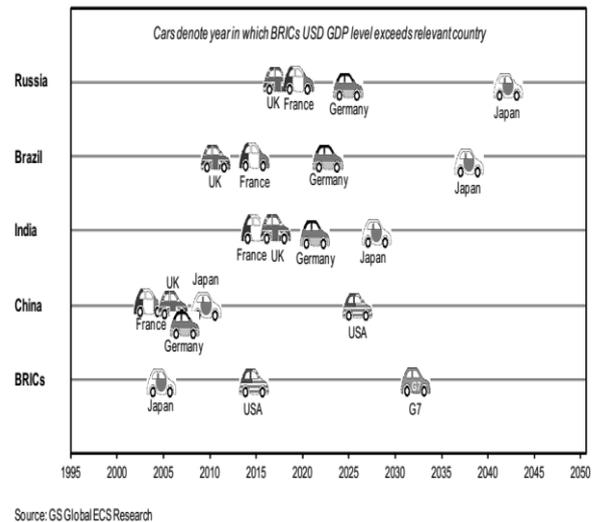


Figure 1: Projected Comparative Position of BRIC Countries vis-à-vis Emerging and Developed Economies

The picture in Figure 1 indicates that India is projected to be quite far behind China among the BRIC countries even in taking over Japan in GDP terms, and dream of taking over USA is not within 2050. India will be the third largest economy by 2050. China, despite all its problems related to language and adverse demographic dividends is able to achieve this so far and will achieve more as per the projections in the picture in Figure 1. Is this because China has developed a good research culture? They have promoted one world class management journal in last ten years. And what have we done?

### Paradigm shift in Indian businesses

The business concerns and managerial talent needs were different during the pre-liberalization period than what it is now. A theme paper prepared by Deloitte is summarized below to bring the new perspective managers in today's context:

Before 1991 managers were required to know rules and regulations and manage bureaucracy. Today a global outlook is expected. The pre-liberalisation hierarchical work environment has been taken over by the environment of innovation and efficiency. Managers needed to manage unions. They were hardly expected to take risk and therefore were working in silos with limited focus and vision. Today's Indian manager is seeking empowerment, works in collaboration rather than under instructions, is more outcome oriented, expects quick rewards and recognition, wants to be motivated and is willing to mentor new generation

managers. Thus in place of working in silos, working in teams has assumed greater importance.

The economic and social environments are different today. They provide lots of opportunities not only for businesses but also for management research. Global integration of Indian businesses and markets, and local reality of huge chunk of population at the base of the pyramid jointly offer great research opportunities in the fields of science, technology and management.

### Who is doing research

Research is largely done by academicians. Doing research does not transform a good teacher into to a bad teacher. If any transformation happens it happens for good. A researcher teacher would teach the knowledge that would be useful for the future challenges rather than teaching the old theories and models which become irrelevant soon in the fast changing world. Let us take a few examples to prove the point that the world is different today because of the research done by academicians.

- Alfred Marshall who gave Theory of Firm, Marginal Utility and Cost of Production was a professor in Cambridge University
- John M. Keynes, a noted Economist was a professor in Cambridge University
- Franco Modigliani who contributed Capital structure Theories was a professor at MIT
- Eugene Fama, who is famous for Portfolio theories was a professor at University of Chicago
- W. Edward Deming whose work in design and quality is path breaking was a professor at NYU
- Peter F. Druker, Father of Modern Management was a professor at Bennington College in Vermont, and at Claremont Graduate School
- C. K. Prahlad who is known for his phrase and theory Fortune at the Bottom of Pyramid, was University of Michigan professor
- Phillip Kotler, a marketing guru is at Kellogg School of Management
- Michael E. Porter, a strategy specialist is with Harvard Business School
- Jagdish Sheth, a well-known marketing guru works at Emory University

What is common among them is, they saw things differently, sometimes observed outliers as compared to the present models and made significant contributions either in terms of more relevant theory or models or tools. Nobel Laureates in most fields are academicians.

### How does the theory evolve with research

Research is a systematic investigation and it helps in improving theories, practices and efficient management for creating values.

Management research can be of many varieties. It can be conceptual or application oriented as well as exploratory or empirical. Research methods and approach will vary depending upon the type and nature of research warranted by the research question.

Charlie and Christensen gave a very interesting model to explain how the theory evolves with research. Often work of many researches jointly culminate into a new theory. Sometime disruptive theories emerge by the efforts of management thinkers. The following section is attempting a summary of a selected portion of the working paper of Charlie and Christensen.

There are two types of theory building processes: (a) descriptive and (b) normative. The descriptive process describes the characteristics of a population or phenomenon under study. That means it involves the study of 'what we see or observe'. The characteristics are based on some categorical scheme like size, industry, geographical areas, visible features etc. In a way it studies 'what' of the subject on hand. This type of research does not explain causes of situation. Therefore, the descriptive research is usually low on internal validity. This is the reason why descriptive study uses frequencies, averages and other statistical tools. Qualitative research is often descriptive.

Descriptive theory building process starts with the observation of phenomenon. Phenomenon being a product of many muddled details, several abstractions termed 'constructs' are drawn and defined to enable proper description of phenomenon.

A normative research attempts to know "how or when or why" of some event or happening or the characteristics of the subject under study. The normative research is a causal study, which describes the cause of situation. When one or more variables affect the dependent variable, it is explained through a normative study. This is also

called an explanatory research because it explains the outcomes or phenomena.

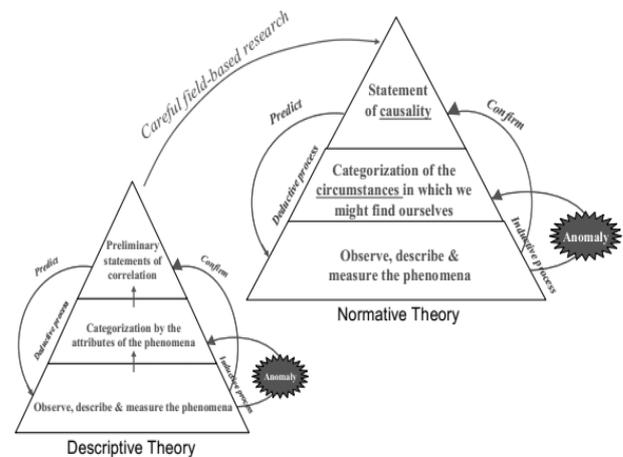
The comparison of the descriptive research and normative research aptly explains that the normative research follows the descriptive research.

Both the theory building processes involve three stages: observation, categorization and defining association or relationship. While the observation is a common stage in both the categorization basis are different. In descriptive research categorization is based on more observable or measurable factors, whereas in normative research the categorization can be based on non-physical but logical factors. The descriptive research, therefore, explains the association only between the variables, whereas the normative research makes the statement causality as can be seen in Figure 2. The Figure 2 also indicates that there is a transition from descriptive approach to a normative approach, without which continuous research and continuous evolution of theory and development of models is not possible.

Categorization scheme helps in identifying consequential relation between phenomenon and its outcome by simplifying and organizing the scope of research. Finally different attributes and variation in their magnitudes affecting the final output are studied. For given attributes, varying impact based on the strength of their association is analyzed through research techniques like regression. The output of these studies is often known as 'model'.

This journey from bottom to top on the pyramid is known as inductive process of theory building. Inductive process establishes a model however it should be noted that the theory improvisation starts only when we move from top to bottom and start predicting through model by testing the hypothesis. This process is known as deductive process wherein hypotheses are tested by a new set of data. When the outcome confirms the established correlation the theory is set to be referred to as 'tested but unimproved'. However when the outcome does not confirm, the researcher is directed to cut the data in a different way by revisiting the classification scheme. For example, in study of innovation through technology, when anomalies were observed, the classification scheme is sub-sequentially framed as modular v/s architectural innovation (through technology), sustaining v/s disruptive technologies and threat v/s opportunity framework. With every modification in the classification, the anomalies left out by the previous scholars are covered. No model becomes indisputably superior however iterations over the

deductive path leads to better understanding of the phenomenon as well as improvised utility for the practitioners.



Source: Charlie, Paul R and Christensen Clayton M, "The Cycles of Theory Building in Management Research", a Working paper

Figure 2: Process of Building Theory: Descriptive and Normative Approaches

Once the theory pertaining to phenomenon seems robust up to a certain level the researcher, through detailed and empirical observation, shifts the attention from statement of correlation to the causes of the outcome. This marks the second stage of theory building known as normative theory building process. Here the researcher follows the same steps as followed in the descriptive theory development process however rather than classifying on basis of attributes different circumstances are anticipated and used as a basis of classification. Once the researcher has framed the statements of causality (inductive portion of the normative theory building process), they frame the hypothesis based on statement of causality and test whether the outcome match the actions taken. Whenever any anomaly is detected, they ponder on the circumstances that yield to different result for given causal mechanism. A number of iterations up and down the pyramid of normative theory facilitate researcher to express how and why the same causal mechanism leads to different results on the basis of different situations. The transition becomes complete when a researcher has clear guidance about the actions which will and will not lead to desired result.

It should be noted that with the plethora of complexities existing in the managerial world it is necessary for a researcher to list out the prominent circumstances pertaining to the theory developed following the descriptive-normative phases.

## Research traps

Often researchers fall in ‘research trap’ and limit their contributions. Some of the research traps are listed below:

### 1. Outliers are Irrelevant

Usually researchers exclude the outliers from the data set and then run the statistical tests. The outliers are exceptions and the fear that they may distort the results makes it necessary to exclude them from the data set. However, the outliers should draw an attention of the researcher for understanding the phenomenon. It may trigger a new research and may result into a new model. Cluster theory was borne out of the study of outliers.

### 2. Non-Experts Cannot be of any Help

Many researchers discuss their research thoughts and problems with only their fraternity members, implicitly assuming that non-area members cannot make contributions in their work. This is a fallacy. Experience of discussion of research thoughts with non-area members and non-experts is often more enriching because what they can see, experts cannot.

### 3. My Findings are not Correct

Some researchers feel that findings are not correct when they do not get expected outcomes. Findings are findings; they cannot be right or wrong. Research problem may not be correct, sample size may be incorrect, data may be irrelevant or inadequate and data analysis may be faulty. However, having taken care of research problem, sample size, data adequacy and relevance, and data analysis whatever is the outcome of research is always correct.

### 4. Research Problem must be Comprehensive

In management research it is practically impossible to select and define a problem which comprehensive or complete in nature. The real-life variables are so many, and so dynamic, that no research problem can be complete ever. Therefore, adequate definition, depending upon the research topic and environment in which it is studied would define the relevance of the research. The management research, therefore, continuously go through the cycle of descriptive and normative research as well as inductive and deductive processes. However, this does not mean that there is no need for defining a research problem well.

### 5. Recommendation Fallacy

This type of trap exists, especially when a researcher has conducted a descriptive study and is using the findings to make causal based recommendations. The data used for a descriptive study would surely be different from the data required for a normative study. Therefore, a temptation to derive recommended actions based on descriptive study should be avoided.

### 6. Single Cause Fallacy

For a particular phenomenon there might be a large number of causes. Accommodating all of them is practically impossible. However attempting the polar opposite of singling out the cause might be equally apprehensive. As a researcher, the itch to oversimplify the cause must be avoided and multiple causes, if existent, should be identified before deciding on the salient circumstances for any causal mechanism.

### 7. Anomalies are not Good

Absence of anomalies opens up the scope of marking the model as ‘tested but unimproved’. However it is the anomalies that open up the scope of refinement of the classification scheme while the model is through the descriptive stage of the theory building process. Moreover Descriptive theory that quantifies the degree of correlation between the category-defining attributes of the phenomena and the outcomes of interest are generally only able to make probabilistic statements of association representing average tendencies. Hence failure to address anomalies not only leads to dropping off the results that are true but negative, but also inclusion of result that are untrue but show positive result.

### 8. Adaptation is Unnecessary

Many a times a research that is conducted in particular political, economic, social, technological and legal environment is adopted to draw inferences for another set of environmental context. Imperativeness to adopt a research without provisioning for the change in ethnic conditions leads to erroneous framing of phenomenon. Wrongly framed phenomenon kills the entire objective of research at its very inception.

In nutshell, academicians are best suited for conducting research and bringing the findings of it in the classroom for the preparation of future

managers. A good teacher can only become better teacher with research based on questions that he develops while teaching a topic. The management theories, models, tools and practices would continuously improve with research and create economic and social value for the mankind. If India has to achieve its dream of becoming a superpower the Indian research has to pick up a fast pace. The paradigm change that has been happening fast with the wind of economic liberalisation, and with the vast population at the bottom of the pyramid, India offers very good scope and opportunities for the research in the fields of science, technology and management.

A researcher has to carefully understand the descriptive and normative research with inductive and deductive processes and also understand the steps of making observation, categorization of variables and defining of association or relationships. Simultaneously being aware of research traps would help too.

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# A Predictive Model for E-commerce Value among SMEs Entrepreneurs in India

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## Abstract

It is very important to study what entrepreneurs of SMEs perceive about the value of e-commerce as an effective marketing tool. In reality, it is hardly understood about its potential as a strong marketing tool. The application of a web site for marketing the products encompass different components of business, such as, information delivery, effective cost, better service to customers, market expansion, competition strength. Therefore, it is necessary to know the perception of entrepreneurs on these aspects of web sites as part of total e-commerce. It is found in the study that SMEs are missing a great value proposition of making their web sites as a platform for market competitiveness for customers. They also perceive that web site is a medium of delivering information cost-effectively for the customers. Surprisingly, they give least weightage to web sites as a tool for creating customer value, and for market retention and expansion. However, as a mind-set of entrepreneur, business expansion and opportunity identification & exploration are emerging as major dimensions which can be achieved through use of e-commerce as effective marketing tool.

## Sample Design

The population consists of select SMEs of Gujarat state in India which is on the western parts. A sample size of 225 manufacturing units was

## Introduction

It is very important to study what entrepreneurs of SMEs perceive about the value of e-commerce as an effective marketing tool. The digital tool is largely perceived to be as “platform desk” on the web. However, it is hardly understood about its potential as a strong marketing tool. Therefore, web sites go beyond the boundary of information dissemination. In fact, the application of a web site for marketing the products encompass different components of business, such as, information delivery, effective cost, better service to customers, market expansion, competition strength. Therefore, it is necessary to know the perception of entrepreneurs on these aspects of web sites as part of total e-commerce. As such web sites increase the value of information about the customers who become potential for sales. Information value can be increased by giving different shapes to information, which can really convince the potential customers. Such factor also spurs the word-of-mouth sales. Web sites, at the same time, become a platform to disseminate information in a more efficient way than traditional brochures, leaflets, etc. It reduces the cost of delivery of information.

Since the reach of web sites is limitless, it helps the companies to grab new business opportunities. It also improves the logistic aspect to the business and enables to increase the availability of products to customers. Many effortless buying processes give better buying experience to customers who over a period of time increase the market share of the company. This also helps to increase exports in a greater way because customers have access to many sources of products in the market.

Another significant advantage of using web sites is the reduction in transaction cost and marketing cost. Furthermore, the inventory carrying cost is reduced. This also helps to gain more information about customers which become a valuable input for future marketing strategies. Since suppliers are also in the look out of new customers, web sites fetch more information about raw material at a very low cost. The overall benefit gives a competitive advantage in many ways. Moreover, web sites integrating with social media become the effective marketing tool. It is largely observed from the survey of web sites of SMEs that only 9% of them fall in the effective category. Hence, it is necessary to understand the perception about web sites among the entrepreneurs.

decided for measuring the business perception about web sites among SMEs entrepreneurs. However, there was a declined participation from 58 entrepreneurs resulted into 167 responses. The response rate achieved was 74.22%. Five point likert-scaled was developed as an instrument.

## Characteristics of the Sample

Table 1.1: Characteristics of the Sample

No of Employees More than 25	<b>Yes</b>	<b>No</b>	<b>Total</b>	
	90 54%	77 46%	167 100%	
Companies more than 15 years of establishment	103 62%	64 38%	167 100%	
	30 18%	137 82%	167 100%	
Turnover - More than 50 Crore	<b>Labor</b>	<b>Capital</b>	<b>Total</b>	
	103 62%	64 38%	167 100%	
Intensive Nature	<b>DialUp</b>	<b>Leased Line</b>	<b>No Internet</b>	<b>Total</b>
	143 86%	17 10%	7 4%	167 100%
Internet Access	<b>Domestic</b>	<b>Export</b>	<b>Both</b>	<b>Total</b>
	114 68%	3 2%	50 30%	167 100%
Transnational Sales	<b>Yes</b>	<b>No</b>	<b>Total</b>	
	124 74%	43 26%	167 100%	
Companies having a Web site				

## Research Study

An instrument comprises of four sections was designed to study what entrepreneurs of SMEs perceive about the value of web sites as the effective marketing tool. Section 1 was designed with 25 different factors, which can depict the perceived value of a web site. Section 2 was designed with 15 different factors, which can depict the entrepreneurial mind-set, Section 3 was designed with 11 different factors, which can portray organizational readiness while Section 4 was designed with 5 different factors which represents competitive environment. The instrument was assessed through a statistical test called 'Factor Analysis' using SPSS version 18. In this study, Exploratory Factor Analysis (EFA) was used out of two approaches to Factor Analysis because EFA is often used in the early stages of research to gather information about (explore) the interrelationship between a set of variables. There are three basic steps to Factor Analysis: (1) Computation of the correlation matrix for all variables, (2) Extraction of initial factors, and (3) Rotation of the extracted factors to a terminal solution (Ho, 2006).

As Factor Analysis is based on correlations between measured variables, a correlation matrix

containing the intercorrelation coefficients among the variables was computed first. The researchers then extracted the number of common factors using the Principal Component Analysis (PCA) method. To determine the number of initial unrotated factors to be extracted, an Eigenvalues criterion was used. Only factors with eigenvalues of 1 or greater were considered to be significant; all factors with eigenvalues less than one were disregarded. An eigenvalue is a ratio between the common (shared) variance and the specific (unique) variance explained by a specific factor extracted. The rationale for using the eigenvalue criterion is that the amount of common variance explained by an extracted factor should be at least equal to the variance explained by a single variable (unique variance) if that factor is to be retained for interpretation. An eigenvalue greater than 1 indicates that more common variance than unique variance is explained by that factor (Ho, 2006). The Scree Test criterion was also used to identify the optimum number of factors that can be extracted before the amount of unique variance begins to dominate the common variance structure. The scree test was derived by plotting the eigenvalues (on the Y axis) against the number of factors in their order of extraction (on the X axis).

Finally, the extracted factors were rotated to achieve a simpler, theoretically more meaningful pattern because factors produced in the initial extraction were difficult to interpret. Out of Orthogonal and Oblique - two rotation methods, the researcher selected Oblique approach assuming the correlation between the factors. The factors studied in the survey reflect the inter-related relationship. They are, by some reason, connected with one another because they reflect the perception. Therefore, it is reasonably assumed that correlation exists among them. Hence, Direct Oblimin approach was applied.

## Results & Interpretation

### Section 1: Perceived value of a web site

In this section, 25 different variables were analyzed to know the perceived value of a web site among SME Entrepreneurs. Any instrument is required to

be checked for internal consistency. To measure Reliability Analysis, Cronbach Alpha was applied to check the internal consistency for all the 25 factors prior to the analysis resulted into a value of 0.937. If alpha is high (0.80 or higher), then this suggests that all the items are reliable and the entire test is internally consistent (Ho, 2006). Examination of the Correlation Matrix revealed fairly high correlations between many of the 25 variables having a value of 0.33 or higher. To verify that the data set is suitable for factor analysis, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) test was applied, which resulted into a value 0.856 (.6 or above is acceptable, Ho:2006). The Bartlett's test of sphericity was used to test for the adequacy of the correlation matrix, i.e.; the correlation matrix has significant correlations among at least some of the variables. Bartlett's test was significant ( $p = .000$ ). Therefore, Factor Analysis was appropriate.

**Table 1.2: KMO & Bartlett's Test – Section 1**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.856
Bartlett's Test of Sphericity	Approx. Chi-Square	3247.530
	Df	300
	Sig.	.000

The Communalities presents the communality of each variable (i.e., the proportion of variance in each variable accounted for by the common factors). Factor A21, A20, A17, A12, and A1 are perceived to be the most valued by the entrepreneurs. Thus, exploring more sources and types of raw material, reduction in the cost of inventory carrying, increase in sales, and product information to customers are perceived values of web sites.

**Table 1.3: Total Variance Explained**

Total Variance Explained							
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings <sup>a</sup>
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	10.173	40.691	40.691	10.173	40.691	40.691	6.201
2	3.023	12.094	52.785	3.023	12.094	52.785	5.095
3	1.843	7.372	60.157	1.843	7.372	60.157	5.313
4	1.509	6.034	66.191	1.509	6.034	66.191	6.031
5	1.205	4.818	71.009	1.205	4.818	71.009	6.038

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

As reflected in Table 1.3, PCA revealed the presence of five components (factors) with eigenvalues exceeding 1, explaining 40.69%, 12.09%, 7.37%, 6.03%, and 4.82% of the variances respectively. An inspection of the scree plot also revealed a break after the fifth component. Therefore, it was decided to retain five components for further investigation.

To aid to the interpretation of these five components, Oblimin rotation was performed. Since it was reasonable to assume that the five components are also interrelated, Oblimin rotation

was performed, while Varimax being orthogonal was not performed. The rotated solution revealed in the pattern matrix (Table 1.4), the clusters of components. The values with 0.55 and more have been retained. Therefore, factors A24, A25, A19, A15, and A10 were dropped from 25 factors, which reflect that entrepreneurs did not perceive the ability of a web site to change the business strategy faster, business value of social media, web site as a source of information about customers, reduction in cost of marketing using web sites, and web sites as a platform to expand its market share.

**Table 1.4: Pattern Matrix**

Pattern Matrix <sup>a</sup>					
	Component				
	1	2	3	4	5
A1		-.816			
A2		-.834			
A3		-.890			
A4		-.554			
A5		-.344		-.604	
A6				-.846	
A7				-.769	
Pattern Matrix <sup>a</sup>					
	Component				
	1	2	3	4	5
A8				-.773	
A9				-.646	
A10				-.437	-.548
A11					-.639
A12					-.817
A13					-.822
A14					-.639
A15			.537		
A16			.884		
A17			.901		
A18			.801		
A19	.531		.436		
A20	.904				
A21	.904				
A22	.773				
A23	.609			-.302	
A24	.485				
A25	.532		.305		
Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization.					
a. Rotation converged in 12 iterations.					

Therefore, the first component with four factors – A21, A20, A22, and A23 make one cluster explaining the highest variance among all the five components. The cluster of these four factors explains the unique perception of entrepreneurs towards web sites as web sites enable the SMEs of being competitive in the market by way of reducing prices in the material cost through more sources of material, availability of more types of material, better prices of material and thereby becoming competitive in the market. They perceive the web site not actually as a marketing tool. Hence, there is no perceived value of web sites as connecting with the customers, but perceived value as connecting with suppliers. So, they do not perceive value of web sites as disseminating information about the products and marketing them to customers. However, they perceive the value as obtaining information about the products as raw material and purchasing them from suppliers. Therefore, this explains the first component as ‘Market Competitiveness through Sourcing’ having 40.69% of highest variance.

The second component has also four factors – A3, A2, A1, and A4, which explain 12.09% of variance. These factors explain that entrepreneurs perceive the value of web sites as cost efficient information to potential customers by way of the reduction in cost of information delivery through web sites better than traditional brochures and enhancing information value with updation at lesser cost. Thus, second component explains the ‘Cost-efficient Information to Customers’ with second highest focus with 12.09% of variance.

The third component has three factors – A17, A16, and A18 which explains the perceived value as cost

advantage through reduction in inventory carrying cost, distribution cost, and supply chain. This component explains 7.37% of variance. Therefore, the third component may be explained as 'Cost Advantage on In-bound Logistics'. As factor A15, which explains the cost reduction in marketing cost through falling in the same cluster, is dropped, it is reasonable to infer that entrepreneurs perceive that web sites marketing cost to reduce their cost on in-bound supply chain which also includes inventory carrying cost.

The fourth component has a cluster of five factors – A6, A8, A7, A9, and A5. These factors explain the perceived value with regard to generating new business opportunities, new customers, better services to customers, products availability, and enhancing brand value. This component explains 6.03% of variance having very less weightage in the perceptual study. However, this component may be explained as perceived value as to 'Customer Value'.

The fifth and last component has a cluster of four factors – A13, A12, A14, and A11. These factors explain the perceived value to 'Market Retention and Expansion' through increase in exports, increase in sales to existing customers, decrease in cost of processing transactions, and enhanced buying experience. However, this component explains only 4.8% of variance which is the least perceived value among all five components.

## Section 2: Entrepreneurial Mind-set

Entrepreneurship is all about vision, resource mobilization and risk-taking. In today's environment, entrepreneurship is more challenging because of the complexity and dynamism in the business environment. Expansion, product range, training & development, new market exploration, R & D, talent management, opportunity identification, customer orientation, new ideas development are some of the attributes, which reflect the entrepreneurial mind-set. Adoption of E-commerce and web site as a marketing tool springs from such mind-set. Therefore, it is necessary what dimensions make up for entrepreneurial mind-set. Examination of the Correlation Matrix revealed fairly high correlations between many of the 25 variables having a value of 0.33 or higher.

To measure Reliability Analysis, Cronbach Alpha was applied to check the internal consistency for all

the 15 factors prior to the analysis resulted into a value of 0.878. KMO test was applied, which resulted into a value 0.895. The Bartlett's test of sphericity was significant which was used to test for the adequacy of the correlation matrix.

The Communalities presents the communality of each variable (i.e., the proportion of variance in each variable accounted for by the common factors). Factor B2, B9, B3, B7, B12, and B6 are perceived to be the most by the entrepreneurs. Thus, entrepreneurs believe that there should be increase in investment for business growth & expansion, a separate budget for R & D and experimental lab, should regularly attend conference / workshop / exhibition, target new markets regularly, need for membership of business association, and there has to be a system to find new business / markets regularly.

Through Total Variance Explanation, PCA revealed the presence of four components (factors) with eigenvalues exceeding 1, explaining 40.13%, 10.74%, 8.45%, and 7.88% of the variances respectively. An inspection of the scree plot revealed a break after the fourth component. Using Scree Test, it was decided to retain four components for further investigation.

To aid to the interpretation of these four components, Oblimin rotation was performed. The values with 0.55 and more have been retained. Therefore, factors B4, and B8 were dropped from 15 factors, which reflect that entrepreneurs do not believe in sending their employees for training & development for the business growth and they do not keep close watch on competitors' activities.

There are four components which explain the entrepreneurial mind-set. The first component has three factors, viz, B1, B2, and B3 which explain that any company should expand in terms of product range as well as investment and knowledge. Therefore, the first component explains 'Business Expansion' as one dimension with entrepreneurial mind-set. The component explains 40.12% of the variance which is the highest among all the four components.

The second component explains 10.74% of the variance. It has five factors under its cluster, viz, B12, B14, B11, B15, and B13. These factors explain the opportunity as the engine of business growth. Hence, it should never be missed, but

converted into business growth through business network, resource mobilization, and new ideas & initiatives. Therefore, this component explains that these five factors contribute to development of focus on 'Business Opportunities Identification and Exploration'.

The third component explains 8.45% of variance. This has a cluster of three factors, viz, B9, B7, and B10. These factors contribute to 'New Market Exploration' through regular target on new markets, and allocating budget for R & D. Also employees should be rewarded with incentives for their better performance. Hence, this component explains the dimension of 'New Market Exploration' as to entrepreneurial mind-set.

The fourth and last component explains 7.67% of the variance. This has a cluster of two factors, viz, B5 and B6 which explain the 'Risk-Taking' dimension of entrepreneurship. The SMEs should develop a system of finding new business or markets continuously and such expansion should be financed through equity. This truly reflects the 'Risk-Taking' feature of entrepreneurship. Thus, the four components can be explained as follows.

### Section 3: Organizational Readiness

No goal can be achieved if the organization of all activities is not properly made. Therefore, organization in itself becomes a separate entity. The color, shape, and fragrance of the organization change with the growth and expansion. In order to grab new opportunities the structure of the organization has to change. To sustain the growth, organization has to adopt new processes, methodologies, and adapt to new environment.

E-commerce is an emerging phenomenon where it is used more as a strategy for business expansion and growth. Therefore, it has become inevitable to embrace the E-commerce environment. Eleven factors were identified which reflect the organizational readiness for E-commerce adoption. Factor Analysis was performed to capture the dimension of organizational readiness.

Cronbach Alpha was applied to check the internal consistency for all the 11 factors prior to the analysis resulted into a value of 0.912. KMO test was applied, which resulted into a value 0.895. The Bartlett's test of sphericity was significant which

was used to test for the adequacy of the correlation matrix.

Through Total Variance Explanation, PCA revealed the presence of two components (factors) with eigenvalues exceeding 1, explaining 55.58%, and 14.49% of the variances respectively. An inspection of the scree plot revealed a break after the second component. Using Scree Test, it was decided to retain two components for further investigation.

To aid to the interpretation of these two components, Oblimin rotation was performed. The rotated solution revealed in the pattern matrix, the clusters of components. The values with 0.55 and more have been retained. Therefore, factor C8 was dropped from 11 factors, which reflect that organizations are not ready to enhance applications / capabilities / features of web sites.

The analysis of pattern matrix revealed that there are two components which explain the organizational readiness. The first component has made a cluster of seven factors, viz, C3, C5, C6, C2, C4, C7, and C1. All these factors contribute to organizational readiness with regard to restructuring of business processes by way of systems change, work culture, necessary training, resource mobilization recognizing the fact that the E-commerce is today's business requirement. This component explains 55.58% of the variance.

The second component explains 14.49% of the variance and clusters three factors, viz, C10, C11, and C9. These factors contribute to organizational readiness for new technology platforms by way of exploring them for E-commerce implementation, developing social media for strengthening E-commerce, and supporting mobile applications for E-business. However, the most important observation is, factor C8 is dropped which explains organization is not ready to enhance capabilities and features of web sites for complete E-commerce. Therefore, organizational readiness seems to be limited application of E-commerce which reflects the myopic view of E-commerce capability. Thus, both the components are explained in the following table.

### Section 4: Competitive Environment

Competitive environment is such which will compel the companies to adopt new means of doing

business. If such a situation is not responded positively, then companies will face the problem of survival. Therefore, E-commerce or developing a web site is a compelling factor for SMEs. This reflects the reactive form of strategy building.

Five factors were identified which reflect the competitive environment for E-commerce adoption. Factor Analysis was performed to capture the dimension of competitive environment. Cronbach Alpha was applied to check the internal consistency for all the 5 factors prior to the analysis resulted into a value of 0.914. KMO test was applied, which resulted into a value 0.830. The Bartlett's test of sphericity was also applied to check whether Factor Analysis was appropriate or not.

As reflected in Total Variance Explanation, PCA revealed the presence of only one component (factor) with eigenvalues exceeding 1, explaining 74.94% of the variances respectively. An inspection of the scree plot revealed a break after the second component. Using Scree Test, it was decided to retain two components for further investigation.

Since, only one component is extracted, the rotation matrix is not performed. The extracted component explains 74.94% of variance. All the factors are retained and they contribute to E-commerce adoption due to competitive environment. It is perceived that competition is

forcing E-commerce which will help in differentiation, building brand stronger and enable the company to take leadership position. This component can be explained as E-commerce adoption due to competitive pressure.

#### Linear Regression and Hypothesis Testing

E-commerce is a relatively new phenomenon for doing business digitally. Over the years, the business world is tuned to do business physically, so, it is taking time to adopt with the virtual world. Still, its potential is not yet tapped to take full advantage. Web sites have huge potential for being effective marketing tool. It enables SMEs to expand the market at lesser costs. It helps companies to collect information about the customers which can be used in decision-making for increasing sales.

Its adoption is largely dependent on entrepreneurial mind-set, organizational readiness, and competitive environment. It is anticipated that linear relationship exists between the components. Therefore, linear regression was carried out on the components wherein perceived value of the web site (A) is a dependent variable, and entrepreneurial mind-set (B), organizational readiness (C), and competitive environment (D) are independent variables. This can help us to build a predictive model which can be used for strategy development to increase perceived value of web site.

**Table 1.5: Model Summary**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.810 <sup>a</sup>	.657	.650	9.272
a. Predictors: (Constant), All_D, All_B, All_C				

R is 0.81 which explains very good correlation between the dependent variable and independent variables, while R square value explains that 65% of the variance in dependent variable can be explained by three independent variables.

**Table 1.6: ANOVA**

ANOVA <sup>b</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26794.042	3	8931.347	103.884	.000 <sup>a</sup>
	Residual	14013.814	163	85.974		
	Total	40807.856	166			
a. Predictors: (Constant), All_D, All_B, All_C						
b. Dependent Variable: All_A						

**Table 1.7: Coefficients**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.427	5.599		1.326	.187
	All_B	.597	.155	.292	3.862	.000
	All_C	.724	.179	.322	4.049	.000
	All_D	1.143	.203	.320	5.618	.000
a. Dependent Variable: All_A						

All the coefficients of B, C, and D are positive, so they positively influence the dependent variable A. The prediction equation is:

$$A = 7.427 + 0.597B + 0.724C + 1.143D$$

The equation explains that the perceived value of web site is predicted to increase by 59.7% when there is increase in entrepreneurial mind-set by 100%. Similarly, perceived value of web site is predicted to increase by 72.4% with the increase in organizational readiness by 100%, while increase in competitive environment by 100% would increase perceived value of web site by 114.30%. Thus, among all independent variables, competitive environment emerges to be the most influential factor for perceived value of web sites followed by organizational readiness, i.e., 72.4%, and lastly by entrepreneurial mind-set by 59.7%.

## Conclusion

Thus, in order to generate e-commerce value among the SMEs entrepreneurs, it is necessary on the part of policy makers to influence the entrepreneurs by making them aware of competitive environment how it will impact the business, how they should make their organizations ready for new tools, and how they should cultivate

their mind-set. SMEs can get global opportunities for their business if E-commerce is adopted as a tool for business expansion.

The research undertaken reveals many things why e-commerce has not been yet perceived to be effective marketing tool. Basically, SME sector is governed by entrepreneurs' thinking. They influence the implementation of strategies. The leadership in the SME sector is largely individualistic as opposed to collective, and autocratic as opposed to participative. At the same time, SME leadership is traditional and routine with no much experimentation and adoption of new ways of doing business. Hence, many business opportunities are missed.

Largely, the SMEs entrepreneurs under the study do not perceive e-commerce as a marketing tool. But, they perceive as creating market competitiveness through sourcing of material with highest variance of 40%. This reflects that SMEs are missing a great value proposition of making their web sites as a platform for market competitiveness for customers. What they get as value from suppliers' web sites, they fail to deliver value to their customers. They also perceive that web site is a medium of delivering information

cost-effectively for the customers. Surprisingly, they give least weightage to web sites as a tool for creating customer value, and for market retention and expansion.

However, as a mind-set of entrepreneur, business expansion and opportunity identification & exploration are emerging as major dimensions which can be achieved through use of e-commerce as effective marketing tool. Probably, it is revealed that they are oriented towards business expansion but carry wrong factors about the use of web sites.

Interestingly, as an organization they show readiness for restructuring business processes and for the use of web sites as technology platforms for E-commerce implementation. But, they are not aware that they can use their web sites as effective marketing tool. However, the study reveals that competitive environment is forcing them to implement e-commerce as marketing tool which is a reactive stand taken by them. The study also reveals that competitive environment emerges to be the most influential factor for e-commerce as effective marketing tool. In order to make them understand about e-commerce value, it is imperative to draw a true picture of competitive situation prevailing in the respective sectors of SMEs.

