

A Study of E-CRM Services of Commercial Banks in Virudhunagar District, Tamil Nadu

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Abstract - Internet is an excellent example of a worldwide cooperative movement that is quickly spanning across countries. A few years ago Electronic Customers Relationship Management (E-CRM) was only for establishing relationship between enterprise and its customers. Today it is an integral part of the information technology strategy for banking industry. Most of the E-CRM developments are taking place in the E-Commerce domain whether B2B (Business to Business) or B2C (Business to Commerce). So now banks identify this internet banking as their thrust area.

Electronic Customer Relationship Management (E-CRM) enables to store customer information in computers and they can be retrieved at the click of a button. These arrangements are becoming popular among private, public and foreign banks. This is what makes E-CRM in banking a challenging proposition. For example, bankers can make up queries on the fly, searching for the information that lasts them identify which customers to target with a new product or to find out which bank branches have high loan default rates. Users can just as easily save their search queries and use them as templates to generate additional query reports from the saved data metrics. At the back end, the system provides analysis that can be tied to geographic, product, channel and customer dimensions. Bankers might need to address customers' queries at a more personal level to convince them of the benefits and enable them to use the services to their fullest extent. This paper deals with customer's opinion about E-CRM services of commercial banks in virudhunagar district

Keywords: E-CRM, Banking Products, Services.

I. INTRODUCTION

Banking Industry has witnessed a lot of changes in the era of Liberalization. The advent of foreign banks into the country and the licensing of private sector have created stiff competition within the business. E-CRM role is more important for a healthy growth of banking business and combat the competition from rivals. In order to save time and to concentrate more on marketing and selling, banks to adopt alternate channels like e-banking, m-banking, smart cards, Automated Teller Machines etc.,

Electronic Customer Relationship Management (E-CRM) has enabled the effectiveness of business transactions in modern economies. E-CRM has pervaded all spheres of human activity.

In banking sector, E-CRM plays an important role for its growth and development. In fact, E-CRM has made the banking sector more competitive because of advancement of information and communication technologies. E-CRM has allowed the banks to effectively cater to the needs of the consumers by strengthening internal control systems which are backed by the effective systems and effective communication mechanism.

The wide spread use of smart cards, ATMs, Mobile banking, Electronic banking pave way to twenty-four hours service. With the use of advanced tools and variety of products, banks are enabling to maintain effective Customer Relationship Management (CRM). In spite of the various challenges faced by the banking sector due to technologies, E-CRM is considered to be an indispensable tool for serving the customers quickly and satisfactorily.

II. STATEMENT OF THE PROBLEM

The challenges faced by the banking industry have been so complex. To operate in this tough environment banks need to be ready to change and redefine them the way they do business.

With the competition throwing up new challenges and customers raising their expectations continuously, it is becoming increasingly difficult for banks to retain their customers unless they offer superior, faster and convenient services.

In order to retain their customers, the bank offers ATM services, Tele banking, internet banking, home banking, mobile banking and others are offer another. One among them is E-CRM solutions.

With the implementation of E-CRM solutions, banks can expect several advantages such as streamlined processing reduced transaction cost, better security and operational control, multiple delivery channels for the customers, time to market, easy latent of new products and the like.

Now, most of the banks are moving to branch banking to E-banking. The scope of the study related to E-CRM solutions is vast and ever expanding. Hence, the researcher

undertakes this study to analyse the customers' attitude towards E-CRM solutions.

III. REVIEW OF LITERATURE

In order to identify the research gap, the researcher has made the following reviews to have an insight into the problem.

