

The Effect of Electronic Payment on Customer Satisfaction

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Abstract

Retail electronic payment system has progressed in the recent years in various countries. We find that India is no exception. Reserve Bank in its Vision statement has set the objective to proactively promote electronic payments with an objective towards cash less society. The formation of National Payments Corporation (NPCI) in the year 2009 has set the stage for development of retail electronic payments which offers enormous opportunity to move towards cashless and less cash society. Using T test, with an objective to assess the contribution of NPCI, we find that significant difference exist in products such as electronic clearing, ECS (Debit), National Electronic Funds Transfer (NEFT), and Card Products when we compare the period after formation of NPCI and before formation of NPCI. Various innovative products, such as Immediate Payment Services (IMPS), National Automated Clearing House (NACH) and Prepaid Instruments (PPI), were launched after the formation of NPCI. There is enormous opportunity since the ratio of retail electronic clearing to systematically important payments such as Real Time Gross Settlement and CCIL grew from 1 percent in the year 2005-06 to 3 percent in the year 2013-2014. I intend to discuss with you all about a silent revolution that has been sweeping the country. It is about the payment systems in India. I said 'silent revolution'. That is because, the payment systems has been evolving and changes have been continuous over the last 35 years, it has rarely got noticed as a revolutionary change. Let us see how it evolved and beneficially impacted settlement of economic transactions of common persons and businesses and how it is now poised for still larger impact.

INTRODUCTION

The driving force in the development of national payment systems of any country is usually the central bank of that country. The Reserve Bank of India as the central bank of India has been playing this developmental role and has taken several sufficient steps for Safe, Efficient, Accessible, Secure, Sound, and Authorized payment systems in the country.

The Board for Regulation and Supervision of Payment and Settlement Systems (BPSS), a sub-committee of the Central Board of the Reserve Bank of India is the highest policy making body on payment systems in the country. The BPSS is empowered for authorizing, prescribing policies and setting standards for regulating and supervising all the payment and settlement systems in the country. In India, the payment and settlement systems are regulated by the Payment and Settlement Systems Act, 2007 (PSS Act) which was legislated in December 2007. The initiatives taken by RBI in the mid-eighties and early-nineties focused on technology-based solutions for the improvement of the payment and settlement system infrastructure, coupled with the introduction of new payment products by taking advantage of the technological advancements in banks. The continued increase in the volume of cheques added pressure on the existing set-up, thus necessitating a cost-effective alternative system.

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CUSTOMERS SATISFACTION

Customer satisfaction refers to the extent to which customers are happy with the products and services provided by a business . Customer satisfaction levels can be measured using survey techniques and questionnaires

DEFINITIONS:

Definition 1:

Customer satisfaction is equivalent to making sure that product and service performance meets customer expectations.

Definition 2:

Customer satisfaction is the perception of the customer that the outcome of a business transaction is equal to or greater than his/her expectation.

BENEFITS OF CUSTOMER SATISFACTION

The importance of customer satisfaction and support is increasingly becoming a vital business issue as organization realize the benefits of Customer Relationship Management (CRM)for providing effective customer service. Professionals working within customer-focused business or those running call centre or help desks, need to keep informed about the latest customer satisfaction techniques for running a valuable customer service function. From small customer service departments to large call centre , the importance of developing a valued relationship with customers using CRM is essential to support customer and long-term business growth.

What Do Customers Want?

Before we begin to create tools to measure the level of satisfaction, it is important to develop a clear understanding of what exactly the customer wants. We need to know what our customers expect from the products and services we provide. Customer expectations have two types –

Expressed

Customer Expectations are those requirements that are written down on the contract and agreed upon by both parties for example, product specifications and delivery requirements. Supplier's performance against these requirements is most of the items directly measurable.

Implied

Customer Expectations are not written or spoken but are the ones the customer would 'expect' the supplier to meet nevertheless. For example, a customer would expect the service representative who calls on him to be knowledgeable and competent to solve a problem on the spot.

What is payment?

When people or businesses enter into economic transaction, i.e. buy and sell of goods and services and value there of needs to be settled. Before the concept of money came in, the settlement was through exchange of goods and / or services and it is called the barter system. With the concept of money, the sale of goods and services are being affected or settled by payment of money.