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# Measuring Impact of Time Management Habits on the Academic Result of the Students of Commerce and Management

Yagnesh Dalvadi, Punita Rajpurohit

## Abstract

Time is life. Wasting one's time is wasting one's life especially for student life. When a student wants to build bright career, it is important to manage the time effectively so that he/she focus more time on studies and less in trivial things. Commerce and management students are future managers. It is said that students are like wet cement, whatever falls on them makes an impression. Inculcation of time management habit in students' right from inception will play a vital role in their success. The focus of this study is to study time management habit in commerce and management students and impact of time management on their academic results. This study also focuses on students' perception about the importance of time management in the corporate sector. The study indicate that the students who manage their time as per time management skill does give good academic results but we cannot deny the fact that those who do not plan, they also gets good results. Junior students manage their time effectively compare to senior students. However there is no significant difference in the scoring on time management scale according to Gender, Level of Study (UG/PG) and academic results wise.

## Introduction

Time management plays a vital role in life of everyone especially students. Students are required to focus on plethora of activities for their all-round development. In such a situation time management becomes extremely important for them. Time is the most precious asset. To manage time has become a priority for everyone in today's fast moving and competitive world. Time management has become buzzword in this era and even included as a part of curriculum in studies. Time management has definitely an impact on the performance of an individual. For students, time management can have a positive impact on their academic performance. The focus of the study is to understand the time management habit among commerce and management students and examine its impact on the academic performance of commerce and management students.

## Time management

Time management is an important skill to learn and use in everyone's life especially students. By implementing time management skills, students realize they have enough time. They just have to identify it and use it wisely.

Time management means fixation of priorities according to time. It helps one to do task in time and utilize your time more productively. It helps identify the useless activities which can be avoided and time can be saved. Time management comprises of following:

1. Allocation of time against activities.
2. What should be done first and what should be done second?
3. How much time should be given to a task according to its importance and nature?
4. What is the right time for a task?
5. Which tasks should be avoided in order to save time or to identify the activities which lead to wastage of time?

A student has to perform varied activities during the day, academic work related to his/her career, activities essential for life, entertainment, physical fitness. Some of these activities are necessary for refreshing mind but may consume excess time than required. At this juncture time management becomes important.

## Importance of time management

1. Time is Limited

Everyone gets the same amount of time each day, and it's limited, therefore it's important to make the most of your time if you ever want to be more than average at the workplace.

## 2. Accomplish More with Less Effort

By taking control of your time, you're able to stay focused on the task at hand. This leads to higher efficiency since you never lose momentum. Imagine running a mile where you stop every 5 seconds, this would cause you to become exhausted very quickly and take much longer to complete the run.

## 3. Make better Decisions

There are many choices in life and often-times we're faced with many choices to choose from at the same time. When you practice good time management, you have more time to breathe; this allows you to determine which choices are the best to make.

When you feel pressed for time and have to make a decision, you're more likely to jump to conclusions and not fully consider the different options; this leads to poor decision making.

## 4. Be more Successful

Time management is the key to success; it allows you to take control of your life rather than follow the flow of others. You accomplish more, you make better decisions, and you work more efficiently; this leads to a more successful life.

## 5. Learn More

When you control your time and work more efficiently, you're able to learn more and increase your experience faster. There's a reason some students graduate earlier than others, so imagine implementing time management throughout your entire career. You'll not only stand out from the rest, but you'll gain experience much faster and be able to move up in life a lot sooner.

## 6. Reduce Stress

One of the main causes of stress is due to people feeling rushed. The phrase "I have so much to do and so little time to do it" is generally spoken with frustration which leads to stress. With good time management, you know how much time you have, how long it will take to get your tasks done, you accomplish more, and have more free time. This gives you more breathing room, which reduces the feeling of being rushed, which in turn leads to less frustration and stress.

## 7. Higher Quality Work

We all need some free time to relax and unwind but, unfortunately, many of us don't get much free time because we're too busy trying to keep up with

our daily activities and work load. By implementing time management skills, you are able to get more done in a shorter period of time leading to more free time.

## 8. Creates Discipline

When you practice good time management in your life, you are less likely to procrastinate. Time management leads to higher productivity and leads to a disciplined life.

### Review of literature

Study of Macan, Therese H.; Shahani, Comila; Dipboye, Robert L.; Phillips, Amanda P. (1990) indicates that many college students may find the academic experience very stressful (K. J. Swick, 1987). One potential coping strategy frequently offered by university counseling services is time management. 165 students completed a questionnaire assessing their time management behaviors and attitudes, stress, and self-perceptions of performance and grade point average (GPA). The study revealed 2 major findings. The Time Management Behavior Scale consists of 4 relatively independent factors; the most predictive was Perceived Control of Time. Students who perceived control of their time reported significantly greater evaluations of their performance, greater work and life satisfaction, less role ambiguity, less role overload, and fewer job-induced and somatic tensions. Findings are consistent with theory and advice on time management (e.g., R. S. Schuler; 1979) but also indicate that the dynamics of time management are more complex than previously believed.

Study of Misra, Ranjita; McKean, Michelle (2000) investigated the interrelationship among academic stress, anxiety, time management, and leisure satisfaction among 249 university, undergraduates by age and gender. Time management behaviors had a greater buffering effect on academic stress than leisure satisfaction activities. Significant gender differences existed among all the measures. Females had more effective time management behaviors than males, but also experienced higher academic stress and anxiety. Males benefited more than females from leisure activities. Freshmen and sophomore students had higher reactions to stress than juniors and seniors. Anxiety, time management, and leisure satisfaction were all predictors of academic stress in the multivariate analysis. Anxiety reduction and time management in conjunction with leisure activities may be an effective strategy for reducing academic stress in college students.

Study of Mark Trueman and James Hartley (1996) indicated (i) that women students in general reported significantly greater time-management skills than did men students, and (ii) that older mature students (more than 25 years of age) reported significantly better time-management skills than did the other two groups that is traditional entry students (less than 21 years of age) and borderline mature students (age between 21 and 25). Academic performance, however, was only modestly predicted by age and scores on one component of the time-management scale.

Study of Britton, Bruce K.; Tesser, Abraham (1991) tested the hypothesis that college grade point average (GPA) would be predicted by time-management practices. 90 college students completed a time-management questionnaire in 1983; their high school Scholastic Aptitude Test (SAT) scores were obtained from college records. Principal-components analysis of the 35-item time-management instrument revealed 3 components. Regression analyses showed that 2 time-management components were significant predictors of cumulative and accounted for more variance than did SAT scores. It was concluded that time-management practices may influence college achievement.

Study of Leonidas A. Zampetakis, Nancy Bouranta and Vassilis S Moustakis (2010) investigated the relationship between time management behaviours and attitudes with measures of creativity, as assessed by self-rated creativity and a measure of creative personality. Additionally, total creativity was examined, as the sum of the two creativity constructs when z-scored. Using data from a survey of 186 participants, results suggested that creativity is positively related to daily planning behaviour, confidence on long-range planning, perceived control of time and tenacity and negatively related to preference for disorganization. These results have theoretical implications for understanding how creativity relates to time management.

### Objectives of study

1. To understand the time management habit among the commerce and management students.
2. To know their perception about the importance of time management in corporate sector.
3. To examine the impact of time management score on the academic performance of commerce and management students.

### Research methodology

The scope of this study is to know the time management habit among the commerce and management students who are perusing their Bachelor and Master degree in Management and Commerce in the universities. This study also explores impact of time management habits on students' academic results. This study is based on primary data which was collected through questionnaire from B.Com, BBA and M.Com students. For this purpose a survey was conducted and responses were recorded. The selections of respondents were based on convenient sampling techniques. We receive 385 responses, 18 questionnaire was incomplete therefore not considered for this study. Finally 367 students' responses were processed for the study. The researcher has made them aware and explained each of the statement time management questions so that they can give accurate response. At the end we explained the interpretation of the score obtained by the respondents and suggested ways to improve their score. There are two limitations of the study, first samples do not include MBA students and second responses are collected from one university only.

In this study, time management habit of the respondents is studied using their score on time management scale. Respondents had to give score to 25 statements asked to them. These statements are retrieved from <http://advising.wayne.edu/hndbk/time.php>. They had to give score "2" for "always", "1" for "sometimes" and "0" for "never". Respondents had to score themselves on the following questions and tally the score at last.

1. I do things in order of priority.
2. I accomplish what needs to be done during the day.
3. I always get assignments/ Home Work done on time.
4. I feel I use my time effectively.
5. I tackle difficult or unpleasant tasks without procrastinating.
6. I force myself to make time for planning.
7. I am spending enough time for planning.
8. I prepare a daily or weekly "to do" list.
9. I prioritize my list in order of importance, not urgency.

10. I am able to meet deadlines without rushing at the last minute.
11. I keep up-to-date on my reading and homework assignments.
12. I prevent interruptions from distracting me from high priority tasks.
13. I avoid spending too much time on trivial matters.
14. I am spending enough time on academic matters.
15. I plan time to relax and be with friends in my weekly schedule.
16. I have a weekly schedule on which I record fixed commitments such as classes and work hours.
17. I try to do the most important tasks during my most energetic periods of the day.
18. I make constructive use of my commuting time.
19. I periodically re-assess my activities in relation to my goals.
20. I have discontinued any wasteful or unprofitable activities or routines.

21. I screen and group my telephone calls to allow for control over telephone interruptions.
22. I judge myself by accomplishment of tasks rather than by amount of activity or "busy-ness".
23. My actions are determined primarily by me, not by circumstances or by other people's priorities.
24. I have a clear idea of what I want to accomplish during the coming semester.
25. I am satisfied with the way I use my time.

The interpretation of the score is as follows:

**45-50 points:** You're on your way to becoming CEO of a major corporation!

**38-44 points:** You probably own your organization and have organized your sock drawer.

**30-37 points:** You are managing your time fairly well, but sometimes feel overwhelmed.

**25-29 points:** Your college career is likely to be stressful and less than satisfying unless you take steps to begin to manage your time more effectively.

**Less than 25 points:** Your life is one long roller coaster ride, out of control.

## DEMOGRAPHIC PROFILE OF RESPONDENTS

**Table: 1 Demographic Profile of Respondents**

	CATEGORY	FREQUENCY	PERCENTAGE
CLASS	B.Com	94	25.6
	BBA	121	33.0
	M.Com	152	41.4
Year of study	First year	153	41.7
	Second year	122	33.2
	Third year	69	18.8
	Fourth year	23	6.3
Academic result	Not clear	55	15.0
	Pass class	12	3.3
	Second class	70	19.1
	First class	135	36.8
	Distinction	95	25.9
Gender	Male	167	45.5
	Female	200	54.5
Age	Below 20 years	139	37.9
	20 to 30 years	228	62.1
Level of study	Under Graduate	215	58.6
	Post Graduate	152	41.4

**DATA ANALYSIS AND INTERPRETATION**

	YES/NO	FREQUENCY	PERCENTAGE
<b>Do respondents manage their time?</b>	Yes	303	82.6
	No	64	17.4
	<b>Total</b>	367	100.0
<b>Workshop/seminar attended by respondents on time management</b>	Yes	195	53.1
	No	172	46.9
	<b>Total</b>	367	100.0

**Table: 2 Time Management Habit and Attendance in Workshop /Seminar**

The above table indicates that 303 (82.6 %) respondents believe that they practice time management. 195 (53.1%) respondents have attended seminar or workshop on time management.

**Perception about importance of time management in corporate sector**

Yes/No	Frequency	Percentage
Yes	348	94.8
No	19	5.2
Total	367	100.0

**Table: 3 Perception about importance of time management in corporate sector**

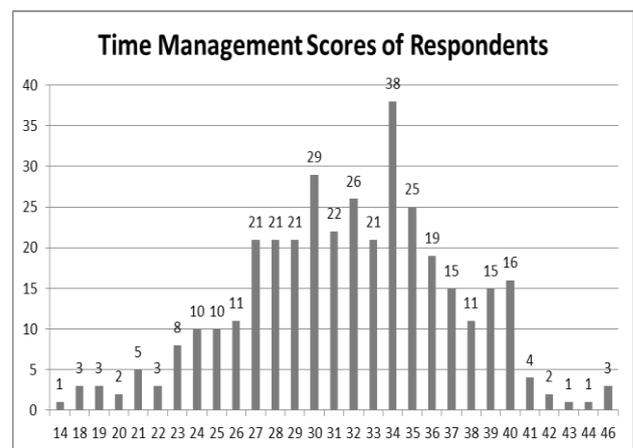
The above table presents the data about the perception of commerce and management students about the importance of time management in corporate sector. 94.8% (348) respondents perceive that time management is important when they join corporate sector. This indicates that students are aware of the importance of time management at work place.

**Score of respondents on time management scale**

Score	Frequency	Percentage
14.00	1	.3
18.00	3	.8
19.00	3	.8
20.00	2	.5
21.00	5	1.4
22.00	3	.8
23.00	8	2.2
24.00	10	2.7
25.00	10	2.7
26.00	11	3.0
27.00	21	5.7
28.00	21	5.7
29.00	21	5.7
30.00	29	7.9

31.00	22	6.0
32.00	26	7.1
33.00	21	5.7
34.00	38	10.4
35.00	25	6.8
36.00	19	5.2
37.00	15	4.1
38.00	11	3.0
39.00	15	4.1
40.00	16	4.4
41.00	4	1.1
42.00	2	.5
43.00	1	.3
44.00	1	.3
46.00	3	.8
Total	367	100.00

**Table: 4 Score of respondents on time management scale**



**Chart 1: Score of Respondents On Time Management Scale**

The maximum number of respondents has scored 23 to 40 marks on time management scale. 9.5% of the total respondents have scored below 25 on time management scale which means their life is on long

roller coaster ride and out of control. 22.8% of the total respondents have scored between 25 to 29 marks on time management scale which indicates their college career is likely to be stressful and less than satisfying unless they take steps to begin to manage their time more effectively. 53.2% of the total respondents have scored between 30 to 37 marks on time management scale which means they are managing their time fairly well, but sometimes feel overwhelmed. 13.7% of the total respondents have scored between 38 to 44 on time management scale which means they can probably own an organization and have organized their sock drawer. Less than 1% of the total respondents have scored between 45 to 50 on time management scale which means they are on the way to becoming CEO of a major corporation!

**Gender-wise Score of Time Management**

Gender	Mean	5% Trimmed Mean	Median	Min	Max
Male	31.23	31.28	31.28	14.0	46.0
Female	32.21	32.29	32.00	18.0	46.0

**Table: 5 Gender-wise Score of Time Management**

The above table shows the gender wise mean score of time management. The mean score of female respondents is more than male respondents. The maximum score of time management among male and female is same that is 46. The minimum score is 14 among the male respondents and it is 18 among the female respondents. This shows that female respondents manage their time better than the male respondent.

**Age-wise Score of Time Management**

Age	Mean	5% Trimmed Mean	Median	Min	Max
Below 20 Year	32.21	32.35	33.0	18.0	18.0
20 to 30 Years	31.49	31.55	32.0	14.0	46.0

**Table: 6 Age-wise Score of Time Management**

The above table shows the age wise mean score of time management. The mean score of students below 20 years is more than students between the age of 20 and 30 years.

**Mean Score According to Workshop/seminar attended by the respondents**

	Mean	5% Trimmed Mean	Median	Min	Max
YES	32.58	32.69	33.00	18.0	46.0
NO	30.84	32.69	31.00	14.0	42.0

**Table: 7 Score of Time Management According to Workshop/seminar attended by the respondents**

The above table indicates that the whether the respondents have attended the workshop/seminar or not, it does not have impact on the trimmed mean score of the respondents. However, the maximum score among the respondents who have attended workshop/seminar is 46, which is higher than the respondents those who not attended workshop/seminar. This is quite evident because attending a workshop might have given them a better outlook on how to manage their time more effectively.

**Score of Time Management by Results of Respondents in Last Year/Semester**

	Mean	5% Trimmed Mean	Median	Min	Max
Not clear	31.83	31.91	33.0	21.0	41.0
Pass class	29.41	29.46	29.0	18.0	40.0
Second class	29.71	29.71	30.0	14.0	46.0
First class	31.66	31.77	32.0	18.0	46.0
Distinction	33.68	33.66	34.0	23.0	46.0

**Table: 8 Score of Time Management by Results of Respondents in Last Year/Semester**

The above table indicates that the mean score of the respondents who have secured distinction in their last exam is the highest. This is quite apparent as those who can manage their time precisely will naturally find more time for priority work like academic work and this in turn will have a positive impact on their academic performance. Surprisingly, the mean score of students who failed to clear the last exam and those who secured first

class is almost same. This may mean that the respondents who were not able to clear their last semester exam have become more conscious towards their study and are managing their time so that they can devote more time for academic work.

**Scores of respondents on time management scale by Year of their studies**

Year of Studies	Mean	N	Std. Deviation
First Year	32.7647	153	5.17047
Second Year	30.5000	122	5.34163
Third Year	33.1594	69	4.81304
Fourth Year	27.6957	23	5.26079
Total	31.7684	367	5.37229

**Table: 9 Scores of respondents on time management scale by Year of their studies**

The above table shows the mean score of respondents on time management scale by their year of study. The mean score of third year students is highest which indicates that they are more serious for their studies as graduation is turning point for their career. The mean score of fourth year students is the lowest among all which may mean that they are not quite serious for their studies. Surprisingly, the mean score of the first year student is quite good which indicates they are quite serious for their career right from the beginning.

**Mean Score of UG or PG Student**

	Mean	5% Trimmed Mean	Median	Min	Max
UG	32.23	32.4018	33.0	18.0	46.0
PG	31.11	31.1023	31.0	14.0	46.0

**Table: 10 Mean Score of UG or PG Student**

The above table indicates that the mean score of the UG students is more than the PG students, which may mean that the PG students are quite confident to manage their time without any formal preparations.

**Hypothesis and its testing**

$H_0$ = There is no significant correlation between the Time Management score and Result secured by the respondents.

$H_1$ = There is significant correlation between the Time Management score and Result secured by the respondents

		Results of Respondents in Last Year/Semester	scores of respondents on time management scale
Results of Respondents in Last Year/Semester	Pearson Correlation	1	.143(**)
	Sig. (2-tailed)		.006
	N	367	367
scores of respondents on time management scale	Pearson Correlation	.143(**)	1
	Sig. (2-tailed)	.006	
	N	367	367

**Table: 11 Correlation Table**

\*\* Correlation is significant at the 0.01 level (2-tailed).

We can observe that there is positive relationship between the scores of time management and result obtained by the students but the relationship is weak. Above table shows that the p values is greater than 0.05 indicate the relationship is not significant. Therefore we accept the null hypothesis. Means there is no significant relationship between above two variables.

**Are PG and UG Students Time management scores different?**

$H_0$ = There is no significant difference in the mean score of PG and UG Students.

$H_1$ = There is significant difference in the mean score of PG and UG Students.

To check this we have applied t test.

**Descriptive Statistics**

	UG or PG Student	N	Mean	Std. Deviation	Std. Error Mean
scores of respondents on time management scale	UG Students	215	32.2326	5.19452	.35426
	PG Students	152	31.1118	5.56544	.45142

Scores of respondents on time management scale

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
Equal variances assumed	1.439	.231	1.976	365	.049	1.12072	.56707	.00559	2.23584
Equal variances not assumed			1.953	311.0	.052	1.12072	.57383	-.00836	2.24979

**Table: 12 t-test**

We can observe that the mean of UG Students is higher than PG students. This indicates that UG Students plan more compare to PG Students. As p value is 0.52 which is more than 0.05 so we accept the null hypothesis. It means there is no significant difference in the mean score of PG and UG Students.

**Academic Result wise Difference in Score on Time Management**

H<sub>0</sub>= There is no significant difference in the mean score of students as per academic results obtained.

H<sub>1</sub>= There is significant difference in the mean score of students as per academic results obtained.

**ANOVA**

Scores of respondents on time management scale

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	135.183	2	67.592	2.359	.096
Within Groups	10428.13	364	28.649		
Total	10563.31	366			

**Table: 13 ANOVA Table**

The p value is 0.096 which is more than 0.05, so we accept the null hypothesis which means there is no significant difference as per the academic results obtained by the respondents.

**Hypothesis**

H<sub>0</sub>= There is no significant difference in the mean score of male and female Students.

H<sub>1</sub>= There is significant difference in the mean score of male and female Students.

	Gender of Respondents	N	Mean	Std. Deviation	Std. Error Mean
scores of respondents on time management scale	Male	167	31.2335	5.76231	.44590
	Female	200	32.2150	4.99435	.35315

Scores of respondents on time management scale

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	2.063	.152	-1.748	365	.081	-.98147	.56157	-2.08579	.12285
Equal variances not assumed			-1.725	330.946	.085	-.98147	.56881	-2.10041	.13747

**Table: 14 t test as per Gender**

We can observe that the p value is more than 0.05, so we accept the null hypothesis meaning thereby there is no significant difference in the mean score of male and female students.

**Does the Time Management Score differ as per their Time Management Habit?**

Scores of respondents on time management scale

Do respondents manage their time?	Mean	N	Std. Deviation
Yes	32.4356	303	5.19695
No	28.6094	64	5.09160
Total	31.7684	367	5.37229

**Table: 15 ANOVA as per level of studies**

**ANOVA**

Scores of respondents on time management scale

	Sum of Square	df	Mean Square	F	Sig.
<b>Between Groups</b>	135.183	2	67.592	2.359	.096
<b>Within Groups</b>	10428.1	364	28.649		
<b>Total</b>	10563.3	366			

**Table: 16 ANOVA as per their time management habits**

According to the above table, the mean score of the respondents who manage their time is more than the respondents who do not manage their time which is quite obvious. But as the p value is more than 0.05, there is no significant difference between the mean scores of the respondents who manage their time and who don't manage their time. This indicates that the score on time management scale is not affected by whether the respondents manage their time or not.

**Regression**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.143(a)	.021	.018	1.30508

a Predictors: (Constant), scores of respondents on time management scale

**ANOVA(b)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.03	1	13.031	7.65	.006(a)
	Residual	621.68	365	1.703		
	Total	634.71	366			

a Predictors: (Constant), scores of respondents on time management scale

b Dependent Variable: Results of Respondents in Last Year/Semester

**Coefficients(a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	2.437	.409		5.958	.000
	scores of respondents on time management scale	.035	.013	.143	2.766	.006

a Dependent Variable: Results of Respondents in Last Year/Semester

We can observe that R Square is only 0.021 indicate that time management habits does not guarantee the good Grade in the examination.

**Conclusion and discussion**

The basic purpose of this paper was to understand the time management habit among commerce and management students and its impact on their

academic performance. The paper also focused to study the perception about importance of time management in the corporate sector. The study indicates that the majority of the students manage their time but approximately 30% students are not able to score more than 30 in given time management scale. Majority students believe that when they will enter in corporate sector time management is must. Time management score of female respondents is found to be more in comparison of the male respondents. Similarly,

respondents in the age category below 20 years scored more. The time management score of the students who have attended workshop/seminar is quite higher in comparison of those who have not attended such workshop/seminar. The students who secured distinction and first class scored higher at time management scale. Similarly, students who are in third year manage their time in a better way in comparison to first and second year students. UG students are able to score more in comparison to PG students. We can infer that PG students are quite confident to manage their time without formal preparations.

If we prove statistically, there is no significant difference in the score according to the level of study (UG & PG), academic result wise, gender wise and as per their time management habits. The study shows that there is a positive relationship between time management score and academic results. However, the relationship is weak. R square is found to be very poor, only 0.021 which indicates that time management habit does not give guarantee of good grades in college.

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# An Analysis of Accreditation Scenario of Indian Institutions

Nehal Daulatjada, Bharat Tarapara

## Abstract

Education is the gateway to the uplifting of the citizens of any nation. It plays a prominent role in the social-economic development of the country. For this to happen, the role of education must be clearly stated and understood. Educational institutions play a significant role for the development and growth of youths. It provides vital inputs to the people in helping them attain knowledge and develop skills which can enrich the overall quality of life. The higher education system has improved in India post-independence, showing the understood need of education. The XII Five Year Plan (2012-2017) recognized the importance of higher education institutes and the issues faced by higher education system. This plan proposes focus on Extension, Equity, Brilliance, Governance, and Implementation & Monitoring. The quality of education has become the focus and hence National Assessment and Accreditation Council has come into existence. But the question revolves around the question whether accreditation is accepted by the educational institutions and to what extent. This paper is an analysis of the NAAC accreditation scenario for all the states of India.

## Introduction

The University Grants Commission (UGC) was established in 1956 as a statutory body of Government of India through Parliament Act. It is the only organization authorized to give grants. It performs two responsibilities: Funding and Maintaining standards in higher education institutions. UGC's mandate includes: Promoting and coordinating University education; Determining and maintaining standards of Teaching, Examination and Research in Universities; Framing regulations on minimum standards of education; Monitoring developments in the field of College and University education; Disbursing grants to the Universities and Colleges; Serving as a vital link between the Union and State Governments and institutions of higher learning; Advising the Central and State Governments on the measures necessary for improvement of education.

For monitoring the standards of higher education institutions, UGC established 16 autonomous statutory institutions. One such institution established is the National Assessment and Accreditation Council (NAAC), as an autonomous body, under section 12 (CCC) of its Act in September 1994. NAAC is entrusted with the task of performance evaluation, assessment and accreditation of Universities and Colleges in the Country. The philosophy of NAAC is improvement and enabling, rather than punitive or judgmental, so that all institutions of higher learning are empowered to maximize their resources, opportunities and capabilities.

If we see the scenario of institutes of higher learning in Indian, in the Year 1950-51, there were 30 universities and 695 colleges. This number has increased to 634 Universities and 33023 colleges up to December 2011. As on March 2010, only 13.1% (4,094) of the colleges in the country had been accredited NAAC which has increased to hardly 15% till December 2012. The Table-1 reveals the growth of higher education in India.

**Table-1: Higher Education Institutes in India**

Sr.	Types of Institutions	Number
1	Central Universities	44
2	State Universities	306
3	State Private Universities	145
4	Deemed Universities	130
5	Institutions of National Importance Plus	60
6	Institutions established under state	5
7	Total Colleges	35,539
	Grand Total	36,229

Source : Survey of Ministry of Finance - Government of India.

During XI Five Year Plan, Government of India has established 16 Central Universities for imparting quality higher education and to remove regional imbalances in India. The government has set up 10 new National Institutes of Technologies to be located at Goa, Puducherry, Delhi, Uttarakhand, Mizoram, Meghalaya, Manipur, Nagaland, Arunachal Pradesh and Sikkim.

### Objectives of the study

In view of the above perspective, the study has been undertaken to explore the following objectives:

1. To know if there is any relation between Grade and various Zones of India.
2. To know if there is any relation between Grade and Area (Rural/Urban)
3. To know if colleges go for Cycle-2 accreditation on time or not.
4. To know if colleges in Cycle-1 have received their Cycle-2 accreditation or not.
5. To know if there is decline or increase in the grade of an institution in the next cycle.

### Literature Review

Since this is one of its kind of analysis, there was no related work found. The entire data for our study is taken from the official NAAC site.

### Hypothesis

The following Null hypotheses are set up for the work undertaken:

H01: There is no association between Grade and Zone.

H02: There is no association between Grade and Area.

H03: Is there any significance difference among the various Zones of India with respect to Grade.

### Research Methodology and Scope of Study

We have used secondary data for the analysis. Population includes all the accredited institutions in Cycle-1, Cycle-2 and Cycle-3 from the year 1998 to 2013. Sampling frame will include all the records of the Population. Sample units will be all the records. The total number of institutions which have received NAAC accreditation is 5242. So it is an exhaustive inclusion of the Population Space. Since the accreditation grades were based on different scales, a mapping of the grades was performed to bring all the discrepancy into a uniform grading system. Hence all the grades have been brought down to the 4-point scale currently used by NAAC for accreditation. We have used Statistical techniques like Chi-Square test and ANOVA to analyze the data. For calculation, we have considered the various states divided into six zones based on the zonal map of India i.e. North Zone, East Zone, West Zone, South Zone, Central Zone and North East Zone as shown in Table-8.

### Observations

The complete analysis profile is presented in Table-2. It shows the number of colleges on a 4-point grade scale for each state for all the cycles of accreditation. Table-3 shows the total number of colleges Grade-wise for all the three cycles. Table-4 shows the percentage of all colleges Grade-wise for all the three cycles. Chart-1 shows the Bar chart of the percentage of all colleges Grade-wise for all the three cycles. There are 5242 institutions which have been accredited, out of which 1023 institutes have gone for Cycle-2. From these 1023 institutes, only 24 institutes went for Cycle-3. There were 17 institutes which were not accredited. Table-5 lists the accreditation status from Cycle-1 to Cycle-2 in number as well as percentage. Chart-2 shows a pie chart of the accreditation status based on percentage values of Table-5 data.

Table-2: State-wise number of colleges segregated on 4-point grade scale for each accreditation cycle

State	Cycle-1					Cycle-2				Cycle-3			
	A	B	C	NA	Total	A	B	C	Total	A	B	C	Total
Andhra Pradesh	18	246	62		326		52	35	87		2	3	5
Arunachal Pradesh	0	5	1		6		1		1				
Assam	1	110	83		194	8	32	2	42				
Bihar	4	27	17	3	51	3			3				
Chandigarh	3	9			12	1			1				
Chhattisgarh	0	33	10	1	44	2	2		4				
Daman	0	1			1				0				
Delhi	5	8			13				0				
Goa	1	20			21	5	5		10				
Gujarat	16	304	89	1	410	2	4		6				
Haryana	24	198	49		271	4	4		8				
HP	1	33	7		41	1	1		2				
Jharkhand	1	17	5		23	1	5		6				
JK	4	48	5		57	4			4				
Karnataka	47	412	82	1	542	74	163	1	238				
Kerala	28	149	4		181	37	32		69				
Maharashtra	86	633	326	7	1052	125	183	4	312				
Meghalaya	3	8			11	4	2		6				
Mizoram	0	10	9		19	1	1	1	3				
MP	14	98	39		151	6	5		11				
Nagaland	1	6			7	1	1		2				
Orissa	13	116	78		207		2		2				
Puducherry	2	8	1		11	1			1				
Punjab	45	143	9		197				0				
Rajasthan	12	123	46	1	182	4	4		8				
Sikkim	0	2			2				0				
Tamilnadu	90	341	31		462	85	64	1	150	16	2		18
Tripura	0	4	1		5				0				
UP	40	332	37	2	411	6	11		17				
Uttarakhand	1	35	10		46		6	1	7				
West Bengal	18	204	49	1	272	11	10	1	22	1			1

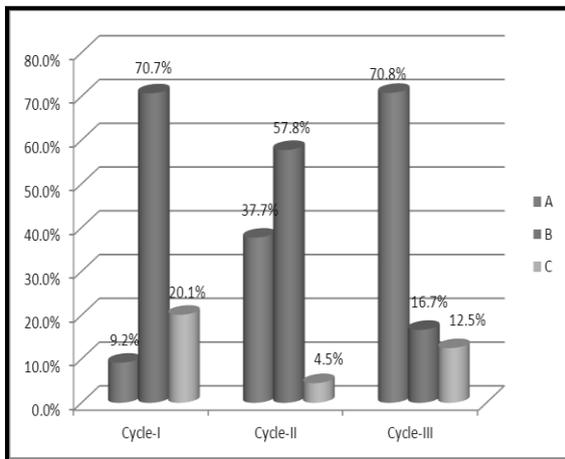
Table-3: Summary of all Colleges grade-wise for each cycle (In number)

Grade	Cycle-I	Cycle-II	Cycle-III
A	479	386	17
B	3695	591	4
C	1051	46	3
Total	5225	1023	24

**Table-4: Summary of all Colleges grade-wise for each cycle (In percentage)**

Grade	Cycle-I	Cycle-II	Cycle-III
A	9.2%	37.7%	70.8%
B	70.7%	57.8%	16.7%
C	20.1%	4.5%	12.5%

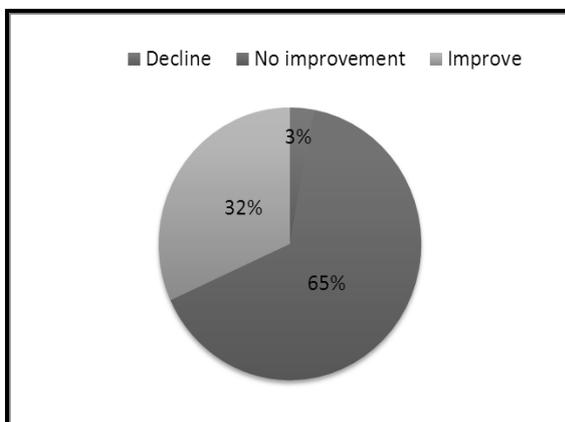
**Chart-1: Pictorial representation of Table-4**



**Table-5: Accreditation status from Cycle-1 to Cycle-2**

Observation	(In number)	(In percentage)
Decline	30	3%
No improvement	668	65%
Improve	325	32%
Total	1023	100%

**Chart-2: Pictorial representation of Table-5**



**Data Analysis**

There are 5242 institutions which have been accredited, out of which 1023 institutes have gone for Cycle-2, out of which only 24 institutes went for Cycle-3. There were 17 institutes which were not accredited. (Table-3), Out of 5242 institutions which have been accredited so far, 2486 of Cycle-1 institutions have not gone for Cycle-2 on time. (Table-3)

Out of 1023 institutions which have gone for Cycle-2, 675 have not gone for re-accreditation on time.

Mode of the grade shows most of the colleges have B grade those which have applied for accreditation. (Table-4)

Of all the accredited institutes from Cycle-1 to Cycle-2, we observed Decline (3%), not improvement (65%) and improvement (32%). (Table-5)

Maximum A-grade in Tamilnadu, B grade and C in Maharashtra as shown in Table-6.

**Table-6: State with maximum A, B and C Grade**

State	A	B	C
Maharashtra		633	326
Tamilnadu	90		

Minimum number of accreditations is in North East Zone (5%), East Zone (11%) and Central Zone (4%) whereas Maximum number of accreditations is in North Zone (20%), West Zone (32%) and South Zone (29%) as shown in Table-7.

**Table-7: Zone-wise Percentage of Accredited institutes**

	North Zone	East Zone	West Zone	South Zone	Central Zone	North East Zone
Per (%)	20%	11%	32%	29%	4%	5%

Table-9 shows the zone-wise list of the number of colleges having A, B or C grade. Table-10 shows p-value of Chi-Square test which is less than 0.05, therefore Null hypothesis  $H_{01}$  is rejected at 5% level of significance. Therefore there is association between Grade and Zone.

**Table-8: Zone-wise States of India**

North Zone	East Zone	West Zone	South Zone	Central Zone	North East Zone
Chandigarh	Bihar	Daman	Andhra Pradesh	Chhattisgarh	Arunachal Pradesh
Delhi	Jharkhand	Goa	Karnataka	MP	Assam
Haryana	Orissa	Gujarat	Kerala		Manipur
HP	West Bengal	Maharashtra	Pondicherry		Meghalaya
JK		Rajasthan	Tamilnadu		Mizoram
Punjab					Nagaland
UP					Sikkim
Uttarakhand					Tripura

**Table-9: Zone-wise number of Colleges with relevant Grades**

	North Zone	East Zone	West Zone	South Zone	Central Zone	North East Zone	
A	123	36	115	185	14	6	479
B	806	364	1081	1156	131	157	3695
C	117	149	461	180	49	95	1051
	1046	549	1657	1521	194	258	5225

**Table-10: Chi-square Test statistics**

<b>Chi-square</b>	267.96
<b>df</b>	10
<b>Aysmp. Sig (p-value)</b>	0.000

Table-11 shows the number of colleges falling under Rural and Urban category having A, B or C grade. Table-12 shows p-value of Chi-square test which is less than 0.05, therefore Null hypothesis  $H_{02}$  is rejected at 5% level of significance. Therefore there is association between Grade and Area (rural and urban).