1. In E-business journal, an article "E-Banking" written by Jayant Kumar and Hitesh Bhatia was published in January 2009. In this article, the authors described that the 'brick and mortar' banking system will be undermined with the advent of e-banking adopted by majority of commercial banks and financial institutions.
2. In professional Banker Journal an article was written by Sohami A.K describing that the biggest challenge faced by the bank in moving from a manually operated system to adopt a technology driven system is making its large workforce computer savvy and ensuring successful implementation of computerization.
3. Karthikeyan. K, in his thesis entitled, "Customers Attitude Technology based services offered by ICICI Bank" in the year 2006, has suggested to install more ATM machines in Sivakasi town to cover more customers. The ICICI bank should provide effective security measures to safeguard the interest of the customers.
4. Srinivasa Rao.K in his research paper "Technology Innovations in Banking" published in "The Indian Banker" dated December 2008 stated that the National Electronic Funds Transfer (NEFT), Electronic Clearing System (ECS), Real Time Gross settlement (RTGS) and the ongoing endeavour at cheques transaction system is now leading to a national payment and settlement system.
5. The research entitled, "A study on the Impact of the Computerization of commercial Banks in Sivakasi", undertaken by Sankareswari.S (2003), clearly points out that though banks are computerized, the customer service are not mere cheques, drafts, issue of cheques book and the like.
6. Yogeshwaren. G (2005) in his research report "A study of Marketing of Banking Service with reference to SBI" revealed that, the bank would be able to render services efficiently and effectively in the interest of the customers of the study area as well as in the interest of the country as a whole.

The growth and performance of E-CRM solutions in commercial Banks is an untouched area. Therefore, the researcher has a special interest to study this area.

IV. OBJECTIVES OF THE STUDY

The objectives of the present study are as follows:

1. To study the theoretical concepts of e-CRM.
2. To analyze the E-CRM solutions of Commercial Banks in Virudhunagar District.
3. To give valuable suggestions based on the findings of the study.

V. HYPOTHESIS OF THE STUDY

There is no significant difference between the age, gender and educational qualifications of the respondents and their satisfaction level.

VI. METHODOLOGY

The present study is based on both primary as well as secondary data. The primary data are those data, which are collected from the customers of commercial banks in Virudhunagar District. For that, separate schedule was constructed and the opinions of the customers about the E-CRM solutions have been collected.

The secondary data are those data, which are already collected by someone else. The researcher collected the secondary data from the records of commercial banks, journals, websites and so on.

Sampling Design

The primary data are collected by the researcher from different categories of customers. It is very difficult to apply Census method and hence Judgment sampling technique is used to collect the primary data from 125 respondents from the different parts of the district. Moreover, the researcher has chosen the respondents from different segments of society.

Statistical Design

The researcher used the following statistical tools for this study.

1. For data analysis – weighted arithmetical mean, Garret ranking method, weighted average method and Percentage analysis have been used.
2. For data presentation – Tables and Charts are used.
3. For testing Hypothesis – Chi-square test has been applied

Period of the Study

The researcher has collected data relating to E-CRM solutions from customers of commercial banks in Virudhunagar District during the period of 4 months from November 2014 to February 2015.

VII. RESULTS AND DISCUSSION

TABLE I DEMOGRAPHIC FACTORS OF THE RESPONDENTS

S.No.	Particulars	No. of Respondents	Per cent to total
Gender wise classification of the respondents			
1	Male	71	56.8
2	Female	54	43.2
Age Wise Classification of Respondents			
1	Below 30 years	59	47.2
2	30 to 40 years	23	18.4
3	40 to 50 years	29	23.2
4	50 to 60 years	11	8.80
5	Above 60 years	3	2.4
Level of Education			
1	Illiterate	6	4.8
2	Primary level	15	12
3	Secondary level	27	21.6
4	Graduate	38	30.4
5	Post Graduate	39	31.2
Monthly Income Level of the Respondents			
1	Below Rs 10,000	19	15.2
2	Rs. 10, 000 – Rs. 20, 000	37	29.6
3	Rs.20,000 – Rs. 30, 000	26	20.8
4	Rs. 30, 000 – Rs. 40,000	13	10.4
5	Above Rs. 40, 000	30	24
Employment Status			
1.	Employed	99	79.2
2.	Unemployed	26	20.8
Total		125	100
Category of Employment			
1	Professionals	18	18.18
2	Business Persons	33	33.33
3	Private/Government Employees	40	40.41
4	Coolies	8	8.08
Total		99	100
1	Students	17	65.39
2	House wives	7	26.92
3	Job Seekers	2	7.69
Total		26	100.00

Source: Primary Data

From Table I, it is inferred that out of 125 respondents, most of the respondents are male, belong to the age group of below 30 years, post graduate, their monthly income Rs.10, 000 to Rs.20, 000. Out of 99 respondents, most of the

respondents are Private / Government employees. Out of 26 respondents, majority of the respondents are Students.