Today we can boast the strong retail payments framework in the country comparable to that any advanced country, perhaps even better than some of them in terms of variety and efficiency. Various types of payment instruments exist to meet the different type of requirements of different users in different circumstances- bank account, cheques, debit and credit cards prepaid payment and instruments etc. There are various systems to meet the remittance requirements of users depending upon their time criticality and cost sensitivity - National Electronic Funds Transfers [NEFT], Immediate Payment Service [IMPS], Aadhaar Enabled Payment System [AEPS] and Unified Payments Interface. The need for making bulk and repetitive payment is met by systems as Electronic Clearing Service [ECS], National Automatic Clearing House [NACH], and Aadhaar Payments Bridge System [APBS]

Electronic Payment System in India

The RBI plays a pivotal role in the development of India's payment and settlement systems for both large-value and retail payments. The central bank played a pioneering role in automating the paper-based clearing system in the 1980s. It introduced an electronic funds transfer system and electronic clearing services (ECS Credit and Debit) in the 1990s. The special electronic fund transfer (SEFT) system was introduced in April 2003 (subsequently discontinued in March 2006, after the implementation of the National Electronic Fund Transfer (NEFT) system in November 2005) and the real-time gross settlement (RTGS) system in March 2004. The RBI operates the RTGS, which has replaced the paper-based inter-bank clearing system and settles a sizeable volume of large-value and time-critical customer transactions. RBI also manages the clearinghouses (for paper-based and electronic clearing) in 17 large cities while operating the clearinghouses at four major locations.

It is the settlement banker in these cities. The RBI introduced the NEFT system in November 2005. Together with ECS, this forms the electronic retail payment infrastructure.

The National Electronic Clearing Services (NECS) system, which aims to centralize the Electronic Clearing Service (ECS) operation and bring uniformity and efficiency to the system, was implemented in September 2008. At present, the NECS settles only credit transfers.

Electronic Clearing System

ECS is an electronic mode of payment / receipt for transactions that are repetitive and periodic in nature. ECS is used by institutions for making bulk payment of amounts towards distribution of dividend, interest, salary, pension, etc., or for bulk collection of amounts

towards telephone / electricity / water dues, cess / tax collections, loan installment repayments, periodic investments in mutual funds, insurance premium etc. Essentially, ECS facilitates bulk transfer of monies from one bank account to many bank accounts or vice versa. ECS includes transactions processed under National Automated Clearing House (NACH) operated by National Payments Corporation of India (NPCI).

Primarily, there are two variants of ECS - ECS Credit and ECS Debit.

ECS Credit is used by an institution for affording credit to a large number of beneficiaries (for instance, employees, investors etc.) having accounts with bank branches at various locations within the jurisdiction of an ECS Centre by raising a single debit to the bank account of the user institution. ECS Credit enables payment of amounts towards distribution of dividend, interest, salary, pension, etc., of the user institution.

ECS Debit is used by an institution for raising debits to a large number of accounts (for instance, consumers of utility services, borrowers, investors in mutual funds etc.) maintained with bank branches at various locations within the jurisdiction of a ECS Centre for single credit to the bank account of the user institution. ECS Debit is useful for payment of telephone / electricity / water bills, cess / tax collections, loan installment repayments, periodic investments in mutual funds, insurance premium etc., that are periodic or repetitive in nature and payable to the user institution by large number of customers etc.

TECHNIQUES OF ELECTRONIC PAYMENT SYSTEM:

National Electronic Funds Transfer System (NEFT)

National Electronic Funds Transfer (NEFT) is one of the most prominent electronic funds transfer systems of India. Started in Nov.-2005, NEFT is a facility provided to bank customers to enable them to transfer funds easily and securely on a one-to-one basis. It is done via electronic messages. This is not on real-time basis like RTGS (Real Time Gross Settlement). This is a "net" transfer facility, which is executed, in hourly batches resulting in a time lag. NEFT facilities are available in 30,000 bank branches all over the country and work on a batch mode.

NEFT has gained popularity due to it saving on time and the ease with which the transactions can be concluded. This reflects from the fact that 42% of all electronic transactions in the 2008 financial year were NEFT transactions.

Card based clearing (CBC)

As mentioned above India is one of the fastest growing countries in the plastic money segment. Already there are 130 million cards in circulation, which is likely to increase at a very fast pace due to rampant consumerism. India's card market has been recording a growth rate of 30% in the last 5 years. Card payments form an integral part of e-payments in India because customers make many payments on their card-paying their bills, transferring funds and shopping.

Ever since Debit cards entered India, in 1998 they have been growing in number and today they consist of nearly 3/4th of the total number of cards in circulation.

Credit cards have shown a relatively slower growth even though they entered the market one decade before debit cards. Only in the last 5 years has there been an impressive

growth in the number of credit cards- by 74.3% between 2004 and 2008. It is expected to grow at a rate of about 60% considering levels of employment and disposable income. Majority of credit card purchases come from expenses on jewelry, dining and shopping.

