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CONTENTS

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

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iii

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INTRODUCTION

REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESIS (ES)

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

LIMITATIONS

SCOPE FOR FURTHER RESEARCH

REFERENCES

APPENDIX/ANNEXURE

The manuscript should preferably be in **_2000_** to **_5000 WORDS_**, But the limits can vary depending on the nature of the manuscript.

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-   Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.

-   Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

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-   Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

UNPUBLISHED DISSERTATIONS

-   Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES

-   Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

WEBSITES

-   Garg, Bhavet (2011): Towards a New Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

A STUDY ON THE GROUP LEVEL WORKPLACE SPIRITUALITY OF THE COLLEGE TEACHERS WITH SPECIAL REFERENCE TO ENGINEERING COLLEGES IN NAMAKKAL DISTRICT

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ABSTRACT
The emerging paradigm called 'Workplace Spirituality' is interpreted by many in many ways. The recent researches on 'Workplace Spirituality' reveal that there is a common set of theme that most of the sources agree upon. Most of the researchers in this field use reference from "The Handbook of workplace Spirituality and Organizational Performance" by Giacalone and Jurwierokz (2003). Ashmos and Duchon (2000) describe workplace Spirituality as involving three levels, individual, work-unit and organization-wide. The work-unit dimension (group level) entails how much employees have a sense of connection and community with their management, principal, head of the department, colleagues and students; as well as assessing the extent to which they are caring and encouraging. This research is aimed at finding out the group level workplace spirituality of the college teachers by finding out the interpersonal relationship. The teachers who have good interpersonal relationship would be more productive in their jobs and would have good individual and organizational performance. This study is useful for the Management, teachers and researchers for their professional working. It is a descriptive type of research. The sample size was 100. The questionnaire was prepared for measuring the job satisfaction at Engineering College level. Data was analyzed by using Weighted Average, Pearson Correlation Analysis, Regression Analysis and Chi-Square Test.

KEYWORDS
workplace, spirituality, teachers, interpersonal relationship, engineering college.

INTRODUCTION
Engineering colleges of any country acts as a backbone for that country as it provides skilled human resource. Higher education sector, especially the engineering colleges today are facing global challenges from a dynamic environment characterized by rapid technological change. Engineering colleges are in need of producing skilled and corporate ready graduates. It is the need of the hour for the management of these engineering colleges to focus more on developing the performance of the teaching staff. This is made possible by creating an environment that inculcates good interpersonal relationship.

Interpersonal relationship of teaching staff in college includes the relationship with the management, Principal, Head of the department, colleagues and the students. The quality of the relationship is essential for the healthy developments of teachers and students alike. We know for example that teacher learning thrives when principals facilitate accommodating and safe organization culture. Productive environment is characterized by supportive and warm interactions throughout the college. Positive interpersonal relationships have been proposed as a buffer against stress and risk, instrumental help for tasks, emotional support in daily life, companionship in shared activities and a basis for social and emotional development. Therefore, positive interpersonal relationship leads to better group level workplace spirituality. The researcher believed that the employees who have good interpersonal relationship with the management, the principal, the head of the department, the colleagues and the students would have good organizational behavior which is the indicator of group level workplace spirituality.

OBJECTIVES
PRIMARY OBJECTIVE
1.   To find out the group level workplace spirituality of the college teachers with special reference to Engineering Colleges in Namakkal District.
SECONDARY OBJECTIVES
1.   To find out the interpersonal relationship of the college teachers with the management.
2.   To find out the interpersonal relationship of the college teachers with the principal.
3.   To find out the interpersonal relationship of the college teachers with the head of the department.
4.   To find out the interpersonal relationship of the college teachers with their colleagues.
5.   To find out the interpersonal relationship of the college teachers with their students.

RESEARCH METHODOLOGY
In the present study, extensive use of both primary and secondary data was made systematically. For collecting primary data, field survey technique was used in the study area i.e in Namakkal District. First-hand information pertaining to the respondents' socio-economic background, general details related to the job, factors contributing to the interpersonal relationship of the teaching staff with the management, principal, head of the department, colleagues and the students. The primary data was collected from the engineering college teachers, using stratified random sampling method. The survey was conducted with 100 respondents from Namakkal district.
SOURCES OF DATA COLLECTION
Primary Data: The primary data was collected with the help of a structured questionnaire which was administered for this purpose. The questionnaire was prepared after pre-testing with a pilot survey through preliminary interviews with about 20 respondents, and was further critically analysed. The finally redrafted questionnaire was administered among the engineering college teachers.
Secondary Data: The secondary data was collected from various published and unpublished research reports, text books, magazines, journals and dailies, internet web resources, other published and unpublished sources of information.
ANALYTICAL FRAMEWORK
The data collected were organized as simple tables and further analysed with the help of appropriate statistical tools such as – Percentage Analysis, Weighted Average Method, Correlation & Regression Analysis, Chi-square Test, etc., for logical interpretation of the data collected.
LIMITATIONS OF THE STUDY
➢   Since the research was based only on the Namakkal District, the same results may not be generalized over the whole universe.

- As the topic is very vast and so does its constraints that make the report tough one to cover all area.
- Due to time constraints and busy schedules of the teaching staff it was difficult to interact with them completely.
- Collection of data from the respondents could be done only when they are in their workplace.
- Many respondents do not like to give information relating to interpersonal relationship.

DATA ANALYSIS AND INTERPRETATION

TABLE 1: FREQUENCY AND % REGARDING THE PROFILE OF RESPONDENTS

Demographic variables		Frequency	Percentage
Gender	Male	**54**	**54**
	Female	46	46
Age	Upto 25 Years	7	7
	25 – 35 years	**39**	**39**
	35 – 45 years	28	28
	45 – 55 years	18	18
	Above 55years	8	8
Religion	Hindu	**74**	**74**
	Muslim	12	12
	Christian	14	14
Educational Qualification	UG	3	3
	PG	**68**	**68**
	M.Phil	10	10
	Ph.D	19	19
Marital Status	Single	35	35
	Married	**65**	**65**
Designation	Teaching Assistant	3	3
	Assistant Professor	**64**	**64**
	Associate Professor	23	23
	Professor	10	10
Income Level	Upto Rs. 15,000	15	15
	Rs. 15,000 – Rs. 30,000	**51**	**51**
	Rs. 30,000 – Rs. 45,000	25	25
	Above Rs. 45,000	9	9
Teaching Experience in yrs	Up to 5	6	6
	6 - 10	**48**	**48**
	11 – 15	32	32
	Above 15	14	14
Total		100	100

Source: Primary data

Inference: The survey was conducted from Hundred the respondents out of which 54% were Male and only 46% were female. Most of the respondents' age falls between 25 and 35 years (39%). 65% of the respondents were married and 35% of them were single. Most of the respondents (74%) belong to Hindu religion. Most of the respondents' educational qualification is Post Graduate degree (68%). 64% of the respondents' designation is Assistant Professor. 51% of the respondents' income level ranges from Rs. 15,000 to Rs. 30,000 and 48% of the respondents have the teaching experience 6 to 10 years.

TABLE 2: LEVEL OF AGREEMENT WITH THE STATEMENT THAT CONCERNS WITH THE MANAGEMENT

S. No.	Attributes	Weighted Average
1	Encourage progressive learning of the teaching staff	22.70
2	Utilize the potential of the staff members	**29.56**
3	Facilitate the resources required for effective teaching	24.56
4	Preserve and improve the morale of the staff members	19.67
5	Treat all the staff members equally	14.54
6	Allow the teaching staff to participate in decision making	27.9
7	Transparent in providing the required information	17.90
8	Create a good organizational climate	24.98
9	Use proper grievance handling machinery	24.33
10	Take steps to retain the staff members	22.85

Source: Primary data

Inference: From the Table 2, it is inferred that among the level of agreement with the statement that concerns with the Management, utilize the potential of the staff members gets greater weighted average (29.56) and treat all the staff members equally gets the lowest weighted average (14.54).

TABLE 3: LEVEL OF AGREEMENT WITH THE STATEMENT THAT CONCERNS WITH THE PRINCIPAL AND THE HEAD OF THE DEPARTMENT

S.No.	Attributes	Weighted Average (Principal)	Weighted Average (HoD)
1	Is very good at college/department administration	26.45	25.35
2	Inspire and motivate the staff members	23.45	26.76
3	Provide creative and innovative ideas	19.23	21.45
4	Delegate the duties fairly	25.67	27.45
5	Handle the difficult students effectively	29.45	**30.65**
6	Conduct the staff meeting periodically	**31.20**	28.56
7	Encourage faculty interaction outside the world (college)	25.67	18.58
8	Encourage the faculty members to publish journals and books	27.47	27.34
9	Consult the staff members before taking any decision related to the	23.46	25.64
10	Understand and help the personal difficulties of the staff members	26.25	29.67

Inference: From the Table 3, it is inferred that among the level of agreement with the statement that concerns with the Principal, Conduct the staff meeting periodically gets greater weighted average (31.20) and Provide creative and innovative ideas gets the lowest weighted average (19.23) and that concerns with the Head of the Department, Handle the difficult students effectively gets greater weighted average (30.65) and Encourage faculty interaction outside the world (college) gets the lowest weighted average (18.58).

TABLE 4: LEVEL OF AGREEMENT WITH THE STATEMENT THAT CONCERNS WITH THE INTERPERSONAL RELATIONSHIP WITH THE COLLEAGUES

S. No.	Attributes	Weighted Average
1	My colleagues trust each other	20.32
2	I have no problem in communicating with my colleagues	**29.89**
3	My colleagues help me to manage conflict	24.54
4	The staff members of our college work as a team to ensure students' development	24.54
5	The feedback from my colleagues helps me to develop my teaching skill	29.65
6	I have no problem in giving feedback to my colleagues	28.78
7	My colleagues support me in my professional difficulties	27.89
8	My colleagues support me in my personal difficulties	29.76

Source: Primary data

Inference: From Table 4, it is inferred that among the level of agreement with the statement that concerns with the interpersonal relationship with the Colleagues, most of the respondents agree that they have no problem in communicating with my colleagues (WA = 29.89).

TABLE 5: LEVEL OF AGREEMENT WITH THE STATEMENTS THAT CONCERNS WITH THE INTERPERSONAL RELATIONSHIP WITH THE STUDENTS

S. No	Attributes	Weighted Average
1	Have good attitude towards academic work	28.58
2	Listen and understand my teaching	**32.01**
3	Prepare well for the university examinations	31.67
4	Does not hesitate to get support and guidance from the staff members	30.98
5	Have respect for staff members	29.67
6	Feel free to interact with the staff members	30.98

Source: Primary data

Inference: From Table 5, it is inferred that among the level of agreement with the statements that concerns with the interpersonal relationship with the Students, most of the respondents agree with the opinion that Listen and understand the teaching (WA = 32.01).

TABLE 6: PEARSON CORRELATION BETWEEN THE AGE AND THE ATTITUDE OF NOT HESITATING TO GET SUPPORT AND GUIDANCE FROM THE STAFF MEMBERS

Factor	Pearson Correlation Value	Remarks
Age / Does not hesitate to get support and guidance from the staff members	- 0.0114	Inverse Relationship

Inference: Hence the calculated Pearson Correlation is Negative (-0.0114) there is no evidence that when the age of the respondents increase the attitude of the students to get support and guidance from the staff members increases.

Chi – Square Test:

Testing the dependency of the Marital Status and the staff members work as a team to ensure students' development

H_0: There is no significant relationship between the Marital Status and the staff members work as a team to ensure students' development

H_a: There is significant relationship between the Marital Status and the staff members work as a team to ensure students' development

TABLE 7: MARITAL STATUS * THE STAFF MEMBERS WORK AS A TEAM TO ENSURE STUDENTS' DEVELOPMENT

Factor	Calculated Chi-square value	DF	'p' Value	Remarks
Gender	12.4	2	< 0.001	Highly Significant

Inference: It is noted from the above table that the 'p' value is less than 0.01 and hence the result is significant at 1 %. Hence the hypothesis 'Gender of the respondents and the staff members work as a team to ensure students' development are not associated' does not hold well. From the analysis it is concluded that there is highly significant association was found between the Gender of the respondents and the staff members work as a team to ensure students' development.

FINDINGS

- 54% of the respondents are male and 46% are female.
- Most of the respondents are in the age group of 25-35 years (39%).
- Most of the respondents (74%) belong to Hindu religion.
- Most of the respondents' educational qualification is Post Graduate degree (68%).
- 65% of the respondents are married.
- Most of the respondents' designation is Assistant Professor (64%).
- Most of the respondent's income lies between Rs. 15,000 and Rs. 30,000.
- 48% of the respondents teaching experience lies between 6 and 10 years.
- Among the level of agreement with the statement that concerns with the Management, utilize the potential of the staff members gets greater weighted average (29.56) and treat all the staff members equally gets the lowest weighted average (14.54).

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➢ Among the level of agreement with the statement that concerns with the Principal, Conduct the staff meeting periodically gets greater weighted average (31.20) and Provide creative and innovative ideas gets the lowest weighted average (19.23).

➢ Among the level of agreement with the statement that concerns with the Head of the Department, Handle the difficult students effectively gets greater weighted average (30.65) and Encourage faculty interaction outside the world (college) gets the lowest weighted average (18.58).

➢ Among the level of agreement with the statement that concerns with the interpersonal relationship with the Colleagues, most of the respondents agree that they have no problem in communicating with their colleagues (WA = 29.89).

➢ Among the level of agreement with the statements that concerns with the interpersonal relationship with the Students, most of the respondents agree with the opinion that Listen and understand the teaching (WA = 32.01).

➢ From the Pearson Correlation it is inferred that there is no evidence when the age of the respondents increase the attitude of the students to get support and guidance from the staff members increases.

➢ From Chi-square analysis it is concluded that highly significant association was found between the Gender of the respondents and the staff members work as a team to ensure students' development.

SUGGESTIONS

An individual spends around seven to eight hours at his workplace and it is practically not possible for him to work all alone. One needs people to talk to and discuss various issues at the workplace. The individual has to be motivated in teams in order to increase the productivity. The Management, Principal and the Head of the Department should frequently conduct formal and informal meetings with the teaching staff and the students for inculcating a good interpersonal relationship.

CONCLUSION

An association between individuals working together in the same organization is called interpersonal relationship. Research says productivity increases manifold when individuals work in groups as compared to an individual working alone. Employees must get along well for a healthy ambience at the workplace. The teaching staff must communicate with each other effectively for a healthy relationship. From the research, it is found that the interpersonal relationship of the teaching staff in the engineering colleges in Namakkal district is moderate and the management of the engineering colleges should take measures to improve the interpersonal relationship which would improve the group level workplace spirituality of the teaching staff.

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THE EFFECT OF INVESTOR DEMOGRAPHICS ON CONFIRMATION BIAS OF INDIVIDUAL TRADING DECISIONS AT THE NAIROBI SECURITIES EXCHANGE

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ABSTRACT

The main objective of this study was to establish the effect of investor demographics on confirmation bias on individual trading decisions at the Nairobi Securities Exchange. The target population of this study was 1.67 million investors with a sample size of 60 respondents and relied on primary data sources. To conduct the study, questionnaires were issued to investors of Nairobi Securities Exchange. There was a 65% response rate that is a total of 39 respondents. Data collected for this study was analyzed using descriptive statistics and regression analysis. Regression analysis was used to analyze relationship between investor demographics and confirmation bias. The investor demographics studied were gender, age, income, experience and level of education. The results indicated that investors are affected by confirmation bias in their trading decisions. There was also no significant relationship between confirmation bias and investor demographics of the study. The study found out that there exists a negative relationship between the investor demographics and confirmation bias with R (0.346). The co-efficient of the variables in the model was - 0.076 for gender, -0.535 for education, - 1.078 for age, -0.528 for income and only experience had a positive relationship with a value of 0.070. The study recommends that investors should get knowledge of confirmation bias and learn how to overcome it. Finally, the study suggests that research on biases can be done in various security markets across the region.

KEYWORDS

confirmation bias, investor demographics, trading decisions.

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General G11

1.0 INTRODUCTION

Investors are affected by many biases as they make decisions on what to trade or what not to trade in. The confirmation bias is exhibited when investors have a biased search for information, they interpret information in a biased way or still they try to remember information that affirms to their stand point and shrug off the one that is against what they believe is true. In so doing investors are more likely not to accept new information which might even be beneficial to their investment decisions and thereby end up losing out. Investors that are not affected by confirmation bias are more open minded in their trading, they accept information even though it's against what they believe is true, change their way of viewing the trade environment and eventually are bound to make more gains in their trading.

Confirmation bias is the tendency to favor information that confirms one's beliefs or hypotheses People display this bias when they gather or remember information selectively, or when they interpret it in a biased way. The effect is stronger for emotionally charged issues and for deeply entrenched beliefs. People also tend to interpret ambiguous evidence as supporting their existing position. Biases at the Nairobi Securities Exchange show the presence of investor irrationality. Investors trade too much (over trading) on stocks that perform; this over trading is a result of over confidence and sensation seeking. Individual investors often extrapolate recent good stock or fund performance even when it shows little to no persistence; this shows a level of bias in the trading. Also as a result of availability and familiarity of companies, investors trade in securities from companies that are local, thus showing the home bias, familiarity and even availability bias.

Investment decisions are made by investors and investment managers. Investors commonly perform investment analysis by making use of fundamental analysis, technical analysis and judgment. Investment decisions are often supported by decision tools. It is assumed that information structure and the factors in the market systematically influence individuals' investment decisions as well as market outcomes (Ritter, 2003). Investor market behaviour derives from psychological principles of decision making to explain why people buy or sell stocks. These factors focus on how investors interpret and act on information to make investment decisions. No matter how much an investor is well informed, has done research, studied deeply about the stock before investing, he also behaves irrationally with the fear of loss in the future. This different behaviour in the individual investors is caused by various factors which compromise the investor rationality. An individual investor is one who purchases generally small amounts of securities for his or her own account.

2.0 LITERATURE REVIEW

2.1 OVERVIEW OF NAIROBI SECURITIES EXCHANGE

The Nairobi Securities Exchange is the principal securities exchange in Kenya. It began in 1954 as an overseas stock exchange while Kenya was still a British Colony with permission of the London Stock Exchange. The NSE is a member of Africa Stock Association. The Nairobi Securities Exchange is self-regulating organization for listed instruments (Muga, 1974). The NSE use two indices; the NSE 20-Share Index which has been in use since 1964 and measures the performance of 20 blue chip companies with strong fundamentals and which have consistently returned positive financial results. In 2008, the Nairobi Securities Exchange All Share Index (NASI) was introduced as an alternative index. The index incorporates all traded shares of the day. Its attention is therefore on the overall market capitalization (NSE, 2010)

At the NSE, security prices move in excess of the fundamental market expectations. The most recent being the IPO where the Safaricom shares were oversubscribed by almost twice and some investors went to the extent of taking loans to purchase the shares which resulted to losses as the share price did not increase as expected. This is a case of herding in that the investors bought the shares because everybody did. This is also witnessed during the corporate earnings announcement. When the performance of the company is good the share price goes up for a short while then they fall in prices. This is attributed to disposition effect where investors rush to sell the stock when the prices are up in the fear that it may go down (Shikuku, 2014).

2.2 EFFECT OF INVESTOR DEMOGRAPHICS ON CONFIRMATION BIAS OF INDIVIDUAL TRADING DECISIONS

Rabin and Schrag (1999) Psychological research indicates that people (despite their gender, age, income, religion, race, and geographical location) have a cognitive bias that leads them to misinterpret new information as supporting previously held hypotheses. They showed in a simple model that such confirmatory bias induces overconfidence: given any probabilistic assessment by an agent that one of two hypotheses is true, the appropriate beliefs would deem it less likely to be true. Indeed, the hypothesis that the agent believes in may be more likely to be wrong than right. The study also showed that the agent may come to believe with near certainty in a false hypothesis despite receiving an infinite amount of information.

Kleinman and Knobloch-Westerwick (2012) tested the hypotheses on confirmation bias and information utility driving selective exposure prior to an election and confirmed that information utility can override a confirmation bias and motivate exposure if a government change is likely and the favored party is likely to lose the election. Klayman and Ha (1987) presented an approach that disputed the view of humans as hypothesis confirmers; they proposed that many phenomena of human hypothesis testing can be understood in terms of a general positive strategy. According to this strategy you test a hypothesis by examining instances in which the property or event is expected to occur (to see if it does occur), or by examining instances in which it is known to have occurred (to see if the hypothesized

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5

conditions prevail). The reverse of the positive test strategy is the negative test strategy; this is when the hypothesis is falsified. Negative test strategy can also be used to test the confirmation bias.

2.3 CONFIRMATION BIAS

According to Nickerson (1998) Confirmation bias implies the seeking or interpreting of evidence in ways that are partial to existing beliefs, expectations or a hypothesis at hand. It connotes a less explicit, less consciously one-sided case building process. It refers usually to unwittingly selectivity in the acquisition and use of evidence. The line between deliberate selectivity in the use of evidence and unwitting molding of facts to fit hypotheses or beliefs is a difficult one to draw in practice, but the distinction is more meaningful conceptually and confirmation bias has more to do with the latter than the former.

An investor will exhibit confirmation bias if they have the tendency to selectively search for and consider information that confirms one's beliefs. They would trade in stocks that endorse their beliefs, thus repeating past trading patterns. When an investor has a strong, emotional belief about something, say company X, they see everything that confirms it, and their mind skips over what contradicts it.

2.4 FACTORS AFFECTING DEMOGRAPHICS IN INDIVIDUAL TRADING

Amount of investment (wealth) the total resources owned by the investor is a demographic that may influence trading of an investor. The increase in wealth raises the quantity demand on an asset. Also the disposable income will determine how investors spend as more income might lead to careless expenditure. More income would translate to more trading at the Stock Market.

Education also is expected to play a role in the investor decision making since more educated investors are expected to employ decision making tools such as Technical Analysis when trading as compared to the less educated investors. On Gender, women are expected to trade more than men and (Onsomu, 2014) are affected more by Confirmation Bias than men. On Age younger traders are expected to have an appetite for risk than older traders. Experienced investors tend to be keener on what they invest in, as they have a firsthand experience on trading than those that are starting out.

3.0 IMPORTANCE OF STUDY

Understanding behavioral factors that underlie individual decision making will help investment managers to set better investment outcome and achieve a better advisory relationship with their clients. The study will assist existing and potential investors to make investment decisions soberly now that they would know other factors influencing their behavior. The study will also assist the practitioners and government agencies to develop programs that will rectify any distortions or anomalies that are in the bourse and which investors encounter while making investment decisions. This will be through policy formulation and regulation by the Capital Markets Authority and the Nairobi Securities Exchange.

4.0 STATEMENT OF THE PROBLEM

Investors are affected by many biases as they make decisions on what to trade or what not to trade in. The confirmation bias is exhibited when investors have a biased search for information, they interpret information in a biased way or still they try to remember information that affirms to their stand point and shrug off the one that is against what they believe is true. In so doing investors are more likely not to accept new information which might even be beneficial to their investment decisions and thereby end up losing out. Investors that are not affected by confirmation bias are more open minded in their trading, they accept information even though it's against what they believe is true, change their way of viewing the trade environment and eventually are bound to make more gains in their trading. Biases at the NSE show the presence of investor irrationality. Investors trade too much (over trading) on stocks that perform; this over trading is a result of over confidence and sensation seeking. Individual investors often extrapolate recent good stock or fund performance even when it shows little to no persistence; this shows a level of bias in the trading. Also as a result of availability and familiarity of companies, investors trade in securities from companies that are local, thus showing the home bias, familiarity and even availability bias. Most studies set out to establish the existence of irrationality at the NSE and the determination of the behavioral factors affecting the investment decisions of investors at the NSE. From review of studies no study has been done to directly show the effect of investor demographics on confirmation bias on individual investor trading decisions.

5.0 OBJECTIVES

Studies found out that there are five behavioral factors affecting the investment decisions of individual investors at the Nairobi Securities Exchange: Herding, Market Prospect, Overconfidence, gambler's fallacy, and Anchoring-availability bias. These studies set out to establish the existence of irrationality at the Nairobi Securities Exchange and the determination of the behavioral factors affecting the investment decisions of investors at the Nairobi Securities Exchange. Therefore, the research sought to find out the effect of investor demographics on the relationship between confirmation bias and the individual trading decisions at the Nairobi Securities Exchange.

6.0 HYPOTHESES

Confirmation bias is shown when the investors give more weight to information that affirms what they consider to be true. They gather and remember information that confirms what they think and when they approach new information they interpret it in a biased way. It was therefore necessary to conduct this study to investigate the effect of demographics on investor trading decisions at the Nairobi Securities Exchanges.

7.0 METHODOLOGY

The study utilized a descriptive research design, descriptive studies provide information about the demographics, behavior, attitudes or other characteristics of a particular group. The population of the study comprised all the individual investors at the NSE. In the determination of Sample size, Roscoe (1975) suggests that studies involving two or more variable quantities (multivariate), the sample size should be at least ten times larger than the number of variables being considered. The variables studied were; Confirmation Bias, Age of Investors, Education Level, Experience, Gender and Income Level. Since these variables are six then the sample size was 60.

A sample of 60 individual investors from the population was selected to represent all individual investors in the country. The sample was obtained by presenting 6 questionnaires to 10 identified stock brokerage firms. This sample is appropriate as the variability of retail investors is usually deemed to be low. The systematic sampling technique was used to randomly select 6 respondents from each of the 10 brokerage firms. The study was based on primary data which was collected using questionnaires. A semi-structured questionnaire was prepared consisting of closed ended questions to elicit information from respondents. MS Excel was then be used for data analysis. The data was analyzed using Regression Analysis. Tables were also used in data presentation because of their ability to bring up a relative form to the otherwise abstract nature of results. Means, frequencies and percentages was computed.

8.0 RESULTS AND DISCUSSION

8.1 RELATIONSHIP BETWEEN CONFIRMATION BIAS AND DEMOGRAPHICS

A composite score for confirmation bias was computed by recoding the various factors under; investors buying stocks for the first time from a company, when investors were selling a performing stock after negative comments from analysts and when making an investment decision at the stock market after collecting information. The following tables show the findings.

TABLE 8.1: CO-EFFICIENTS OF THE MODEL

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
Constant	34.023	5.612		6.063	.000		
Gender (X_1)	-0.076	1.298	-.011	-.059	.954	.720	1.389
Education(X_2)	-.535	.965	-.186	-.554	.583	.236	4.236
Age(X_3)	-1.078	.682	-.304	-1.582	.123	.721	1.387
Income(X_4)	-0.528	.922	-.208	-.572	.571	.201	4.971
Experience (X_5)	.070	.521	.026	.134	.894	.699	1.430

From the Table 8.1, the Regression Model was as follows:

Confirmation Bias = $34.023 - 0.076X_1 - 0.535X_2 - 1.078X_3 - 0.528X_4 + 0.070X_5$

From this model it can be deduced that gender, education, age and income relate negatively with confirmation bias except experience.

Gender affected confirmation bias negatively, an increase in one unit leads to a decrease in confirmation bias by 0.076 units. There exists a negative relationship between confirmation bias and education implying that the more an investor gets educated the less they will exhibit confirmation bias, as an increase in one unit of education results in a decrease of confirmation bias by 0.535 units. Age affects confirmation bias negatively implying that the older an investor gets the less confirmation bias they will exhibit, as an increase in one unit of years results in a decrease of confirmation bias by 1.078. Income also affects confirmation bias negatively and the more income an investor has the less confirmation bias they would exhibit an increase in one unit of income leads to a decrease in confirmation bias by 0.528. Lastly there exists a positive relationship between confirmation bias and experience implying that increase in one year of experience will result in an increase in 0.070 units of confirmation bias.

8.2 TESTS OF SIGNIFICANCE

TABLE 8.2: MODEL SUMMARY FOR CONFIRMATION BIAS AND INVESTOR DEMOGRAPHICS

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.346	.120	-.013	3.34641	1.802

The value of R (0.346) indicates a positive but weak relationship between confirmation bias and investor demographics. Table indicates that predictor variables only influenced 12 % of variations in confirmation bias as indicated by the R square statistic 0.120. The R-square value can be interpreted to mean that 12% of the variability in confirmation bias can be explained by the investor demographics. Overall, this means that investor demographics do not explain very much of the confirmation bias, given that 88% of the variability is unaccounted for. In other words, the variable confirmation is like better explained by the combination of different unobserved variables.

From above Table testing the significance of the coefficients, reveals all coefficients of the variables are insignificant since the values 0.954, 0.583, 0.123, 0.571, 0.894 are all greater than 0.05 representing Gender, Education, Age, Income and Experience respectively.

8.3 MULTICOLLINEARITY AND AUTOCORRELATION

Multicollinearity of predictor variables was tested using variance inflation factors (VIFs). Multicollinearity is the undesirable situation where the correlations among the independent variables are strong. It Exists in the model if VIF ≥ 10. The VIF for Gender was 1.389, VIF for education is 4.236, VIF for age was 1.387, VIF for Income was 4.971 and VIF for experience was 1.430. This meant that variance inflation factors for all predictor variables were less than 10 hence Multicollinearity was not in existence.

Autocorrelation was tested using Durbin-Watson value. From table 8.2, the value of Durbin- Watson was 1.802 hence there was no existence of autocorrelation since the value was far below the threshold for autocorrelation of 7.

9.0 FINDINGS

9.1 DEMOGRAPHICS AND CONFIRMATION BIAS

The study found out that females would wait for more information if they receive information that is opposite to what they think is true while male investors would reject any information that is contrary to what they think is true. Therefore, male investors show higher levels of confirmation bias than female investors. Older investors exhibited confirmation bias in decision making than younger investors. Investors with more than three years' investment experience were more infected by confirmation bias than investors with less than three years' experience. Investors with less income showed more confirmation bias than those with more income. Investors who were graduates were undecided when asked whether they would analyze the company first then buy the stock, an instance where they are buying stock for the first time.

The study found that in the model, investor demographics (gender, education, age, income and experience) influenced 12% of variations in investor confirmation bias as depicted by the R square statistic of 0.120 (refer to table 8.2). The bulk of the variation (in confirmation bias) being accounted for by residuals/ other exogenous factors (88.0%). The study, however, found investor demographics to be insignificantly related to confirmation bias.

Gender had a negative relationship with confirmation bias with a value of -0.076 from the model. Education also had a negative relationship with confirmation bias with a value of - 0.535 implying that the more an investor is educated the less confirmation bias they would show. Also age had a negative relationship with confirmation bias with a value of -1.078, showing that with age investors tend to exhibit less confirmation bias, income related negatively with confirmation bias with a value of -0.528. Experience related positively with confirmation bias with a value of 0.070

10.0 RECOMMENDATIONS

From the findings in the study, confirmation bias influences the individual investor trading decisions. Investor advisors should help the investors in this regard and they should organize different training programs to minimize this bias. Investor advisors should also consider investment biases and personality traits as important factors in designing investment programs so that the desired investment objectives can be achieved.

The study recommends that investors should be aware of the existence of the confirmation bias in trading decisions and that it should be provided for in the decision making process.

11.0 CONCLUSIONS

The study found out that, investors at the NSE exhibit confirmation bias in their individual trading decisions. Since they are affected by confirmation bias in their decision making despite their diversity in demographics.

The study found out that there is a relationship between confirmation bias and investor demographics. This relationship was also found to be positive, weak and insignificant.

12.0 LIMITATIONS

The availability of the required data was a challenge since most respondents were reluctant to divulge sensitive information especially on the average monthly income. The study concentrated on the investors who are based in Mombasa County. This could have limited the study since it was confined to a small geographical area compared to the whole country.

13.0 SCOPE FOR FURTHER RESEARCH

Further research can be done by having a larger sample size. This would increase the coverage to more respondents. The study can also be replicated in other countries in Africa, especially in the East African region, Tanzania's Dar es salaam Stock Exchange, Uganda Securities Exchange.

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ASSESSING THE MODERATING EFFECT OF CEO VALUES ON CORPORATE CULTURE AND PERFORMANCE LINK: THE CASE OF COMMERCIAL STATE CORPORATIONS IN KENYA

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ABSTRACT

In today's increasing competitive conditions, attaining desired organizational performance level attracts both academician's and practitioners' interest much more. The factors influencing organizational performance are examined with highly increasing importance. Considering corporate culture as one of the factors, the role of corporate culture on organizational performance is questioned. The individual effect of the organizational leaders on the performance strategies is viewed in terms of their values. Besides, the values of self-direction, stimulation, power that leaders have are researched. The purpose of this study was to investigate the moderating effect of CEO values on the relationship between corporate culture and organisational performance of commercial state corporations in Kenya. The study adopted descriptive and explanatory research designs with a statistical sample of 103 employees responsible for key result areas in 36 commercial state corporations in Kenya. Data was collected using a structured questionnaire as well as various reports. Corporate culture was measured using culture traits of Denison's model while organizational performance was measured through Fisher's measures with some modifications. The CEO values (moderating variable) were measured using scale of personal values in the Social Value Survey (SVS) developed by Schwartz. Data was analyzed using descriptive and inferential statistics with the aid of Statistical package for social sciences (SPSS) version 20 for descriptive statistics, factor analysis, hypotheses testing and regression analysis. Results of the study show a positive significant role of corporate culture in performance of state corporations ($R_2 = 0.951$). The top manager's values (self-direction and stimulation) play a moderator role on this relationship. The study recommends that state corporations embrace positive corporate culture that promotes entrepre-neurship and productivity for them to become competitive and remain successful. To turn around the corporations and achieve high performance CEO values of stimulation and self-direction in Kenyan parastatals should be adopted because they play a very important role in shaping corporate culture thus influencing the performance of state corporations.

KEYWORDS
corporate culture, denison model, CEO values, Social Value Survey (SVS), organizational performance, commercial state corporations.

1.0 INTRODUCTION
Organisations in many industries, such as service, energy, banking, electronics and agriculture have faced increasingly complex and changing environments brought about by deregulation, technological revolution, foreign competition and unpredictable markets. This has not spared state corporations (Liu, Kiley & Ballard, 2009). Besides, the fierce competition of the market economy and globalization trends are forcing businesses to constantly explore new things and boost creativity and adaptability to changes in order to survive and develop (Nguyen, 2015). This requires businesses to build and maintain culture-specific routines to promote the capacity and promote the contribution of everyone to achieve the overall objectives of the organization - which is Corporate Culture (CC). Development of a particular culture for the organisation is key to the success of these organisations (Philip & McKeown, 2004). This consists of fostering attitudes of flexibility, dynamism and responsiveness; seeking structures and cultures that are positive and organic; and developing the human resource to its maximum capacity (Pettinger, 2000). CEO's values were adopted as the moderating variable because previous studies examining top leaders' personal values found that values can function as a cognitive hierarchy (Behr, 1998; Ravlin & Meglino, 1987) and the hierarchy of values has been used to explain the differences in organiza-tional outcomes (Meglino & Ravlin, 1998).

1.1 OBJECTIVE OF THE STUDY
The objective of this study was to investigate the moderating effect of CEO values on the relationship between corporate culture and performance of commercial state corporations in Kenya.

1.2 LIMITATIONS OF THE STUDY

Limitations are those conditions which are beyond the control of a researcher that place restriction on the conclusion of the study and their application to the situations (Best & Kahn, 1993, in: Munene, Namusonge & Iravo, 2013). The first problem confronted in the study was access to information. It is normally difficult to access data in government. They consider it a sensitive issue in releasing information to outsiders.

There were some methodological challenges that hampered the systematic analysis of how values combine to moderate the other variables. The most common measure of Schwartz's (1992) values has been the 57-item Schwartz Value Survey (SVS), which is reasonably difficult to answer as respondents are asked to read the first set of 30 value items and choose the one value item that is most important and rate its importance, then choose the value item most opposed to their values and rate it as -1, or if there is no such value item, to rate the least important value item as 0 or 1. Then, they are asked to rate the remaining value items in the first set and to repeat the process for a second set of 27 value items. This process takes approximately 12 minutes of survey time (Lindeman and Verkasalo, 2005). It also produces an ordinal, ipsatised scores, which limit the type of analyses researchers should use (Lee et al., 2010). The CEO values were therefore measured using two sub-variables (self-direction and stimulation) each with three indicators.

2.0 LITERATURE REVIEW

2.1 CORPORATE CULTURE

Corporate/Organizational culture has been characterized by many authors as something to do with people and the unique quality and style of the organization (Kilman et al; 1985), and the way things are done in the organizations (Deal & Kennedy, 1982). Sometimes, organization culture is also known as 'corporate culture'. 'Corporate Culture' is used to denote the more 'commercialized' meaning of organizational culture (Deal & Kennedy, 1982).

2.2 DIMENSIONS OF CORPORATE CULTURE

Although there are many dimensions of organizational culture, three major ones that have been widely recognized are Hofstede (1980), Schein's (1985) and Denison's (1990). These dimensions of organizational culture are a useful way of comparing the basic properties of organizational culture in general. This study was based on Denison's model.

2.3 THE DENISON MODEL

Developed based on 20 years of studies and research, the Denison Model of organisational culture describes a theory of organisational behaviour that emphasises the strong link between culture and performance. Denison, the creator of this model, has emphasised the following cultural dimensions: involvement, consistency, adaptability and mission. Each of these dimensions includes three other features. As many other contemporary models of management and organisational effectiveness, the Denison circumplex focuses on the contradictions that arise as organisations achieve the internal integration processes and the external adaptation. For example, the market-oriented organisations towards the external environment often have internal integration problems. On the other hand, those that focus on internal integration and on intensive control, have difficulties in adapting to the external environment. Effective organisations are those that are able to resolve these contradictions without resorting to compromises. The model consists of a 60-statement survey instrument that is developed based on four cultural traits and 12 indices (Dharmayanti, 2013).

2.4 ORGANISATIONAL PERFORMANCE

One of the important questions in business has been why some organizations succeed while others fail. Organizational performance is the most important issue for every organization be it profit or non-profit one. It is very important for managers to know which factors influence an organization's performance in order for them to take appropriate steps to initiate them. However, defining, conceptualizing, and measuring performance have not been an easy task. Researchers among themselves have different opinions and definitions of performance, which remains to be a contentious issue among organizational researchers (Barney, 1997). The central issue concerns with the appropriateness of various approaches to the conceptualization and measurement of organizational performance (Venkatraman & Ramanujam, 1986).

According to Javier (2002) performance is equivalent to the famous 3Es (economy, efficiency, and effectiveness) of a certain program or activity. However, according to Daft (2000) organizational performance is the organization's ability to attain its goals by using resources in an efficient and effective manner. Ricardo (2001) defined organizational performance as the ability of the organization to achieve its goals and objectives. Organizational performance has suffered from not only a definition problem, but also from a conceptual problem. Hefferman & Flood (2000) states that as a concept in modern management, organizational performance suffer from problems of conceptual clarity in a number of areas. The first is the area of definition while the second is that of measurement. The term performance is sometimes confused with productivity.

Organizational model of firm performance focus on organizational factors such as human resource policies, organizational culture, and organizational climate and leadership styles. A study by Chien (2004) found that there were five major factors determining organizational performance, namely: leadership styles and environment, organizational culture, job design, model of motive, and Human resource policies. Organizational culture is used in this study.

2.5 RELATIONSHIP BETWEEN CORPORATE CULTURE AND ORGANISATIONAL PERFORMANCE

Corporate culture is pervasive and powerful as it either encourages or hampers change in the organization. For employees, corporate culture is either the glue that binds employees to the organization or the wind that blows them away. Corporate culture is important in enhancing organizations' key capabilities and how they function (Silverthorne, 2004). Culture is also essential in determining how well an employee fits into the organizational context. Deal and Kennedy (1982) argue that a strong corporate culture enables employees understand the goals of the organization, and as they work towards organizational goals, their productivity increases.

2.6 VALUES

Values are defined as enduring goals that serve as guiding principles in people's lives (Rokeach, 1973; Schwartz, 1992). Rokeach (1973) defined value as an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence.

2.7 MODERATING ROLE OF CEO VALUES

The moderating variable is the categorical or metric variable that influences the value and direction of the relationship between dependent and independent variable (Baron & Kenney, 1986). Statistical moderation implies that a moderating variable conditions or alters the independent variable's effect on the dependent variable (Garnett et al., 2005). Instead of being channelled through the mediator, the independent variable's effect takes on a qualitatively different character as a result of the interaction between it and the moderator. As a result, moderators are often characterized as having "when and how" effects, meaning they describe when and how the independent variable affects the dependent variable. Some moderators mitigate or dampen the independent variable's effect, where others amplify or strengthen it.

Individuals with different values tend to emphasize different outcomes and are driven to achieve different goals. The impact of values is pervasive in that they influence the most basic ways in which people perceive their environments (Meglino, 1998). According to Berson (2008), organizational culture represents an active, living, phenomenon by which key members of the organization, such as executives, create shared meaning. As such, CEO values shape the organizational culture as a component affecting the manner of decision making, management style and behaviour models in the organization. Since CEOs are leaders they also have a central role in shaping and controlling organizational culture (Schein, 1992). Cultures have been known to change in the hands of subsequent CEOs (Kerr et al., 2005). Leadership is one of the key driving forces for improving firm performance. CEOs, as the key decision-makers, determine the acquisition, development, and deployment of organizational resources, the conversion of these resources into valuable products and services.

3.0 METHODOLOGY

According to Cooper & Schindler (2006) a research design is the blue print for fulfilling research objectives and answering questions. It is the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them (Chumo, 2011). Selecting a design may be complicated by availability of a large variety of methods, techniques, procedures, protocols and sampling plans. This study was descriptive in nature, as the relationship between

corporate culture and performance was described through the research. Christensen (1997) indicates that the primary characteristic of the descriptive research approach is that it represents an attempt to provide an accurate description or picture of a particular situation or phenomenon. It attempts to identify variables that exist in a given situation and describes the relationship that exists between those variables. This research meets these requirements as the characteristics and constructs of corporate culture and performance are clearly defined and will be analysed using quantitative techniques, and the aim of the research is to determine the nature of the relationship between the two variables.

Explanatory research goes further than merely indicating that relationships exist between variables (Mouton & Marais, 1994). It indicates the direction of the relationships in a causal relationship model. In this research, a particular organisational culture profile is hypothesised to have a role in the performance of the State Corporations. This research can thus also be described as being explanatory in nature.

Thus the study adopted a descriptive survey research with the State Corporations in Kenya as the unit of analysis because the design best serves to answer the questions and the purposes of the study. The survey research is one in which a group of people or items is studied by collecting and analyzing data from only a few people or items considered to be representative of the entire group. In other words, only a part of the population is studied, and findings from this are expected to be generalized to the entire population (Nworgu, 1991).

The hypothesis that were put forth by the researcher was tested through statistical outcomes, and the choice of statistical tests were based upon the level of measurement of the data; the validity of the instrument utilized for measuring the variables of interest; the power of the statistical test selected; and the methodological limitations of the research (Teddie & Tashakkori, 2010 cited in Sang, 2015).

4.0 ANALYSIS OF CEO VALUES (MODERATING VARIABLE)

In this survey, CEO values were operationalised by stimulation and self-direction.

4.1 FACTOR ANALYSIS

Factor analysis was conducted in order to reduce the data to a meaningful and manageable set of factors (Sekaran, 2006) as indicated by the results on Table 4.1.

TABLE 4.1: COMPONENT MATRIX OF CEO VALUES

CEO Values	Component 1
He thinks it is important to do lots of different things in life. He always looks for new things to try.	0.740
He thinks it's important to be interested in things. He likes to be curious and to try to understand all sorts of things.	0.705
It is important to him to be independent. He likes to rely on himself.	0.667
He likes surprises. It is important to him to have an exciting life.	0.639
He likes to take risks. He is always looking for adventures.	0.621
It is important to him to make his own decisions about what he does. He likes to be free to plan and to choose his activities for himself.	0.575
Thinking up new ideas and being creative is important to him. He likes to do things in his own original way.	0.362

Results of factor analysis showed that all the items had factor loadings of 0.4 and above, and as such all items were retained.

4.2 RELIABILITY ANALYSIS

Since no item was removed, cronbach's alpha reliability test results were similar before and after factor analysis. Cronbach's alpha of 0.734 shows acceptable internal consistency (George & Mallery, 2003).

TABLE 4.2: RELIABILITY MEASUREMENT RESULTS FOR CEO VALUES

Variable	Number of Items	Cronbach's Alpha
CEO Values	7	0.734

4.3 CORRELATION BETWEEN CEO VALUES AND ORGANISATIONAL PERFORMANCE

The result of correlation between CEO values and organisational performance is presented in Table 4.3 which shows a positive correlation of 0.126.

TABLE 4.3: CORRELATION BETWEEN CEO VALUES AND ORGANISATIONAL PERFORMANCE

Variables Value	Correlation	Organizational Performance	CEO
Organizational Performance	Pearson Correlation	1	0.126
	Sig. (2-tailed)		0.300
CEO Values	Pearson Correlation	0.126	1
	Sig. (2-tailed)	0.300	

This is further analysed by the scatter plot diagram in Figure 4.1. The result shows that as CEO values increases, organisational performance positively increases. Since the two variables are associated with each other, a hypothesis that postulates a significant relationship between the two variables can be tested by examining the correlation between the two (Sekaran & Bougie, 2010).

FIGURE 4.1: SCATTER PLOT OF CORRELATION BETWEEN CEO VALUES AND ORGANISATIONAL PERFORMANCE
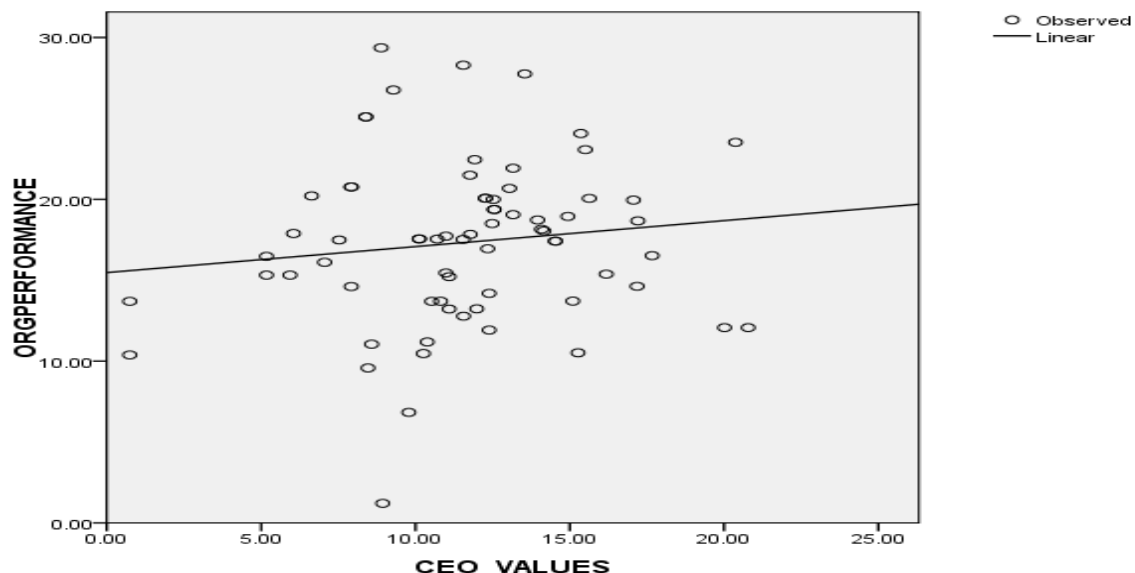
HYPOTHESIS TESTING

The hypothesis of the study was:

H_0: CEO values have no moderating effect on the relationship between corporate culture and performance of commercial state corporations.