**Table-11: Area-wise number of colleges with grade**

	RURAL	URBAN	TOTAL
<b>A</b>	112	367	479
<b>B</b>	594	3101	3695
<b>C</b>	139	912	1051
<b>TOTAL</b>	845	4380	5225

**Table-12: Chi-square Test statistics**

<b>Chi-square</b>	25.12
<b>df</b>	2
<b>Aysmp. Sig (p-value)</b>	0.000

Table-13 shows that the p-value is less than 0.05 and therefore Null hypotheses  $H_{03}$  is rejected at 5% level of significance. Therefore there is a significance difference among the various Zones of India.

**Table-13: ANOVA**

	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	869567.611	5	173913.522	4.18301003	0.019
<b>Within Groups</b>	498914	12	41576.1667		
<b>Total</b>	1368481.61	17			

## Limitations

With respect to the above analysis, there are a few limitations observed:

1. Data reliability: The whole study's reliability is based on the reliability of the records being published by NAAC.
2. Benchmarking parameters: Since details of why an institution got a particular grade, what were the processes they got good/less points is not available, we are unable to decide the area in which educational institutions are lagging in India Zone-wise or State-wise.

## Suggestions

From the outcome of the State-wise study and Rural/Urban divergence, it may be observed that some states lack in the assessment by NAAC, while some regions are producing more quality results. Some regions are having more number of institutions going for accreditation/re-accreditation, while in some region Cycle-2 assessment is less. We have identified that the institutions in the North East and Central Zones are not going for accreditation. To summarize, there was an imbalance in the accreditation in the various zones.

Based on this analysis, UGC can evolve new methods and schemes so that quality of higher education throughout the country can be maintained, especially those zones that are poor in accreditation grades.

## Conclusion and Future Work

The idea of this paper was to find out the accreditation patterns of the institutions with regards to the re-accreditation. NAAC has been made a mandatory requirement for higher education institutions. The institute needs to get a higher grade to prove for quality and quality sustainability. Hence it becomes imperative to find out the pattern of accreditation by all the accredited institutions within the country, hence the analysis.

The study is limited to Region-wise and Rural/Urban area. The study can be extended to finding out the information State-wise as well as University-wise. This can help identify the weaker links in the education sector and take appropriate action for the improvement. If additional data on the benchmarking parameters for each accredited institution can be obtained, then a better mechanism in the quality sustainability can be implemented.

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# Attitude of Agricultural Extension Educationists towards Computer Application

P. J. Joshi, N. B. Chauhan

## Abstract

The study was carried out in the four State Agricultural Universities situated at Anand, Junagadh, Navsari and Sardarkrushinagar Dantiwada of Gujarat state on a random sample of 150 extension educationists to study their attitude towards computer application. The study reveals that majority (73.33 per cent) of the extension educationists working in State Agricultural Universities (SAUs) of Gujarat had medium favourable to highly favourable attitude towards computer application. There was significant relationship of attitude of the extension educationists towards computer application with variables like father's occupation, facilities available in their department, mass media liveliness, library exposure, attitude towards extension work, professional development, job satisfaction, material aspiration, self confidence and innovativeness. It was amazing to note that with constructive attitude towards computer and its various applications, the extension educationists working in SAUs of Gujarat have experienced significance of computer applications, thus there is need to encourage computer applications in SAUs of India to harness best advantages to strengthen extension and communication efforts.

## Introduction

In the recent years, computer technology has been integrated into a wide range of agricultural research, teaching and extension education. Computers are routinely used in word processing, PowerPoint presentations, analysis of information, communication, entertainment and repetitive tasks that can be automated. Nowadays, thousands of softwares are available to perform almost all imaginable tasks using built-in rules and procedures. These programmes offer fast and efficient ways to conduct any business, teaching, research, learning and educational work. Starting from very small work to any other extraordinary task, the computer has become a part and parcel of the life. It is expected that extension educationists of any State Agricultural Universities involved in training and educating current and future extension personnel, need to be updated with latest communication and transfer of technology related technologies like information and communication technology (ICT) and computers to accomplish their work more efficiently. For this first it is expected that they should have positive attitude towards the use and various applications of computers. Understanding this, to know existing sensitivity of the agricultural extension educationists of SAUs of Gujarat towards computer in using this smart machine for the development of their profession, a study was felt necessary to collect reliable information on their feelings and inclination towards computer. With a view to this, a study on "Attitude of agricultural extension educationists working in State Agricultural Universities of Gujarat towards computer application" was undertaken with following specific objectives.

## Objectives of the study

1. To study the Attitude of agricultural extension educationists working in State Agricultural Universities (SAUs) of Gujarat towards computer application
2. To ascertain relationship between profile of extension educationists and their Attitude towards computer application.

## Research methodology

The present investigation was carried out in the four State Agricultural Universities viz. Anand Agricultural University, Junagadh Agricultural University, Sardarkrushinagar Dantiwada Agricultural University and Navsari Agricultural University of Gujarat state.

The Ex-post facto research design was applied for the study. Based on total number of obtainable agricultural extension educationists, 55 agricultural extension educationists from Anand, 38 from

Junagadh 29 from Navsari and 28 from Sardarkrushinagar Dantiwada Agricultural University were selected, thus study was conducted on a random sample of 150 extension educationist

respondents. To measure attitude, scale was developed by authors using ‘Scale product method’ which combines the Turnstone and Chave’s Technique (1928) of equal appearing interval scale for selection of items and Likert’s Technique (1932) of summated rating for ascertaining the response on the scale as proposed by Eysenck and Crown (1949), whereas other independent variables were measured using well-developed scales. The methodological procedure consisted of dependent and independent variables. The data so collected were coded classified, tabulated and analyzed in order to make the findings meaningful.

### Results and discussion

Attitude of agricultural extension educationists towards computer application: The attitude of the extension educationists towards computer application is one of the important factors to expect their high quality inclination with computer.

The data seen in the Table: 1 that majority (73.33 per cent) of the extension educationists had medium favourable to highly favourable attitude towards computer application. It can be said that majority of the extension educationists were either about to accept computer in their everyday life or had great mental acceptance to recognize computer in their everyday life. This might be due to the good understanding amongst them about tremendous usefulness of computer and its application to make agricultural extension, research and academic work more smooth and successful. It was interesting and pleased to make a note of the result that majority of the extension educationists, who were working as key components in deciding significant policy of State Agricultural Universities in terms of extension, human resource, training, development, transfer of technology programmes and agricultural journalisms had considered computer as an important factor to make their everyday work easier, practical and effective. This result is in line with the result of Patel (2007) and partially in the line with the result reported by Shah (2006).

**Table: 1 The Extension Educationist according to their attitude towards computer application**

n=150

Sr. No	Attitude	Number	%
1	Unfavourable (< 53)	40	26.67
2	Medium favourable (53 to 58)	69	46.00
3	Highly Favourable (>58)	41	27.33
<b>Total</b>		<b>150</b>	<b>100.00</b>

### Relationship between profile of extension educationists and their attitude towards computer application:

The data presented in Table 2 show the relationship of personal, economic, social, communicational and psychological characteristics of extension educationists with their attitude towards computer application.

### Personal variables and attitude towards computer application:

The data presented in Table 2 indicate that personal variables of extension educationists like their age, academic qualification, medium of education, total experience, knowledge of different languages and native place were observed non-significant with their nature of attitude towards computer application. Understanding wonderful efficacy of computer and its relevance to make agricultural extension, research and academic work smoother and successful, old, medium or old aged extension educationists with bachelors, masters or doctorate degrees, short, medium or long period of service experience, urban or rural background with medium of education in local or English language had shown constructive attitude towards computer applications. This result is in line with the result of Patel (2007) and partially in the line with the result reported by Shah (2006).

**Table: 2 Relationship between profile of extension educationists and their attitude towards computer application**  
n=150

Sr. No	Variables	Correlation coefficient ('r')
<b>I</b>		
<b>Personal variables</b>		
1	Age	-0.067 NS
2	Academic qualification	0.077 NS
3	Medium of education	0.068 NS
4	Total experience	0.011 NS
5	Knowledge of different languages	-0.055 NS
6	Native place	0.039 NS
<b>II</b>		
<b>Economic variable</b>		
7	Annual income	0.063 NS
8	Father's occupation	0.272*
<b>III</b>		
<b>Situational and communication variables</b>		
9	Father's education	0.046 NS
10	Mother's education	0.072 NS
11	Facilities available in the Department	0.195*
12	Professional zeal	0.114 NS
13	Mass media liveliness	0.163*
14	Habit of Information collection	0.116 NS
15	Library exposure	0.268*
16	Training received	0.034 NS
<b>IV</b>		
<b>Psychological variables</b>		
17	Attitude towards extension work	0.436*
18	Perception of workload	0.091 NS
19	Professional development	0.297*
20	Job satisfaction	0.308*
21	Materialistic aspiration	0.182*
22	Professional aspiration	0.122 NS
23	Self confidence	0.302*
24	Perception of span of control	0.142 NS
25	Inter-personal communication	0.056 NS
26	Innovativeness	0.211*

\* Significant at 0.05 level Table value 'r' = 0.1603

**Economic variables and attitude towards computer application:**

The data seen in Table 2 indicate that attitude of extension educationists towards computer application was non-significantly correlated with their economic variable like annual income, while it was significantly correlated with other economic variable fathers' occupations. The results indicate that the extension educationists with irrespective level of annual income had encouraging feelings towards applications of computers in their routine lives; at the same time it was observed that the extension educationists with superior involvement in more number of occupations by their family had comparatively superior mind-set towards applications of computer. This finding differs to the finding reported by Chauhan (2005).

**Situational and communication variables with attitude towards computer application:**

The data existing in Table 2 indicate that attitude of the extension educationists towards computer application was non-significantly correlated with situational and communicational variables like father's education, mother's education, professional zeal, habit of information collection and training received, while it was observed significant with other situational and communicational variables of the extension educationists like facilities available in the department, mass media liveliness and library exposure. Same thing was observed in this study and it was seen that the degree of attitude of extension educationists towards computer application was observed more positive amongst those, who had better facilities of computer and other information and communication technology (ICT) tools in their department.

### Psychological variables and attitude towards computer application

The data observed in Table 2 indicate that attitude of the extension educationists towards computer application was non-significantly correlated with their psychological variables like perception of workload, professional aspiration, perception of span of control and inter-personal communication, while their attitude towards computer application was observed positively significant with their psychological variables like attitude towards extension work, professional development, job satisfaction, materialistic aspiration, self confidence and innovativeness. Computer is such an effective medium through which, extension educationists can collect latest information on new extension methodology and latest development about their subject from internet. This might be the reason to have positive and elevated attitude of those extension educationists, who had positive attitude towards extension.

### Conclusion

It can be concluded from the result of the study that majority (73.33 per cent) of the extension educationists working in SAUs of Gujarat had medium favourable to highly favourable attitude towards computer application. There was significant relationship of attitude of the extension educationists towards computer application with variables like father's occupation, facilities available in their department, mass media liveliness, library exposure, attitude towards extension work, professional development, job satisfaction, material aspiration, self confidence and innovativeness.

### Implication

Computer facilitates to be linked with internet and internet facility assists to build agricultural

teachers, researchers and extension educationists to be yielding thinkers that stay lively with students, farmers and extension agencies in the present age of information and knowledge. It was amazing to note that with constructive attitude towards computer and its various applications by the extension educationists working in SAUs of Gujarat have experienced significance of computer applications, thus there is need to encourage computer applications in SAUs of India to harness best advantages to strengthen extension and communication efforts.

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# COMMODITY MARKET – A Study on Financial Health of India's largest Commodity Exchange

Jaimin Trivedi

## Abstract

Existence of a vibrant, active and liquid commodity market is normally considered as a healthy sign of development of any economy and commodity market can be operated through the commodity exchange. Therefore, it will be significant to study the growth of commodity exchange. Moreover, shareholders are also interested in financial condition of an undertaking. This paper is useful to the researchers of commodity market area, Government, students, investors and various institutions working in the same area. Here, attempt is made to study the growth in financial performance of selected commodity exchange i.e. Multy Commodity Exchange of India Ltd.

## Introduction

### Introduction of commodity market

Commodity markets are markets where raw or primary products are exchanged. These raw commodities are traded on regulated commodities exchanges, in which they are bought and sold in standardized contract. It is similar to an equity market, but instead of buying or selling shares one buys or sells commodities.

### Regulatory frame work

The Forward Market Commission (FMC) headquartered at Mumbai, is the regulatory body for commodity derivatives market in India. It is a statutory body set up in 1953 under the forward contract regulation Act, 1952. FMC is in turn supervised by the Ministry of Consumer affairs, Food and Public distribution, Govt. of India.

### Commodity exchanges

A commodity exchange is an association or a company where various commodities and derivatives products are traded for which license has been granted by regulating authority. Most commodity markets across the world trade in agricultural products and other raw materials like wheat, barley, sugar, maize, cotton, cocoa, coffee, milk product, pork bellies, oil, metal, etc. and contract based on them. These contracts can include spot forward, future etc.

## Introduction of mcx

Multi Commodity Exchange of India Limited (MCX) is a "new order" "exchange with permanent recognition from the Government of India for setting up a nationwide online (electronic) multi-commodity marketplace, offering "unparalleled efficiencies", "unlimited growth and "infinite opportunities" to market participants. Promoted by Financial Technologies (India) Limited, MCX has introduced a state-of-the-art, online digital exchange for commodities trading in the country. In line with its strong belief of setting up a truly independent and a neutral platform, MCX is committed in its pursuit of broad basing its ownership and inclusive. Subsequent to this, the exchange would be accountable not only to FMC but also SEBI.

## Shareholders of the MCX

State Bank of India, National Bank for Agriculture and Rural Development (NABARD), HDFC Bank, Bank of India, State Bank of Indore, State Bank of Hyderabad, SBI Life Insurance Co. Ltd., Financial Technologies (India) Ltd.,

National Stock Exchange of India Ltd. (NSE), Fidelity International, State Bank of Saurashtra, Canara Bank

## Research methodology

Here attempt is made to study the conceptual framework of commodity market, commodity exchange and their regulatory framework as well as to study the financial growth of India's largest commodity exchange by one of the financial analytical technique i.e. Ratio analysis. Moreover, statistical analysis have been carried on for the purpose of measuring correlation in selected financial variable i.e. income, expenditure and profit. Correlation test have been applied to test whether there is significant correlation in selected financial variable or not. The study period is from 2008 to 2012. The study is based on secondary data only and it has been collected from annual reports of the selected unit i.e. Multy Commodity Exchange of India.

**Financial performance**

It is necessary to measure the financial health of an undertaking from the investor’s point of view is concern because they are looking for the financially sound organization for the investment purpose. Investment without reasonable analysis is like drunken man in dark night.

**Ratio Analysis**

In simple words the term accounting ratio means proportion between two related items of financial statement. The financial statement alone cannot give true idea about the correct financial position of the business. For getting true picture, the financial statement has to be analyzed, compare and evaluated. Ratio analysis is one of the techniques

for such analysis and interpretation of financial statement.

The following financial ratios have been computed to measure the financial condition of Multi Commodity Exchange:

1. Net Profit Ratio
2. Operating Profit Ratio
3. Return on Capital Employed
4. Return on Share Holders Fund
5. Current Ratio
6. Earnings per Share

**Table- 1- Working result of financial condition**

**(In millions)**

Particulars	2008	2009	2010	2011	2012
Operating Profit	1736.58	2124.48	2873.82	3688.92	5262.01
Total Income	2741.51	3658.44	4937.64	4472.87	6289.07
Expenditure	1373.54	1555.71	1707.77	2018.1	2187.06
PBT	1367.96	2102.73	3229.87	2454.77	3959.73
PAT	1052.71	1580.26	2206.22	1728.24	2861.88

**Source: Annual reports of MCX.**

The above table reveals the working result of financial condition of MCX during five years i.e. from 2008 to 2012. The profit is commonly measured by profit after tax which is the result of the impact of all factors on the company’s earnings. Taxes are not controllable by management. To separate the influence of taxes, profit before tax may be computed. If the company’s profit has to be examined from the point of view of all investors, the appropriate measure of profit is operating profit. This measure of earning shows earning arising directly from the commercial operation of business. From the above table, it is observed that the operating income and expenditure are continuously increasing over a period of time from

2008 and other components of financial condition are increasing from 2008 to 2010 but there was slight decline in 2011 and then it went up in 2012.

Table – 2 of various ratios reveals the financial performance of MCX. The various ratios can be divided in view point of investors and in view point of management. EPS, return on shareholders fund etc. are important ratios for investors and other than those are important for management of MCX to measure the overall efficiency of MCX. The interpretation regarding above financial indicators are as under:

**Table – 2- Financial performance indicators of MCX over the years**

Financial performance Indicators	2008	2009	2010	2011	2012
Net Profit Ratio	38%	43%	45%	39%	46%
Operating Profit Ratio	63%	58%	58%	82%	84%
Return on Capital Employed	29%	30%	31%	20%	28%
Return on Share Holders Fund	29%	31%	32%	20%	28%
Current Ratio (CA/CL)	0.37	0.77	0.80	0.75	1.59
EPS	13.47	19.65	27.4	33.89	56.12

Source: Computed.

### 1. Net Profit Ratio:

The net profit ratio determines the relationship between earning after tax and total receipts. It is arrived by dividing profit after tax with total income. It is indicative of management's ability to operate the business with sufficient success not only to recover from revenue of the period, the cost of service, the expense of operating the business, the cost of borrowed fund but also to leave a margin of reasonable compensation to the owners for providing their capital at risk. Here, the net profit ratio reveals that net profit was continuously increasing from 2008 to 2010 but it went down in 2011 due to decrease in total income but it achieved growth in 2012 which was highest during the period of study i.e. 46% so the overall performance of net profitability was improved which can be understood by time series analysis of net profit ratio.

### 2. Operating Profit Ratio:

It is the ratio between operating income and total receipts. Operating profit is the net profit earned from the business for which the concerned is started. The operating profit ratio also indicates the operating efficiency or inefficiency of business. The standard operation profit ratio is 10%, so on operating profit ratio of 10% or more is an indication of the operating efficiency of the business. And operating profit ratio of less than 10% is an indication of the operating inefficiency of the business. Here the operating ratio indicated the increasing trend from 2009 over the years under analysis, which revealed that the operating efficiency was continuously increasing during the period of study. The highest operating efficiency of Multy Commodity Exchange was 84% in 2012.

### 3. Return on Capital Employed:

The fund employed in the net assets is known as capital employed. Rate of return on capital employed is one of the mean which provides a basis for testing of profitability related to the sources of long term funds. There are number of sources through which organization can acquire its total assets. Thus, the capital employed is the tool of measuring the profitability of the examined unit. This ratio is yardstick for measuring the profitability of company. It has been observed in this ratio of Multy Commodity Exchange that, return was continuously increasing from 2008 to 2010 but it was declined in 2011 because of the reduction in earnings after tax. However, it achieved growth in 2012 therefore we can conclude that the overall performance regarding return on capital employed was improving which indicates the good efficiency of Multy Commodity Exchange.

### 4. Return on Shareholders' Fund:

This ratio expresses the net profit in terms of equity shareholders' fund. This ratio is an important yardstick of performance for equity shareholders since it indicates the return on the fund employed by them. The factor which motivates shareholders to invest in a company is the expectation of an adequate rate of return on their fund and periodically they will want to assess the rate of return earned in order to continue with their investment. Here, the shareholder is getting good return and the return was increasing from 2008 to 2010 but it declined due to the reduction of net earnings in 2011. However, it was increased in 2012 with the increase in net earning so the overall performance regarding return on equity shareholders fund was good in case of MCX.

### 5. Current Ratio:

It is the ratio which indicates the relationship between current assets and current liability. Current assets refers to all those assets which change their form and substance and which are ultimately converted in to cash during the normally operating cycle of business i.e. the normal course of business, which is normally 12 months. Here in this study the overall performance of current ratio was improving over a period of time under analysis which indicates favorable liquid condition.

### 6. Earnings per Share:

This ratio expresses the relationship between net profit and number of equity shares. Earnings per share indicates the per share earnings available to equity shareholders. It is also one of the factors which highly influence the investors for the investment. If earning per share is increasing the investors will automatically motivated for the investment in concern and vice-a-versa. Here in case of MCX the EPS was continuously increasing which was observed from the annual reports of MCX during the period under analysis which indicated the efficient performance of MCX.

### Statistical Analysis and Interpretation

Here, attempt is made to analyze the correlation between selected financial variable of MCX, i.e. Income, Expenditure and profit. The range of correlation coefficient is from -1 through 0 and +1. Coefficient of correlation is denoted by *r*. the values of *r* = -1 and *r* = +1 reveals a case of perfect relationship, through the direction of relationship is negative in first case, and positive in second case. The direction of the relation is indicated by the sign (+ or -) of the correlation. The degree of relationship is indicated by the numerical value of correlation. A value near 1 indicates a nearly perfect relation, and a value near 0 indicates no relationship. The Pearson correlation measures linear (straight line) relationship. In a positive relationship, both variables tend to change in the same direction. The given variable will vary in opposite direction than it is known as negative relation. Following hypothesis have been framed for the analyzing of correlation during the period of study among selected financial variable.

#### Income & expenditure

H<sub>0</sub> - There is no significant positive correlation

H<sub>1</sub> - There is significant positive correlation

#### PBT & PAT

H<sub>0</sub> - There is no significant positive correlation

H<sub>1</sub> - There is significant positive correlation

#### Income:

It refers to the income of commodity exchange through trading and clearing system of MCX. Here, the presentation covers the growth of income during six years of MCX. The company's income consists of transaction fees, admission fees, and application processing fees, subscription fees, terminal charges, deposit appropriation, interest income, dividends from investments, and other miscellaneous incomes.

#### Expenditure:

It refers to the overall expenses for the operations and running of the commodity exchange. The company's expenditure consists of operating and other expenses, interest and depreciation/amortization charges. Operating and other expenses principally comprises employee cost, advertisement cost, business promotion expenses, sponsorship and seminar cost, travelling and conveyance, software support charge, communication cost, professional and legal charges, and the like.

H<sub>0</sub> - There is no significant positive correlation between Income & Expenditure

**Table-3- Correlation between income & Expenditure**

#### Descriptive Statistics

	Mean	Std. Deviation	N
income	4419.9060	1338.04628	5
Expense	1768.4360	332.58598	5

#### Correlations

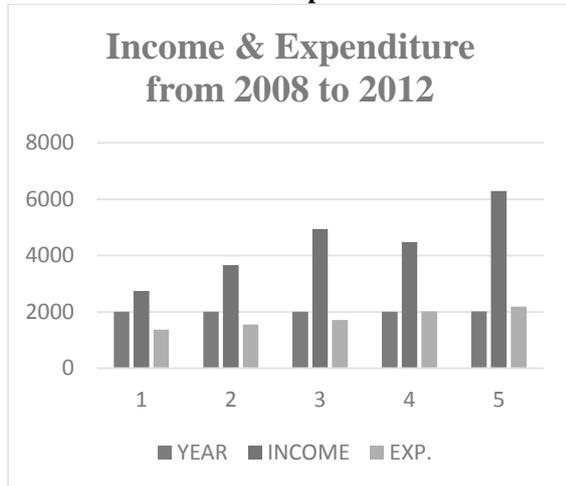
		income	Exp
income	Pearson Correlation	1	.893*
	Sig. (2-tailed)		.042
	N	5	5
Expense	Pearson Correlation	.893*	1
	Sig. (2-tailed)	.042	
	N	5	5

\*. Correlation is significant at the 0.05 level (2-tailed).

Here, the above table-3 indicates the correlation between income and expenditure which is worked

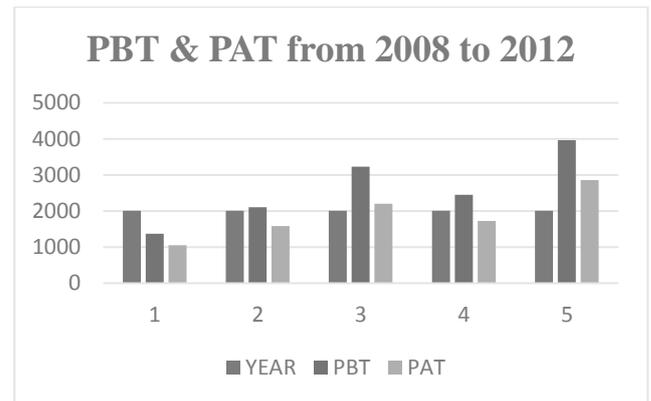
out to 0.893 which is nearest to +1 which indicates that there is significant positive correlation between selected financial variable. Therefore, null hypothesis rejected. Meaning thereby income and expenditure is increasing significantly in accordance with each other during the period of study which is graphically presented here below.

**Graph-1**



Here, the above table-4 indicates the correlation between PBT and PAT which is worked out to 0.995 which is nearest to +1 which indicates that there is significant positive correlation between selected financial variable. Therefore, null hypothesis rejected. Meaning thereby PBT and PAT is increasing significantly in accordance with each other during the period of study which is graphically presented here below.

**Graph-2**



**PROFIT:** It can be divided into two categories such as profit before tax and profit after tax. It is the profit which indicates the financial soundness of MCX during 2008 to 2012. Here attempt is made to study the correlation between both of them.

**H<sub>0</sub> - There is no significant positive correlation between PBT & PAT**

**Table-4 Correlation between PBT & PAT**

Descriptive Statistics			
	Mean	Std. Deviation	N
PBT	2623.0120	1003.64908	5
PAT	1885.8620	683.30446	5
Correlations			
		PBT	PAT
PBT	Pearson Correlation	1	.995**
	Sig. (2-tailed)		.000
	N	5	5
PAT	Pearson Correlation	.995**	1
	Sig. (2-tailed)	.000	
	N	5	5

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Conclusion**

The financial health of Multy Commodity Exchange of India limited is growing because of the efficient and effective financial management therefore we can conclude that there is improvement in the financial condition during the period of study i.e. from 2008 to 2012. Moreover, we can also say that, there is overall development of MCX because the income, expenditure and profit are continuously increasing which is the result of expansion of business operations. Keeping in view the above observations, the following suggestions are made which would go a long way with a view to improving performance of commodity market players of India.

1. Potential investors of stock market should invest their surplus in the securities of Multy Commodity Exchange to hedge the risk of loss because the financial condition of MCX is continuously improving. Moreover, earning per share is also increasing therefore it is beneficial for them to invest in the shares of MCX.
2. Small commodity exchanges, which are having resource constraints, should take the collaborative support from MCX for their development in all respects.

Existence of a vibrant, active and liquid commodity market is normally considered as a healthy sign of development of any economy and commodity market can be operated through the commodity exchange. Therefore, we can also interpret that the

commodity market as well as the Indian economy is also growing.

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<http://www.mcxindia.com>

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# An Experiential Exploration of Hotel Facilities and Hoteliers' Efforts for Performance Improvement of Hotels as Customer Relationship Management [CRM] Initiatives in the State of Gujarat

Neha Shah, Parimal Vyas, Priti Nigam

## Abstract

The Indian hotel industry has witnessed huge spurt of foreign investment and international brands entering the fray. A hotel is an establishment that provides paid lodging on a short-term basis (www.scribd.com). The success of any firm rest upon their ability to attract and retain their customers. The frequency of gathering guests or customers' information for adopting systems to measure and analyze their needs for providing quality and customized services by hoteliers calls for adoption of Customer Relationship Management [CRM] practices.

The key objectives of this empirical descriptive research study were to seek feedback of selected hoteliers on their ways of collecting information about customers that is hotel guests as well as also on providing them various facilities & evaluating hotels' performance to offer findings and implications for improving CRM practices in the hotels in the Gujarat State.

## Introduction

The Government of India has initiated various reforms to accelerate growth of the hotel industry with liberalization in the regulatory framework, investment friendly schemes, extensive support for creating a world class infrastructure, better air and land connectivity, incentivizing regional set-up in tier III and IV cities, and exploring the untapped geographical resources. It has led to significant growth in room inventory across categories from upscale luxury to limited services and, boutique and budget hotels. The emergence of branded budget and economy segment hotels presented tremendous opportunities. According to World Travel & Tourism Council, by 2020, investment in travel and tourism has been estimated to reach figure of US\$ 109.3 Billion. Major international hotel brands viz., Starwood, Hilton, Marriott, Hyatt and Accor have showed a growing presence in India. Marriott International operated in 11 properties across India has planned to expand its network to 100 hotels over by the 2015. ITC Hotels has projected its plan to open 25 new hotels under the Fortune brand, and Keys Hotels, a brand of Berggren Hotels, to open and manage 40 hotels across India by the 2015. Ginger Hotel has planned to open nearly 70 budget hotels in 23 locations across India (www.businessstandard.com). The hotel industry has anticipated increased occupancy during festive season in Gujarat (www.businessstandard.com). The Gujarat State has higher industrial activities clubbed with good tourism promotion, and its promotional campaign 'Khushboo Gujarati Ki', is believed to attract additional 5 to 7 per cent tourists from other parts of India resultant into induced room occupancy ratio and revenue for hotels. The availability of hotel infrastructure in Gujarat State is found to pushing pressure on the room tariffs thereby making the competition fiercer (www.businessstandard.com).

## Review of literature

The researcher has made an attempt to outline in brief review of literature on selected aspects such as viz., hotel attributes; performance & process of hotels; IT, brand, yield management; CRM in service sector respectively.

The studies in hotel selection criteria had focused on the intangibility, inseparability, variability, and perishability of services which had revealed that customers' perception of satisfaction criteria included contextual cues that they use to

evaluate in the selection of hotel and to make decisions about future patronage, whether or not they experienced the hotel's products and services before (Bitner, 1990; Parasuraman et al., 1985).

Mine Haktanir, & Peter Harris (2005) explored performance measurement practices in the context of an independent hotel in Northern Cyprus to present their results on performance measurement practices of an independent hotel setting, providing information on the business, the decision-making process and the information flow respectively (Mine Haktanir, & Peter Harris, 2005).

Byeong Yong Kim, Haemoon Oh and Mary Gregoire, (2006) suggested that building relationships with suppliers and customers can lead to high financial performance of the restaurant firms (Byeong Yong Kim, Haemoon Oh and Mary Gregoire, 2006). Hokey Min, et al (2008) developed a balanced scorecard for measuring the comparative efficiency of Korean luxury hotels to improve its competitiveness by proposing use of Data Envelopment Analysis (DEA) for measurement of the comparative efficiency of 06 luxury hotel chains in Korea (Hokey Min, et al, 2008). Rob Law, et al (2007) found that the web sites of local travel agents and local reservation agents offered the lowest online room rates, and that indirect distribution channels offered lower room rates than direct distribution channels (Rob Law, et al, 2007). Sunil Sahadev and Nazrul Islam (2005) revealed those factors that influenced a hotel's propensity to adopt ICTs which were broadly divided into location-related and firm-related (Sunil Sahadev and Nazrul Islam, 2005).

Sipra Mukhopadhyay (2003) had found that segmentation and targeting with appropriate product and pricing more so for the restaurants along with product innovation were the major strategy thrust in the industry (Sipra Mukhopadhyay, 2003). Ajit Mathur (2003) provided an understanding on the actual experience of Taj Air Caterers to explain customer relationships, and its dynamics based on his own experience (Ajit Mathur, 2003). According to G. Shainesh and Ramneesh Mohan (2003), service firms worldwide, had been the pioneers in adopting the practice of customer relationship management practices. In India too, the service firms have taken some of the early initiatives in CRM, especially in financial services. They had addressed few issues viz., quality and customer centric processes, employee empowerment, technology selection, customer knowledge strategies, and individualization of market programs (G Shainesh and Ramneesh Mohan, 2003). Kapil Chaturvedi and Anil B Bhatia (2003) had argued that companies have found Electronic Customer Relationship Management (e-CRM) as critical to their businesses (Kapil Chaturvedi and Anil B Bhatia, 2003). Anjana Grewal (2003) had outlined the ten stages for effective customer relationship practices in financial services (Anjana Grewal,

2003). Wolfgang Messner (2005) had looked at the evolution of CRM and CRM technology to analyze its current status to offer recommendations (Wolfgang Messner, 2005). Sultan Mahmoud Alshourah, (2012) had found that four key factors had significant influence on CRM performance viz., top management, customer data, customer information processing, and CRM functionality. Abdul Alem Mohammed et al. (2012) had attempted to provide a value conceptual model to explain the theoretical linkages between CRM dimensions and hotel performance and also the mediation role of marketing capabilities in this relationships. Gagandeep Banga et al. (2013) had found that managers had a positive attitude towards CRM practices, and the benefits of CRM were increased customer satisfaction and customer loyalty.

Nor Aziah Abu Kasima and Badriyah Minaib (2009) had revealed that Information Technology [IT] dimension of CRM strategy had a significant and positive effect on performance. Tanvi Beniwal and Leelaram, (2013) had identified the marketing practices and business performance in hotel industry in Chandigarh (India) and had found that interaction with individual customer, association with tour operator, travel agencies and airlines, image of business partners and stakeholders, loyalty and reward program were important.

## Research methodology

The major objectives of this empirical descriptive research study were to seek feedback of selected respondents that is hoteliers on their ways of collecting information about customers that is hotel guests as well as also on providing them various hotel facilities & evaluating hotels' performance to offer findings and implications for improving CRM practices in the selected hotels located in the selected cities of the Gujarat State. The targeted population was defined as hotel managers' and the other senior staff members being employed who were conveniently drawn for collecting primary data using structured non-disguised questionnaire. Total number of 204 responses were considered gathered from 51 hotels located in the selected cities of the State of Gujarat. In all, 46 respondents were chosen from the Vadodara city, 101 from the Ahmedabad city, 25 from the Surat city, and 32 respondents were drawn from the Rajkot city respectively.

## Reliability of the Structured Non-Disguised Questionnaire

The reliability test was applied to test each of the selected dimensions of the questionnaire related

with measurement of hoteliers' efforts concerning CRM practices. The Cronbach's alpha ranged from 0.803 to 0.881 to determine how strongly the opinions of selected hoteliers were related to each other. It is a formal scientific process to analyze the results of various parameters of the economic and business activities of the firm. The comparison and analysis of logically related items in the financial statements clearly brings out the results of economic activity. The techniques of financial statement analysis have inherent strengths to assess and judge the strength or otherwise of the business. As such, a well thought out analysis has a power to predict business failure.

### Data analysis & interpretation

The primary data were collected using structured non-disguised have been analyzed by applying SPSS 15.0. It mainly revealed following.

#### Profile of Selected Respondents (Hoteliers)

75 percent of the hoteliers were males whereas 25 percent of them were females. More than 80 percent of hotel staff members in the Rajkot city were males whereas female staff members had topped the list in the Ahmedabad city. It implies that there exists scope for females to develop her career in hotel industry in the State of Gujarat. Overall, 44.12 percent of the hotel staff members were found as unmarried, and Surat topped the list in this category where as in case of married respondents Baroda had topped the list. [Refer Appendix-Table Number-02].

#### Selected Hoteliers Responses on Collection of Information About Customers

The overall data analysis revealed that the 52 percent of the hotel staff updated guests' information each day; whereas 42.2 percent of them had collected it on monthly basis [Refer Appendix-Table Number-03]. It was found that more than 85 percent of them showed their agreement on items concerning like source of awareness about the hotel to customer, purpose of customers' visit to the hotel, frequency of their stay, and feedback given by them in the selected cities of the Gujarat State [Refer Appendix-Table Number-04].