Another recent innovation in the field of plastic money is co branded credit cards, which combine many services into one card-where banks and other retail stores, airlines, telecom companies enter into business partnerships. This increases the utility of these cards and hence they are used not only in ATM's but also at Point ofsale(POS) terminals and while making payments on the net.

Real-time gross settlement (RTGS)

Real-time gross settlement systems (RTGS) are specialist funds transfer systems where transfer of money or securities takes place from one bank to another on a "real time" and on "gross" basis. Settlement in "real time" means payment transaction is not subjected to any waiting period.

The transactions are settled as soon as they are processed. "Gross settlement" means the transaction is settled on one to one basis without bundling or netting with any other transaction. Once processed, payments are final and irrevocable.

RTGS systems are typically used for high-value transactions that require immediate clearing. In some countries the RTGS systems may be the only way to get same day cleared funds and so may be used when payments need to be settled urgently. However, most regular payments would not use a RTGS system, but instead would use a national payment system or network that allows participants to batch and net payments.

The Future of India's Payments System

Looking at the trends, we can be sure that electronic payments is the future and that digital will redefine the payment systems of years to come. This will be significantly more pronounced with the entry of 11, resource-rich, technology-focused payment banks in 2016/17. Based on our experience, these are some of the broad trends that will redefine payment systems in India:

- a. **Inter-operability:** With a myriad of payment service providers servicing millions of customer accounts, the time is ripe to unleash network effects through inter-operability between various digital channels.
- b. **Proliferation of acceptance networks:** As of now, India has about 1.2 million POS terminals. This needs to increase rapidly (some estimates suggest it should expand to around 20 million), given India's population, geography, number of merchants, etc.
- c. **Government initiatives:** The Government of India has been at the forefront in the drive to encourage digital payments. Furthermore, it is working to use direct benefit transfers for its various schemes and thus deliver entitlements directly into beneficiaries' accounts, identified and authenticated by the *Aadhaar* system. Buoyed by the success of DBT for LPG, the Union Budget 2016 announced trial of DBT for fertilisers.
- d. **Customer convenience and affordability:** With a critical mass of 50 million transactions per month happening over mobile wallets – increasingly in rural areas of

country, the continued focus on convenience (without losing sight of security and risk mitigation) will be essential. There are very real concerns about client service and protection that should be addressed urgently. With this, and a low-cost 24X7 backbone offered by IMPS, the time is ripe to reduce the transaction cost for the customer. This would be something that will be hastened with the entry of new players.

Progress of Electronic Banking in India

In India, Reserve Bank of India outlined the mission to ensure that payment and settlement systems are safe, efficient, interoperable, authorized, accessible, inclusive and compliant with international standards. The Vision is to proactively encourage electronic payment system for ushering in a less cash society in India. Regulation is keen to promote innovation and competition with an intention to help payment system achieve international standards. Various initiatives by Reserve Bank of India, in mid-eighties and early-nineties, resulted in offering technology based solutions. The need evolved to provide costeffective alternative system.

Electronic Clearing Service (ECS) was launched in 1990s to cater to bulk and repetitive payments. By September 2008, a new avatar in the form of National Electronic Clearing cell was launched to handle multiple credits to beneficiary accounts. National Electronic Clearing Service (NECS) rides on core banking solution of member banks. The retail funds transfer system was introduced in 1990s to allow electronic transfer of fund for people to people payment. In November 2005, a robust system was launched to allow one to one funds transfer requirement of individuals and corporates. Prepaid instruments allow transaction for goods and services against the value stored on payment instrument. It may be in the form of smart cards, magnetic stripe cards, internet wallets, mobile accounts, mobile wallets and paper vouchers. Consequent to the guidelines in mobile banking, selected banks were permitted to offer the service after receipt of necessary permission from Reserve Bank of India. Indian Retail payments pose significant challenges and opportunities. Based on Payment system vision document released by Reserve Bank of India, the number of non-cash transactions, at 6 per person, is low in India. It is estimated that Government subsidies alone constitute more than Rs.2.93 trillion and Electronification has a potential to translate 4.13 billion electronic transactions in a year. Based on the report of Internet and Mobile Association of India (IAMAI), internet commerce is expected to reach Rs.465 billion by the year 2012. To facilitate electrification, Reserve Bank of India established the umbrella organization, National Payment Corporation of India. Many researches in the past have laid importance on the significant developments that are taking place in the banking industry due to the surge in information technology.