The researcher has classified the respondents on the basis of the banks in which the respondents hold the account. The Table II shows the classification.

TABLE II BANKING CATEGORY OF THE CUSTOMERS

S. No.	Banks	No. of Respondents	Percentage
1	SBI and its associates	44	35.2
2	Nationalized Banks	23	18.4
3	Private Banks	45	36
4	Foreign Banks	12	9.6
5	Others	1	0.8
Total		125	100.00

Source: Primary Data

While analyzing the respondents' banking category, it is found that 35.2 per cent (44) of the respondents are the customer of SBI and its associates, 18.4 per cent (23) respondents are the customers of nationalized banks, 36 per cent (45) of the respondents are account holder of private

banks, 9.6 per cent (12) of the respondents are account holder of foreign banks and the remaining 0.8 per cent (1) of the respondents are the customers of other banks like Co-operative banks. It is inferred that most of customers belong to private banks

TABLE III REASONS FOR THE BANK SELECTION

S. No.	Bank Selection	No. of Respondents	Percentage
1	Quality service	43	34.4
2	Goodwill	31	24.8
3	Excellent CRM	41	32.8
4	Proximity to home	10	8
Total		125	100.00

Source: Primary Data

Out of 125 respondents, 34.4 per cent (43) of the respondents select the bank for quality service, 24.8 per cent (31) of the respondents choose the bank for goodwill, 32.8 per cent (41) of the respondents select for the reason of

excellent CRM, 8 per cent (10) of the respondents are select the bank for proximity to home.

Most of the respondents are selecting the bank for the reason of quality service.

TABLE IV TYPE OF ACCOUNT

S. No.	Kind of Account	No. of Respondents	Percentage
1	Savings Account	71	56.8
2	Current Account	36	24.00
3	Recurring Deposit Account	8	6.4
4	Fixed Deposit Account	16	12.8
Total		125	100.00

Source: Primary Data

It is clear from Table IV that out of 125 respondents, 71 (56.8%) respondents have Savings Bank Account, 36 (24%) have Current Account, 8 of them (6.4%) have for

Recurring Deposit Account, and the remaining 16 of them (12.8%) have fixed deposit account.

It clearly reveals that large number of respondents have savings bank accounts.

TABLE V PERIOD OF BEING A CUSTOMER

S. No.	Period of being a Customer	No. of Respondents	Percentage
1	Below 5 years	60	48.00
2	5 to 10 years	41	32.8
3	10 to 15 years	16	12.8
4	More than 15 years	8	6.4
Total		125	100.00

Source: Primary Data

Out of 125 respondents, 48 percent (60) of the respondents are customers of the bank for the period of below 5 years, 32.8 per cent (41) of the respondents have they are from 5 to 10 years, 12.8 per cent (16) of the respondents are customers to the period of 10 to 15 years,

and the remaining 6.4 percent (8) of the respondents are customers of the bank more than 15 years.

Most of the respondents are customers for the period of below 5 years.

TABLE VI PURPOSE OF USING ONLINE FACILITIES

S. No.	Using online Banking	No. of Respondents	Percentage
1	Electronic Bill presentation and payment	14	11.2
2	Electronic Fund Transfer	30	24
3	Online bill payment for shopping	26	20.8
4	Deposit and withdraw money	55	44.00
Total		125	100.00

Source: Primary Data

Out of 125 respondents those who utilize the online services, 14 of them (11.2 percent) utilize Electronic bill presentation and payment, 30 of them (20.8 per cent) prefer for online bill payment for shopping, and the remaining 55

of them (44 per cent) prefer the online service for deposit and withdraw the money.