Equation 1 was used to represent the variables in the model to test this hypothesis.

$Y = \beta_0 + \beta_i X_i + \beta_i X_i Ẑ + \varepsilon$ ……………………………………………………**Equation 1**

To test the presence of moderation (interaction) Equation 1 was compared with the moderated multiple regression model (MMR) which is represented by Equation 2:-

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 Ẑ + \beta_6 X_1 Ẑ + \beta_7 X_2 Ẑ + \beta_8 X_3 Ẑ + \beta_9 X_4 Ẑ + \varepsilon$….**Equation 2**

Where:-

β_1 is the coefficient relating the independent variable, X, to the outcome, Y, when $Ẑ = 0$,

β_5 is the coefficient relating the moderator variable, Ẑ, to the outcome when $X = 0$,

β_0 the intercept in the equation, and ε is the residual in the equation,

Y = Organisational performance as the dependent variable,

X = Corporate culture (Involvement, Consistency, Adaptability, Mission) as independent variable

Ẑ = CEO values (Stimulation, Self-direction) as Moderator variable

X*Ẑ = the interaction between the predictors (Corporate Culture * CEO values).

Hierarchical multiple regression was used to assess the presence of moderation by CEO values on each of the hypothesized relationship between independent variables (Corporate culture) and the dependent variable (Organisational performance). Accompanying hypotheses were therefore developed.

MODERATING EFFECT OF CEO VALUES IN THE RELATIONSHIP BETWEEN INVOLVEMENT CULTURE AND ORGANISATIONAL PERFORMANCE

Table 4.4 shows the model summary of the hypothesis that CEO values have no moderating effect on the relationship between Involvement culture and performance of commercial state corporations. Table 4.4 shows that for Model 1, $R^2 = 0.943$. This means that 94.3% of the variance in organizational performance is explained by Involvement culture and CEO Values.

TABLE 4.4: VARIATION IN THE MODERATED REGRESSION MODEL FOR INVOLVEMENT CULTURE

Model	R	R Square	Adjusted R Square	Std. Error of the stimate
1	0.97	0.943	0.940	4.4040255

Table 4.5 is the ANOVA which tests the goodness of fit of the overall moderated regression model for Involvement Culture: $Y = \beta_0 + \beta_1 X_1 + \beta_5 Ẑ + \beta_6 X_1 Ẑ + \varepsilon$. The result shows a significant presence of moderating effect.

TABLE 4.5: SIGNIFICANCE OF THE MODERATED REGRESSION MODEL IN PREDICTION OF ORGANIZATIONAL PERFORMANCE

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21494.878	3	7164.959	369.415	0.000
	Residual	1299.495	67	19.395		
	Total	22794.373	70			

Table 4.6 shows the results of coefficients of the regression Equations 1 from Model 1. Model 1 indicates that Involvement Culture was statistically significant ($p=0.000<0.05$; Beta value = 0.877); CEO Values was found to be significant ($p = 0.000<0.05$, Beta value = 0.786) and Involvement Culture * CEO values was found to be significant (($p=0.000<0.05$; Beta value = 0.039). On substituting in equation 1,

$Y = 0.877 X_1 + 0.786 Ẑ + 0.039 X_1 Ẑ$……………………………………………**Equation 3**

TABLE 4.6: MODERATED REGRESSION MODEL COEFFICIENTS FOR INVOLVEMENT CULTURE

Model		Coefficients			
		B	Std. Error	t	Sig.
1	INVOLVEMENT CULTURE	0.877	0.087	10.124	0.000
2	CEO VALUES	0.786	0.172	4.564	0.000
	Involvement Culture * CEO values	0.039	0.010	3.742	0.000

5.2 MODERATING EFFECT OF CEO VALUES IN THE RELATIONSHIP BETWEEN CONSISTENCY CULTURE AND ORGANISATIONAL PERFORMANCE

Table 4.7 shows the model summary of the hypothesis that CEO values have no moderating effect on the relationship between Consistency culture and performance of commercial state corporations. Table 4.7 shows that for Model 1, $R^2 = 0.941$. This means that 94.1% of the variance in organizational performance is explained by Consistency culture and CEO Values.

TABLE 4.7: VARIATION IN THE MODERATED REGRESSION MODEL FOR CONSISTENCY CULTURE

Model	R	R Square Adjusted	R Square	Std. Error of the Estimate
1	0.970	0.941	0.938	4.4896112

Table 4.8 is the ANOVA which tests the goodness of fit of the overall moderated regression model for Consistency Culture: $Y = \beta_0 + \beta_2 X_2 + \beta_5 Ẑ + \beta_6 X_2 Ẑ + \varepsilon$. The result shows a significant presence of moderating effect.

TABLE 4.8: SIGNIFICANCE OF THE MODERATED REGRESSION MODEL IN PREDICTION OF ORGANIZATIONAL PERFORMANCE

Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21443.880	3	7147.960	354.621	0.000
	Residual	1350.493	67	20.157	
	Total	22794.373	70		

Table 4.9 shows the results of coefficients of the regression equations 1 from Model 1. Model 1 indicates that Consistency Culture was statistically significant ($p=0.000<0.05$; Beta value = 0.906); CEO Values was found to be significant ($p = 0.000<0.05$, Beta value = 0.765) and Consistency Culture * CEO values was found to be significant (($p=0.000<0.05$; Beta value = 0.037). On substituting in equation 1,

$Y = 0.906 X_2 + 0.765 Ẑ + 0.037 X_2 Ẑ$……………………………………………**Equation 4**

TABLE 4.9: MODERATED REGRESSION MODEL COEFFICIENTS FOR CONSISTENCY CULTURE

Model		Coefficients			
		B	Std. Error	t	Sig.
1	CONSISTENCY CULTURE	0.906	0.091	9.956	0.000
	CEO VALUES	0.765	0.179	4.277	0.000
	Consistency Culture * CEO values	0.037	0.011	3.316	0.001

5.3 MODERATING EFFECT OF CEO VALUES IN THE RELATIONSHIP BETWEEN ADAPTABILITY CULTURE AND ORGANISATIONAL PERFORMANCE

Table 4.10 shows the model summary of the hypothesis that CEO values have no moderating effect on the relationship between Adaptability culture and performance of commercial state corporations. Table 4.10 shows that for Model 1, R^2 = 0.951. This means that 95.1% of the variance in organizational performance is explained by Adaptability culture and CEO Values.

TABLE 4.10: VARIATION IN THE MODERATED REGRESSION MODEL FOR ADAPTABILITY CULTURE

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.975	0.951	0.949	4.0740366

Table 4.11 is the ANOVA which tests the goodness of fit of the overall moderated regression model for Adaptability Culture: $Y = \beta_0 + \beta_3X_3 + \beta_5\bar{z} + \beta_6X_3\bar{z} + \varepsilon$. The result shows a significant presence of moderating effect.

TABLE 4.11: SIGNIFICANCE OF THE MODERATED REGRESSION MODEL IN PREDICTION OF ORGANIZATIONAL PERFORMANCE

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21682.322	3	7227.441	435.446	0.000
	Residual	1112.051	67	16.598		
	Total	22794.373	70			

Table 4.12 shows the results of coefficients of the regression equations 1 from Model 1. Model 1 indicates that Adaptability Culture was statistically significant (p=0.000<0.05; Beta value = 0.960); CEO Values was found to be significant (p = 0.000<0.05, Beta value = 0.620) and Adaptability*CEO values was found to be significant ((p=0.000<0.05; Beta value = 0.035). On substituting in equation 1,

$Y = 0.960X_3 + 0.620\bar{z} + 0.035 X_3\bar{z}$……………………………………**Equation 5**

TABLE 4.12: MODERATED REGRESSION MODEL COEFFICIENTS FOR ADAPTABILITY CULTURE

Model		Coefficients			
		B	Std. Error	t	Sig.
1	ADAPTABILITY CULTURE	0.960	0.086	11.182	0.000
	CEO VALUES	0.620	0.159	3.908	0.000
	Adaptability Culture * CEO values	0.035	0.010	3.586	0.001

5.4 MODERATING EFFECT OF CEO VALUES IN THE RELATIONSHIP BETWEEN MISSION CULTURE AND ORGANISATIONAL PERFORMANCE

Table 4.13 shows the model summary of the hypothesis that CEO values have no moderating effect on the relationship between Mission culture and performance of commercial state corporations. Table 4.13 shows that for Model 1, R^2 = 0.955. This means that 95.5% of the variance in organizational performance is explained by Mission culture and CEO Values.

TABLE 4.13: VARIATION IN THE MODERATED REGRESSION MODEL FOR MISSION CULTURE

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.977	0.955	0.953	3.9084858

Table 4.14 is the ANOVA which tests the goodness of fit of the overall moderated regression model for Mission Culture: $Y = \beta_0 + \beta_4X_4 + \beta_5\bar{z} + \beta_6X_4\bar{z} + \varepsilon$. The result shows a significant presence of moderating effect.

TABLE 4.14: SIGNIFICANCE OF THE MODERATED REGRESSION MODEL IN PREDICTION OF ORGANIZATIONAL PERFORMANCE

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21770.863	3	7256.954	475.048	0.000
	Residual	1023.510	67	15.276		
	Total	22794.373	70			

Table 4.15 shows the results of coefficients of the regression equations 1 from Model 1. Model 1 indicates that Mission Culture was statistically significant (p=0.000<0.05; Beta value = 0.927); CEO Values was found to be significant (p = 0.000<0.05, Beta value = 0.706) and Mission*CEO values was found to be significant ((p=0.000<0.05; Beta value = 0.037). On substituting in equation 1,

$Y = 0.960X_4 + 0.620\bar{z} + 0.035 X_4\bar{z}$……………………………………**Equation 6**

TABLE 4.15: MODERATED REGRESSION MODEL COEFFICIENTS FOR MISSION CULTURE

Model		Standardized Coefficients			
		B	Std. Error	t	Sig.
1	MISSION CULTURE	0.927	0.077	12.018	0.000
	CEO VALUES	0.706	0.140	5.055	0.000
	Mission Culture * CEO values	0.037	0.009	4.214	0.000

5.0 CONCLUSIONS

This study confirms the work of Denison (1990) and Schwatz (2004) and from the findings it can be concluded that CEO Values were found to moderate the relationship between corporate culture and organizational performance of state corporations in Kenya. This is consistent with empirical literature.

6.0 RECOMMENDATIONS

To turn around the corporations and achieve high performance CEO values of stimulation and self-direction in Kenyan parastatals should be adopted because they play a very important role in shaping corporate culture thus influencing the performance of state corporations. This can be a very critical factor to consider when setting selection criteria for CEOs of these state corporations.

For the parastatals to become competitive and remain successful it is recommended that they need to evolve a culture that promotes entrepreneurship and productivity. This is where the CEO values come in handy. CEOs have to provide leadership to ensure that the parastatals provide a conducive and healthy environment to the employees so that they are able to achieve not only their individual goals but attain organizational objectives as well. In a developing country like Kenya where the economy is struggling to grow, parastatals must be run competitively to generate revenue to the government by being left alone to operate profitably and being put on their toes to meet the challenges of the rapidly changing global business scenarios. This requires visionary leaders to be hired for the parastatals in a competitive manner just like in the private sector with set targets. This calls for a review of recruitment, employment, performance, compensation, training and development policies in these parastatals.

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SCM FRAME WORK FOR COMPETITIVE ADVANTAGE IN RETAIL SECTOR

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ABSTRACT

The study aims at examining the existing supply chain practices and the level of supply chain responsiveness considered by the retail formats. Finally, the study concludes with a proposed model considering supply chain strategies and responsiveness as a building blocks for sustainable retail format (to achieve competitive advantage). The study is based on the data available from secondary sources (review of literature).

KEYWORDS
supply chain management, retail sector.

INTRODUCTION

In this information era, customers are expecting not only products for their money spent, in turn more from the firms. So it becomes mandatory for the firms to consider the needs and wants of the customer to enhance the customer satisfaction level. Retailing in India is one of the fastest growing sectors to support its economy. As per the record of "Associated chamber of commerce and industry" (ASSOCHAM) in 2012-2013, the contribution of both organized and unorganized retail sector to GDP was 22%. They also estimated that retail sector has yearly growth rate of 15%. It leads to an estimation of INR 34trillion in the year 2016 as the share of retail sector to GDP in India. High consumer spending over the years by the young population (more than 31% of the country is below 14 years) and sharp rise (improved lifestyle) in disposable income are driving the Indian organized retail sectors growth. So in order to sustain in the retail industry the retail firms should add value to the customer by making merchandise available under one roof and provide time, place and possession utility to customers. To achieve this objective of the retail sectors should adopt supply chain management practices as this finds cheaper suppliers, low cost manufacturing facilities, strategically located distribution centers and highly profitable or high – volume customer markets (Goldratt and Cox 2004). Hence, it is the total responsibility of supply chain management to make retail business a successful one.

Christopher (1994) defined supply chain management as, the flow of goods from supplier through manufacturing and distribution chains to the end user. In today's competitive world supply chain management plays a vital role in ensuring the product availability to customer and also the possible value additions, the sustainability of the firms in the markets were mainly attributable to the supply chains strategies adopted by them. (Dennis Minnich et al) defined Supply chain responsiveness as, the ability to react purposefully and within an appropriate time-scale to customer demand or changes in the market place, to bring about or maintain competitive advantage. The effect of supply chain strategies can be assessed through supply chain responsiveness and hence the firms can make use of the concept of supply chain responsiveness to assess the value addition along with to the products supplied by them. This value addition helps the sustainability of the firms in the market.

Thus the supply practices and supply chain responsiveness are considered as tools for competitive advantage in retail forms. Hence the study deals with these two factors to build a framework towards competitive advantage in retail sector. The competitive advantage considered as output variable (dependent variable) and supply chain strategies and responsiveness considered as input variable. Supply chain responsiveness is based on the strategies adopted by the firm.

LITERATURE REVIEW

Xiang Li (2014), discussed in his paper, organizations adopt numerous business improvement methodologies to improve business performance. Logistics and supply chain management has been regarded to be the crucial factor for the companies to obtain competitive advantage.

SUPPLY CHAIN MANAGEMENT

Bhattacharya et al., (1996) Supply chain management is seen as a key to delivering higher customer satisfaction with reduced lead time and cost. Bowersox, (1997) Supply chain management is a collaborative-based strategy to link cross-enterprise business operations to achieve a shared vision of market opportunity. Bowersox and Closs, (1996) The basic notion of supply chain management is grounded on the belief that efficiency can be improved by sharing information and by joint planning an overall supply chain focusing on integrated management of all logistics operation from original supplier to final consumer acceptance. Canvinato, (1991) Supply chains are popular inter firm linkages to attain joint cost savings, product enhancements, and competitive services. Christopher, (1994) Supply chain management covers the flow of goods from supplier through manufacturing and distribution chains to the end user. Cooper, Lambert and pagh, (1997) the integration of all key business processes across the supply chain is what we are calling supply chain management. Ellarm and Cooper, (1993) Supply chain management has been characterized as across between traditional, open market relationship and full vertical integration. As such, supply chain management represents an innovative way to compete in today's ever changing global economy. Jones and Riley, (1985) Supply chain management deals with the total flow of materials from supplier to end users. The global supply chain forum, 1998 Supply chain management is the integration of business processes from end user through original suppliers that provides products, services, and information that add value for customers.

SUPPLY CHAIN STRATEGIES

The supply chain strategy determines the methodology adopted by an organization, the pattern of the customer demand is taken as a crucial element while formulating efficient supply chain strategies. S.M.S Rana et al., (2016) define supply chain strategy as a set of inter- related issues employed to incorporate suppliers, manufacturers, warehouses and stores so that products are made and distributed at the right quantities to the right location at the right time in orders lessen system-wide costs while satisfying service level requirements. Organizations are thinking supply chain strategies as a way of increasing their performance and achieving long term goals. The supply chain strategy helps the supply chain process in the movement and storage of raw materials, work-in-process inventory and finished goods from the point of origin to point of consumption. Somuyiwa et al., (2012) defined SCM practices as the set of activities undertaken by an organization to promote effective management of its supply chain. Identified strategic supplier partnership, customer relationship and information sharing as key SCM practices.

PRODUCT TYPES

The products are generally classified into two categories such as functional product and innovative products. Madhu bala et al., discussed that the Confederation of Indian Industry (CII) (2005) defines the FMCG industry as one of the largest industries in the world. It comprises consumer non-durable goods and caters to the everyday needs of the consumer. The product characteristics are unique to the industry as they are non-durable, branded, packaged and consumed every month directly by the end consumer. The main segments of the FMCG industry are: personal care, packaged food and beverage, household care, spirits and tobacco. They have taken two product segments in common, i.e. 'dairy' and 'packaged food'.

SUPPLY CHAIN STRATEGY BASED ON PRODUCT TYPE

Make to stock strategy generally adopted for functional products as they have stable demand pattern, make to order strategy adopted for innovative products usually these products have irregular demand pattern. Inspite of these two lets us consider some more such as, Ruth Banomyong et al discussed about lean strategy and agile strategy.

LEAN STRATEGY

Leanness means developing a value stream to eliminate all waste, including time, and to enable a level schedule. When demand is smooth, the concept of lean can be used to eliminate waste by aiming to maximize profit through the minimizing of physical costs.

AGILE STRATEGY

Agility means using market knowledge and a virtual corporation to exploit profitable opportunities in a volatile market place." Agility will allow businesses not to cope with, but exploit this volatility to their strategic advantage. agile manufacturing is on the other hand a strategy for rapidly entering niche markets and being able to serve the specific needs of customers on an individual basis.

Experimented taken an aquarium manufacturing firm and compared the effect of lean and agile strategy on the manufacturing process.

S.M.S. Rana et al discussed about lean, agile and strategy as, agile strategy concentrates on meeting customer's needs on demand. These are most appropriate for products having uncertain demand. Lean strategy focuses on the elimination of waste with a bias towards pulling goods through the system based on demand. In retailing, lean strategy employed to diminish costs and wastages. This strategy requires the retailers to anticipate the market demand and assemble the products so that customers get maximum value at reasonable cost. Hybrid or leagile strategy where both lean and agile strategies are used.

SUPPLY CHAIN PRACTICES

Supplier partnership, customer relationship, and information sharing are identified as key SCM practices.

Strategic supplier partnership is defined as "the long term relationship between the organization and its suppliers. It is designed to leverage the strategic and operational capabilities of individual participating organizations to help them achieve significant ongoing benefits" (Li et al.). Some of the advantages of including suppliers early in the product-design process as mentioned by Tan, Lyman and Wisner (2002) are that suppliers can offer cost effective design alternatives, assist in selecting better components and technologies, and aid in design assessment. Long-term relationship does not refer to any specific period of time, but rather, to the intention that the arrangement is not going to be temporary Chen & Paulraj, (2004). Through close relationships supply chain partners are willing to share risks and reward and (2) maintain the relationship on a long term basis Landeros & Monczka, (1989); Cooper & Ellram, (1993); Stuart, (1993).

Customer relationship is defined as "the entire array of practices that are employed for the purpose of managing customer complaints, building long-term relationships with customers, and improving customer satisfaction" (Li et al.). Successful SCM involves customer integration at the downstream and supplier integration at the upstream, considering that each entity in a supply chain is a supplier as well as a customer Tan et al., (1999). Close customer relationship allows product differentiation from competitors, helps sustain customer loyalty, and elevates the value provided to customers Magretta, (1998). Immediate customer relationship activities have played a crucial role in developing effective SCM strategies Wisner, (2003).

Information sharing refers to "the extent to which critical and proprietary information is communicated to one's supply chain partner" (Li et al.). Simatupang and Sridharan (2005) bring forth some of the elements that comprise information sharing, including data acquisition, processing, storage, presentation, retrieval, and broadcasting of demand and forecast data, inventory status and locations, order status, cost-related data, and performance status. However, there is the reluctance on the part of organizations in the supply chain to share information with each other. Information is generally viewed as providing an advantage over competitors, and organizations resist sharing with their partners Vokurka & Lummus, (2000) due to the fear of giving away competitive and sensitive information such as inventory levels, production schedules Lancioni, Smith & Oliva, (2000); Ballou, Gillbert & Mukherjee, (2000); Croom, Romano & Giannakis, (2000).

SUPPLY CHAIN RESPONSIVENESS

S.M.S. Rana et al., (2016) defined in his paper supply chain responsiveness as the promptness and the degree to which supply chain can address variation in customer demand. Firm need to know what strategies are important to respond changing customer needs so as today's uncertain environment. Dennis Minnich et al., defined responsiveness as, the ability to react purposefully and within an appropriate time-scale to customer demand or changes in the market place, to bring about or maintain competitive advantage. In contrast, a supply chain would be considered efficient if the focus is on cost reduction and no resources are wasted on non-value added activities. Somuyiwa et al., (2012) discussed in his paper, the supply chain responsiveness increases as the level of speed and flexibility increases, low cost, high quality and improved responsiveness are the three main strategic imperatives to stay competitive in the market. Advocated the need for the organization to be responsive when the penalties associated with uncertainty are higher. These penalties for an organization could include costs of stocking out or carrying the wrong inventory and which can be mitigated through a responsive system, by adopting effective supply chain practices. Inda sukati et al., by addressing supply chain management practices that can lead responsiveness, will make better understanding the scope and activities related with supply chain management practices that create enhance level of supply chain responsiveness in today's competitive market place.

A firm's ability to satisfy customer requirements in a timely manner is referred to as supply chain responsiveness.

The construct of supply chain responsiveness identified are:

Operations system responsiveness is defined as the ability of a firm's manufacturing system to address changes in customer demand. Duclos et al. and Lummus et al. in a conceptual study, emphasize that operation responsiveness at each node of the chain is an integral component of supply chain responsiveness. They further argue that in order to meet the end customer's needs, each entity in the supply chain must deliver the product or service in a timely and reliable manner.

Logistics process responsiveness is defined as the ability of a firm's outbound transportation, distribution, and warehousing system (including 3PL/4PL) to address changes in customer demand. The responsiveness in the logistic processes is a vital component in the success of a responsive supply chain strategy (Fawcett, 1992).

Supplier network responsiveness is defined as the ability of a firm's major suppliers to address changes in the firm's demand. A key to responsiveness is the presence of responsive and flexible partner upstream and downstream of the focal firm Christopher &Peck, (2004). The ability of firms to react quickly to customer demand is dependent on the reaction time of suppliers to make volume changes. Whenever disruptive causes such new technology, terrorist threats Walker, (2005) or cut-throat competition tend to throw the supply chain haywire, the supply chain networks must be ready to react to any ripple effect. Slack (1991) argues that supplier networks are the essential building blocks of a flexible system.

Competitive Advantage

Competitive advantage is defined as the "capability of an organization to create a defensible position over its competitors" (Li et al.). Tracey, Vonderembse and Lim (1999) argue that competitive advantage comprises of distinctive competencies that sets an organization apart from competitors, thus giving them an edge in the marketplace. They further add that it is an outcome of critical management decisions.

Today, however, competition is considered a "war of movement" that depends on anticipating and quickly responding to changing market needs Stalk, Evans and Shulman, (1992). Competitive advantage emerges from the creation of superior competencies that are leveraged to create customer value and achieve cost and/or differentiation advantages, resulting in market share and profitability performance Barney, (1991); Coyne, (1986); Day and Wensley, (1988); Prahalad and Hamel, (1990). Sustaining competitive advantage requires that firms set up barriers that make imitation difficult through continual investment to improve the advantage, making this a long-run cyclical process Day and Wensley, (1988). Most managers agree that cost and quality will continue to remain the competitive advantage dimensions of a firm Souza and Williams, (2000). The five dimensions of competitive advantage construct used in this study are:

i. Price/Cost-The ability of an organization to compete against major competitors based on low price.

ii. Quality-The ability of an organization to offer product quality and performance that creates higher value for customers.

iii. Deliver dependability-The ability of an organization to provide on time the type and volume of product required by customers

iv. Product Innovation-The ability of an organization to introduce new products and features in the market place.

v. Time to Market-The ability of an organization to introduce new products faster than major competitors.

RETAIL SUPPLY CHAIN

Leigh sparks in his paper discussed about the evolution of retail supply chain, In the first stage of evolution (pre-1980) the dominant method of distribution to stores was, by manufacturers that stored products at their factories or field warehouses for multiple drops to numerous small shops. As the retail multiples gained in prominence retailers invested in regional distribution centers (RDC) to consolidate deliveries from suppliers to delivery in stores. This was the first step to changing the supply of fast-moving consumer goods (FMCG) in that buying and distribution became a head office function in retailing and the logistical infrastructure created a market for third party logistics service providers. To all intents and purposes, this change marked the removal of manufacturers and suppliers from controlling the supply chain and reinforced the switch of power to the retail end of the channel. This period of centralization throughout the 1980s enabled retailers to reduce lead times, minimize inventory, and give greater product availability to customers in their stores. The 1990s witnessed a consolidation of this process. In many cases inventory had been shifted only from store to RDC. By implementing just-in-time (JIT) and flow principles, retailers began to focus on their primary distribution networks (from supplier to RDC) demanding more frequent deliveries of smaller quantities. Clearly this created a problem for many suppliers in that they could not deliver full vehicle loads of product. To ensure that vehicle utilization could be maximized, consolidation centers were created upstream of the RDC. Additionally, retailers had established supplier collection programmers to pick up products from supplier's factories on return trips from stores. In the first part of this century, retail networks have continued to be upgraded as efficient consumer response (ECR) initiatives were enacted and grocery retailers accommodated the increase in nonfood products through their distribution centers. Further, the greater sharing of information, especially through Internet exchanges, fostered collaborative, planning, forecasting, and replenishment (CPFR) initiatives to reduce supply chain response times.

RETAIL SUPPLY CHAIN IN INDIA

Jitendra Singh et al., (2014) discussed about the role of supply chain management in retail sector, India is witnessing changing life styles, increased incomes, the demographic variability and vibrant democracy. Retail industry is playing vital role in the economic growth of the country. The concept of shopping is moving in and around hypermarkets, supermarkets, and specialty stores and in other formats. Retail industry is one of the key upcoming sectors in India contributing major to employment generation. It offers huge potential for growth in coming years. India is becoming most favored retail destination in the world.

The role of supply chain in Indian organized retail is very significant. The Indian Supply Chain Council have been formed to explore the challenges that a retailer faces and to find possible solutions for India. The role of supply chain management in retail sector is self-centric. Means there is a mutual partnership between retailers and the manufactures. And this will indicate that they are loss free from the external hurdles and the response of that will give to growth to top and bottom management.

As we take the example of fresh products (vegetable and fruits) in the organized retail sector then definitely we find that is a less availability. This is so for the nature of supply chain is very fragmented. This shows the important role of supply chain in the organized retail sector. In the organized retail market in India the role of supply chain is very important for the Indian customer demands at affordable prices a variety of product mix. It is the supply chain that ensures to the customer in all the various offerings that a company decides for its customers, be it cost, service, or the quickness in responding to ever changing tastes of the customer.

The infrastructure in India in terms of road, rail, and air links are not sufficient. And so warehousing plays a major role as an aspect of supply chain operations. To overcome these problems, the Indian retailer is trying to reduce transportation costs and is investing in logistics through partnership or directly. The Indian organized retail sector is growing so the role of supply chain becomes more important. It should become more responsive and adaptive to customer's demand. There is also need for the supply chain to be more cost efficient and collaborative to win the immense competition in this sector. The role of supply chain in Indian organized retail has expanded over the years with the boom in this industry. The growth of the Indian retail industry to a large extent depends on supply chain. Thus supply chain is considered as important factor for competitive advantage.

EXISTING MODEL

Inda Sukati et al., (2012) discussed in his paper a model considering supply chain integration, supply chain responsiveness and competitive advantage, investigated the impact of supply chain integration, supply chain responsiveness on competitive advantage. He made a conclusion that supply chain responsiveness and supply chain integration was positively associated with competitive advantage.

FIG. 1
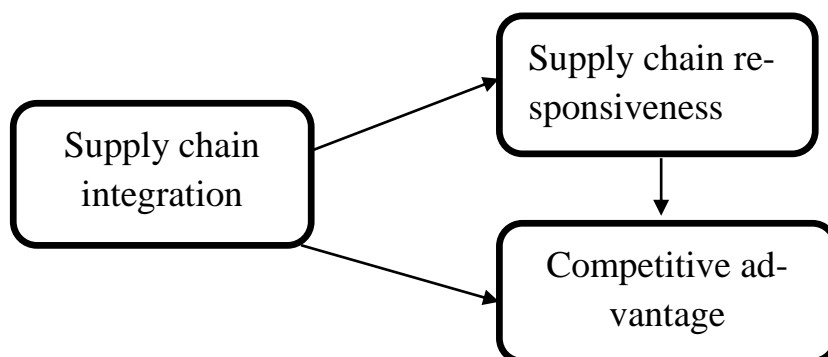
ANALYSIS

Review has been made on 30 papers considering the aspects of supply chain strategies, responsiveness, and competitive advantage in retail sector. Among which 16 are foreign journals and 14 are Indian journals. Four authors made a study on retail sectors in India. All over the world various authors considered various retail sectors under study to examine the impact of supply chain strategy and responsiveness on retail performance. Supply chain practices around world are technologically well developed and it differs from country to country. In India still advancement in supply chain practices is needed to achieve world class level by adopting quick response (QR) practices such as implementation of CPFR, VMI and use of RIFD Technology.

VARIABLES

The authors considered various variables such as price, quality, information sharing etc. to assess the impact of supply chain practices and responsiveness on competitive advantage. From the knowledge gained by the review of literature the variables selected for future study are, inventory level, lead time, replenishment order, demand forecasting method, quality, price, delivery dependability, delivery speed, customer satisfaction level. With use of these variables a real time data collection will be made to find the impact of supply chain practices and responsiveness on competitive advantage in a particular region in future.

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DISCUSSION

Based on the review of literature made, Somuyiwa et al (2012) made a study on firm's competitiveness through supply chain responsiveness and supply chain management practices in Nigeria. The result of his study revealed positive association between supply chain responsiveness, SCM practices and competitive advantage.

As the three terms has a close association with each other, a model has been proposed by gaining knowledge from the review made, and the model has been tested by collecting real time data in future in various retail sectors, then the association between them can be analyzed in Trichy region.

PROPOSED MODEL

From the review of literature, a model has been proposed and it has been taken for future research by collecting real time data from various retail sectors.

FIG. 2
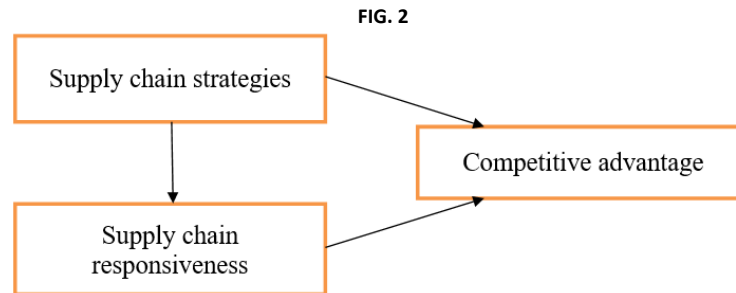
CONCLUSION

The study concludes with a proposed model considering supply chain strategies and responsiveness as a building blocks for sustainable retail format (to achieve competitive advantage). The study is based on the data available from secondary sources (review of literature).

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FOREX TRADING STRATEGY: AN EMPIRICAL STUDY ON THE CURRENCY PAIR GBP/USD

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ABSTRACT

This research paper attempts to build a Forex trading Strategy on Currency pair GBP/USD. We used daily Series of data from April1, 2014 to March, 2015 (156 exchange rates). Forex strategy built on the basis of ten parameters. The trading strategy framed in this study has found that account balance which is seen as a measure of profitability of the strategy is influenced by the draw down level and lots employed. This provides an evidence to show that volume of trading and draw down level influences the profitability. The study ensures that the draw down level should be taken care of while changing the other variables. This is because increasing the draw down value would create high loss while trading. The study ensures that the draw down level should be taken care of while changing the other variables. This is because increasing the draw down value would create high loss while trading. The important finding is that the time frame of trading does not influence the account balance.

KEYWORDS
forex, strategy, account balance, draw down, lots employed, parameters.

1. INTRODUCTION

Access to foreign exchange (forex), the most extensive market on the planet, is generally through an intermediary known as a **forex broker**. Similar to a stock broker, these agents can also provide advice on forex trading strategies. This advice to clients often extends to technical analysis and research approaches designed to improve client forex trading performance.

The foreign exchange (currency or forex or FX) market exists wherever one currency is traded for another. It is by far the largest financial market in the world, and includes trading between large banks, central banks, currency speculators, multinational corporations, governments, and other financial markets and institutions. The average daily trade in the global forex and related markets currently is over US$ 3 trillion. Retail traders (individuals) are a small fraction of this market and may only participate indirectly through brokers or banks, and are subject to forex scams. Not only is the forex market the largest market in the world, but it is also the most liquid, differentiating it from the other markets. In addition, there is no central marketplace for the exchange of currency, but instead the trading is conducted over-the-counter. Unlike the stock market, this decentralization of the market allows traders to choose from a number of different dealers to make trades with and allows for comparison of prices.

The analysis done is confined to the data available in the forex strategy builder software and it is limited to the variables computed in the FSB software.

2. REVIEW OF LITERATURE

2.1 IMPACT OF LOTS EMPLOYED ON ACCOUNT BALANCE

Studies on various stock markets have proved that the trading volume has a lagged relationship with the profitability. Hiemstra and Jones (1994) studied a linear relationship from Dow Jones stock returns to percentage changes in NYSE trading volume; they also found a significant bi-directional non-linear causality between returns and volume. A study conducted by Lee and Rui (2002) on three large stock markets (New York, Tokyo, and London) showed the positive correlation between trading volume and profitability except for the London stock market. All these studies have been essentially limited to stock markets with the existence of short sale restrictions. This study has been extended to confirm the relation between the volume and return in the foreign exchange market. The following hypothesis has been tested for this analysis.

H1: Trading volume has an effect on the profitability of currency trading

2.2 IMPACT OF INDICATOR ON ACCOUNT BALANCE

The indicators used in technical analysis have been differentiated as price based and volume based indicator. The price based indicators have been found to have a negligible effect on profitability. Blume et. al (1994), for instance, suggested that volume may provide insights into the quality of traders' information that cannot be observed from price statistics. Suominen (2001) also developed a model to demonstrate that trading volume contains additional useful information not reflected in current stock prices, which can be exploited by traders to improve the profitability of their trading strategies. A study conducted by Elaine Loh provided

empirical evidence on the role of volume in technical analysis by investigating if the performance of technical analysis based on daily price statistics may be improved by additionally employing technical indicators based on trading volume. This study examines the performance of currency trading strategy based on price indicators. Thus the following hypothesis has been framed regarding the efficiency of price based indicators in predicting profitability.

H1: Price based technical indicator influences the profitability of currency trading

2.3 DRAW DOWN AND ACCOUNT BALANCE

Draw down is simply the amount of money lost in trading, expressed as a percentage of total trading. If all trades were profitable there would never be a draw down. Draw down does not measure overall performance, only the money lost while achieving that performance. Its calculation begins only with a losing trade and continues as long as the account hits new equity lows (Lave Dandry). The following hypothesis has been tested based on this fact to study the level of impact of draw down on the profitability.

H1: draw down influences the account balance

2.4 ACCOUNT BALANCE AND PERCENTAGE POSITION

Most of the traders employ a Moving Average (MA) trading rule that implies establishing or maintaining a long position in a currency if the short term MA is equal to or greater than the long-term MA; establish or maintain a short-position if the short-term MA is less than the long term MA. Though the Percentage position may have some influences on account balances, it will be a very little and the influence does not impact more. Traders being able to gain money over the long run were taking smaller positions than losing and bankrupt traders (Johan Ginyard) (1982).

H1: The duration of a position held influences the account balance

2.5 DRAW DOWN AND PERCENTAGE POSITION

Draw down is the peak-to-trough decline during a specific record period of an investment, fund or commodity. A draw down is usually quoted as the percentage between the peak and the trough. When the current position in a currency pair moves against the favorable trend, it sounds better to change the position as early as possible. As this time frame prolongs, the draw down value gets increased resulting in a greater loss which in turn reduces the profitability of trading. This leads to test the following hypothesis.

H1: There is a significant association between draw down and different time frames employed.

2.6 DRAW DOWN AND TIME FRAME

With the decreasing time frame, the frequency of trading increases. The probability of unfavorable moves in a high frequent trading is large. This being the case the draw down level will vary depending on the frequencies of trading. This necessitates examining the impact of various time frames on draw down level.

H1: Time frame of trading has an influence on draw down

2.7 LOTS EMPLOYED AND DRAW DOWN

Trading Volume is an important one that traders pay more attention. Low volume indicates that the market is illiquid which also implies high volatility in price and vice versa. This reduces the price effect i.e. Draw down in large trades. In general, with increase in volume, the market makers have greater opportunity for profit as result of low drawdown.

H1: Volume of trading influences drawdown.

2.8 DRAW DOWN AND INDICATOR

Drawdown is simply the amount of money lost in trading, expressed as a percentage of total trading. It does not talk about the performance of trading. Even with the same indicator of varying values, the profitability reduces which has an impact on drawdown. The indicator indicates the trend and the time to perform the buy or sell. Based on the indicator and values taken for the indicator, the draw down is influenced.

H1: Choice of indicator influences draw down level

2.9 PROFIT/LOSS RATIO ON TIME FRAME

A profit/loss ratio refers to the size of the average profit compared to the size of the average loss per trade. The profitability varies based on the time frame which influences the profit/loss ratio. There are certain traders who may maintain the ratio as 2:1 or 3:1 but it all depends on the timeframe they are trading and the other factors that are affecting the strategies followed by the trader. If the timeframe is constant, then the ratio does not get affected but trading in different time frames affects the ratio.

H1: Time frame of trading influences the profit/loss ratio

2.10 ACCOUNT BALANCE AND TIME FRAME

Account Balance varies as the time frame of trading varies. If the trading in the forex must be considered in long term and as an investment, then longer time frame like weekly charts must be considered which gives more profitability. The shorter time frame and the Intraday are only based on speculation and the profitability is based on risk factor by the trader.

H1: Different time frames have varying effects on account balance

3. DATA AND RESEARCH METHODOLOGY

3.1 DATA

Only secondary data were used. The data set employed in this study consisted of monthly observations of exchange rates for GBP/USD currency pair. It has been collected from the Forex Strategy Builder software which is in-built for the period of April 2014 to March 2015. Period of study is from April 2014 to March 2015 (156 exchange rates). Sampling method which was used non-probability sampling, period of data collection has been chosen according to its availability. The Forex strategy built on the basis of following ten parameters

1. Impact of lots employed on account balance
2. Impact of indicator on account balance
3. Draw down and account balance
4. Account balance and percentage position
5. Draw down and percentage position
6. Draw down and time frame
7. Lots employed and Draw down
8. Draw down and indicator
9. Profit/loss ratio on time frame
10. Account Balance and Time Frame

3.2 METHODOLOGY

Given the time series nature of data, the parameters which was tested using of Correlation test was used to study the correlation among variables like account balance, lots employed, time in position, draw down, time frame etc. T test was used to study the impact of indicator used on account balance, and one way ANOVA was used to study the impact of different time frames on account balance, draw down level, profit loss ratio and the impact of different indicators on account balance and draw down.

Here analysis was made with the help of commonly known software package of SPSS.

The formula for Pearson's correlation takes on many forms. Here two variables is tested X, namely one variable, Y refers another variable N refers the number of observation. A commonly used formula is shown below:

$$r = \frac{\sqrt{\left(\sum x_5 - \frac{N}{(\sum x)_5}\right)\left(\sum \lambda_5 - \frac{N}{(\sum \lambda)_5}\right)}}{\sum x\lambda - \frac{N}{\sum x \sum \lambda}}$$

The One-Way ANOVA procedure produces a one-way analysis of variance for a quantitative dependent variable by a single factor (independent) variable. Analysis of variance is used to test the hypothesis that several means are equal. This technique is an extension of the two-sample t test.It is easy to model all of this with an equation of the form:

$$y_{ij} = m + a_i + e_{ij}$$

This equation indicates that the *jth* data value, from level *i,* is the sum of three components: the common value (grand mean), the level effect (the deviation of each level mean from the grand mean), and the residual (what's left over.

In general, the ANOVA table for the one-way case is given by:

TABLE 1

Source	Sum of Squares	Degrees of Freedom	Mean Square
Factor levels	$J\sum a_i^2$	I-1	$J\sum a_i^2 / (I-1)$
residuals	$\sum\sum e_{ij}^2$	I(J-1)	$\sum\sum e_{ij}^2 / I(J-1)$
corrected total	$\sum\sum y_{ij}^2 - IJm^2$	IJ-1	

In testing the null hypothesis that the population mean is equal to a specified value μ_0, one uses the statistic

$$t = \frac{\overline{x} - \mu_0}{s/\sqrt{n}},$$

where *s* is the sample standard deviation of the sample and *n* is the sample size. The degrees of freedom used in this test is $n-1$.

4. RESULTS AND DISCUSSIONS

CORRELATION BETWEEN ACCOUNT BALANCE AND DRAWDOWN
The calculated value of significance is .000 which is less than .05. Therefore, reject the null hypothesis and accept the alternate hypothesis. There is a significant relation between account balance and draw down. The two variables have negative correlation. Hence if the drawdown value is decreased, the profitability will be increased.

CORRELATION BETWEEN ACCOUNT BALANCE AND PERCENTAGE POSITION
The calculated value of significance is .026 which is lesser than the observed value of .05. Therefore, reject null hypothesis and accept the alternate hypothesis. Thus it has been inferred that there is a significant relation between account balance and percentage position. The two variables have positive correlation. This is one of the main factors which affect profitability.

CORRELATION BETWEEN ACCOUNT BALANCE AND LOTS EMPLOYED
The calculated value of significance is .000 which is lesser than the observed value of .05. Therefore, reject the null hypothesis and accept the alternate hypothesis. It has been inferred that there is a significant relation between accounts balance and lots employed. The two variables have a positive correlation. Thus if the lot size is increased the profitability will also be increased.

CORRELATION BETWEEN PERCENTAGE POSITION AND DRAWDOWN
The calculated significant value .979 is found to be greater than the observed value of .05 and hence the null hypothesis has been accepted. The inference is that there is no significant correlation between percentage position and draw down. The lower value of correlation shows that they are weakly correlated.

CORRELATION BETWEEN LOTS EMPLOYED AND DRAWDOWN
The calculated significant value of .000 is less than .05. Hence the null hypothesis has been rejected and the alternate hypothesis accepted. Thus the inference is that there exists a significant relation between lots employed and drawdown. The two variables are positively correlated. As the number of lots is increased the draw down may get increased resulting in significant loss.

DRAW DOWN ON INDICATOR
Null hypothesis: there is no significant difference between the draw down level for different indicators
Alternate hypothesis: there is a significant difference between the draw down level for different indicators.
The calculated value of significance (.333) is greater than the observed value of .05. Hence accept the null hypothesis. Thus there exists no significant difference between the draw down level for different indicators used.

PROFIT/ LOSS RATIO ON TIME FRAME
Null hypothesis: There is no significant difference between the profit loss ratio levels at different time frames.
Alternate hypothesis: There is a significant difference between the profit loss ratio levels at different time frames.
The calculated value of significance (.1) is greater than the observed value of.05. Hence accept the null hypothesis. Thus there do not exist any significant difference between the draw down level for different time frames employed.

INDEPENDENT SAMPLE T – TEST
ACCOUNT BALANCE AND INDICATOR
Null hypothesis: There is no significant difference between the account balance values for different indicators used
Alternate hypothesis: There is a significant difference between the account balance values for different indicators used
Levenes test says that the variances of the two samples are equal. The calculated value of significance .001 is less than the observed significance of .05. Therefore, reject the null hypothesis which says that the choice of indicator does not influence net profit. It is inferred that the account balance differs for each type of indicator. Looking at the descriptive statistics the momentum indicator shows greater profitability. It means that the variances are different.

5. CONCLUSION
The trading strategy framed in this study has found that account balance which is seen as a measure of profitability of the strategy is influenced by the draw down level and lots employed. This provides an evidence to show that volume of trading and draw down level influences the profitability. The study ensures that the draw down level should be taken care of while changing the other variables. This is because increasing the draw down value would create high loss while trading. The important finding is that the time frame of trading does not influence the account balance. Thus it should be decided according to the convenience of the trader in the long run. This study helps a trader to optimize his trading strategy based on the relationship between several variables of the forex strategy builder software.

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APPENDIX

TABLE 2: CORRELATION RESULTS ON ACCOUNT BALANCE, PERCENTAGE POSITION, LOTS EMPLOYED AND DRAW DOWN

	Account Balance Vs. Draw Down	Account Balance Vs. Percentage Position	Account Balance Vs. Lots Employed	Percentage Position Vs. Draw Down	Lots Employed Vs Draw Down
Pearson Correlation	-.687(**)	.179(*)	.318(**)	.002	.458(**)
Sig. (2-tailed)	.000	.026	.000	.979	.000
N	156	156	156	156	156

ONE-WAY ANOVA

TABLE 3: TIME FRAME Vs. ACCOUNT BALANCE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5396780.974	2	2698390.487	5.567	.005
Within Groups	74164855.250	153	484737.616		
Total	79561636.224	155			

DRAW DOWN ON TIME FRAME

TABLE 4

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3649914.782	2	1824957.391	3.641	.029
Within Groups	76677088.654	153	501157.442		
Total	80327003.436	155			

DRAW DOWN ON INDICATOR

TABLE 5

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	489216.000	1	489216.000	.944	.333
Within Groups	79837787.436	154	518427.191		
Total	80327003.436	155			

PROFIT/ LOSS RATIO ON TIME FRAME

TABLE 6

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	22560.047	2	11280.024	5.217	.007
Within Groups	224879.039	104	2162.298		
Total	247439.086	106			

ACCOUNT BALANCE AND INDICATOR

TABLE 7

	indicator	N	Mean	Std. Deviation	Std. Error Mean
account balance	leading	78	338.65	334.244	37.846
	lagging	78	727.49	919.223	104.082

INDEPENDENT SAMPLES TEST ON ACCOUNT BALANCE

TABLE 8

	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	11.657	.001	-3.511	154	.001	-388.83	110.749	-607.616	-170.051
Equal variances not assumed			-3.511	97.011	.001	-388.83	110.749	-608.638	-169.028

A STUDY OF CONSUMER PERCEPTION OF LIFE INSURANCE CORPORATION IN THE TIRUPATI REGION

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ABSTRACT

In this paper highlights and measures the consumer perception of services provided by LIC. In this study, total service quality is measured in the selected dimensions with the help of a structured questionnaire. The schedule consists of A and B parts. The A part was used to get information on personal profile and family background of policyholder while part B was used to gain familiarity with regard to, their perception of various policies of LIC and service quality dimensions. To measure quality, five point Likert Scale was used. It is concluded that majority of the respondents (29.30 percent) earn a monthly income of Rs. 20000 - Rs. 30000. From the analysis one can infer that the monthly income of 44 respondents out of 150 is in the income between Rs. 20000 and Rs. 30000. Of these 21 respondents are Employed and 11 respondents earn income above Rs. 50,000. Only 7 respondents (63.64 percent) out of 11 were employed and only 4 respondents (36.36 percent) were professional in the income range of above Rs. 50,000.

KEYWORDS
consumer perception, economic factors, quality dimensions.