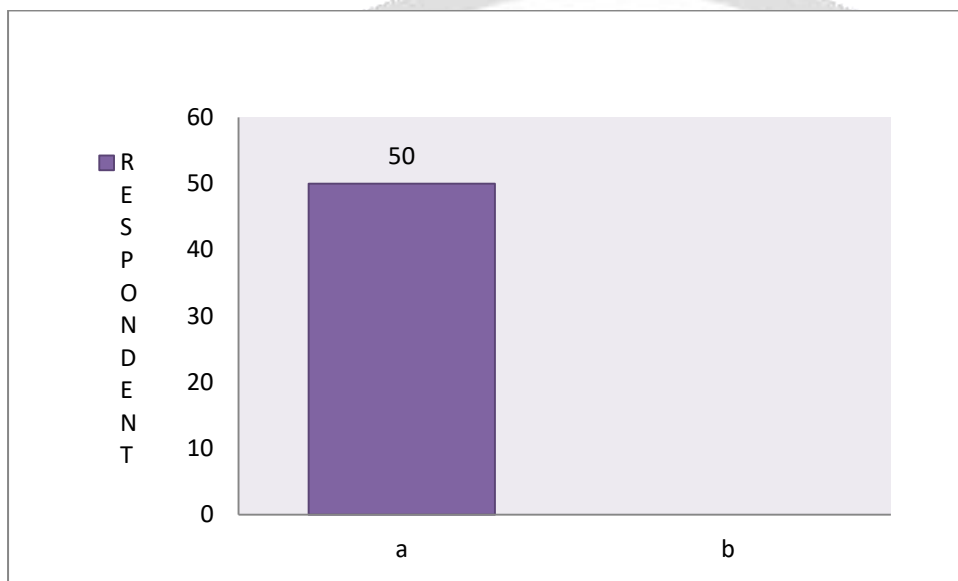
OBJECTIVE OF THE STUDY

- To know about the current and future prospects of online payment system to the customer.
- To review the impact of cashless policy in comparison of cash policy.
- To find the problem and solution of electronic payment system on individual customer.

DATA ANALYSIS

1. Do you think that your bank caters all your banking needs?

SNO	PARTICULAR	RESPONDENT	%age
1.	Yes	50	100%
2.	No	0	0%

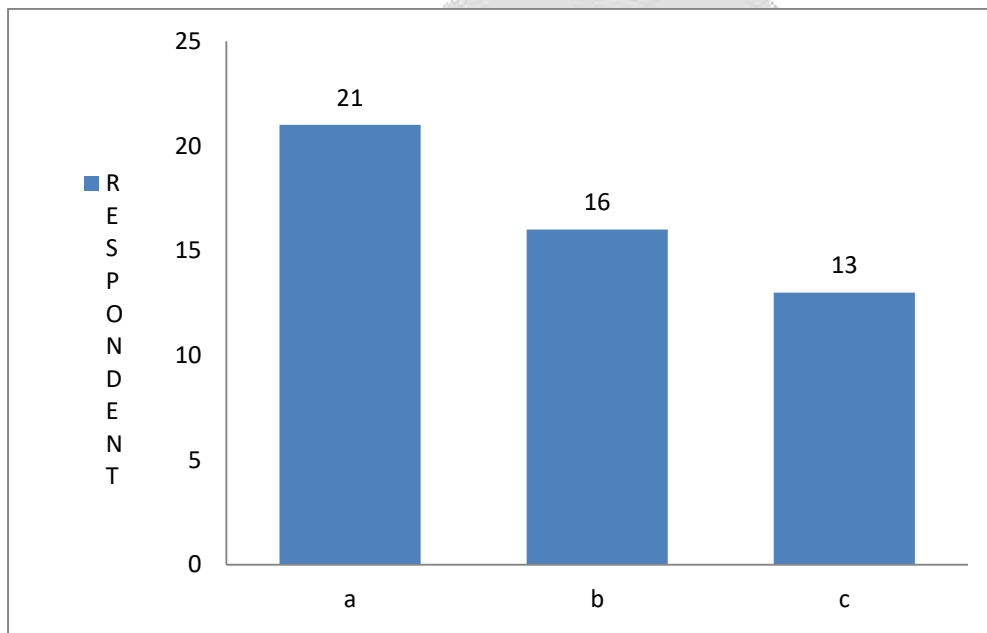


INTERPETATION:

The result of the data Analysis shows that the majority of respondents (i.e.100%) agree their bank caters all their banking needs. It conclude that all the customers getting all banking need from their respective bank.