Most of the respondents prefer the online banking only for depositing and withdrawing of money.

TABLE VII TYPES OF ANCILLARY FACILITIES

S. No.	Ancillary Facilities	No. of Respondents	Percentage
1	Balance Enquiry	33	26.40
2	Service Cost transactions	38	30.4
3	Cheque Book request	15	12.00
4	Top-Up mobile talk time	13	10.4
5	All the above	26	20.8
Total		125	100.00

Source: Primary Data

Out of 125 respondents, 33 of them (26.4 per cent) utilize balance enquiry facility, 38 of them (30.4 per cent) utilize service Cost transactions facility, 13 of them (10.4 per cent) utilize top-up Mobile talk time and the remaining 26 of them (20.8 per cent) utilize all services of e-CRM.

Most of the respondents are use ancillary facilities for service cost transactions.

The researcher has also taken efforts to know the opinion of the respondents about the various aspects of e-CRM service provided by their bank. The Table 8 shows the data regarding e-CRM solutions.

TABLE VIII NATURE OF E-CRM SOLUTIONS

S. No.	Particular	Agree			Disagree			No Opinion			Total	Percentage
1	Quick Service	98	3	294	19	2	38	8	1	8	340	I
2	Easy Updating	75	3	225	31	2	62	19	1	19	306	IV
3	Customer Relationship	84	3	252	22	2	44	19	1	19	315	II
4	Anywhere Access	80	3	240	23	2	46	22	1	22	308	III

Source: Primary Data

It is transparent from Table 8 that quick service occupies the 1st rank, Customer Relationship gets 2nd rank; 3rd rank has

been gained by anywhere access facility and the 4th rank has been placed to easy updating.

TABLE IX PLASTIC CURRENCY

S. No.	Plastic Currency	No. of Respondents	Percentage
1	Used	103	82.4
2	Not Used	22	17.6
Total		125	100.00

Source: Primary Data

Out of 125 respondents, 103 respondents (82.4%) are using plastic currency and the remaining 22 respondents (17.6 per cent) are not using the plastic currency.

It is known from the Table IX that majority of the respondents (82.4 %) are using the Plastic Currency.

TABLE X REASONS FOR PLASTIC CURRENCY PREFERENCE

S. No.	Plastic Currency preference	No. of Respondents	Percentage
1	Avoid risk of handling cash	40	38.84
2	Convenience	28	27.18
3	Showing Prestige	13	12.62
4	To handle emergency circumstances	21	20.39
5	Others	1	0.97
Total		103	100.00

Source: Primary Data

Out of 103 respondents those who are preferring a plastic currency, 40 of them (38.84 %) are preferring the Plastic currency to avoid risk of handling cash, 28 of them (27.18 per cent) are preferring for convenience usage, 13 of them (12.62 per cent) are preferring for a prestige, 21 of them

(20.39 per cent) are preferring to handle emergency circumstances and the remaining 1 of them (0.97 per cent) is preferring for other purposes. The most of the respondents prefer the plastic currency to avoid risk of handling cash.

TABLE XI EVENTS OF USAGE OF PLASTIC CARDS

S. No.	Event of Usage	No. of Respondents	Percentage
1	For Shopping	45	43.7
2	For Travel	40	38.8
3	Recreation purposes	16	15.5
4	Others	2	2
Total		103	100.00

Source: Primary Data

Out of the respondents those who are prefer a event of usage, 45 of them (43.7 per cent) use the card for shopping, 40 of them (38.8 per cent) use for travel, 16 of them (15.5

per cent) use for recreation purposes and the remaining 2 of them (2 per cent) use the card for other purposes. Most of the respondents are using the card at shopping time.