INTRODUCTION

Life is full of risk and uncertainties. Since we are the social human beings we have certain responsibilities too. Indian consumers are influenced by emotions and rationality in their buying decisions. They believe in future rather than the present and desire to have a better and secured future. In this direction life insurance services have their own value in terms of minimizing risk and uncertainties. Indian economy is developing. It has a huge middle class conscious of its societal status and consists of salaried persons. They value money for meeting current needs and fulfilling future desires. Here the pendulum moves to another side which shows the reasons behind holding a policy. Here the attempt has been made in this research paper to study the buying behavior of consumers with respect to life insurance services.

Life insurance is one of the best known insurance products today. People buy these products as investment tools and also as protection for themselves and their families. All the insurance companies the world over are looking at attracting the customer and positioning their solutions innovatively to cater to niche and specific markets. One of the most critical aspects both from the view point of the customer and the insurer is getting important and relevant leads that can be beneficial for both.

TRENDS IN INSURANCE WITH LPG IN INDIA

Adoption of the free market paradigm – Liberalization, privatization and Globalization (LPG) in the early 1990's has changed the very face of Indian economy. Since then, the service sector is giving the transformational push to Indian economy from its traditional mould of agrarian economy to internationally acclaimed service economy. During the first four decades, since independence, agriculture used to employ more than 50 percent of the population, while service sector accounts for about 25 percent, the industrial sector accounts for just 10 percent. In contrast, the 2008 economic estimates give a clear view of the shift in sect oral employment.

Given the evolving socio-economic conditions worldwide, the insurance companies are increasingly reaching out to cross-border customers and are offering more competitive and customized products than ever before. Consequently, the global insurance platform has witnessed a phenomenal change over the past decade. During the last 10 years the global insurance premium proceeds netted by insurance companies have risen by more than 50 percent, with annual growth rates ranging from 2 to 10 percent. According to a survey conducted by a leading global insurance firm, Swiss Re, the worldwide insurance premiums totaled $ 4.06 trillion in 2009. This is approximately equal to 6.98 percent of the global GDP.[1]

SATISFACTION VERSUS SERVICE QUALITY

Practitioners and writers tend to use the terms 'satisfaction' and 'quality' interchangeably, but researchers have attempted to be more precise about the meanings and measurement of the two concepts, resulting in considerable debate. Consensus is that the two concepts are fundamentally different in terms of their underlying causes and outcomes. Although they have certain things in common, satisfaction is generally viewed as a broader concept, whereas service quality focuses specifically on dimensions of service. Based on this view, perceived service quality is a component of customer satisfaction[2]. Figure 1.1 graphically illustrates the relationship between the two concepts.

These five dimensions are discussed further along with the scale developed to measure them.

- **Reliability:** ability to perform the promised service dependably and accurately.
- **Responsiveness:** willingness to help consumers and provide prompt service.
- **Assurance:** employees' knowledge and courtesy and their ability to inspire trust and confidence.
- **Empathy:** caring, individualized attention given to consumers.

- **Tangibles:** appearance of physical facilities, equipment, personnel, and written materials.

FIG. 1: CUSTOMER PERCEPTION OF SERVICE QUALITY AND CUSTOMER SATISFACTION
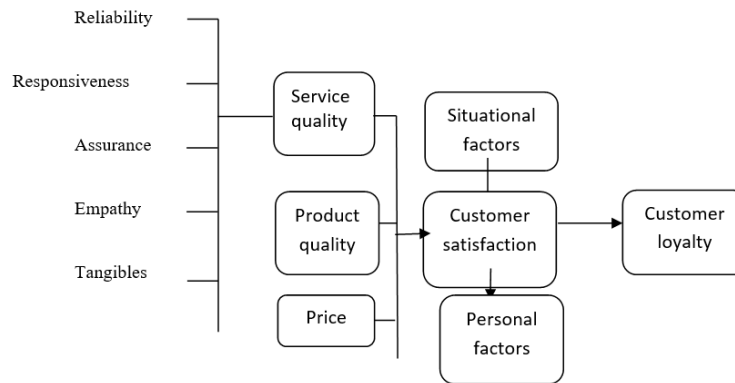
Source: Valarie A Zethmal, 2008.

REVIEW OF LITERATURE

Vidya (2001)[3] conducted "A study on policyholders' satisfaction in insurance companies with regard to Life Insurance Corporation with special reference to Coimbatore" for which the following objectives were framed, namely, to study the policyholders satisfaction with Life Insurance Corporation, to study the awareness about Life Insurance Corporation among the public and to know the advertisements performance.

Pujari and Anand (2004)[4] in their study formulated certain objectives to identify the marketing concepts in the services offered by insurance companies to fill the gaps in marketing efforts by the companies and to suggest measures to strengthen customer satisfaction. The study is primarily based on the observation and unstructured interviews with the executives at regional offices and branch office of insurance companies.

Rao (2004)[5] in his article has attempted to study the liberalized customers, which would be a challenge to the insurer. He had found that the customers value their time, speed of response, and reliability of insurance products, transparency and fairness of the provider. He added that insurer's staff should be specially trained in handling customer relations.

Beloucif, et al (2004)[6] studied the relationship between brokers and clients in U.K. Insurance Industry. The overriding concern is evaluation of the duration of the different stages in a relationship and characteristics that have impact on the quality of a relationship. A model describing these stages, unique to this relationship, is tested but the impact of different characteristics is still inconclusive. Service quality is found to be a mediating variable and has significant impact.

Dhanabhakyam (2007)[7] studied the customer awareness of LIC policies in Coimbatore city. The study attempts to examine the various life insurance schemes offered by the LIC and to find the attitude of the respondent's towards the LIC policies.

Sheela Arti (2007)[8] aimed at conducting a study on the awareness of life insurance policies in Visakhapatnam. The main objective of the study is to find customers' views of insurance and their significance, and relative preferences for products offered by life insurance companies

Shukla, Timira (2011)[9] the state sponsored Life Insurance Corporation (hereinafter referred to as LIC) of India was the sole player in the Indian life insurance market before 2000. With the entry of private players, LIC has lost considerable market share to private players although both market size and insurance premier, are on the rise. It also attempts to identify the dimensions of service quality which are important to a customer. SERVQUAL scale was used to discern the different dimensions of service quality and mean scores were used to find out if there is any gap between customer expectations.

Dar, Altaf Ahmad and Bhat, Ahmad (2012)[10] examined the Consumers' perception on service quality offered by the insurance companies in and around Srinagar city. The SERVQUAL scale is administered to measure the commuter's perception of service quality. A survey was conducted among the commuters who were regularly availing themselves of insurance services.

STATEMENT OF THE PROBLEM

Review of the extant literature clearly highlights the policyholders' post purchase behaviour, and eloquently conveys the unsatisfactory performance of LIC of India. Failure in meeting the consumer expectations (mismatch between service promises and service delivery), improper and inadequate handling of consumer complaints and grievances and substantial decline in the service standards provided by the agent from pre-purchase to post-purchase stage have eroded the consumer-base of LIC. Earlier studies have not covered these aspects, particularly service quality – consumer satisfaction. Therefore, the present study will fill the research gap and extend the existing knowledge base.

NEED FOR THE STUDY

The study focuses mainly on the perception and satisfaction level of urban buyers of life insurance policies. The life insurance industry has come a long way since independence and Indian consumers had been dealing with only one life insurance player – the Life Insurance Corporation (LIC) in the public sector. After the liberalization of the insurance sector more than 20 companies have entered the business and started operating from urban areas. In this highly competitive environment the insurance companies have to compete with each other to gain an advantage over their competitors and attract the maximum number of customers.

During the past 20 years there have been a number of changes in the insurance marketing sector based on LPG (liberalization, privatization and globalization). There are certain unique features which call for separate strategies to be distinctively developed to suit the rural and urban market behavior. The focus of corporate therefore needs to be on the introduction of new policies to suit urban customers and developing specific strategies. The customer may be dynamic between private and public sector towards new policies. So in this situation the researcher may select to study about customer perception of products of LIC of India.

OBJECTIVES OF THE STUDY

1. What are the key determinants of consumer satisfaction in life insurance business?
2. To identify the key indicators of high consumer perception towards policies of life insurance business?
3. To study the factors that influence consumer perception of the products of Life Insurance Corporation of India.

METHODOLOGY

The following methodology is used for the study to find out the consumer perception and satisfaction with regard to the products of LIC: The data relevant for the study has been collected from both primary and secondary sources. As research in life insurance sector is yet to attain momentum, there is a paucity of published data and scholarly literature. Therefore, a large part of this analysis is exclusively based on the primary data. The study is empirical in nature covering customer perception of LIC products.

1. SOURCES OF DATA

The primary data was collected from customers of LIC through interview and schedule, while the secondary data was collected from the website of LIC, books, newspapers, magazines and journals.

The schedule consists of A and B parts. The A part was used to get information on personal profile and family background of policyholder while part B was used to gain familiarity with regard to, their perception of various policies of LIC and service quality dimensions. This research study is based on the model developed by Parasuraman and others. This model has been widely used across the globe to measure the service quality which contains five dimensions – reliability, responsiveness, assurance, tangibles and empathy. To measure quality, five point Likert Scale was used.

2. SAMPLING PROCEDURE

The data was collected through multi-stage sampling. In the first stage, 10 agents of LIC are selected from among 150 agents attached to Tiupati city of Chittoor district. In the second stage samples of 15 LIC policyholders are selected from each of the 10 LIC agents to get a total of 150 LIC policyholders for the study.

3. STATISTICAL TOOLS

The primary data was analyzed with the help of simple statistical tools such as percentage, Chi-square test and ANOVA wherever the data was categorical. The researcher has used Statistical Package for Social Science (SPSS) to analyze and interpret the data. The primary data was analyzed with the help of statistical tools such as chi-square test, ANOVA and average rank analysis.

ANALYSIS OF DATA

1. MONTHLY INCOME-WISE

Table: 1 describes Income-wise distribution of the respondents who are selected for the study. The approximate monthly income of the sample respondents is classified as less than Rs. 20000, Rs. 20000– Rs. 30000, Rs. 30000- Rs. 40000, Rs. 40000 – Rs. 50000, and above Rs. 50000.

OCCUPATION AND MONTHLY INCOME WISE RESPONDENTS

TABLE 1: OCCUPATION-WISE AND MONTHLY INCOME WISE DISTRIBUTION OF SAMPLE RESPONDENTS

Occupation	Approximate monthly income					Total
	Less than Rs. 20000	Rs. 20000-Rs. 30000	Rs. 30000-Rs. 40000	Rs. 40000-Rs. 50000	Rs. 50000 and above	
Business	16 (61.54)	20 (45.73)	18 (45.00)	5 (17.24)	-	59 (39.33)
Employed	4 (15.38)	21 (47.73)	16 (40.00)	9 (31.03)	7 (63.64)	57 (38.00)
Professional	6 (23.08)	1 (2.27)	5 (12.50)	11 (37.93)	4 (36.36)	27 (18.00)
Agriculturist	-	2 (4.55)	1 (2.50)	4 (13.79)	-	7 (4.67)
Total	26 (100)	44 (100)	40 (100)	29 (100)	11 (100)	150 (100)

Source: primary data

The table 1 shows that 59 respondents (39.33 %) are businessmen and of them, 20 have monthly income of Rs. 20,000 – 30,000, 18 respondents have a monthly income of Rs. 30,000 – 40,000, 16 respondents have a monthly income of less than Rs. 20,000 and a mere 5 respondents have a monthly income of Rs. 40,000 – 50,000. Similarly, 57 respondents (38 %) are employees and of them, 21 respondents have monthly income of Rs. 20,000 – 30,000, 16 respondents have monthly income of Rs. 30,000 – 40,000, 9 respondents have monthly income of Rs. 40,000 – 50,000, 7 respondents have monthly income of more than Rs. 50,000 and only 4 respondents have monthly income of less than Rs. 20,000. 27 respondents (18 %) are professionals. Of them, 11 respondents have a monthly income of Rs. 40,000 – 50,000, 6 respondents have monthly income of less than Rs. 20,000, 5 respondents have monthly income of Rs. 30,000 – 40,000 and just 4 respondents have a monthly income of more than Rs. 50,000 while 1 respondent has a monthly income of Rs. 20,000 – 30, 000. It is concluded that majority of the respondents have monthly income ranging between Rs. 20, 000 and 40,000 and that professionals have more income.

TABLE 2: INCOME-WISE DISTRIBUTIONS OF THE SAMPLE RESPONDENTS OF LIC

Approximate monthly income	Number of respondents	Percentage
Less than Rs. 20000	26	17.30
Rs. 20000 - Rs. 30000	44	29.30
Rs. 30000 – Rs. 40000	40	26.70
Rs. 40000 – Rs. 50000	29	19.30
Above Rs. 50000	11	7.30
Total	150	100

Source: primary data

Table 2 shows that 44 respondents (29.30 percent) earn approximate monthly income of Rs. 20000 – Rs. 30000, 40 respondents (26.70 percent) earn a monthly income of Rs. 30000 – Rs. 40000, 29 respondents (19.30 percent) earn between Rs. 40000 – Rs. 50000, 26 respondents (17.30 percent) earn a monthly income of less than Rs. 20000 and 11 respondents (7.30 percent) earn above Rs. 50000 per month.

It is concluded that majority of the respondents (29.30 percent) earn approximately monthly income of Rs. 20000-Rs. 30000.

IMPACT OF INCOME ON SERVICE QUALITY PERCEPTION

TABLE 3: INCOME WISE RESULTS OF ANOVA ON THE SERVICE QUALITY PERCEPTION

		N	Mean	Std. Deviation	F-value	p value	Sig
TANGIBILITY	Less than 20000	26	14.346	2.190	3.210	0.015	*
	20000-30000	44	13.046	2.719			
	30000-40000	40	13.100	1.751			
	40000-50000	29	12.310	2.002			
	50000 above	11	12.636	1.362			
	Total	150	13.113	2.242			
READABILITY	Less than 20000	26	17.346	2.513	4.383	0.002	**
	20000-30000	44	15.568	2.256			
	30000-40000	40	15.450	1.413			
	40000-50000	29	15.276	1.962			
	50000 above	11	15.818	2.786			
	Total	150	15.807	2.194			
RESPONSIVENESS	Less than 20000	26	13.846	2.148	2.956	0.002	**
	20000-30000	44	12.227	2.134			
	30000-40000	40	12.575	1.693			
	40000-50000	29	12.172	2.089			
	50000 above	11	13.000	3.286			
	Total	150	12.647	2.177			
ASSURANCE	Less than 20000	26	12.269	2.706	4.992	0.001	**
	20000-30000	44	12.250	1.793			
	30000-40000	40	12.150	1.805			
	40000-50000	29	12.241	2.837			
	50000 above	11	15.364	2.420			
	Total	150	12.453	2.365			
EMPATHY	Less than 20000	26	16.615	2.299	2.323	0.059	@
	20000-30000	44	15.591	2.182			
	30000-40000	40	14.825	2.194			
	40000-50000	29	15.276	2.433			
	50000 above	11	15.818	3.790			
	Total	150	15.520	2.441			
TOTAL	Less than 20000	26	74.423	7.495	5.686	0.000	**
	20000-30000	44	68.682	6.618			
	30000-40000	40	68.100	3.643			
	40000-50000	29	67.276	6.584			
	50000 above	11	72.636	11.351			
	Total	150	69.540	6.998			

Source: primary data

Note: ** Significant at 1 percent level, *Significant at 5 percent level, @-Not significant.

The table 3 shows that the tangibility 'F' value 3.210 and 'P' value 0.015 are significant at 5 percent level. The reliability 'F' value 4.383 and 'P' value 0.002 are significant at 1 percent level. The responsiveness 'F' value 2.956 and 'P' value 0.002 are significant at 1 percent level. The assurance 'F' value 4.992 and 'P' value 0.001 are significant at 1 percent level. The empathy 'F' value 2.323 and 'P' value 0.059 are not significant and the total 'F' value 5.686 and 'P' value 0.000 are significant at 1 percent level. A total variable implies income wise impact on customer perception of LIC.

Hence it can be inferred that income strongly influences the variables tangibility, reliability, responsibility, assurance and total variables. But income does not influence empathy. Income and empathy differ and they are independent variables. The above table shows the significance is equal to .000. According to the rule if sig. is less than alpha (.000 <.001), we reject null hypothesis. Since the p-value (sig.) is less than 0.01, we can say that there is overwhelming evidence to infer that the alternative hypothesis is true. We can also say that the relationship is highly significant between Income and service quality dimension of the customers in LIC. Hence, it is concluded that the significant difference between income wise and service quality dimensions except empathy is not significant.

IMPACT OF GENDER ON SERVICE QUALITY PERCEPTION

TABLE 4: SHOWS THE GENDER-WISE SAMPLE RESPONDENTS OF CUSTOMER PERCEPTION OF LIC MEAN STANDARD DEVIATION AND T-VALUES, P VALUES

	GENDER	N	Mean	Std. Deviation	t-value	p value	sig
TANGIBILITY	Male	97	13.021	2.475	-0.684	0.495	@
	Female	53	13.283	1.747			
RELIABILITY	Male	97	16.165	2.272	2.765	0.006	**
	Female	53	15.151	1.895			
RESPONSIVENESS	Male	97	12.567	2.273	-0.605	0.546	@
	Female	53	12.793	2.003			
ASSURANCE	Male	97	12.959	2.245	3.688	0.000	**
	Female	53	11.528	2.317			
EMPATHY	Male	97	15.546	2.269	0.179	0.858	@
	Female	53	15.472	2.750			
TOTAL	Male	97	70.258	7.319	1.710	0.089	@
	Female	53	68.226	6.222			

Source: primary data

Note: ** Significant at 1 percent level, *Significant at 5 percent level, @-Not Significant.

The table 4 shows the tangibility 'F' value – 0.684 and 'P' value 0.495 are not significant. The reliability 't' value 2.765 and 'P' value 0.006 are significant at 1 percent level. The responsiveness 't' value-0.605 and 'P' value 0.546 are not significant. The assurance 't' value 3.688 and 'P' value 0.000 are significant at 1 percent level. The empathy 't' value 0.179 and 'p' value 0.858 are not significant. The total gender-wise variables 't' value 1.710 and 'P' value 0.089 are not significant.

This hypothesis that there is no relationship between gender and service quality perception among the customers of LIC in Tirupati is accepted.

IMPACT OF FAMILY TYPE ON THE PERCEPTION OF SERVICE QUALITY

TABLE 5: FAMILY TYPE – WISE ANALYSIS OF ANOVA RESULTS ON SERVICE QUALITY DIMENSIONS

	Type of Family	N	Mean	Std. Deviation	t-value	p value	sig
TANGIBILITY	Joint	61	13.295	1.626	0.821	0.413	@
	Nuclear	89	12.989	2.583			
RELIABILITY	Joint	61	15.279	1.827	-2.482	0.014	*
	Nuclear	89	16.169	2.356			
RESPONSIVENESS	Joint	61	12.918	1.943	1.266	0.207	@
	Nuclear	89	12.461	2.316			
ASSURANCE	Joint	61	12.508	2.378	0.234	0.815	@
	Nuclear	89	12.416	2.368			
EMPATHY	Joint	61	15.672	1.938	0.631	0.529	@
	Nuclear	89	15.416	2.738			
TOTAL	Joint	61	69.672	4.675	0.191	0.849	@
	Nuclear	89	69.449	8.246			

Source: primary data

Note: ** Significant at 1 percent level, *Significant at 5 percent level, @-Not significant

The ANOVA table 5 shows the reliability 't' value -2.482 and 'p' value 0.014 are significant at 5 percent level. The reliability has substantial relationship with the type of family of sample respondents of LIC. The ANOVA results show that the t and p values for tangibility, responsiveness, assurance, empathy and totals are not significant. Hence, it can be inferred that responsibility, tangibility, assurance, and empathy are related to type of the family of respondent with respect to their perception of service quality of LIC in Tirupati.

FINDINGS AND SUGGESTIONS

➢ Majority of the respondents (59.30 percent) belong to nuclear family.
➢ Majority of the respondents (48 percent) are having 5 members in their family.
➢ Majority of the respondents (64.70 percent) are males.
➢ It is concluded that majority of the respondents (29.30 percent) earn a monthly income of Rs. 20000 - Rs. 30000.
➢ From the analysis one can infer that the monthly income of 44 respondents out of 150 is in the income between Rs. 20000 and Rs. 30000. Of these 21 respondents are Employed and 11 respondents earn income above Rs. 50,000. Only 7 respondents (63.64 percent) out of 11 were employed and only 4 respondents (36.36 percent) were professional in the income range of above Rs. 50,000.
➢ From the analysis it can be inferred that the highest number of respondents (44) out of 150 respondents, irrespective of their age, are in the income group ranging from Rs. 20000 – Rs. 30000 of whom 18 respondents (40.91 percent) are in the age group of 25 -30 years and only one respondent (2.27 percent) is aged below 25 years. Only 11 respondents out of 150, irrespective of their age fall in the income group of above Rs. 50,000 and only 11 respondents (100 percent) are in the age group of above 35 years. There are no respondents in the group 25 to 35 age group.
➢ There are many factors which affect consumer investment decision in life insurance and from the study it has been seen that the demographic factors of the people play a major and pivotal role in deciding the purchase of life insurance policies.
➢ To achieve greater insurance penetration healthier competition has to be intensified by both the sectors and they should come up with new innovative products to offer greater variety or choice to the customers and also make improvement in the quality of services and sell products through appropriate distribution channel to secure advantage for both the parties.
➢ Insurance companies should devise policies which provide effective risk coverage rather than focusing on the tax benefits and also encourages them for long term investment in insurance.
➢ Government should bring awareness about the insurance and its importance. The unfavorable feeling of illiterates, daily wage workers can be washed out by educating the households extensively. Government should create awareness about insurance among people sure most of the uninsured have negative attitude as they don't have knowledge about insurance.

CONCLUSION

It is concluded that majority of the respondents (29.30 percent) earn a monthly income of Rs. 20000 - Rs. 30000. From the analysis one can infer that the monthly income of 44 respondents out of 150 is in the income between Rs. 20000 and Rs. 30000. Of these 21 respondents are Employed and 11 respondents earn income above Rs. 50,000. Only 7 respondents (63.64 percent) out of 11 were employed and only 4 respondents (36.36 percent) were professional in the income range of above Rs. 50,000.

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GOVERNMENT'S INCLINATION IN DEVELOPMENT OF ORGANIC AGRICULTURE IN INDIA

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ABSTRACT

From ancient times itself organic farming is prevalent in India. Organic farming system in India is not new and is being followed from ancient time A food that is described as 'organic' simply means a food in its purest form, grown or produced without chemical aid. Organic farming keeps harmful chemicals and pesticides out of the food we eat and beverages we drink. The main objectives of organic farming are to maintain organic matter level, promote soil biological activities and careful mechanical intervention to protect the long term fertility of soil, providing nutrients to the crops indirectly with the help of soil micro-organisms which are relatively insoluble nutrient sources and giving due attention to the impact of the farming system on the wider environment and the conservation of wildlife and natural habitats. The different kinds of organic farming are discussed in this article. The main concentration in this article is given to the role of Government of India in development of organic farming. Schemes developed and constraints faced by the Government in path of developing the organic agriculture in India. Some recommendations are offered like Farmers' Organization should be formed as a sound organic strategy for reasonable price premium, awareness and training programmes for organic farming at a regular interval are required and regular demonstrations to the farmers regarding the economic benefits due to application of Integrated Pest Management (IPM) strategy in organic farm should be given. Flow of credit to agriculture by Kishan Credit Card (KCC), Self Help Group (SHG)-banking linkage programme, Farm Income Insurance Scheme (FIIS) should be developed, especially for organic farming.

KEYWORDS

constraints, government's role, kinds of organic farming, promote organic farming, schemes developed.

INTRODUCTION

From ancient times itself organic farming is prevalent in India. Organic farming system in India is not new and is being followed from ancient time. The main aim of organic farming is to keep the soil alive and in good health by the use of organic wastes like crop, animal and farm wastes and aquatic wastes. It is a method of farming system which primarily aimed at cultivating the land and raising crops in such a way, as to keep the soil alive and in good health by use of organic wastes and other biological materials along with beneficial microbes to release nutrients to crops for increased sustainable production in an ecofriendly pollution free environment.

As per the definition of the United States Department of Agriculture (USDA) study team on organic farming "organic farming is a system which avoids or largely excludes the use of synthetic inputs (such as fertilizers, pesticides, hormones, feed additives etc) and to the maximum extent feasible rely upon crop rotations, crop residues, animal manures, off-farm organic waste, mineral grade rock additives and biological system of nutrient mobilization and plant protection".

Organic agriculture is a unique production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles and soil biological activity, and this is accomplished by using on-farm agronomic, biological and mechanical methods in exclusion of all synthetic off-farm inputs.

NEED FOR ORGANIC FARMING

The Green Revolution has taken India from food deficiency stage to self-sufficient stage to export level production. It has all been possible by the use of high yielding varieties and higher level of inputs of fertilizers and plant protection chemicals. During the post Green Revolution period, the production of food grains has increased four-folds. Anything in excess is not good for human, plants and for soil too, excessive use of chemicals in agriculture is raising the questions on sustainability of agriculture in the long run calling attention for sustainable production, which shall address social, ecological and economical issues together. Recognizing the adverse impact of excessive use of chemicals on soil health and human health, there has been a realization for integrated management system. Since organic farming addresses soil health, human health and environmental health and is eco-friendly, appears to be one of the options for sustainability. Therefore, organic farming is receiving a focused attention of Government of India.

Producing crops using fertilizers and chemicals has come to be known as conventional agriculture. Environmental concerns, possible pesticide residues in foods and declining energy resources have breathed new life into alternative forms of production such as organic farming. Foods that are organically farmed are seen as more natural, healthier and perhaps of higher quality. Organically grown foods are cultivated without synthetic pesticides, herbicides and fertilizers. A food that is described as 'organic' simply means a food in its purest form, grown or produced without chemical aid. Organic farming keeps harmful chemicals and pesticides out of the food we eat and beverages we drink.

The main objectives of organic farming are:

- To maintain organic matter level, promote soil biological activities and careful mechanical intervention to protect the long term fertility of soil.
- Making the soil nitrogen self-sufficient biological nitrogen fixation and use of crop residues and livestock wastes as manures.
- Providing nutrients to the crops indirectly with the help of soil micro-organisms which are relatively insoluble nutrient sources.
- Controlling weeds, diseases and pest through crop rotation, natural predators, diversity, organic manuring, and minimal thermal, biological and chemical intervention.
- Taking extensive care of livestock, paying full attention to their adaptations, behavioural needs and welfare issues regarding their nutrition, housing, health, breeding and rearing.
- Giving due attention to the impact of the farming system on the wider environment and the conservation of wildlife and natural habitats

DIFFERENT KINDS OF FARMING PRACTICES

Homoeofarming

Samuel Hahnemann, the developer of the modem homoeopathic method of medicine, discovered in 1827 that when a remedial substance was diluted and then shook or knocked and repeated the process several times, the end result was remedy which had lost its toxicity and simultaneously had acquired a stronger medicinal property with a greater curing effect That is why he called this processing 'potentizing'.

Advantages of homoeofarming

- It is a total and complete organic farming with assured yields.

- Produces healthy soils, healthy plant life and healthy yields.
- Restores natural taste, color and flavor of the yields. The cooking quality of rice and other cereals improved very much.
- No environmental pollution and ecological disturbance
- The plants are not subjected to shocks due to chemical fertilizers and chemical pesticides
- Easy to carry and handling charges are nil. For example 200-450 ml (1 kg max) of Tincture per acre is sufficient as against 50 - 100 kg of chemical fertilizers.
- These are cost-effective (200-300% less than chemicals.) So it is very much helpful to small and marginal farmers.
- Leads to sustainable Agriculture.

Maharishi Vedic Organic Agriculture

Maharishi Vedic Organic Agriculture is natural agriculture free from all poisonous fertilizers, pesticides and herbicides, grown by farmers enjoying Vedic consciousness. It is higher consciousness spontaneously in harmony with the rhythms and cycles of nature on the local and cosmic levels and utilizing the Vedic sounds - the sounds of natural law to awaken the inner intelligence of the plants, so that their growth and health-giving, nourishing properties are maximized to uplift the consciousness and promote a peaceful, healthy life for all who eat them. The goal of Maharishi Vedic Organic Agriculture is to re-enliven Natural Law in agriculture, bringing the farmer, the process of farming and the environment in complete harmony with each other.

Agnihotra

Agnihotra is a healing fire from the ancient science of ayurveda. It is a process of purifying the atmosphere through a specially prepared fire performed at sunrise and sunset daily. Agnihotra utilizes the combined effect of various factors involved in its science viz., burning *of* specific organic substances like cow's ghee, rice grains, twigs of plants like vata, audumbar, palaash, peempal and bael etc and thereby injecting the atmosphere with nutrients. The mantra vibrations chanted too have a healing and relaxing effect on the atmosphere and all the living beings. Agnihotra also nourishes plant life and neutralizes harmful radiation and it harmonizes the functioning of life energy and can be used to purify water resource.

Amrutpani

Amrutpani invigorates the living soil and converts a dead soil into a living one. Amrutpani is liquid manure prepared by Ahimsak Rishi-Krishi Despande technique. Amrutpani is also used to improve the soil fertility.

How to use Amrutpani?

Sugarcane, turmeric, ginger etc. should be planted after dipping into Amrutpani. In the case of crops where the seedlings are transplanted, the roots can be dipped into Amrutpani before planting. While watering sugarcane and other crops with canal or well water, Amrutpani can be mixed in the main watering channel stirring all the time. For rain fed or monsoon crops the seeds need dressing. When the soil is damp, it should be drenched with Amrutpani. Between the rows and not directly on the plants. While planting seedlings of crops such as chilli, tobacco or fruit trees, the small amount of water, which is needed to wet the area around the plants, should be Amrutpani. Excess of Amrutpani is always beneficial and will not harm the young plants.

Companion planting

Companion planting refers to the practice of planting more than one crop in the row or planting a different crop between two rows of a like crop. It is theorized that or aroma of certain plants are inhibitory to some diseases or insects. Companion cropping can effectively use garden space and is particularly useful with small gardens. If companion cropping is used, select companions with care to avoid shading or excessive, competition for water and nutrients. Like for beans - Potato, carrot, cucumber, cauliflower, cabbage are companion crops but Onion, garlic are antagonist crops.

Biopreservatives

In today's food industry, chemical preservatives are commonly used to maintain raw material quality, to ensure safety and stability of the products during their extended shelf life. But consumers world over prefer food products that are natural, additive free, have less salt and acceptable shelf life with assured quality. However, the use of chemical preservatives to inhibit sgrowth of spoilage bacteria in modem food systems has been recognized as deterrent to health. Thus this has necessitated the need to exploit the natural biological substance from plants, animals and microorganisms, which are safe for human health and are capable of producing substances that act as preservatives, called 'Biopreservatives'.

GOVERNMENT'S ROLE IN DEVELOPMENT OF ORGANIC FARMING IN INDIA

Government of India also wants to develop the organic products market in India and around the world. Government is taking actions to promote organic production in India. As part of 10th Five year Plan, Government of India has earmarked about Rs. 100 crores for the promotion of organic agriculture in the country. The main components of this initiative include farming of standards, negotiating with different countries and putting in place a system of certification for organic products. Central Government is also promoting the production and use of bio-fertilizer to make it popular. Government has initiated a project "National Project on Development and Use of Bio fertilizers" for this purpose.

Government in 2001 has created a nodal agency named APEDA (Agricultural and Processed Food Products Export Development Authority) to promote the Indian organic agriculture and its exports opportunities. Another program called National Program for Organic Production (NPOP) is outlined and under this program, National Organic Standards have been evolved. This apart, it has also developed Criteria for Accreditation of certification agencies, Accreditation Procedure and Inspection and Certification Procedures. In developing these standards and procedures due attention is paid to the guidelines as enumerated by international organizations such as International Federation for Organic Agricultural Movement (IFOAM), EU Regulations and FAO Codex Standards. As part of this program, a National Logo for organic products on behalf of Govt. of India has also been developed.

Some of the other efforts towards promotion of organic exports include attempts to collaborate with all the major organic importing countries. Towards this APEDA is deliberating with European Union for inclusion of India in the list of third countries under Article 11 of the EU regulations No 2092/91 so that India's National Programme for Organic Production gets the required recognition under the EU regulations.

A national level steering committee is functioning as the apex advisory body for assisting the government to promote organic farming in the country. This body consists of representative's form the Ministries of Agriculture, Food Processing Industries, Forests and Environment, Science and Technology, Rural Development and Commerce.

CONSTRAINTS THAT ORGANIC AGRICULTURE IS FACING IN INDIA

- **Market Information** – Very less information regarding organic farming is available in the market. The information is not easily accessible to the local farmers. There are no central, state and local designated agencies which brings the information to the farmers.
- **Bio – input** – The conventional inputs are considered more effective than bio inputs because –
    a. There is no quality monitoring system for bio inputs due to which many spurious and low quality brands are available in the market.
    b. There is low penetration of bio inputs in market due to the disincentive for traders.
    c. Traders are not willing to keep the stock of bio input in the shop due to the limited shelf life of the bio inputs.
    d. It takes long period for bio inputs to be effective. There are very limited R&D and investments on bio inputs.
- **Time and cost of conversion** – High cost is involved in the certification process and there are very limited numbers of certifying agencies. Small and marginal farmers hesitate to convert from conventional to organic farming due to high cost and time lag.
- **Limited Government Support** – Farmers prefer conventional inputs since they are subsidized but no incentives are provided to bio inputs. Government has outlaid limited financial support to bio inputs. There are no coordinated efforts between centre and state level for strategic attention towards greening the agriculture.

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- **Inadequate Infrastructure** – There is lack of adequate transportation facilities and no or limited storage facilities. Quality assurance mechanisms are not easy for the farmers. Marketing channels for green outputs are under developed. Price premiums reach more for intermediaries than producers. There is low level of networking among farmers and other stakeholders.

HINDRANCES THAT GOVERNMENT IS FACING WHILE PROMOTING ORGANIC AGRICULTURE

The subsidies on chemical and fertilizers have slowed down the growth of organic agriculture.

The change process from conventional to organic is difficult because in India majority of numbers of farmers are small or marginal and there is high level of illiteracy rate among them, so making them understand that the income loss while changing the cropping and cultivation patterns is an investment even if it is slow and time consuming process.

Government aided agricultural departments, research institutions and extension services have for long been oriented towards chemical input agriculture as a result there is a requirement for reorienting these officials towards organic agriculture which takes time and money.

SCHEMES DEVELOPED BY THE GOVERNMENT TO PROMOTE ORGANIC AGRICULTURE

Many corporate houses require a regular supply of organic foods and all the polyclinics in the major cities demand toxin free fruits and vegetables for inmates. The retailers of metropolitan cities and exporters of vegetable to the Middle East / Far East require small quantities of organic produce on a continuous basis throughout the year. Correspondingly substantial area in Erode, Thirunelvi, Sivagangai, Coimbatore and Madurai districts have been converted into organic horti-cultural production systems. APEDA has accredited Spices Board and OASIS, an NGO to certify the organic farms.

Importing regions such as the EU are insisting on adherence to Sanitary and Phyto Sanitary standards (SPS) and Traceability norms on the import of food products. The WTO also has developed norms for Good Agricultural Practices (GAP), Good Manufacturing Practices (GMP) in line with Europe Gap to ensure food safety. In this context, it is imperative to promote organic farming in places like Nilgiris, Sathyamangalam, Sivagangai, Tirunelveli, Theni etc., so as to enable the farmers to get certified by agencies like INDOCERT, SKAL, and IFOAM.

The organic producers are to be trained on GAP, SPS and traceability issues. Currently, there is no institutional mechanism to link the production base with the retail sector. District level collection centers and retail sales centers at Urban areas are proposed to be established under Tamil Nadu Horticultural Produces Co-operative Enterprises, primarily a farmers co-operative, so that a steady flow of organic produce is ensured between the producers and consumers. This model is proposed to be implemented in two production centers during 2005–06 and scaled up to all major horticultural clusters in the next couple of years. The total financial assistance sought in 2005-06 for all initiatives under Organic farming (all components) is Rs 157.6 Lakhs.

ADOPTION OF ORGANIC FARMING

Estimated Value	:	Rs.20,000/-ha
Subsidy	:	50% (i.e) Rs.10, 000/-ha
Maximum subsidy per individual will be for 4 ha		

Organic farming can be followed in fruit crops, vegetables, spices & condiments and Cole crops.

TABLE 1 – INVESTMENT TO ADOPT ORGANIC FARMING

Details	50% Subsidy Rs.	Farmers contribution (Rs.)	Total (Rs.)
Land preparation	0	2,500	2,500
Green manure and seed material	0	500	500
Trichoderma viridi, Pseudomonos,Azospirillum, Phosphobacteria, VAM	1,000	0	1,000
Vermicompost & organic manure	4,000	0	4,000
Neem seed oil cake & pungam cake	4,000	0	4,000
Neem oil	500	0	500
Poultry manure, farmyardmanure	500	7,000	7,500
Total	**10,000**	**10,000**	**20,000**

Source: agritech.tnau.ac.in

Following are the schemes of Government to aid all the farmers irrespective of the size:

1. Production and distribution of Green manure seeds -- 25 % subsidy
2. Production and Distribution of *Rhizobium, Azospirillum* and Phosphobacteria- Rs.6/200 gm packet
3. Production and distribution of Blue green algae Rs.2.75/kg
4. Production and distribution of parasites to control Black headed caterpillar. Subsidy charge Rs.35/ha
5. Release of parasite in sugarcane to control internode borer. RS.35.75/ha
6. Production of NPV for the control of prodenia in cotton. Rs.53/ha
7. Composting of farm waste through pleurotus. Distribution of kits at free cost (1 kg of pluerotus, 5 kgs of urea and a leaflet containing technical information at a cost of rs.140 per kit)
8. Vermicompost production scheme implemented to conduct demonstration. Supply input at the cost of Rs.1200
9. Vermicompost production scheme implemented to conduct training. Rs. 50 for each person participates in training.

RECOMMENDATIONS

1. Farmers' Organization should be formed as a sound organic strategy for reasonable price premium.
2. Awareness and training programmes for organic farming at a regular interval are required.
3. Regular demonstrations to the farmers regarding the economic benefits due to application of Integrated Pest Management (IPM) strategy in organic farm
4. Flow of credit to agriculture by Kishan Credit Card (KCC), Self Help Group (SHG)-banking linkage programme, Farm Income Insurance Scheme (FIIS) should be developed, especially for organic farming.
5. Interlinked credit with output for organic farm production should be initiated to facilitate export in this section and to encourage organic farmers.
6. Sound public policy should involve revolving fund for farmers to access initial financing required for investments to vermicomposting, bio-pesticide produc-tion, livestock, etc. These are useful in integrated systems of manures, pesticides, etc.
7. Government incentives or tax exemptions on organic inputs should be applied like conventional inputs and benefits could be channeled like extension ser-vices and support for biological pest controls.
8. The Government should provide start-up funding as subsidy for a broad scale farmer conversion programme i.e. inputs of organic in nature.
9. The organic farm produce should be included under the public distribution system (PDS).
10. Proper attention should be paid while supplying the inputs at the door step of farmers in the initial stage.
11. Farmers and consumers should rely on a system of private self-organized producer organizations and independent certifiers which will provide an economi-cally-efficient mechanism of certification (e.g. PGS, i.e. Participatory Guarantee System).
12. Marketing co-operatives by pooling the small and scattered produce of the producers can improve the bargaining strength of organic growers and can thus effectively eliminate the margin appropriated by the market intermediaries.

13. Organic food products should be integrated into public procurement, such as in schools, hospitals, etc., through the requirement of at least a certain percentage of organic foods, if these are available, to stimulate both a base market demand and improve the public information and consumer exposure to organics.

14. Public domain research with adequate funding for sustainable agriculture is urgently necessary in developing countries. The Government of India should set up an Organic Agricultural Research Institute (OARI) with its all India network through different centers in different states of different agro-ecological condition.

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IMPLEMENTATION OF SECURITY IN CLOUD COMPUTING

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ABSTRACT

This paper will discuss some security concerns of cloud computing. Cloud Computing provides several services in the market, such as Infrastructure as a Service (IaaS), Platform as a Service (PaaS) and Software as a Service (SaaS). There are many service providers in the cloud computing, all services are fully managed by providers. Users can consume their services at a rate that is set by the providers. There are significant security concerns that need to be discussed when data is exchanging between the clouds.

KEYWORDS
cloud computing, security issues.

1. INTRODUCTION

In the last few years, cloud computing has grown from being a promising business concept to one of the fastest growing segments of the IT industry. [1] Power grids, traffic control, healthcare, water supplies, food and energy, along with most of the world's financial transactions, now depend on information technology. An emerging IT delivery model-cloud computing - can significantly reduce IT costs & complexities while improving workload optimization and service delivery. Cloud computing is massively scalable, provides a superior user experience, and is characterized by new, internet-driven economics. Cloud computing is a class of the next generation highly scalable distributed computing platform in which computing resources are offered 'as a service'. Cloud based services include software-as-a-service (SaaS) and platform as a service (PaaS). Amazon's Elastic Compute Cloud (EC2) [2] and IBM's Blue Cloud [3] are example of cloud computing services [4]. These clouds have different architecture based on the services they provide. The data is stored on to centralized location called data centers having a large size of data storage. The data as well as processing is somewhere on servers. So, the clients have to trust the provider on the availability as well as data security. [5][6] One of the major issues slowing cloud computing growth is security. Despite the proliferation of security management tools, along with numerous reliability assurances from cloud providers, complications with data privacy and data protection continue to plague the market. This primer on cloud computing security contains all our recent cloud security news stories, tips and interviews. Thus to take full advantage of the power of cloud computing, end user need comprehensive security solution to attain assurance of the cloud's treatment of security issues. [4] In the end, one prevalent question remains: Will things get better or worse for security in the cloud?[7]

2. BACKGROUND WORK

The concept of cloud computing has been evolving for more than 40 years. In the 1960s, J.C.R. Licklider [8] introduced the term "intergalactic computer network" at the Advanced Research Projects Agency. This concept served to introduce the concept that the world came to know as the Internet. The underlying premise was a global interconnection of computer program and data [9].

Other experts attribute the cloud concept to computer scientist John McCarthy [10] who proposed the idea of computation being delivered as a public utility, similar to the service bureaus which date back to the sixties [11].

Since the sixties, cloud computing has developed along a number of lines, with Web 2.0 being the most recent evolution. However, since the internet only started to offer significant bandwidth in the nineties, cloud computing for the masses has been something of a late developer.

One of the first milestones for cloud computing was the arrival of Salesforce.com [12] in 1999, which pioneered the concept of delivering enterprise applications via a simple website. The services firm paved the way for both specialist and mainstream software firms to deliver applications over the internet.

The next development was Amazon Web Services in 2002 [12], which provided a suite of cloud-based services including storage, computation and even human intelligence through the Amazon Mechanical Turk.

Then in 2006, Amazon launched its Elastic Compute cloud (EC2) [12] as a commercial web service that allows small companies and individuals to rent computers on which to run their own computer applications.

Another big milestone came in 2009, as Web 2.0 [13] hit its stride, and Google and others started to offer browser-based enterprise applications, though services such as Google Apps.

"*The most important contribution to cloud computing has been the emergence of "killer apps" from leading technology giants such as Microsoft and Google. When these companies deliver services in a way that is reliable and easy to consume, the knock-on effect to the industry as a whole is a wider general acceptance of online services,*" said Dan Germain [14], chief technology officer at IT service provider Cobweb Solutions.

Other key factors that have enabled cloud computing to evolve include the maturing of virtualization technology, the development of universal high-speed bandwidth, and universal software interoperability standards, said UK cloud computing pioneer Jamie Turner. Turner added, "As cloud computing extends its reach beyond a handful of early-adopter Google Docs users, we can only begin to imagine its scope and reach. Pretty much anything can be delivered from the cloud." From a technical perspective, cloud computing includes service oriented architecture (SOA) and virtual applications of both hardware and software. Within this environment, it provides a scalable service delivery platform. Cloud computing share its resources among a cloud of service consumers, partners, and vendors. By sharing resources at various levels, this platform offers various services such as an Infrastructure cloud, a software cloud, an application cloud and a business cloud [11].

3. CLOUD PROVIDERS

There are so many Cloud Service Providers which provide their services according to cloud models. Some of them are based on Iaas, PaaS and others are on SaaS. Prominent Cloud Computing Service providers are:

TABLE 1: PROMINENT CLOUD PROVIDERS

Cloud Provider	Cloud Type
Microsoft	SaaS
Zenith InfoTech	IaaS
TCS	IaaS & SaaS
Cynapse India	IaaS & SaaS
Wipro	SaaS
Netmagic Solutions	IaaS
Reliance Data Centre	IaaS, PaaS & SaaS
Infosys	SaaS
Salesforce.com	SaaS
Amazon AWS	PaaS & IaaS
Google App. Engine	PaaS
Go Grid	IaaS
Rackspace	IaaS
Force.com	Paas

4. SECURITY CONCERNS

Cloud computing brings benefits across three categories: economic, architectural, and strategic. First, it helps reduce IT costs. Second, it improves the experience of end-users. Third, it helps companies focus on their core competencies. While cost and ease are two great benefits of cloud computing, there are major security concerns which are to be discussed when data is moving from one cloud to another cloud. To address these concerns, the cloud provider must develop sufficient controls to provide the same or greater level of security. There are some security concerns to review in cloud computing.

Data Storage: With in the Cloud Computing, different countries have different requirements and controls placed on access. Because data resides in different physical locations, the cloud provider should agree in writing to provide the level of security required for customers.

Unauthorized Access: Access control is a key concern, because insider attacks are a huge risk. A potential hacker is someone who has been entrusted with approved access to the cloud. Anyone considering using the cloud needs to look at who is managing their data and what types of controls are applied to these individuals.

Genuine Cloud: Organizations operating in the US, Canada, or the European Union have many regulatory requirements that they must abide by (e.g., ISO 27002, Safe Harbor, ITIL, and COBIT). You must ensure that your cloud provider is able to meet these requirements and is willing to undergo certification, accreditation, and review.

Audit Rights: The cloud service providers should agree in writing to the terms of audit.

Trained Employers: Employees of the cloud service providers should be well trained because people will always be the weakest link in security. How the cloud service providers trains employees is also an important item to review.

Data Security Types: With the exact location of data anybody can enter in the virtual environment and access the data. The cloud service provider should ensure data confidently, integrity and availability. The storage provider must offer capabilities that, at a minimum, include tested encryption schema, unauthorized access to data, schedule data storage and backup [15]

Security Service Levels: The SLA serves as a contracted level of guaranteed service between the cloud provider and the customer that specifies what level of services will be provided.

Providers Reliability: How long has the cloud provider been in business and what is their track record. If they go out of business, what happens to your data? Will your data be returned, and if so, in what format? As an example, in 2007, online storage service Media Max went out of business following a system administration error that deleted active customer data. The failed company left behind unhappy users and focused concerns on the reliability of cloud computing.

Security Breach: If a security incident occurs, what support will you receive from the cloud service provider? While many providers promote their services as being unhackable but cloud based services are an attractive target to hackers.

Recovery & Backup: While you may not know the physical location of your services, it is physically located somewhere. All physical locations face threats such as fire, storms, natural disasters, and loss of power. In case of any of these events, how will the cloud provider respond, and what guarantee of continued services are they promising?