2. For the past how many years you have account with this bank?

SNO	PARTICULAR	RESPONDENT	%age
1.	0-5 year	21	42%
2.	5-10 year	16	32%
3.	More than 10 year	13	26%

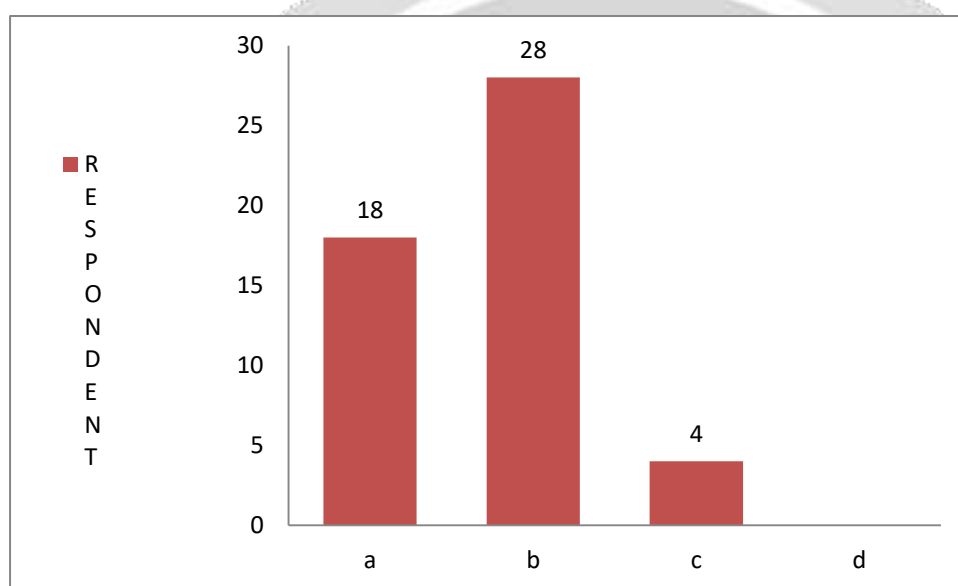


INTERPETATION:

The result of this data analysis shows that 42% respondents have their account from less than 5 years , 32% respondent have their account more than 5 years, but less than 10 years . And rest of 26% respondent have more than 10 years. It conclude that as per our survey the mostly respondent have their accounts in bank within last 5 years and others have their accounts less or more than 10 years in their respective banks.

3. What kind of account do you maintain in this bank?

SNO	PARTICULAR	RESPONDENT	%age
1.	Current Account	18	36%
2.	Saving Account	28	56%
3.	Loan Account	4	8%
4.	Demat Account	0	0%

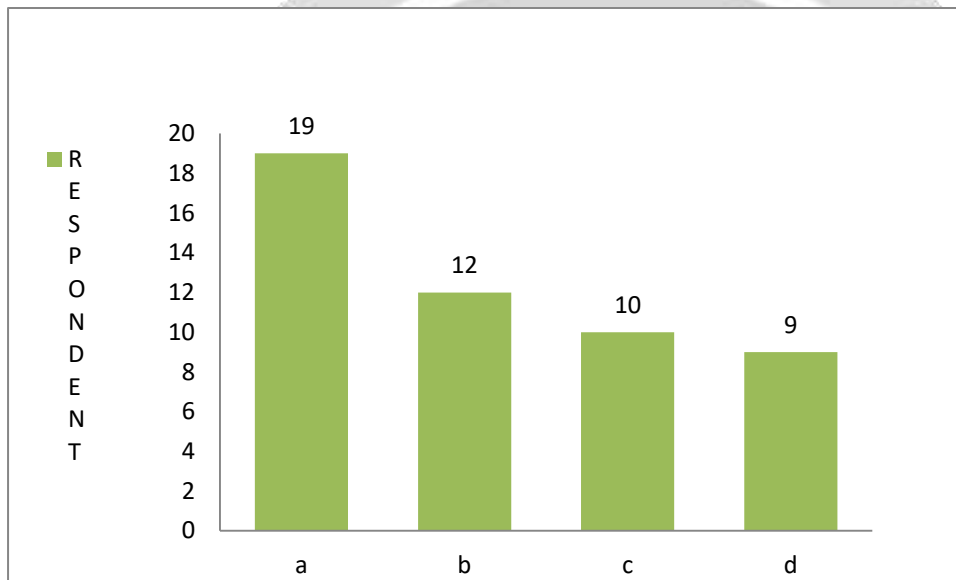


INTERPETATION:

. The result of this data analysis shows that 56% respondents have Saving Account, 36% respondents have Current Account, and the rest of 8% have Loan Account. It conclude that maximum customers have saving accounts in their banks and other have current account but very few customers have loan account or Demat Accounts.