TABLE XII TYPE OF CARD

S. No.	Type of Card	No. of Respondents	Percentage
1	ATM card / Debit Card	91	88.3
2	Credit Card	7	6.8
3	Smart Card	5	4.9
Total		103	100.00

Source: Primary Data

It is clear from the Table XII that out of 103 respondents, 91 of them using ATM Card / Debit Card, 7 of them using

Credit Card and the remaining 5 of them have Smart Card. Majority of them using ATM cum Debit Card.

TABLE XIII USING OF ELECTRONIC CLEARING SERVICES

S. No.	Electronic Clearing Service	No. of Respondents	Percentage
1	Utilized	80	64
2	Not utilized	45	36
Total		125	100

Source: Primary Data

It is known from the table that out of 125 respondents, 80 of them (64 per cent) utilize the Electronic clearing services and the remaining 45 of them (36 per cent) have not

utilized. It is shown that more respondents utilize the electronic clearing services.

TABLE XIV TRANSACTION FOR WHICH ECS IS USED

S. No.	Transaction Made	No. of Respondents	Percentage
1	Pay the utility Bills	32	40.00
2	Pay the Recurring Expenses	31	38.75
3	Pay the regular Investments	17	21.25
Total		80	100.00

Source: Primary Data

It is observed from Table 14 that out of those who used ECS out of 80 respondents, 38.75 per cent (31) of the respondents use ECS to pay the utility bills, 40 per cent (32) of the respondents use to pay the recurring expenses and the

remaining 21.25 per cent (17) of the respondents use to regular investments. Most of the respondents use their ECS to pay the utility bills.

TABLE XV RISKS WITH E-BANKING SERVICES

S. No.	Risk Faced	No. of Respondents	Percentage
1	Network failure	43	34.4
2	Error in operation	38	30.4
3	No authentication records	23	18.4
4	No security for e-dealings	21	16.8
Total		125	100.00

Source: Primary Data

It is clear from the Table XV that out of 125 respondents, 34.4 per cent of the respondents face network failure, 30.4 per cent of the respondents face error in operation, 18.4 per cent of the respondents feel that there is no authentication records, and the remaining 16.8 per cent of the respondents think that there is no security in e-dealings. It is revealed that a large number of respondents face (34.4 per cent) network failure.

The Garret ranks are calculated by using appropriate Garret ranking formula. Then based on the Garret ranks, the

Garret Table value is ascertained. The Garret Table values and scores of each rank in Table 16 are multiplied to record scores in Table 17 finally by adding each row; the total Garret score is obtained.

Per cent position = $100 (R_{ij} - 0.5) / N_j$
 R_{ij} = Rank given for i^{th} item by the j^{th} sample respondents

N_j = Total rank given by the j^{th} sample respondents.

TABLE XVI PER CENT POSITION AND GARRET VALUE

S. No.	$100 (R_{ij} - 0.5) / N_j$	Calculated Value	Garret Value
1	$100 (1 - 0.5) / 6$	8.33	77
2	$100 (2 - 0.5) / 6$	25	63
3	$100 (3 - 0.5) / 6$	41.67	54
4	$100 (4 - 0.5) / 6$	58.33	46
5	$100 (5 - 0.5) / 6$	75	37
6	$100 (6 - 0.5) / 6$	91.67	23

Source: Secondary Data

In order to rank the reasons for preferring the bank by the respondents, the Garratt Ranking Technique has been used.

Table 17 shows the responses of the respondents regarding the reasons for preferring the bank.

TABLE XVII RANKING OF THE REASONS TO PREFER THE BANK

S. No.	Factors	Garret Score	Average Score	Rank
1	Convenient banking	7145	57.16	I
2	Privacy	6214	49.71	IV
3	Easy Access	7087	56.70	II
4	Elimination of waiting time	6151	49.21	V
5	Low cost & saves time	6084	48.67	III
6	Tailored Products & services	4819	38.55	VI

Table XVII shows the Garret scores and the average scores. The average score are ranked according to their values. The first rank is given to “Convenient banking”, the second rank is given to “Easy access”, third rank is given to

“Low cost and saves time”, the fourth rank is given to “Privacy”, fifth rank is given to “Elimination of waiting time”, and the last rank is given to “tailored products and services.”