The cloud as a social networking hub: Now a Days one of the most popular concept is social networking sites, most of the people are using these sites regularly and they uploading their personal details, pictures & videos. Hence, users are encouraged to provide verifiable facts, such as birthdays, full names, educational or professional background, and so on. However, this leads to the problem that, if such a set of facts can be used to establish your own identity, then it is equally possible for an attacker to steal your identity if this set of facts is acquired. Identity theft is a huge concern for those who spend a great deal of their time online. Another security problem with social networks is the abundance of trust and permissions that is applied by your account to others in your network. For example, messages sent by a friend are likely to be more trusted than, for example, email, since anyone can send you an email but only certain people are in your network. [16]

The cloud as an online service provider: We will also tackle the cloud as a service provider. This covers Software as a Service (SaaS), web-hosting services, and so on.

SaaS was declared by the Software & Information Industry Association (SIIA) as a 'tide of web-based, outsourced products and services that remove the responsibility for installation, maintenance and upgrades from over-burdened MIS [Management Information System] staff' that will 'sweep away traditional packaged desktop and enterprise applications' [17]. An SaaS application traditionally has the following characteristics [18]:

- Network-based
- Centralized access (by the end-user) and management (by the vendor)
- (Usually) one-to-many model

Currently popular SaaS systems are SAP Business By Design, Microsoft Dynamics and Google Apps. Gartner estimates that by 2012, 80 per cent of Fortune 1000 companies will be using SaaS [19]. Because SaaS applications often involve the storage of business or institution data in the servers of a third-party vendor, the usual problems may arise as to the security and robustness of the data. We will not be considering cases in which the SaaS provider and client are the same entity. An additional problem is that because SaaS applications are managed remotely by the vendor, there may be a need to make non-IT people within the client organization administrators or owners of portals. [16]

The cloud as a commercial entity: We will talk about the cloud as an entity through which commercial transactions are made. This is a special case of the cloud as a storage space because in this sense the information stored is (1) compulsory – you won't be able to buy anything if you don't give out your credit card details and so on – and (2) The security problems associated with the cloud as a commercial entity all revolve around the safety of the data stored with online transaction processors. Online transactions are also susceptible to scamming tactics such as spoofing and phishing. The profitability of online transactions makes it a prime target for cyber criminals to try to get transaction data, for example through phishing for Pay Pal or Amazon credentials, or even online games. [16]

5. CLOUD COMPUTING SECURITY ATTACKS

In the following, we present a selection of security issues & attacks related to Cloud Computing. Each issue is explained briefly and accompanied with a short discussion. Some of the potential attack vectors criminals may attempt include:

Denial of Service (DoS) attacks: In a denial-of-service (DoS) attack, an attacker attempts to prevent legitimate users from accessing information or services. By targeting your computer and its network connection, or the computers and network of the sites you are trying to use, an attacker may be able to prevent you from accessing email, websites, online accounts (banking, etc.), or other services that rely on the affected computer. [20]

XML Signature: A well known type of attack on protocols using XML Signature for authentication or integrity protection is XML Signature element wrapping [21] (denoted as wrapping attack). [22]

Browser Security, In a Cloud, computation is done on remote servers. The client PC is used for I/O only, and for authentication and authorization of commands to the Cloud. It thus does not make sense to develop (platform dependent) client software, but to use a universal, platform independent tool for I/O: a standard Web browser. Modern Web browsers with their AJAX techniques (JavaScript, XML Http Request, Plugins) are ideally suited for I/O. But what about security? [22]

Side Channel attacks: Side Channel attacks are based on "Side Channel Information". Side Channel Information is information that can be retrieved from the encryption device that is neither the plaintext to be encrypted nor the cipher text resulting from the encryption process. [20]. So an attacker could attempt to compromise the cloud by placing a malicious virtual machine in close proximity to a target cloud server and then launching a side channel attack.

Flooding Attacks: In cloud computing, companies (users) to rent server hardware on demand (IaaS). In This approach day-and-night cycles can be attenuated by having the data traffic of different time zones operated by the same servers. Thus instead of buying sufficient server hardware for the high workload times, Cloud

Authentication attacks: Authentication is a weak point in hosted and virtual services and is frequently targeted. There are many different ways to authenticate users; for example, based on what a person knows, has, or is. The mechanisms used to secure the authentication process and the methods used are a frequent target of attackers.

Man-in-the-middle cryptographic attacks: This attack is carried out when an attacker places himself between two users. Anytime attackers can place themselves in the communication's path, there is the possibility that they can intercept and modify communications. [23]

Transaction security: The old saying that 'money is the root of all evil'. The fact that online transactions use a central system means that if a cyber criminal manages to get control of the transaction servers, everyone is affected regardless of how cautious or security-aware they are. For example, database breaches such as those that affected debit card processor Heartland were reportedly due to malware that infiltrated the company's systems [24].

According to the indictment of suspect Albert Gonzalez, SQL injection was the primary attack vector, and in some cases custom-made malware was installed in certain systems, which allowed the suspects to evade anti-virus programs, scan for data, and delete log files [25]. The criminals managed to infiltrate the system and may potentially have come away with as many as 100 million credit card numbers. Spoofing and phishing are two social engineering techniques that have emerged solely from the development of the cloud. [16]

Malware and exploits: In this section we will discuss some of the malware families that are known to use these techniques. Themed social engineering is what Win32/Waledac [26], a high-profile spamming family, uses to enlarge its users database. As for payloads, Win32/Waledac has the ability to download and execute arbitrary files, harvest email addresses from the local machine, perform denial-of-service attacks (DoS), act as a proxy server for network traffic, and sniff passwords. It was included in the Microsoft Malicious Software Removal Tool (MSRT) in April 2009 [27] due to its high prevalence. Win32/Koobface [28] is one of the biggest threats spreading through social networks, hence its addition to the MSRT in March 2009 [29]. It is highly complex and affects multiple networking sites, such as Bebo, Facebook, Friendster, Fubar, Hi5, LinkedIn, MySpace, Tagged and Twitter. [16]

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CUSTOMER SATISFACTION LEVEL TOWARDS LANDLINE SERVICE PROVIDED BY BSNL WITH REFERENCE TO COIMBATORE

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ABSTRACT
Customer satisfaction is the main goal of every business organization. In this competitive business scenario each and every activity starts and ends with the customer. In the present scenario, the telecommunication is lifeblood for every business activity. Even in this industry there prevails a stiff competition between the service providers. In spite of a well-established network and infrastructure supporting, certain service providers weren't able to root their footsteps in the market due to lack in customer service and satisfaction. Due to this their promotional initiatives haven't yielded fruitful results. Since there is a marginal difference between the services rendered, there is more possibility for the subscriber to switch from one service provider to another based on their satisfaction. So it very essential for the service provider to understand the influence of various Demographic variables that influence the satisfaction level to win the hearts of the customers.

KEYWORDS
customer, satisfaction, tele communication.

INTRODUCTION

Telecommunication is recognized, world over, as a key factor in the development of social, economic, commercial and cultural activities. The development of telecommunication infrastructure is likely to play a greater role in meeting the diverse needs of people and improving their quality of life through interlinked development of many other sectors. The term 'Telecommunication' in ITU parlance covers a very wide variety of services such as sound & television broadcasting, space communications, aeronautical and maritime mobile communications, radio-location and radio-navigation systems, radio astronomy, meteorological aids and services, radio amateurs, etc, besides the public telecommunications services. There are large telecommunication networks belonging to railways, defence and para-military organizations, law and order services (police etc), public utility organizations like electricity grids, transport organizations, municipal services, national and international telecommunications service providers – both government and private, civil aviation department and airlines, shipping & port authorities, sound and TV broadcasting organizations, meteorological department, oil exploration, processing and distribution companies, large private companies, etc.

The following factors are expected to contribute to the growth of the Indian Telecommunications Industry:
- Economic Growth and continued development of the Indian Economy:
- Higher growth rate of service oriented sector, leading to an increased demand for telecommunication services;
- Increased use of Information Technology and Internet, leading to a large demand for data communication services;
- Declining tariff reduced equipment cost and reduced handset costs over time.
- Increasing customer choice and demand for value added services.
- Increasing globalisation of the Indian Business, leading to increase international voice & data traffic.

OBJECTIVES OF THE STUDY
1. To study the customer satisfaction level towards Landline service provided by BSNL
2. To study the influence of Demographic variables of the respondents.
3. To study the satisfaction level of Customer Service provided by BSNL.
4. To identify the customer opinion about BSNL.

RESEARCH METHODOLOGY
RESEARCH DESIGN
The research design is the basic framework or a plan for a study that guides the collection of data and analysis of data. In this market survey the design used is used Descriptive Research Design. It includes surveys and fact-finding enquiries of different kinds. The major purpose of descriptive research is description of state of affairs, as it exists at present.
SOURCES OF DATA
The data were collected from both primary and secondary sources. Questionnaire method is used for collecting the primary data. The data were also collected from published records, Journals and Websites.
SAMPLE SIZE
To study the customer satisfaction towards land line (BSNL) 200 respondents were selected in Coimbatore by adopting convenience sampling method.
STATISTICAL TOOLS FOR ANALYSIS
The collected data were analyzed by employing the statistical tools like
- Percentage analysis
- Chi-square test
- Two-way table

LIMITATIONS OF THE STUDY
➢ The area of study is limited Coimbatore only; hence the results may not be true for other geographical areas.

➢ Validity & Reliability of the data are obtained depends on the responses from the customer.
➢ The time factor of the researcher is limited.
➢ The size of the sample comparing to the population is very less and hence it will not represent the whole population

REVIEW OF LITERATURE

S. Vishnuvarthani (2013) in her article entitled "Consumers" Awareness and Preference for Mobile Phone Services at Erode City" has pointed out that telecommunication is one of the most important growing service sectors in India. It plays an inevitable role in today's busy world. The telecommunication includes both mobile communication and fixed telephony lines. In recent days there is an upsurge in the use of mobile phones rather than land lines. The number of mobile phone subscribers outnumbered land line telephony system. It is because of certain advantages that mobile phone has for itself. Government and private operators are competing at close margin and are trying to provide multiple value added services to people.

M. Nandhini and D.Sivasakthi (2014) in their article entitled, "A Study on Customer Attitude Perception towards Branded Broad Band" have indicated that the broad band is the new oxygen. It opens up a large box of information with a single click of a button. Get ready to surf the world in the www with a high speed connection like access mails faster, download music, share multimedia instantly, video chat with friends and play games with someone at the other end of the globe. When broadband was first introduced as a method to connect to the web, many companies confidently expected it to capture the majority of the market share, and with good reason. Broadband tends to be faster, more efficient, and less problem-laden than other access methods such as dial-up. As the purchasing power of the people increases, requirements move towards convenience, though the expectations are towards quality, quantity and less price which lead to consumer satisfaction

ABOUT BSNL TELEPHONE SERVICES

BSNL is the largest telecom operator in India and is known to everybody for Basic Telephony Services for over 100 years. Presently the Plain old, Countrywide telephone service is being provided through 32,000 electronic exchanges, 326 Digital Trunk Automatic Exchanges (TAX), Digitalized Public Switched Telephone Network (PSTN) all interlinked by over 2.4 lakh km of Optical Fiber Cable, with a host of Phone Plus value additions to our valued Customers. BSNL's telephony network expands throughout the vast expanses of the country reaching to the remotest part of the country.

- **NEW TELEPHONE CONNECTIONS**

Permanent connections are available in the following eight categories to suit different subscribers,

- **TEMPORARY CONNECTIONS**

Temporary Connections are provided for short period for emergency requirements of purely temporary nature. Temporary connections are to be provided for a maximum period of 3 months at a time in the case of private individuals and 6 months at a time in the case of Government Offices. The charges for the entire period along with security deposit, installation charges and rentals will be collected in advance. No waiting list is maintained for this category.

- **CASUAL CONNECTIONS**

Casual connections are provided to applicants for social/religious functions, marriages, and exhibitions etc., for a period not exceeding 30 days.

SHIFTS ON ALL INDIA BASIS

Permissible if the telephone has worked for at least 18 months in respect of NON-OYT connection and 6 months in respect of OYT connection in the original exchange area or the date of registration for the connection to be shifted is prior to the release date of new lines of the specific category in the required exchange.

VALUE ADDED FACILITY

Gone are the days when basic telephones were used only to make and receive calls. With the aid of state-of-the-art digital exchanges, BSNL offers you a host of phone plus services, converting your old basic telephones to a sophisticated tool which can be used for a variety of applications.

CALL WAITING

This facility lets you receive incoming calls even when your telephone is busy. You will get a short duration pip-pip tone when you are busy talking, indicating that another call is waiting for you, provided you have activated this facility. You can talk to any one of the callers keeping the other waiting. Complete secrecy of communication between the two callers is maintained.

CALL TRANSFER (CALL FORWARD)

Useful for very mobile persons who may not want to miss incoming calls. Using this facility Calls can be forwarded to another telephone number designated by you.

NUMBER/CALL HUNTING SERVICE

If you have more than one telephone line, this facility is very helpful for your caller. If the called line is engaged, your caller does not have to disconnect and dial other line(s). This facility automatically transfers the incoming call to whichever line is free.

CALLING LINE IDENTIFICATION PRESENTATION (CLIP)

The subscriber has to buy separately the CLIP display device from market. Using this facility, you can see the number of the calling party before lifting your telephone. Very useful to trace malicious caller. However, the CLIP instrument shall be procured and installed by the users themselves.

PHONE BELL CHECK

Dial 161 and after a few second replace the hand set. Your phone will ring very soon. Useful for checking functioning or adjusting volume of bell of your phone.

ELECTRONIC LOCKING FOR STD/ISD:

For 100% protection against improper use, you can lock your telephone electronically. Here, you only know the secret code. You can lock/allow Local, STD or ISD calls in many way viz. all calls allowed, only local calls allowed, only STD & Local calls allowed, all outgoing calls barred etc.

CALL CONFERENCING

With this service telephonic conference can be set up within 3 or more parties. This service is available subject to technical feasibility.

CHANGES IN TELECOMMUNICATION ENVIRONMENT

FIG. 1
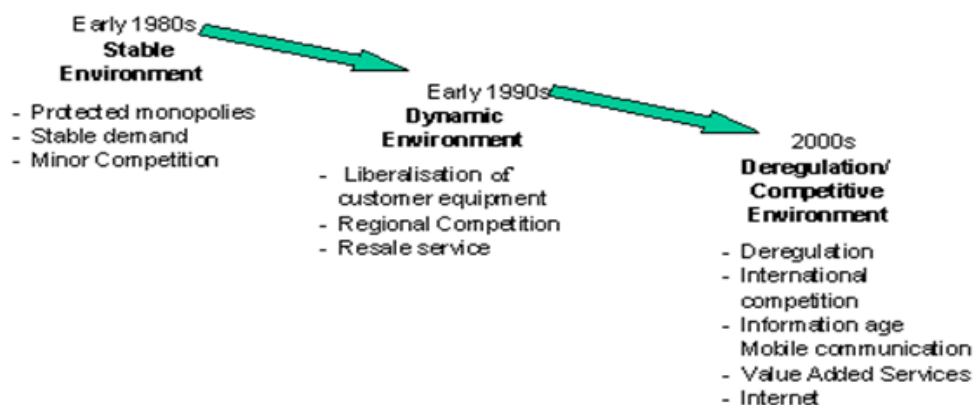
TABLE 1: DEMOGRAPHIC PROFILE OF THE RESPONDENTS

S.NO	CATEGORY	OPTIONS	NUMBER OF RESPONDENTS	PERCENTAGE
1	Age	Below 25 years	58	29
		25 to 35 years	70	35
		Above 35 years	71	36
		Total	**200**	**100**
2	Gender	Male	143	72
		Female	57	28
		Total	**200**	**100**
3	Educational Qualification	Primary Education	6	3
		SSLC / +2	77	39
		Graduates	117	58
		Total	**200**	**100**
4	Occupation	Government Employee	7	3
		Private Employee	117	59
		Professionals	18	9
		Self Employed	58	29
		Total	**200**	**100**
5	Monthly Income	Less than Rs. 5000	19	9
		Rs. 5000 – Rs. 10000	73	37
		Rs. 10000 – Rs. 15000	81	41
		More than Rs. 15000	27	13
		Total	**200**	**100**

From the above table, it shows that 36% of the respondents are above 35 years of age, 72% of respondents are male, 58% of respondents are graduates, 59% of the respondents are private employees, 41% of respondents have their monthly income ranging from Rs 10000 – Rs 15000.

TABLE NO. 2: PHONE RELATED FACTORS

S.NO	CATEGORY	OPTIONS	NUMBER OF RESPONDENTS	PERCENTAGE
6	Purpose of use	Residential	119	59
		Official	81	41
		Total	**200**	**100**
7	Availing STD Facility	Yes	152	76
		No	48	24
		Total	**200**	**100**
8	Number of calls per month	Less than 50 calls	8	4
		51 to 100 calls	34	17
		101- 150 calls	78	39
		More than 150 calls	80	40
		Total	**200**	**100**
9	Monthly bill Amount	Less than Rs. 500	10	5
		Rs. 501 to Rs. 1000	40	20
		Rs. 1001 to Rs. 1500	78	39
		More than Rs. 1500	72	36
		Total	**200**	**100**

From the above table it is found that 59% of the respondents are using calls for official purpose, 76% of the respondents are having STD facility, 42% of the respondents are making more than 150 calls per month, 39% of the respondents are paying their monthly bill amount between Rs. 1001 – Rs. 1500.

TABLE NO. 3: RESPONDENTS SATISFACTION RELATED FACTORS

S.no	Particulars	Highly satisfied	Satis-fied	Neutral	Dissatis-fied	Highly dissatisfied
1.	Satisfaction level towards features of the phone	49	97	51	3	-
2.	Satisfaction level towards voice clarity while communicating	118	61	21	-	-
3.	Satisfaction level towards Rent / free calls	26	117	54	3	-
4.	Satisfaction level towards Local/STD/ISD call tariff	8	131	61	-	-
5.	Satisfaction level towards Mode of payment	40	123	37	-	-
6.	Satisfaction level towards Delivery of bills	60	121	19	-	-
7.	Satisfaction level towards Attitude of staff and response to queries	127	51	19	3	-
8.	Satisfaction level towards providing information about the new schemes/services	27	129	39	5	-
9.	Satisfaction level towards transfer of phone connection	24	100	76	-	-
10.	Satisfaction level towards Call waiting facility	15	89	84	12	-
11.	Satisfaction level towards call divert facility	9	57	113	21	-
12.	Satisfaction level towards Caller id facility	11	41	117	31	-
13.	Overall Satisfaction Level Of BSNL Landline Service	14	148	35	3	-

The above table shows that most of the respondent's are highly satisfied with clarity of voice while communicating, local and STD tariff, attitude of staff with response to customer queries transfer of phone connection and service provided by the bill collection centers only few respondents are dissatisfied with call waiting and call diverting facility offered by the BSNL. The overall satisfaction level of BSNL Landline service is satisfied.

CHI - SQUARE ANALYSIS

TABLE NO. 4: AGE AND OVERALL SATISFACTION LEVEL TOWARDS BSNL LANDLINE SERVICE (TWO-WAY TABLE)

S.No.	Age	Level of satisfaction of BSNL landline service				Total
		Highly satisfied	Satisfied	Neutral	Dissatisfied	
1	Below 27 years	1	47	10	1	59
2	27 to 35 years	9	51	8	2	70
3	Above 35 years	4	50	17	0	71
	Total	14	148	35	3	200

Null Hypothesis (H$_0$)　　　- There is no significant relationship between age and overall level of satisfaction towards BSNL landline service.

Alternative Hypothesis (H$_1$)　- There is close relationship between age and overall level of satisfaction towards BSNL landline service.

CHI-SQUARE (χ^2) CALCULATION

Calculated χ^2 value	=	11.491
Degree of freedom	=	6
Table value	=	12.592

INFERENCE

From the above analysis, we find that the calculated value of χ^2 is lesser than the table value and hence, the null hypothesis accepted. Hence, there is a no significant relationship between age and overall level of satisfaction towards BSNL landline service.

CHI-SQUARE (χ^2) CALCULATION

Calculated χ^2 value	=	6.099
Degree of freedom	=	3
Table value	=	7.815

TABLE NO. 5: PURPOSE OF USING THE LANDLINE AND SATISFACTION LEVEL TOWARDS BSNL LANDLINE SERVICE (TWO-WAY TABLE)

S.No.	Purpose of Using	Level of satisfaction of BSNL landline service				Total
		Highly satisfied	Satisfied	Neutral	Dissatisfied	
1	Residential	3	57	18	3	81
2	Official	11	91	17	0	119
	Total	14	148	35	3	200

Null Hypothesis (H$_0$)　　　- There is no significant relationship between purpose of using and overall level of satisfaction towards BSNL landline service.

Alternative Hypothesis (H$_1$)　- There is close relationship between purpose of using and overall level of satisfaction towards BSNL landline service.

CHI-SQUARE (χ^2) CALCULATION

Calculated χ^2 value	=	8.498
Degree of freedom	=	3
Table value	=	7.815

INFERENCE

From the above analysis, we find that the calculated value of χ^2 is greater than the table value and hence, the null hypothesis rejected. So, there is a close significant relationship between purpose of using and overall level of satisfaction towards BSNL landline service.

FINDINGS

❖ Most of the respondents belongs to the age groups 25-35 years and above 35 years and most of the respondents belongs to male category.
❖ Most of the respondents are educated as graduates and most of the respondents are working as private employee.
❖ Most of the respondents are earning Rs. 10000- Rs. 15000 per month.
❖ Most of the respondents are using for the official purpose and all are availed of STD facility.
❖ It is inferred that maximum respondents are making more than 150 calls per month and paying their bill amount from 1001-1500.
❖ It is find that most of the respondents are satisfied by getting their new connections immediately after submitting their applications.
❖ It is found that most of the respondents are satisfied with basic services provided by BSNL.
❖ It is found that most of the respondents are satisfied with billing services provided by BSNL
❖ It is found that most of the respondents are satisfied with customer services and value added facility provided by BSNL.
❖ It is inferred that most of the respondents are not much satisfied with the features of the phone provided by BSNL.
❖ It is noted that among the various billing service provided by BSNL delivery of bills and mode of payment makes the respondents very much satisfied.
❖ It is noted that the demographic variables occupational status, monthly income level has relationship with the overall satisfaction level.
❖ It is inferred that other variables like usage of schemes, period of using, and purpose of usage also has relationship with the overall satisfaction level.
❖ There is a no significant relationship between age and overall level of satisfaction towards BSNL landline service
❖ There is a close significant relationship between purpose of using and overall level of satisfaction towards BSNL landline service.

SUGGESTIONS

❖ Most of the respondents are satisfied with the services provided by BSNL landline, steps to be taken to make the customers more satisfied.
❖ Few of the respondents are satisfied with call connectivity. It is suggested to the company to give importance to that and make the entire customer to be satisfied.
❖ It is noted that the demographic variables occupational status, monthly income level has relationship with the overall satisfaction level. So it is suggested while making changes in service/tariff these factors to be considered. It is noted from the above study that most of the respondents are not aware of various schemes. So it is suggested to the service provider to give more weightage to know about various schemes.

CONCLUSION

From the study the influence of Demographic variable in the level of satisfaction yielded by the user as well as the Behavioural pattern of the user is analyzed in this study. It is identified that the service provided by BSNL is at satisfactory level to the respondent's. But few of the respondents are not satisfied with the features of the phone. BSNL should focus on the promotional measures as equal to the private service providers to enhance their service activity to satisfy their customers.

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PERSPECTIVES CONSIDERED IN BALANCED SCORECARD: A STUDY WITH SPECIAL REFERENCE TO IT/ITES EMPLOYEES OF COIMBATORE DISTRICT

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ABSTRACT
The information technology (IT) and information technology enabled services (ITES) industry has been one of the key driving forces fueling India's economic growth. IT is one of the world's fastest growing economic activities, which conceive easier flow of information at various levels in the desired pattern. The Information Technology Enabled Services (ITES) sector has not only changed the way the world looks at India but has also made significant contributions to the Indian economy. The balanced scorecard proposes that the organization should be viewed from four perspectives, with metrics developed, data collected and analyzed for each of them. These four perspectives are: Financial, Customer, Internal Business Processes and Learning and Growth. The present study analyses the IT and ITES employees" opinion on the perspectives considered in balanced scorecard which primarily ranked shareholder's perspective, supplier's perspective, employee's perspective, competitor's perspective and environmental and social perspectives considered in the organization.

KEYWORDS
information technology enabled services, information technology services.

1.1 INTRODUCTION
The Balanced Scorecard translates Mission and Vision Statements into a comprehensive set of objectives and performance measures that can be quantified and appraised. These measures typically include Financial performance (revenues, earnings, return on capital, cash flow),Customer value performance (market share, customer satisfaction measures, customer loyalty), Internal business process performance (productivity rates, quality measures, timeliness),Innovation performance (percent of revenue from new products, employee's suggestions, rate of improvement index) performance (morale, knowledge, turnover, use of best demonstrated practices) and strike a balance between short-term and long-term objectives, financial and non-financial measures, outcome and process measures, lagging and leading indicators and also between internal and external perspectives.

1.2 METHODOLOGY
The study included 530 sample subjects surveyed in 106 IT and ITES companies. At the end of data collection, five interview schedules were found incomplete and these five schedules were deducted. Thus the study consists of 525 respondents. The study cover both primary and secondary data. For the purpose of collection come to the primary data, a well-structured interview schedule was framed. The interview schedule covered information on demographic, socioeconomic status and senior officials' perceptions of BSC practices, its dimensions, benefits, and problems faced, its impact, success rate and senior official's level of satisfaction regarding BSC implementation.

1.3 OBJECTIVE
This article will be most useful for IT & ITEs company's employers, experts and research scholars in understanding IT & ITES employees' opinion on various perspectives considered in the balance scorecard. So the primary objective of the study is as follows:
1.   To analyse the IT & ITES employees' opinion on the share holders' perspective, suppliers' perspective, employee's perspective, competitor's perspective and environmental and social perspectives considered in the balance scorecard.

1.4 STATISTICAL TOOL USED
This research is primary in nature and the questionnaire is issued in person by the researcher. To analyse the opinion on the dimensions of balance scorecard, the major statistical techniques like sum, mean and ranking technique area are used and mean score is calculated.

1.5 ANALYSIS

TABLE 1: IT & ITES EMPLOYEES' OPINION ON INVESTORS/ SHAREHOLDERS PERSPECTIVE CONSIDERED IN BALANCED SCORECARDS

Measures	Most Important	Important	Moderate	Not Important	Not at all	Sum	Mean	Rank
EVA	226 (43.05)	251 (47.81)	46 (8.76)	2 (0.38)	0 (0.00)	2276	4.34	1
Market value added (MVA)	139 (26.48)	293 (55.81)	83 (15.81)	8 (1.52)	2 (0.38)	2134	4.06	2
Cash value added (CVA)	134 (25.52)	229 (43.62)	141 (26.86)	17 (3.24)	4 (0.76)	2047	3.90	4
Dividend per share	159 (30.29)	218 (41.52)	120 (22.86)	23 (4.38)	5 (0.95)	2078	3.96	3
Real asset value enhancer (RAVE)	150 (28.57)	200 (38.10)	131 (24.95)	23 (4.38)	21 (4.00)	2010	3.83	5

Source: Primary Data

From the above empirical data analysis, it has been observed that most of the employees' have opined that their organization considers Economic Value Added (EVA) as the key factor of investor/shareholders' perspective, as it is a measure of shareholder value and an estimate of the true economic profit of an enterprise. This factor has been ranked the first with an average score of 4.34. The respondents have said that the ratios such as Market Value Added (MVA), Dividend Per Share, Market Value Added (MVA) and Real Asset Value Enhancer (RAVE) are considered important as part of shareholders/investors perspective. These variables are placed in second, third, fourth and fifth positions with the mean scores of 4.06, 3.96, 3.90 and 3.83 respectively.

Hence it has been inferred that most of the employees have opined that their organization considers Economic Value Added (EVA) as the key factor of investor/shareholders' perspective as it is ranked the first among others with an average score of 4.34.

The Indian IT and ITES industry has continued to perform its role as the most consistent growth driver for the economy. Service, software exports and BPO remain the mainstay of the sector. Over the last five years, the IT and ITES industry has grown at a remarkable pace. A majority of the Fortune 500 and Global 2000 corporations are sourcing IT and ITES from India and it is the premier destination for the global sourcing of IT and ITES accounting for 55 per cent of the global market in offshore IT services and garnering 35 per cent of the ITES/BPO market. Hence the management of supplier base becomes strategically important. The following table BSC values from suppliers perspective.

TABLE 2: IT & ITES EMPLOYEES' OPINION ON SUPPLIERS' PERSPECTIVE CONSIDERED IN BALANCED SCORECARDS

Measures	Most Important	Important	Moderate	Not Important	Not at all	Sum	Mean	Rank
Inbound logistics cost as a percentage of sales	146 (27.81)	214 (40.76)	108 (20.57)	27 (5.14)	30 (5.71)	1994	3.80	8
Average payment period to suppliers	146 (27.81)	235 (44.76)	103 (19.62)	24 (4.57)	17 (3.24)	2044	3.89	7
Supplier performance in terms of time and quality	126 (24.00)	235 (44.76)	116 (22.10)	23 (4.38)	25 (4.76)	1989	3.79	9
Fill rate	172 (32.76)	230 (43.81)	97 (18.48)	20 (3.81)	6 (1.14)	2117	4.03	4
Number of suppliers	214 (40.76)	243 (46.29)	45 (8.57)	10 (1.90)	13 (2.48)	2210	4.21	2
Number of duplicated functions minimized	245 (46.67)	186 (35.43)	84 (16.00)	8 (1.52)	2 (0.38)	2239	4.26	1
Number of product improvements with supplier partnerships	212 (40.38)	199 (37.90)	88 (16.76)	17 (3.24)	9 (1.71)	2163	4.12	3
Supplier performance in terms of reduction in variance in time and quality	187 (35.62)	189 (36.00)	95 (18.10)	37 (7.05)	17 (3.24)	2067	3.94	5
Inventory carried (in terms of number of days and amount) by the supplier	183 (34.86)	200 (38.10)	85 (16.19)	31 (5.90)	26 (4.95)	2058	3.92	6

Source: Primary Data

The above table illustrates the IT and ITES employees' opinion on suppliers' perspective considered in balanced scorecards. The majority of the IT and ITES employees have opined that their organization endeavors to minimize the number of duplicated functions; it is ranked the first with the mean score of 4.26. Similarly, the sample populations have stated that the number of suppliers, the number of product improvements with supplier partnerships and fill rate are the prominent features considered by their organization. The variables are in the second, third and fourth positions with the mean scores of 4.21, 4.12 and 4.03 respectively. Subsequently, the respondents have said that their concern uses balance scorecards to record the supplier performance in terms of reduction in variance in time and quality, inventory carried by the supplier and average payment period to suppliers. These factors are in the fifth, sixth and seventh place with the mean scores of 3.94, 3.92 and 3.89. On the other hand, the employees have said that their firm adopts balanced scorecards to analyse the inbound logistics cost as a percentage of sales and to find the supplier performance in terms of time and quality.

Thus, it has been clearly identified that the majority of the IT & ITES employees have opined that their organization endeavors to minimize the number of duplicated functions, hence it is ranked the first place with the mean score of 4.26.

With, human resources being an underlying strategic factor of success, Kaplan and Norton suggest a perspective for learning and development that tries to depict all staff- and organizational- related aspects that are important regarding organizational reengineering processes. The senior authorities' perception of employee perspective on the objectives of sample IT firms is discussed in the following table.

TABLE 3: IT & ITES EMPLOYERS OPINION ON EMPLOYEES PERSPECTIVE CONSIDERED IN BALANCED SCORECARDS

Measures	Most Important	Important	Moderate	Not Important	Not at all	Sum	Mean	Rank
Sales per employee	143 (27.24)	210 (40.00)	118 (22.48)	33 (6.29)	21 (4.00)	1996	3.80	4
Employee cost as a percentage of sales	165 (31.43)	204 (38.86)	112 (21.33)	25 (4.76)	19 (3.62)	2046	3.90	2
Attrition rate	186 (35.43)	223 (42.48)	82 (15.62)	8 (1.52)	26 (4.95)	2110	4.02	1
Value added per employee	156 (29.71)	223 (42.48)	105 (20.00)	16 (3.05)	25 (4.76)	2044	3.89	3

Source: Primary Data

The above table indicates that majority of the IT & ITES employees have said that their company pays more attention to control the attrition rate of the workers. It is ranked first place with an average score of 4.02. Batches of sample populations have opined that their organization gives importance to attributes such as employee cost as a percentage of sales, value added per employee and sales per employee while giving scores. These factors are placed in second, third and fourth ranks with the mean scores of 3.90, 3.89 and 3.80, respectively.

Hence, it has been concluded that majority of the IT and ITES employees have said that their company pays more attention to control the attrition rate of the workers.

India was known for exporting low technology-oriented products of low quality. Now, to compete in the global market, IT/ITES companies have adopted high quality standards. This, in turn, influences other sectors too. In the process, not just India's IT product is becoming a quality brand. But, overall Made in India is getting quality brand recognition. Listing of Indian IT/ITES companies in various global stock exchanges, which requires abiding by strict global accounting norms, has helped build a strong image of companies and sectors outside India. Indian IT/ITES industry is playing a key role in different acquisitions and mergers of overseas companies. At this juncture, a timey implantation of effective BCS will benefit the small and marginal business entrepreneurs of IT & ITES sector in releasing their strength and to wave out their weakness. Based on the above discussion, the following table draws an introspective analysis of the employees perceptive of the competitiveness of balanced score card strategies of their organizations.

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42

TABLE 3: IT & ITES EMPLOYEES' OPINION ON COMPETITIVENESS CONSIDERED IN BALANCED SCORECARDS

Measures	Most Important	Important	Moderate	Not Important	Not at all	Sum	Mean	Rank
Market share	84 (16.00)	66 (12.57)	132 (25.14)	173 (32.95)	70 (13.33)	1496	2.85	4
Company cost vis-à-vis industry average	58 (11.05)	128 (24.38)	164 (31.24)	145 (27.62)	30 (5.71)	1614	3.07	3
New product development	97 (18.48)	109 (20.76)	157 (29.90)	117 (22.29)	45 (8.57)	1671	3.18	2
Number of brands vis-à-vis total brands in the market	171 (32.57)	124 (23.62)	102 (19.43)	102 (19.43)	26 (4.95)	1887	3.59	1
Availability/development of raw material substitutes	70 (13.33)	61 (11.62)	147 (28.00)	172 (32.76)	75 (14.29)	1454	2.77	5

Source: Primary Data

The data presented in the above table indicates that, the respondents have opined that their company always competes to hold its position in the market, it is ranked in first place with the mean score of 3.59. They also the employees have to stated that their firm gives importance to new product development, company cost over industry average, market share and on the availability/ development of raw material substitutes in terms of competitiveness. These variables are ranked in second, third, fourth and fifth rank with the mean score of 3.18, 3.07, 2.85 and 2.77, correspondingly.

From the discussion of the above data, it has been inferred that the respondents have opined that their company always competes to hold its position in the market, it is ranked in first place with the mean score of 3.59.

Literature on strategic change and business management claims that the correct implementation of the BSC causes a significant change in the employees' behavior and attitudes toward the firm's strategic objectives. The following table discusses employees' perception of this issue.

TABLE 4: IT & ITES EMPLOYEES' OPINION ON ENVIRONMENTAL & SOCIAL PERSPECTIVE CONSIDERED IN BALANCED SCORECARDS

Measures	Most Important	Important	Moderate	Not Important	Not at all	Sum	Mean	Rank
Efficiency in material and energy use	118 (22.48)	84 (16.00)	144 (27.43)	130 (24.76)	49 (9.33)	1667	3.18	4
Water/Air quality monitoring	71 (13.52)	144 (27.43)	168 (32.00)	110 (20.95)	32 (6.10)	1687	3.21	3
Number of environmental incidents/accidents	97 (18.48)	115 (21.90)	181 (34.48)	93 (17.71)	39 (7.43)	1713	3.26	2
Eco-performance of products	141 (26.86)	130 (24.76)	145 (27.62)	75 (14.29)	34 (6.48)	1844	3.51	1
Green procurement	68 (12.95)	99 (18.86)	143 (27.24)	150 (28.57)	65 (12.38)	1530	2.91	5
Investment in environment protection	46 (8.76)	71 (13.52)	148 (28.19)	166 (31.62)	94 (17.90)	1384	2.64	9
Waste produced per quantity of finished product	55 (10.48)	92 (17.52)	176 (33.52)	153 (29.14)	49 (9.33)	1526	2.91	5
Specific pollutant quantities, e.g.,Nox, Sox, CO, Pb, CFCs	39 (7.43)	90 (17.14)	171 (32.57)	167 (31.81)	58 (11.05)	1460	2.78	7
Percentage of waste recycled	49 (9.33)	89 (16.95)	108 (20.57)	207 (39.43)	72 (13.71)	1411	2.69	8

Source: Primary Data

The above table discusses the IT & ITES employees' opinion on environmental and social perspectives considered in balanced scorecards. The damage to the majority of the employees have opined that their organization tests the Eco-performance of products in order to prevent the environment. It is ranked first with the mean score of 3.51. The respondents have said that they consider aspects like number of environmental incidents/accidents, water/air quality monitoring, efficiency in material and energy use, green procurement and wastage quantity to prevent the environment. These variables are ranked also the second, the third, the fourth and the fifth rank with the mean score of 3.26, 3.21, 3.18 and 2.98 accordingly. On the other hand, the sample employees have said that their organization takes initiatives to control the specific pollutant quantities, e.g. Nox, Sox, CO, Pb, CFCs and observes percentage of waste recycled and investment in environment protection. These variables are ranked in seventh, eighth and ninth position with an average score of 2.78, 2.69 and 2.64 respectively.

Thus, it has been clearly identified that the majority of the employees have opined that their organization tests the Eco-performance of products in order to prevent the environment; it is placed in first place with the mean score of 3.51.

1.6 CONCLUSION

The present study analysed the IT and ITES employees" opinion on the perspectives considered in the balanced scorecard in Coimbatore region and it primarily included shareholders" perspective, suppliers perspective, employees perspective, competitors perspective and environmental and social perspectives considered in the organization.

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INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   44

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AN EMPIRICAL STUDY OF EDP CELLS IN COLLEGES

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ABSTRACT

Entrepreneurship refers to the functions performed by an entrepreneur in establishing an enterprise. Entrepreneurship is described as the function of handling economic activity, undertaking risk, creating something new and organizing and coordinating resources. It is recognized as an involvement of the fusion of capital, technology and human talent. It is a dynamic and risky process. Entrepreneurship is both an art as well as science. Entrepreneurship can't grow in vacuum. It requires an environment in which an entrepreneur can learn and discharge his functions. Stepanek identifies intelligence, motivation, knowledge and opportunity as the pre-requisites for Entrepreneurial Development. Entrepreneurs must be endowed with intelligence. Motivation is not inherited but a personal and cultural trait. Knowledge can be acquired through formal education and experience. Entrepreneurs can overcome many obstacles to development and if given sufficient time, can create opportunity. It is very difficult to measure quantitatively the ability to use knowledge intelligently, to seize opportunity and to inject the spark of innovation and creativity. EDP may be defined as "a programme designed to help an individual in strengthening his entrepreneurial motive and in acquiring skills and capabilities". EDP Cells conduct Entrepreneurship Training Program which provides training in jewellery designing, fabric painting, printing, embroidery, jute products, pot designing, artificial floral arrangement, tailoring etc. This boosts up the entrepreneurial quality as well as the self-confidence in the students for pursuing a career in such businesses. Questionnaires were distributed to 100 college students. Percentage Analysis and Factor Analysis to analyze student's perception as regards EDP Cells in Colleges was done using SPSS package.

KEYWORDS
entrepreneurship, entrepreneurial development, entrepreneurship training programs.

INTRODUCTION
THE CONCEPT OF ENTREPRENEURIAL DEVELOPMENT
Development of entrepreneurship incorporates four basic issues viz

1) The availability of material resources
2) The selection of real entrepreneurs
3) The formation of industrial units &
4) Policy formulation for the development of the region

All these issues are closely inter-related. given the resources and the entrepreneurs expected to exploit them, the focal issues that remains is that of the industrial units, particularly because it affects the proper utilization of raw material & the marketing of the product. An interaction of the first 2 variables & the ground work created by the third one depends on the specific policies which constantly supervise the direction of the process of economic development of the region.

Development of an entrepreneur means inculcating entrepreneurial traits into a person, imparting the required knowledge, the technical, financial, marketing & managerial skills and building the entrepreneurial attitude. The development involves equipping a person with the information used for enterprises building and sharpening his entrepreneurial skills

Entrepreneurial development is an organized and systematic development; it is now regarded as a tool of industrialization and a solution to unemployment problem. The objective of entrepreneurial development is to motivate a person for entrepreneurial career and to make him capable of perceiving and exploiting successful opportunities for enterprises. One trained entrepreneur can guide others on how to start their own enterprises and approach various institutions. In fact, trained entrepreneurs become catalyst of developing industry and economic progress.

Entrepreneurial development programme (EDP) may be defined as "a programme designed to help an individual in strengthening his entrepreneurial motive and in acquiring skills and capability necessary for playing his entrepreneurs role effectively. It is necessary to promote his understanding of motives and their impact on entrepreneurial value and behavior for his purpose

ENTREPRENEURSHIP DEVELOPMENT PROGRAMMES (EDP)
he EDP are offered by both the government organization as well as non-government organization(NGO's). Initially the small industrial extension & training (SIET), Hyderabad selected 52 young people in 1971 from business & industrial community & offered a 3 months training programme and motivated the participants to be entrepreneurs. This was the humble beginning of a massive programme of ED. At present, there are about 700 all India & state level financial institution & public sector bank like Indian bank, canara bank, state bank of India etc conducting short and the educational development programmes. In IT industry many training institutions offer specific programmes after which a trainee can start his/ her own enterprises

OBJECTIVES OF EDP
The important objective of EDP can be started as follows
1)   Developing and strengthening entrepreneurial quality in them.
2)   Analyzing environmental setup as to small business and industry
3)   Selecting project
4)   Formulating the project
5)   Understanding the process and procedure of setting up of a small enterprise
6)   Knowing the sources of assistance available for setting up an enterprise

7) Acquiring the necessary managerial skills for managing an enterprise
8) Knowing the pros and cons of being an entrepreneur.
9) Acquainting the required entrepreneurial discipline
10) identifying and training potential entrepreneurs
11) providing post-training assistance
12) accelerating industrial development
13) solving unemployment problem

SHORT TERM OBJECTIVES

They imply the objectives which are to be achieved immediately after the completion of the programme. Preparing a personality for the entrepreneurial venture, making him competent to scan the environment and situation within the existing regulatory framework are the short term objectives.

LONG TERM OBJECTIVES

An entrepreneurial development programme seeks to equip the participants with all the skills required for the establishment and smooth running of business ventures. The ultimate objective is that the participant under training should establish their own venture.

NEED FOR TRAINING AND DEVELOPMENT

The need for EDP can be understood from the following:

1. **Essential for economic development of a country:** EDP is considered as very essential for the economic development of a nation. Entrepreneurs use the factors of production to a maximum extent, create innovations, generate employment, and improve the standard of living of people, which result in overall development and growth of a nation.
2. **Removes the unemployment problem:** Unemployment has serious effect. Idle hands are the symptoms of economic waste. Worklessness is the worst of all the evils. EDP plays an important role in solving the problem of unemployment.
3. **Removes poverty:** Poverty is considered as a serious illness among any nation. EDP by enabling overall development and providing employment opportunities to a larger number of people helps in removing poverty among the people.

ENTREPRENEURIAL TRAINING

Entrepreneurial training is provided through EDPs. The focus shall be to develop motivation through training and education. Factors that motivate people to become entrepreneurs vary from individual to individual. Some may be motivated by economic factors like profit, some by self-esteem, some by social needs etc. The Maslow's theory, called the Maslow's Need Hierarchy Theory classifies the human needs into five different categories in order of priority from basic needs. It is because the basic needs are to be satisfied one after the other as without satisfying one. A person cannot even think of the other need.

FIG. 1
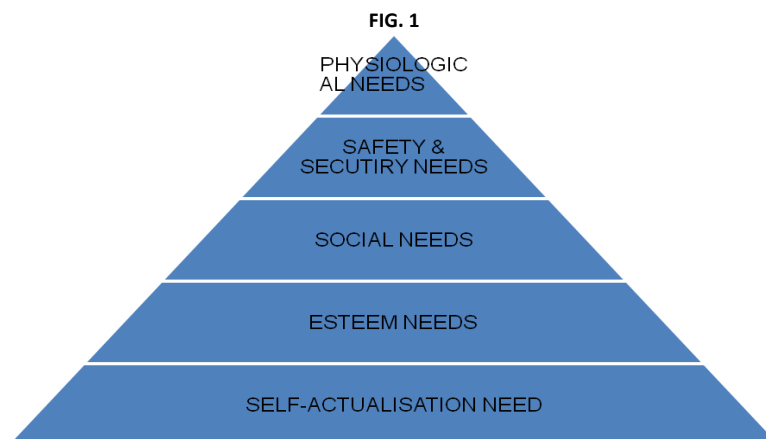
1. Physiological needs like food, clothing, shelter, air, water and other necessities of life.
2. Safety and security needs like economic security and protection form physical dangers
3. Social needs refer to a sense of belonging recognition, acceptance, interaction, etc.
4. Esteem needs which are in terms of self-esteem, self-respect, self-confidence, achievement, competence, knowledge, independence, reputation etc.
5. Self-actualization need is the final stage which aims at self fulfillment. Once this need is satisfied, human needs cease to be a motivating factor.

The first two needs are for general people in the society, it is the other three needs that build up the fire in the person to become an entrepreneur.

PHASES OF EDP

1. INITIAL OR PRE-TRAINING PHASE

This phase includes the activities and the preparations required to launch the training programme. The main activities are:

a) Creation of infrastructure for training
b) Preparation of training syllabus
c) Tie up of guest faculty
d) Arrangement for inauguration of the programme
e) Designing tools and techniques for selecting trainees
f) Formation of selection committee
g) Publicity campaign for the programme
h) Development of application form
i) Pre-potential survey of environmental opportunities

2. TRAINING OR DEVELOPMENT PHASE

During this phase the training programme is implemented to develop motivation and skills among the participants. The objective of this phase is to bring desirable changes in the behavior of the trainees. The trainers have to judge how much and how far the trainees have moved in their entrepreneurial pursuits.

a) Is he attitudinally very strongly towards his proposed project idea?
b) Is he motivated to plunge for entrepreneurial venture & risk that is expected of an entrepreneur?
c) Is there any change in his entrepreneurial outlook, role and skill?
d) How should he behave like an entrepreneur?
e) What kind of entrepreneurial behaviour does the trainee lack?
f) Does he possess the knowledge of technology, resources and other related entrepreneurial knowledge?
g) Is he skillful in choosing the right project mobilizing the right resources at the right time?

3. POST-TRAINING PHASE

This phase involves assessment to judge how far the objectives of the programmes have been achieved. Monitoring and follow up reveals draw backs in the earlier phases and suggests guidelines for framing the future policy. In this phase, infrastructural support, counseling and assistance in establishing new enterprise and in developing the existing units can also be reviewed.

Selection of potential entrepreneurs has two essential components namely:

i) Identification of entrepreneurial traits in the potential entrepreneurs and

ii) Identification of suitable and viable opportunity or enterprise (project) for each identified entrepreneur.