#### Selected Hoteliers Responses on Facilities in the Hotels

Overall, less than 35 percent of selected respondents had confirmed availability of selected facilities in hotels. To illustrate, 33.8 percent had

other, and also to compare its composite score (Naresh K. Malhotra, 2007 and Jum C. Nunnally, 1981). [Refer Appendix-Table Number-01].

affirmed for swimming pool in the hotel, 19.6 for sports facility, 20.6 percent were favorable for spa facility, 7.4 percent had expected discotheque in the hotel, and 14.2 percent had favorably expressed for yoga room, 5.4 percent wished for beauty parlor, 19.6 percent expected Sauna & Jacuzzi in the hotel, and 11.3 percent of them had affirmed for shopping center, 34.3 percent for babysitters facility whereas 9.8 percent had suggested for kids activity centre, and 29.4 percent for authorized liquor shop for permit holders in the hotel. Overall, city wise results revealed that though all of them focused on personalized communication strategy but the most significant area that needed an improvement in the hotel was understanding the needs of dissatisfied customers [Refer Appendix-Table Number-05].

#### Selected Hoteliers Responses on Areas of Improvement in Hotels

Overall, city wise results revealed that the most important area that needed an improvement in the hotel was 'understanding the need of dissatisfied customer', whereas 'personalizing staff guest encounters' too was considered to be less important [Refer Appendix-Table Number-06].

### Findings of the research study

The Chi-square test was applied to offer findings and implications of the research study as follows.

#### Hypothesis

The CRM Practices concerning gathering of information by the hoteliers from the selected customers or hotel guests on selected criteria in the selected cities of the Gujarat State is homogeneous.

Sr. No.	Selected Criteria	'P' Value of X <sup>2</sup>
	We keep an account of following:	
(1)	Source of awareness about the Hotel to Customer	NS(.194)
(2)	Purpose of Customers' visit to the Hotel	S(.001)
(3)	Frequency of their Stay	S(.009)
(4)	Room Rates charged each time	S(.014)
(5)	Preference of Room by Customer	NS(.406)

Cont..		
(6)	Newspaper that Customer read	S(.009)
(7)	Kind of Food preferred by Customer	<b>NS(.044)</b>
(8)	Regular visitors to Hotel website	S(.029)
(9)	Spending pattern of Customer in Restaurants	S(.026)
(10)	Shopping within the premise of Hotel	S(.031)
(11)	Additional services purchased by customer	<b>NS(.988)</b>
(12)	Usage of the loyalty programme	S(.003)
(13)	Preferred Method of payment	<b>NS(.141)</b>
(14)	Feedback given by the Customer	S(.042)

The CRM Practices concerning gathering of information was not found homogeneous. The significant differences were found in the hoteliers' CRM practices except on a selected criteria viz, Source of Awareness about the hotel; Preference of Room by Customer; Kind of Food preferred by Customer; Additional services purchased by customers, and Preferred Method of payment.

### Hypothesis: II

The perceived importance concerning selected CRM Practices aimed at improving hotels' performance on selected criteria amongst the selected hoteliers in the selected cities of the Gujarat State is homogeneous.

Sr. No.	Selected Criteria	'P' Value of $X^2$
(1)	Understanding the need of dissatisfied Customer	S(.000)
(2)	Personalizing Promotional offers	S(.003)
(3)	Personalizing Communication strategy	<b>NS(.082)</b>
(4)	Personalizing Staff Guest Encounters	S(.002)
(5)	Understanding the Room Preferences	S(.012)
(6)	Identifying and focusing on key customers.	S(.000)
(7)	Customizing services to the customers.	S(.001)
(8)	Identifying different customers need.	S(.000)

(9)	Developing amicable relation with existing customers.	S(.014)
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Except the CRM practice "Personalizing Communication strategy", rest of the CRM practices were having different perceived importance aimed at improving hotels performance amongst selected hoteliers in the Gujarat State.

### Implications of the research study

The research findings revealed that hoteliers of different hotels in different selected cities in the state of Gujarat are not much concerned about the CRM practices related to gathering information from the selected customers. It implies that there is an urgent requirement of to record the purpose & frequency of every hotel guest properly & if they give feedback, hotelier should follow that rigorously. More sessions are required to be conducted at hotel to generate the feeling of necessity of CRM practices, because Hoteliers were found not having importance of certain practices aiming at improvement of hotels' performance.

They were least bothered about understanding the need of dissatisfied hotel guests and personalizing offers as per their expectations. Personalization Customization of services is the need of the hour. In this research study, hotel's performance was found different to the service outcome, which implies that level of service outcome should bring up so that performance of the hotel can also go high and ultimately resulting in to growth of the hotel by practicing CRM. There is a need of focusing more on CRM practices, because still hoteliers are differing in perceived importance of CRM practices, which are to be taken care properly for the attraction, retention & maintain the customer.

### Concluding Remarks

Though, this is proven that CRM practices are unavoidable rather with the help of CRM practices, personalization and customization of services has become the need of the hour. The hoteliers should follow various criteria mentioned by researchers; those were found important, for the survival & growth of the hotels. By catering the customized needs of the individual customer, which would ultimately lead to increased delivery of customer satisfaction and retention of the customers, the

hoteliers would be able to compete effectively and efficiently in this globalized era.

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APPENDIX

Table Number: 01: Summary of Indicators Hotelier efforts for CRM and Reliability Alpha Score

Sr. No.	Grouped Indicator Items	Cronbach's Reliability Alpha Coefficient
(01)	Information Sources about the Customer	0.803
(02)	Efforts for improvement in Hotel's performance	0.881

Table Number: 02: Profile of Selected Respondents

Sr. No.	Selected Background Variables of Selected Respondents		Number and Percentages of Selected Respondents				
			Vadodara	Ahmedabad	Surat	Rajkot	Total
01	Gender	Males	36 (78.3)	72(71.3)	19(76.0)	26(81.3)	153(75.0)
		Females	10(21.7)	29(28.7)	6(24.0)	6(18.8)	51(25.0)
			<b>46(100.0)</b>	<b>101(100.0)</b>	<b>25(100.0)</b>	<b>32(100)</b>	<b>204(100)</b>
02	Marital Status	Un-Married	16(34.8)	41(40.6)	15(60.0)	18(56.25)	90(44.12)
		Married	30(65.2)	60(59.4)	10(40.0)	14(43.75)	114(55.88)
		Total	<b>46(100.0)</b>	<b>101(100.0)</b>	<b>25(100.0)</b>	<b>32(100)</b>	<b>204(100)</b>
03	Age Group	Below 25 years	7 (15.2)	28 (27.7)	11(44.0)	15(46.9)	61(29.9)
		26 to 35 years	26 (56.5)	45(44.6)	9(36.0)	11(34.4)	91(44.6)
		36 to 45 years	12 (26.1)	27(26.7)	4(16.0)	5(15.6)	48(23.5)
		Above 46 years	1 (2.2)	1(1.0)	1(4.0)	1(3.1)	4(2.0)
		Total	<b>46(100.0)</b>	<b>101(100.0)</b>	<b>25(100.0)</b>	<b>32(100.0)</b>	<b>204(100.0)</b>
04	Educational Qualifications	Graduation	15(32.6)	30(29.7)	13(52.0)	18(56.3)	76(37.3)
		Post-Graduation	20(43.5)	47(46.5)	9(36.0)	7(21.9)	83(40.7)
		Professional Qualification	6(13.0)	11(10.9)	1(4.0)	4(12.5)	22(10.8)
		Diplomas	5(10.9)	13(12.9)	1(4.0)	3(9.4)	22(10.8)
		Others	0(.0)	0(.0)	1(4.0)	0(.0)	1(.5)
		Total	<b>46(100.0)</b>	<b>101(100.0)</b>	<b>25(100.0)</b>	<b>32(100.)</b>	<b>204(100.0)</b>

05	Occupation	Director	0(.0)	1(1.0)	0(.0)	0(.0)	1(.5)
		Duty Manager	13(28.3)	15(14.9)	3(12.0)	5(15.6)	36(17.6)
		Customer Relationship Manager	10(21.7)	22(21.8)	6(24.0)	5(15.6)	43(21.1)
		Front Office Manager	6(13.0)	22(21.8)	6(24.0)	9(28.1)	43(21.1)
		Marketing Manager	7(15.2)	12(11.9)	5(20.0)	7(21.9)	31(15.2)
		Housekeeping Executive	5(10.9)	12(11.9)	2(8.0)	4(12.5)	23(11.3)
		Others	5(10.9)	17(16.8)	3(12.0)	2(6.3)	27(13.2)
		Total	46(100.0)	101(100.0)	25(100.0)	32(100.0)	204(100.0)

Table Number: 03: Selected Hotel Staff Members' Responses on Frequency of Gathering Customers' Information

Sr. No	Cities Frequency of Gathering Customer Information	City wise Classification of Respondents				Number & Percentages of Selected Respondents
		Vadodara	Ahmedabad	Surat	Rajkot	
01	Every Day	25(54.3)	54(53.5)	13 (52.0)	14(43.8)	106(52.0)
02	Every Month	21(45.7)	39(38.6)	11(44.0)	15(46.9)	86(42.2)
03	Every Six Month	0(.0)	6(5.9)	1(4.0)	3(9.4)	10(4.9)
04	Every Year	0(.0)	2(2.0)	0(.0)	0(.0)	02(1.0)
Total		46(100.0)	101(100.0)	25(100.0)	32(100.0)	204(100.0)

Table Number: 04: Selected Hotel Staff Members' Responses on Gathering Customers' Information

Sr. No.	Selected Criteria	Number and Percentages of Respondents									
		Vadodara		Ahmedabad		Surat		Rajkot		Total	
		DA	AG	DA	AG	DA	AG	DA	AG	DA	AG

01	Source of awareness about the Hotel to Customer	0 (.0)	46 (100)	9 (8.9)	92 (91.1)	1 (4.0)	24 (96.0)	2 (6.3)	30 (93.8)	12 (5.9)	192 (94.1)
02	Purpose of Customers' visit to the Hotel	5 (10.9)	41 (89.1)	10 (9.9)	91 (90.1)	1 (4.0)	24 (96.0)	2 (6.3)	30 (93.8)	18 (8.8)	186 (91.2)
03	Frequency of their Stay	2 (4.3)	44 (95.7)	7 (6.9)	94 (93.1)	3 (12.0)	22 (88.0)	3 (9.4)	29 (90.6)	15 (7.4)	189 (92.6)
04	Room Rates charged each time	5 (10.9)	41 (89.1)	10 (9.9)	91 (90.1)	7 (24.0)	19 (76.0)	4 (12.5)	28 (87.5)	26 (12.3)	179 (87.7)
05	Preference of Room by Customer	6 (13.0)	40 (87.0)	21 (20.8)	80 (79.2)	4 (16.0)	21 (84.0)	3 (9.4)	29 (90.6)	37 (16.7)	170 (83.3)
06	Newspaper that Customer read	8 (17.4)	38 (82.6)	34 (33.7)	67 (66.3)	6 (24.0)	19 (76.0)	2 (6.3)	30 (93.8)	50 (24.5)	154 (75.5)
07	Kind of Food preferred by Customer	2 (4.3)	44 (95.7)	18 (17.8)	83 (82.2)	7 (28.0)	18 (72.0)	4 (12.5)	28 (87.5)	31 (15.2)	173 (84.8)
08	Regular visitors to Hotel website	17 (37.0)	29 (63.0)	48 (47.5)	53 (52.5)	8 (36.0)	16 (64.0)	11 (34.4)	21 (65.6)	84 (41.7)	119 (58.3)
09	Spending pattern of Customer in Restaurants	14 (30.4)	32 (69.6)	38 (37.6)	63 (62.4)	7 (28.0)	18 (72.0)	3 (9.4)	29 (90.6)	62 (30.4)	142 (69.6)
10	Shopping within the premise of Hotel	39 (84.8)	7 (15.2)	63 (62.4)	38 (37.6)	20 (80.0)	5 (20.0)	23 (71.9)	9 (28.1)	145 (71.1)	59 (28.9)

11	Additional services purchased by customer	19 (41.3)	27 (58.7)	41 (40.6)	60 (59.4)	10 (40.0)	15 (60.0)	12 (37.5)	20 (62.5)	82 (40.2)	122 (59.8)
12	Usage of the loyalty programme	11 (23.9)	35 (76.1)	32 (31.7)	69 (68.3)	9 (36.0)	16 (64.0)	5 (15.6)	27 (84.4)	57 (27.9)	147 (72.1)
13	Preferred Method of payment	5 (10.9)	41 (89.1)	19 (18.8)	82 (81.2)	4 (16.0)	21 (84.0)	1 (3.1)	31 (96.9)	29 (14.2)	175 (85.8)
14	Feedback given by the Customer	2 (4.3)	44 (95.7)	7 (6.9)	94 (93.1)	1 (4.0)	24 (96.0)	0 (.0)	32 (100.0)	10 (4.9)	194 (95.1)

**Table Number: 05: Selected Hotel Staff Members' Responses on Availability of Facilities in the Hotel**

Sr. No	Selected Facilities in Hotel	Number and Percentages of Respondents				
		Vadodara	Ahmedabad	Surat	Rajkot	Total
01	Internet in Room	46(100)	99(98.0)	23(92.0)	32(100)	200(98.0)
02	Laptop/Computer for customers' use	23(50.0)	65(64.4)	17(68.0)	22(68.8)	127(62.3)
03	Direct line of Phone in Room	41(89.1)	97(96.0)	24(96.0)	32(100.0)	194(95.1)
04	Answering phone in Room	34(73.9)	80(79.2)	20 (80.0)	17(53.1)	151(74.0)
05	Safe deposit locker in Room	35(76.1)	97(96.0)	20(80.0)	25(78.1)	177(86.8)
06	Non-Smoking Rooms	40(87.0)	101(100.0)	25(100.0)	32(100.0)	198(97.1)
07	Smoking Rooms	29(63.0)	86(85.1)	20(80.0)	30(93.8)	165(80.9)
08	Wi-Fi enabled Rooms	46(100.0)	99(98.0)	20(80.0)	30(93.8)	195(95.6)
09	Fax in Hotel	40(87.0)	100(99.0)	25(100.0)	28(87.5)	193(94.6)
10	Xerox in Hotel	40(87.0)	100(99.0)	22(88.0)	25(78.1)	187(91.7)
11	Scanner in Hotel	40(87.0)	99(99.0)	24(100.0)	30(93.8)	193(95.5)

12	Gym in the Hotel	44(95.7)	78(77.2)	20(80.0)	19(59.4)	161(78.9)
13	Swimming pool in the Hotel	24(52.2)	26(25.7)	15(60.0)	4(12.5)	69(33.8)
14	Sports Facility in the Hotel	6(13.0)	17(16.8)	14(56.0)	3(9.4)	40(19.6)
15	Spa Facility in the Hotel	7(15.2)	24(23.8)	10(40.0)	1(3.1)	42(20.6)
16	Discotheque in the Hotel	1(2.2)	6(5.9)	6(24.0)	2(6.3)	15(7.4)
17	Yoga room in the Hotel	5 (10.9)	10 (9.9)	11 (44.0)	3 (9.4)	29 (14.2)
18	Beauty Parlor in the Hotel	1 (2.2)	6(5.9)	1 (4.0)	3 (9.4)	11 (5.4)
19	Sauna & Jacuzzi in the Hotel	7(15.2)	23 (22.8)	7(28.0)	3(9.4)	40(19.6)
20	Shopping Center in the Hotel	3(6.5)	11(10.9)	5(20.0)	4(12.5)	23(11.3)
21	Wake-up Calls	46(100.0)	101(100.0)	25(100.0)	32(100.0)	204(100.0)
22	Restaurant Reservations in the Hotel	45(97.8)	93(92.1)	24(96.0)	30(93.8)	192(94.1)
23	Babysitters Facility in the Hotel	13(28.3)	40(39.6)	5(20.0)	12(37.5)	70(34.3)
24	Money Changing Facility	42(91.3)	92(91.1)	17(68.0)	28(87.5)	179(87.7)
25	Banquet Facility in the Hotel	44(95.7)	100(99.0)	25(100.0)	31(96.9)	200(98.0)
26	Laundry Facility in the Hotel	46(100.0)	97(96.0)	23(92.0)	32(100.0)	198(97.1)
27	Buying movie Ticket from Multiplex	19(41.3)	48(47.5)	16(64.0)	12(37.5)	95(46.6)
28	Taking to the Local Market	13(28.3)	57(56.4)	14(56.0)	20(62.5)	104(51.0)
29	Doctor on Call	46(100.0)	101(100.0)	23(92.0)	32(100.0)	202(99.0)
30	Car on Rent	45(97.8)	100(99.0)	25(100.0)	32(100.0)	202(99.0)
31	Kids Activity Centre	2(4.3)	5(5.0)	10(40.0)	3(9.4)	20(9.8)
32	Authorized Liquor Shop for Permit holders	14(30.4)	36(35.6)	9(36.0)	1(3.1)	60(29.4)

**Table Number: 06: Selected Hotel Staff Members' Responses on Areas of Improvement in Hotels**

Sr. No.	Selected Criteria	Number and Percentages of Respondents									
		Vadodara		Ahmedabad		Surat		Rajkot		Total	
		UI	IM	UI	IM	UI	IM	UI	IM	UI	IM
01	Understanding the need of dissatisfied	4 (8.7)	42 (91.3)	3 (3.0)	98 (97.0)	1 (4.0)	24 (96.0)	2 (6.3)	30 (93.8)	10 (4.9)	194 (95.1)

	Customer										
02	Personalizing Promotional offers	9 (19.6)	37 (80.4)	9 (8.9)	92 (91.1)	5 (20.0)	20 (80.0)	1 (15.6)	27 (84.4)	28 (13.7)	176 (86.3)
03	Personalizing Communication strategy	10 (21.7)	36 (78.3)	7 (6.9)	94 (93.1)	3 (12.0)	22 (88.0)	4 (12.5)	28 (87.5)	24 (11.8)	180 (88.2)
04	Personalizing Staff Guest Encounters	12 (26.1)	34 (73.9)	21 (20.8)	80 (79.2)	2 (8.0)	23 (92.0)	4 (12.5)	28 (87.5)	39 (19.1)	165 (80.9)
05	Understanding the Room Preferences	4 (8.7)	42 (91.3)	7 (6.9)	94 (93.1)	4 (16.0)	21 (84.0)	4 (12.5)	28 (87.5)	19 (9.3)	185 (90.7)
06	Identifying and focusing on key customers.	6 (13.0)	40 (87.0)	8 (7.9)	93 (92.1)	4 (16.0)	21 (84.0)	0 (.0)	32 (100.0)	18 (8.8)	186 (91.2)
07	Computerizing services to the customers.	6 (13.0)	40 (87.0)	16 (15.8)	85 (84.2)	5 (20.0)	20 (80.0)	4 (12.5)	28 (87.5)	31 (15.2)	173 (84.8)
08	Identifying different customers' need	4 (8.7)	42 (91.3)	8 (7.9)	93 (92.1)	3 (12.0)	22 (88.0)	0 (.0)	32 (100.0)	15 (7.4)	189 (92.6)
09	Developing amicable relation with existing customers.	4 (8.7)	42 (91.3)	15 (14.9)	86 (85.1)	1 (4.0)	24 (96.0)	1 (3.1)	31 (96.9)	21 (10.3)	183 (89.7)

## A Study on Influence of Children on Family Buying in Gujarat State

Ankur Amin

### Abstract

Today, children are emerging as the most powerful influencers in the Family buying decisions. Gone are the days, when the child had a meagre say in the family buying decisions, they were not consulted while purchasing goods even related to them. People are at the threshold of helping and participating attitude towards the children. Their likes and dislikes are duly taken care of and they are being thought as major participants in family buying decisions.

Presently, the market is a tough place to be in; thousands and thousands of products are being launched every day. But most of them are rejected, primarily because of lack of proper market research and being indifferent towards the customer's needs. In this pursuit, they have segmented the market and children have become the prime target for marketers. These facts prompted to focus attention to the study of influence of children in family buying decisions. The present study analyzes various facts, issues and explores the role of children in Family buying decisions by using secondary and primary data with different statistical techniques.

### Introduction

Children constitute an important target market segment and merit attention from a marketing perspective. The role that children plays in making decisions concerning the entire family unit has prompted researchers to direct attention to the study of influence of children.

Children have come to constitute a very important consumer group that influences family purchases of various products in many ways. Thus, recognising children as a primary market, an influencing market, and a future market, children today are seen as different from past generations; especially the 8-14 year-old (called "tweens", as they are neither children nor teens but something between). "They've grown up faster, are more connected, more direct and more informed. They have more personal power, more money, influence and attention than any other generation before them".

Family structures have changed, which influences family decision-making, and, as some authors argue, family communication has become more open and democratic, one consequence being that today parents pay more attention to their children and their opinions. These changes in family communication have made it possible for children to exert influence on family decision-making, a phenomenon called reciprocal socialisation, suggesting that children influence parents, just as parents influence children.

A family has been identified as the most important decision making and consumption unit; therefore, how a family makes decisions as a consumption unit has attracted the interest of marketers and marketing research over the years. Usually, many studies examined family decision making by looking at the relative influence of husbands and wives in the different consumption decisions. Gradually, this has shifted to also include children's influence.

The increasing attention on children's role was largely because of children's increasing influence on family decisions and increasing spending power. Children attempt to and succeed in influencing family purchase decisions. Consequently, companies are making a conscious effort to direct their marketing campaigns toward children to attract their attention to advertised products and brands, acknowledging their influence, especially for products that they are the primary users. Numerous practitioners have offered insight on how children think and act as consumers along with advice regarding how to best market to this segment;

indicative are some of the available titles: Creating Ever-Cool: A Marketer's Guide to a Kid's Heart,

Marketing to and through Kids, or The Great Tween Buying Machine: Marketing to Today's Tweens.

### Literature review

Belch, Belch, and Ceresino (1985) later studied the diversity in the influence of children and reported that the extent of such influence varied with

product and stage in the decision making process, thus supporting the assertion of Szybillo and Sosanie (1977) that the roles of husbands, wives, and children vary across stages of decision making. They found that while the role of the teen age child was most prominent at the initiation stage, it was limited thereafter.

Moschis George P. (1985) has introduced the related concept of consumer socialization. He has given the conceptual framework and the measurement models of socialization. Along with the theoretical perspective he attempted to explain the family influences of the buying behaviour of customer, he pointed out various factors responsible for the purchase decisions.

Ekstrom, Tansuhaj and Foxman (1987) took a reciprocal view of consumer socialization of children and proposed that children contribute to decision outcome through routes – one by influencing their parents by direct expression of preferences and secondly by communicating new knowledge to the parents and influencing purchases.

Singh (1992) studied the role played by family members while purchasing a television across five occupational categories: teachers, doctors, business people, lawyers, and engineers. Children of engineers and doctors were found to have remarkable influence in the purchase decisions.

Kapoor (2001) collected information from families in Delhi in regard to their roles across stages of purchase decision making for six durables - televisions, refrigerators, washing machines, personal computers, audio systems and cars. She found that individual members were associated with multiple roles.

Kaur and Singh (2006) explained that children constitute three different markets: the primary, the influencer, and the future market. Certain products are simply children's products for which they are the primary users / buyers. They sometimes either purchase a product themselves or select the product before it is purchased by the parents.

## Objective of the study

The objective of the study is to examine the role of children on Family buying decisions.

## Hypothesis of the study:

- Ho: Children do not play significant buying roles in family by influencing directly or indirectly.

- Ho: Children from Low-income level families have less influence than high income family in making purchase decisions.

## Reserch design

### Sampling Method

In the present study, the non-probability convenience sampling method has been adopted.

### Sample Unit

While collecting the data one family has been considered as a sample unit.

### Sample Size

The sample size was so selected that it could be adequate enough to represent the whole population; therefore two cities of Gujarat- Ahmedabad and Surat have been selected for the present study. The sample is also restricted to the urban area of those two cities. The sample size has been restricted to 500 families having children below 14 years (i.e. 1000 respondents). The randomly selected 250 families from each city include two respondents: a parent (either mother or father) and a child below the age of 14 years from each family.

### Primary Data

The primary data collected for this research study has been collected through the structured non-disguised questionnaires. A structured non-disguised questionnaire is one where questions and answers are specified. Separate set of questionnaires were prepared for both parents and children.

### Instrument of Data Collection

The responses were measured on five point scale. The method is based on Likert Scaling Technique. Scaling describes the procedure of assigning numbers to various degrees of opinion, attitude and other concepts.

### Preparation of the Scale

The data thus obtained were statistically treated giving a weight of 5, 4, 3, 2, and 1 for the positive items. The weights were reversed for negative items, i.e., 1, 2, 3, 4, 5. Then the score of each individual was summed up to calculate the response of the items.

**Data Analysis**

The following statistical measures have been used in the study.

Weighted average score, co-efficient of variance, co-efficient of contingency, chi-square, t-test and analysis of variance.

**Data analysis and interpretation**

The following is the summerised results from the analysis of data

**Table 01 Demographic Profile of Parents**

City	Surat	Ahmedabad	Total
<b>Age</b>			
Up to 35	15(6)	25(10.00)	40(8.00)
35 -40	88(33.20)	83(33.20)	171(34.20)
40-45	115(46.00)	99(39.60)	214(42.80)
Above 45	32(12.80)	43(17.20)	75(15.00)
<b>Occupation</b>			
Business	97(38.80)	151(60.40)	248(49.60)
Service	153(39.60)	99(61.20)	252(50.40)
<b>Gender</b>			
Male	192(76.80)	163(65.20)	355(71.00)
Female	58(23.20)	87(34.80)	145(29.00)
Woman of family			
Working	28(11.20)	63(25.20)	91(18.20)
Non-working	222(88.80)	187(74.80)	409(81.80)
<b>No. of Children</b>			
One	14(5.60)	13(5.20)	27(5.40)
Two	146(58.40)	158(63.20)	304(60.80)
Three / More	90(36.00)	79(31.60)	169(33.80)
<b>Monthly Family Income(Rs.)</b>			
Up to 10,000	107(42.80)	66(26.40)	173(34.60)
10000-20,000	94(37.60)	87(34.80)	181(36.20)
Above 20,000	49(19.60)	97(38.80)	146(29.20)
<b>Education</b>			
Matric	71(28.40)	57(22.80)	128(25.60)
Graduate	124(49.60)	120(48.00)	244(48.80)
Post-Graduate	55(22.00)	73(29.20)	128(25.60)

Figures in parentheses indicate percentages

It is found that respondents of both the cities have significant association between age/gender, occupation/Woman of family, occupation/education, gender/Woman of family, Woman of family/education, number of children/education and income/education that is, gender and occupation of the respondent determine the status of Woman of family either working or not and education being an important demographic factor determine the status of Woman of family, number of children of respondents and their income level whereas age of the respondent does not have any significant association with number of children. Gender of respondent does not have any

association with education and number of children of respondents.

City wise analysis shows that income of the respondents of Surat is largely affected by their age, occupation, gender and status of Woman of family. Number of children of respondents depends upon their age, whereas in Ahmedabad occupation of the respondents is determined by their age and number of children is determined by the monthly income of the respondents.

**Table 02 Demographic Profile of Parents**

	Surat	Ahmedabad	Total
<b>Gender</b>			
Male	151(60.40)	117(46.80)	268(53.60)
Female	99(39.60)	133(53.20)	232(46.40)
<b>Age</b>			
Up to 10	50(20.00)	51(20.40)	101(20.20)
10-13	101(40.40)	102(40.80)	203(40.60)
Above 13	99(39.60)	97(38.80)	196(39.20)
<b>Education</b>			
Up to 5 <sup>th</sup>	14(5.60)	40(16.00)	54(10.80)
5 <sup>th</sup> – 8 <sup>th</sup>	144(57.60)	141(56.40)	285(57.00)
Above 8 <sup>th</sup>	92(36.80)	69(27.60)	161(32.20)
<b>Monthly Pocket Money</b>			
No Pocket Money	83(33.20)	48(18.40)	129(25.80)
Up to 100	76(30.40)	98(39.20)	174(34.80)
Above 100	91(36.40)	106(42.40)	197(39.40)

Figures in parentheses indicate percentages

Child respondents of two cities show significant association only between age and class of the respondents. Whereas all the other variables gender/age, gender/class, age/monthly pocket money and class/monthly pocket money show insignificant association between them.

**Role of Children and Growth of Market**

The objective of the study is to examine the role of children in the family buying decisions. The factor combination from the scale i.e. Fa1, Fa2, Fa5, Fa12 from the parent’s responses and Fb1, Fb2, Fb4, Fb10 and Fb14 from the children responses has been taken for consideration to study this phenomenon.

**Parents Agree to the Consent of Children**

	Surat	Ahmedabad	Total
<b>Age wise Analysis</b>	Chi <sup>2</sup> = 11.07	Chi <sup>2</sup> = 25.08*	Chi <sup>2</sup> = 20.74
<b>Occupation wise Analysis</b>	Chi <sup>2</sup> = 4.95	Chi <sup>2</sup> = 1.01	Chi <sup>2</sup> = 2.35
<b>Gender wise Analysis</b>	Chi <sup>2</sup> = 2.63	Chi <sup>2</sup> = 3.42	Chi <sup>2</sup> = 5.37
<b>Woman of Family wise</b>	t = 0.299	t = 2.039*	t = 1.757
<b>No. of Children wise</b>	Chi <sup>2</sup> = 3.54, F = 3.18*	Chi <sup>2</sup> = 8.13 F = 3.42*	Chi <sup>2</sup> = 5.71 F = 5.11**
<b>Monthly Income wise</b>	Chi <sup>2</sup> = 21.77**	Chi <sup>2</sup> = 9.63	Chi <sup>2</sup> = 20.77**
<b>Education wise</b>	Chi <sup>2</sup> = 33.11** F = 7.94**	Chi <sup>2</sup> = 12.47	Chi <sup>2</sup> = 23.74** F = 7.50**

\*\* Significant at one percent level of significance

\* Significant at five percent level of significance

Comparative analysis of the statement shows that occupation, gender and number of children do not have any significant influence on the respondents’ perception. Whereas income and education significantly influence Surat respondents. Age and Woman of family (working or non-working)

significantly affect the perception of Ahmedabad respondents. Hence it can be concluded that age, income and education have significant influence on the role of children.

**Most of Routine Decisions are initiated by Children**

	Surat	Ahmedabad	Total
Age wise Analysis	Chi <sup>2</sup> = 17.48	Chi <sup>2</sup> = 32.00**	Chi <sup>2</sup> = 33.16**
Occupation wise Analysis	Chi <sup>2</sup> = 3.80	Chi <sup>2</sup> = 3.68	Chi <sup>2</sup> = 4.33
Gender wise Analysis	Chi <sup>2</sup> = 8.30	Chi <sup>2</sup> = 2.19	Chi <sup>2</sup> = 5.92
Woman of Family wise	Chi <sup>2</sup> = 6.46	Chi <sup>2</sup> = 4.30	Chi <sup>2</sup> = 4.38
No. of Children wise	Chi <sup>2</sup> = 11.08	Chi <sup>2</sup> = 8.46	Chi <sup>2</sup> = 14.51
Monthly Income wise	Chi <sup>2</sup> = 17.91* F = 3.34*	Chi <sup>2</sup> = 16.70*	Chi <sup>2</sup> = 28.28** F = 3.70*
Education wise	Chi <sup>2</sup> = 17.32*	Chi <sup>2</sup> = 21.08** F = 8.38**	Chi <sup>2</sup> = 26.96** F = 7.97**

\*\* Significant at one percent level of significance  
\* Significant at five percent level of significance

Comparative analysis of the statement shows that occupation, gender, Woman of family working or non-working and number of children do not have any impact on the perception of respondents but

income and education of the Surat respondents significantly varies their perception about the statement, whereas in case of Ahmedabad age, income and educational level of respondents have significant influence on the respondents' perception.

**Children Make Hurry to Take Decisions**

	Surat	Ahmedabad	Total
Age wise Analysis	Chi <sup>2</sup> = 16.31	Chi <sup>2</sup> = 10.77	Chi <sup>2</sup> = 20.52
Occupation wise Analysis	Chi <sup>2</sup> = 9.45 t = 2.959**	Chi <sup>2</sup> = 3.57	Chi <sup>2</sup> = 9.66* t = 2.594**
Gender wise Analysis	Chi <sup>2</sup> = 4.26	Chi <sup>2</sup> = 12.35* t = 3.346**	Chi <sup>2</sup> = 12.20* t = 2.912**
Woman of Family wise	Chi <sup>2</sup> = 3.93	Chi <sup>2</sup> = 3.70	Chi <sup>2</sup> = 5.98
No. of Children wise	Chi <sup>2</sup> = 8.54	Chi <sup>2</sup> = 11.84	Chi <sup>2</sup> = 11.22
Monthly Income wise	Chi <sup>2</sup> = 7.36	Chi <sup>2</sup> = 30.29**	Chi <sup>2</sup> = 17.87*
Education wise	Chi <sup>2</sup> = 7.32	Chi <sup>2</sup> = 5.51	Chi <sup>2</sup> = 5.35

\*\* Significant at one percent level of significance  
\* Significant at five percent level of significance

Comparative analysis of the statement shows that majority of the variables like age, Woman of family, number of children and education of the respondent does not have any significant influence on their perception but occupation affects the Surat

Respondents significantly and income and gender have significant influence on the perception of Ahmedabad respondents. Hence, the data concludes that respondents of different age, gender and occupation show more concern with the statement.

**Children Play Role of Mediator in Conflicts of Parents**

	Surat	Ahmedabad	Total
Age wise Analysis	Chi <sup>2</sup> = 10.22	Chi <sup>2</sup> = 17.34	Chi <sup>2</sup> = 15.80
Occupation wise Analysis	Chi <sup>2</sup> = 6.80	Chi <sup>2</sup> = 0.65	Chi <sup>2</sup> = 3.44
Gender wise Analysis	Chi <sup>2</sup> = 7.14	Chi <sup>2</sup> = 10.87* t = 2.558*	Chi <sup>2</sup> = 11.52* t = 3.261**
Woman of Family wise	Chi <sup>2</sup> = 2.51	Chi <sup>2</sup> = 5.59	Chi <sup>2</sup> = 5.42 t = 2.426*
No. of Children wise	Chi <sup>2</sup> = 18.61* F = 4.63*	Chi <sup>2</sup> = 13.99	Chi <sup>2</sup> = 19.05* F = 3.54*
Monthly Income wise	Chi <sup>2</sup> = 13.49	Chi <sup>2</sup> = 18.20*	Chi <sup>2</sup> = 13.26
Education wise	Chi <sup>2</sup> = 25.70**	Chi <sup>2</sup> = 10.94	Chi <sup>2</sup> = 28.87**

\*\* Significant at one percent level of significance  
\* Significant at five percent level of significance

Comparative analysis of all the factors on statement concludes that age, occupation and Woman of family does not have any significant impact on Surat and Ahmedabad respondents' perception

whereas gender and monthly family income of the respondents have significant impact on Ahmedabad's respondents and number of children and education plays a significant role on Surat respondents' perception.

**Children can Influence Buying Decisions of Parents**

	Surat	Ahmedabad	Total
Gender wise Analysis	Chi <sup>2</sup> = 4.79	Chi <sup>2</sup> = 3.26	Chi <sup>2</sup> = 6.58
Age wise Analysis	Chi <sup>2</sup> = 11.06	Chi <sup>2</sup> = 10.66	Chi <sup>2</sup> = 12.26
Class wise Analysis	Chi <sup>2</sup> = 10.99	Chi <sup>2</sup> = 7.87	Chi <sup>2</sup> = 9.43
Monthly Pocket Money wise	Chi <sup>2</sup> = 8.82	Chi <sup>2</sup> = 20.83** F = 4.14**	Chi <sup>2</sup> = 19.77*

\*\* Significant at one percent level of significance  
\* Significant at five percent level of significance

Comparative analysis of the statement shows that age, gender and class do not have any significant

influence on the respondents of both the cities but monthly pocket money have significant impact only on the opinion of respondents of Ahmedabad city.