TABLE XVIII LEVEL OF SATISFACTION OF THE PRODUCT

S. No.	Facility Offered	Very high			High			Neutral			Low			Very Low			Total	Rank
1	E-Banking	52	5	260	65	4	240	5	3	15	3	2	6	-	-	-	521	II
2	Mobile Banking	33	5	165	57	4	228	27	3	21	4	2	8	4	1	4	486	III
3	Card Facilities	59	5	295	47	4	185	17	3	51	2	2	4	-	-	-	538	I
4	Electronic Fund Transfer	31	5	155	49	4	196	26	3	78	15	2	30	4	1	4	463	IV
5	Electronic Clearing Service	32	5	160	45	4	180	23	3	69	13	2	26	12	1	12	447	V

Source: Primary Data

Table XVIII spells that card facilities provided by their bank occupies 1st rank, E-Banking gets 2nd rank, 3rd rank is placed to mobile banking, Electronic Fund Transfer occupies 4th rank and 5th rank has been gained by electricity clearing service.

For the purpose of analysis, the respondents have been classified into three categories like high, medium, low level of satisfaction on the basis of total scores obtained by each respondent. In order to classify the respondents, arithmetic mean (\bar{x}) and standard deviation (α) of the total opinion score of 125 respondents have been computed. Score above

(α) + (α) is to be high level of opinion. Score below (α) - (α) is considered to be low and score between high and low is considered to be the medium level opinion. Arithmetic mean score is 19.82 (or) 20 and standard deviation score is 9.84 (or) 10.

Respondents whose opinion score of (20+10) 30 are considered as having high-level opinion and whose opinion scores below 10 (20-10) are considered as having low level opinion. The respondents whose opinion scores are in between 10 and 30 are classified as having medium level of opinion. The classification of the respondents on the basis of their opinion score is given in Table XVIII.

TABLE XIX CLASSIFICATION OF RESPONDENTS ON THE BASIS OF SATISFACTION SCORES

S. No.	Designation	No. of Respondents	Percentage
1	Low	20	16
2	Medium	65	52
3	High	40	32
Total		125	100

Source: Primary Data

It is seen from the Table XIX that 16 per cent of the respondents have low level opinion and 52 per cent have medium level opinion. Those who have high level opinion amounted to 32 per cent. A majority of the respondents (52%) have medium level satisfaction on e-crm services. In order to analyse the influences of demographic factors such as gender, age and educational qualification on the satisfaction level, the chi-square test has been applied.

Chi-Square Test

Chi-square test is applied to study the relationship between the personal factors and level of satisfaction on e-crm services of banks in Virudhuhagar District.

$$\text{Chi - Square test} = \sum \frac{(O - E)^2}{E}$$

$$E = \frac{\text{Row total} * \text{column total}}{\text{Grand total}}$$

O = Observed Frequency
 E = Expected Frequency
 df = Degrees of Freedom
 (r - 1) (c - 1)
 r = row
 c = column.

The respondents in the study area belong to different age groups. Hence, an attempt has been made to analyze whether there is any significant difference between the age of the respondents and their satisfaction level. For this purpose two way table has been prepared. Table 20 shows the awareness levels of respondents of different age groups.

TABLE XX SATISFACTION LEVELS OF RESPONDENTS OF DIFFERENT AGE GROUPS

S. No.	Age	High	Medium	Low	Total
1	Up to 40	31	50	1	82
2	Above 40	7	16	20	43
Total		38	66	21	125

In Table XX, it is seen that among 38 respondents who have high level opinion, 31 respondents in the age group up to 40 years, and 7 respondents in the age group above 40 years.

In order to test whether there is any significant influence of age of the respondents on their satisfaction level. Chi-

square test is applied. For this purpose, the null hypothesis that “there is no significant relationship between the age of the respondents and their satisfaction level”. Table 21 shows the result of chi-square test.