ANALYSIS OF DATA

AGE

TABLE 1: AGE OF RESPONDENTS

PARTICULARS	FREQUENCY	PERCENTAGE
18	26	26
19	53	53
20	21	21
TOTAL	100	100

Source: Questionnaire.

Table 1 shows that majority of the students are 19 years of age.

INCOME LEVEL

TABLE 2: FAMILY INCOME

PARTICULARS	FREQUENCY	PERCENTAGE
25000 – 50000	71	71
50001 – 100000	20	20
ABOVE 100000	9	9
TOTAL	100	100

Source: Questionnaire.

Table 2 shows that majority of the student's family income is between Rs. 25000- 50000.

YEAR OF STUDY

TABLE 3: YEAR OF STUDY

PARTICULARS	FREQUENCY	PERCENTAGE
I YEAR	18	18
II YEAR	54	54
III YEAR	28	28
TOTAL	100	100

Source: Questionnaire.

Table 3 shows that majority of the II year students are EDP cell members

FACTOR ANALYSIS FOR IDENTIFYING RELATIONSHIP FACTORS

Factor analysis has been applied to investigate the underlying structure of the variables that influence students' attitude towards EDP cells. KMO measure of sampling adequacy is 0.730 and Bartlett's test shows a significance of 0.000. Therefore, factor analysis can be applied to 14 variables measuring perception of students as regards the EDP cells in colleges. The anti-image matrices of variables measuring perception of students as regards the EDP cells in colleges was calculated and it is observed that all measures of sampling adequacy (MSA) being more than 0.5, all the 14 variables can be subjected to factor analysis.

The Principal Component Method of factor analysis method and Varimax rotation method have been used to group the 14 variables measuring perception of students as regards the EDP cells in colleges into factors.

TABLE 4: ROTATED COMPONENT MATRIX

Variable	Component			
	1	2	3	4
EDP cell motivates me to start a business which my family supports	.344	**.586**	.212	-.162
EDP cell has taught me about government incentives to start a business	.111	.145	.029	**.851**
EDP cells makes society appreciate young entrepreneurs	.029	.202	**.692**	-.226
EDP cell has moulded me to a person capable of taking financial risk	**.748**	.096	.142	-.247
EDP cell has taught me not to be afraid of the hurdles in business	**.846**	.032	.103	.148
EDP cell has taught me bear any type of pressure in business	**.769**	.274	.035	.157
EDP cell has taught me that becoming an entrepreneur is easy due to government support	-.018	-.138	.103	**.639**
EDP cell motivates me to start a business to gain social status	.221	.457	**.663**	.084
EDP cell motivates me to start a business using adequate resources in my family	.124	**.819**	.024	-.002
EDP cell has taught me that I can achieve better by utilising better opportunities in society	.073	.097	**.832**	.141
EDP cell has taught me that the society favours new entrepreneurs	.208	-.029	**.581**	.338
EDP cell has made me acquire adequate knowledge about business operations	**.500**	.391	.329	.192
EDP cell has trained me to utilize well acquainted technical knowledge of my family members to start a business	.311	**.554**	.136	-.295
EDP cell motivates me to start a business with family resources	-.022	**.721**	.184	.124

Extraction method: Principal Component Analysis.

Rotation method: Varimax with Kaiser normalization.

TABLE 5: NAMING OF FACTORS

Sl.no.	Overall sample n= 100
Factor 1	Family
Factor 2	Society
Factor 3	Personal traits
Factor 4	Government policies
% of total variance explained	61.395%

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT 47

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TABLE 6: VARIABLES IN RESPECTIVE FACTORS

Factors	Variables	Factor loadings
Factor 1 Family		
	EDP cell motivates me to start a business which my family supports	0.586
	EDP cell motivates me to start a business using adequate resources in my family	0.819
	EDP cell has trained me to utilize well acquainted technical knowledge of my family members to start a business	.554
	EDP cell motivates me to start a business with family resources	.721
Factor 2 Society	EDP cells makes society appreciate young entrepreneurs	.692
	EDP cell motivates me to start a business to gain social status	.663
	EDP cell has taught me that the society favours new entrepreneurs	0.581
	EDP cell has taught me that I can achieve better by utilising better opportunities in society	.832
Factor 3 Personal traits	EDP cell has made me acquire adequate knowledge about business operations	.500
	EDP cell has moulded me to a person capable of taking financial risk	.748
	EDP cell has taught me not to be afraid of the hurdles in business	.846
	EDP cell has taught me bear any type of pressure in business	.769
Factor 4 government policies	EDP cell has taught me that becoming an entrepreneur is easy due to government support	.639
	EDP cell has taught me about government incentives to start a business	.851

Extraction method: Principal Component Analysis.

Rotation method: Varimax with Kaiser normalization.

Tables 4,5 & 6 shows that principal component method of factor analysis and the varimax rotation method have been used to group the 14 variables into 4 factors. The most dominant factor is, 'family', which comprises of 4 variables viz, support, resource, technical knowledge, etc and this explains (31%) of the variance. The second factor is "society" which comprises of society appreciates young entrepreneurs, status, utilising opportunities in the society etc. This explains (12%) of variance. The third factor is 'personal traits' and it includes 4 variables viz, knowledge of business operations, capacity to take financial risk, not afraid of hurdles, bearing the pressure in business. This explains (10.5%) of variance. The fourth factor is 'government policies' comprising of 2 variables viz, Govt support & incentives for business. This factor explains (7.895%) of the variance.

FINDINGS & CONCLUSION

Conduct of EDPs has now become very common in India. Every year hundreds of EDPs are conducted by more than 650 organizations to give entrepreneurial training. Thousands of participants are attending the programme will not help developing nation. The need of the hour is making them to start a venture. In other words, its success depends upon turning the participants into entrepreneurs.

So far many studies have been conducted to evaluate EDPs effectiveness. Recently, Entrepreneurship Development Institute of India (EDII) located at Ahmadabad conducted a study at national level to evaluate EDPs. The study found that only about 25% of the participants actually started enterprises after undergoing EDP. This shows that there are more problems in the conducting of EDPs by the EDP cells. Basically the EDP cells aim at bringing up self-employment to the trainees where it is finding some fault in it.

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INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   48

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FORECAST ANALYSIS OF PROFITABILITY IN SELECT STEEL COMPANIES IN INDIA

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ABSTRACT
The Indian Iron and Steel industry contributes significantly to the overall growth and development of the economy. As per the estimation of the ministry of steel, the industry today directly contributes to 2% of India's GDP and its weightage in the official index of Industrial Production (IPP) is 6.2%. The industry has been able to shape out a niche for itself globally. From a country with a production of one million tonnes at the time of independence, it has now become the world's 4th largest producer of crude steel preceded behind China, Japan and the US The study evaluates the profitability level of selected steel companies to know their financial strength and weakness, it will lead to increase financial tactic to compete with international steel producers. In the present study concludes that the profitability of selected steel companies very fair, except few belongs to mid-cap companies, they need effort to stabilize their financial position to meet domestic and global competition. The companies belong to same industry differ in maintaining of profitability in various aspects.

KEYWORDS
profitability, profit margin, return on investment, return on assets, return on net worth.

INTRODUCTION
The prime objective of a business undertaking is to earn profit and it is considered essential for the survival of the business. A business needs profit not only for its existence but also for expansion and diversification. Profit to the management is the test of efficiency and a measurement of control. It is to the owners a measure of worth of their investment, to the creditors the margin of safety, to the employees a source of fringe benefits, to the government a measure of taxpaying capacity and the basis of legislative action, to the customers a hint to demand better quality and price units, to an enterprise a less cumbersome sources of finance for growth and existence and finally to the country an index of economic progress. A business enterprise can discharge its obligations to the various segments of the society only through earnings of profits. Therefore, profit is the engine that drives the business enterprise to achieve its objectives, and is the reward for entrepreneurship. In this stage the analysis of profitability of TATA, SAIL, JSW, VISA, which are large Cap and Mid Cap companies of BHUSHAN, JSPL& KALYANI was analyzed by using multiple variables acquires more significance.

The Indian Iron and Steel industry contributes significantly to the overall growth and development of the economy. As per the estimation of the ministry of steel, the industry today directly contributes to 2% of India's GDP and its weightage in the official index of Industrial Production (IPP) is 6.2%. The industry has been able to shape out a niche for itself globally. From a country with a production of one million tonnes at the time of independence, it has now become the world's 4th largest producer of crude steel preceded behind China, Japan and the US

The study evaluates the profitability level of selected steel companies to know their financial strength and weakness, it will lead to increase financial tactic to compete with international steel producers. Profitability involves profit-making ability of business. Profitability is defined as the ability of invested capital to earn a return from its uses and it is the relationship of the earnings to total capital of the company. Profitability is an overall indication of the strength and weakness of the company. Therefore, profitability is the main sign of the efficiency and effectiveness of a business enterprise in achieving its goal of earning profit. Profitability as a relative measure enables the management to make prompt changes in the financial and production policies in the beam of the past performance. The important managerial decisions are pertaining to such issues, expansion of plant, implementation of modern technology, raising of additional funds, and also payment of bonus and dividend are depending on profitability of the firm.

NEED OF THE STUDY
The profitability entails the process and methodology of identifying company's all operational income and expenditure value drivers at a transactional level, and aggregating to translate their workings into financial results. It is providing operational managers to use their resources in an optimal way. In addition, to get insight into the financial consequences of their operational business and it guides to increase financial control and predictability of financial results. The purpose of profitability makes the good and permanent business environment. It should create goodwill and increase value of the firm, not only for the benefit of one individual, but also for the benefit of all consumers, suppliers, employees and the community at large. Businesses can be a catalyst to transform benefits to society and nations for serving as the engine of the economy

STATEMENT OF THE PROBLEM
In the present scenario, companies are facing so many problems to generate profit, due to high competition in domestic and international level. The production companies are struggling to maintain to reduce costs, increase production, and constant profitability. Here, profitability is the primary goal of all business. Without profitability, the business will not survive for a long period. Therefore, measuring current and past profitability and predicting future profitability is very important to identify the success of the business during the period. Conversely, the highly profitable company has the ability to reward its shareholders with a high return on their investment. Profitable and continuous growth only suggests itself when all operations and financial control things deep inside the business are running well.

OBJECTIVE OF THE STUDY
To find forecast performance of profitability of select steel companies in India.

REVIEW OF LITERATURE
Greiner (1972) described the relationship between company growth and profitability can be positive or negative. On the one hand, increased growth can contribute a breakdown of informal relationship established over time in companies, greater growth requiring greater formality in relationships at work, which in the short-term can be difficult to achieve efficiency, thus leading to diminish company profitability. On the other hand, greater growth can result in greater profitability.

Singh and Whittington (1975)studied about the growth and profitability that are important dimensions of firm performance, when the study of growth is undertaken in terms of systematic influence which may affect growth, rather than regarding growth as wholly chance phenomenon, then most important systematic influence on growth is that of profitability, it may consider by industry condition and economic cycles which affects the competitiveness of the market environment, and in turn both growth and profitability.

Kester (1986) found that there is a negative relationship between capital structure and profitability under market value and book value basis for both U.S and Japanese manufacturing firms. There is no significant difference in U.S and Japanese company's growth, profitability, risk, size, and industry classification.

Lieberman and Montgomery (1988) argued that growth displays a favourable impact on its profitability except for samples of bigger firms. It might be argued that smaller firms are being more flexible which tend to take chance more readily than their bigger rivals, it may also be that smaller firms can profitably exploit chances by expanding sales at unreduced price. It suggests that new entrants can create a lasting advantage by building a dominant position for themselves in the market.

Debashish Rai and Debashish Sur (2001) studied about how the firm's growth rate affects the profitability and analysed the various categories in relationship with growth and profitability. They concluded that the studies support the general notion which shows a positive relationship between growth and profitability.

Eldos Mathew punnoose (2008) postulated negative relationship between growth and profitability; in short the empirical evidence on the relationship between growth and profitability performance is inconclusive. There is no evidence for substantial, universal and positive relationship between growth and profitability.

Fulbag Singh and Monica Mogla (2008) discussed about profitability on merger in an expanding economy, one should expect a positive association between growth and profitability of firms because profits provide the ability to grow. However, the factors affecting the willingness to grow and that are likely to vary between different industries.

Ahmed Arif Karim Almazari (2009) found evidence that growth had a positive impact on profitability providing support indicates a positive relationship, and also suggested that growth and profitability are positively related, one would be expecting the empirical evidence to clearly demonstrate a positive association between the two, whether or not the research can determine the direction of casualty.

Balram Dogra and Gupta (2009) examined that the optimum capital structure enhances the profitability and the value of the firm. The result of a study on SMEs in India showed that they relied more on their own funds and comparatively less on borrowed funds,

Zelia Serrasqueiro (2009) measured firm's profitability in the analysis of the relationship between growth and profitability, return on assets and return on sales, the profit rates measured by sales will give a short term perspective of profitability because sales are annual flows. On the other hand, the return on assets and return on capital employed will give us a long term perspective of profitability concludes that there is a positive relationship between growth and profitability.

Rajagopalan (2009) concluded that profitability analysis by taking into account, the combined effect of sales related and assets related ratios is in the inception stage. In the context of widening opportunities, challenging competition, merger and acquisition wave, strategic investment in subsidiaries and associates and increased depends upon debt financing.

Ramachandran Azhagaiah and Raju Deepa (2011) studied about the profit earned by firms was a major contribution to the profitability and its impact of various predictors variable such as liquidity, capital intensity, growth, volatility on profitability, when income earned was controlled. It was found that the firms, with varying income level, were influenced by different determinants in deciding their profitability.

Karthik and Titto (2011) have found that profitability more or less depends upon the better utilisation of resource, cut-off expenses and quality of management, it is worthwhile to increase production capacity and use advance technology to cut down the cost of production in order to increase profitability, not only against the investment, but also from investor's return point of view. These programs are helpful to increase profitability of the company.

Sathya (2012) studied to measure the composite profitability of a firm by a single index. The analysis shows that in order to rank the selected companies in terms of composite profitability, ratio-wise scores have been aggregated and the firm who is getting the highest total score has been ranked as 1 and the firm who is securing the lowest total score has been ranked as 30. The return of a business may be measured by studying the profitability of investment in it. Profitability may be defined as the ability of given investment to earn a return from its use

Sasikala (2012) investigated that there is no relationship between liquidity and profitability, risk and profitability and concluded that the excessive liquidity may lead to lower profitability. So, the negative association between liquidity and profitability must control with effective liquidity management.

Krishna Moothi and Ramesh (2012) have found that the companies belong to steel industry are maintaining different level of profitability, the profitability strength level determine on the basis of difference in gross profit, net profit, operating profit, return on investment and dividend payout ratio. They conclude that there is no correlation of net profit and operating profit among the selected companies, and there is no significant difference in return on Investment of selected companies in India.

Amir Hossein Jamali and Asghar Asad (2012) investigated the relationship between the management efficiency and the firm's profitability for a sample of 13 auto manufacturing companies listed on the Bombay Stock Exchange and the study conclude that profitability and management efficiency are highly correlated to each other and based on the results of the study; recommendations for improving the management efficiency and profitability in this industry are given

RESEARCH DESIGN

The research design describes the theoretical plan and structure of the study to find answers to the research problem. It constitutes the outline for data collection, sampling techniques and framework for analysis of data. The present study is both descriptive and analytical nature.

DATA COLLECTION

The present study purely based on the secondary data only. The related data, such as profit and loss account statement, balance sheet and some important key ratios were collected from the published annual reports of selected steel companies in India. Other related information was collected from the Centre for Monitoring Indian Economy (CMIE) Reports, official website of selected steel companies, NSE, BSE, annual report of the ministry of steel, Institute of Financial Management and Research (IFMR), Libraries of various institutions, research publications and various academic research reports. Further the researcher referred various finance related textbooks and journals.

SAMPLING

In order to analyse the profitability and dividend performance of steel companies, the details of 72 companies were collected. From this, the steel companies which satisfied the following criteria which have been shortlisted for further research:

1. The companies listed in NSE and BSE.
2. Availability of data at least for the period of 10 years.
3. The company should have at least three years of continues profit during the study period.
4. The companies declared and paid dividend for a minimum of three years during the study period.
5. The selected steel companies have been classified as large and mid-cap companies based on market capitalisation.

The companies' stocks with market capitalisation of Rs. 10,000 crore or more are large cap companies and which are listed below:

LARGE CAP COMPANIES

1. Tata Steel Limited
2. Steel Authority of India Limited (SAIL)
3. JSW Steel Limited
4. Visa Steel Limited

The companies' stocks with market capitalisation between Rs. 2,000 crore to Rs. 10,000 crore are mid cap companies and which are listed below:

MID CAP COMPANIES

1. Bhushan Steel Limited
2. Jindal Steel and Power Limited (JSPL)
3. Kalyani Steels Limited

FRAMEWORK FOR ANALYSIS

The various statistical tools are used to analyse profitability performance of the selected steel companies in India. The study of financial statement such as profit and loss accounts and balance sheets through profitability ratios, solvency ratios, turnover ratios and dividend ratios constitutes in the framework of analysis. The frame work of analysis contains data analysis by using of SPSS package with applications of ratio analysis and forecast models

MODEL FITTING OF PERFORMANCE OF SELECTED FINANCIAL PARAMETERS

Eleven basic mathematical models were used to fit these data. The objective is to find how best these data fit into the models and choose the model. The following eleven mathematical models were used for this purpose.

1. Linear model : $Y = b_0 + b_1 t$
2. Quadratic model : $Y = b_0 + b_1 t + b_2 t^2$
3. Cubic model : $Y = b_0 + b_1 t + b_2 t^2 + b_3 t^3$
4. Logarithmic model : $Y = b_0 + b_1 \log t$
5. Inverse model : $Y = b_0 + b_1 / t$
6. Compound growth model : $Y = b_0 * b_1^t$
7. Power curve model : $Y = b_0 . t^{b_1}$
8. S curve model : $Y = e^{(b_0 + b_1/t)}$
9. Growth curve model : $Y = e^{(b_0 + b_1 t)}$
10. Exponential model : $Y = b_0 . e^{b_1 t}$
11. Logistic model : $Y = 1 / [(1/u) + (b_0 . b_1 t)]$

Where, u = upperbound

In all these equations Y represents as dependent variable, t as time and b_0 as constant, b_1, b_2 and b_3 are growth coefficients. The best fitting model is identified by the highest R^2 value, since R^2 describes them the goodness of fit of the model. Once the best fit model is identified, then the forecast for the next few years were estimated using the model.

OPERATING PROFIT MARGIN

It is seen from the analysis that the cubic model has highest R^2 value and hence considered as the best fitting model when comparing with all other models. The model equations for the Operating Profit Margin for the large cap and mid cap companies are

Y_{TATA}	$= 29.4883 + 5.5463\,t - 0.789\,t^2 + 0.0243\,t^3$
Y_{SAIL}	$= 17.5420 + 8.0937\,t - 1.6410\,t^2 + 0.763\,t^3$
Y_{JSW}	$= 28.6483 + 34868\,t - 1.1014\,t^2 - 0.633\,t^3$
Y_{VISA}	$= 5.7343 - 3.6562\,t + 1.8601\,t^2 - 1.625\,t^3$
$Y_{BHUSHAN}$	$= 22.1100 - 6.8147\,t + 1.7384\,t^2 - 0.0979\,t^3$
Y_{JSPL}	$= 35.6180 + 2.8903\,t + -0.4520\,t^2 + 0.077\,t^3$
$Y_{KALYANI}$	$= -0.5800 + 12.8364\,t + 2.8417\,t^2 + 0.1663\,t^3$

TABLE 1: FORECASTED VALUES OF OPERATING PROFIT MARGIN

Year	Large cap companies				Mid cap companies		
	TATA	SAIL	JSW	VISA	BHUSHAN	JSPL	KALYANI
2014	27.32	9.62	19.03	-25.71	27.24	22.97	18.12
2015	24.35	10.28	22.33	-51.10	21.56	18.53	31.62
2016	21.54	13.15	27.99	-84.47	12.31	13.73	51.40

Source: SPSS output

Using the coefficient values of CUBIC model the forecast was done for next few years i.e. for 2014, 2015 and 2016. Observing the estimates of this models it can be predicted that the Operating Profit Margin for TATA is expected to be 27.32, 24.35 and 21.54 for the years 2014-16 respectively, for SAIL is expected to be 3.62, 10.28 and 13.15 for the years 2014-16 respectively, for JSW is expected to be 19.03, 22.33 and 27.99 for the years 2014-16 respectively and for VISA is expected to be -25.71, -51.10 and -84.47 for the years 2014-16 respectively.

The predicted Operating Profit Margin for BUSHAN is expected to be 27.24, 21.56 and 12.31 for the years 2014-16 respectively, for JINDAL is expected to be 22.97, 18.53 and 13.73 for the years 2014-16 respectively, for KALYANI is expected to be 18.12, 31.62 and 51.4 for the years 2014-16 respectively.

GROSS PROFIT MARGIN

MODEL FITTING OF PERFORMANCE OF SELECTED FINANCIAL PARAMETERS

It is seen from the analysis that the cubic model has highest R^2 value and hence considered as the best fitting model when comparing with all other models. The model equations for the Gross Profit Margin for the large and mid cap companies are

Y_{TATA}	$= 27.7527 + 7.0279t - 1.2688\,t^2 + 0.0556\,t^3$
Y_{SAIL}	$= 10.9007 + 13.2481\,t - 2.7731\,t^2 + 0.1421\,t^3$
Y_{JSW}	$= 13.2180 + 10.0257\,t - 2.2555t^2 + 0.1249\,t^3$
Y_{VISA}	$= 9.8667 - 6.6756\,t + 2.4258\,t^2 - 0.2020\,t^3$
$Y_{BHUSHAN}$	$= 18.1397 - 5.7268t + 1.5258t^2 - 0.0908t^3$
Y_{JSPL}	$= 38.3770 - 2.9910t + 0.5460t^2 - 0.0432t^3$
$Y_{KALYANI}$	$= -4.6140 + 15.1287t - 3.3525t^2 + 0.1960t^3$

TABLE 2: FORECASTED VALUES OF GROSS PROFIT MARGIN

Year	Large cap companies				Mid cap companies		
	TATA	SAIL	JSW	VISA	BHUSHAN	JSPL	KALYANI
2014	25.56	10.21	16.80	-38.86	18.93	14.06	17.08
2015	25.48	16.09	24.52	-69.92	12.26	6.48	32.93
2016	26.87	26.65	36.73	-110.67	2.10	-3.12	56.19

Source: SPSS output

Using the coefficient values of CUBIC models the forecast was done for next few years ie for 2014, 2015 and 2016. Observing the estimates of CUBIC models it can be predicted that the Gross Profit Margin for TATA is expected to be 25.56, 25.48 and 26.87 for the years 2014-16 respectively, The predicted Gross Profit Margin for SAIL is expected to be 10.21, 16.09 and 26.65 for the years 2014-16 respectively, for JSW is expected to be 16.80, 24.52 and 36.73 for the years 2014-16 respectively and for VISA is expected to be -38.86, -69.92 and -110.67 for the years 2014-16 respectively,

The predicted Gross Profit Margin for BUSHAN is expected to be 18.93, 12.26 and 2.10 for the years 2014-16 respectively. for JINDAL is expected to be 14.06, 6.48 and -3.12 for the years 2014-16 respectively, for KALYANI is expected to be 17.08, 32.93 and 56.19 for the years 2014-16 respectively.

NET PROFIT MARGIN

MODEL FITTING OF PERFORMANCE OF SELECTED FINANCIAL PARAMETERS

It is seen from the analysis that the cubic model has highest R^2 value and hence considered as the best fitting model when comparing with all other models. The model equations for the Net Profit Margin for the large cap and mid cap companies are

Y_{TATA}	$= 13.9170 + 4.5131\,t - 5751\,t^2 + 0.0131\,t^3$
Y_{SAIL}	$= 9.9403 + 4.8423\,t - 0.8202\,t^{2+} - 0.0285\,t^3$
Y_{JSW}	$= 14.8480 + 0.7242\,t - 0.3697\,t^2 + 0.0199\,t^3$
Y_{VISA}	$= 6.0183 - 4.0256\,t + 1.2202\,t^2 - 0.1041\,t^3$

$Y_{BHUSHAN}$ = 8.9267-4.0768 t +1.2827 t^2 -0.0883 t^3

Y_{JSPL} = 23.8950 -2.3368 t + 0.6383 t^2 − 0.0533 t^3

$Y_{KALYANI}$ = -7.8900 +2.7552 t +0.1558 t^2 +0.1558 t^3

TABLE 3: FORECASTED VALUES OF NET PROFIT MARGIN

	Large cap companies				Mid cap companies		
Year	TATA	SAIL	JSW	VISA	BHUSHAN	JSPL	KALYANI
2014	11.41	1.94	4.54	-29.11	1.72	4.51	11.33
2015	7.90	-0.75	4.66	-46.37	-7.91	-4.29	23.02
2016	4.19	-3.03	5.47	-68.69	-21.34	-15.66	40.43

Source: SPSS output

Using the coefficient values of CUBIC models the forecast was done for next few years i.e. for 2014, 2015 and 2016. Observing the estimates of CUBIC models it can be predicted that the Net Profit Margin for TATA is expected to be 11.41867, 7.90821 and 4.19139 for the years 2014-16 respectively, The predicted Net Profit Margin for SAIL is expected to be 1.942000, -0.75148 and -3.03073 for the years 2014-16 respectively, for JSW is expected to be 4.54967, 4.66618 and 5.47527 for the years 2014-16 respectively and for VISA is expected to be -29.11000, -46.37894 and -68.69909 for the years 2014-16 respectively,

The predicted Net Profit Margin for BUSHAN is expected to be 1.72667, -7.91394 and -21.34879 for the years 2014-16 respectively for JINDAL is expected to be 4.51000, -4.29742 and -15.66424 for the years 2014-16 respectively, for KALYANI is expected to be 11.33167, 23.02879 and 40.43606 for the years 2014-16 respectively.

RETURN ON CAPITAL EMPLOYED

MODEL FITTING FOR PERFORMANCE OF SELECTED FINANCIAL PARAMETERS

It is seen from the analysis that the cubic model has highest R^2 value and hence considered as the best fitting model when comparing with all other models. The model equations for the Return on Capital Employedfor the large cap and mid cap companies are

Y_{TATA} = 44.6870+4.2126 t -2.5939 t^2 +0.1897 t^3

Y_{SAIL} = 8.3320+28.9131 t -6.1834 t^2 + 0.3295 t^3

Y_{JSW} = 4.9367 + 11.4052 t − 2.4298 t^2 + 0.1380 t^3

Y_{VISA} = 12.7423- 4.9381 t +1.3632 t^2 − 0.01021 t^3

$Y_{BHUSHAN}$ = 12.0533-1.1640 t +0.1454 t^2 -0.0077 t^3

Y_{JSPL} = 26.2780- 1.9010 t +0.3047 t^2 − 0.0285 t^3

$Y_{KALYANI}$ = -4.7347+18.1809 t -3.7304 t^2 + 0.2087 t^3

TABLE 4: FORECASTED VALUES OF RETURN ON CAPITAL EMPLOYED

	Large cap companies				Mid cap companies		
Year	TATA	SAIL	JSW	VISA	BHUSHAN	JSPL	KALYANI
2014	29.71	16.73	20.07	-12.53	6.53	4.28	21.68
2015	49.58	34.23	30.38	-26.65	5.63	-1.93	36.92
2016	77.94	63.08	45.77	-45.4	4.47	-9.59	59.73

Source: SPSS output

Using the coefficient values of cubic models the forecast was done for next few years i.e. for 2014, 2015 and 2016. Observing the estimates of cubic models it can be predicted that the Return On Capital Employed for TATAis expected to be 29.71, 49.58 and 77.94 for the years 2014-16 respectively. The predicted Return On Capital Employed for SAIL is expected to be 16.73, 34.23 and 63.08 for the years 2014-16 respectively, for JSW is expected to be 20.07, 30.38 and 45.77 for the years 2014-16 respectively and for VISA is expected to be -12.53, -26.65 and -45.40 for the years 2014-16 respectively,

The predicted Return On Capital Employed for BUSHAN is expected to be 6.53, 5.63 and 4.47 for the years 2014-16 respectively, for JINDAL is expected to be 4.28, -1.93 and -9.59 for the years 2014-16 respectively, for KALYANI is expected to be 21.68, 36.92 and 59.73 for the years 2014-16 respectively.

RETURN ON NET WORTH

MODEL FITTING OF PERFORMANCE OF SELECTED FINANCIAL PARAMETERS

It is seen from the analysis that the cubic model has highest R^2 value and hence considered as the best fitting model when comparing with all other models. The model equations for the Return on Net Worth for the large and mid cap companies are

Y_{TATA} = 43.3043+1.2844 t − 1.4810t^2 +0.1034 t^3

Y_{SAIL} = 61.2097- 4.9608 t -0.4298 t^2 + 0.372 t^3

Y_{JSW} = 42.7877- 9.4718 t +1.1759 t^2 − 0.0576 t^3

Y_{VISA} = 7.5267- 1.2482 t +0.4946 t^2 − 0.0734 t^3

$Y_{BHUSHAN}$ = 9.6257+6.3858 t-0.7967 t^2+ 0.0159t^3

Y_{JSPL} = 40.2133-3.3135 t +0.4100 t^2 -0.0345 t^3

$Y_{KALYANI}$ = -6.0463 + 17.8716 t -3.5659 t^2 + 0.1935 t^3

TABLE 5: FORECASTED VALUES OF RETURN ON NET WORTH

	Large cap companies				Mid cap companies		
Year	TATA	SAIL	JSW	VISA	BHUSHAN	JSPL	KALYANI
2014	15.91	4.09	4.22	-44.07	4.59	7.47	16.63
2015	24.2	4.00	-1.08	-63.09	-1.05	-0.11	29.31
2016	36.97	5.72	-8.17	-86.41	-7.14	-9.35	48.79

Source: SPSS output

Using the coefficient values of these models the forecast was done for next few years i.e. for 2014, 2015 and 2016. Observing the estimates of these models it can be predicted that the Return On Net Worth for TATA is expected to be 15.91, 24.20 and 36.97 for the years 2014-16 respectively. The predicted Return On Net Worth for SAIL is expected to be 4.09, 4.00 and 5.72 for the years 2014-16 respectively, for JSW is expected to be 4.22, -1.08 and -8.17 for the years 2014-16 respectively and for VISA is expected to be -44.07, -63.09 and -86.41 for the years 2014-16 respectively,

The predicted Return On Net Worth for BUSHAN is expected to be 4.59, -1.05 and -7.14 for the years 2014-16 respectively, for JINDAL is expected to be 7.47, --0.11 and -9.35 for the years 2014-16 respectively, for KALYANI is expected to be 16.63, 29.31 and 48.79 for the years 2014-16 respectively

RETURN ON ASSETS

MODEL FITTING OF PERFORMANCE OF SELECTED FINANCIAL PARAMETERS

It is seen from the analysis that the cubic model has highest R^2 value and hence considered as the best fitting model when comparing with all other models. The model equations for the Return on Assets for the large and mid-cap companies are:

Y_{TATA} = 119.203-17.968 t + 14.2270 t^2 -0.7890 t^3

Y_{SAIL} = 8.5243+2.3735 t +2.1484 t^2 -0.1475 t^3

Y_{JSW} = -76.979+130.316 t -11.866 t^2 − 0.8814 t^3

Y_{VISA}	$= -7.6277 + 19.9010\, t - 3.6693\, t^2 + 0.2173\, t^3$
$Y_{BHUSHAN}$	$= 148.743 - 50.203\, t + 35.6586\, t^2 - 2.9165\, t^3$
Y_{JSPL}	$= -223.77 - 596.303\, t - 128.59\, t^2 - 7.2950\, t^3$
$Y_{KALYANI}$	$= -5.3650 + 56.3513\, t -- 9.2439\, t^2 + 0.4431\, t^3$

TABLE 6: FORECASTED VALUES OF RETURN ON ASSETS

Year	Large cap companies				Mid cap companies		
	TATA	SAIL	JSW	VISA	BHUSHAN	JSPL	KALYANI
2014	592.83	98.23	1093.83	56.57	29.39	486.41	85.78
2015	588.85	91.45	1301.13	78.36	-358.51	1021.38	105.44
2016	556.51	78.35	1548.17	108.46	-885.07	1824.42	138.51

Using the coefficient values of these models the forecast was done for next few years i.e. for 2014, 2015 and 2016. Observing the estimates of these models it can be predicted that the Return on Assets for TATA is expected to be 592.83, 588.85 and 556.51 for the years 2014-16 respectively. The predicted Return on Assets for SAIL is expected to be 98.23, 91.45 and 78.35 for the years 2014-16 respectively, for JSW is expected to be 1093.83, 1301.13 and 1548.17 for the years 2014-16 respectively and for VISA is expected to be 56.57,78.36 and 108.46 for the years 2014-16 respectively.

The predicted Return on Assets for BUSHAN is expected to be 23.39, -358.51 and -885.07 for the years 2014-16 respectively, for JINDAL is expected to be 486.41, 1021.38 and 1824.42 for the years 2014-16 respectively, for KALYANI is expected to be 85.78, 105.44 and 138.51 for the years 2014-16 respectively.

FINDINGS AND SUGGESTIONS

Keeping in view of the above findings related to evaluation of Profitability and Dividend progress, the following measures are suggested to make improvement of a weak area in financial activities of large cap and mid cap companies.

➢ It has been observed that VISA and KALYANI indicates lower levels of operating profit ratio due to increase in operating expenses. Hence, both companies are suggested to give attention to reduce operating expense by effective utilisation of resources and efficient maintenance of equipment, it leads to increase gross profit margin and net profit margin of firm.

➢ All the large cap and mid cap companies are showing good return on their total capital employed due to efficient uses of equity and long term fund in the right proportion. But VISA and BHUSHAN show lower than others due to improper uses of equity and debt fund. Hence, both companies are suggested to use available fund in the right proportion with consideration of cost of capital.

➢ The return on net worth of major Large cap companies are good due to efficient uses of equity fund, but VISA shows the negative ratio, it shows that the company's inefficient and ineffective uses or misuse of shareholder's funds and it indicates unfavourable business conditions, so it can take new strategies to effective uses of equity fund in their operation by reducing external debt investment.

➢ The generating of income from assets is a very good position in the majority of large and mid cap companies, but VISA and KALYANI fail to increase its return on assets due to inefficient and ineffective uses of assets, so these companies should take necessary step to increase income by effective utilization of assets

CONCLUSION

In the present scenario, companies have to meet global competition and grow with profitable. It is the main role of financial manager and management to evaluate the company's financial position with appropriate manner, that assist to various financial decision making, such as Investment decision, Finance decision, Dividend decision and Working capital decision. The evaluation plays an important role in judging the financial soundness of selected steel companies in India. The steel industries play vital role in the development of the country's economy. The consumption of steel products is increasing in the industries of automobile, infrastructure, white goods, machinery and tools. This is the role of management to maintain good financial position by effective utilization and control of available asset or funds, which leads to increase profitability of the firm. In the present study concludes that the profitability of selected steel companies very fair, except few belongs to mid cap companies, they need effort to stabilize their financial position to meet domestic and global competition. The companies belong to same industry differ in maintaining of profitability in various aspects.

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A STUDY ON BRAND LOYALTY AND IT's EFFECT ON BUYING BEHAVIOUR IN CASE OF SELECTED COSMETIC PRODUCTS IN PUDUKOTTAI

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ABSTRACT

As consumers, middle-class Indian women in general attach great importance to cosmetics and fashion. The focus on personal appearance in society is considered to be very significant. Many brand managers are, consequently, competing aggressively for market share in this emerging sector. The main purpose of this paper is to study women's buying behavior and brand loyalty as regards to cosmetics in Pudukkottai town in the context of increasing consumption of such products. Various factors were chosen for study and response were gathered using a quantitative approach. Questionnaire were distributed to 26 respondents for self-completion. A non-probability convenience sampling method has been used for this survey. The findings of the study indicate various parameters which women consider important in purchasing cosmetics: women in the sample tend to have low brand loyalty for cosmetics brands. The study also found that women like to use cosmetics for fashion and health, that beauticians were the most effective source of brand awareness and medical stores held the most trusted channel of distribution. The study helps producers and marketers of cosmetics products to take various decisions regarding product, distribution and promotion aspects of the marketing mix.

KEYWORDS
brand loyalty, buying behaviour, cosmetics.

INTRODUCTION

The general term 'cosmetics' is applied to all preparations used externally to condition and beautify the body, by cleaning, coloring, softening, or protecting the skin, hair, nails, lips or eyes. Cosmetics are, therefore, products intended to be applied to the human body for cleansing, beautifying, promoting attractiveness or altering the appearance without affecting the body's structure. This broad definition includes any material intended for use as a component of a cosmetic product. The growth of cosmetics and beauty products markets has become significant as consumers are increasingly becoming aware of appearance, beauty, grooming and the choice of personal care products. Understanding this sector should be of valuable use to marketers in identifying marketing opportunities to ensure greater efficiency in the use of resources and other efforts, which are directly related to consumer purchasing behavior such as market segmentation, consumer targeting, product features, promotional and selling efforts. This paper provides an overview of the cosmetics market and its importance and examines the influence of various parameters and brand loyalty on women's buying behavior concerning cosmetics. This study will provide useful information to the business sector as well as dealers in retailing sectors. The Indian cosmetics industry has experienced rapid growth in the last couple of years, growing at around 7.5% between 2006 and 2008. While this is due to the improving purchasing power and increasing fashion consciousness, the industry is expected to have maintained growth momentum during the period 2009-2012 and beyond. In this sector, both electronic as well as print media are playing an important role in spreading awareness about the various products available and in developing fashion consciousness among the Indian consumers.

REVIEW OF LITERATURE

Tucker W.T., (1964) defined brand loyalty as three successive preference of the same brand in their empirical studies of this concept. Ronald, F. and Harper, B. (1965) conducted a comparative study and indicated that socio-economic variables could not be differentiated between private and manufacturer's brand loyal consumers. Aaker & Keller (1990) argued that loyalty is closely associated with various factors, one of the main ones being the experience of use. Customers may be loyal owing to high switching barriers related to technical, economical or psychological factors, which make it costly or difficult for the customer to change. From another point of view, customers may also be loyal because they are satisfied with the brand and thus want to continue the relationship (Fornell, 1992). Keller (2003) argued that famous brand names can disseminate product benefits and lead to higher recall of advertised benefits than non-famous brand names. There are many unfamiliar brand names and alternatives available in the market place. Consumers may prefer to trust major famous brand names for satisfying purposes. These prestigious brand names and their images attract consumers to purchase the brand and bring about repeat purchasing behavior and reduce price related switching behaviors' (Cadogan & Foster, 2000). Nair Vinith Kumar and Pillai Prakash R., "A study on Purchase Pattern of Cosmetics among Consumers in Kerala." (2007).[1] The study analyses the purchase patterns and spending styles of people belonging to different segments of Cosmetic consumers in Kerala.
Ronald, F. and Harper, B. (1965) conducted a comparative study and indicated that socio-economic variables could not be differentiated between private and manufacturer's brand loyal consumers.[2]

NEED FOR THE STUDY

Consumer attitude gives both difficulty and development to the company. Now, Consumers have lot of interest regarding the cosmetic products and also they having awareness about cosmetic product attributes. Here, the cosmetic companies need to understand the consumer attitude on cosmetics buying behavior which brings success of them. This study focuses on the factors that affect the buying decisions of consumers. This research objective is to get reliable and valid results that helps to the company in planning their future activities and marketing strategies.

PROBLEM IDENTIFICATION AND FORMULATION

As is evident from the description above, till date, good amount of researches were undertaken to study various aspects of Brand Loyalty at the International Level. However, one is yet to come across similar researches in the field of Brand Loyalty at the National Level in India or within the Pudukkottai since the concept of Branding is yet to pick up in a developing nation like ours as compared to western more developed nations. Against such a backdrop, the researcher has decided to undertake a study that extends over a wide canvas entailing a comprehensive examination of the brand loyalty behavioral pattern of the cosmetic consumers in Pudukkottai.

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[1] Tucker W.T "The Development of Brand Loyalty, Journal of Marketing Research, August, 1964. pp. 32-35.
[2] Ronald, F; and Harner, B. "Private Brand Prone Grocery Customers Really Different ",Journal of Advertising Research, vol. 5 December 1965. pp. 27-35.

OBJECTIVES OF THE STUDY

The study has been carried out with the following objectives:

(1) To examine the brand loyalty of women skincare cosmetic product among the consumer.

(2) To identify the important factors that influencing to Purchase the Skincare Cosmetics Products among the respondents.

RESEARCH DESIGN

The research Design of a Study outlines the nature of information required for the purpose of the study, the method of data collection, the technique used for the analysis and interpretation of the data for the study.

PRIMARY DATA COLLECTION METHOD

Primary data were collected through structured questionnaires. A questionnaire approach is considered to be the most effective tool to collect the primary data. The questionnaire included both open-ended and closed –ended questions. Likert scales were used for some questions involving purchasing decisions and additional questions concerned demographic attributes of respondents.

SECONDARY DATA COLLECTION METHOD

Reference books and academic journals were consulted to determine the existing level of knowledge about consumer buying behaviour. Observation from the internet also involved their various brands and product lines available in the market, as well as the company's turnover and their market positions. In addition, past research survey data was used to frame the questionnaire.

SAMPLING DETAILS

The population for this research study consists of women using cosmetics products. Working women, housewives and college students were contacted through a face-to-face interviewing method using the questionnaire. In this study, the sampling unit is the individual consumer who uses cosmetics products. A total of 26 women consumers were contacted within the Pudukkottai town and the sample were selected by a non-probability convenience sampling method to seek fair, impartial and effective data.

NATURE AND TYPE OF THE STUDY

This research work is in the form of 'ex-post –facto' study in which the researcher tried to study the existing perceptions of the Women Skincare Cosmetics Buyers regarding the Concept of Brand Loyalty, The Factors Affecting it and the Factors Affecting the Purchase of Skincare Cosmetics in general, etc, without manipulating in any way the scenario as it stands presently. Thus, this Study is largely Empirical in approach.

DATA ANALYSIS AND INTERPRETATION

TABLE 1: INFLUENCE OF AGE, MONTHLY FAMILY INCOME, OCCUPATION AND MARTIAL STATUS ON OVERALL ATTITUDE

		N	Mean	SD	t	DF	Sig
Age	18 – 20	3	4.333	3.5	3.031	5	0.29
	21 – 25	11					
	26 – 30	3					
	31 – 35	5					
	36 – 40	3					
	Above 41	1					
	Total	26					
Income	Below 10000	5	6.50	2.646	4.914	3	0.16
	10000 – 25000	10					
	25001 – 50000	7					
	50001 and above	4					
	Total	26					
Marital Status	Married	16	13	4.243	4.333	1	0.144
	Unmarried	10					
	Total	26					
Occupation	Student	12	5.20	3.962	2.935	4	0.43
	Homemaker	5					
	Service	4					
	Business	2					
	Professional	3					
	Total	26					

The above table shows the influence of age on overall attitude of the respondents towards skincare cosmetics products. In order to find out the influence, Anova was performed and the results shows a significant outcome (t=3.031; p=0.29). That is the respondents differ significantly with respect to their age towards their attitude on skincare cosmetic products. On observing the mean values, it is noted that the respondents who are in the age group (M=4.333; SD=3.5) Hence, it is concluded that it has positive attitude towards skincare cosmetics products. Next, the table shows the influence of Monthly Family Income on Overall attitude of the respondents towards skincare cosmetics products. Anova result shows a non-significant outcome (t=4.914; p=0.16). and the results on mean of (M=6.50; SD=2.646). Also, the table shows the influence of Occupation on overall attitude of the respondents towards skincare cosmetics products. Anova results shows a significant with respect to their occupation is (t= 4; p=0.43) and the mean results and standard deviation is (M=5.20; SD=3.962) and the table Marital status influences the skincare cosmetic users (t=1; p=0.144) and also the (M=13; SD=4.243).

The following are the factors influencing the category of age and the occupation group are as follows.

TABLE 2: FACTORS INFLUENCING AGE AND OCCUPATION (CROSS TABULATION)

Age/Occupation	Student	Homemaker	Service	Business	Professional
18-20	2	1	0	0	0
21-25	9	2	0	0	0
26-30	1	0	1	0	1
31-35	0	3	0	1	1
36-40	1	0	1	0	1
Above 41	0	0	1	0	0

Source: Primary Data from survey

The table2 shows that the comparison between the age group and occupation. it is identified by using the Anova calculation of mean of 2.17 on students and 0.83 of Homemakers and 0.67 of service women cosmetic users and 0.33 of business women's 0.50 of professionals of skincare cosmetics users. And the median of (1.00,) of student and 0.50 of homemakers and 0.50 of service and 0.50 of professional cosmetic users.

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TABLE 3					
	Student	Homemaker	Service	Business	Professional
mean	2.17	0.83	0.67	0.33	0.50
Median	1.00	0.50	0.50	.00	0.50
Std. Deviation	3.430	1.169	0.816	0.516	0.548
Variance	11.767	1.367	0.667	0.267	0.300
Range	9	3	2	1	1
Multiple modes exist. The smallest value is shown.					

MAJOR FINDINGS BASED ON THE SURVEY

BRANDS OF SKINCARE PRODUCTS ENJOYING MAXIMUM BRAND LOYALTY

The women respondents were asked to determine brand names of various categories of skincare products that they chose to use consistently / purchase repeatedly. The survey results as classified based on the main categories of skincare products viz. Body care, Facial care and Hand care are as under:

IN THE BROADER BODY CARE SEGMENT

- Among the General purpose body care products Vaseline turned out to be the leading brand with 25% brand Loyals, followed by Pond's with a loyalty score of 21% in second place and Fair and Lovely with a loyalty score of 18% in third place.

In the broader segment of Facial care products, the loyalty scores of these respondents were observed as under:

- Among the <u>Acne Treatment</u> products Himalaya Herbals was the leader with a loyalty score and clean @ clear followed the second vicco shared the third spot.
- In the <u>Face masks</u> category Ever youth led with a loyalty score of 18% Pond's followed with 8.12% and Fair&lovely with the score of 7% occupied third.
- Among the <u>Cleaners</u> Clean & clear led the market first and followed by Everyouth and Lakme with respectively.
- The <u>Anti-agers,</u> category had Olay as the leader with a loyalty score followed by pond's and Garnier with scores respectively.
- Among the <u>Facial moisturizers</u>, Pond's had the maximum no. of loyal's followed by Vaseline with a loyalty score and Nivea at third place.
- In the <u>Lip care</u> category, Vaseline was the clear winner followed with Nivea and Lakme products.
- In the <u>Toner</u> category Lakme led loyal to its credit followed by Amway and Pond's.

Finally, in the broader **Hand care** segment, Vaseline emerged a winner again with the loyalty score followed by Dettol and pond's with third place.

SUGGESTIONS OF GENERAL NATURE

In order to maintain and extend the Brand Loyalties of the existing Customers and to induce Non-users or Competitor's Customers to Switch their brands in their favour, companies should embark upon the following endeavors.,
1. Develop Long-term outlook coupled with Extensive Research and Development.
2. Continuous Product Innovation
3. Quality Strategy
4. Build Brand Equity by creating the right brand knowledge structures with the right customers.
5. Brand Extension and Multi-Brand Strategy.

The successes of most businesses depend to their ability to create and maintain customer loyalty. Companies have realized that selling to brand loyal customers is less costly than attracting new customers. Brand Loyalty provides companies strong and competitive weapons to fight with competitors in the market place. The concept of brand loyalty is so important that managers must give it sufficient consideration before they plan and implement their marketing strategies.