4. Which payment mode you used mostly, provided by your bank?

SNO	PARTICULAR	RESPONDENT	%age
1.	Card Payment	19	38%
2.	Net Banking	12	24%
3.	Mobile Banking	10	20%
4.	Any Other	9	18%

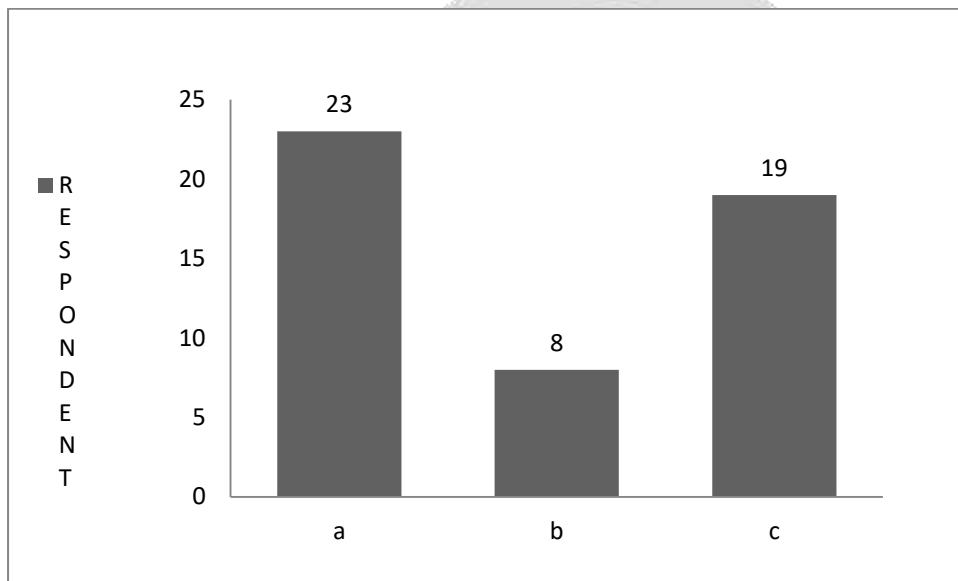


INTERPETATION:

The result analysis show that 38% respondent used the Card Payment, 24% respondent used Net Banking and the rest of 18% respondent used the Other Payment Mode. It conclude that most of the customer used the card payment system and lesser than used the net banking. Apart from this very few customer used the mobile banking.

5. Does your bank have listed its share in stock exchange?

SNO	PARTICULAR	RESPONDENT	%age
1.	Yes	23	46%
2.	No	8	16%
3.	Not Aware	19	38%

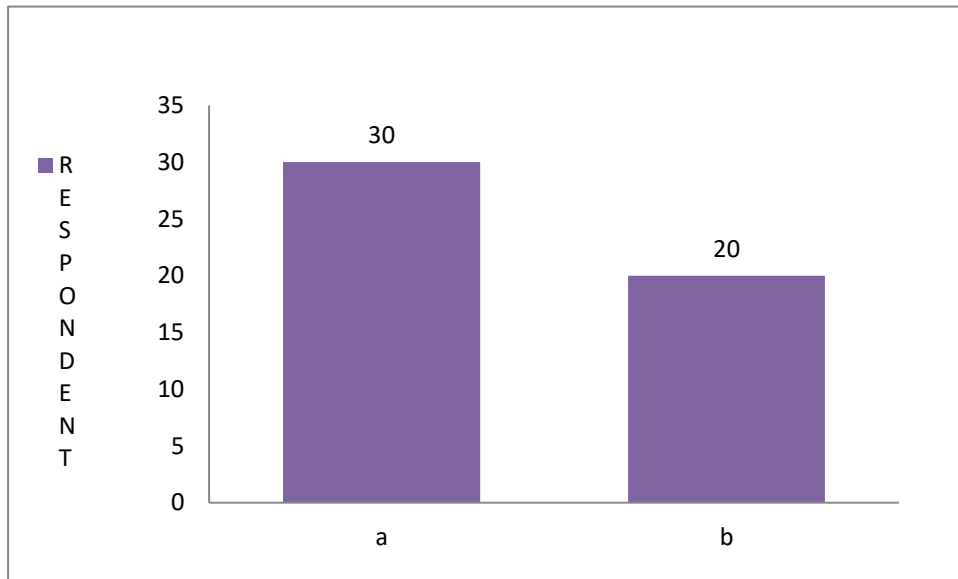


INTERPETATION:

This result analysis shows that 46% respondent replied in Yes, 38% respondent was not aware from it and rest of 16% respondent say no.