**Parents Allow Child to Buy Daily Need Products**

	Surat	Ahmedabad	Total
Gender wise Analysis	Chi <sup>2</sup> = 4.51	Chi <sup>2</sup> = 0.21	Chi <sup>2</sup> = 2.32
Age wise Analysis	Chi <sup>2</sup> = 11.38	Chi <sup>2</sup> = 5.28	Chi <sup>2</sup> = 11.94
Class wise Analysis	Chi <sup>2</sup> = 4.25	Chi <sup>2</sup> = 6.93	Chi <sup>2</sup> = 7.33
Monthly Pocket Money wise	Chi <sup>2</sup> = 3.94	Chi <sup>2</sup> = 45.55** F = 22.76**	Chi <sup>2</sup> = 41.76** F = 17.90**

\*\* Significant at one percent level of significance  
\* Significant at five percent level of significance

Comparative analysis of the statement shows that gender and age of the respondents do not have any significant impact on respondents of both the cities but when we analyse the statement according to monthly pocket money of the respondent, it is

found that it has significant impact on Ahmedabad respondents. Their opinion differs with monthly pocket money they are getting from their parents because it increases their buying capacity and role in family buying decisions.

**Parents Appreciate the Things Purchased by a Child**

	Surat	Ahmedabad	Total
<b>Gender wise Analysis</b>	Chi <sup>2</sup> = 12.87* t = 3.231**	Chi <sup>2</sup> = 1.57	t = 2.196*
<b>Age wise Analysis</b>	Chi <sup>2</sup> = 11.02	Chi <sup>2</sup> = 9.28	Chi <sup>2</sup> = 9.43
<b>Class wise Analysis</b>	Chi <sup>2</sup> = 6.23	Chi <sup>2</sup> = 10.99	Chi <sup>2</sup> = 8.65
<b>Monthly Pocket Money wise</b>	Chi <sup>2</sup> = 8.75	Chi <sup>2</sup> = 36.77** F = 4.00**	Chi <sup>2</sup> = 28.67** F = 4.09*

\*\* Significant at one percent level of significance  
\* Significant at five percent level of significance

Comparative analysis of the statement shows that the age and class of the respondents do not have any significant impact on respondents' perception in both the cities but the gender of the respondent

has significant impact on the perception of respondents of Surat city and pocket money changes the opinion of respondents in Ahmedabad city.

**Children are the Initiators and First Person to Demand the Product**

	Surat	Ahmedabad	Total
<b>Gender wise Analysis</b>	Chi <sup>2</sup> = 10.39* t = 2.282*	Chi <sup>2</sup> = 1.47	Chi <sup>2</sup> = 4.49
<b>Age wise Analysis</b>	F = 2.66*	Chi <sup>2</sup> = 16.96*	Chi <sup>2</sup> = 11.29
<b>Class wise Analysis</b>	Chi <sup>2</sup> = 10.57	Chi <sup>2</sup> = 17.98*	Chi <sup>2</sup> = 24.29**
<b>Monthly Pocket Money wise</b>	Chi <sup>2</sup> = 2.63	Chi <sup>2</sup> = 9.87	Chi <sup>2</sup> = 8.92

\*\* Significant at one percent level of significance  
\* Significant at five percent level of significance

Comparative analysis of the statement shows that where age has significant influence on the opinion of respondents of both the cities, monthly pocket money does not have any impact on opinion of respondents of both the cities. Gender has a significant influence on the opinion of Surat respondents and the class has significant influence on the opinion of Ahmedabad respondents.

Ahmedabad are more receptive to the statement and majority of the respondents either agree or disagree to the statement as compared to Surat city. Parent respondents in both the cities agree that although most of routine decisions are not initiated by children because they are early adopters and hasten to take decisions, still they agree to the consent of children while buying a family product. Parents while accepting the increasing role of children in the family accept that children play a role of mediator if there is any conflict while buying a family product.

**Findings and conclusion**

Children today are playing an influential role in the family buying decisions; they are also emerging as a big market for the marketers. While analyzing the different factors for achieving the first objective it is found that although respondents of both the cities accept the role of children in family buying decisions, respondents (both parent and children) of

Child respondents agree that they influence the purchase decisions of their parents and parents not only allow them to buy daily need products of their choice but also appreciate the things purchased by them. Children also agree that they are not the initiators for the buying decisions but they act as

influencers in family buying decisions. It becomes clear that role of children in family buying decisions is increasing because parents today have more disposable income and the increase in number of women in work force also facilitates the buying power of products in the children. The financial position of the family is improving which in result increases the role of children in family buying decisions because parents today do not want to say "NO" to their kids.

### Future research direction

This study focuses on the influence of children on family buying decision only on the parents and children of two cities of Gujarat. Further study can be conducted with more cities of Gujarat as well as the comparison between rural area and urban city. The study is confined to urban area only; more comprehensive study can be done at national and international levels by increasing the sample size.

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# Impact of Marketing Expenses on Financial Performance of Selected Banks in India

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## Abstract

Traditionally, marketers concentrated their attention on customer or product-market results, such as awareness, attitude, sales, market share, brand equity, and customer satisfaction. They focused on the short-term effects of marketing variables, rather than long-term effects, and they rarely considered the link to financial outcomes and stock price. However, changes in the business environment have led to an increased emphasis on financial accountability for expenditures. Reflecting this shift, the Marketing Science Institute has designated metrics, or marketing productivity — that is, the measurement of the impact of marketing on financial outcomes.

## Introduction

Marketing ROI is critical to any organization, especially business to business and smaller consumer companies. Without a significant return on marketing investment, the sales organization will not operate effectively, the company won't meet its' objectives. How does marketing answer the question when the CEO asks? "Why should I invest in marketing when I can get better results by hiring more salespeople?" Is marketing responsible for delivering brand awareness, flashy graphics and great marketing programs? Or is it responsible to deliver leads and shorten the sales cycle to generate revenue at a cost and risk in line with other investments that a company might make?

Marketers are thus being increasingly asked to justify their investments to senior management in financial and profitability terms, as well as in terms of building and brand and growing the customer base. As a consequence, they are employing a border variety of financial measures to assess the direct and indirect value their marketing efforts create. They are also recognizing that much of their firms' market value comes from intangible assets, particularly their brands, customers base, employees, distributor and supplier relations, and intellectual capital.

## Review of Literature

The PIMS (Profit Impact of Marketing Strategy) database enabled numerous investigations of the link between marketing variables and profitability. Jacobson and Aaker (1985) used the PIMS database to tackle the question "Is Market Share All That It's Cracked Up to Be?" In their award-winning paper, they reported that the direct effect of market share on ROI was smaller than expected and suggested that marketers should return to fundamentals to determine additional antecedents of ROI.

More than a decade after the PIMS effort, marketers' attention shifted from market share and sales to more sophisticated financial outcomes. Srivastava, Shervani, and Fahey (1998) developed a conceptual framework that proposed that marketing's task is to develop and manage market-based assets (defined as assets arising from the firm's interactions with its environment), such as customer, channel, and partner relationships. They argued that such market-based assets increase shareholder value by accelerating and enhancing cash flows, lowering the volatility and vulnerability of cash flows, and increasing the residual (long-run annuity) value of cash flows.

Their paper stimulated additional work on this topic, including several papers published in an

MSI-sponsored special section of the October 2004 issue of the Journal of Marketing entitled "Linking Marketing to Financial Performance and Firm Value".

Are marketing efforts able to affect long-term trends in sales or other performance measures? Answering this question is essential for the creation of marketing strategies that deliver a sustainable competitive advantage. This paper introduces persistence modeling to derive long-term marketing effectiveness from time-series observations on sales and marketing expenditures. First, we use unit-root's tests to determine whether sales are stable or evolving (trending) over time. If they are evolving, we examine how strong this evolution is (univariate persistence) and to what extent it can be related to marketing activity (multivariate persistence). An empirical example of sales and media spending for a chain of home-improvement stores reveals that some, but not all, advertising has strong trend-setting effects on sales. We argue that traditional modeling approaches would not pick up these effects and, therefore,

seriously underestimate the long-term effectiveness of advertising. The paper concludes with an agenda for future empirical research on long-run marketing effectiveness. (Dekimpe, Marnik G., and Dominique M. Hanssens, Marketing Science 14(1) (Winter 1995), 1-21.)

### Objectives of the study

The objectives of the study are as follows:

1. To study and analyze diversity of adversity and marketing expenses made by selected public and private sector banks.
2. To measure and compare marketing performance of selected banks in terms with the help of some selected marketing metrics.
3. To examine the association between advertising and marketing expenses and overall financial performance of banks.

### Research methodology

Descriptive research designed has been used to study with the help of secondary data of selected 15 public sector and 10 private sector banks. Purposive sampling methods has been used for present study of total 25 banks for last 10 years form 2003-04 to 2012-13. Appropriate statistical tests have been used to test the hypothesis with the level of significance 5%.

List of the banks under the study:

### Hypothesis

1. Private sector banks are investing more in marketing than public sector banks.
2. There is no significant difference between marketing performance of public and private sector bank in terms of some financial ratio related to marketing investment and marketing return.
3. There is no relationship between spending on marketing and financial performance of public and private sector banks.

Sr. no.	Public Sector Banks	Sr. no.	Private Sector Banks
1	State Bank of India	1	YES Bank
2	Oriental Bank Corporation	2	AXIS Bank
3	Allahabad Bank	3	Federal Bank
4	Bank of India	4	HDFC
5	Bank of Baroda	5	ICICI
6	Corporation	6	Karur

	Bank		Vysya Bank Limited
7	Punjab National Bank	7	Kotak Mahindra Bank
8	Indian Bank	8	IndusInd Bank
9	Bank of Maharashtra	9	Lakshmi Vilas Bank Limited
10	Central Bank of India	10	Jammu and Kashmir Bank Limited
11	Industrial Development Bank of India		
12	Union Bank of India		
13	UCO Bank		
14	DENA		
15	Indian Overseas Bank		

### Discussion of Findings

Advertisement spending and Income of Public sector banks which are found to be more often an increasing trend. Public Sector banks such as SBI, BOI, BOB and UBI are having remarkably higher spending than the overall average spending of all banks. If we compare the advertisement expenses with income, we found that up to year 2008 advertisement and publicity expenses increases in the almost same proportion but thereafter advertisement and publicity expenses shows mixed trend and income reveals increasing trends. While, in the year 2010 and 2012 there was a decreasing trend in advertisement and publicity expenses. However, both reached at same level in 2013.

Advertisement spending and Income of Private sector banks which are found to be opposite trend. Private Sector banks such as ICICI, HDFC and AXIS are having remarkably higher spending than the overall average spending of all banks. If we compare the advertisement expenses with income, we found that both shows reverse trends. While, in the year 2012 and 2013 there was an increasing trend in advertisement and publicity expenses and income. However, Income increased at a steady level while advertisement and publicity expenses revealed mixed trends.

The average ratio of selected public sector bank was in between 1% to 2% during the period of study and particularly some banks like UBI, IDBI and Corporation bank spend more. In case of private sector banks KVB, YES Bank and AXIS bank spends considerably more on advertisement.

It has been found that highest amount spent by ICICI banks and second highest by HDFC bank. Axi bank is also spending considerable amount on advertising and publicity. Other relatively new private sectors banks spent less than 10 crore average yearly on advertising and publicity expenditure.

It has been evident from the data analysis that few private sectors banks are spending considerable high on advertising and publicity expenditure compared to other banks. Result of ANOVA also indicates the same result that there is significance difference in Advertising and Publicity Expenditure made by private sectors banks at 0.05 level of significance.

It has been found that there is positive correlation between Income and Advertising & Publicity Expenditure as value of r is 0.794 which is nearer to one and this value is further to found significant at 0.05 level of significance (0.00). It clearly indicates that there is relationship between Income and Advertising & Publicity Expenditure. As expenditure on Advertising & Publicity increase it also help to increase the income of banks.

Linear regression is used to model the value of an income variable based on its linear relationship to income predictors. R, the multiple correlation coefficients, is the linear correlation between the observed and model-predicted values of the dependent variable. Its large value indicates a strong relationship between advertisement expenditure and income of the banks. R Square, the coefficient of determination, is the squared value of the multiple correlation coefficients. It shows that about 63% of the variation in time is explained by the model.

Prediction Line:  $Y = 1222.159 + 220.272 X$

Where X = an advertisement expenditure by Banks and Y = projected Income

$R = .794$  and  $R^2 = 0.630$   $F = 165.270$  and  $p = 0.00$

To study the trend, linear regression analysis was done and on the basis of this result, a linear regression line was fit. The predicted line is shown above. To test the significant difference in

actual and predicted values of given ratio, ANOVA test was obtained and F-value with p-value was obtained. The calculated value of 'F' was 165.270 with p – value 0.00. As p-value is less than 0.05, above null hypothesis was rejected. It proves that above regression model is significantly fitted.

It has been also found that there is positive correlation between Income and Advertising & Publicity Expenditure of public sector banks as value of r is 0.932 which is nearer to one and this value is further to found significant at 0.05 level of significance (0.00). It clearly indicates that there is relationship between Income and Advertising & Publicity Expenditure. As expenditure on Advertising & Publicity increase it also help to increase the income of banks.

Linear regression is used to model the value of a income variable based on its linear relationship to income predictors. R, the multiple correlation coefficients, is the linear correlation between the observed and model-predicted values of the dependent variable. Its large value indicates a strong relationship between advertisement expenditure and income of the banks. R Square, the coefficient of determination, is the squared value of the multiple correlation coefficients. It shows that about 86 % of the variation in time is explained by the model.

Prediction Line:  $Y = 282.131 + 532.326 X$

Where X = an advertisement expenditure by Public sector Banks and Y = projected Income

$R = .932$  and  $R^2 = 0.867$   $F = 976.061$  and  $p = 0.00$

To study the trend, linear regression analysis was done and on the basis of this result, a linear regression line was fit. The predicted line is shown above. To test the significant difference in actual and predicted values of given ratio, ANOVA test was obtained and F-value with p-value was obtained. The calculated value of 'F' was 976.061 with p – value 0.00. As p-value is less than 0.05, above null hypothesis was rejected. It proves that above regression model is significantly fitted.

It has been found by studying the annual report of all selected public and private sector banks that they are not having any efforts to evaluate the marketing performance of bank therefore public as well as private sector banks should make point to evaluate the performance of marketing efforts with the help of some marketing metrics and some other qualitative standards.

**Table No. 1 Advertising and Publicity Expense (In Rs. Cr.) of Public Sector Bank**

ADVERTISING & PUBLICITY	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	Average
SBI	384.3	206.6	257.8	224.0	251.2	173.2	88.49	109.44	67.08	67.36	182.9
OBC	22.86	15.81	9.07	11.73	13.87	10.62	11.64	9.11	9.08	8.66	12.24
ALLAHABAD	31.55	27.36	35.82	21.64	14.23	15.41	20.93	22.76	10.20	4.07	20.40
BOI	62.76	64.00	58.65	47.47	22.44	31.20	42.50	13.75	14.88	8.36	36.60
BOB	61.06	58.15	57.51	44.46	39.97	33.18	25.70	25.64	10.41	24.11	38.02
CORP.	20.60	21.34	24.28	18.25	16.48	13.97	10.78	14.18	14.32	10.73	16.49
PNB	31.10	37.16	39.68	40.11	31.24	23.31	18.03	20.15	19.15	10.85	27.08
INDIAN	8.34	9.61	10.33	10.63	8.86	12.21	16.74	5.59	11.02	3.97	9.73
BOM	16.22	17.88	18.77	14.03	17.72	18.76	8.55	11.79	4.93	4.46	13.31
CBI	28.69	35.22	96.94	17.22	15.33	6.87	6.01	7.79	7.04	6.93	22.80
IDBI	12.63	26.22	46.34	45.84	48.38	25.25	11.01	16.95	16.19	15.97	26.48
UBI	71.63	70.59	94.08	38.98	132.63	34.49	19.55	20.35	25.21	14.64	52.22
UCO	32.42	24.01	21.68	18.87	19.30	11.17	12.66	8.43	6.00	5.52	16.01
DENA	8.26	8.27	16.35	10.80	11.21	9.47	11.05	12.77	11.66	5.82	10.57
IOB	29.83	38.87	23.17	35.83	29.95	12.17	13.57	8.86	2.85	3.84	19.89
Average	54.82	44.07	54.04	39.99	44.85	28.75	21.15	20.50	15.33	13.02	33.55

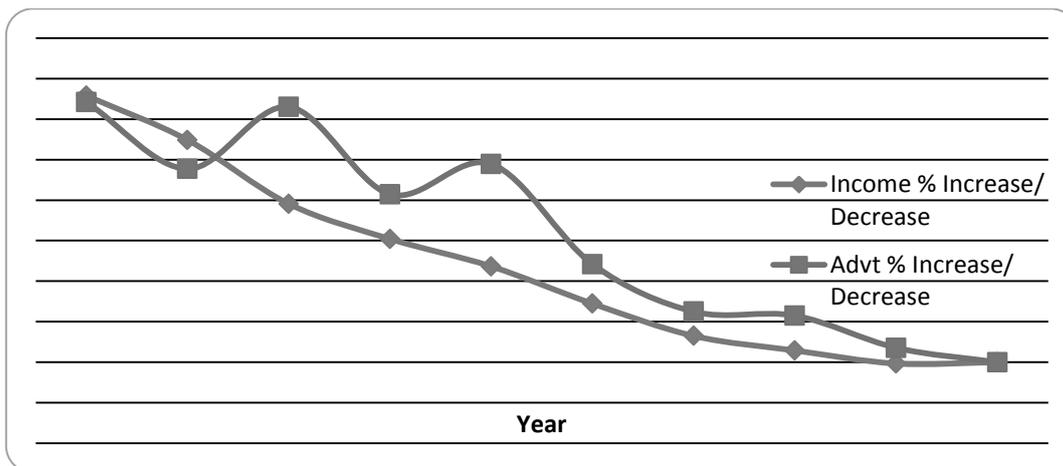
**Table No 2 Advertising and Publicity Expense (In Rs. Cr.) of Private Sector Bank**

ADVERTISING AND PUBLICITY	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	Average
YES	32.21	10.28	20.64	10.79	1.48	1.67	2.68	1.77	2.48	0.00	8.40
AXIS	119.65	88.15	80.42	47.27	46.32	74.41	29.62	17.06	11.47	10.81	52.52
FEDERAL	12.69	16.05	18.32	10.46	8.41	7.62	3.90	2.81	3.72	3.56	8.75
HDFC	187.01	154.83	158.95	83.12	108.68	114.73	187.96	217.29	54.95	37.06	130.4
ICICI	191.16	132.48	148.75	110.80	140.28	207.86	217.74	185.55	116.26	68.68	151.9
KVB	28.42	23.01	19.26	13.41	10.40	7.34	9.41	4.31	8.34	3.37	12.73
KOTAK	70.85	56.38	44.00	19.29	19.86	22.01	15.00	11.16	11.16	11.70	28.14
INDUSIAND	13.28	16.15	16.48	6.26	15.51	2.11	3.33	8.15	5.81	5.95	9.30
LAXMIVILAS	4.31	5.62	4.23	1.78	1.74	1.18	1.26	0.72	0.80	0.83	2.62
J&K	10.29	7.00	5.99	6.23	7.36	7.72	4.94	3.06	4.53	5.17	6.23
Average	66.99	50.99	51.70	30.94	36.01	44.66	47.58	50.13	24.30	14.71	41.11

**Table 3: Comparison of Advertisement and publicity expenditure and Income of Public sector banks**

YEAR	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
<b>Total Income of Selected banks During the Study Period (Rs. In '000 Crore)</b>	<b>535.4</b>	<b>467.1</b>	<b>368.7</b>	<b>314.7</b>	<b>272.4</b>	<b>215.1</b>	<b>165.3</b>	<b>142.9</b>	<b>122.8</b>	<b>124.8</b>
<b>Total Income % increase/Decrease</b>	428.8	374.1	295.3	252.0	218.2	172.3	132.4	114.4	98.3	100.0
<b>Total Advertisement and publicity expenses of Selected banks During the Study Period (Rs. In Crore)</b>	822.3	661.12	810.55	599.9	672.8	431.3	317.2	307.5	230.0	195.2
<b>Total Advt Cost % increase/Decrease</b>	421.07	338.53	415.05	307.19	344.53	220.86	162.43	157.49	117.78	100.00

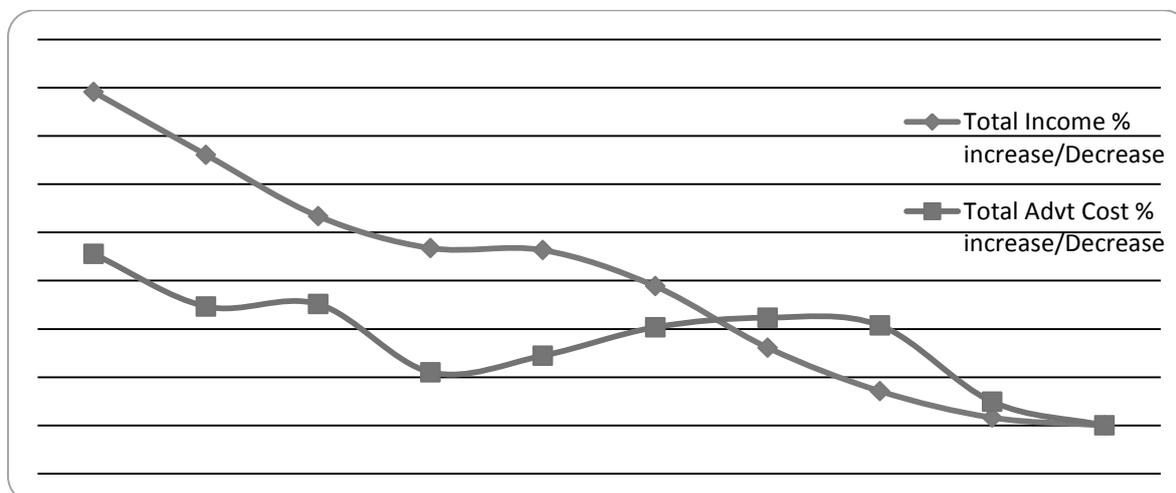
**Graph 1: Comparison of Total Advise ment and Publicity Expenditure and Total income of Public sector banks.**



**Table 4: Comparison of Advertisement and publicity expenditure and Income of Private sector banks**

YEAR	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Total Income of Selected banks During the Study Period (Rs. In '000 Crore)	205.2	171.4	138.4	121.2	120.2	100.7	67.7	44.4	30.1	25.9
Total Income % increase/Decrease	791.1	660.8	533.4	467.4	463.3	388.4	261.2	171.1	116.2	100.0
Total Advertisement and publicity expenses of Selected banks During the Study Period (Rs. In Crore)	669.8	509.9	517.0	309.4	360.0	446.6	475.8	451.8	219.5	147.1
Total Advt Cost % increase/Decrease	455.29	346.60	351.42	210.30	244.71	303.58	323.41	307.13	149.20	100.00

**Graph 2: Comparison of Total Advise ment and Publicity Expenditure and Total income of Private sector banks.**



**Table 5: ADVERTISING AND PUBLICITY EXPENSES TO TOTAL INCOME OF PUBLIC SECTOR BANK (%)**

	SBI	OBC	A'BAD	BOI	BOB	CORP	PNB	INDIAN	BOM	CBI	IDBI	UBI	UCO	DENA	IOB
2004	0.13	0.22	0.12	0.11	0.29	0.38	0.11	0.12	0.17	0.11	0.19	0.27	0.15	0.25	0.09
2005	0.12	0.24	0.27	0.21	0.13	0.52	0.18	0.32	0.18	0.12	0.48	0.44	0.15	0.57	0.06
2006	0.18	0.21	0.52	0.17	0.30	0.44	0.18	0.07	0.47	0.13	0.25	0.31	0.17	0.58	0.17
2007	0.13	0.21	0.39	0.40	0.24	0.27	0.14	0.33	0.28	0.09	0.15	0.24	0.22	0.43	0.22
2008	0.19	0.15	0.21	0.21	0.23	0.27	0.14	0.19	0.48	0.08	0.25	0.32	0.15	0.30	0.14
2009	0.22	0.14	0.24	0.12	0.22	0.23	0.14	0.11	0.37	0.13	0.36	0.99	0.21	0.29	0.27
2010	0.17	0.10	0.22	0.23	0.22	0.22	0.16	0.12	0.26	0.12	0.26	0.26	0.18	0.23	0.31
2011	0.17	0.07	0.29	0.24	0.22	0.24	0.13	0.10	0.31	0.59	0.22	0.51	0.18	0.29	0.17
2012	0.12	0.09	0.16	0.20	0.17	0.15	0.09	0.07	0.23	0.17	0.10	0.30	0.15	0.11	0.20
2013	0.19	0.12	0.17	0.17	0.15	0.12	0.07	0.05	0.15	0.12	0.04	0.26	0.18	0.09	0.13

**Table 6: ADVERTISING AND PUBLICITY EXPENSES TO TOTAL INCOME OF PRIVATE SECTOR BANK (%)**

YEAR	Yes	AXIS	Federal	HDFC	ICICI	KVB	KOTAK	INDUS	Laxmi	J&K
2004	0.00	0.51	0.24	1.22	0.49	0.47	1.00	0.45	0.22	0.28
2005	5.15	0.49	0.26	1.47	0.69	1.18	0.64	0.45	0.24	0.28
2006	0.61	0.47	0.17	3.80	0.72	0.54	0.37	0.61	0.20	0.17
2007	0.34	0.54	0.19	2.29	0.52	0.93	0.35	0.19	0.26	0.24
2008	0.10	0.85	0.26	0.92	0.34	0.56	0.29	0.10	0.20	0.29
2009	0.06	0.34	0.22	0.55	0.22	0.61	0.28	0.56	0.23	0.23
2010	0.37	0.30	0.25	0.41	0.19	0.67	0.21	0.19	0.18	0.18
2011	0.44	0.41	0.40	0.65	0.24	0.78	0.40	0.38	0.35	0.15
2012	0.14	0.32	0.26	0.45	0.20	0.64	0.43	0.25	0.34	0.14
2013	0.34	0.35	0.18	0.43	0.26	0.61	0.44	0.16	0.22	0.16

**Table 7: ADVERTISING & PUBLICITY TO TOTEL OPERATING EXPENSESOF PUBLIC SECTOR BANK (%)**

	SBI	OBC	A'BAD	BOI	BOB	CORP	PNB	INDIAN	BOM	CBI	IDBI	UBI	UCO	DENA	IOB
2004	0.39	0.88	0.28	0.48	1.27	1.86	0.45	0.37	0.79	0.31	2.93	0.85	0.46	0.72	0.25
2005	0.44	0.95	0.95	0.65	0.41	2.24	0.61	1.20	0.68	0.42	3.45	1.71	0.47	1.41	0.20
2006	0.61	0.94	1.96	0.52	0.89	1.89	0.65	0.48	1.79	0.45	1.87	1.31	0.62	1.60	0.61
2007	0.41	1.32	1.87	1.35	0.86	1.34	0.46	1.34	1.14	0.30	1.35	1.08	0.85	1.23	0.85
2008	0.65	1.19	1.08	0.91	0.91	1.57	0.59	0.87	2.24	0.34	2.41	1.58	0.67	1.04	0.76
2009	0.83	0.89	1.02	0.60	0.99	1.64	0.62	0.62	1.84	0.82	3.02	4.80	1.11	1.16	1.30
2010	0.46	0.53	1.33	0.87	0.92	1.45	0.69	0.61	1.31	0.77	2.37	1.22	0.97	1.14	1.06
2011	0.55	0.32	1.49	1.15	1.19	1.48	0.62	0.53	1.14	2.42	1.86	1.83	0.67	1.21	0.64
2012	0.44	0.47	1.00	1.28	1.07	1.20	0.52	0.44	1.09	0.94	0.97	1.28	0.85	0.58	0.84
2013	0.73	0.86	1.07	1.15	0.97	1.03	0.37	0.30	0.90	0.68	0.39	1.59	1.49	0.64	0.88

**Table 8: ADVERTISING AND PUBLICITY TO TOTEL OPERATING EXPENSES PRIVET SECTOR BANK (%)**

	Yes	AXIS	Federal	HDFC	ICICI	KVB	KOTAK	INDUS	Laxmi	J&K
2004	0.00	1.63	1.26	3.75	1.64	1.95	2.05	1.57	1.02	1.60
2005	6.21	2.00	0.83	4.36	1.50	4.50	1.00	2.42	0.72	1.26
2006	1.89	1.84	0.61	11.09	1.48	2.00	0.64	2.54	0.55	0.72
2007	1.36	2.13	0.79	7.60	1.07	4.28	0.59	0.83	0.84	1.11
2008	0.47	2.84	1.15	3.00	0.70	3.35	0.52	0.46	0.88	1.91
2009	0.31	1.28	0.92	1.87	0.44	3.96	0.48	2.31	1.13	1.56
2010	1.84	0.92	0.96	1.41	0.34	3.66	0.31	0.72	0.58	0.86
2011	2.87	1.65	1.38	2.17	0.48	4.42	0.73	1.41	1.49	0.79
2012	1.09	1.45	1.31	1.63	0.45	4.10	0.99	1.09	1.66	0.87
2013	2.41	1.68	0.90	1.62	0.63	3.73	1.07	0.75	1.28	1.04

**Table 9: Comparisons of Public and Private Sector Bank Advertising and Publicity Expenditure**

Banks	N	Mean	Std. Deviation	Std. Error
Private Sector Bank	99	41.488	59.12562	5.94235
Public Sector Bank	150	33.654	50.95726	4.16064
Total	249	36.768	54.37148	3.44565

3	Federal	10	8.75	5.53532	1.75042
4	HDFC	10	130.45	60.40362	19.10130
5	ICICI	10	151.95	47.78091	15.10965
6	KVB	10	12.72	8.28814	2.62094
7	Kotal Mahindra	10	28.14	21.28435	6.73070
8	Indusind	10	9.30	5.51949	1.74542
9	Laxmivilas	10	2.24	1.78221	.56359
10	J & K	10	6.22	2.00991	.63559
	Total	99	41.48	59.12562	5.94235

**Table 10: Independent Samples Test and ANOVA Advertising and Publicity Expenditure**

Statistics	Sum of Squares	df	Mean Square	F	Sig.	t-Val	Sig.
Between Groups	3660.2	1	3660.2	1.23	0.267	0.11	0.267
Within Groups	729491.8	247	2953.4				
Total	733152.0	248					

**Table 12: ANOVA Advertising and Publicity Expenditure**

Statistics	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	270668.108	9	30074.23	37.214	.000
Within Groups	71924.058	89	808.135		
Total	342592.166	98			

**Table 11: Advertising and Publicity Expenditure**

Sr. No	Private Sector Banks	Statistics			
		N	Mean	Std. Deviation	Std. Error
1	Yes	9	9.33	10.74152	3.58051
2	Axix	10	52.51	36.97772	11.69338

**Table-13: Descriptive statistics of Income and Advertising & Publicity Expenditure**

Variables	Mean	Std. Deviation	N
Income	10360.8290	16406.34248	99
Advertising and Publicity Expenditure	41.4882	59.12562	99

**Table-14: Correlation of Income and Advertising & Publicity Expenditure**

Variables	Statistics	Income	Advertising and Publicity Expenditure
Income	Pearson Correlation	1	.794**
	Sig. (2-tailed)		.000
	N	99	99
Advertising and Publicity Expenditure	Pearson Correlation	.794**	1
	Sig. (2-tailed)	.000	
	N	99	99

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 15: Regression Analysis – Model Summary**

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.794 <sup>a</sup>	.630	.626	10028.84276
a. Predictors: (Constant), Advertising and Publicity Expenditure				
b. Dependent Variable: Income				

Table 15: ANOVA <sup>b</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.662E10	1	1.662E10	165.270	.000 <sup>a</sup>
	Residual	9.756E9	97	1.006E8		
	Total	2.638E10	98			
a. Predictors: (Constant), Advertising and Publicity Expenditure						
b. Dependent Variable: Income						

Table 16: Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1222.159	1233.395		.991	.324
	Advertising and Publicity Expenditure	220.272	17.134	.794	12.856	.000
a. Dependent Variable: Income						

**Table 17: Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	<b>1380.7542</b>	<b>49184.1094</b>	<b>10360.8290</b>	<b>13023.69723</b>	<b>99</b>
Residual	<b>-43364.40625</b>	<b>36254.53125</b>	<b>.00000</b>	<b>9977.54399</b>	<b>99</b>
Std. Predicted Value	<b>-.690</b>	<b>2.981</b>	<b>.000</b>	<b>1.000</b>	<b>99</b>
Std. Residual	<b>-4.324</b>	<b>3.615</b>	<b>.000</b>	<b>.995</b>	<b>99</b>

a. Dependent Variable: Income

**Table 18: Correlation and Regression Analysis: Public Sector Banks**

Variables	Mean	Std. Deviation	N
Income	18197.0590	29109.85291	150
Advertising and Publicity Expenditure	33.6541	50.95726	150

a. Type of Bank = Public Sector Bank

**Table 18: Correlation Advertising and Publicity Expenditure and Income**

Statistics	Variables	Income	Advertising and Publicity Expenditure
Pearson Correlation	Income	<b>1.000</b>	<b>.932</b>
	Advertising and Publicity Expenditure	<b>.932</b>	<b>1.000</b>
Sig. (1-tailed)	Income	<b>.</b>	<b>.000</b>
	Advertising and Publicity Expenditure	<b>.000</b>	<b>.</b>
N	Income	<b>150</b>	<b>150</b>
	Advertising and Publicity Expenditure	<b>150</b>	<b>150</b>

a. Type of Bank = Public Sector Bank

**Table:19 Model Summary<sup>b</sup>**

Model	R	R Squar e	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	<b>.932<sup>a</sup></b>	<b>.868</b>	<b>.867</b>	<b>10598.34824</b>	<b>.868</b>	<b>976.061</b>	<b>1</b>	<b>148</b>	<b>.000</b>

a. Predictors: (Constant), Advertising and Publicity Expenditure

b. Type of Bank = Public Sector Bank

**Table:20 ANOVA<sup>b,c</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	<b>1.096E11</b>	<b>1</b>	<b>1.096E11</b>	<b>976.061</b>	<b>.000<sup>a</sup></b>
	Residual	<b>1.662E10</b>	<b>148</b>	<b>1.123E8</b>		
	Total	<b>1.263E11</b>	<b>149</b>			

a. Predictors: (Constant), Advertising and Publicity Expenditure  
 b. Type of Bank = Public Sector Bank, c. Dependent Variable: Income

**Table:21 Coefficients<sup>a,b</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	282.131	1038.099		.272	.786
	Advertising and Publicity Expenditure	532.326	17.039	.932	31.242	.000

a. Type of Bank = Public Sector Bank, b. Dependent Variable: Income

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## A Comparative Study on Usage and Satisfaction of Customers from ATMs of State Bank of India and ICICI Bank: A Study of Anand City

Darshana Dave, Komal Mistry

### Abstract

The trend in banking has evolved from cash banking to card banking. Aggressive competition from inter and intra bank group along with the global forces have forced the banks to adopt the technological changes to face the electronic age. Now Indian banks are investing money in ICT infrastructure to provide e-banking services to their customers. This study aims to analyze the extent of use of ATM banking services by the customers of SBI and ICICI Bank of Anand district and identify the measures to improve ATM usage.

### Introduction

The trend in banking has evolved from cash banking to card banking. Aggressive competition from inter and intra bank group along with the global forces have forced the banks to adopt the technological changes to face the electronic age. The influence of technology over product innovations in banks is enormous. Now Indian banks are investing money in ICT infrastructure to provide e-banking services to their customers. It provides various alternative e-channels to using banking services e.g. ATM, credit card, debit card, internet banking, mobile banking, electronic fund transfer, electronic clearing services etc. However, as per Indian e-banking scenario ATM is most accepted e-banking channel as compared to other e-channels.