CONCLUSION

Based on the research, it is concluded that there are many factor which may be considered as very important for respondents when purchasing cosmetics. Although brand loyalty is important for any organization because it gives surety that products will have a strong bond in the minds of consumers and this will discourage them from switching to another brands, the research here indicated that it was not easy to obtain and sustain consumer loyalty. Propensity to switch is high in what appears to be a low-trust environment and a market which is still developing, with a great deal of churn as new products appear and new opinions from about them. However, information has been gathered here which should help in structuring communications campaigns and designing promotional efforts.

Finally, in order to create a successful brand, marketing managers should be more devoted on building brand image. Customer's satisfaction and brand loyalty as part of their branding strategy. By maintaining and strengthening the brand images and values. It will hopefully position the brand positively in the minds of consumers. Therefore, there is a need to Understand the important roles of three branding strategies: brand image, brand satisfaction and brand loyalty in order to enhance their brand appeal.

LIMITATION AND FURTHER RESEARCH

There are a number of limitations in this study. Firstly, the small sample size used limit the ability to generalize what is found in this study to the general industry. (i.e., not enough to capture the images of the brand particularly the benefits appeal). Future research should opt for a larger sample size. In addition, although students have been categorized as potential actual users, and thus are argued to be validly used as samples in many studies cited in the literature, the fact that they may not be the ultimate users remains and may have an impact on the study's result. Thus, using actual users for future research is advisable. Consequently, this study stressed on too many color cosmetic brands. Each type of brand may have different image benefits or brand meaning and brand attitude. We suggest that for future research, it would be better to focus on not more than three brands. In addition, future studies may consider examining one type of color cosmetic product category, for example, lipcare or foundation. By focusing on one type of color cosmetic may perhaps truly reveal the brand attributes and benefits of that particular brand. Again future research can be administered on how various brand loyalty factors influence a consumer 's loyalty towards other product categories – FMCG and Non FMCG. To find out the behavioral patterns of consumers and differences between the Loyalty patterns among the various products categories if any.

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CUSTOMER PREFERENCE TOWARDS BRANDED ICE CREAM OUTLETS IN COIMBATORE CITY

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ABSTRACT

Ice cream, being the most popular frozen dairy dessert, is a complex colloidal food system which consists of air bubbles, ice crystals and partially destabilized fat globules dispersed in a continuous aqueous phase within which polysaccharides, lactose, sugars and mineral salts are dissolved. The ice cream mix consisting of a combination of components such as milk, sweeteners, stabilizers, emulsifiers and flavoring agents is one of the most critical components at the manufacturing stage of ice cream. Higher quality ingredients and the optimal treatment processing steps required to produce a good quality ice cream are well known and used in all ice cream producing countries. That is, its formulation varies worldwide and the ingredients used to supply the components are chosen on the basis of availability, cost and expected quality. In recent years, ice cream industry is becoming a much profitable subsector due to rapidly developing technological advances. Ice-cream consumers are happy people when they enjoy the dessert and its purchasing decision resembles, most of the times, to a moment of revelation. The study finds out which branded ice cream outlets are most preferred by the customers and what determines them to purchase and consume this product from the selected outlet.

KEYWORDS
branded ice creams, consumer preference, influencing factors.

INTRODUCTION

The term ice cream taken from the phrase 'iced cream'. The origin dates back to china's T'ang period, probably as a dish for the country's rulers. Ice creams are a real relief from the scorching summers in India. Loved by one and all ice creams are the best way to beat the heat in India. As soon as summers approach in India the streets are full of vibrant pushcarts belonging to the different ice cream brands that almost force you to pick up a stick, a cup or a cone. The ice cream market in India has witnessed a steady growth over the last few decades. The growth in the Ice cream industry has been primarily due to a strong distribution network and a good cold chain infrastructure. The ice cream market in India is divided into the branded market and the unbranded market. The branded market is currently 100 million liters per annum valued at 800 crores. The unbranded market consists of small local players and cottage industry players. Up to a decade ago, the category was largely limited to ice-creams with traditional flavors, e.g. vanilla, chocolate and strawberry, along with some other variants like kesar pista, mango, elaichi, traditional kulfi, etc. During the past decade, the category has grown, with an array of innovations in ice-creams now the main subcategory and new subcategories like frozen yoghurt coming up. Currently the ice cream industry in India is worth 2,000 crores. The per capita consumption of ice cream in India is about 300 ml, as compared to the world average of 2.3 liters per annum[1].

IMPORTANCE OF THE STUDY
The purpose of the study would contribute to the body of knowledge by in-depth analysis of the various factors that influences the customer in selecting the branded ice cream outlet. The study particularly useful to the retail outlets in designing their marketing strategies and acts as a guide to future shoppers.

STATEMENT OF THE PROBLEM
The ice-cream/frozen desserts category has witnessed substantial evolution in the recent past. Consumers changing their preference, and being more inclined towards healthy options. Ice creams with lower milk fat content and higher edible oils are most likely to witness a strong growth in the recent period. The study analyses the factors which influences the customers in purchasing and consuming the particular brand from the selected outlet.

OBJECTIVES
1. To study the factors influencing the customers to purchase the ice-cream from the selected outlets.
2. To study the source of awareness of various branded ice-cream in the selected outlets.
3. To analyze the pattern of purchase of ice-cream from the selected outlets.

METHODOLOGY USED IN THE STUDY
AREA OF THE STUDY
Area of the study refers to Coimbatore city
1. **SOURCE OF THE DATA**: The study used primary data which is collected from 200 respondents visiting the branded ice cream outlets.
2. **SAMPLING DESIGN**: Convenience sampling method has been adopted to select the 40 respondents each from the five branded ice cream outlets namely Boomerang, Ibaco, Bon Bon, Kwality walls and Baskin robins
3. **TOOLS FOR ANALYSIS**: Simple percentage analysis

LIMITATIONS OF THE STUDY
a) The study is confined to Coimbatore city and not covered all the branded ice cream outlets due to time constraint.
b) The results obtained from this study cannot be completely generalized to all branded ice cream outlets.

ANALYSIS AND INTERPRETATION

TABLE 1: GENDER OF THE RESPONDENTS

S no	Gender	No of respondents	Percentage
1	Male	115	57.5
2	Female	85	42.5
	Total	**200**	**100**

The above table shows that 57.5% of the respondents are male and 42.5% of the respondents are female.

TABLE 2: AGE OF THE RESPONDENTS

S no	Age	No of respondents	Percentage
1	Less than 20 years	81	40.5
2	21-30 years	82	41
3	31-40 years	27	13.5
4	Above 40 years	10	5
	Total	**200**	**100**

The above table shows that 41% of the respondents belong to the age group 21- 30 years, 40.5% of the respondents are belong to the age less than 20 years, 13.5% of the respondents belong to the age group 31-40 years and 5% of the respondents belong to the age of above 40 years.

TABLE 3: MARITAL STATUS OF THE RESPONDENTS

S no	Marital Status	No of respondents	Percentage
1	Single	149	74.5
2	Married	51	25.5
	Total	**200**	**100**

The above table shows that 74.5% of the respondents are single and 25.5% of the respondents are married.

TABLE 4: EDUCATIONAL QUALIFICATION OF THE RESPONDENTS

S no	Educational Qualification	No of respondents	Percentage
1	School level	27	13.5
2	Under graduation	91	45.5
3	Post-graduation	32	16
3	Professional	48	24
4	Others, specify	2	1
	Total	**200**	**100**

The above table shows that 45.5% of the respondents have completed their under graduation, 24% of the respondents have completed their professional education, 16% of the respondents have completed their post-graduation, 13.5% of the respondents have completed their school education and 1% of the respondents have completed diploma.

TABLE 5: AREA OF RESIDENCE OF THE RESPONDENTS

S no	Area of residence	No of respondents	Percentage
1	Rural	50	25
2	Urban	120	60
3	Semi urban	30	15
	Total	**200**	**100**

The above table shows that 60% of the respondents are residing in urban areas, 25% of the respondents are residing in rural areas and 15% of the respondents are residing semi-urban areas.

TABLE 6: OCCUPATION OF THE RESPONDENTS

S no	Occupation	No of respondents	Percentage
1	Student	111	55.5
2	Businessman	30	15
3	Salaried employee	38	19
4	Professionals	15	7.5
5	Others	6	3
	Total	**200**	**100**

The above table shows that 55.5% of the respondents are students, 19% of the respondents are salaried employees, 15% of the respondents are businessmen, 7.5% of the respondents are professionals and 3% of the respondents are housewives.

TABLE 7: FAMILY MONTHLY INCOME OF THE RESPONDENTS

S no	Income (Rs)	No of respondents	Percentage
1	Below 15,000	42	21
2	15,000-30,000	61	30.5
3	30,001-45,000	53	26.5
4	Above 45,000	44	22
	Total	**200**	**100**

The above table shows that 30.5% of the respondents are having a family monthly income of between Rs. 15,000 – 30,000, 26.5% of the respondents are having a family monthly income of between Rs. 30,001 – 45,000, 22% of the respondents are having a family monthly income of above Rs. 45,000 and 21% of the respondents are having a family monthly income of below Rs. 15,000.

TABLE 8: NUMBER OF MEMBERS IN FAMILY OF THE RESPONDENTS

S no	Number of members in family	No of respondents	Percentage
1	Only 2	21	10.5
2	2-4 members	113	56.5
3	4-6 members	49	24.5
4	Above 6 members	17	8.5
	Total	**200**	**100**

The above table shows that 56.5% of the respondents are having 2 -4 members in their family, 24.5% of the respondents are having 4 - 6 members in their family, 10.5% of the respondents are having only 2 members in their family and 8.5% of the respondents are having more than 6 members in their family.

TABLE 9: NUMBER OF KIDS IN THE FAMILY OF THE RESPONDENTS

S no	Number of kids in the family	No of respondents	Percentage
1	Only 1	86	43
2	2-4	96	48
3	More than 4	18	9
	Total	**200**	**100**

The table 9 shows that 48% of the respondents are having 2-4 kids in their family, 43% of the respondents are having only one kids their family and 9% of the respondents are having more than 4 kids in their family.

TABLE 10: PREFERRED ICE CREAM OUTLET OF THE RESPONDENTS

S no	Preferred brand	No of respondents	Percentage
1	Boomerang	78	39
2	Ibaco	46	23
3	Bon Bon	26	13
4	Kwality Walls	33	16.5
5	Baskin Robbins	17	8.5
	Total	**200**	**100**

The above table shows that 39% of the respondents prefer to visit the branded ice cream outlet Boomerang, 23% of the respondents prefer to visit the branded ice cream outlet Ibaco, 16.5% of the respondents prefer to visit the branded ice cream outlet Kwality Walls, 13% of the respondents prefer to visit the branded ice cream outlet Bon Bon and 8.5% of the respondents prefer to visit the branded ice cream outlet Baskin robbins.

CONSUMPTION PATTERN

TABLE 11: FREQUENCY OF VISITING THE ICE CREAM OUTLET BY THE RESPONDENTS

S no	Frequency of visiting	No of respondents	Percentage
1	Once in six months	15	7.5
2	Weekend	45	22.5
3	Once in a month	74	37
4	Once in three months	66	33
	Total	**200**	**100**

The above table shows that 37% of the respondents are visiting the branded ice cream outlet once in a month, 33% of the respondents are visiting the branded ice cream outlet once in three months, 22.5% of the respondents are visiting the branded ice cream outlet every week end, and 7.5% of the respondents are visiting the branded ice cream outlet once in six months.

TABLE 12: PREFERABLE TIME TO HAVE ICE CREAM BY THE RESPONDENTS

S no	Preferred Time	No of respondents	Percentage
1	Morning	11	5.5
2	Noon	53	26.5
3	Evening	95	47.5
4	Night	41	20.5
	Total	**200**	**100**

The above table shows that 47.5% of the respondents are preferred to have ice creams in the evening, 26.5% of the respondents are preferred to have ice creams in the noon, 20.5% of the respondents are preferred to have ice creams in the night time and 5.5% of the respondents are preferred to have ice creams in the morning.

TABLE 13: TYPE OF PACK PREFERRED BY THE RESPONDENTS

S no	Preferred pack	No of respondents	Percentage
1	Scoops	59	29.5
2	Cups	45	22.5
3	Stick	27	13.5
4	Cone	49	24.5
5	Family pack	20	10
	Total	**200**	**100**

The above table shows that 29.5% of the respondents preferred to buy scoops, 24.5% of the respondents preferred to buy cones, 22.5% of the respondents preferred to buy cups, 13.5% of the respondents preferred to buy sticks and 10% of the respondents preferred to buy family packs.

TABLE 14: PREFERRED ALTERNATIVES OF THE RESPONDENTS

S no	Alternatives preferred	No of respondents	Percentage
1	Milk shakes	84	42
2	Ice cream cakes	71	35.5
3	Sundae	24	12
4	Coffee	21	10.5
	Total	**200**	**100**

The above table shows that out of the 200 respondents, 42% of the respondents prefer to buy milk shakes at the branded ice cream outlets as an alternative to ice creams, 35.5% of the respondents prefer to buy ice cream cakes at the branded ice cream outlets as an alternative to ice creams, 12% of the respondents prefer to buy sundae at the branded ice cream outlets as an alternative to ice creams and 10.5% of the respondents prefer to buy coffee at the branded ice cream outlets as an alternative to ice creams.

TABLE 15: PERSONS WITH WHOM THE RESPONDENTS VISIT THE ICE CREAM OUTLET

S no	Persons	No of respondents	Percentage
1	Partners	26	13
2	Friends	38	19
3	Parent's	29	14.5
4	Children	100	50
5	Myself	7	3.5
	Total	**200**	**100**

The above table shows that 50% of the respondents visit the branded ice cream outlet with their children, 19% of the respondents visit the branded ice cream outlet with their friends, 14.5% of the respondents visit the branded ice cream outlet with their partners, 13% of the respondents visit the branded ice cream outlet with their partners and 3.5% of the respondents visit the branded ice cream outlet alone.

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TABLE 16: AMOUNT SPENT PER PURCHASE BY THE RESPONDENTS

S no	Amount spent per purchase	No of respondents	Percentage
1	Less than Rs. 100	40	20
2	Rs. 100-Rs. 500	99	49.5
3	Rs. 500-Rs. 1000	52	26
4	More than 1000	9	4.5
	Total	200	100

The above table shows that 49.5% of the respondents stated that they spent between Rs. 100-Rs. 500 per purchase, 26% of the respondents stated that they spent between Rs. 500-Rs. 1000 per purchase, 20% of the respondents stated that they spent less than Rs. 100 per purchase and 4.5% of the respondents stated that they spent above Rs. 1000 per purchase.

TABLE 17: FACTORS INFLUENCING THE RESPONDENTS TO SELECT THE BRANDED ICE CREAM OUTLET

S no	Factors	Mean Rank	Rank
1	Price	4.98	II
2	Availability	5.51	IV
3	Distance of outlet	5.7	V
4	Variety of flavor	4.91	I
5	Value added services	6.37	VI
6	Promotion	5.4	III
7	Personal interaction	6.83	VIII
8	Physical appearance	6.72	VII

From the above mean rank table it is understood that the respondents have given first rank to "Variety of flavor" (mean 4.91) which says that respondents have given prior importance to availability of different flavors in the ice cream while selecting the particular ice cream outlet, second rank have been assigned to "Price"(mean 4.98) and "Promotion" have been assigned the third rank (mean 5.4)."Availability" is considered to be a reason that influence a person to choose a particular site which is given fourth rank (mean 5.51) followed by "Distance of outlet"(mean 5.7) with fifth rank, "Value added services"(mean6.37) have assigned sixth rank, "Physical appearance" (mean 6.72) with seventh rank which is followed by "Personal interaction"(mean 6.83) with eighth rank.

FINDINGS
- ❖ Most (41%) of the respondents are under the age group of 21-30 years.
- ❖ Majority (74.5%) of the respondents are single.
- ❖ Majority (60%) of the respondents are in the urban area.
- ❖ Majority (56.5%) of the respondents are having 2-4 members in their family.
- ❖ Majority (48%) of the respondents are having 2-4 kids in the family.
- ❖ Majority (39%) of the respondents prefer to visit the branded ice cream outlet Boomerang.
- ❖ Most of the respondents (47.5%) prefer to have ice creams in the evening.
- ❖ Most (29.5%) of the respondents preferred to buy scoops.
- ❖ Most of the respondents (42%) prefer to buy milk shakes at the branded ice cream outlets as an alternative to ice creams.
- ❖ Many of the respondents (49.5%) under the amount spent purchase of Rs. 100-Rs. 500.
- ❖ Most of the respondents have given first rank to the factor variety of flavor which influences the respondents in selecting the branded ice cream outlet.

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ECOMMERCE ON THE VERGE THESE DAYS: A STUDY OF ECOMMERCE IN INDIA AND THE WAY FORWARD

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ABSTRACT

Over the last decade, Internet has changed the way people were used to buy and sell goods and services. Ecommerce is transforming customers shopping experience a lot. This sector has shown unpredictable growth in last few years. The adoption of new technology is making ecommerce sector more advance and reachable. Internet penetration, broadband services, 3G data, 4G data and Wi-Fi and many other devices like mobiles, tablets, and laptops are helping to increase number of online customer's day by day. Banks and many other players are providing safe payment gateways to customers so that they feel safe while paying online. But still ecommerce industry is facing many challenges and with the increased growth this industry need to overcome those challenges. This paper will give you an overview of ecommerce in India, from where and when it evolved in India, what are the different kinds of ecommerce business models and what is the way forward in ecommerce sector. This paper will also tell you why ecommerce is growing day by day and facing so much challenges. Since many ecommerce companies bear huge loses but still this sector is growing with a huge page in India.

KEYWORDS
e-commerce, customer shopping.

INTRODUCTION

From a buzzword to today's reality, the ecommerce market in India has made remarkable growth of almost 50 % in last five years. Ecommerce is referred as the transmission of funds or data or buying and selling of goods and services over an electronic network that is internet. Although the trends of ecommerce have been making rounds for almost 15 years, the ecosystem of the ecommerce is in the suitable place and business is literally thriving. It has successfully changed the way how people were used to do transaction. Now a days people are able to do shopping or to book tickets or anything else within minutes just with a one tap from anywhere be it their homes or their workstations and most importantly, they can do at any time of the day according to their comfort level.

EVOLUTION OF ECOMMERCE IN INDIA

The concept of ecommerce was popularized long way back in 20th century. In the year 1991 e commerce was introduced. It was noted as a new chapter in the history of online world where it became a hot choice amongst the economic use of the internet. At the time of 20's nobody has even thought that the buying and selling of goods and services online or doing trade online will become a trend in the world and other than that nobody has even thought that India will share a good percentage of the success.

Then in 2002 IRCTC teaches tough Indians to book tickets online. It was first time that India was interacted with the online e commerce via the IRCTC. This online strategy was experimented by the government of India for its public so that it is convenient for them to book the train tickets. The IRCTC accepted digital payments through credit cards for e-tickets. With the advent of the online train ticket booking from anywhere at any time, it became a blessing for the common man as of now they can feel safe while using their credit cards as it was under government surveillance, they don't have to wait in long lines, no time wastage due to unavailability of trains, no burden on ticket bookers and many more. With the passage of time IRCTC online system have seen advancement in technology as now one can book tickets like normal, tatkal etc in one go, can check the position of the ticket and time of the train as well and easy payments. In the field of ecommerce in India this is the big achievement.

Then in 2003 after the success of IRCTC online system Air Deccan introduced low cost Airline, so that people can save the commission given to the agents by doing web bookings. This led to the use of ecommerce India for the first time. For providing online flight tickets at a very low cost to the people, two companies entered Indian ecommerce industry. The year 2005 was the year of low cost airlines in that year makemytrip.com came into existence and after that in next year yatra.com entered ecommerce industry for providing low cost airline tickets. Together with other companies, yatra.com also helped in reduction of India's resistance to make online payments. At present these companies are also offering many other services beside flight tickets like hotel bookings, bus bookings etc.

Then from 2007 onwards many start-ups entered into the Indian ecommerce market to make it large. The start-up companies were flipkart, snapdeal, myntra, infibeam, amazon, jabong etc. These portals gained importance only with deep discount model of flipkart, the company which re launched online shopping in India. Soon after this other portal also started hunting in India. At present flipkart is considered the top player in Indian ecommerce.

Then after 2014 and till now online shopping has become a trend in India. In its early stage it was just a simple medium for shopping with fewer options available. The users were just able place an order and pay cash on delivery. But in past few years this field has been modernised to a high extent and hence delighted many consumers. The reason behind the increasing trend of online shopping is attractive online websites, large number of online stores with new fashion, easy and secure payment methods like cash on delivery, no obligations on quantity and quality, and one can select the products based on the price, colour, size etc.

Although being a developing and emerging country, India has shown excellent rise in the ecommerce industry in past few years, thereby hitting the market with a thrive. Though Indian ecommerce market is miles away from the US and the United Kingdom, still it has been developing with a fast speed. Further the inclusion of coupons, offers, 30 days' return guarantee, 1-7 days delivery time, discounts etc. to the ecommerce and online market have added new flavours to the industry.

KEY DRIVERS IN INDIAN ECOMMERCE MARKET

- Large number of population subscribed to broadband internet, increased 3G users and recent launch of 4G across the whole country
- Increased standard of living of people leaving to reduction in poverty rate
- Expanded product range
- Increased smartphones users, India to become second largest smartphone user base.
- Competitive Prices
- Expanded use of online restricted sites
- Evolution of million dollar companies like jabong, saavn, makemytrip, amazon, zomato etc

ECOMMERCE BUSINESS MODEL

There are many different kinds of B2C and C2C ecommerce business models that have developed in India over time and each business model has its own characteristics. B2C that is business to consumer are the business models in which trading take place between business and consumer. Customer can choose the product from the website of the business organisation and can order the same. C2C that is consumer to consumer are the business models in which transaction take place between two people in which one consumer can sell products on the website and other consumer can buy that particular product from that website. Besides categorizing business models on the basis of B2C and C2C they can be categorized on the basis of their business objectives and their unique selling proposition to customers. Various business models are:

FIG. 1
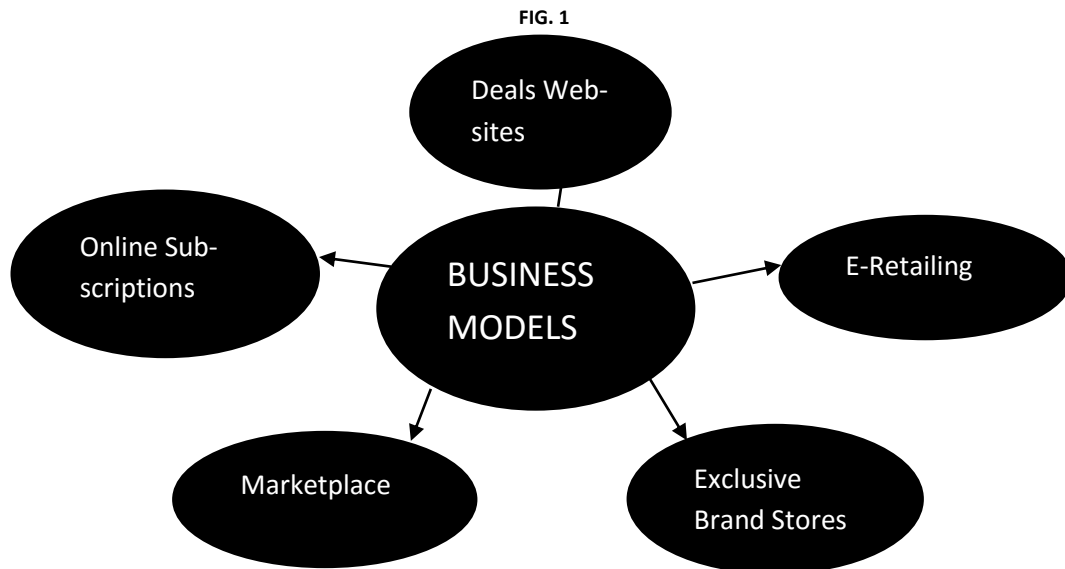
(A) Deals Websites: - There are various websites of ecommerce providing best deals to the consumers like price discount, freebies, coupons etc. These websites normally work at very less margins as their prime objective is to win over customers. The main USP of these deal websites is that they work in so overcrowded ecommerce space with the use of discounts. These deal websites can be classified as:

- Flash sale sites- It is a B2C business model which directly sell the products to the end customers. These type of sites typically offer the products at a very huge discount to the consumers. These websites generally buy old stock or the dead stock from the brands and sell them through their websites by providing huge discount. The discount ranges from 50% to 90% and generally consumer don't even care that they are buying such products from the websites which are no longer in fashion. The best example is FashionandYou.com
- Daily Deal Sites: - It is also a B2C business model which showcases a very profitable sale on the various products for the customers. Such sites normally get the products from the manufacturers at a very huge discount. In case these daily deal sites are not able to sell the discounted products on the day of sale then they try to offer the same product on some other day on sale. So they keep on shifting their daily deals and try to make as much profit as they can.
- Group Buying Sites- It is also a unique B2C business model in which website invites the buyers to buy the product from their sites at a discount or at wholesale price. Their deals are not limited to one day. The website honour the transaction only when the minimum number of buyers fixed by them buy the particular product or else website refund the money of customers. The best example for group buying websites is Groupon.com

(B) Online Subscriptions: - These type of websites works similar to an offline subscription website. Such websites showcase their whole list of subscriptions so that customers can choose from the list and subscribe online. The customers have to pay online to avail the subscriptions offered and they can avail them again and again by paying online through the websites. The main objective of these type of websites with online facilities of payment is to provide convenience to the customers

(C) E-Retailing: - There are numerous websites offering products and services to the customers across various brands and categories. These e-retailing websites buy the products from the brands and sell to the end customers. Their prime objective is to offer the latest product to the customer's online at best possible price they can. jabong.com, flipkart.com, myntra.com are some of the e retailing examples.

(D) Market Place: - This type of business model is gaining much importance in India which enables the buyers to get in touch with sellers and make the transactions. In this business model website owners act as a mediator for the buyers and the sellers to make transactions. These type of websites provide various facilities to the seller like payment collection, logistics etc. but do not hold their inventory in their own warehouse. There are two types of marketplace that are: -

- C2C Marketplace- Consumer to consumer marketplace means an online marketplace where particular consumers can sell products to the buyers. If you are seller and you don't run a business even though you can sell your products to the end customers through such marketplace. Ebay.in is the best example of C2C marketplace.
- B2C marketplace- Business to consumer marketplace means a marketplace operating online in which only business owners can sell their products to the end customers, no individual customers can sell product. Snapdeal.com is the best example of B2C marketplace.

(E) Exclusive Brand Stores: - This is the upcoming business model which recently started in India. In this business model various brands set up their own exclusive brand stores online so that customers can buy the product directly from the brand itself. This business model is growing rapidly and various brands are seeking towards it. There are few brands who are operating online through their exclusive online brand stores like Samsung. Lenovo, HP, Canon, Timex etc.

CHALLENGES FACED BY ECOMMERCE IN INDIA

With the increase in technology and growth in ecommerce industry. This industry is still facing many challenges which still need to be recovered.

1. **LOGISTICS: LAST MILE DELIVERY**- As there are many logistics multinationals operating in India like DHL and FedEx, still goods are shipped through third party carriers. For shipping goods in different regions of the country many different carriers are used. For last mile deliveries companies often hire individual couriers so that orders sourced outside cities are also delivered on time. To tide over this logistics, issue many backward integrated players are acquiring logistics companies and using the services given by the new start-ups and focusing only on logistics for ecommerce space. They are also coming up with supply chain solutions and innovative logistics like snap deal launched 90 hours reverse pickups, card on delivery and four-hour delivery options last year that is 2015. The $300-billion domestic logistics industry which is going forward will be derived by the fastest growing ecommerce sector and the market will be unified with the introduction of goods and service tax which is going to roll out this year hopefully. This will be the biggest push for this sector. In the upcoming year 2016 a lot of focus will be made on strengthening vehicle tracking, city local networks for delivery and making base for local fulfilment.
2. **CASH ON DELIVERY: PREFERENCE FOR CASH OVER ONLINE PAYMENTS AND HIGH RETURN RATES**: Sometimes cash collection at the time of delivery is also risky and expensive. For almost two weeks' courier companies keep the money with them and because of that ecommerce companies have to restock the inventory before they get the payment from their last sale. Few of the courier companies charge almost 3 percent for their service. But the biggest challenge

comes at the time of reverse logistics as for that sometimes company has to pay up to 10 percent leaving to high return rates. Combined efforts of industry and governments movement towards cashless economy will help the companies to overcome this challenge.

3. **INCREASED FAILURE RATES IN TERMS OF ONLINE PAYMENTS AND LOW PENETRATION OF DEBIT AND CREDIT CARDS**: For many ecommerce company's online payment is becoming a major challenge as Indian consumers doesn't feel safe to put payment information online and this leads to low penetration of debit and credit cards. The reason behind the low penetration of online payment is lack of trust. So to overcome this challenge ecommerce companies are setting up wallets and trying new methods to build trust among consumers. For example, has set up a facility called PayU Paisa. It keeps the payments made by customers in a special purpose accounts and the money is moved to the e-tailor only after the item purchased reaches the customer.

4. **HIGH COST OF CUSTOMER ACQUISITIONS**: The ecommerce sector is facing intense pressure to acquire new customers at irrational cost and show valuation. Their main focus is on increasing loyalty among customers and profitability whereas discounts and marketing also helps to acquire new customers. In addition, there are at least 4-5 players in every segment which are increasing competitive stress and most of the players are running after valuations rather than profitability with many players not even able to reach operational expenses from revenues generated today. However, this is soon going to change with investors now pushing start-ups to rethink business models, trim teams and control their "cash burn rate".

5. **INCREASING USE OF MOBILES FOR DOING PAYMENTS**- In India in the year 2015 around 23 billion dollar digital payments were done. With mobile becoming most preferred mode of doing E commerce transactions, payments gateways are facing challenges to reduce payment failure rates and provide security of transactions to the consumers. Two type of wallets that are digital wallet and M wallet are becoming as a solution. In 2015 less than 5 per cent of payments were done through wallets but this is likely to increase up to 20 per cent by 2020. Google wallet and Nokia money wallet were launched in 2011 and further in 2012 came Ypaycash, M Pesa from Vodafone and ICICI and Infibeam launched their own wallet. From 2015 onwards several players across the country integrated mobile wallet payment mechanism into their service offering. Almost 40 per cent of ecommerce payments in our country are controlled by HDFC Bank, as they are both issuer of card and processor of card based payments and it is the latest jump into the wallet space.

WHY ECOMMERCE IS ON THE VERGE IN INDIA AND WHAT IS THE WAY FORWARD?

With the increased market size in India every year and emerging new player's in ecommerce, it continues to be on the verge in India and it is growing day by day in India.

According to Assocham India's ecommerce industry is going to be worth of almost $38 billion by the end of 2016. There is almost 67% of jump in revenues as compared to last year 2015. In year 2009 it was $3.8 billion then it went up to $17 billion in 2014 and $23 billion in 2015. They also added that various factors like increased use of internet, increased mobile penetration, favourable demographics and growth in online payments has provided opportunities to companies to connect with customers in this ecommerce industry in India. Further they also said that there will be huge increase in revenue in 2016 due to cheap rates and doorstep deliveries of various branded apparels, footwear's, jewellery, gifts etc. On the other hand, they also added that they had observed that m commerce is gaining importance these days and smartphones are behaving like a game changer. Mobile commerce is verifying itself as secure and stable supplement for ecommerce whereas industry people believed that mobile commerce could contribute up to 70 percent to their total revenue. They further added that the government's digital India project will also help ecommerce to grow more as this project will lead to development of internet and broadband to remote areas in the country. This initiative by the government with the investment of $17 billion will transform India to connected economy. This will also lead to e manufacturing and various jobs.

Due to the boom in Indian ecommerce it is also attracting various artisans and entrepreneurs from different slums across the country which also lead future of ecommerce as it has reached to the remote areas also. Many slum dwellers from Bengaluru, Delhi, Rajasthan, Mumbai are selling various products like shoes, handbags, apparel, jewellery online on ecommerce websites like amazon, snap deal, eBay etc. There are many people's from slums who are selling online and earning money like a man name Sayed started selling jackets under the brand named candid in the year 2015 and now he owns a two bedroom house in Thane. Like Sayed there are many other peoples who are doing good job online and earning good amount of money due to which their living conditions are also improved. Due to increasing demand of ecommerce industry in India, almost 2.5 lakh more jobs will be generated this year in online retail business. There will be increase of 60-65 percent in hiring sector. Most of the ecommerce businesses have increased their turnover as compared to last year that is why there is an opportunity for the ecommerce industry to develop further and generate jobs.

CONCLUSION

The time when ecommerce entered India and till now it is growing with the fast page. There are various B2C and C2C business models which have been developed with the passage of time. Many new companies are entering in ecommerce every year with the aim of making profit. It has changed buying behaviour of many people and shifted them online. Since this sector is showing huge growth but many companies are still facing many challenges which need to be recovered soon. The basic and the main challenge faced by the ecommerce companies is online payment, consumers don't feel safe while giving payment information online. This is just because of lack of trust. So to overcome this challenge they need to create trust among consumers. Cyber security also acts as a major issue behind this ecommerce online payment challenge. E Crimes and digital fraud threats are growing rapidly; various techniques are being used by attackers to target people. So to overcome this there is need to make cyber risk awareness among humans and various war games, penetration test etc. need to be conducted against cyber-attacks.

As ecommerce is on the verge but still it is facing many problems so what is there in the future in this ecommerce sector is difficult to predict. There are many factors which will contribute to the bright future of ecommerce in India. One of the factor gaining importance these days is mobile commerce. It is assumed that in future most of the revenue will be generated through mobile commerce only as more than half of the population in India is more dominated to smartphones. So this factor need to be overlooked. Another factor contributing are the payment options, companies are generating more and more online payment gateways for consumers so that they feel secure and start making online payments beside cash on delivery.

So at last ecommerce industry is facing many challenges in India and there are many factors which are contributing towards ecommerce future so everything need to be looked upon for the bright future of ecommerce.

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A STUDY ON THE IMPACT OF CHANGE IN REPO RATES ON BANK STOCKS IN INDIA

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ABSTRACT

Almost a week before every bi-monthly policy of the Reserve bank of India, many analysts forecast the impact the change in repo rate might have on the stock market. This speculation also includes an impact on the bank stocks. Particularly because the impact of the repo rate has on the operations of the bank. Repo rate is the rate at which commercial banks borrow money from the RBI. The increase in repo rates makes loans costlier thereby reducing the number of customers for a commercial bank and vice versa. This led to the inquisitiveness to analyse whether this operational impact owes the shareholders to change their investment decisions. This change can be observed by studying the stock prices of banks, which for the study have been attributed to the S&P BSE BANKEX, which is an index consisting of 12 public and private sector bank. The paper aims to study the impact of change in repo rates on bank stocks in India. This paper is restricted to study the impact on the day of the change. The study was conducted using various statistical tools like regression analysis, correlation, residual plot and normal probability plot. After the study was successfully conducted from the data taken from the RBI website, it was apparent that there is no significant impact of change in repo rates on the bank stocks on the day of the change. Hence, all speculations and forecasts regarding their relationship are flawed and do not hold true for bank stocks in India.

KEYWORDS

Reserve Bank of India, repo rate, bank stock, S&P BSE BANKEX.

INTRODUCTION

Repo rate is the rate at which banks can borrow money from the RBI. This rate is one of the most important instruments used by the RBI to control credit, money supply and inflation in the economy. It has an inverse relationship with the amount of credit and money supply. This is because when the RBI increases the repo rate, it becomes costlier for banks to borrow excess funds from the RBI and hence the amount of money available to lend reduces, thereby reducing the amount of credit and money supply in the economy. Whereas, when the RBI decreases the repo rate, it becomes cheaper for banks to borrow money from the RBI and lend the same to its customers thereby increasing the amount of credit and money supply in the economy. Hence, whenever the RBI reduces repo rate most banks start reducing the rate at which they lend loans thereby inducing more people to borrow from banks and vice versa. This passing on of the benefit to the customers leads to more impact on the money supply. Due to this change as the money supply in the market increases, people are ready to pay more and more for a particular product and hence the demand for goods increase and the supply remains constant. This phenomenon leads to a research gap to find out the impact of changes in repo rates on bank stocks since the operational impact is quite evident.

REVIEW OF LITERATURE

BOFA-ML (2015), The article talks about the impact of lowered rates on inflation in the country. It states that inflation will be below 6% mandate set by RBI. This will lead to more purchasing power, which is likely to be invested in the economy. According to this cycle the additional investment in the economy will lead to a growth in the markets, which will in turn lead to an increase in the prices of stocks.

DAVID ASHWORTH (2015), The article talks about the varied reasons and implications of the repo rate cut by the RBI in January 2015. One of the most important reasons behind the cut was to maintain the low CPI and WPI. The probable impact of the cut was a tremendous 2.6% increase in the S&P BSE SENSEX index with banks being the biggest gainers. The writer also appreciates the sudden move by the RBI because it led to a better reaction by the markets. The article also explains how a rate cut by the RBI induces foreign investors in USA to more actively invest in the Indian market.

ANAMIKA SINGH (2014), The study intends to know the monetary policy key rates relation with NIFTY and Bank NIFTY, to measure the inflation influence on key interest rates, to measure the monetary policy rates influence on selected economic indicators, and to find the CRR impact on stock market volatility. The paper concludes that CRR and SLR are negatively co- related with the market indices due to more money being locked up in these reserves. The paper also states that there is a further scope to do research on monetary policy changes impact on market benchmark behaviour.

VIVEK SHARMA (2013), The article states that a change in the repo rate acts as a catalyst agent for the markets. This is because the rumours about the expected change in the rates spur the market even before the news is out. The article also states that it is difficult to judge the impact of the change in rates because it has many long term effects on the market and the money supply which will not be prevalent in short term or in a day's time. This assessment makes sense since the impact of the rates on the lending chain will only be seen in long term, as banks will lower their rates, therefore the impact on the market on the day of the change is a very narrow scope to judge the impact of the repo rate.

PALLAVI INGALE (2012), The study is concentrated to find out the impact of RBI policy on inflation. The study concluded that though the rising interest rate will hurt the economy in the short run, the increasing trend of interest rate will in the long term help in bringing down inflation. This is because it will curb the excess money supply in the economy leading to decrease in demand and ultimately reducing the prices of goods and services.

NEED AND SIGNIFICANCE OF THE STUDY

- **AID TO THE RBI IN THE FORMULATION OF POLICIES REGARDING THE REPO RATE**

The relationship between the change in repo rate and the effect on bank stocks will provide a base to the central bank to study the market and formulate the repo policies accordingly. Since the study also evaluates the degree to which it impacts the bank stocks, it will be easy to know the impact of change in repo policies by the RBI.

- **SETTING MARKET TRENDS**

The study of this impact will help bankers and brokers in their daily activities because a definite trend creation would then be possible based on this historical data analysis.

- **EFFICIENT USE OF HISTORICAL DATA**

The relationship between change in repo rate and trend of bank stocks will help in efficiently using the historical data available and will provide a base for future use.

- **FORMULATION OF A THEORY**

There exist various views of experts on the impact of repo rate on bank stocks and they widely differ from each other. This intense study of the two will lead to a formulation of a theory which will be very helpful in the future for the economy.

- **USEFUL FOR BANKS**

Since the banks will be aware about the degree to which the repo policies will affect their stock prices and in which way, the bank can plan accordingly for their future course of action in case of any change in the policy, without disturbing their operations to a large extent.

OBJECTIVES OF THE STUDY

1. To analyse the impact of change in repo rates on bank stocks in India
2. To analyse the degree to which change in repo rates can impact the stocks of banks in India
3. To test the theory – "Increase in repo rates leads to a decrease in stock prices" with respect to bank stocks

SCOPE OF THE STUDY

The scope of the study is limited to India and to the capital markets of India (BSE and NSE). This is because the policies followed by the central bank of each country differ from another and the market situations in each country also differ from the other. Additionally, the capital markets of each country differ from the other in nature (developed/developing), type (bullish/bearish) and reaction to situations. The analysis was conducted taking into consideration of daily stock prices of the banks.

The data was collected for a period of 15 years from 31-03-2000 to 29-09-2015 to make the study more reliable and accurate. However, the data for BANKEX was not available for the period from 2000-2003, which made it difficult to consider this period for the study. Hence, all such dates were excluded from the study to make the results more accurate. Thus, effectively the data used for the study is only for 11 years; from 31-03-2004 to 29-09-2015.

METHODOLOGY OF THE STUDY

- **SOURCES OF DATA**

The study is based on the secondary sources of data, collected through the statistical data made available by the Reserve Bank of India website and other related websites. The data for the study was collected in 2 parts; Market data from BSE BANK INDEX and repo rate data from the RBI statistical database.

- **SAMPLE SIZE**

The collected data was then simplified and recorded only for the dates on which the repo rates were changed by the central bank. This step helps in a better analysis of the data because it makes it more comparable and logical. The simplification was required to limit the scope of the study to only "change" in repo rates and not any record the impact of any external factors. Although the study is to analyse the impact of repo rate change, the data used is that of BSE BANK INDEX because it is a widely accepted measure of bank stock movements in the country. It is made up of the stocks of 12 major banks of the country including both public and private sector. The 12 banks included in the index are shown in table 1.

TABLE 1: LIST OF BANKS INCLUDED IN THE S&P BSE BANKEX

NAME OF THE BANK	SECTOR
Axis Bank	Private Sector
Federal Bank	Private Sector
HDFC Bank	Private Sector
ICICI Bank	Private Sector
Induslnd Bank	Private Sector
Kotak Mahindra	Private Sector
YES Bank	Private Sector
Bank of Baroda	Public Sector
Bank of India	Public Sector
Canara Bank	Public Sector
Punjab National Bank	Public Sector
State Bank of India	Public Sector

(*Source:* www.moneycontrol.com)

In the above table the index has an appropriate mix of all major public and private sector banks of the country, so the value of the index will be a true representative of the banking industry in India. It will also guarantee a smoothening in the data since the index is calculated by using the modified market capitalization method. This method ensures that the index is calculated based on user defined weighting, thereby ensuring that a true representative value is achieved. Hence, this index can be used for the study to form a reliable and accurate conclusion.

The sample technique used was convenience sampling under non-probability sampling. This is because the most recent data which was easily available was recorded and analysed for the study

- **STATISTICAL TOOL**

The tool used for the study is Linear Regression Analysis, Correlation and R- squared.

DATA ANALYSIS AND INTERPRETATION

After organising and describing the data required for the study, the following interpretations were made using different analytical tools.

- **NEGATIVE INSIGNIFICANT CORRELATION**

The study of the two variables X (Change in repo rate) and Y (Change in BANKEX) shows that the correlation between the two variables is -0.06558 as depicted in the table -1

TABLE -1: CORRELATION TABLE

	X	Y
X	1	
Y	-0.06558	1

The correlation between two variables can also be depicted using a scatter chart, which makes the interpretation of the relation easier and clear.

GRAPH 1: CORRELATION SCATTER CHART
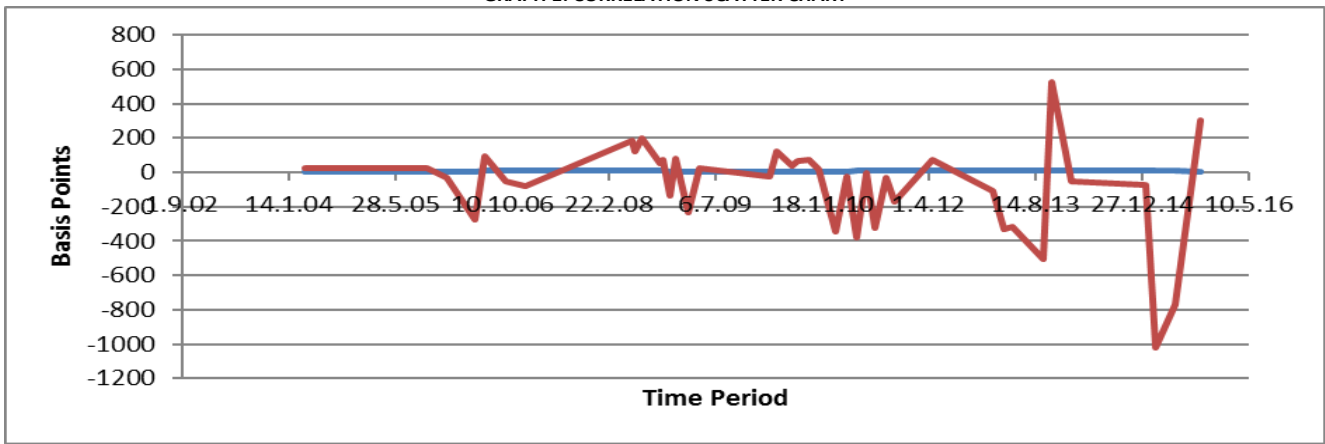
Analysis and Interpretation

From graph 1 and aforementioned calculations, it is apparent that there is negligent or no correlation between the two variables being studied. This is because the correlation is -0.06 or -6%, which is very low compared to the extremes which are 1 and -1(100% or -100%). However, the correlation has a negative value, which portrays that the correlation is negative. This means that a change in X will lead to an opposite change in Y. Similarly it can be conclude that a change in repo rate does not lead to a significant change in bank stocks. However, the small change in bank stocks has a negative relationship with change in repo rates. This means that an increase in repo rate will lead to a very insignificant decline in the bank stocks. It can also be concluded that there are stronger factors that have an impact on bank stocks, other than a change in repo rates.

- **NEGATIVE MARGINAL REGRESSION**

The linear regression equation of the two variables as calculated using the above mentioned formula is as follows;

Y= 37.87+ (-16.798) X

Analysis and Interpretation

The above equation shows that with every 1 unit change in X there is a -16.798 unit change in Y. In other words, with every 1 basis point change in repo rate there will be a reduction of 16.798 basis points in the BANKEX. Hence, there is a negative relationship between the two variables. This is because an increase in one variable leads to a decrease in the other variable. It can also be noted that if there is no increase or decrease in the independent variable the mean of the dependent variable will be 37.87 points at that level. But since the repo rate can never be 0 the intercept in this case is insignificant to their relationship.

GRAPH -2: REGRESSION TREND LINE
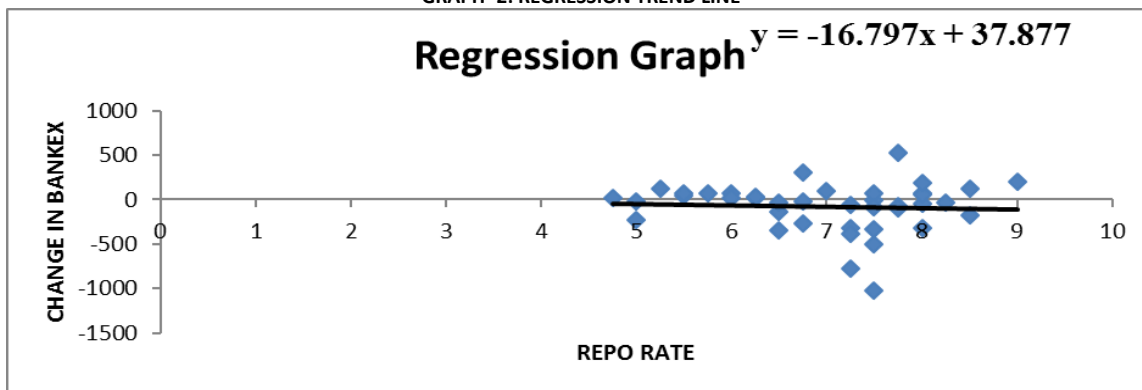
A downward sloping trend line substantiates the above analysis that there is a negative relationship between the two variables of the study. The x-axis represents the repo rate or the X variable and the y-axis represents the change in BANKEX or the Y variable. The blue squares symbolise the change in BANKEX at a particular rate.