6. Does your bank have core banking facility for the customer?

SNO	PARTICULAR	RESPONDENT	%age
1.	Yes	30	60%
2.	No	20	40%

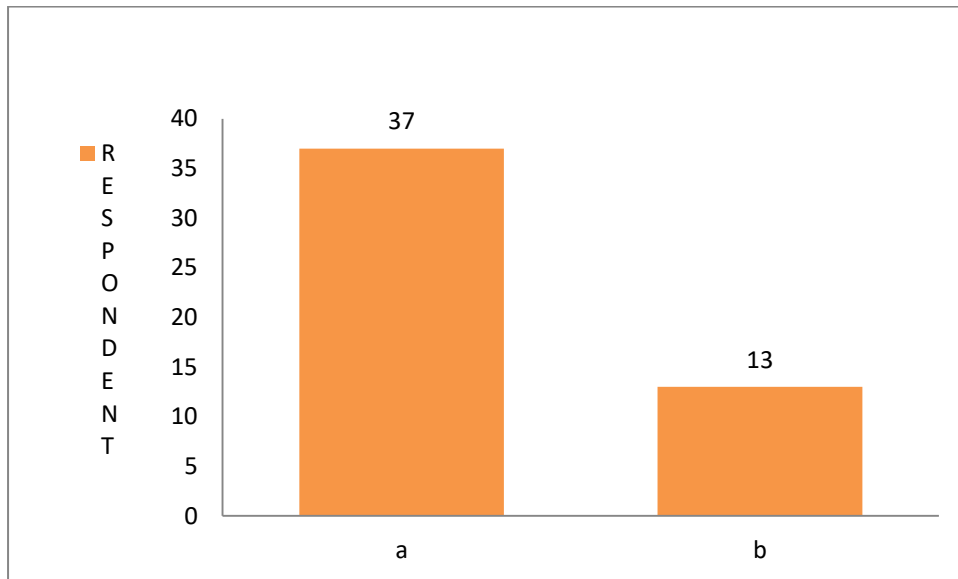


INTERPETATION:

The result analysis show that 60% respondent says Yes , their bank provide the Core Banking services 40% respondent says that their bank not provide Core Banking services. It conclude that maximum customer agree that their bank provide them the core banking facilities.

7. Do they any charges for online payment service?

SNO	PARTICULAR	RESPONDENT	%age
1.	Yes	37	74%
2.	No	13	26%

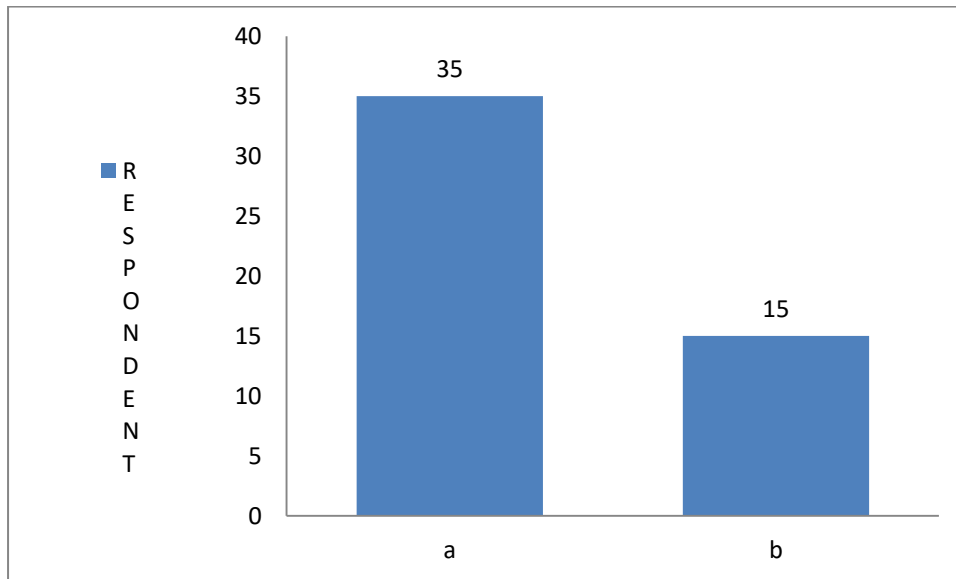


INTERPETATION:

The result analysis show that 74% respondent says Yes their bank charges for online payment services and 26% respondent says that their bank does not charged against the online payment System . it conclude that most of the bank charges against the online payment service annually.