ATMs have become the order of the day in banking. Though they were evolved as novel cash dispensers, now they have emerged as a marketing tool to target the masses. There are about 9500 off-site and on-site ATMs of many banks are nothing but virtual branches, as customers can conduct any transactions, through the touch screens. They are user friendly and they have mass acceptability. They can effectively reach out a large customer base at low cost. At present, banks have started outsourcing and sharing of ATM services to reduce cost. Most banks are used to cross-sell other products also so as to meet the varied requirements of customers. Banks have started dispensing Railway tickets, Air tickets, Movie tickets etc. through ATMs. Voice activated ATMs; ATMs with finger print scanning technology etc. are on the move. If they become operative, they can save the customers from the hassle of carrying a card. In future, a bank's ATM would function like a kiosk delivering more on non-cash transactions, thereby reducing fixed and operating costs. (Source: Gordan Natrajan)

The spread of ATMs has increased from 34,789 in March, 2008 to 60,153 in March 2012. The biggest commercial bank like SBI has committed to open 1000 ATMs every year to come. Moreover, banks have entered into bilateral or multilateral arrangements with other banks to have inter-bank ATM networks. To bring transparency and reasonableness in ATM charges, the RBI has issued necessary directions that customers could make use of their own bank's ATMs or any other bank's ATM at free of cost up to 5 transaction in a calendar month for cash withdrawal. The volume of ATM transactions has increased from 17,797 lakh aggregating to Rs. 4,38,151 crore during 2007-2008 to 23,530 lakh aggregating to Rs. 6,16,456 crore during 2008-2009.

ATMs are equipped with biometric identification of the users so that even the illiterate masses can use ATMs. Biometric identification is nothing but using the body as a password. It refers to the technique of verifying a person by a physical characteristic or personal trait.

For e.g. if a finger print scan is used for authentication, a customer is required to set his figure on the fingerprint scanner when he inserts his card in a biometric enabled ATM. So, there is no need to remember the personnel identification number (PIN). A company's biometric ATM interface solution (BAIS) meets the requirements by performing the requisite message transactions as well as confirming authorization.

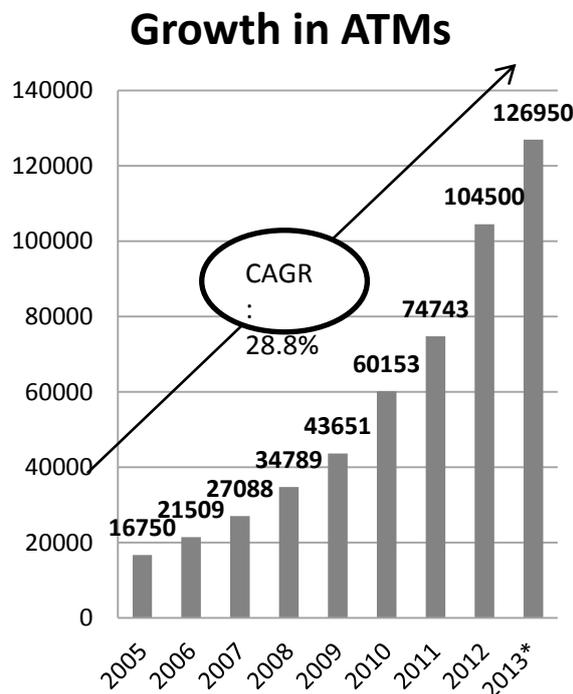
Even there is an ATM designed to enable a low-cost model in delivering banking services in rural areas by using the solar energy. These ATMs are easy to use since they employ biometric system and moreover they are eco-friendly. It requires only one fourth of the cost of a conventional ATM.

This study aims at analyzing the usage of ATMs by customers of State Bank of India (SBI) (leading Public sector Bank) and ICICI Bank (leading Private Sector Bank). This study focuses on ATM services offered by the bank, Number of visits to bank & ATM, Purpose of visiting bank branch.

This study is a type of exploratory research using convenient sampling technique. This will be helpful to SBI and ICICI Bank management in identifying reasons for the less usage of ATM by their customers, and formulating of their strategies accordingly.

### Literature Review

There is a robust asset growth in the banking sector. Total Indian banking sector assets has reached USD 1.5 trillion in FY 12 from USD 1.3 trillion in FY 10, with 73 per cent of it being accounted by the public sector banks. The wide scope and ease of online banking has led to a paradigm shift from traditional branch banking to net banking. The total number of people using net banking has increased to 7 per cent in 2012. Extensions for facilities such as fund transfer, account maintenance and bill payment at ATM stations have reduced branch banking footfall. ATMs in India have increased to 1,26,950 in 2013 and are further expected to double over the next two years. The increase would take the number of ATMs per million populations from the current 85 to about 170. (Source: Planning Commission, Aranca Research)



(Source: IBA statistics, Reserve bank of India, Aranca Research)

(Notes: CAGR - Compound Annual Growth Rate, CAGR is calculated in Indian Rupee term 2013\* - till Aug 2013)

From the above data it is clear that the topic more relevant for the purpose of research. The concept of ATM is quite old and has been developing worldwide. Number of theoretical and empirical researches has been undertaken on ATM Banking like usage of ATMs, Service quality for ATM services, factors affecting usage of ATM banking, etc. as follows:

Sundaram and J. Premalatha (2012) studied the overall satisfaction level of the customers of the various banks in Vellore district, and concluded that customers felt that bankers must improve the safety, provide accurate, timely information and make the use of ATM services easy in order to retain the customers. They concluded that the majority of the customers are highly satisfied in using the ATM services of their banks.

Pandian & Sharma (2012) observed that in this modern world where money plays an important role for survival. ATM helps the people to take money whenever needed by them and also during emergency conditions.

Shariq & Tondon (2012) observed that the customers prefer ATM use over other e-banking services. Nearly 95% of respondents use ATM services, followed by internet banking, and phone banking.

Tuli, Khatri & Yadav (2012) analyzed that most important factor which influence customer to use the ATM services is it's convenience in use & availability of machines.

Singh and Saxena (2011) conducted a study on customer satisfaction regarding the use of ATMs and revealed that the ICICI Bank, being the largest private sector bank, must make its customers satisfied to sustain in this world of competition. They considered that the management of ICICI Bank should seriously consider the recommendations made by their customers regarding ATMs and take all necessary steps to follow the same.

Kumbhar (2011) observed that other than cost effectiveness of ATM service perception about all service quality dimensions is approximately same in public and private sector banks. Overall results shows that cost effectiveness of ATM service were core service quality dimension and it were significantly affecting on overall customer satisfaction in ATM service provided by commercial banks.

Khan (2010) concluded that the key dimensions of automated banking service quality include reliability, ease of use, privacy, convenience and responsiveness. He concludes that ATM facility

resulted in speed of transactions and saved time for customers.

Singh & Komal (2009) found that Size of respective bank, year of establishment, & performance of bank are the major factors which are responsible for the customer satisfaction towards ATM service of banks.

Kamala (2008) has made a detailed survey regarding the customer satisfaction towards ATM services in Tirunelveli city of Taminadu. She observed that the respondents were conscious about more innovative techniques in ATM services.

Uppal R.K. (2008) concluded that among all e-channels, ATM is the most economic and effective while mobile banking does not hold a strong position in public. The study also suggested some strategies to improve ATMs and m-banking services.

Kaul (2007) in his article explained the importance and benefits of ATM, the players in the Indian market and presented various information concerning the growth of ATM.

Al-Hawari et al. (2006) compiled a list of five major items about ATM service quality that includes convenient and secured locations, functions of ATM, adequate number of machines and user-friendliness of the systems and procedures.

Mcandrew (2003) talked about the various utilities of ATMs, which has given worldwide popularity. The utilities include withdrawal of cash as per convenience of the customers than during the banking hours at branches. Besides providing off time and off shore services, there is reduction of cost of servicing.

In another article, James J. Mcandrew (2003) discussed about the various utilities of ATMs which has given worldwide popularity. The utilities include withdrawal of cash as per convenience of the customers than during the banking hours at branches. Besides providing off time and off shore services, there is reduction of cost of servicing.

Shastri (2001) analyzed the effect and challenges of new technology on banks. He found that technology has brought a sea change in the functioning of banks and use of ATMs has increased with the passage of time.

Stuart E. Weiner (1999) pointed out that the total number of ATM transaction has more than doubled over the last ten years and is estimated to reach near 11 billion and total number of ATM terminals in United States has tripled over last ten years. This

shows that ATM cards have become another most popular non cash instruments in US and its popularity has been explosively increasing throughout the world.

Banknet Publications (2007), this report is based on online survey of 316 respondents who were in the age range of 20-60 years, from cities spread across India. Majority of respondents belonged to Maharashtra, Tamil Nadu, Delhi, Karnataka, and Andhra Pradesh. An effort was made to ascertain through this survey ATM user's perceptions towards accepting the ATM machines, value added services provided and the problems faced by users. The key findings of this study are enumerated below:

- There is an increase in the monthly usage of these machines as the plethora of services that banks have started offering are now being used by consumers.
- The most used of the value added services is Bill payment and pre-paid mobile recharges. The other services like mutual fund transactions and booking airline/rail tickets are not so commonly used, either because users are skeptical about the charges of using such services, or such services are not provided by the respective banks.
- Waiting in long queues is one of the bigger problems faced by ATM users. This show the need of additional machines to be installed at these high-demand areas.
- ATM depleted cash at a faster rate than what banks had assumed. This hints the inadequate cash management and the need for better forecasting of daily cash requirements at various locations.

So, from the above literature it is clear that there are so many studies carried out in connection to ATM banking in India and outside India but still comparative analysis is not yet carried out particularly in the state of Gujarat.

## **Research Methodology**

Looking at the changing environment, awareness, technological up gradation and innovation in banking sector, there is a need to study the usage and satisfaction of customers regarding technological issues in banking sector. The present paper is a step in this direction. This paper has tried to study the usage and satisfaction of ATM services provided by SBI and ICICI bank to its customers.

**Population and Sample:** The population defined for this research paper was limited to the ATM users of SBI and ICICI in the state of Gujarat. In this study non probabilistic convenient sampling

technique has been used. Total 300 respondents (150 of each bank) were surveyed to find out the objectives of the study.

**Data collection and analysis:** Both primary and secondary data collection methods were used for the purpose of the study. A structured questionnaire was used to collect primary data. The respondents were asked to indicate their usage and satisfaction regarding ATM services and problems while using ATM.

**Statistical tools and techniques:** The collected data further has been analyzed by using descriptive statistics such as frequency distribution, percentages, mean scores and standard deviation. These statistical techniques are run through SPSS.

**Objectives of the Study:**

The basic objective of this paper is to identify satisfaction level of ATM users of SBI and ICICI.

1. To analyze the relationship between various demographic variables and satisfaction of customers after using ATM services.
2. To compare level of satisfaction between customers of SBI and ICICI Bank.
3. To identify directions for more meaningful usage of ATMs.

**Hypotheses of the Study:**

1. There is no association between various demographic variables and the level of satisfaction.
2. There is no significant difference in satisfaction level of customers of SBI and ICICI bank.

**Limitations of the Study:**

The study confines the usage and satisfaction of ATM Banking. Further among different types of internet banking channels only ATM is considered for the purpose of the study. Inclusion of more number of banks can give more meaningful results. The study was restricted to 300 respondents due to time constraint.

**Primary Data Analysis of Survey**

**Table 1: Demographic Profile**

Particulars	N	%
<b>Gender:</b>		
Male	161	53.67
Female	139	46.33
Total	300	100.00
<b>Age (in years):</b>		
15 to 25	37	12.33
26 to 40	200	66.67
41 to 60	27	9.00
More than 60	36	12.00
Total	300	100.00
<b>Education:</b>		
Below HSC	80	26.67
Graduate	70	23.33
Post Graduate	63	21.00
Post PG / Professional	87	29.00
Total	300	100.00
<b>Income (in Rs.):</b>		
Less than 10,000	59	19.67
10,000 to 20,000	57	19.00
20,001 to 50,000	65	21.67
50,001 to 1,00,000	66	22.00
Above 1 lakh	53	17.67
Total	300	100.00
<b>Occupation:</b>		
Businessman	127	42.33
Professional	124	41.33
Govt. Service	25	8.33
Private Service	22	7.33
Student	2	0.67
Total	300	100.00

The above table displays demographic profile of the respondents. 53.67% of the respondents are male and 46.33% are female. Majority of the respondents (66.67%) belongs to age group of 26 to 40 years, which represents young population is dominating in usage of ATM Banking. Educational profile shows, 29% respondents are Post PG / Professional, followed by 26.67% below HSC. This is because women respondents even though not highly educated but still using ATM in regional language for cash withdrawal. Looking into monthly income of respondents, 22% are falling into 50,001 to 1,00,000, followed by 21.67% which belongs to 20,001 to 50,000.

**Table 2 Frequency of visiting ATM**

Frequency of visiting ATM	SBI Bank		ICICI Bank	
	N	%	N	%
Yearly	12	8.00	11	7.33
Six Monthly	35	23.33	15	10.00
Monthly	63	42.00	20	13.33
Weekly	40	26.67	104	69.33
Total	150	100.0	150	100.0

It can be observed from above Table 2 that 68.67% of SBI customers visit ATMs weekly & monthly. There appears to be a correlation between visit to ATMs and visit to branches. Possibly after doing a transaction in the ATM, customer goes to the branch to update the transaction in the pass book and for other services. While in case of ICICI customer's more than 82% are using ATM services on weekly and monthly basis.

**Table 3 Purpose of ATM Visit**

ATM Services	SBI Bank		ICICI Bank	
	N	%	N	%
Cash withdrawal	150	100.00	150	100.00
Cash deposit	4	2.67	82	54.67
Cheque drop box	11	7.33	68	45.33
Mini statement	83	55.33	89	59.33
Balance inquiry	65	43.33	78	52.00
Mobile recharge	36	24.00	66	44.00
Other utility payments	37	24.67	41	27.33

Indian banks offer variety of technology-based services in ATMs, as there is a progress in information technology and communication infrastructure. This study includes some of these add-on services. It can be seen from the above Table 3 that all the SBI and ICICI customers

frequently use ATMs for cash withdrawals, Balance enquiry and mini statement. The SBI customers rarely use other facilities offered at the ATMs like mobile recharge, cheque drop box, cash deposit & other. 100% respondents of both the banks use ATMs for Cash Withdrawal, followed by Mini Statement, and Balance Inquiry. In comparison of SBI customers of ICICI uses these facilities more than customers of SBI.

**Table 4 Frequency of visiting Bank Branch**

Frequency of visiting Bank Branch	SBI Bank		ICICI Bank	
	N	%	N	%
Yearly	11	7.33	48	32.00
Six Monthly	15	10.00	50	33.33
Monthly	20	13.33	29	19.33
Weekly	104	69.33	23	15.33
Total	150	100.00	150	100.00

The above given Table 4 gives the frequency of customer's visit to bank branch. In SBI Bank 69.33% respondents visit bank branch weekly and 13.33% monthly. While in case of ICICI Bank 33.33% respondents visit bank branch six monthly and 32 % visit bank branch yearly. This indicates that the SBI customers are still dependent upon traditional banking channel even though there is increase in usage of ATM Services.

**Table 5 Purpose of Branch Visit**

Visit to Bank Branch	SBI Bank		ICICI Bank	
	N	%	N	%
Do not visit	5	3.33	30	20.00
Cash deposit / withdrawal	95	63.33	36	24.00
Cheque deposit	81	54.00	18	12.00
Pass book entry / statement	92	61.33	15	10.00
Cheque book request	91	60.67	26	17.33
Loan / Credit transactions	106	70.67	97	64.67
Other (FD / Locker / Tax)	103	68.67	93	62.00

As ATMs are providing basic banking services and facilities, one would expect that the frequency of visit in bank branches would decrease. But the results of the survey are to the contrary. In SBI only 3.33% and in ICICI only 20% of the respondents do not visit branches; rest of them visit branches for one reason or the other. Surprisingly even for routine works like cash deposit / withdrawals and cheque deposits which can be done at ATMs, still 63.33% customers of SBI prefer to visit branch for that. This shows that still customers are not familiar with all the provided services and they need to be informed and educated.

**Table 6: ATM breakdown in month**

ATM breakdown	SBI Bank		ICICI Bank	
	N	%	N	%
Never	26	17.33	127	84.67
1 time	82	54.67	3	2.00
2 times	29	19.33	7	4.67
3 times or more	13	8.67	13	8.67
Total	150	100.00	150	100.00

The above table 6 shows that 54.67% SBI customers found at least once the ATM fails during the month. Banks should examine this aspect and ensure that ATMs work at all times. This can also help reduce customer visits to branches for cash withdrawal, enquiries, and other ATM related transactions. While in case of ICICI majority (84.67%) of respondents reported ATMs are always working and not out of order. This shows that ICICI is having efficient system for handling ATM network.

**Hypothesis Testing**

**H1: There is no association between various demographic variables and the level of satisfaction.**

To check the association between all demographic variables and satisfaction level, the Chi-square Test has been performed. As per Table 7, all the demographic variables p-value is greater than 0.05 (5%), therefore null hypothesis is accepted. So, there is no association between any demographic variable and satisfaction level for using ATM banking.

**Table 7 Cross tabulation & Chi-square test of Demographic Variables & level of Satisfaction**

Demographic Variables		Level of Satisfaction while using ATM					Total	Chi-Square Test p-value
		Highly Dissatisfied	Dissatisfied	Neutral	Satisfied	Highly Satisfied		
Gender	Male	5	6	26	47	77	161	0.761
	Female	8	7	19	41	64	139	
	Total	13	13	45	88	141	300	
Age (in years)	15 to 25	3	0	4	9	21	37	0.462
	26 to 40	7	11	28	58	96	200	
	41 to 60	2	1	7	10	7	27	
	More than 60	1	1	6	11	17	36	
	Total	13	13	45	88	141	300	
Monthly Income (in Rs.)	Less than 10,000	1	3	10	14	31	1	0.841
	10,000 to 20,000	3	2	8	22	30	3	
	20,001 to 50,000	2	0	8	18	29	2	
	50,001 to 1,00,000	4	5	11	21	25	4	
	Above 1 lakh	3	3	8	13	26	3	
	Total	13	13	45	88	141	300	

Education	Below HSC	2	3	17	21	37	80	0.182
	Graduate	1	1	12	27	29	70	
	Post Graduate	5	5	8	17	28	63	
	Post PG / Professional	5	4	8	23	47	87	
	Total	13	13	45	88	141	300	
Occupation	Businessman	6	6	17	34	64	127	0.603
	Professional	4	6	21	36	57	124	
	Govt. Service	0	0	4	11	10	25	
	Private Service	3	1	2	6	10	22	
	Student	0	0	1	1	0	2	
	Total	13	13	45	88	141	300	

(Source: Primary Data)

is much higher than ICICI customers. The other findings are as follows:

**H02: There is no significant difference in satisfaction level of customers of SBI and ICICI bank.**

**Table 8 Significant difference in satisfaction level of SBI and ICICI customers**

Name of Bank	N	Mean	Std. Deviation	p-value
SBI	150	4.09	1.074	0.791
ICICI	150	4.12	1.099	

To check significant difference between satisfaction level of ICICI and SBI, independent t-test has been performed. The p-value (0.791) is greater than 0.05, therefore the null hypothesis is accepted. It shows that there is no significant difference between level of satisfaction of SBI and ICICI.

## Findings

Closer examination of the responses of bank customers and filed interviews reveals the following:

It was identified that, majority of customers visit ATMs for cash withdrawal, and balance inquiry. For their remaining banking needs they visit their bank branch personally. Further, in both the banks more than 65% customers visit bank branch for other services like FD/Locker operations/Tax deposits etc. The proportion of customers visit bank branch for loan related transaction is also very high in both the banks. However, in SBI customers visiting bank branch just for passbook entry which

- SBI customers are using ATM services less as compared to ICICI customers.
- SBI consumers are hesitant of using ATM based services such as cash / cheque deposit because of the perceived risks. They do not also use ATMs for utility payments and mobile recharge etc. due to fear / lack of trust on the safety and security of such online payment system. So SBI needs to address these issues effectively if they have to increase ATM usage among customers for other facilities offered at ATM.
- Both the banks must encourage customers to use ATMs for all their basic banking services to reduce visit in branches.
- Banks should identify the causes for low usage of ATM based services, and formulate strategies to increase their usage.
- SBI customer's visit to bank branches is high compared to ICICI banks despite large ATM network. SBI customers are still depended on bank branches for services which can be done at ATMs. It is evident from the study that though customers are aware about ATM banking services still they do not use all the offered services.
- Customers of SBI found break down of ATM more frequently compared to customers of ICICI Bank. Therefore, SBI need to take care about maintenance of ATMs.
- Both the banks customers are satisfied with the ATM banking service provided by their banks.

## Conclusion

For both SBI and ICICI, ATM has become popular among the customers for cash withdrawals. But the other ATM services like Cash deposit, Cheque drop box or utility payments should also be used efficiently. Another important thing for SBI is that merely setting up ATMs as convenience points is not sufficient. Customers have to be influenced to use ATMs for all the basic banking needs and ATM should work properly 24×7 to have efficient usage.

While more and more people are moving towards ATMs for their banking needs, it is still largely used as cash machines. Large number of customers still do not use other value added services on offer at ATMs. Both the Banks therefore have a task on hand to make ATMs self-serving model for customers. This would become commanding to increase ATM network across the country and to achieve economies of scale.

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# A Study of Leadership Styles in MSMEs of Surat District

Ankita Dholariya

## Abstract

Leadership is an integral part of management and plays a vital role in managerial operations. If there is any single factor that differentiates between successful and unsuccessful organizations, it could be considered as dynamic and effective leadership. This paper is an attempt to analyze the leadership styles adopted by the owners-managers of MSMEs at micro level. It also attempts to find out whether the leadership styles vary with demographic characteristics. It also analyses whether there is a correlation between leadership styles of owners-managers and their demographic characteristics. The findings reveal leadership is situational and that most of the owners-managers adopt benevolent autocratic style in all the business matters. Results also show that demographic characteristics influence the leadership styles.

## Introduction

Leadership has always been the area of interest for the researchers. It is the only factor which is responsible for the success or failure of the business. Moreover, Leaders in modern organizations have been confronting many situations rarely encountered by organizational leaders of the past. Leadership is always considered a challenging task for the owners, entrepreneurs, CEOs and managers. Of Course, it is the interpersonal relationship between the leader and followers. So, the followers related factors also affect to the style of leaders. Leadership styles are also depended upon the situation. Leaders may be successful in one situation and may not be in another situation. The leadership styles can be classified according to the philosophy of the leaders or there are probably as many different styles of leadership as there are leaders. But leadership styles used for the present research work are as follows:

### Style I: Benevolent Autocrat

Under this style, the owner-manager gets required information from his subordinates and then makes the decision without the involvement of the subordinates at any stage of decision making process. His motivation style is positive.

### Style II: Strict Autocrat

Under this style the owner-manager centralizes decision making power in him. He structures the complete work situation for his employees and they do what they are told. His motivation style is negative.

### Style III: Prior Consultation:

Under this style the owner manager shares the problem with his subordinates for their advice and suggestions and then, he makes the decision.

### Style IV: Democratic Style:

The owner-manager and his subordinates together analyze the problem, evaluate alternatives and come to a decision.

### Style V: Delegation:

Under this style, the owner-manager once determines policy programmes and limitations for action and the entire process is left to subordinates. He maintains contacts with outside persons and intervenes only in exceptional cases.

From the industry point of view, Gujarat has registered an impressive industrial development since its formation as a separate state in 1960. The industrial sector at present comprises of over 1200 large industries and over 3,45,000 micro, small and medium industries.

As per the results of the Annual Survey of Industry (ASI), 2005-06 carried out by the Central Statistical Organization (CSO), under Ministry of Statistics and Program Implementation, Government of India, Gujarat accounts for 19.69% of fixed capital investment, 16.13% of gross output and 15.35% of net value added in industrial sector in India. This survey further reinforced the position of Gujarat as the most industrially developed state in India in respect of first ranking in industrial investment and second in terms of value of production and value addition in industrial sector. In the India, micro, small and medium enterprises as per the MSME Development Act, 2006 are defined based on their investment in plant and machinery for manufacturing enterprise and on equipments for enterprises providing or rendering services. It is explained with the help of table no.1:

**Table 1: Classification of MSMEs as per MSMED Act,2006**

Enterprises	Investment in Plant & Machinery (Mfg.)	Investment in Equipment (Service)
Micro	Less than Rs. 25 lakhs	Less than Rs. 10 lakhs
Small	Rs. 25 lakhs – Rs. 5 crore	Rs. 10 lakhs – Rs. 2 crore
Medium	Rs. 5 crore – Rs. 10 crore	Rs. 2 crore – Rs. 5 crore

Source: Industrial Handbook on Industries in Gujarat-2010

Government has also announced some promotional schemes for the development of this sector. This sector also faces some key issues and one of the important key issues is lack of managerial skills and effective leadership. So as a result, many units are closed or failed to survive in this competitive global market. So in this context, the attempt has been made to analyse the leadership styles at micro level.

### Review of literature

Many researches have been done at international level. As a result, theories of Leadership have been developed like The Trait Theory, The Behavior Theory, Contingency Theory, The Path-Goal Theory, The Vroom-Yetton-Jago Model (1973 and 1988), The Hershey-Blanchard Life Cycle Theory of Leadership, The Situational Approach (1969), The Managerial Grid by Robert Blake and Jane Mouton (1978) etc. to name a few. Stogdill (1974) extensively studied relationship between successful leadership and traits and believed that, "The pattern of leadership traits is different from situation to situation. A person who becomes a leader in one situation may not become in a different situation." Research studies conducted at the University of Michigan by Katz, Maccoby and Morse (1957) suggested that, "Leadership behaviour could be defined along employee-centered dimension and production-centered dimension, both complimenting each other". The researcher (2007) and (2014) also conducted a research on "Leadership Styles in Dyeing and Printing Industry of Jetpur City" and "Leadership Styles in Micro, Small and Medium Scale Enterprises" (Rajkot district) respectively. In both the researches, it was found that on an average, more than 2/3rd of the owners-managers were adopting the autocratic style and 1/4th of the sample size were adopting participative and democratic approach while taking decisions about all the business matters. This is was again confirmed in

### Objectives

a. To study various leadership styles in Micro, Small and Medium scale Enterprises of Surat District of Gujarat State among the owners-managers.

b. To examine the influence of age, education, experience and family background on the leadership styles of the owners- managers.

c. To conclude which leadership styles are used by the owners- managers.

### Hypothesis

a. The owners- managers adopt different types of leadership styles depending on situations.

b. Leadership styles of owners- managers vary with the type of decision.

c. Leadership styles of owners-managers vary with age, education, experience and family background.

### Methodology

The data was randomly collected from 100 owners-managers of MSMEs of Surat district. Both primary and secondary data have been used for this research work. Primary data were collected from the owners-managers of the MSMEs. A structured schedule and questionnaire was prepared for this purpose in which 5 leadership styles and 21 situations were incorporated. The secondary data were collected from magazines, journals, periodicals, newspapers, reference books and websites. For the purpose of analysis, average, Karl Pearson Co-efficient of correlation, Spearman's Rank correlation and ANOVA technique have been used.

### Limitations

a. The study has been restricted only to 100 owners-managers.

b. Though Leadership is an interpersonal relationship between the leaders-mangers and the followers, the study is focused on the former.

**Leadership styles****Table 2: Leadership Styles of Owners-Managers in Percentage of times the styles used**

Situation	Leadership Styles					Total
	I	II	III	IV	V	
Production						
1	66.0	32.0	2.0	0.0	0.0	100.0
2	45.0	46.0	9.0	0.0	0.0	100.0
3	54.0	36.0	0.0	7.0	3.0	100.0
4	9.0	81.0	2.0	8.0	0.0	100.0
5	6.0	84.0	8.0	2.0	0.0	100.0
Average	36.0	55.8	4.2	3.4	0.6	100.0
Technical						
1	48.0	44.0	0.0	8.0	0.0	100.0
2	31.0	67.0	1.0	0.0	1.0	100.0
3	50.0	40.0	4.0	1.0	5.0	100.0
4	53.0	37.0	1.0	2.0	7.0	100.0
Average	45.5	47.0	1.5	2.8	3.3	100.0
Financial						
1	6.0	86.0	0.0	8.0	0.0	100.0
2	10.0	90.0	0.0	0.0	0.0	100.0
3	10.0	90.0	0.0	0.0	0.0	100.0
Average	8.7	88.7	0.0	2.7	0.0	100.0
Personel						
1	60.0	36.0	1.0	0.0	3.0	100.0
2	57.0	35.0	8.0	0.0	0.0	100.0
3	62.0	35.0	3.0	0.0	0.0	100.0
4	56.0	37.0	7.0	0.0	0.0	100.0
5	14.0	85.0	0.0	1.0	0.0	100.0
Average	49.8	45.6	3.8	0.2	0.6	100.0
Marketing						
1	40.0	60.0	0.0	0.0	0.0	100.0
2	11.0	87.0	2.0	0.0	0.0	100.0
3	24.0	66.0	10.0	0.0	0.0	100.0
4	3.0	86.0	10.0	1.0	0.0	100.0
Average	19.5	74.8	5.5	0.3	0.0	100.0
Mean	31.9	62.4	3.0	1.9	0.9	100.0

Source: Data collected from sample industrial enterprises

From table 2, it is observed that the dominantly style used by the owners-managers is style I. Style I is used for maximum number of times in personnel matters while it is used for less number of times in financial matters. Similarly, style II is used for maximum number of times in Financial matters while it is used for less number of times in personnel matters. Style III is used for maximum number of times in marketing matters and it has not been used in financial matters. Style IV is used for maximum number of times in Production matters while it is used for less number of times in Personnel matters. Style V is used to a negligible extent in Production, Technical and Personnel matters. While it is not at all used in Financial and Marketing matters.

Thus, style II is the popular leadership style used by owners-managers of the MSMEs of Surat

district (62.4%). It is followed by style I (31.9%), style III (3%), style IV (1.9%) and style V (0.9%). The mean percentage of style I and II put together comes to about 94%. Thus, maximum owners-managers are adopting an autocratic style. Style III and IV put together comes to about 5% and thus, approximately 1/20th of the sample owners-managers are adopting participative and democratic approach while taking decisions about all these business matters. But style II is the most important style among the owners-managers of the MSMEs of Surat district. However, whether difference between mean score of leadership styles is significant or not is tested at 5% level of significance with the help of 'ANOVA'.

**Table 3: Analysis of Variance**

Situations	Source of Variation	Sum of Squares	D.F.	Mean Square	F	P-value
Production	Between Groups	11779.783	4	2944.946	10.083	.000
	Within Groups	5549.550	19	292.082		
	Total	17329.333	23			
Technical	Between Groups	9198.500	4	2299.625	37.031	.000
	Within Groups	931.500	15	62.100		
	Total	10130.000	19			
Financial	Between Groups	17832.000	4	4458.000	696.563	.000
	Within Groups	64.000	10	6.400		
	Total	17896.000	14			
Personnel	Between Groups	12454.983	4	3113.746	16.314	.000
	Within Groups	3626.350	19	190.861		
	Total	16081.333	23			
Marketing	Between Groups	15992.500	4	3998.125	41.662	.000
	Within Groups	1439.500	15	95.967		
	Total	17432.000	19			

Source: Data collected from sample enterprises

Table 3 shows the statistical analysis of respondents' views regarding leadership styles for the different situations of production, technical, financial, personnel and marketing matters. P-value of the production, technical, financial, personnel and marketing matters is less than 0.05. Therefore null hypothesis is rejected. It shows significant difference among the five leadership styles adopted by the owners-managers. From the whole analysis, it is observed that all the owners-managers are adopting different styles depending upon the situation. They do not use particular one type of leadership styles while taking all the business

decisions. They act as the demand of the situation. Therefore, the formulated hypothesis that the

owners-managers adopt different types of leadership styles depending upon the situations is accepted.

The above analysis also indicates that the leadership styles of owners-managers vary with the type of decision. Therefore, the formulated hypothesis that the leadership styles of owners-managers vary with the type of decision is also accepted.

## Demographic characteristics and leadership styles

An analysis is made to know whether there is any correlation between the leadership styles of managers and their demographic characteristics such as age, education, experience and family

background. An attempt is also made to find out whether the leadership styles of owners-managers vary with their demographic characteristics. However, whether leadership styles vary with their demographic characteristics or not is tested at 5% level of significance with the help of ANOVA.

**Table 4 Demographic Characteristics and Leadership Styles**

Sr. No.	Variables	Styles										Total	
		I		II		III		IV		V			
		Times	(%)	Times	(%)	Times	(%)	Times	(%)	Times	(%)	Times	(%)
1	Age of owners-managers (in years)												
	<=30	30	11.0	243	89.0	0	0.0	0	0.0	0	0.0	273	100.0
	31-40	271	34.9	418	53.8	46	5.9	27	3.5	15	1.9	777	100.0
	41-50	398	41.2	542	56.1	15	1.6	8	0.8	3	0.3	966	100.0
	51-60	8	12.7	55	87.3	0	0.0	0	0.0	0	0.0	63	100.0
	61>=	8	38.1	2	9.5	7	33.3	3	14.3	1	4.8	21	100.0
	Total	715		1260		68		38		19		2100	
2	Experience of owners-managers (in years)												
	<=5	66	12.6	422	80.4	20	3.8	12	2.3	5	1.0	525	100.0
	6-10	323	35.8	493	54.6	48	5.3	25	2.8	14	1.6	903	100.0
	11-15	209	49.8	211	50.2	0	0.0	0	0.0	0	0.0	420	100.0
	16-20	109	47.2	121	52.4	0	0.0	1	0.4	0	0.0	231	100.0
	21-25	8	38.1	13	61.9	0	0.0	0	0.0	0	0.0	21	100.0
	Total	715		1260		68		38		19		2100	
3	Education levels												
	Below S.S.C.	217	47.0	145	31.4	55	11.9	31	6.7	14	3.0	462	100.0
	H.S.C.	314	30.5	690	67.1	13	1.3	7	0.7	5	0.5	1029	100.0
	Graduate	163	29.9	383	70.1	0	0.0	0	0.0	0	0.0	546	100.0
	Post Graduate	21	33.3	42	66.7	0	0.0	0	0.0	0	0.0	63	100.0
	Total	715		1260		68		38		19		2100	0.0
4	Family Background												
	Agriculture	141	42.0	194	57.7	0	0.0	1	0.3	0	0.0	336	100.0
	Business	180	47.6	198	52.4	0	0.0	0	0.0	0	0.0	378	100.0
	Labour	111	40.7	39	14.3	68	24.9	36	13.2	19	7.0	273	100.0
	Profession	283	25.4	829	74.5	0	0.0	1	0.1	0	0.0	1113	100.0
	Total	715		1260		68		38		19		2100	0.0

Source: Data collected from sample industrial enterprises

**Table 5**  
**Coefficient of Correlation between Demographic Characteristics and the number of times the styles used**

Coefficient of Correlation	Styles				
	I	II	III	IV	V
Age	0.141(**)	-0.117(*)	-0.036	-0.014	0.023
Experience	0.143(**)	-0.252(**)	0.068	-0.042	-0.060
Education	-0.052	-0.028	0.185(**)	0.129(**)	-0.002
Family backgrounds	-0.157(**)	0.194(**)	0.016	-0.022	-0.031

Source: Data collected from sample enterprises

### Age and Leadership Styles

Table 4 gives details regarding the number of times a particular style is used in terms of percentages among different age groups of owners-managers. The highest percentage of times is used by the owners-managers who fall in the age group of 41-50 years in the case of style I constituting 41.2% of times, followed by 38.1% in case of more than 60 years age group, and 34.9% in the case of 31-40 age group. The owners-managers who fall in the age group of 31-40 years use the style II for the highest percentage of times (89%), followed by 51-60 age group. While in case of more than 60 years the owners-managers have adopted it to an extent of 9.5% only. In case of style III, the owners-managers who more than 60 years use it for maximum number of times (33.3%). While it is not at all used by below 30 years and 51-60 years age groups. Style IV is adopted for maximum number of times by more than 60 years age group while it has not been used by below 30 years and 51-60 age groups. Style V is used by all the age groups to a negligible extent. The table indicates that the old aged (more than 60 years), 31-40 and 41-50 years age groups of owners-managers are more flexible in adopting leadership styles in various business matters. Table 5 expresses the coefficient of correlation between different age groups and various leadership styles. It shows that there is a significant positive relationship between age and style I and a low negative relationship between age and style III and IV. While there is a low positive relationship between age and style V.