- **MARGINAL R- SQUARED**

The R-squared of the 2 variables for the study was = 0.0043 or 0.43%.

Analysis and Interpretation

This suggests that a change in variable X explains only 0.43% change in variable Y around its mean. Hence, a change in the repo rate explains only a 0.43% change in the BANKEX. Since this value is closer to 0 we can say that the model explains none of the variability of the dependent data around its mean. Therefore, there may be other variables which may have a significant impact on values of BANKEX and that change in repo rate does not explain the changes in BANKEX.

GRAPH -3: R-SQUARED GRAPH

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68
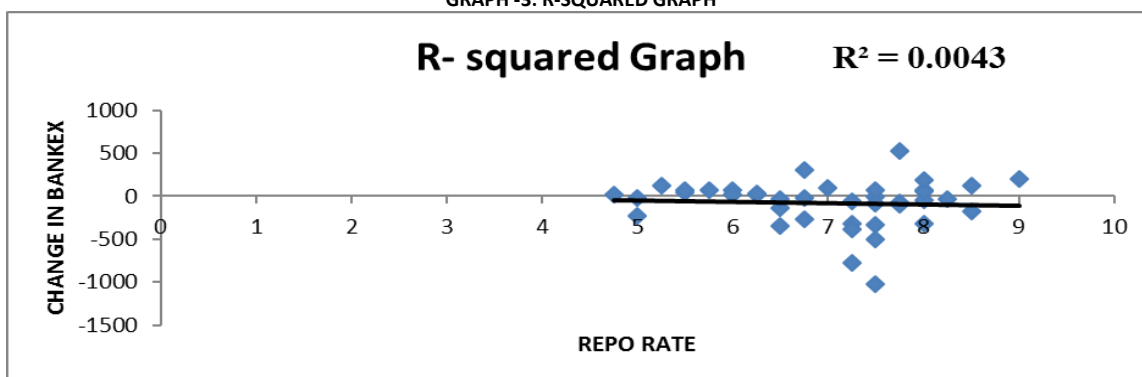
Graph -3 is similar to that of the regression graph and interprets the same results but displays the r-squared value for the two variables. The low r-squared suggests that the independent variable is not a significant predictor of the dependent variable, and that there are other variables which explain the remaining predictability.

• **PATTERNED RESIDUAL PLOT**

The residual points for the data were calculated using the regression equation, which presents the expected value, and the actual results of the dependent variable.

TABLE 2: RESIDUAL PLOT TABLE

| Observation	Predicted Y	Residuals	Observation	Predicted Y	Residuals
1	-75.5013	376.2413	21	-58.7044	125.3444
2	-83.8997	-688.58	22	-54.5052	93.20523
3	-88.0989	-933.441	23	-50.306	172.536
4	-92.2981	20.84808	24	-46.1068	25.03682
5	-96.4973	45.21728	25	-41.9076	64.04761
6	-92.2981	620.2681	26	-46.1068	-188.733
7	-88.0989	-413.921	27	-54.5052	131.1352
8	-83.8997	-230.32	28	-71.302	-66.968
9	-88.0989	-240.081	29	-88.0989	163.4189
10	-92.2981	-12.6919	30	-96.4973	148.2873
11	-96.4973	172.9873	31	-113.294	312.0441
12	-104.896	-68.0043	32	-104.896	227.7157
13	-100.696	68.64649	33	-96.4973	278.9473
14	-96.4973	-228.393	34	-88.0989	7.648871
15	-88.0989	83.67887	35	-83.8997	29.14967
16	-83.8997	-295.18	36	-79.7005	174.4505
17	-75.5013	53.40126	37	-75.5013	-197.079
18	-71.302	-270.178	38	-71.302	42.86205
19	-67.1028	81.80284	39	-67.1028	94.39284
20	-62.9036	134.5236	40	-62.9036	85.73364

GRAPH 4: RESIDUAL PLOT GRAPH
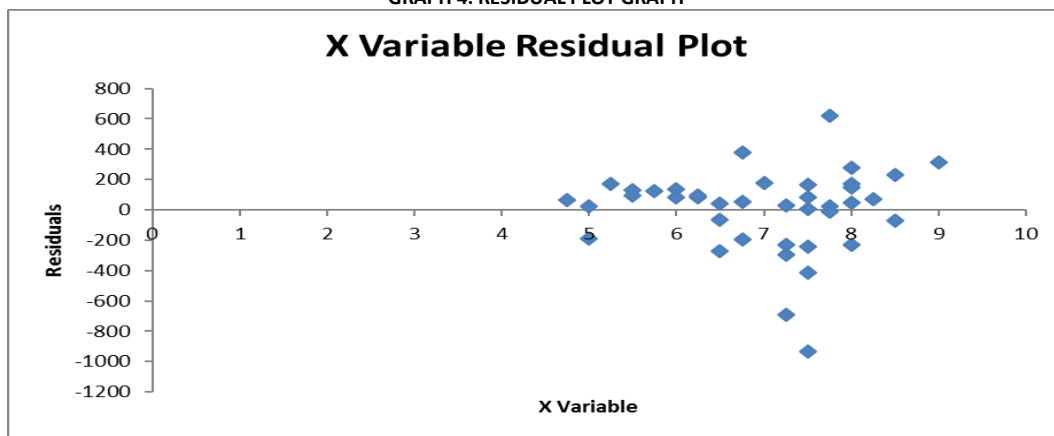
Analysis and Interpretation

Graph -4 shows a definite pattern of the residuals, the value of the residual can be fairly predicted at any given point. Hence, there are other predictors in the Stochastic Error which can be used to predict the values of the dependent variable. Therefore, it can be concluded that the given predictor i.e. the change in repo rate is not the only predictor of the response, and the model is not explaining all the possibilities in the response. Additionally, since no clear outline or pattern can be observed in the residual plot, it is a sign that there are more variables to be studied than the one considered.

GRAPH -5: LINE FIT PLOT GRAPH
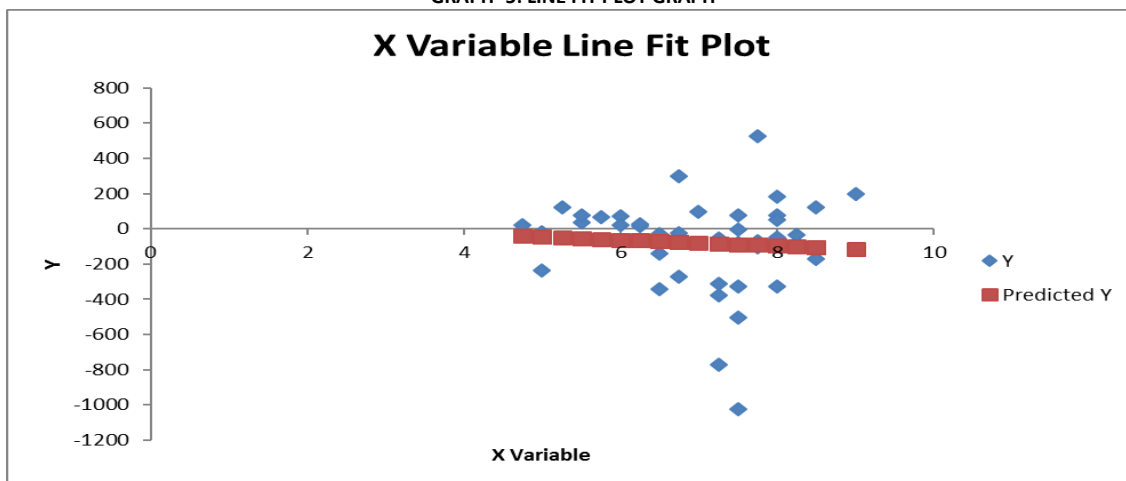
Graph -5 is another way to analyse the residual plot. As observed that the actual values of Y do not follow the pattern of predicted values of Y. This indicates that the independent variable cannot explain all the possibilities of the response and there are other factors governing the response values. This is also because there is a weak correlation between the predicted values and the actual values of the response.

• **NORMAL PROBABILITY PLOT**

The normal probability plot was created using the available data about the two variables. The plot was created to understand the values that lie outside the relevant range and may have an extreme impact on the data. The plotted chart is depicted in graph -6.

GRAPH -6: NORMAL PROBABILITY PLOT
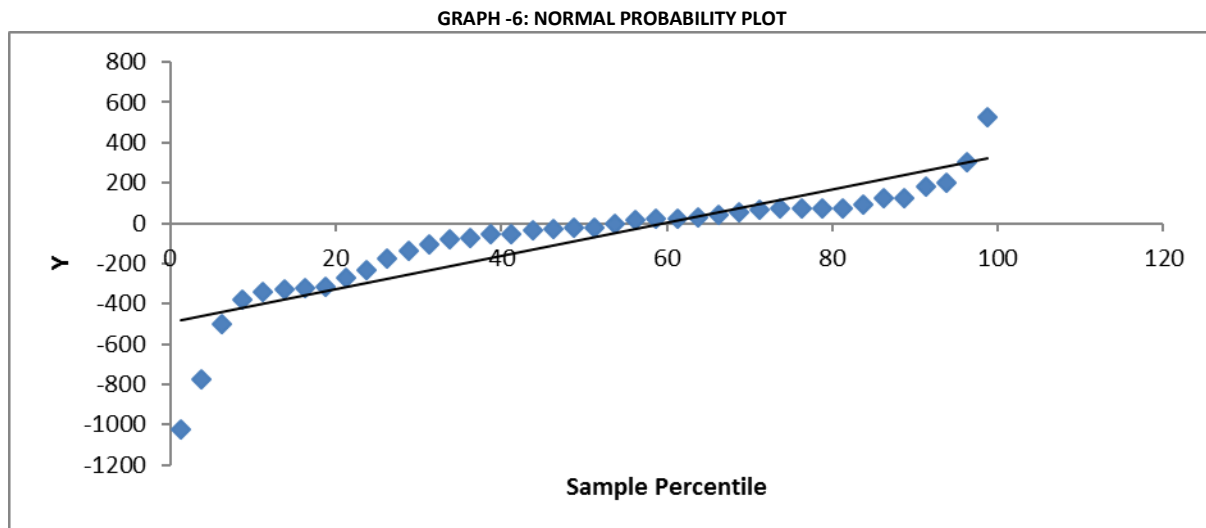
Analysis and Interpretation

Graph -6 can be termed as a long tailed graph, which signifies that there is more variance in the data than can be expected in normal distribution. The graph also indicates a few extreme values (the points that shift away from the normal line), which indicate an abnormal impact on the values and cannot be defined without more information.

This plot suggests that more information is required to analyse the data and the given variable does not provide a normal distribution plot. It may also suggest that other tools are required to analyse the different variables involved.

FINDINGS OF THE STUDY

1. The study has proved that there is a negative relationship between the change in repo rate and the change in the BANKEX. The relationship was proved by a negative correlation and a negative slope of the regression equation. Therefore, when the repo rate rises the BANKEX falls. Hence, we can conclude that the repo rates have a negative effect on bank stocks.
2. A very small coefficient of determination and a random residual line fit plot shows that there are other variables which impact the BANKEX and in turn the bank stocks. It is also apparent that the impact of these variables is big enough to dwarf the impact of repo rate on bank stocks.
3. The economic theory suggests that if the repo rate changes, it will have a significant opposite change in the stock market, but this does not hold true for bank stocks in India. The impact is very negligent and shown that other factors are dominant.
4. The study also revealed that the value of the change in BANKEX cannot be determined by the repo rate. In turn, it means that the value of change or impact on bank stocks cannot be predicted by the repo rates. This is evident in the Residual line fit plot and Residual plot graph.
5. It is very much clear that there are some values of the dependent variable which lie outside the relevant range and show amplified results, which could mean that not all dependent values can be predicted with this model.

SUGGESTIONS

1. Due to a short span of the study, it was not possible to study all the variables which impact the dependent variable. Hence, to make a more informed decision it is required that all these variables are identified and studied in detail; there impact to be studied individually and in entirety.
2. To check for interdependence of the variables, the Durbin-Watson test can be used and the model can be studied in detail. This test will help in analysing any interdependent behaviour between the two variables and any other variable which may be used for an in-depth study of the model.
3. The same economic theory can be tested using variables from other industries and even in other markets. This is because different markets behave differently in many situations. For convenience, markets of economies at different development levels can also be studied in context of this model.

CONCLUSION

As mentioned above, the study suggests that there is a very weak or negligent relationship between the change in repo rate and bank stocks in India. The impact on the bank stock reflects that there are more apparent variables that have a stronger impact on them. Hence, the study suggests that these variables to be identified and studied in depth and their impact studied in detail. The stock markets in general are volatile and studying the market is much like studying human behaviour. Hence, a definite theory can never be suggested to predict the any pattern; as suggested by the random walk theory. This randomness of the market also makes it difficult for researchers to formulate a patter or a theory for the changes in the market. Therefore, the theory that a change in repo prices will lead to an inverse change in the market, may not hold true for bank stocks in the current scenario, with numerous factors showing their effect. Therefore, there is a lot of scope for researchers to analyse all such theories on the markets and test whether they hold true in the current scenario. A major reason for such volatility of the markets is also the opening up of domestic economies for the world, leading to globalization.

LIMITATIONS OF THE STUDY

• Since the study is based on the analysis of market data, which is very volatile in nature, it is difficult to give a definite analysis.
• The data available to conduct the study is mainly collected from secondary sources. Hence, the analysis can be very ideal or unrealistic in the absence of such valuable data. Due to this it is not possible to give a fair analysis, since the impact of the data which is not available for the study cannot be determined.
• There are various methods, through which BSE indexes are calculated like, price weighted calculation, market capitalization method etc. The calculation method is changed from time to time to represent the best value of the index depending upon the situation.

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APPENDIX/ANNEXURE

TABLE 3

BANKEX	Open	High	Low	Close	Repo
29-09-2015	19468.41	19995.50	19056.14	19769.15	6.75
02-06-2015	21426.68	21437.83	20596.47	20654.20	7.25
04-03-2015	23536.42	23656.72	22425.64	22514.88	7.5
15-01-2015	22094.75	22260.34	21832.61	22023.30	7.75
28-01-2014	12071.76	12251.02	11829.53	12020.48	8
29-10-2013	12303.09	12861.22	12182.25	12831.06	7.75
20-09-2013	12668.88	12740.50	11851.41	12166.86	7.5
03-05-2013	14497.82	14497.82	14150.15	14183.60	7.25
19-03-2013	13537.81	13562.97	13115.86	13209.63	7.5
29-01-2013	14694.38	14865.95	14561.53	14589.39	7.75
17-04-2012	12047.35	12248.28	11832.16	12123.84	8
25-10-2011	11092.30	11237.01	10707.05	10919.40	8.5
16-09-2011	11159.58	11222.46	10983.05	11127.53	8.25
26-07-2011	13018.94	13056.94	12648.99	12694.05	8
16-06-2011	12081.10	12223.61	12017.28	12076.68	7.5
03-05-2011	12785.75	12931.82	12353.80	12406.67	7.25
17-03-2011	12362.63	12516.29	12306.30	12340.53	6.75
25-01-2011	12691.23	12775.97	12317.24	12349.75	6.5
02-11-2010	14508.20	14611.43	14435.70	14522.90	6.25
16-09-2010	13579.05	13859.34	13563.82	13650.67	6
27-07-2010	11411.62	11517.96	11338.64	11478.26	5.75
02-07-2010	10624.91	10721.70	10624.91	10663.61	5.5
20-04-2010	10557.38	10737.52	10550.47	10679.61	5.25
19-03-2010	10453.26	10453.26	10400.71	10432.19	5
21-04-2009	5294.56	5423.13	5270.52	5316.70	4.75
05-03-2009	3963.06	3981.40	3698.65	3728.22	5
05-01-2009	5798.24	5885.80	5798.24	5874.87	5.5
08-12-2008	4926.12	4989.56	4762.21	4787.85	6.5
03-11-2008	5312.07	5417.66	5294.35	5387.39	7.5
20-10-2008	5643.93	5874.88	5525.36	5695.72	8
30-07-2008	6323.87	6548.54	6323.87	6522.62	9
25-06-2008	6352.99	6519.70	6261.63	6475.81	8.5
12-06-2008	6855.44	7072.43	6702.33	7037.89	8
31-01-2007	7340.54	7434.52	7205.45	7260.09	7.5
31-10-2006	6538.81	6595.53	6432.31	6484.06	7.25
25-07-2006	4474.55	4591.96	4473.40	4569.30	7
08-06-2006	4577.78	4577.78	4260.41	4305.20	6.75
24-01-2006	5110.34	5152.53	5075.62	5081.90	6.5
26-10-2005	4524.48	4574.29	4507.17	4551.77	6.25
31-03-2004	2970.07	3003.69	2952.24	2992.90	6

Source: www.rbi.org

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TAMIL HANDWRITTEN CHARACTER RECOGNITION

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ABSTRACT

This text recognition lays emphasis on technique to recognize handwritten English characters, Tamil Characters & Numerals using MATLAB. Here a novel solution is proposed for performing English character recognition. Handwritten character can be converted into the text. It may be either scanned document or paint image. Here the application is alphabetic letters are assigned with numerals accordingly. The new venture in this topic is to make off-line handwritten character recognition more accurate & challengeable. Here what is uploaded will come in the form of original text. Pursued by the preprocessing technique, feature extraction and recognition. The approach can be utilized in MATLAB for recognizing off-line handwritten English characters.

KEYWORDS
character recognition, handwritten, MATLAB.

I. INTRODUCTION

Recognition is regarded as a basic attribute of human beings, as well as other living organisms. A pattern is the description of an object. Performing the acts of recognition in every walk of our lives, such as recognition of objects around us, recognizing a friend in a crowd, recognizing voice of a known individual and recognizing handwritten characters.

According to the nature of the patterns to be recognized, we may divide our acts of recognition into two major types, namely, the recognition of concrete items and the recognition of abstract items. The concrete items of recognition include spatial patterns like characters, finger prints, weather maps, objects etc and temporal patterns like speech waveforms, electrocardiograms, target signatures, and time series Tou et al (1974). An example of recognition of an abstract item is the recognition of solution to a problem when your eyes and ears are closed. However, we are concerned only with recognition of concrete items. Recognition of concrete patterns by human beings may be considered as a physiological problem which involves a relationship between a person and a physical stimulus. When a person perceives a pattern, he makes an inductive inference and associates this perception with some general concepts or clues which he has derived from his past experience. Human recognition in reality is a question of estimating the relative odds that the input data can be associated with one of a set of known statistical populations which depend on our past experience and which form the clues and the a priori information for recognition. Thus, the problem of pattern recognition may be regarded as one of discriminating the input data not between individual patterns but between populations, via the search for features or invariant attributes among members of a population.

Hence, Pattern Recognition can be defined as the classification of input data into identifiable classes via the extraction of significant features or attributes of the data from a background of irrelevant details. A Character recognition system is a pattern recognition system which receives scanned preprocessed data as input and identifies the name of the character by comparing it with the prototype characters already in the memory by Annadurai et al (2007). The study of pattern recognition problems may be logically divided into two major categories Ullman (1982). The study of the pattern recognition capability of human beings and other living organisms.

In this paper, the impart main emphasis on word recognition & hence assume that the handwritten texts are already segmented into words segment. Characters are limited to be digits on account of time constraints. Since it requires less image processing & data collection efforts. These handwritten texts are varied. Using the lexicon text is taken out the possibility towards correcting recognition.

II. LITERATURE REVIEW

The Literature study is in category namely research work in character recognition, which is given in the following para:

Since 1980 a large amount of work has been carried out in character recognition. In the early 80's most of the works are related to either printed word or hand-written characters' recognition only. In the mid of 80's Nagy et al (1987) demonstrated a heuristic algorithm for assigning alphabetic identity for symbols in a textual context, and a rule based contextual post processor for Devanagari recognition was suggested by Sinha (1985). Much of the work upto 1987 has been reported in Govindan's thesis (1988). The following are some of the recent works in this area. Kahan et al (1987) described the state of the system (OCR during 1987) that recognizes printed text of various fonts and sizes to any extent. Cheng et al (1985) discussed a method based on the concept of fuzzy set for handwritten Chinese character recognition. The strokes of the characters and its type and location features are concentrated to recognize the characters using fuzzy entropy. The state-of-the-art of Methodology and algorithms of fuzzy sets for real world use of Fuzzy sets in Pattern Recognition is described by Pedrycz (1990). The recognition and classification are provided with examples. Recognition of handwritten and machine printed text for postal address interpretation using various algorithms are discussed by Srihari (1992, 1993). Current state-of-the-art of new generation of handwriting recognition system with lessons learned and difficulties involved and the challenges ahead are given in Suen et al (1980, 1993). The conventional techniques in Japan along with state-of-the-art and remaining problems are suggested in Wakahara (1993). New promising approaches are enumerated from the view point of general pattern recognition methodology. Sinha et al (1993) presented a hybrid contextual algorithm designed to read real-life documents printed in varying fonts of any size with string matching. Three passes are discussed in this paper. In the first pass character hypothesis is generated using dynamic contour warping classifier and the recognition is done based on transient statistical information collected. In the second pass word hypothesis is generated using hybrid contextual text processing and the recognition is done using Viterbi algorithm Hull et al (1982) and a string matching concept. In the third pass the word hypothesis is verified using cost criterion based on statistics and language heuristics.

III. METHODOLOGY

An overview of the methodologies adopted in this research work is presented below. A system is developed to recognize handwritten English characters using MATLAB, for a subset of the English characters.

STEPS IN HANDWRITTEN CHARACTER RECOGNITION

The major steps involved in handwriting recognition system suggested by Annadurai[7] are shown in Figure 2.

The steps involved are

1. PREPROCESSING

Preprocessing is concerned mainly with the reduction of these kinds of noise and variability in the input. The number and type of preprocessing algorithms employs on the scanned image depend on many factors such as paper quality, resolution of the scanned image, the amount of skew in the image and the layout of the text. Various preprocessing operations are performed prior to recognition to enhance the quality of the input image.

2. FEATURE EXTRACTION

Feature Extraction is the problem of extracting from the preprocessed data, the information, which is most relevant for classification purposes, in the sense of minimizing the within-class pattern variability, while enhancing the between-class pattern variability.

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3. RECOGNITION

The final goal of character recognition is to obtain the class codes of character patterns. On segmenting character patterns or words from document images, the task of recognition becomes assigning each character pattern or word to a class out of a pre-defined class set. Pattern classification has been the main theme of pattern recognition field and is often taken as a synonym for "Pattern Recognition (PR)". Traditionally, pattern recognition techniques are classified as template and feature-based approach Pal et al(2004).

The framework of this method is shown in fig. 1

FIG. 1
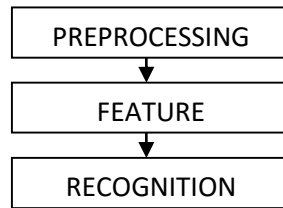
IV. EXPERIMENTAL RESULTS

To assess the performance of each method. Here present some preliminary results under compression. Note that the practical choice of parameters can further be optimized in order to improve the results.

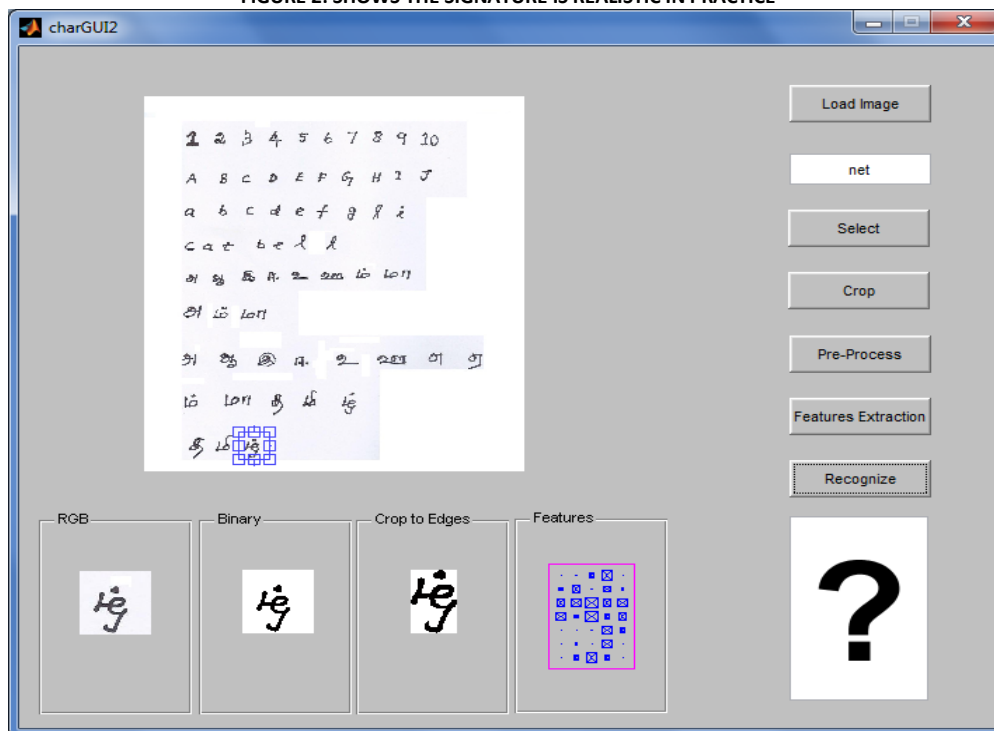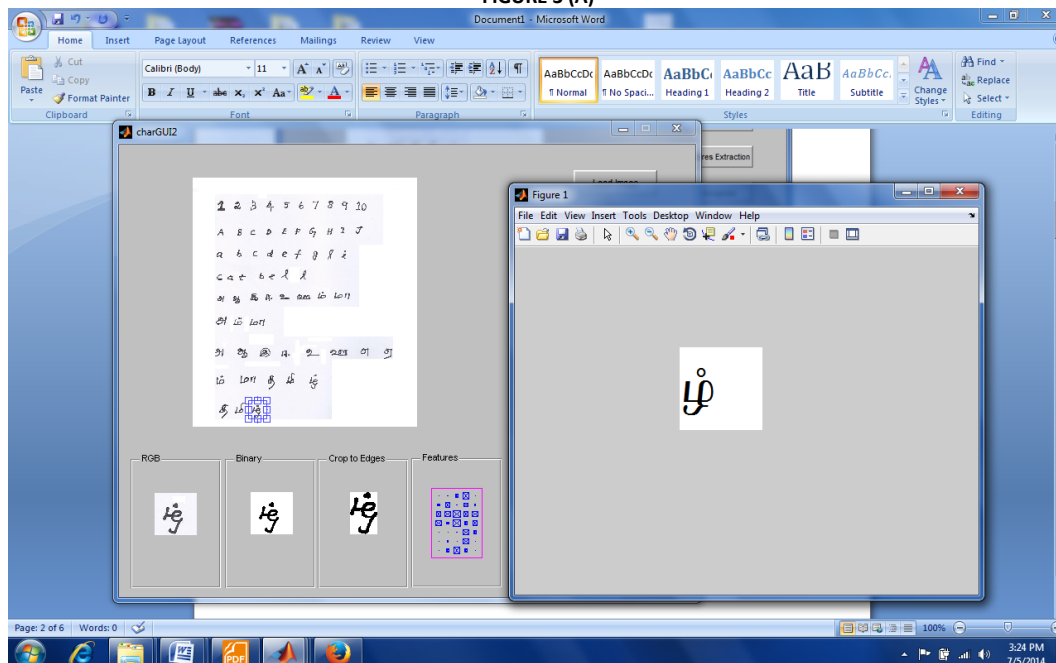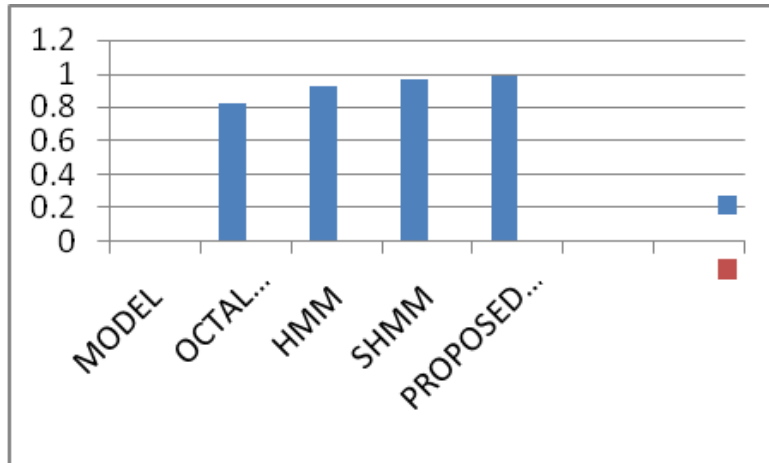**FIGURE 2: SHOWS THE SIGNATURE IS REALISTIC IN PRACTICE**

FIGURE 3 (A)

FIGURE 3(B): SHOWS THE COMPARISON TABLE

MODEL	RECOGNITION RATE			
OCTAL GRAPH APPROACH	82%			
HMM	92%			
SHMM	97%			
PROPOSED METHOD	98%			

FIGURE 4: EXPERIMENTAL RESULTS SHOW THE PROPOSED METHOD IS FEASIBLE IN PRACTICE

V. CONCLUSION

In this chapter the recognition of English Characters was improved using MATLAB to get the maximum possible efficiency. Significant increase in accuracy levels has been found with comparison of our method with the others for character recognition. The experimental results

It shows that the accuracy is really improved than the previous study. With the addition of sufficient preprocessing the approach offers a simple and fast structure for fostering a full OCR system.

VI. SCOPE FOR FUTURE WORK

The work reported in this thesis can be extended in the following directions. It is basically necessary to develop an OCR for multilingual script for a country where more than 10 languages are in use officially. For example, if there is a document where two language scripts are available, then one need not separate two scripts into two different files and feed them into two OCR's. Using our approach one could develop an OCR for two languages, Tamil and English in the same document. These scripts could edit later with an editor too.

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A STUDY ON ANALYSIS OF FACTORS AFFECTING THE CUSTOMER'S SATISFACTION WITH REFERENCE TO ATM SERVICES IN BANGALORE CITY

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ABSTRACT

This is an age of technology. Now a time, in Indian banking industry, E- Banking is at its revolutionary stage and provides various electronic services like Mobile Banking, Internet Banking and ATM services, Electronic Fund Transfer (EFT), Credit Cards and Electronic Clearing Services etc. Among all of these, ATM is the widely used and popular E-Banking services. Now, all types of organizations are adopting the modern technology for providing efficient services to the customers. This study is an attempt to find out the significant factors that affecting the customer's satisfaction in ATM (Automated Teller Machine) service in Bangalore city. In this study, data will be collect from the way of survey from bank customers and later on will be analyse by statistical technique and tools like Descriptive Statistics, Percentage Method, and Ranking Method. Thus the objective of the research is to identify factors affecting the customer satisfaction with reference to ATM services in Bangalore city. The conclusion would be interpreted accordingly.

KEYWORDS

e-banking, ATM, customer satisfaction.

INTRODUCTION

ATMs (Automatic Teller Machines) were introduced to the world in 1983. These modern marvels of technology were well received by consumers because they made it possible for them to access money from their credit cards or debit cards 24 hours per day with a quick and simple system. ATMs also made it possible for consumers to travels in a safer manner they no longer had to carry large amounts of cash with them. Instead, they could access money anywhere in the world with the help of the ATM. Although ATMs made certain aspects of life safer, it did make it easier for counterfeiters and thieves to take advantage of unsuspecting consumers.

ATMs means neither "avoids travelling with money" nor "any time money" but certainly implies both. Slim ATM cards are fast replacing confounding withdrawal forms as a convenient way of getting your money from banks. In a way, they are rewriting the rules of financial transaction. Automated teller machines (ATMs) were the first well-known machines to provide electronic access to customer. With advent of Automatic Teller Machines (ATM), banks are able to serve customers outside the banking hall. ATM is operated by plastic card with its special features. The plastic card is replacing cheque, personal attendance of the customer, banking hour's restrictions and paper based verification.

ATMs have made hard cash just seconds away all throughout the day every at corner of the globe. AQTMs allow us to do a number of banking functions- such as withdrawing cash from one's account, making balance inquiries and transferring money from one account to another using a plastic, magnetic-stripe card and personal identification number issued by the financial institution. While ATMs facilitate a variety of banking transactions for customers, their main utility has been for cash withdrawal and balance enquiry.

The changing business environment offers challenges and opportunities to the organizations. The changing customers" perception of quality poses unique challenge. Excellence in quality has become an imperative for organizational sustainability (Lewis et al., 1994). The developments of technologies have enabled organizations to provide superior services for customers" satisfaction (Surjadjaja et al., 2003). The number of banks customers preferring to use self- service delivery systems is on the increase. This preference is attributed to increased autonomy in executing the transactions. Banks are increasing their technology-based service options to remain competitive. The ATM is an innovative service delivery mode that offers diversified financial services like cash withdrawal, funds transfer, cash deposits, payment of utility and credit card bills, cheque book requests, and other financial enquiries. Researchers have stated that users" satisfaction is an essential determinant of success of the technology-based delivery channels (Tong, 2009; Wu & Wang, 2007).

REVIEW OF LITERATURE

Davies et al. (1996) identified that secure and convenient location, adequate number of ATM and functionality of ATM plays important role in customer satisfaction. Humphrey (2003) studied that electronic payments was considerably cheaper than their paper based alternatives. Similarly, ATMs are a more cost-efficient way to deliver certain depositor services than are branch offices. This Cost –efficiency also influence customer decision.

Josephand Stone (2003) mentioned that adequate number of ATMs, convenient and secure location, speed, cash backup and cost are essential service quality aspects of ATM service.

Snellman and Viren (2006) reveal that the demand for cash depends both on the number of ATMs and ATM networks and on the popularity of other means of payment. Thus, the use of cash can be fairly well explained in a transaction demand framework, assuming proper controls for market structure and technical environment

Whittakar and Introna (2006) studied that automatic teller machine (ATM) will the dominant mode of access to cash for those living in industrialized societies. In order to make some of the politics of the ATM more visible, he illustrates the political struggles through four interconnected narratives: (a) the talking ATM, (b) the insecure ATM, (c) the charging ATM, and (d) the cashless ATM. In each of these descriptive accounts he attempts to show how the ATM becomes (or is) a cybernetic actor that is configured and reconfigured through a multiplicity of political translations resulting in a multiplicity of politically significant cybernetic ATM networks.

STATEMENT OF THE PROBLEM

In today's techno-based banking, the ATM has become indispensable. To ensure that the services of Indian banks are properly rendered, the socioeconomic characteristics of the customers have to be studied. Today's customers are more dynamic in their thinking. Their taste, needs and preferences keep changing as per the current situations. Therefore, customers" satisfaction is an important factor for capturing the market and also for retaining the existing ones. With this as the backdrop, the present study analyses the level of satisfaction of the ATM customers, and factors that influence the customers. Hence the researcher has selected the topic "a study on analysis of factors affecting the customer's satisfaction with reference to ATM services in Bangalore city".

SCOPE OF THE STUDY

This study is much helpful to Banking industry for enhancing the customer satisfaction by adopting strategies which serves the purpose. An analysis of study proves useful, as the banks efforts are directed to attract and retain customers by offering them a basket of tailor made schemes supported by a state of the art distribution system (the ATMs)

OBJECTIVES OF THE STUDY

- To know the factors influencing the use of ATM.
- To find out the problems usually face by customer while using ATM services of a bank.
- To know the satisfaction level of customers associated with various aspects of ATM services in the selected banks.
- To provide suggestions to overcome the problems related to various aspects.
- To study the customer's preference towards ATM services provided by banks.
- To study the awareness level of customers towards ATM services provided by banks.
- To study the opinion of customers towards the ATM services provided by banks.

RESEARCH METHODOLOGY

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically.

a) Sampling area: The study was carried out among the ATM card holders of Banks in Bangalore city.

b) Sample size: 100 customers were selected after considering time and cost.

c) Sampling method: Convenience method of sampling is used to collect the data from the respondents.

d) Data collection: The data was collected from both primary and secondary sources.

i) Primary Data: Primary data is collected from customers of the Banks. The well-structured questionnaire is formulated and by interview method the data is collected.

ii) Secondary data: This data is second hand which is collected from some publication, journals, books magazines, periodicals and websites. Etc. Since the objectives were focused on primary data, the study relied more on the primary data.

e) Statistical tools used: The collected data has been analysed by using Percentage analysis.

Analysed & interpreted data have been presented in the form of tables, charts and figures.

DATA ANALYSIS & INTERPRETATIONS

The Data Analysis and interpretations is a process by which sense and meaning are made of the data gathered in qualitative research, and by which the emergent knowledge is applied to clients' problems. This data often takes the form of records of group discussions and interviews, but is not limited to this. Through processes of revisiting and immersion in the data, and through complex activities of structuring, re-framing or otherwise exploring it, the researcher looks for patterns and insights relevant to the key research issues and uses these to address the client's brief.

TABLE 1: DEMOGRAPHICS OF RESPONDENTS

PARTICULARS	FREQUENCY	PERCENT	CUMULATIVE PERCENT
GENDER			
Male	124	62	62
Female	76	38	100
TOTAL	**200**	**100**	
EDUCATION			
Intermediate	18	9	9
Graduate	86	43	52
Post Graduate	54	27	79
Profession	42	21	100
TOTAL	**200**	**100**	
AGE GROUP			
Below 25	46	23	23
25-35	48	24	47
36-50	64	32	79
51-60	42	21	100
TOTAL	**200**	**100**	
MONTHLY INCOME			
Less Than Rs. 10,000	16	8	8
Rs. 10,001 - Rs. 20,00	30	15	23
Rs. 20,001 - Rs. 30,000	58	29	52
Rs. 30,001 - Rs. 40,000	60	30	82
More Than Rs. 40,000	36	18	100
TOTAL	**200**	**100**	
PROFESSION / OCCUPATION			
Govt. Employee	34	17	17
Pvt. Employee	74	37	54
Professional	24	12	66
Businessman	22	11	77
Student	16	8	85
Retired	22	11	96
Other	8	4	100
TOTAL	**200**	**100**	

Source: Primary Data

Demographic information included Age group, Income level, Qualification and Occupation of the respondents of Bangalore City. Research respondents were selected randomly to understand the Income level, Occupation and Qualification of the people in Metropolitan Cities like Bangalore.

Table 1 represents the demographic profile of the respondents. Out of 200 respondents, (124) 62% of the respondents were male whereas (76) 76% of them were female. Education level of respondents were (18) 9% of respondents are intermediate, (86) 43% have completed graduation, (54) 27% of respondents have done their post graduate level, (42) 21% of respondents belong to profession. Age group of respondents, below age 25 years (46) 23% of respondents, between the age group of 25 years to 35 years the respondents were (48) 24%, between the age group of 36 years to 50 years the respondents were (64) 32% and the age group of respondents between 51 years to 60 years were (42) 21%. The monthly income of respondents less than Rs. 10,000 were (16) 8%, monthly income between Rs. 10,001 to Rs. 20,000 were (30) 15%, monthly income between Rs. 20,001 to Rs. 30,000 were (58) 29%, monthly of respondents between Rs. 30,001 to Rs. 40,001 were (6o) 30%, Monthly income of respondents for more than Rs. 40,000 were (36) 18% of respondents. The occupation level of respondents are, government

employees were (34) 17% of respondents, Private employees were (74) 37%, Professional were (24) 12% of respondents, Businessman were (22) 11% of respondents, Students were (16) 8%, Retired employees were (22) 11% of respondents and others were (8) 4% of respondents. These are the demographic of the respondents who prefer the ATM Card.

TABLE 2: AWARENESS SCORE ON VARIOUS SERVICES

SERIAL. NO	SERVICE	AWARENESS LEVEL			TOTAL SCORE	MEAN SCORE	RANK
		FULLY AWARE	PARTLY AWARE	NOT AWARE			
1.	Cash Withdrawal	80	50	70	410	68.33	9
2.	Balance Enquiry	150	30	20	530	88.33	1
3.	Mini Statement	100	50	50	450	75	5
4.	Prepaid Recharge	80	60	60	420	70	7
5.	Bill Payment	60	95	45	415	69.16	8
6.	Mobile Banking	120	60	20	500	83.33	3
7.	PIN Change facility	135	50	15	520	86.66	2
8.	Single card for all accounts	50	100	50	400	66.66	10
9.	Cheque book request	45	100	55	390	65	11
10.	Money Transfer	100	45	55	445	74.16	6
11.	Deposit Cash & Cheque	100	55	45	455	75.83	4
SOURCE: PRIMARY DATA							

In order to calculate total awareness score, the numbers of respondents whose opinions are "fully aware", "Partly aware" & "Not aware" are multiplied by 3, 2 & 1 respectively. The mean score is calculated by dividing the total score by total number of weights (6). Data reveals that among eleven major services, Balance Enquiry service has got the highest score followed by the PIN Change facility & Mobile Banking.

FIG. 1
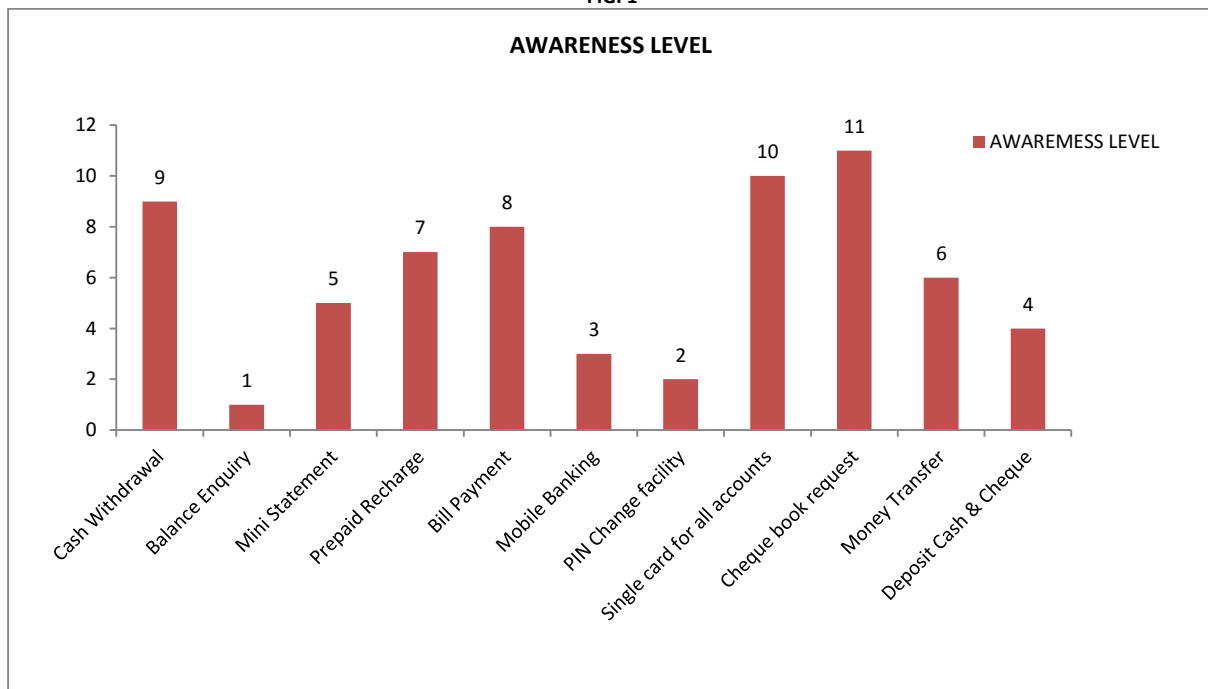
AWARENESS LEVEL

The above graph reveals that majority of customers are aware about balance enquiry in ATM has got first rank, Pin change facility has got second rank in customer awareness level and Mobile banking has got the third rank in customer awareness level but customers are not aware of cheques book facility given to ATM users. It ensures that banks should provide proper information to the customers regarding the all the services ATM users.

TABLE 3: CUSTOMER SATISFACTION IN ATM SERVICES PROVIDED BY BANKS

SL.NO	STATEMENTS	LEVEL OF SATISFACTION					TOTAL SCORE	MEAN SCORE	RANK
		HIGHLY SATISFIED	SATISFIED	AVERAGE	DISSATISFIED	HIGHLY DISSATISFIED			
1.	Satisfied with the existing ATM location	40	45	30	65	20	620	41.33	5
2.	Satisfied with the process of money withdrawn under ATM scheme	80	60	10	30	20	750	50	3
3.	Satisfied with the transaction fee charged by bank for using ATM card	80	60	20	20	20	760	50.66	2
4.	Satisfied with the process of time taken for issuing new cards due to loss of original cards	30	70	40	20	40	630	42	4
5.	Satisfied with the delivering of the ATM card promptly	60	60	40	28	12	728	74.3	1

Source: Primary Data

In order to calculate customer satisfaction, the numbers of respondents whose opinions are "Highly Satisfied", "Satisfied", "Average", "Dissatisfied", "and "Highly Dissatisfied" are multiplied by 5,4,3,2 & 1 respectively. The mean score is calculated by dividing the total score by total number of weights (15). Data reveals that among five major services, satisfied with the delivering of ATM card promptly has got the highest score followed by the Satisfied with the transaction fee charged by bank for using ATM card & Satisfied with the process of money withdrawn under ATM scheme.

FIG. 2

CUSTOMER SATISFACTION
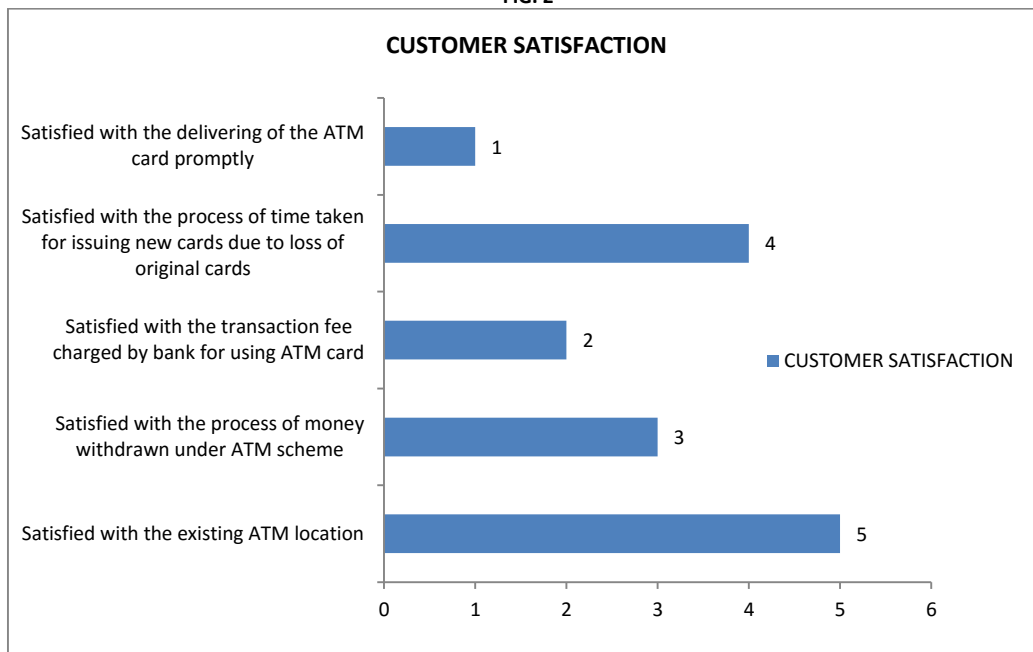
The above graph reveals that majority of customers are satisfied with the delivering of the ATM card promptly has got first rank, satisfied with the transaction fee charged by bank for using ATM card has got second rank in customer satisfaction level and satisfied with the process of money withdraw under ATM has got the third rank in customer satisfaction level but customers are not satisfied with the existing ATM location. It ensures that banks should take into consideration in improving the customer satisfaction.