TABLE XXI CHI SQUARE TEST FOR SATISFACTION LEVEL OF RESPONDENTS OF DIFFERENT AGE GROUPS

Factor	Calculated Value	Table Value	Degree of Freedom	Remarks
Age and Satisfaction Level	38.02	5.99	2	Null hypothesis rejected

Since the calculated value (38.02) is greater than the table value (5.99) at 5 per cent significance level, the null hypothesis is rejected. Hence, there is significant relationship between the age of the respondents and their satisfaction level.

The opinion level differs from one another among different educational qualification. Hence an attempt has

been made to analyze whether there is any significant difference between the educational qualification and the level of satisfaction level of the respondents. For this purpose a two way table has been prepared. Table 22 shows the satisfaction level of respondents of different educational qualification.

TABLE XXII SATISFACTION LEVEL OF RESPONDENTS ON THE BASIS OF THEIR EDUCATIONAL QUALIFICATION

S. No.	Particular	High	Medium	Low	Total
1	Literate	38	61	20	119
2	Illiterate	2	4	0	6
Total		40	65	20	125

In Table 22 it is seen that, among 40 respondents who have high level opinion, 38 respondents are in the category of literate and 2 respondents are in the category of illiterate.

In order to test whether there is any significant difference between educational qualification of the respondents and their satisfaction level. Chi-square test is applied. For this

purpose, the following null hypothesis has been framed by the researcher.

“Let us take the hypotheses that there is no significant difference between the educational qualifications of the respondents and their satisfaction level. It is tested with the help of Chi Square Test.

TABLE XXIII CHI SQUARE TEST FOR SATISFACTION LEVEL OF RESPONDENTS WITH DIFFERENT EDUCATIONAL QUALIFICATION

Factor	Calculated Value	Table Value	Degree of Freedom	Remarks
Educational Qualification and Level of satisfaction	0.36	5.99	2	Null hypothesis accepted

Since the calculated value (0.36) is less than the table value (5.99) at 5% significance level. The null hypothesis is accepted. Hence, there is no significant difference between educational qualification of the respondents and their satisfaction level.

The satisfaction levels of the respondents differ from male to female. Hence, an attempt has been made to analyze whether there is any significant difference between the sex of the respondents and their satisfaction level. For this purpose two way table has been prepared. Table shows the awareness levels of respondents of different sex.

TABLE XXIV SATISFACTION LEVELS OF RESPONDENTS GENDER WISE CLASSIFICATION

Gender	High	Medium	Low	Total
Male	27	43	1	71
Female	11	21	22	54
Total	38	64	23	125

In Table 24 it is seen that, among 38 respondents who have high level opinion, 27 respondents are in the category of male respondents and 11 respondents in the category of female respondents. In order to test whether there is any significant difference between Gender of the respondents and their satisfaction level. Chi-square test is

applied. For this purpose, the following null hypothesis has been framed. “Let us take the hypotheses that there is no significant difference between the sex of the respondents and their satisfaction level”. It is tested with the help of Chi Square Test.

TABLE XXV CHI SQUARE TEST FOR SATISFACTION LEVEL OF RESPONDENTS GENDER WISE CLASSIFICATION

Factor	Calculated Value	Table Value	Degree of Freedom	Remarks
Gender and Level of Satisfaction	29.10	5.99	2	Null hypothesis rejected

Since the calculated value (29.10) is higher than the table value (5.99) at 5% significance level, the null hypothesis is rejected. Hence, there is significant difference between gender and level of satisfaction of the respondents.

VIII. MAJOR FINDINGS OF THE STUDY

The findings of the research study are reported below

1. Out of 125 respondents, (56.8%) 71 respondents are male.
2. Most of the respondents (47.2%) are in the age group of below 30 years of age.