### Experience and Leadership Styles

Table 4 exhibits the experience of the owners-managers of MSMEs and their style of decision making in different situations. It indicates that the owners-managers with an experience of 11-15

years are using style I for more number of times (49.8%). While the owners-managers having experience of less than 6 years are all using the same style to the extent of 12.6%. The owners-managers having an experience of less than 6 years are using style II for more numbers of times (80.4%). While the owners-managers with an experience of 11-15 years adopt the same style for lesser number of times (50.2%). The owners-managers having an experience of 6-10 years adopt style III, IV and V for more number of times. While the owners-managers having an experience of less than 6 years use the same styles for only 3.8%, 2.3% and 1% respectively and the owners-owners having an experience of more than 10 years have not at all used the style III, IV and V in any of the business matters. Style V is used to a negligible extent by all the owners-managers. Analysis also shows that less experienced (upto 10 years) owners-managers are more flexible in adopting leadership styles than more experienced ones. Moreover, more experienced owners-managers adopt only autocratic styles. They have not used participative, democratic and delegation approach at all. There is a significant positive relationship between experience and style I and a significant negative relationship between experience and style II. It also shows there is a low negative relationship between experience and style III and IV. While there is a low positive relationship between experience and style V.

### Education and Leadership Styles

Table 4 shows the education level of the owners-managers and their leadership styles. It indicates that below S.S.C. level holders are adopting style I for maximum number of times (47%). It is followed by the post graduate owners-managers to the extent of 33.3%, the owners-managers who have higher secondary education to the extent of 30.5% and graduate owners-managers to the extent

of 29.9%. In case of style II, it is adopted about to same extent by the owners-managers except below S.S.C. level holders. In case of style III IV and V, it is adopted for maximum number of times by the below S.S.C. level owners-managers. While the owners-managers who have higher secondary education use the same styles for 1.3%, 0.7% and 0.5% respectively. Style III, IV and V is not at all used by graduate and post graduate owners-managers. On an average, it is found that less educated owners-managers are flexible than better (graduates and post graduates) educated owners-managers in using the leadership styles. It is also found that better educated persons follow autocratic approach in all the business matters. There is a low negative relationship between education and style I, II and V. While there is a significant positive relationship between education and style III and IV.

### Family Background and Leadership Styles

Table 4 shows how the leadership styles of owners-managers vary with different family backgrounds. It shows that the style of owner-manager who hails from an agriculture background is quite different from that of owner-manager's with business, professional and labour background. The owners-managers with business background are using style I for 47.6% followed by agriculture for 42%, labour for 40.7%, and profession for 25.4%. The highest

percentage of times is used by the owners-managers having professional background in case of style II constituting 74.5% of times, followed by 57.7% in case of agriculture background, 52.4% in case of business background and 14.3% in case of labour background. Style III and V has been used by the owners-managers with labour background only to an extent of 24.9% and 7% respectively. Style IV has been used by the owners-managers having a labor background for 13.2%, followed by agriculture and professional backgrounds for 0.3% and 0.1% respectively. Style V is used to an extent of 7% by the owners-managers with labour background only. The analysis shows that the owners-managers except labour background are using style I and II, put together for a maximum number of times (more than 90%). It reveals that they use democratic approach to a negligible extent but they don't follow participative and delegation approach. It also shows that the owners-managers whose family background is labour are more flexible than others in their decision making. There is a significant negative relationship between family background and style I and there is a significant positive relationship between family background and style II. There is a low negative relationship between family background and style IV and V. while there is a low positive relationship between family background and style III.

**Table 6: Analysis of Variance**

Demographic Characteristic	Source of variation	Sum of Squares	D.F.	Mean Square	F	Sig.
Age	Between Groups	244650.800	4	61162.700	3.537	.024
	Within Groups	345815.200	20	17290.760		
	Total	590466.000	24			
Experience	Between Groups	174750.571	4	43687.643	3.769	.013
	Within Groups	347719.429	30	11590.648		
	Total	522470.000	34			
Education	Between Groups	244650.800	4	61162.700	3.046	.041
	Within Groups	401647.200	20	20082.360		
	Total	646298.000	24			
Family background	Between Groups	244650.800	4	61162.700	2.469	.078
	Within Groups	495525.200	20	24776.260		
	Total	740176.000	24			

Source: Data collected from sample industrial enterprises

Table 6 shows the statistical analysis of leadership styles with reference to demographic characteristics of respondents. P-value of the age group, education and experience show significant difference among the leadership styles, therefore null hypotheses is rejected and conclude that there is significant difference among the leadership style of the owners-managers with respect to their age, education and experience. It indicates that age, experience and education influence the leadership styles of owners-managers. P-value of family background shows there is no significant difference among the leadership styles therefore the null hypothesis is accepted. It indicates that family background do not influence the leadership styles of owners-managers.

The above analysis relating to the leadership styles of owners-managers and their demographic characteristics such as age, experience, education and family background reveals that demographic characteristics influence the leadership styles of owners-managers. Therefore, the formulated hypothesis that the leadership styles of owners-managers vary with age, experience, and education is accepted. While leadership styles of owners-managers do not vary with family background.

## Findings

- It has been found that, about 94% of the owners-managers are adopting autocratic styles and approximately, only 6% of the sample owners-managers are adopting participative, democratic and delegation approach while taking decisions about all the business matters. It shows that style II is the most important style among the owners-managers of the MSMEs of Surat district.
- The old aged (more than 60 years), 31-40 and 41-50 years age groups of owners-managers are more flexible in adopting leadership styles in various business matters. There is a significant positive relationship between age and style I and a low negative relationship between age and style III and IV. While there is a low positive relationship between age and style V.
- Less experienced (upto 10 years) owners-managers are more flexible in adopting leadership styles than more experienced ones. Moreover, more experienced owners-managers adopt only autocratic styles. They have not used participative, democratic and delegation approach at all. There is a significant positive relationship between experience and style I and a significant negative relationship between experience and style II. It also shows there is a low negative relationship between experience and style III and IV. While there is a low positive relationship between experience and style V.

- Less educated owners-managers are flexible than better (graduates and post graduates) educated owners-managers in using the leadership styles. It is also found that better educated persons follow autocratic approach in all the business matters. There is a low negative relationship between education and style I, II and V. While there is a significant positive relationship between education and style III and IV.

- The owners-managers except labour background are using style I and II, put together for a maximum number of times (more than 90%). It reveals that they use democratic approach to a negligible extent but they don't follow participative and delegation approach. It also shows that the owners-managers whose family background is labour are more flexible than others in their decision making. There is a significant negative relationship between family background and style I and there is a significant positive relationship between family background and style II. There is a low negative relationship between family background and style IV and V. while there is a low positive relationship between family background and style III.

## Conclusion

The owners-managers if MSMEs are adopting different styles depending upon the situations even though they are free to adopt any style. The result of the study confirms that leadership is situational and an effective leader should be flexible to adopt it considering the differences among the followers and situations. It also confirms that demographic characteristics such as age, experience and education influence the leadership styles of owners-managers.

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# Corporate Social Responsibility: A Paradigm Shift

Kamini Shah

## Abstract

The corporate social responsibility (CSR) movement has been gathering momentum for the past ten years. This growth has raised questions -- how to define the concept, how to measure it, and how to make good on its promises. The Dow Jones Sustainability Index created a commonly accepted definition of CSR: "a business approach that creates long-term shareholder value by embracing opportunities and managing risks deriving from economic, environmental and social developments." This definition encompasses a broad range of corporate values and concerns, including reputation, transparency, social impact, ethical sourcing, profitability and civil society -- the list goes on. As a result of the interdependent nature of CSR, integration of its values remains a challenge for many organizations. The CSR provisions of the Companies Act 2013 seek to create an enabling environment; They will allow corporate to harness and channelize their core competencies as well as develop effective business models; They will promote and facilitate far better connect between businesses and communities. This paper evaluates various provisions of Companies Act 2013 and it discusses how changing times need changing approach towards CSR. It also throws light on whether CSR needs to be enforced or it should be voluntary. It has been observed that there is a paradigm shift in the way CSR has been looked at now by all stakeholders of the corporate.

## Introduction

Winston Churchill has been quoted saying many times "Responsibility is the price of greatness". I can't think of a more judicious use of words when it comes to the value of Corporate Social Responsibility (CSR) and sustainability. Perhaps Mr Churchill meant personal greatness here but then what are companies if not groups of people. People, who their own quest for greatness can contribute to making a company truly great. The moral responsibility of business has finally been mandated by law. After the passing of the Companies Act 2013, it has become mandatory for corporates to adopt Corporate Social Responsibility (CSR). What was once voluntary has become law. Before the Companies Bill was passed, CSR was in the nature of voluntary actions that businesses could take. It was like going the extra mile. But the provisions of the Bill, particularly Section 135, read with Schedule VII, show that the Government has adopted an inclusive growth strategy to implement CSR through corporates. While mandating CSR spends for the corporates, the Government has also ensured that such spending is monitored in the form of reporting and disclosure.

Corporate Social Responsibility (CSR) refers to activities done by a co. to give social-economic-environmental benefits to the society. The evolution of CSR in India refers to changes over time in India of the cultural norms of corporations' engagement of CSR, with CSR referring to way that businesses are managed to bring about an overall positive impact on the communities, cultures, societies and environments in which they operate. The fundamentals of CSR rest on the fact that not only public policy but even corporate should be responsible enough to address social issues. Thus companies should deal with the challenges and issues looked after to a certain extent by the states.

Among other countries India has one of the richest traditions of CSR. Much has been done in recent years to make Indian entrepreneurs aware of social responsibility as an important segment of their business activity but CSR in India has yet to receive widespread recognition. If this goal has to be realized then the CSR approach of corporate has to be in line with their attitudes towards mainstream business – companies setting clear objectives, undertaking potential investments, measuring and reporting performance publicly.

## Current State of CSR in India:

CSR is not a new concept in India. While the concept of CSR is centuries old in India, there has been little legislation to enforce this responsibility. The only prominent CSR legislation, India has seen prior to this Bill, is the Corporate Social Responsibility Voluntary Guidelines 2009 .

Ever since their inception, corporates like the Tata Group, The Aditya Birla Group, Indian Oil Corporation etc. to name a few have been involved in serving the community. Through donations and charity events, many other organizations have been doing their part for the society. The basic objective of CSR in these days is to maximize the co.'s overall impact on the society and stakeholders. CSR policies, practices and programs are being comprehensively integrated by an increasing number of companies throughout their business operations and processes. A growing number of corporate feel that CSR is not just another form of indirect expense but is important for protecting the goodwill and reputation, defending attacks and increasing business competitiveness.

Companies have specialized CSR teams that formulate policies, strategies and goals for their CSR programs and set aside budgets to fund them. These programs are often determined by social philosophy which have clear objectives, and are well defined and are aligned with the mainstream business. The programs are put into practice by the employees who are crucial to this process. CSR programs ranges from community development to development in education, environment and healthcare etc. A more comprehensive method of development is adopted by some corporations such as Bharat Petroleum Corporation Ltd, Maruti Suzuki India Ltd and Hindustan Unilever Ltd. Provision of improved medical and sanitation facilities, building schools and houses and empowering the villages and in process making them more self-reliant by providing vocational training and a knowledge of business operations are the facilities that these corporations focus on. The CSR programs of corporations like GlaxoSmithKline Pharmaceuticals' focus on the health aspect of the community. They set up health camps in tribal villages which offer medical check-ups and treatment and health awareness programs. Some of the NGOs are funded by such companies for carrying out health and education programs in backward areas. SAP India had undertaken lot of work to rebuild the lives of the tsunami affected victims in partnership with Hope Foundation, an NGO that focuses mainly on bringing about improvement in the lives of the poor and needy. The SAP Labs centre of HOPE in Bangalore looks after the food, clothing shelter and medical care of street children.

CSR has gone through many phases in India. The ability to make a noteworthy change in the society and improve quality of life. India is the Second Asian country – after Indonesia – to lay down such a requirement.

### Provisions of the companies act, 2013

That CSR needs to be taken more seriously is clear from the Companies Act 2013, which has included a CSR annual spending requirement. The Bill has already been passed by the Lok Sabha on 18th December, 2012 and is also passed by the Rajya Sabha on 8th August.

Salient Features of Companies Act, 2013 on CSR Clause 135:

- Every company with net worth of Rs 500 crore or more, or turnover of Rs 1,000 crore or more or a net profit of Rs 5 crore or more during any financial year to constitute a CSR Committee of the Board consisting of three or more directors, of which at least one director shall be an independent director.
- The Board's report under sub-section (3) of section 134 shall disclose the composition of the Corporate Social Responsibility Committee.
- The main functions of the CSR Committee are to: Formulate and recommend to the board, a CSR policy indicating the activity or activities to be undertaken by the company as specified in Schedule VII of the Act; Recommend the amount to be spent on these activities; and Monitor the company's CSR policy periodically.
- After the CSR Committee makes its recommendations, Board of the company shall approve the CSR Policy and disclose contents of such policy in its report and also place it on the company's website. Further, details about the policy developed and implemented by the company on CSR initiatives during the year to be included in the Board's report every year.
- Board to ensure that the activities listed in the CSR Policy is undertaken by the company.
- Board to ensure that at least 2% of average net profits of the company in the three immediately preceding financial years are spent in every financial year on such activity.
  - Preference to be given to the local area and areas around the company operates for CSR spending.

- If a company fails to provide or spend such amount, Board to specify reasons in its report for that failure.
  - Companies required to comply with CSR shall give additional Information by way of notes to the Statement of Profit and Loss about the aggregate expenditure on CSR activities.
- Schedule VII of the Companies Act 2013 prescribes activities that may be included by companies in their CSR policies
  - Eradicating extreme hunger and poverty;
  - Promotion of education;
  - Promoting gender equality and empowering women
  - Reducing child mortality and improving maternal health;
  - Combating human immunodeficiency virus, acquired immune deficiency syndrome, malaria and other diseases;
  - Ensuring environmental sustainability;
  - Employment enhancing vocational skills;
  - Social business projects;
  - Contribution to the Prime Minister's National Relief Fund or any other fund set up by the Central Government or the State Governments for socioeconomic development and relief and funds for the welfare of the Scheduled Castes, the Scheduled Tribes, other backward classes, minorities and women; and
- The bill says, they're "expected" to...meaning it is not compulsory to spend money. BUT, the same bill provides that
  - Board of directors will be responsible for seeing that company spends money for CSR.
  - It is compulsory to send report on the CSR-spending to the Corporate Affairs Minister.
  - If company is not spending money for CSR, it'll have to explain why they are not doing so.
  - Companies that do not report will face a penalty ranging from Rs 50,000 to Rs 25 lakh or even imprisonment of up to three years.

There are no provisions in The Companies Act, 1956 on CSR

#### Existing CSR Activities of some companies:

Company Name	Major CSR Initiatives
<b>ITC Limited</b>	e-Choupal, social & farm forestry, watershed development, women's empowerment, livestock development, primary education
<b>Infosys</b>	Employees take up social causes like education, rural rehabilitation and inclusive growth. energy conservation, water sustainability, afforestation, waste management, awareness on carbon footprint.
<b>Jubilant Work Sciences</b>	Basic healthcare facilities, supporting government rural primary education system, developing resource pool through vocational training programmes.
<b>Reliance Industries Limited</b>	Health, education, infrastructure development (drinking water, improving village infrastructure, construction of schools etc.), environment (effluent treatment, tree plantation, treatment of hazardous waste), relief and assistance in the event of a natural disaster, and miscellaneous activities such as contribution to other social development organizations.

#### Expected contribution for CSR after the CSR provisions are enforced:

No.	Name of the companies	Average Profits(of the FY 2009-10, 2010-11, 2011-12) (Amt in Rs. millions)	Proposed contribution in CSR (2% of the Average Profits) (Amt in Rs. millions)
1.	<b>GAIL (INDIA) LIMITED</b>	<b>34,516.03</b>	<b>690.32</b>
2.	<b>HUL</b>	<b>23,998.00</b>	<b>479.96</b>
3.	<b>Infosys</b>	<b>69,053.33</b>	<b>1,381.07</b>
4.	<b>L &amp; T</b>	<b>42,633.03</b>	<b>852.66</b>
5.	<b>NTPC Ltd</b>	<b>90,181.73</b>	<b>1,803.63</b>

**Evaluation of CSR Provisions:**

Corporate affairs minister Sachin Pilot said CSR would be mandatory for companies like their tax liabilities. "Severity of law is not deterrent, it is surety which is deterrent," he said, adding the companies may engage in promoting education, reducing child mortality and any other matter they feel can contribute for social welfare. While steering the Bill, Pilot said when Companies Act, 1956, was promulgated there were only 30,000 companies in the country while in 2012, there are 8,50,000 firms in India.

It is not enough for companies to spend the mandatory 2 per cent of their net profit on corporate social responsibility projects and they must also display social sensitivity and responsibility in earning the remaining 98 per cent of profits as well, according to R. Shankar, Executive Director of the Rashtriya Ispat Nigam Ltd (the Visakhapatnam Steel Plant). According to him, the concept of CSR would really become meaningful only "when the customer evaluates the product based on the producer's track record of social sensitivity, corporate social responsibility." For instance, he said if a company's activities cause damage to the environment it will be of no use even if it spends the mandatory 2 per cent or more on CSR. There was a sea change in the way CSR activities of a company were being evaluated now. The senior officials of the State Bank of India, who had visited Visakhapatnam Steel Plant to hand over the formal letter advancing a large loan to the company recently, were keen on the kind of impact RINL's CSR activity had on people. He further said, "All the senior management and directors of the public sector units have to sign an annual statement of fiduciary responsibility which actually binds the officials to work as trustees of public resources. This is the concept of Gandhiji's trusteeship, but unfortunately officials treat the annual statement as a mere formality and merely append their signatures to it. They do not for once realize that they have committed themselves to the role and should live up to it."

Companies should be ready to spend a quarter of their net profit on socially relevant activity, former Vice-Chancellor of Acharya Nagarjuna University V. Bala Mohan Das said. Prof. Prasanna Kumar, former rector of Andhra University, said Gandhiji's teachings could be interpreted in different ways,

but there was no doubt about the relevance of his concepts like trusteeship and the concept of CSR could be related to it in a meaningful way. With CSR spending becoming mandatory for prescribed class of companies, there is bound to be increased engagement of companies with social and development projects. So far, there were only voluntary guidelines for companies to follow. The rationale for CSR activity is that corporates earn their profit by exploiting different resources of the society, and so a portion of the benefit derived by them should be channeled for the betterment of society. Though compulsory CSR spending may seem burdensome for some class of companies, it will create of a sense of responsibility among corporates, especially when they see benefits in the long term. Children, women, uneducated, and unemployed would be among the beneficiaries as CSR activities may be focused on them. Anand Mehta, Partner, Khaitan & Co., a law firm, elaborates on the CSR clause itself, and opines that companies should not be forced to spend a specific amount on CSR. This should be left to the companies will. Alternatively, for encouraging CSR initiatives, along with mandatory spending as proposed, corporates should be provided tax incentives. Companies in particular are increasingly expected to generate annual CSR reports in addition to their pressuring organizations to disclose more and more CSR information. Interested stakeholders, such as employees, regulators, investors, and non-governmental organizations (NGOs) are pressuring organizations to disclose more and more CSR information.

**Corporate Social Responsibility: A Paradigm Shift**

There is a paradigm shift in the way corporate social responsibility has been evaluated now by society, government and corporate etc. With the debate on corporate social responsibility (CSR) in the new Companies Act continuing, industry experts are of the view that this has been incorporated to create an enabling environment. India Inc wants activities including public awareness advertisements, gainfully employing skilled professionals, and contribution to local governing bodies for public causes to be included under corporate social responsibility (CSR), as defined under the Companies Act, 2013. Apart from the expansion of the list of activities,

corporate also want provision for carrying forward the unspent money set aside for CSR. The suggestions are a part of the comments received by the corporate affairs ministry on the rules for CSR under the recently-passed Companies Act, 2013. "Corporate bodies have suggested that the ministry should allow contribution to Municipal Corporation for public cause, like combating dengue, to be considered as CSR. Another suggestion is that in cases where corporate are funding non-governmental organizations and company employees also benefit from it, it should be called CSR activity. The ministry officials along with officials of Indian Institute of Corporate Affairs would soon meet to finalize the rules. In total, the ministry has received around 27,000 comments for rules for all the Sections of the Act, with around 2,000 comments for CSR alone. Companies have also sought clarity on whether the Section 25 companies or charitable organizations set up by them would be included towards CSR. The major area of concern, however, among all corporate, is taxation. "Around 60-70 per cent suggestions, queries and comments received are on taxation. First, they want CSR to be considered as expenditure in profit and loss account. The other suggestion is a tax holiday on such activities. While some of these recommendations like carrying forward unspent money are being considered by the ministry, those like providing suitable employment to underemployed skilled professionals like doctors, chartered accountants and engineers may not be taken in to consideration.

The world is changing before our eyes and whether one actively participates in that or is a bystander; the changes affect all of us. This is true in the business world as well where resource crunch, power shortage and labour unrest means that companies have to take extra precautions to survive in present times. When one looks at the worldwide scenario, it is full of economic gloom and forecasts of things getting worse. In this scenario, it is no longer the case that sustainability and corporate responsibility are just catchphrases or things that the companies can do at their leisure; instead they have become paradigms in their own right which must be followed if the companies and the environment that sustains them have transition to a new paradigm.

The point here is corporate behavior must change with the changing times and hence excessive exploitation of resources along with causing environmental damage would be severely punished. In this context, it is worth noting that companies around the world have adopted corporate responsibility into their business strategies.

Further, the United Nations has made several corporations around the world signatories to their Global Compact. The Global Compact is a set of principles that bind companies to social responsibility and encourage them to adopt sustainable business practices. With the Global Compact and the Millennium Development Goals set by the UN, corporate around the world have incentives to participate in creating a better world.

The ongoing global economic crisis has made sustainability a key parameter as the excesses of the capitalist era precipitated the crisis and catalyzed the movement towards sustainability. Hence, the WTO (World Trade Organization) as well as the IMF and World Bank have incorporated sustainability into their mandates and are actively encouraging and guiding the corporations around the world to adopt corporate social responsibility. In China and India, the severe power shortages and labour unrest has forced many companies to address social responsibility which along with the cost to the environment because of pollution has led to severe penalties from the regulators.

Taking all these factors into account, there is now a widespread acceptance of the fact that CSR is no longer an extra business practice but a necessity. The winds of change are sweeping across the world and it is high time the corporations realized the inevitability of change and transition to a new paradigm. Unless companies learn to do with less and do not cause damage to the environment, there is no way in which humanity is going to survive. This message must be sent loud and clear by bodies like the UN, WTO, IMF and World Bank and it is only when there is realization of this aspect that effective and deep actions can be taken. We have to realize that change takes time and so there must be patience with the change process.

Finally, this is a time for visionary leadership and sagacious wisdom from the top CEO's and management of corporations. Without the mandate coming from the top, it is difficult to actualize

change and create an environment where the future generations have something to look forward to instead of being pessimistic. This is the central challenge of our times and it needs to be seen how far the present leadership of major corporations follow the Global Compact and the Sustainability Principles set out by the UN.

### Conclusion

Indeed, we all need to pay back to the world we live in, and corporations more so, since their motives are value creation for their own co. and customers. A lot of times, these companies put their commitment to paying back to the society and the environment on the backburner. But making CSR a priority also makes also make good business sense for companies since it is a way to stand apart among stiff competition and helps companies build their brand around another facet of their strategies.

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# Evolving a Universal Service Policy for India Post – Issues and Challenges

P. K. Priyan, Kamal Kapoor

## Abstract

The concept of Universal Service Obligation in the context of telecom sector is well researched. However, the concept is fairly unexplored in the context of postal sector. This concept paper provides an overview of the important issues concerning the Universal Service Obligation of Department of Post (India Post), Government of India. It describes the regulatory framework and the poor financial health of India Post which necessitates evolution of a well defined Universal Service Obligation of India Post.

## Introduction

The Department of Posts, commonly known as 'India Post', is the world's biggest post office system with more than 154, 856 post offices (China is at second place has 57,000 post offices) of which 1, 39,164 (89.87%) are in the rural areas. It currently employs more than 4, 65,000 people. On an average, a Post Office serves an area of 21.23 Sq. Km and a population of 8086 people. The Department of Post is part of the Ministry of Communications and Information Technology of the Government of India.

India Post provides access to postal facilities to all the residents of India. India Post has established its network in rural and remote localities, notwithstanding the fact that a majority of these post offices are un-remunerative and financially unviable. India Post opens new post offices in rural areas, as a part of Plan activity under Five Year Plans, even where the anticipated income is only 33.3% of the cost. In respect of remote and tribal localities the benchmark is further lower at 15%. Such un-remunerative post offices in rural and remote localities in India are a drag on the financial viability of India Post.

The ever increasing deficit in its revenues over operational costs (see Table 1) is met by Government of India (GoI) through budgetary support.

Government of India in pursuance of its Fiscal Responsibility and Budget Management Policy, is mandated to reduce and eliminate the deficit between revenue receipts and revenue expenditure and is constrained not to meet the gap between these two through budgetary support. Therefore, it is imperative for the Department of Post (DoP) to become self reliant in its finances. However, considering the financial burden on account of its Universal Service Obligation, it may not be possible for the DoP to meet the revenue deficit on its own.

## Concept of USO in Postal Sector

Universal Service in postal sector can be defined as defined as, a postal service or set of postal services that is characterized by seven service elements that are attained to such a degree or in such a manner that the postal service provided may be considered "universal" (Campbel, James. I. 2008).

The seven service elements and the level or manner of attainment presently considered characteristic of universal service are:

- a. Geographic scope refers to the geographical area served by the Universal Service Provider (USP).
- b. Range of products: refers to the range of postal items and services provided by USP. This may include written and printed matter, parcels, and like materials suited to the needs of different categories of mail and mail users.
- c. Access: Universal service provides mailers ready access to the postal system through an appropriate level of post offices and other access facilities consistent with reasonable economies, especially in rural areas.
- d. Delivery service: Universal service provides for the receipt, transmission, and delivery of postal items.
- e. Rates: Universal service charges prices that are fair, reasonable, nondiscriminatory, and based on a fair and equitable apportionment of costs.

f. Quality of service: Universal service provides for the prompt, reliable, efficient, and adequate transmission of postal items, with particular attention to the most expeditious transmission of letters.

g. User protection: Individual users should have adequate means to ensure they receive universal services that are consistent with the universal service obligation.

Similarly, for purposes of this study, the Universal Service Obligation or USO has been defined as follows (ibid.):

Universal Service Obligation is a legal requirement that sets specific minimum levels of attainment for service elements of a postal service (or a set of postal services) that serves substantially all persons in the country. A universal service obligation may be imposed upon one or more postal operators directly or upon a government agency with authority to regulate postal operators.

### **International Experience in USO in Postal Sector**

USO Policies in countries differ in the specific terms of the universal service obligations as well as the mechanisms of ensuring the provision of universal postal services. Most impose requirements directly on the incumbent by statute, regulation, licensing, or contract.

The variations across different conditions can be studied on three axes: First, the scope of products under USO; second, the quality, in its multiple aspects, such as accessibility, number of deliveries, and door deliveries; and thirdly, the way the price constraints are set on the universal service products, e.g., through uniform pricing, price caps, and break-even rule (Ambrosini et al. 2006). In the following paragraphs a brief overview of the products and services covered under the USO and the accessibility issues in postal sectors of different countries is presented

#### **• Products/Services under USO**

Quite surprisingly, the detailed list of products in the field of universal service is not always precisely defined (ibid.). Some countries, such as France, have a publicly-available detailed list of all universal service products. In the United Kingdom, Postcomm, the regulator, has published such a list. In the Netherlands, the list can be considered de facto, as the non-USO products are defined. In Ireland, the regulator also publishes a list. In these three countries, regulators underline the importance of adaptability of universal service to the needs of

users. Therefore, they regularly evolve the content of the list, as well as the related constraints.

The Netherlands excludes a part of bulk mail (direct mail) from universal service. The Dutch regulator believes that, under complete liberalization, universal service should be limited to single-piece items. However, as long as competition is undeveloped, all mail weighing less than 50 grams must be included in the ambit of universal service. The Netherlands case is an exception: as a general matter, direct mail is a universal product for the large majority of countries.

It is important to note that the scope of universal service can be extended or varied over time. In some countries, governments have included in their definition of universal service some products that one would expect to be outside of the scope. For instance, *poste restante* in the UK, cash on delivery in Germany, special rates for Northern Food Delivery (by air) in Canada, the revenues issued from the rent of post office boxes in the Netherlands are unusual extensions (ibid.).

#### **• Geographical Accessibility**

The universal service obligation of geographical accessibility too differs widely from country to country (ibid.).

- In Germany, the accessibility constraint requires at least 12,000 retail points, of which are 5,000 post offices, which must be company-owned and staffed. Cities of more than 2,000 citizens must have access to at least one retail point. For cities of more than 4,000 citizens, distance between the point of contact and each citizen must be less than 2 km.

- In the Netherlands, for urban areas of more than 5,000 citizens, at least one mailbox within 500m radius and a point of contact within a 5 km radius must be available. For other areas, the requirement is at least one mailbox within a 2,500m radius. Finally, for the urban zones of more than 50,000 citizens, the incumbent postal service provider must provide at least one point of contact per 50,000 citizens.

- In Japan, each municipality must have at least one post office and one letter box. Moreover, the number of post offices must be at least 24,700, while the number of mailboxes should be no less than 186,000.

- New Zealand Post has to maintain at least 240 full service outlets and a minimum of 880 partial service outlets, which excludes businesses that simply sell stamps.

## Survey of India Post Operations and Financial Health

India Post is predominantly man-power oriented. The establishment strength of the department consists of 2.02 lakh departmental officials and 2.63 lakh extra Departmental employees designated as Grameen Dak Sevaks (GDS). As on 31.3.2013, there were 25468 Departmental post offices and 129388 post offices run by extra Departmental employees.

The main activities of the department are:

- (i) Collection, transportation and delivery of mail
- (ii) Money transfer
- (iii) Mobilization of small savings
- (iv) Provision of Life Insurance, and
- (v) Payment of Pensions of other Government Departments.

The Department of late has taken up as part of its Business Development (BD) new initiatives like Speed Post, Business Post, Logistic Post, Media Post, Retail Post, Financial Services - Sale of Mutual Funds, Western Union Money Transfer, Electronic Money Orders, Electronic International Money Orders, Core Banking Solutions, Electronic Clearing system etc.

The Table 1 gives the snapshot of financial health of India Post.

**Table1: Revenue-Expenditure Gap of India Post**

YEAR	REVENUE	EXPENDITURE	DEFICIT
2002-03	4010	5374	1364
2003-04	4257	5632	1375
2004-05	4431	5813	1382
2005-06	5023	6233	1210
2006-07	5322	6571	1249
2007-08	5495	7006	1511
2008-09	5862	9455	3593
2009-10	6266	12908	6642
2010-11	6962	13307	6345
2011-12	7899	13705	5806
2012-13	9366	14792	5426

Source: Annual Reports of Department of Post, GoI

It is evident from the Table 1 that the financial position of India Post has weakened drastically in last few years. The deficit has increased alarmingly since 2008-09. The main reasons for this increase in deficit is the increase in salary bill due to implementation of 6<sup>th</sup> Central Pay Commission as also stiff competition from private couriers companies.

Currently almost half of India Post's revenue comes from financial services which include Postal Savings Bank and Savings Certificates, and the increase in revenue is due to this source. Almost the entire revenue of India Post is used up in meeting operational costs leaving no surplus for capital expenditure.

In general, the postal departments of all countries incur losses in managing USOs but the loss is compensated through value-added services. In the case of India Post, the loss is in both USO operations and the value-added services. This is evident from the Table 2.

**Table 2: Average Cost and Revenue in Postal Services (in paisa)**

Sr No.	Name of Service	Cost	Revenue
1	Post Card	717.90	50.00
2	Letter	796.18	600.00
3	Book Post-Printed Books	1244.92	290.14
4	Parcel	4658.92	4069.43
5	Speed Post	5052.04	2803.27
6	Registration	4213.69	1700.00
7	Money Order	8917.55	5819.24

Source: Department of Posts, Annual Report 2013-14

## Issues in USO of India Post

This section highlights the important issues in evolving a Universal Service Policy for India Post.

- **Absence of regulatory framework**

The Indian postal service is regulated by the Indian Post Office Act, 1898. This act has reserved 'letters' in the hands of the Postal department but the definition of letter is not spelled out in detail. Hence, though theoretically the private couriers are only permitted to carry documents, they have been carrying everything as the distinction between

documents and letters is not laid down by law, The private courier companies have exploited this ambiguity and this has caused the Department of Posts to lose ground to the private sector, with a consequent loss of revenue for the government.

The postal sector has witnessed great deal of liberalization as Foreign Direct Investment has been allowed in the sector. According to the Department of Industrial Policy & Promotion (DIPP) Press Note 4 of 2001, 100% FDI is allowed in the courier sector. The note implicitly has kept 'letters' outside the ambit of FDI which are defined as per existing law (Indian Post Office Act, 1898). This has clearly been specified in the FDI Policy (April, 2006), that FDI is allowed for carrying parcels and packages which do not come within the ambit of the Indian Post Office Act, Further, at present, couriers are under no proper regulatory framework. This leads to lack of legality, responsibility, transparency or concern for community. Non-regulation also leads to irregular pricing practices.

With the infusion of technology and possibilities of market opening, it has been felt that this act needs to be modified. There have been several attempts to amend this act. However, the Indian Post Office (Amendment) Bill (2006) still has not been cleared by Parliament. The proposed Bill intends to define letter-post with respect to weight and attempts to define USO around this. It amends Article 4 of the old Post Office Act, protects all letters below 300 gms, and allows private players to operate beyond this weight limit in all incidental services of receiving, collecting, sending, dispatching and delivering services. This proposal is being further revised and in the revised version, the weight limit may be brought down further (possibly to 150 grams) and private players may be allowed within the reserved area through multiple price mechanisms. The Bill also proposes to set up a Mail Regulatory and Development Authority and Mail Disputes Settlement Tribunal. For private courier companies, the Bill intends to introduce registration as well as renewal fees. The fee structures are different for players opting only for the domestic market and for within and beyond India (Rs. 25,000/- registration fees and Rs. 10,000/- renewal fees for small and medium players, and Rs. 1,000,000 and Rs. 500,000 respectively for big players.) Big players are also required to pay USO fees as per the original proposal. These proposals have met stiff resistance from industry associations who are unwilling to be registered and regulated. Industry is also unwilling to contribute to a USO fund for the postal sector (CUTS International, 2006).

- **Absence of well-defined scope of USO**

It is surprising to note that the Indian Post Office Act 1898 does not specify the universal service obligation of the Department of Post. The Allocation of Business Rules is also silent about any universal service of Department of Post. The Vision and Mission Statement of DoP also does not enumerate the USO. It is only in the Citizen's Charter that USO of DoP is defined in the following manner:

**“We serve all residents of India and we are the main service provider for rural citizens for mails and financial services”**

It goes on to define the service standards for first class mails, speed post, money orders, etc. It is apparent that the USO of DoP has not been defined in concrete terms. This anomaly has not been corrected even in the Draft India Post Office (Amendment) Act 2006.