TABLE 4: OPINION OF SERVICE USERS REGARDING USAGE OF ATM SERVICES

SERIAL. NO	ATM SERVICE PARAMETERS	HIGHLY AGREE	AGREE	NEUTRAL	POOR	VERY POOR	TOTAL SCORE	MEAN SCORE	RANK
1.	Support multiple languages for transaction	100	20	10	5	65	685	45.66	**4**
2.	More problems with ATM services	85	60	30	20	5	800	53.33	**1**
3.	Very less time problem due to insufficient balance in ATM centre	60	60	40	28	12	728	48.53	**3**
4.	Your banks ATM available at convenient location	40	45	30	65	20	620	41.33	**7**
5.	Very less time transaction fail due to network problem in ATM	100	30	25	20	25	760	50.66	**2**
6.	Bank return cash in case of transaction fail (debited amount)	30	65	20	40	45	595	39.66	**6**
7.	Provides balance slip for every transaction	50	50	33	35	32	651	43.4	**5**

Source: Primary Data

In order to calculate opinion of service users regarding usage of ATM services, the numbers of respondents whose opinions are "Highly Agree", "Agree", "Neutral", "Poor", "and "Very Poor" are multiplied by 5,4,3,2 & 1 respectively. The mean score is calculated by dividing the total score by total number of weights (15). Data reveals that among seven major services, more problems with ATM services got the highest score followed by Very less time transaction fail due to network problem in ATM and Very less time problem due to insufficient balance in ATM centre.

FIG. 3

USAGE OF ATM SERVICES
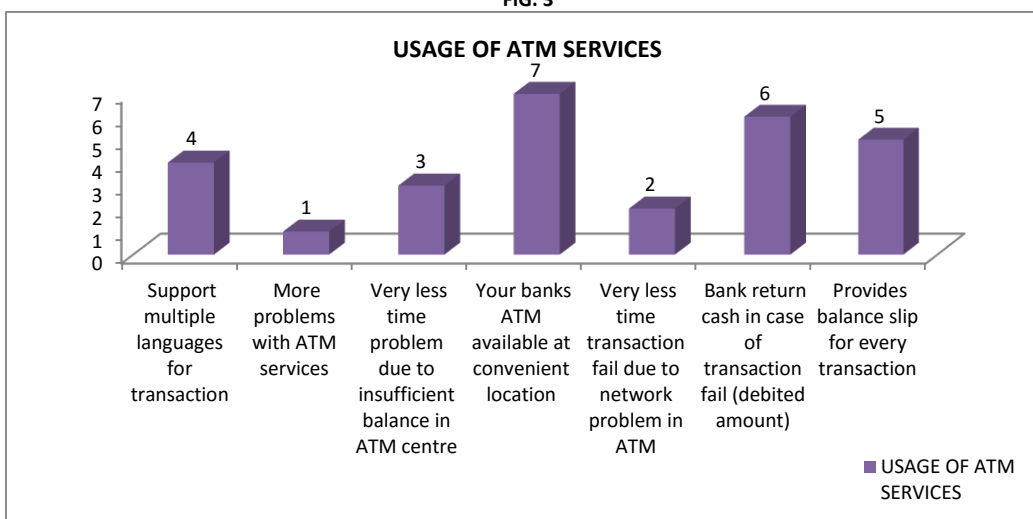
The above graph reveals that majority of the customers are facing more problems in ATM services has got first rank in usage of ATM services, customers are not getting enough time in transaction due to problem in network as got second rank in usage of ATM, very less time problem due to insufficient balance in ATM centre in use age of ATM card, but available of ATM in convenient location are very less in numbers. It ensures that banks should take into consideration the opinion of service users regarding usage of ATM services.

TABLE 5: PROBLEMS FACED BY CUSTOMERS WHILE USING ATM SERVICES IN BANKS

Sr. No.	PROBLEMS	OPINIONS			TOTAL SCORE	MEAN SCORE	RANK
		Often	Rarely	Never			
1.	Wrong amount of Statement	60	45	95	365	60.83	6
2.	Cards get blocked	120	20	60	460	76.66	3
3.	Machine out of order	135	15	50	485	80.83	2
4.	Unsuitable location of ATM	50	50	100	350	58.33	7
5.	ATM not working	45	55	100	345	57.5	8
6.	Provide old currency notes	100	55	45	455	75.83	4
7.	Machines out of cash	100	45	55	445	74.16	5
8.	Poor visibility of statement	150	30	20	530	88.33	1

Source: Primary Data

In order to calculate problems faced by customers while using ATM services in banks, the numbers of respondents whose opinions are "Often", "Rarely" and "Never" are multiplied by 3,2 & 1 respectively. The mean score is calculated by dividing the total score by total number of weights (6). Data reveals that among eight major services, Poor visibility of statement got the highest score followed by Machine out of order and Cards get blocked.

FIG. 4

PROBLEMS FACED BY CUSTOMERS WHILE USING ATM SERVICES IN BANKS
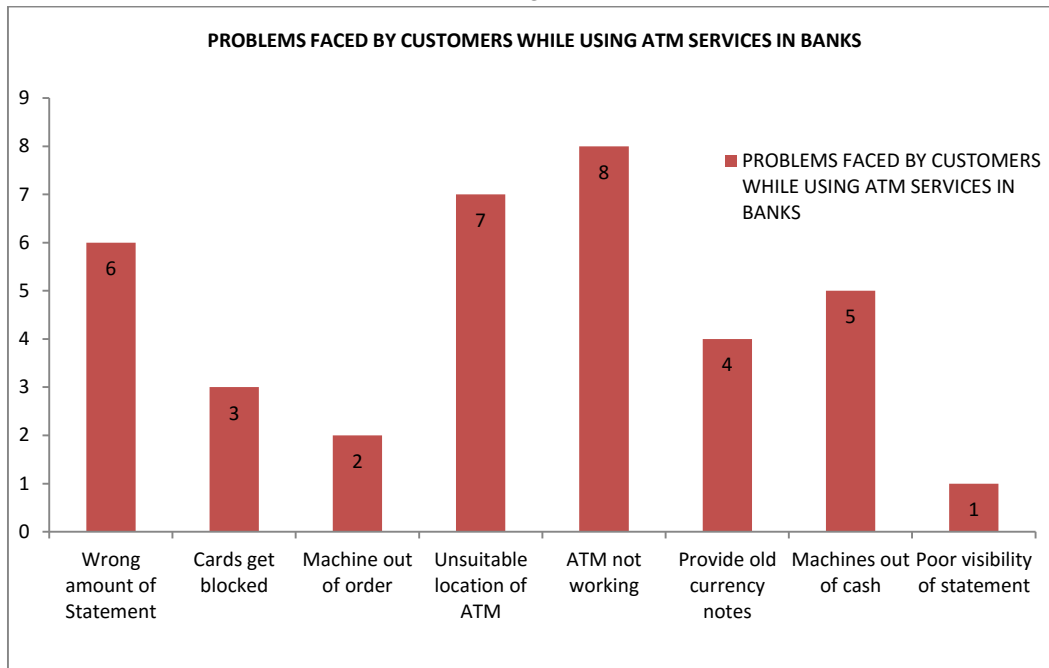
The above graph reveals the problems faced by the customers in using the ATM card in banks, poor visibility of statement has got first rank, machines out of order has got second rank where customers are facing problem and cards get blocked has got the third rank, this are the major problems faced by the customers while using the ATM services in banks. Therefore, banks should take into the consideration the problems faced by the customers and should bring the solution to this problem.

TABLE 6: ANALYSIS OF FACTORS AFFECTING CUSTOMER SATISFACTION TOWARDS ATM

SERIAL. NO	FACTORS	STRONGLY AGREE	AGREE	MEDIUM	DISAGREE	STRONGLY DISAGREE	TOTAL SCORE	MEAN SCORE	RANK
1.	Promptness of the delivery of card	100	20	15	5	60	695	46.33	10
2.	Easily located ATM	80	80	20	10	10	810	54	3
3.	ATM's are found at all useful places like malls, Hospitals, stations. Etc	50	60	40	25	25	685	45.66	12
4.	Directions are clear to operate my ATM	90	30	30	35	15	745	49.66	8
5.	Keypad of ATM machine is working properly	100	50	30	10	10	820	55	1
6.	Processing time of ATM	80	20	80	10	10	750	50	7
7.	Availability of cash in my ATM	100	30	30	20	20	770	51.33	6
8.	ATM grievances are settled within stipulated time	100	35	25	20	20	775	51.66	5
9.	Quality of notes	50	50	33	35	32	651	43	15
10.	ATM grievances are settled within stipulated time	85	60	30	10	15	790	52.66	4
11.	Safety & security	50	60	40	25	25	685	45	13
12.	Behaviour of ATM guard	40	45	30	65	20	620	41.33	16
13.	Sufficient number of ATMs	30	65	20	40	45	595	39.66	17
14.	Working condition	50	50	33	35	32	651	43.4	14
15.	Complaint book	55	45	50	30	20	685	46	11
16.	Availability of Power backup/Generator/Inverter	90	30	30	20	30	730	48.66	9
17.	Overall performance	100	50	30	10	10	820	54.66	2

Source: Primary Data

TABLE 6: In order to calculate analysis of factors affecting customer satisfaction towards ATM, the numbers of respondents whose opinions are "Strongly Agree", "Agree", "Medium", "Disagree", "and "Strongly Disagree" are multiplied by 5,4,3,2 & 1 respectively. The mean score is calculated by dividing the total score by total number of weights (15). Data reveals that among seventeen major services, Keypad of ATM machine is working properly got the highest score followed by Overall performance and easily located ATM.

Various factors which influence the customer satisfaction towards ATM were considered for the study. The above table 6 shows the various factors which stimulate the customers for usage of ATM. The feedback from the research respondents clearly shows that certain factors are more favourable and which induce the Keypad of ATM machine is working properly. The most favourable factors are; Overall performance of ATM card, easily located ATM, ATM grievances are settled within stipulated time, ATM grievances are settled within stipulated time, Availability of cash in my ATM, Processing time of ATM, Directions are clear to operate my ATM.

FIG. 5
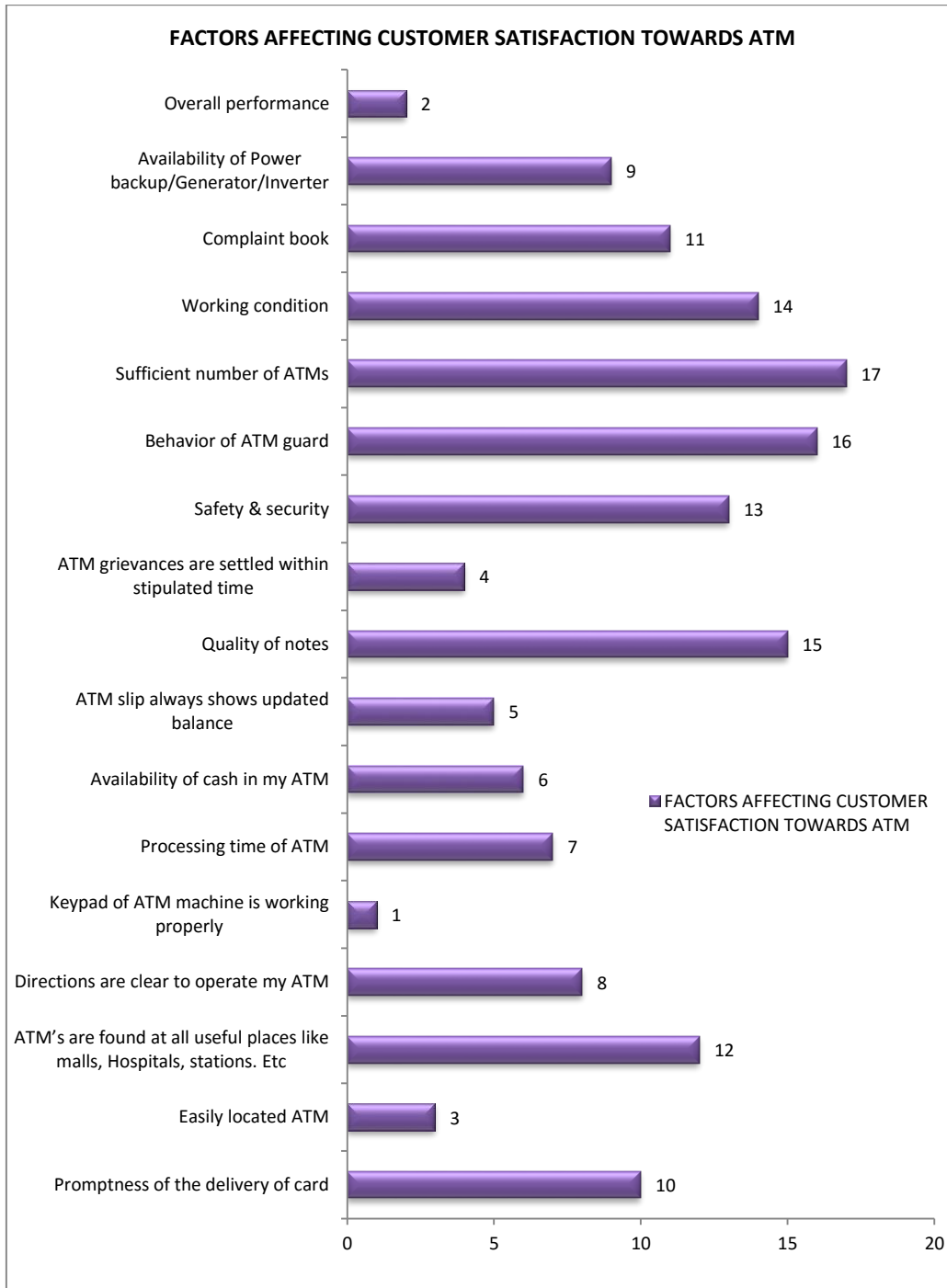
The above graph reveals that factors affecting customer satisfaction towards the ATM services in Bangalore city, keypad of ATM machine is working properly has got the first rank towards the customer satisfaction, overall performance of ATM has got the second rank in the customer satisfaction, Easily located Atm has got third rank towards customer satisfaction.

SUGGESTIONS
- The researcher should give the following suggestions to improve their customer's perception.
- The banks improve their performance for the ATM facilities.
- The bankers are provided the safety measures for ATM centres.
- The bankers are given the new card for quickly if the card is missing.
- Bank should provide sufficient number of ATMs in customer's location.
- Bank should provide Complaint book at every ATM service location.

CONCLUSION

Our banking sector is growing fast specially in technology and simultaneously pattern of service expectation is changing in customer mind. Due to this changing environment bakers are adding more value in their delivery process. The study provides necessary input to the bank management to increase customer Satisfaction through improving ATM service quality. Banks must constantly up-date and ensure continuous satisfaction and retention of customers, and optimize their limited resources. Immediate response to customers" needs and queries about the ATM related services are important to improve the quality service. This would in turn lead to customer satisfaction. In spite of that overall results shows that Satisfied with the existing ATM location, Satisfied with the process of money withdrawn under ATM scheme, Satisfied with the transaction fee charged by bank for using ATM card, Satisfied with the process of time taken for issuing new cards due to loss of original cards and Satisfied with the delivering of the ATM card promptly is the core factors for ATM services quality and these are significantly affecting the overall customer's satisfaction of ATM service provided by banks. Therefore, banks should strongly emphasize their efforts on these factors for providing efficient ATM service to satisfy their customers.

LIMITATIONS OF THE STUDY

- The study is limited to Bangalore City only.
- The sample size is 100 hence finding cannot be generalized.
- It was difficult to know whether the respondents are truly given the exact information.
- Customer preferences and opinions are supposed to change from time to time.

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ENSURING A SUCCESSFUL CELEBRITY ENDORSEMENT: A COMPARATIVE STUDY OF MATCH-UP HYPOTHESIS AND MEANING TRANSFER MODEL

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ABSTRACT

The purpose of the purpose of the paper is to study and evaluate the two important theories regarding the effectiveness of celebrity endorsements. First being the celebrity product Match-up Hypothesis according to which the similarity between the celebrity endorser and the product leads to positive attitudes and purchase intentions. Second is the Meaning transfer model which lays importance to the transfer of cultural meanings associated with the celebrity and to the product in ensuring a successful celebrity endorsement campaign. In the first part both these theories were reviewed with help of past literature. In second part a comparative qualitative evaluation of both theories was done with the help of a practical example of a successful celebrity endorsement. For this purpose, Amitabh Bachchan's endorsement for Cadbury Dairy Milk Chocolate after the 'Worm Controversy' was selected. Finally, the findings and the implications for practice were derived at the end.

KEYWORDS

celebrity endorsements, match-up hypothesis, meaning transfer model.

INTRODUCTION

Data shows that Celebrity endorsement is a continuously growing strategy. Advertisers use this strategy to break through the "advertisement clutter" and reach their target consumers and they also succeed to a great extent. However, keeping in mind the enormous cost associated with celebrity endorsements, 'breaking through the clutter' is not the only thing that should be intended through celebrity endorsements. Apart from it, the celebrity endorsers should also be effective in generating positive attitudes and purchase intentions towards the product or service that is being advertised. Earlier studies such as 'Source Models' stressed only on celebrity specific characteristics in ensuring an effective celebrity endorsement. According to these studies the physical attractiveness, trustworthiness and the perceived expertise of the celebrity endorsers are the most important determinants of their effectiveness in influencing attitudes and purchase intentions. These models were criticized by many researchers stating that they fail to capture other important aspects which are also equally important such as the product and the consumers. Further, many practical examples of celebrity endorsements also highlighted the inefficiency of the source models in ensuring a successful celebrity endorsement. Therefore, two other alternative theories were proposed to overcome the inabilities of the source models and to help the advertisers in successfully capitalizing the celebrities. One was the Celebrity Product Match-Up Hypothesis and the other was Meaning Transfer Model. In the coming chapters, both these theories have been reviewed and then a comparative analysis has been undertaken using a practical example.

THE MATCH-UP HYPOTHESIS

The "Celebrity-Product Match-Up" proposition holds that in order to make an advertisement effective, there must be congruence or fit between the product and the celebrity in terms of characteristics such as image, expertise or attractiveness (Till & Busler, 2000). As early as 1979, Friedman and Friedman explored how the effectiveness of the endorsers differed by product types. The authors suggest that the type of endorser used should be considered very carefully. If the risk involved is social and/or psychological, then the advertiser should consider using a celebrity as an endorser. If the product is high in financial, performance or physical risk, then the advertiser should consider an expert endorser. For the products that have little inherent risk, the advertiser should choose a typical consumer endorser. Forkan (1980) proposed the match-up hypothesis for celebrity selection when he suggested that the message conveyed by the image of a celebrity and the message about a product should converge in an effective advertisement and therefore, implies a need for a congruity between the celebrity image and the product image. The perfect congruence between endorser and product may lead to great endorser believability through the identification process (Langmeyer & Walker, 1991b) and favourably influence consumer attitudes toward ads and products as well as purchase intention. On the other hand, Shimp (2008) stresses that most fundamentally an endorser must match up well with the endorsed brand target market. This is because the first question that a brand manager must pose when selecting an endorser is "Will the target market relate positively to this endorser?" (p. 307).

ATTRACTIVENESS BASED MATCH-UP

Much of the research on celebrity match-up or congruity investigates the appropriateness of the match between an endorser and a product based on the endorser physical attractiveness. Usually, the researchers examine the match between celebrity's physical attractiveness and the product advertised. Kahle and Homer (1985), for example, discover if there were congruence between the two, the match-up hypothesis would predict a positive impact upon the product and advertisement evaluations. In other words, if the product is related to attractiveness, then attractiveness of the celebrity endorser counts. Because earlier research did not fully test the attractiveness aspect of the match-up hypothesis i.e. the studies did not demonstrate that an attractive celebrity was less effective when endorsing a product not used to enhance one's attractiveness, Kamins (1990) uses a physically attractive celebrity and an attractive-unrelated product in his study. The findings revealed that for an attractiveness related product, use of a physically attractive celebrity significantly enhanced measures of spokesperson credibility, relative to use of a physically unattractive celebrity. Furthermore, an increase in the physical attractiveness of a celebrity endorser had no significant impact on advertisement- and product-based evaluations for an attractiveness-irrelevant product.

EXPERTISE BASED MATCH-UP

Till and Busler (1998) point out that physical attractiveness is not the most powerful dimension for generating a match-up, because the logical link between attractive endorser and product used to enhance one's attractiveness seems weak. Some researchers have considered the other two dimensions of source credibility –expertise and trustworthiness. In expertise match-up a celebrity who is perceived as expert in a field is used for endorsing a product related to that particular field, for example an athlete endorsing an energy drink or a sport shoe. Till and Busler (1998) examine the role of physical attractiveness versus expertise as match-up factors in the endorsement process and suggest that expertise dimension might be more valuable than attractiveness in matching celebrity endorsers with brands.

IMAGE BASED MATCH-UP

Image-based match-up means matching highly accessible celebrity associations with highly accessible brand association's congruence. Using jeans and a board game, among others, Misra and Beatty (1990) found that if the products were matched with Celebrities having similar images respectively, they would result in a higher brand attitude than the converse. Similarly, Kamins and Gupta (1994) found the match-up effect for computers (i.e., resulting in higher spokesperson believability, attractiveness, and brand attitude) but not running shoes, provided the computer was matched with "scientific". However, contrary to the theory, they did not find an effect for a fictitious CEO of an accounting company even though his image "fits" the computer equally. Rice, Kelting and Lutz (2011) also found positive effect of image based match-up on brand attitude. In their experiment two film celebrities i.e. Pierce Brosnan and Vin Diesel having distinct images

of 'Sophisticated' and 'rugged' were paired with two different brands of wrist watches having two different images of 'rugged' and 'sophisticated'. When the pairing was congruent it produced favourable impact on brand attitude.

MEANING TRANSFER MODEL

According to McCraken (1989), the previous models discussed above are not capable of capturing the success factors of the endorsement process, hence he proposed the meaning transfer model as a rich and all-inclusive portrayal of the same, the central premise of which is that celebrities encodes unique sets of meanings which might be transferable to the endorsed product, provided the celebrity is used well. Celebrity Endorsement is a special example of the universal process of meaning transfer which witnesses a conventional movement of cultural meaning in consumer societies. Celebrities are known to be full of different meanings in terms of age, gender, personality and lifestyle. Celebrity endorsers bring their own symbolic meaning to the process of endorsement. Specially the cultural meanings residing in a celebrity go beyond the person itself and are passed on to the products. (McCraken 1989) A model exemplifies a three-stage process of meaning transfer which involves the creation of the celebrity image followed by the transfer of meaning from the celebrity to the brand which again in turn is followed by the transfer of brand image to the customers. In the first stage the meanings associated with the famous person moves from the endorser to the product or the brand, and this meaning is drawn by the celebrity from its public persona. In the second stage, the creation of product personality takes place as the meaning is transferred from the endorser to the consumer. This is based on the symbolic properties conveyed by the endorser. Finally, in the last stage which is known as the consumption process, the brand meaning is attained by the consumer. The consumers who identify themselves with these symbolic properties meanings are transferred to them thereby rendering the process of transfer of the meaning from the celebrity to the consumer complete. The third stage of the model overtly proves the importance of the consumer's role in the process of endorsing brands with famous people (McCraken, 1989). These Cultural meanings then in turn influence the attitudes and purchase intentions of the product.

Two early studies in the area of meaning transfer related to the celebrity endorsements were conducted by Langmeyer and Walker (1991) and Walker, Langmeyer and Langmeyer (1992). Langmeyer and Walker's (1991) study used a celebrity endorser (Cher), a celebrity endorsed product (Scandinavian Health Spa), and a non-endorsed product (bath towel), as stimuli to identify the meaning transfer from endorser to product. The authors found that the celebrities do stand for a set of meanings and the celebrity in the study (Cher) represented different themes in the ad which included her physical appearance, personality and lifestyle. The endorsed product (Scandinavian Health Spa) was found having animate and human associations linked with the celebrity. On the other hand, the unendorsed product (bath towel) generated mostly inanimate associations which were more related to the product functions only. Walker et al. (1992) used a survey-based research to find out the nature of meaning transfer. They used two celebrities and three products for the study. The multiple-item semantic differential scales were used to measure the responses of participants on celebrity's image, brand's image and brand quality. They found that the perceived quality and the image of the brand endorsed were more similar to the celebrity who endorsed it.

Recent studies by Ang, Dubelaar & Kamakura (2007) and Roy & Moorthi (2012) have focused on transfer of personality from celebrity to the brand. Both researchers found the possibilities of transfer of personality traits from celebrity to a brand in case of celebrity-brand fit.

Choi and Rifon (2007) based on meaning transfer model identified and validated fifteen images that a celebrity can hold. These items were grouped under four dimensions that a celebrity can hold.

TABLE 1: CELEBRITY IMAGE SCALE (Choi and Rifon, 2007)

1 Genuineness
Socially responsible/ Socially Irresponsible
Wise/stupid
Pleasant/unpleasant
Comfortable/uncomfortable
Sophisticated/naive
2 Competence
Strong/weak
Confident/apprehensive
Enthusiastic/not enthusiastic
Determined/undetermined
3 Excitement
Rugged/delicate
Excitable/calm
Dominating/submissive
Masculine/feminine
4 Sociability
Public/private
Bold/shy

THE CASE OF CADBURY INDIA

In the Year 2003 Cadbury's found itself in the eye of a storm, when a few instances of worms in its Dairy Milk bars were reported in Maharashtra. In less than two weeks, the company launched a PR campaign for the trade. In October 2003, just a month before Diwali, customers in Mumbai complained about finding worms in Cadbury Dairy Milk chocolates. Quick to respond, the Maharashtra Food and Drug Administration seized the chocolate stocks manufactured at Cadbury's Pune plant. In defence, Cadbury issued a statement that the infestation was not possible at the manufacturing stage and poor storage at the retailers was the most likely cause of the reported case of worms.

But the FDA was not satisfied. That was followed by allegations and counter-allegations between Cadbury and FDA. The heat of negative publicity melted Cadbury's sales by 30 per cent, at a time when it sees a festive spike of 15 per cent. As a brand under fire, in October itself, Cadbury's launched project 'Vishwas' - an education initiative covering 190,000 retailers in key states. But what the company did in January 2004 is what really helped de-worm the brand. By investing up to Rs 15 crore (Rs 150 million) on imported machinery, Cadbury's revamped the packaging of Dairy Milk. The metallic poly-flow was costlier by 10-15 per cent, but Cadbury didn't hike the pack price. Cadbury roped in brand ambassador Amitabh Bachchan to do some heavy duty endorsement putting his personal equity on the line for the brand. The company upped ad spends for the Jan-March quarter by over 15 per cent. The recovery began in May 2004, and by June, Cadbury's claimed that consumer confidence was back. These experts believe that the reason for Cadbury's success was that it took crisis head-on. And the consumers were more forgiving, because the brand enjoyed an emotional equity in India.

METHODOLOGY

The endorsement done by Amitabh Bachchan for Cadbury was analysed on both aspects of celebrity product match-up and meaning transfer model. One more advertisement Amitabh Bachchan for Parker Pen was selected to study in order to provide a comparison. Eleven experts from the field of marketing and advertising were chosen to study and analyse the campaigns. Each of the experts analysed the campaign separately. The experts analysed the campaigns on two aspects first, celebrity product match-up and second, the meaning transfer model. Following steps were followed for the analysis.

Step 1: The type of match-up used in both campaigns was identified by the experts.

Step 2: Each expert was then asked to give a score out of five to the degree/strength of the match-up used in the campaigns.

Step 3: Each expert was then asked to identify nine most dominant cultural meanings associated with the Amitabh Bacchchan. The meanings were identified using the celebrity meanings scale developed by Choi and Rifon (2007) and the source credibility scale by Ohanian (1990).

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   83

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Step 4: By selecting the most recurring or common cultural meanings in the list of each expert, a final list of seven cultural meanings of Amitabh Bachchan was prepared.

Step 5: Each expert then gave a score out of five to the relevance and suitability of the identified celebrity meanings for the brand and the target audience

Step 6: Finally, the mean scores were calculated.

In the Table 2 the analysis and the mean score out five has been present

TABLE 2

Advertisement	1 Amitabh Bachchan for Parker Pen	2 Amitabh Bachchan for Cadbury
Positioning required by the brand	luxury pens for sophisticated people/elite intelligence	A trustworthy brand *
Endorser attractiveness	3.6	3.6
Endorser trustworthiness	4.6	4.6
Endorsers expertise	3	2.3
Type of Match-up	Image based	Image based
Strength of Match-up (Mean score)	**3.6**	**2.2**
Celebrity Meanings	Classy, Trustworthy, Honest, Socially Responsible, Elegant, Sophisticated, Determined	Classy, Trustworthy, Honest, Socially Responsible, Elegant, Sophisticated, Determined
Relevance of celebrity meaning for the brand (Mean Score)	**4**	**4.4**
Relevance of the celebrity meaning for the target consumers (Mean Score)	4.3	3.5

ANALYSIS

Now we analyse the endorsement done by Amitabh Bachchan for Cadbury on both aspects of celebrity product match-up and meaning transfer model. We have taken two successful endorsements done by Mr. Bachchan one for Parker pen and other for Cadbury chocolate. If we take a look at the endorsement for parker pen, we notice that it was rated higher on both match-up intensity and relevance of celebrity meanings for the brand (705 in case of match-up and 80% in case of relevance of cultural meanings). The positioning of parker was as a luxury pen and was targeted towards high income elite individuals such as CEO's, businessman and other high class professionals. For parker the cultural meanings of Amitabh Bachchan were perfectly suitable. Meanings like 'Classy' 'Elegant' 'Determined' and 'Sophisticated' are required by the brands that wants to position themselves as luxury items. Further, these cultural meanings are highly desirable for the high income elite individuals who were the target consumers. But in the case of Cadbury the celebrity product match-up score was quite low. So how did the endorsement succeed? The answer is that it was not due to the match-up but because of the cultural meanings which Amitabh transferred to Cadbury. Initially Cadbury positioned itself as "Asli swad zindagi ka" (The real Taste of Life) and used to portray the emotions of Joy, love friendship, excitement in its commercials. A brand to celebrate relationship was the kind of image that Cadbury had built over the years. But after the worm controversy the immediate need was to establish trust among the consumers. So it decided to call in Amitabh Bachchan as a brand ambassador and give an emotional testimonial for the Brand. The commercial was intelligently executed. The Cultural meanings of Amitabh Bachchan like Trustworthy, Honest, Socially Reliable, Reliable, determined which were the need of the hour for the brand were transfer to it, while other meanings of the celebrity like Classy Elegant and sophisticated were avoided. Therefore, despite the incongruence between the brand and the celebrity (just 2.2 less than 50%) the endorsement succeeded and it is also evident from the score of the endorsement on relevance of celebrity meanings for the brand and target consumers which stands very high (4.4, more than 80%). More recently Virat kohli's endorsement for Fair and Lovely is another example supports the importance of cultural meanings of the celebrity in delivering a successful advertising campaign. Though Virat Kohli is one of the most attractive Cricketer of current times and also a good match for fair and Lovely (Men's Fairness Cream) this endorsement has not been able to deliver desired results. An important reason being the cultural meanings which Virat Kohli brings to the brand. His prominent cultural meanings of bold, confident and determined and rugged are not perfectly suitable for a fairness cream.

This endorsement case answers another important question which the Match-up Hypothesis was unable to which is related to the role of celebrity in repositioning the brand. In a case of repositioning, the brand, if strictly adheres to celebrity product match-up then it will not be able to reposition itself as incongruence between the celebrity and the brand is required for it to happen and Amiatbh Bachchan's endorsement for Cadbury is the classic example of successful repositioning.

MANAGERIAL IMPLICATIONS

Here are some important practical implications for the advertisers can be inferred. First, the advertisers should not always opt for the most popular celebrity endorser for their brand but should choose the one which offers the cultural meanings required for the brand in the best manner. Second, the cultural meanings which are associated with the celebrity should be relevant and suitable for the brand. As in the case of Parker pen the meanings of Amitabh Bachchan were very suitable and relevant for the brand which was trying to position itself as luxury brand targeted towards CEO, Businessman etc. Third, the advertisers should try to make required cultural meanings of the celebrity prominent in the advertising campaigns and should avoid other meanings associated with the celebrity. Like in the Cadbury campaign the irrelevant cultural meanings were avoided and only the meanings of trustworthiness, socially reliable, determined were highlighted. Lastly, we cannot fully ignore the role of Match-up in celebrity endorsement effectiveness as it has been shown by past research that it is also important especially in the case of high consumer involvement, but apart from ensuring match (if the repositioning of the brand is not required) they should also consider the relevance of cultural meanings when selecting an endorser.

CONCLUSION

Two successful advertisement campaigns done by the celebrity Amitabh Bachchan were analysed in relation to two celebrity endorsement theories. First was Match-up Hypothesis and second was the Meaning Transfer Model. The results show that Meaning Transfer model is more effective explanation of the success of both the advertisement campaigns. It clearly shows that despite low on celebrity product match-up, Amitabh Bachchan's endorsement for Cadbury chocolate was a huge success. Many more similar examples can be found where the celebrity endorsements succeeded without having a high celebrity product match-up because the celebrity delivered the relevant meanings to the product (for example SRK for Hyundai Santro, Zakir hussain for Taj Mahal Tea, Sachin for MRF Tyres) similarly some of them were unsuccessful despite having very high celebrity product match-up because the celebrity meanings were not relevant for the brand and the target audience (for Example Virat Kohli for Fair and Lovely). The Match-up hypothesis relies on only the similarity between the celebrity and the product while the perspective of Meaning Transfer Model is broader. It takes into consideration all the three most important parties involved, the celebrity the product and the target consumers. Meaning Transfer Model considers the process of consumption and transfer of cultural meanings from celebrities to brand and finally to consumers thus giving due importance to all aspects. Further, the meaning transfer model over comes an important problem which match-up hypothesis ignores, the incongruence between the celebrity and product which is required in order to reposition the brand. Thus in the light of this research paper it would be safe to say that meaning transfer model is a more superior and comprehensive approach to study and implement the practice of celebrity endorsements.

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INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT 85

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VARIOUS STEGANOGRAPHY TECHNIQUES FOR HIDING INFORMATION: A SURVEY

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ABSTRACT

Steganography is the technology to communicate the information secretly in an appropriate carrier i.e. text, image, audio and video files. Under this assumption, the objective is to conceal to the existence of the embedded data. Steganography helps to maintain the confidentiality and security of transmitted information in an unprotected transmission media. Cryptography and Steganography are techniques those are used to encrypt and hide the secret data inside other media to ensure data security. This paper discusses the comparison of available Steganography techniques. Steganography Technique is to hide in an image file using Least Significant Bit (LSB) based Steganography, Discrete Cosine Transform (DCT) based steganography, and Discrete Wavelet Transform (DWT) based steganography. The proposed paper provides a systematic survey of existing Steganography research by categorizing existing methods according to the certain features and analyzing the advantages of these features.

KEYWORDS

steganography, LSB, DCT, DWT.

I.   INTRODUCTION

teganography is the invisible communication of messages. This is done by hiding information in other information. The term Steganography has been derived from the Greek words "stegein" means "cover" and "grafein" means "to write". Hence, Steganography can be considered to be a procedure of covered writing [6]. Since last decade, this approach of information hiding has become popular in a number of application areas. Digital Steganography is the technology of securing information hiding it to other piece of information. Now a days it is easy to access any form of data i.e text, image, audio and video which are very weak and attacked by many threats. Therefore, there is necessary of hiding secret identification inside in different digital data. In Cryptography which secures that by encrypting the data in unreadable format but Steganography makes data invisible by embedding them in another piece of information [13]. The Secret information can be embedded in covers like text, audio, video and images which resulted as stego-text, stego-audio, stego-video and stego-image respectively. Now a days for more confidentiality both Steganography and Cryptography has been taken together [16].

TABLE 1: COMPARISON BETWEEN SECRET COMMUNICATION TECHNIQUES

TECHNIQUES	Confidentiality	Imperceptibility	Integrity	Roboustness
Cryptography	Yes	Yes	No	Yes
Steganography	Yes/No	Yes	Yes/No	Yes/No

The below Figure 1 shows the block diagram how the secret message can hide inside in another information.
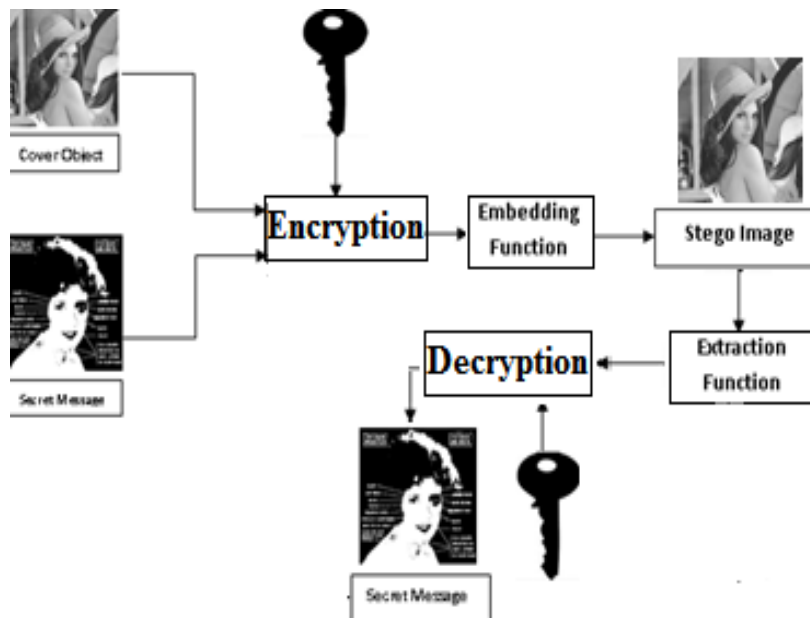
FIGURE 1: **BLOCK DIAGRAM OF STEGANOGRAPHY SYSTEM**

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   86

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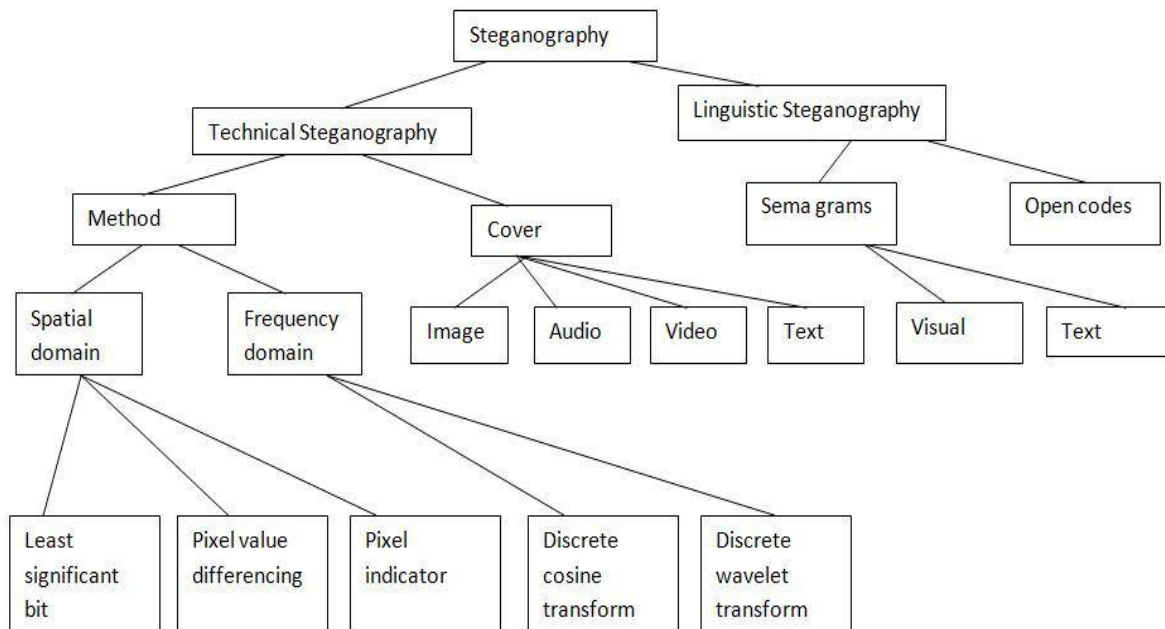
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FIGURE 2: TYPES OF STEGANOGRAPHY [11]

II.   TYPES OF STEGANOGRAPHY

1.   LINGUISTIC STEGANOGRAPHY

This steganography hides the information within the cover medium in some non-obvious way [15]. The technique utilizes written natural language to hide information. It is divided into two types:

1.1   Semagrams: The Semagram is the technique to hides the information by using sign or symbol. This technique uses of two types, which are as follows:

1.1.1   Visual Semagrams: This technique uses the physical objects everyday to communicate a message. e.g. the positioning of items on a particular website. In this technique painting, drawing, letters and symbols are used for hiding information.

1.1.2.   Text Semagrams: This technique is used to hides the information by modifying the cover message or by changing the font size or by adding extra space in words or by using different flourished in letters or hand written text.

1.2   Open Codes: Open code hides the information in such a way that the observer can't find the message immediately. Open code is openly readable text. This text is consisting of sequence of words, sentences that can be hidden in vertical or reverse order. The letter must be place at any position of text. This can be categorized into Jargon Codes and Covered Ciphers [14]. Jargon codes uses the languages which is understand by group of people but it is meaningless to other people. Jargon codes consist of symbols used to indicate the type and presence of wireless network signal undergoing terminology or an innocent conversation that conveys special meaning because of known facts only to the speakers [17]. Covered Ciphers uses a special technique to hide the message in an open carrier message such as embedding the message into the words of carrier message.

2.   TECHNICAL STEGANOGRAPHY

Technical Steganogrphy uses various methods or tools to hide the message.

2.1   Cover: The cover message is the carrier of message such as image, text, audio or video. The carrier message or cover is divided into number of bits and message bits are hidden in each bit of carrier message. The information is encrypted by changing the various properties of carrier message [2].

2.1.1   Text Steganography: In this technique number of tabs, white space, capital letters just like Morse codes and etc are used to achieve for hiding information [10]. In this approach the carrier message uses some random number of character sequences, changing the words in text or by changing the format of an existing text to conceal the message. Text Steganogrphy requires less memory because it can store only text files. Text steganography not commonly used as text files contains large amount of redundant data [9].

2.1.2   Audio Steganogrphy: Audio Steganography, is hiding information in audio i.e noise and in frequencies which human can't hear. There are various types of audio steganogrphy are available such as

2.1.2.1   Echo Hiding: This method embeds information into audio signals by adding a small echo to host signal. The data is unseen varying for three echo parameters i.e. initial amplitude, decay rate and offset. If only one echo is produced from the original signal, then only one-bit information could be encoded [12].

2.1.2.2   Phase Coding: In this phase components of sound are not as perceptible to the human ear as noise is. It can be done by substituting the phase of an initial audio segment with a reference phase that represents the data. It encodes the message bits as phase shifts in the phase spectrum of a digital signal, achieving an inaudible encoding in terms of signal-to-perceived noise ratio subsequent segments is then adjusted store the relative phase between segments. Disadvantage: It is a complex method and has low data transmission rate [12] [3]

2.1.2.3   Parity Coding: This technique breaks a signal down into separate regions of samples and encodes each bit from the secret message in a sample region's parity bit [8]. If the parity bit of a selected region does not match the secret bit to be encoded, the process flips the LSB of one of the samples in the region. Thus, the sender has more of a choice in encoding the secret bit, and the signal can be changed in a more unobtrusive fashion.

2.1.2.4   Spread Spectrum: In this technique the data can sent over a wide frequency range. This is the system using an implementation of the LSB coding that randomly spreads the message bits over the entire sound file. It is used to encode a category of information by spreading the encoded data across frequency spectrum. This allows the signal reception, even if there is interference on some frequencies. It can introduce noise into a sound file [12] [3].

2.1.2.5   Tone Insertion: In this inaudibility of lower power tones in the presence of significantly higher ones. Tone insertion method can resist to attacks such as low-pass filtering and bit truncation addition to low embedding capacity, embedded data could be maliciously extracted since inserted [4].

2.1.3   Video Steganography: The separation of video into audio and images or frames results in the efficient method for data hiding. The use of video files as a carrier medium for steganography is more eligible as compared to other techniques.

2.1.4   Image Steganography: This Steganography scheme is very popular in recent year than other steganography because of the plenty of electronic image information available. These image can use as a carrier message. It can involve hiding information in the naturally occurred noise within the image. Noise refers to the imperfections inherent in the process of rendering an analog picture as a digital image. In Image steganography we can hide message in pixels of an image. An image steganographic scheme is one kind of steganographic systems, where the secret message is hidden in a digital image with some hiding method [5]. The original images which carry the information are called cover image in steganography, and the message-embedded

image in cover image is called a stego image. Various methods of image steganography are done using spatial domain and frequency domain which are as follows

2.1.4.1   Spatial Domain: This method embeds the information in the intensity of the original image pixels directly. Basically the LSB method is used for spatial domain. In LSB method the cover or carrier message decomposed into number of bit planes and then LSB bit planes are replaced by secret information This substitution method includes embedding at the minimum weighting bit as it will not affect the pixel of original information or cover message. The only disadvantage of the LSB scheme is the   third party can extract the secret message immediately**.**

2.1.4.2   Frequency Domain: Frequency domain is also known as transform domain where images are transformed and then the message is embedded in the image. In this domain the secret message is hidden in specific area of covered message which makes data impossible to attack such as compression, cropping, or image compression methods than LSB approach. There are different formats available in frequency domain. The DCT technique plays a vital role in JPEG compression technique. DCT allows an image to be broken up into three frequency bands namely the Low-frequency band (FL), High frequency band (FH) and mid-frequency band (FM). In this approach the secret data is embedded into the DCT blocks containing mid frequency (FM) sub band components whereas high frequency sub band component remains unused. It improves the capacity and quality of stego-images. The DWT technique is multi resolution decomposition process in terms of expansion of an image into a set of wavelet basis function. By applying DWT on cover image it generates four sub bands LL, LH, HL and HH and modifying the coefficients stego-image is generated [1]. The Haar wavelet is also possible wavelet transform technique [7].

III.   CONCLUSION

Information security has become one of the most significant problems during the communication of internet users. Unauthorized access to secret data can have serious loss of internet users. Steganography is one of solution to hide the secret in unsecure communication channel. This paper contains different steganographic system to hide the information. Each of these techniques tries to satisfy the factors of Steganography i.e. imperceptibility, Capacity and Roboustness. We have taken various types of steganography techniques from different sources. We mentioned the various techniques, Least Significant Bit (LSB), DCT (Direct Cosine Transform), DWT (Discrete Wavelet Transform) in this paper which helps to improve in security.

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