3. Most of the respondents (31.2%) are Post Graduate.
4. Most of the respondents (29.6 per cent) earns in the income range of Rs 10,000 to Rs 20, 000
5. Most of the respondents (79.2%) are employed.
6. Most of the respondents (40.41%) are government /private employees.
7. Most of the respondents (65.39%) are Students.
8. Large numbers of respondents (36 per cent) are customers of private banks.
9. Majority of the respondents (34.4%) are selecting the bank for the reason of quality service.

10. Large numbers of respondents (56.8%) have savings bank account.
11. Majority of the respondents (48%) are customers for the period of below 5 years.
12. Most of the respondents prefer the online banking only for depositing and withdrawing of money.
13. Most of the respondents (30.4%) are use ancillary facilities for service cost transactions
14. Majority of the respondents (82.4 %) are using the Plastic Currency.
15. The most of the respondents are (38.84%) prefer the plastic currency to avoid risk of handling cash
16. Majority of the respondents (43.7%) are using the card at shopping time.
17. Majority of the respondents are (88.3%) have ATM/Debit Card.
18. Most of the respondents (64%) utilize the electronic clearing services.
19. Majority of the respondents (40%) use their ECS to pay the utility bills.
20. It is revealed that a large number of respondents face (34.4 per cent) network failure.
21. Convenient banking placed first among the reasons to select the bank.
22. Card facilities provided by their bank occupies 1st rank
23. The chi-square test reveals that there is no relationship between the factors such as sex and educational status and the level of satisfaction and there is a relationship between the age and the satisfaction level of the respondents.

IX. SUGGESTIONS

The following suggestions are offered for improving the E-CRM.

1. The bankers can extend the deposit and withdrawal limit as per the convenience of the customers.
2. Customers of E-CRM solutions must be given utmost priority in the bank.
3. If any complaints are received from the customers they must be redressed immediately to get better satisfaction from the customers.
4. The head office may concentrate on branches in semi urban and rural areas to implement E-CRM solutions.
5. Customers try to understand the procedures framed by the banker for availing E-CRM solutions (i.e.) they have to accept the specified limit of deposits and withdrawals.
6. Bankers suggested that; make use of ATM service for withdrawals.
7. Bankers advised the customers that make fuller utilization of E-CRM solutions offered in
8. Bankers should ensure the security in use of Internet banking, tele banking, home banking, and mobile banking.

9. Customers must report any inconvenience faced while operating their accounts under E-CRM solutions immediately to the staff concerned.
10. The dissatisfied age group of bank customers should be identified and the remedial steps must be taken in increase the satisfaction of the customer.

X. CONCLUSION

Overall inference of the researcher is that E-CRM solutions have become the matter of compulsion for the banking industry. Most banks are moving from core banking solutions to E-CRM solutions. If right E-CRM solutions are implemented in right way, they will surely enhance capabilities of the bank in all fronts to make, "Banking without boundaries" a reality.

REFERENCES

- [1] Gordon. E and Natarajan. K, Banking Theory Law and Practice, Himalaya publishing House private Ltd., Mumbai, 2006.
- [2] Gurusamy, S., "Banking Theory Law and Practice", Vijay Nicole imprints Private Limited, Chennai, 2005.
- [3] Kapoor, G.P., "Commercial Banking", A.P.H.Publishing Corporation, New Delhi, 2004.
- [4] Natarajan , S and parameswaran. R, Indian Banking, chand and company Ltd., New Delhi, 2009.
- [5] Vasu Deva, E-Banking, common wealth publishers, New Delhi, 2005.
- [6] Anantha Bhasker, P.V., "Customer Service in banks", IBA Bulletin, August 2004.
- [7] Mehrotra, K.M., "Automated teller Machine in Indian Banking", IBA Bulletin, November 1996.
- [8] Kulkarni, R.V., "Computerized in Banks", IBA Bulletin, June 2000.
- [9] IBA Bulletin, February 2005.
- [10] E-Business, January 2006.
- [11] The Indian Banker, June 2006
- [12] Journal of Banking December 2006.
- [13] www.bankingtechnology.com
- [14] www.crm2day.com
- [15] www.oppapers.com
- [16] www.wikipedia.com