This can be contrasted with USA where the Postal Act sets the geographic scope through Section 101(b), which states that the Postal Service “shall provide a maximum degree of effective and regular postal services to rural areas, communities, and small towns where post offices are not self sustaining.”

It also defines the products covered under the universal service obligation under Section 101(a) of title 39 “the obligation to provide postal services to bind the Nation together through the personal, educational, literary, and business correspondence of the people.”

- **Absence of data on cost and revenues**

There is lack of credible and accurate data on cost and income from various services and products of the Department of Post. The present accounting system (which is on cash basis) does not allow capturing of cost and revenue data pertaining to each network element.

### **The Accounting Challenge**

There are two basic approaches for calculating the cost incurred by postal operators in providing universal service:

#### **Net Avoided Cost Approach**

This approach focuses primarily on the financial effect of eliminating services whose revenues do not cover their avoidable costs. It is assumed that all products, product groups, or mail paths that do

not cover their costs would be discontinued by the postal operator if there were no USO.

### Profitability Approach

This approach compares profit levels under the status quo to profit levels under a “what if” scenario in which one element of either the USO or the monopoly is changed. For example:

- Reducing the frequency of delivery from five or six deliveries per week. The greatest incentive for reductions occur in areas with high unit delivery costs, e.g., in the most rural areas.
- Reducing the number of postal offices, and substituting contract agencies for traditional postal offices.

Whichever approach a postal operator uses the cost of each network element needs to be calculated with a reasonable degree of accuracy. India Post will have to work out the receipt and expenditure in respect of the USO services and areas and commercial activity segment separately to ascertain the required compensation for service obligation segment operations. This poses a serious accounting challenge for India Post as the present system of accounting does not provide for such details.

### Recommendations

India Post is expected to ensure provision of quality and basic postal services on regular basis to all the users at all points in the country at affordable prices as part of its unwritten Universal Service Obligation. On the basis of above analysis it is recommended that:

a. In order to make a strong case for getting compensation for fulfilling its (unwritten) universal service obligation India Post needs to define the various elements of its universal service obligation, like, Geographic Scope, USO Products/Services, Delivery Modes and Frequency in specific terms. India Post urgently needs to push for incorporation of a well defined USO in the India Post Office Act

b. The cost of providing these universal services has to be assessed systematically. This will be a challenging task as the accounting system is not geared to capture the cost of different elements.

c. A sustainable tariff policy for providing the basic postal services also has to be determined.

d. The source of funding needs to be determined and set in ways that ensure the financial self-sufficiency of India Post and allow it to make decisions relating to its growth and development.

e. In view of the increasing participation of private players in mail services there is a need to address the issue in a holistic manner by bringing them within the regulatory ambit.

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# Integration of Information & Communication Technologies (ICT) by SMEs in India

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## Abstract

Latest research confirms that small and medium size enterprises use less technology compared to the large size enterprises. Integration of ICT for SMEs creates the synergy which is crucial for mutual interaction and benefits amongst SMEs. The synergy that allows free flow of communication for carrying out internal as well as external business processes. It can reduce the transaction cost and increase the speed of transaction. It also creates sense of reliability.

Based on prevalent ICT practices, this paper applies a knowledge based framework to identify strengths, trends and opportunities for SMEs to explore ICT tools. The paper poses the current picture of SMEs by making a conceptual study on available ICT tools for SMEs, their beneficial use, their cascading effects and the current scenario of ICT usage by SMEs of India. The paper also examines the motivational factors and challenges behind employing ICT. SMEs that are already experiencing ICT have adopted certain strategies and are also facing some barriers. The paper discusses wholesome experience of ICT integration by SMEs to mark their presence in the globalized digital world.

In this survey along with other nine criteria the parameters like communication and ability to use computer were also assessed. The findings were Communication skills were found to be grossly lacking among both managers and supervisors.

## Introduction

The economic growth and development in India can be achieved through the surfacing of strong SMEs, which can be the growth engines in the development of Indian economy. According to the 2007-08 UNCTAD Information Economy Report, the use of ICT in business processes by SMEs can contribute to the revenue generation and improved labour efficiency to the large extent.

The existing business environment presents a threat as well as an opportunity for local SMEs. The fast growing economy gives SMEs the momentum to expand to these free and open markets. Technology has also increased the effectiveness and efficiency of operating a global business. To survive in this intense competition, SMEs need to find out their niche in the market and improve their connectivity with other businesses.

The industrialization in present economy is expected to serve twin purpose of creating opportunities for the incorporation of excess labour and diversification of employment. SMEs must offer the necessary support and compliment the growth of Industrialization which can further be proved beneficial for them as well. The SMEs makes more efficient use of capital and labour for developing economy. They are able to produce a unit of output with lesser cost of production. SMEs are using exhaustive labour force with smaller amounts of capital requirements. In the country like India where capital is rare and labour is excess, both more production and more employment are correspondingly important and in this situation Small and medium enterprises become very important.

## Literature Review: Current Issues and Trends

"ICT can reduce the cost of transactions and increase market access. However, wider adoption of ICTs by developing country enterprises is still limited by a lack of awareness of the potential benefits of ICT use, and by investment and implementation costs" UNCTAD IER, 2007-08

The following analysis is based upon the survey conducted by the Methods Apparel Consultancy. Ten factories were rated and 300 people were assessed during the surveys in November-December, 2007 commissioned by the Garment Technical Cooperation (GTZ) in association with Okhla Garment and Textile Cluster (OGTC) to analyse current systems and advise ways to improve overall productivity.

Many of them still believe that the louder you shout the more you produce. Effective communication skills if not inborn can be acquired by professional training and can be a major tool for the managers.

61 managers were evaluated 96% were unable to achieve the required level of communication skills. 92% need knowledge of the techniques required in today's demanding and competitive production scenario. Only basic computer knowledge is present with some of the managers. These two skills were rated with the 'most urgently training required' category.

"These findings hold no surprises. SMEs are much less formalized or structured in their thinking about IT. They have a more opportunistic approach to IT investment." He adds: "Many SMEs have an older infrastructure and want to sweat these assets. This focus makes any new implementation of IT that would affect significant business change almost untenable." Alan MacNeela, vice-president of research at analyst firm Gartner, as quoted in Computer Weekly.

Effective and sensible use of ICTs in SMEs can create a great impact on its competitiveness and sustainability. Recently SMEs have started using ICT relatively but as such they are generally characterised by inferior technology and management capabilities (Caldeira and Ward 2002). As Pool noted, (2006) whilst e-commerce, i.e. the use of Internet related ICT for business has spread rapidly throughout large firms, its growth amongst SMEs has been much less pervasive. Indeed the need to build ICT-related capabilities and competencies among SMEs is specifically identified by a recent reports and observations based on SMEs.

SMEs play an integral role in contributing substantial contribution to the GDP. In India, there are around 2.6 Cr SMEs located across the length and breadth of India. It is an engine which stimulate local employment. India's 40% of the workforce is confined to SMEs; 45% of the manufactured output is from SMEs, and they contribute 40% of India's total exports. Due to Government's consistent Policy of supporting the Sector, mortality rate of sickness has come down tremendously. The true fact reported, concern that 45% of India's work force contribute just 17% to the GDP. This is indeed a paradox. But fact of the matter is more than 50% of the labour is unorganized, 60% unskilled, the managerial personnel is devoid of skill, out-dated training if any, etc. The workers are poorly paid. Government unfortunately is not aware of the ground facts. It does not have the machinery to equip with a comprehensive knowledge of the work's landscape. (Ramanathan Vekat (Kochi) 28 Jun, 2013 10:39 AM. In response to article, SMEs employ close to 40% of India's workforce, but contribute only 17% to GDP By Malini Goyal, ET Bureau Jun 9, 2013, 05.00AM IST)

## Objectives of the study

To identify the need for SMEs to integrate ICT.

To study prevalent trends of ICT adoption by SMEs in India.

To find out the challenges and barriers faced by SMEs in adoption of ICT.

## Methodology

The paper is a conceptual study based on purely secondary data. The data and information stated in the paper are collected from published books, reports and survey by agencies, articles and proceedings of conferences and research papers published in renowned journals.

## Discussion and Findings

### The Power of ICT

SMEs need to adapt to global competitive environment by improving the technological stand. The ICT, at this stage can help in improving the efficiency, adaptability and sustainability of manufacturing systems as well as their better integration within business processes in an increasingly globalized industrial context. Experience is valuable but the knowledge of innovative and efficient management techniques is equally important.

Business today demands a broad vision – Branding as a principle of marketing to be successful and also to survive. Today SME has competition in all areas with other local players, regional, national and even international companies. They need to manage their communication channels in all directions may it be internal or external. Internal communication using ICT tools simplify the cumbersome process of getting things done orally and personally. External channels – both – vertical and lateral – need to be addressed with technologies as there is a major shift in all manufacturing units towards the use of advanced technologies.

Information technology has been instrumental in bringing around the competitiveness, innovation and change in current economy. ICT is changing our lives – the way we socialize, work, search for information, and communicate. Following are a few data to familiarize with the emerging trends. The data is based on an online study 'Stimulating Innovation through smart use of ICT' conducted by enterprise and Industry, European Commission in May 2013:

- Two billion people are now connected to the Internet and this number is growing by 200 million per year.
- Information technologies cut across all industries and services and create wealth, growth and jobs. More than 75% of the value added created by the Internet is in traditional industries. The ICT's main impact is through the modernization of traditional activities. Smart innovation enabled by the Internet and ICT developments leads to higher productivity and has benefited all industries.
- ICT enables all forms of innovation, from social to organizational and technological innovation. ICT boosts businesses' efficiency and competitiveness in the global market.
- The advent of Internet has changed the global business landscape. Internet has been instrumental for GDP growth over the past 15 years. Recent ICT developments like Enterprise 2.0, cloud computing, social networks, etc. are enabling dynamic new and smaller companies to develop and bring to market innovations that before were too expensive to develop.
- SMEs grow two-three times faster when they embrace the Internet.
- For every job destroyed by the emergence of the Internet, 2.6 new jobs were created. Still, the huge potential of ICT-enabled business innovations remains to be unleashed by Indian SMEs.

(Source:[http://ec.europa.eu/enterprise/sectors/ict/eb/sn/digital\\_supply\\_chains/index](http://ec.europa.eu/enterprise/sectors/ict/eb/sn/digital_supply_chains/index))

As per Economic survey, June 2013, Employing close to 40% of India's workforce and contributing 45% to India's manufacturing output, SMEs play a critical role in generating millions of jobs, especially at the low-skill level. The country's 1.3 million SMEs account for 40% of India's total exports.

Then also Indian SMEs are the ones suffering the most from limited understanding of ICTs and their potential, limited budget for ICT investments and difficulty in recruiting ICT professionals suggests European e-business Support Network for SMEs. Despite the challenges faced by SMEs on ICTs adoption, SMEs stand to benefit from adopting ICTs in their business processes especially in accessing international markets. SMEs play a great role in the economy and thus need special attention

## Challenges for SMEs

The first step for SMEs to hold the global - digital economy is to go on-line, by establishing their own websites. A web presence is necessary for an SME, but it is not enough. There are millions of websites on the net competing for visibility and for attracting the interest of potential clients.

Moreover, the tools and techniques for industrial value chains are becoming more and more sophisticated and global. New business trends are emerging. The competitiveness of SMEs progressively more depends on their capability to connect better globally and do business with bigger enterprises, to integrate global value chains and become capable to collaborate with international business. Intelligent use of information technology can help SMEs achieve all these goals.

There are also other downsides of industrial value chains, because of the disintegration of the dogmatic and technological outlook, particularly across the countries. The creation and increase of different business models and standards have created a lack of inter functionality between diverse technological solutions and uninterrupted efficient information flows along value chains. SMEs in particular have a risk of getting excluded from global value chains, due to shortage of proper, reasonable and inter functional ICT solutions to connect them with large business partners.

So the huge potential of smart use of ICT, notably by SMEs is still largely under exploited. The other challenges are:

1. Lack of Technical know-how
2. Frequent power disruption in rural areas
3. Large organizations have enough resources to adopt ICT while on the other hand SMEs have limited financial and human resources to adopt ICT.
4. Lack of ICT skills and knowledge in SMEs as one of the major challenges faced by SMEs.

## Barriers in adopting ICT

The proprietor and managers play a crucial role in decision making in SMEs. Chau and Turner (2001) point out that the owner's lack of knowledge of ICT and professed benefits is a major barrier to the adoption of ICT. The lack of knowledge on how to use the technology and the low computer literacy are other causative factors for not adopting ICT. Suspicious nature of owners towards IT industry and lack of time are also dominant factors to affect the decision to adopt

ICT. SMEs main purpose to do business is to make profit. That's why SMEs owners are more worried about a return on their investments. There are issues related to the kind of the organization which affect the adoption of ICT. It has been studied that the existing level of technology adoption in organization largely affect the process of ICT usage. It has been also discovered that lack of awareness; uncertainty about the benefits ICT; lack of human resources and skills; set-up costs and pricing issues and security concerns are the most significant barriers to ICT adoption. (Knol and Stroeken 2001, Akkeren and Cavaye 1999, Panagariya 2000)

Research studies on ICT adoption by SMEs in India have revealed that economic and technological factors are important barriers to ICT adoption. Developing countries like India have to face lot of challenges when for ICT use and adoption. These challenges are; lack of infrastructure, lack of technicians in ICT, and low computer literacy and internet bandwidth. These technical barriers in India make it difficult for some SMEs in the rural areas to accept and use ICT.

Lack of availability of computer applications, hardware, and telecommunication facility at a sensible cost; security issues and unpredicted benefits from ICT, are considered to be major factors that slow down ICT adoption. A comparative study has found that, limited number of computers, increasing cost of internet access and other online facilities, were found to be straightly affecting ICT adoption by SMEs.

**Table 1**

<b>Internal Barriers to use of ICT.</b>	<b>External Barriers to use of ICT.</b>
Employees lack required skills	<b>Cultural Barriers</b> : Lack of popularity for online marketing and sales
ICT has no financial gains	<b>Infrastructure barriers</b> 1. Inadequate speed and quality of infrastructure. 2.Low internet penetration in the country
ICT is not suited to products and services	<b>Political barriers</b> 1.Unstable economic environment in the country 2.Changing regulations with each government change
ICT not suited to way business is done	<b>Social barriers</b> 1.No one stop-shop facility for services 2.Lack of information on ICT 3.Senior management in the sector lack ICT knowledge

ICT not suited to our customers and suppliers	<b>Legal and regulatory barriers</b> 1.Little support and policies for SMEs from government and industry associations 2.Inadequate legal frame network for business using ICT 3.No simple procedures and guidelines 4.Lack of suitable software standards
Security concerns with payments over the internet	

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### **Advanced and Innovative ICT tools for SMEs**

Cyber-Physical Systems (CPS) refer to next generation embedded ICT systems that are interconnected and collaborating including through the Internet of things, and providing businesses with a wide range of innovative applications and services. These are the ICT systems making "smarter", more intelligent, more energy-efficient and more comfortable our transport systems, cars, factories, hospitals, offices, homes, cities and personal devices. Focus is on both reinforcing industrial strengths as well as exploring new markets. To maximise impact and return on investment in this field, the following challenges must be addressed:

Advanced Thin, Organic and Large Area Electronics (TOLAE) Technologies is an emerging technology and is the basis for advanced products in large area electronics that are thin, light weight, flexible and/or stretchable, suitable for large market sectors such as the textile, automotive, health, paper, plastic, advertising or construction industries.

Access service to industry, enables the wider adoption and deployment of this technologies in innovative products, in particular by SMEs and driven by concrete user requirements and business cases. It could include activities for improving skills development and for promoting young people, entrepreneurs and the general public to embrace ICT. However, close synergies should be sought with existing similar actions and regional / national research and innovation strategies for smart specialisation.

(Information and Communication Technology Calls. THORIZON 2020 – WORK PROGRAMME 2014-2015 LEIT – Information and Communication Technologies Part 5i - Page 7 -12 of 108)

### **Major Findings**

A study on “Usage of Information & Communication Technology (ICT) tools by Indian SMEs and its impact on their business” carried out by Federation of Indian Chamber of Commerce

and Industry in July 2012 brings forth many surprising fact on ICT usage by Indian SMEs. FICCI conducted telephonic survey and obtained data from 150 small and medium size enterprises across India. The major finds were:

- SMEs were asked whether they have their company's website .74% of the respondents (SMEs) have their company's website. It indicates that people understand the importance of using ICT tools like having a website will improve their presence in the market and amongst the potential customers.

- SMEs were asked about use of ICT tools in their day to day business operations. 79% of the respondents (SMEs) use ICT tools in their day to day business operations. It implies that most of the people are aware about ICT and understand its importance and therefore use ICT tools in their day to day business operations. However, about one-fifth (21%) of the total respondents do not use any kind of ICT tools.

- Extent of use of ICT tools in different business verticals. 79% people who use ICT tools in their day to day business operations, maximum usage of ICT tools is done for promoting sales and marketing (79%) by different companies (SMEs), followed by finance (67%) and market research (53%). Very few companies (21%) use ICT tools in their supply chain activities.

### Reasons

Most of the people are not aware about different supply chain management software like ERP, bar code system etc. which can integrate their supply chain and make the process of inventory management very effective.

Majority of the companies use the basic ICT tools like internet, emails, B2B portals, tally etc.

SMEs don't find the need of using sophisticated software/ICT tools like ERP, Bar Code system (BCS) etc.

- Reasons for not using ICT for those who do not use. 21% respondents who do not use ICT tools in their business activities, 68% do not use because of lack of knowledge about ICT or they do not possess sufficient knowledge on various kinds of ICT tools available and how it can benefit them. 23% people do not use as they do not possess sufficient funds to afford ICT tools. 32% people say that they do not use ICT tools because they don't feel the need of ICT in their business activities

- SMEs were asked about the effect/result in their business performance after the use of ICT tools. Out of the people who use ICT tools in their day to day business operations, maximum respondents (95%) find them beneficial in one or the other way except only about 5% respondents who feel that there has been no noticeable effect/result in their business after the usage of ICT tools.

- 67% of the respondents feel that maximum effect has been in time saving i.e. use of ICT tools has considerably reduced time of business operations across business verticals (sales & marketing, finance, market research etc.)

- The rating on the improvement in inventory control side has been very low (30%). The reason for this is very less or no use of ICT tools for supply chain management which is also indicated in the analysis above (Question IV).

- SMEs were asked whether they are aware about Enterprise Resource Planning (ERP) software. Around 58% respondents are aware about ERP software.

- SMEs were asked whether they are using Enterprise Resource Planning (ERP) software in their business operations. About 88% respondents do not use ERP in their business. In spite of 58% people being aware about ERP, only 12% actually use it in their business. Majority of the people know about ERP but still do not use it.

### Reasons

People find it very expensive to afford.

They use some kind of substitutes like tally, MS Access, MS Office etc. which serves their purpose to a large extent.

People although aware about ERP but do not possess in-depth knowledge on how it can prove to be a great source for easing the day to day business operations.

Last but not the least, as case may be, many SMEs do not have business operations large enough which requires the need of sophisticated software/ ICT tools like ERP.

**Source:** A report on Usage of Information & Communication Technology (ICT) tools by Indian SMEs and its impact on their business by Federation of Indian Chamber of Commerce and Industry 17/5/2012

## Research limitations

The major limitation of this paper is that it is based on purely and only reviews of relevant literature and that empirical findings based on primary sources are not obtained to give an insight and holistic view of ICTs adoption and assimilation by SMEs.

## Conclusion and Recommendations

The paper concludes that, ICTs adoption and adaptation in SMEs is critical to enhance their competitiveness. In addition, ICTs usage in SMEs will enhance accessibility into the international markets.

## The key recommendations are

1. Young entrepreneurs can be encouraged to become partners in the distribution of ICT. Small businesses should be allowed to realize reasonable margins and grow their organizations while generating immense benefits for local communities.
2. Those success stories in SMEs should be aptly rewarded and motivated so that they can act as models of effective ICT & can help creating incredible opportunities in their communities.
3. There has to be continued provision of computer infrastructure and hardware to SMEs who would not have otherwise have access of new equipment. This will impact positively on their daily performance.
4. Association of Small and medium businesses and community based organizations should make learning resources and materials along with computer hardware. This will help improve business performance, marketing skills, business plan conception and development.

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# Information Technology Act, 2000 and CYBER Law in India

Subhash Joshi

## Abstract

The users of information and communication technology (ICT) are increasing day by day. Largely, the internet and ICT has become inevitable for various people and business and commercial organizations. In business, all the transactions are contracts, and they imply rights and obligations. The methods, ways and implications of formation of contracts, creation of rights and obligations, performance of promises and the supposed non-compliance of such promises are the realities. The ICT has drastically affected contract transactions. The use of ICT also has connections with civil and criminal offences also. This article is elucidating all such issues of contracts, performance of promises, evidence and cyber-crimes.

## Introduction

The users of information technology are increasing day by day. Particularly, the internet has become inevitable for various people and organizations. Team Berners Lee wrote HTTP in 1989, which became fully operational and popular after 1993. Further development was HTML which made use of internet more easy. Today the number of users of personal computers and internet are increasing by leaps and bounds.

### INFORMATION TECHNOLOGY ACT, 2000

Considering the wide use of computers and information technology, government of India came out with a comprehensive legislation and passed The Information Act, 2000. The provisions of this law foster an environment whereby the advantages of this new technology can be tapped. The law facilitates:

- 1) Electronic business transactions.
- 2) Electronic filing.
- 3) Maintaining electronic records, and
- 4) Electronic government transactions.

The law also defines cyber-crimes like a) hacking b) unauthorized access to electronic media, and c) destruction of digital information, and the provisions for punishment.

## INTERNET

The internet is a vast global network of computers storing information on every conceivable subject of interest to humankind. This was basically developed for military and security purpose. By end of seventies, there were experiments at National Physical Laboratory in UK and Pentagon in USA. By 1973, ARPANET was developed which provided for standardization and flexibility. Domain name servers were introduced in 1984. The Internet grew significantly after the introduction of the world wide web, through which it became geographical and interactive. The world wide web is a network of sites that can be searched and retrieved by a special protocol known as Hypertext Transfer Protocol. This protocol simplified the writing of addresses; automatically searched the Internet for the address indicated and called up the document for viewing. This was developed by Tim Berners Lee, and became useful worldwide by 1993.

Later on, the search engines like AltaVista, Infoseek, HotBot and Google were developed which facilitates to shift thro vast quantities of information available on any given subject on the internet. There are more than one thousand million web pages available for viewing. These web pages are ranging from products, lawyers, government, commercial adds to specific laws.

## ELECTRONIC EVIDENCE

E Commerce has grown to become the buzzword in the corporate circles. Cyber space has no territorial boundaries, because the cost and speed of message transmission on the net is almost entirely independent of physical location. Messages can be transmitted from one physical location to any other location without degradation, decay or substantial delay, and without any physical cues of barriers that might otherwise keep certain geographically remote places and people separate from each other.

The net enables transactions between people who do not know each other's physical location. The power of control activity in cyber space has only the most tenuous connections to physical location. Doing business globally has become a reality through internet. The web page can be reached in every state and every nation on earth. Business is governed by procedures and documents. Use of ICT implies absence of paper documents/evidences, irrelevance of geographical location, impersonation of parties and reliability of information on the web site. An effective judicial system requires certainty of jurisdiction, venue and service of legal process in order to hear a case and render an effective judgement. In case of proper jurisdiction only, either subject jurisdiction or personal jurisdiction, the courts can entertain the trial of any civil or criminal matter. Since in case of the use of ICT for doing business, there are no boundaries, national as well as international, and physical presence of contracting parties, fixing the jurisdiction is of prime importance. Usually the law of place where contract was made would govern the validity of a contract. Earlier certain criteria were evolved to assist the courts of law to decide about the jurisdiction. These were:

- 1) The need of the interstate and international system.
- 2) The relevant policies of the forum.
- 3) The relevant policies of the interested states.
- 4) The protection of justified expectations.
- 5) The basic policies underlying the particular field of law.
- 6) Certainty and uniformity of result. And
- 7) Ease in determining and applying the law.

Later on, the minimum contacts rule was developed as per the case of *International Shoe V/s Washington* 326 US.310 (1945). In case of *Aashi V/s Superior court of California* 480 US. 102 (1987), the issue of purposeful availment of the forum was applied. The trouble with Internet jurisdiction is the presence of multiple parties in various parts of the world who have only a virtual nexus with each other. Traditional requirements generally encompass two areas : (a) the place where the defendant resides or (b) where the cause of action arises. In the context of internet, both these are difficult to establish with any certainty. Many cases like *Cybercell V/s Cybersell Inc.* 1997 US App. , *Edias Software International, LLC, V/s Basis International Ltd.* 947 Supp. 413, and *United States V/s Thomas*, 74 F.3d 701 are worth mentioning.

In India, the Code of Civil Procedure, 1908 bases territorial jurisdiction on two principles : first, the place of residence of the defendant, and second the place where the cause of action arises. In the context of the Internet, residence of the defendant may well include either his place of physical residence, or the place where the web site server is located. Similarly, the cause of action may be said to arise at a variety of places : where the site is accessed or where its server is located. But in the absence of any statutory clarification, courts will be forced to rely upon precedents. Parties to a contract may select a preferred forum, or a preferred choice of law, as a part of their agreements with each other. Other strategies to minimize risk are :

- (a) Limit the degree of interaction ,because the provision of goods in the form of transmitted data or information requested by a user, or the acceptance of purchase orders through the web site, may suffice to establish specific jurisdiction relating to that transmission or transaction.
- (b) Limit the amount of non internet promotion and solicitation, so that the courts are unable to identify the vital other contract that they mostly rely upon to obtain jurisdiction.
- (c) Decline business from remote locales, by making it clear that the site is only directed at persons from a particular region or locality. This would do away with the purposeful availment requirements of the minimum contact test.

Information Technology Act, 2000 is also illustrative of the confusion in the area of jurisdiction in the context of the Internet. Sec. 1 (2) of the said Act provides that the law shall extend to the whole of India, and save as provided otherwise in the Act, it applies also to any offence or contravention there under committed outside India by any person. Sec. 75 (2) of the said Act also provides that this Act shall apply to an offence or contravention committed outside India by any person if the act or conduct constituting the offence or contravention involves a computer, computer system or computer network located in India. This is unlikely to be effective on practicality ground.

Another issue is regarding the authenticity and admissibility of electronic evidences. Where there is the use of information and Communication technology (ICT) in many circumstances, paper evidences are not available. The ever changing technology has effects on delivery and availability of information, acts, transactions and services. Most of the legal rules in our country assume the existence of paper records, the signed records, of original records. Section 65 (B) of IT Act, 2000 provides that electronic records are very well

evidences admissible in the Courts of Law. In case of Companies also, electronic evidences are validly admissible evidences as provided under Sec.610A of Companies Act,1956. The computer generated documentary evidence are of three types. First is calculations and analyses that are generated by the computer itself through the running of software and the receipt of the information from other devices. Secondly, there are documents and records produced by the computer that are copies of information supplied to the computer by human beings. Finally, there is derived evidence, which is information that combines real evidence with the information supplied to the computer by human beings to form a composite record.

#### SOFTWARE COPYRIGHTS

The key business of the Internet is computer software. It is the largest and the most efficient distribution mechanism that has existed to date, it also is the largest forum for discussion on software and is the largest market and the largest producer of software. At the same time it plays host to the largest number of piracy web sites, from where one can download software. Section 2 (ffc) of Indian Copyright Act, 1957 defines a software as a set of instructions expressed in words, codes, schemes or in any other form, including a machine readable medium, capable of causing a computer to perform a particular task or achieve a particular result. Under the Copyright Act, 1957, the computer programmes are well protected. Computer software consists of several components with varying degrees of intellectual and innovative content. Certain aspects of intellectual property law are worth mentioning :

- 1) The use of copyright to protect against exact or near exact copying of a programme code.
- 2) The use of copyright to protect certain aspects of user interfaces.
- 3) Trade secret software is available under licensing agreements.
- 4) The use of trade secret protection for the source code of programmes and other internally held documents concerning programme design.
- 5) Patent protection for individual processes that have computer elements.

The Indian Copyright Act, 1957 specifically protects computer programmes. There are five areas where copyright law comes into play, when dealing with the internet and computer software. These are :

- 1) Creation of intellectual property.

- 2) Upload of content.
- 3) Transmission of content.
- 4) Access of content.
- 5) Use of content.

Here, caching is worth mentioning. It is copying of storage of entire site or other complete set of material from a source for later use. Caching can be local caching or proxy caching. The persons involved are (a) website authors (b) browsers and (c) internet service providers.

However, for violations certain defences are available. They are :

- 1) Ignorance: The innocent act of such infringement is covered under this.
- 2) Fair use: When copyrighted work is reproduced for reporting, criticism, research, etc. this defence is available.
- 3) De Minimis: Not material.
- 4) Implied licences: Downloading files from site to view it, browsing, referring etc.

#### DOMAIN NAMES

In the new e-economy it is required that all the companies/entities have address where they can be contacted. This would require its registration under a particular domain name and website. This has been made possible with the emergence of the Domain Name System. Now domain names carry goodwill, reputation and high recall value. A domain name can serve the classic trade mark function of symbolizing a company's recognition and goodwill in the marketplace. For the consumers, domain names work as trademarks and trade names, to identify the organization, person and the product. Like trademarks, these domain names are subject to disputes also. These are in two contexts. Firstly, same or similar name is registered for appropriation of goodwill, draw the customers, diversion of web traffic and extortion. Second situation arise between persons who are equally entitled to a name : a situation that arises often, given the global nature of the Internet. Domain names are to be registered with the administrator.

There are numerous cases connected with domain name disputes.

The Princeton Review Management Corporation V/s Stanley H. Kaplan Educational Centre Ltd. 94 Civ. 1604 (MGC). This was a case of Cybersquatting, resolved in favour of Kaplan. Other well known cases are Yahoo Inc. V/s Akash

Arora & Anr. 1999 PTC (19) 210 (Delhi). Delhi High Court granted relief to Yahoo in this case, on the ground of passing off. Titan Industries and ICICI are other well known cases.

#### LEGAL PRINCIPLES

Domain names have the value as an intellectual property. Trademarks are given protection through two methods. One is registration. Second is the common law protection in case of passing off. The right of the owner will depend on different factors like right to a particular name, the intention behind its use as domain name, right of third parties in that name, the contents of the website behind that name etc.

#### CYBER CRIME

The computer technology is a boon to many sections of the society. With the Internet, crimes like unauthorized access, damage to property, theft and distribution of obscene and indecent material have increased. The essential ingredients of crime are :

1) The accused has caused a certain event, which is forbidden by law.

2) He had a defined state of mind in relation to the causing of the event or the existence of the state of affairs.

A person is said to have done the act when a person is:

A) Trying to make a computer function.

B) Trying to access data stored on a computer or from a computer which has access to data stored outside.

C) Using the Internet to attempt to gain access.

D) Attempting to login, even if those attempts fail.

Types of Internet crimes :

1) Hacking without any intention to commit any further offence or crime.

2) Unauthorized access with intention to commit further offences. This can include theft, fraud, misappropriation and forgery.

3) Destruction of Digital information through use of viruses, Trojan horses and logic bombs.

The following acts, done without permission of the owner or any other person who is in charge of a computer/network etc. are contraventions as per Sec. 43 of Information Technology Act, 2000:

1) Accessing or securing access to the computer/network.

2) Downloading any data or information from the computer network.

3) Introducing any computer containment or computer virus into the computer/network.

4) Damaging or causing to be damaged the computer/network, data, the computer database or any other programmes residing in it.

5) Disrupting of the computer/network.

6) Denying any person authorized to access the computer/network by any means.

7) Providing assistance to any person to facilitate access to the computer/network in contravention of the provisions of The Information Act, 2000, rules or regulations made thereunder.

8) Charging the services availed of by a person to the account of another person by tampering with or manipulating any computer/network.

The following are the specific offences punishable as Information Technology Offences :

1) Source code attacks.

2) Hacking.

3) Obscenity.

4) Failure to comply with Controller's directions.

5) Accessing designated protected systems..

6) Misrepresentation to CCA.

7) Breach of confidentiality/privacy.

#### CYBER STALKING

STALKING refers to harassing or threatening behavior that an individual engages in repeatedly towards another person. This involves willful course of conduct involving repeated or continuing harassment of another individual that actually causes the victim to feel terrorized, frightened, intimidated, threatened, harassed or molested and that would cause a reasonable person to feel so. This is on line harassment, with physical danger of high probability. Users are vulnerable to being targeted as cyberstalking victims in three areas :

1) Internet relay chat.

2) Message boards and news groups.

3) E mail boxes.

The remedy of injunction is available as per Civil Procedure Code, 1908.

What to do:

- 1) If you are receiving unwanted contact, make clear to that person that you would like him not to contact you again.
- 2) Save all communications for evidence. Do not edit or alter the same.
- 3) The messages from a particular e mail address may be blocked, through a software.
- 4) If harassment continues even after your instructions to that person, contact the internet service provider, who will stop the abuse.
- 5) Contact the local police and inform them fully.

#### INFORMATION TECHNOLOGY ACT AND CONTRACTS:

Every e-commerce transaction, like any other commercial transaction, is in essence a contractual relationship between the transacting parties. The e-commerce transactions are of distinct nature, on account of which, certain operational and technical aspects of contract formation are covered by Cyber Law. The Contract Act, 1872 provides for elements of a CONTRACT.

Essential elements of a Contract:

- 1) Proposal and acceptance.
- 2) Legal object.
- 3) Free consent.
- 4) Consideration.
- 5) Capacities of the parties.
- 6) Legal relationships.
- 7) Enforceable by law.

By virtue of Sec. 1(4), the provisions of Information Technology Act, 2000 are not applicable to the following transactions.

- 1) A negotiable instrument.
- 2) A Power of Attorney.
- 3) A Trust.

4) A Will.

5) Any contract for sale or conveyance of an immovable property.

6) Any class of documents and transactions notified by the Central Government.

Sec. 12 & 13 of The Information Technology Act, 2000 deals with the rules of contract formation. Proposal and acceptance through electronic mode, through internet etc. are valid modes of forming a contract. In the internet era, the click wrap and shrink wrap contracts are well known and have got due recognition by Courts.

Internet is a virtual media as per new technology. A person may be anywhere in the world. Site of business may be having confusions as to where the place of formation of contract, which is crucial when contractual disputes take place. With reference to these contracts, the crucial questions which arise are :

- 1) At what point of time is a contract formed in the cyber world?
- 2) Where does e-contract formation take place?
- 3) Is it that an e-contract is formed merely by offer and acceptance by dispatch of e-records.

Answer to these questions have wide implications on:

- 1) Creating a contractual relationship.
- 2) Law of the land that govern the transaction.
- 3) Jurisdiction.
- 4) Limitation period.

The Supreme Court judgement is a landmark judgement regarding formation and jurisdiction of a contract in case of Bhagwandas Goverdhandas Kedia V/s Girdharilal Purshottamdas and Co. AIR 1966 SC 543. In this digital era, the rule is where the internet site is registered, is the residence of the party, with reference to the jurisdiction applicable to the contract formed.

#### Conclusion

Every person, dealing with e-business transactions, be it an IT student or a business executive, is concerned with the civil and criminal provisions of electronic transactions. Internet is a breakthrough discovery which has changed the world, and particularly the business world on a global basis. The relevant laws are (1) The Information Technology Act, 2000 (as amended by Information

Technology (Amendment) Act, 2008 (2) Indian Contract Act, 1872 (3) Indian Penal Code, 1972 and (4) Sale of Goods Act, 1930.

### References

- 1) Indian Contract Act, 1872.
- 2) Information Technology Act, 2000.

3) Cyber Law Simplified. By: Vivek Sood. (Mcgraw Hill, New Delhi).

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