8. Do you think the online payment service is secure in comparison of cash payment mode?

SNO	PARTICULAR	RESPONDENT	%age
1.	Yes	35	70%
2.	No	15	30%

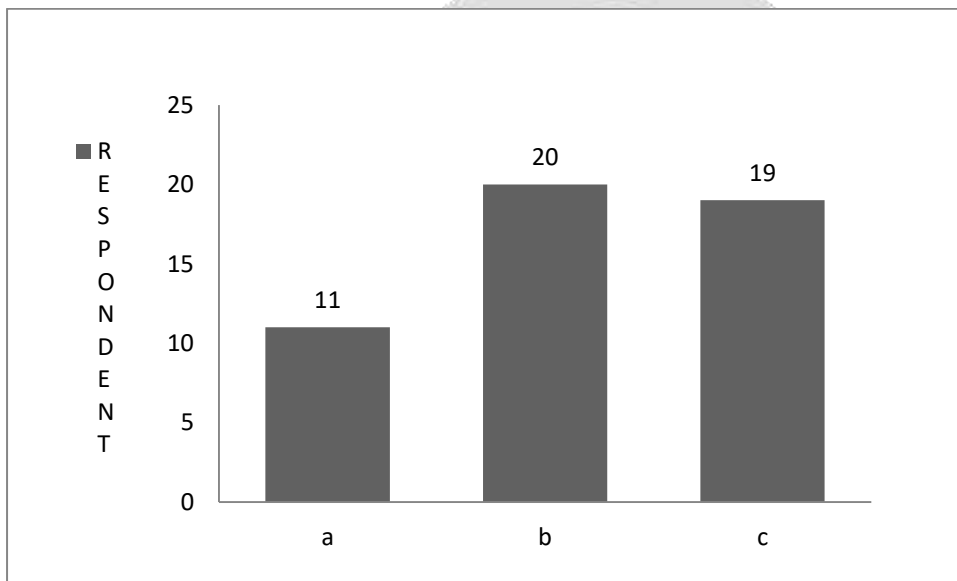


INTERPETATION:

The result analysis shows that 70% respondent says that online payment service secured but 30% respondent says that service is not secured. It concludes that online payment service is more secure in comparison of cash payment. Reason behind it that online payment service save the time and provide cash back facility in some cases.

9. How much you are satisfied with the online payment service of your bank?

SNO	PARTICULAR	RESPONDENT	%age
1.	Not Satisfied	11	22%
2.	Average Satisfied	20	40%
3.	Fully Satisfied	19	38%

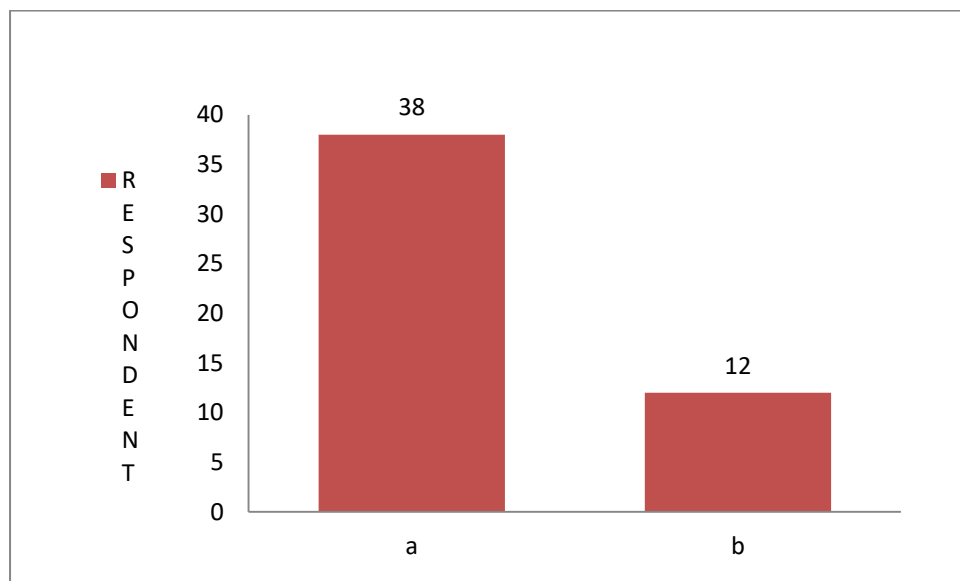


INTERPETATION:

The result analysis shows that 40% respondent is the Average Satisfied, 38% respondents are fully satisfied and the 22% respondent says they are not satisfied. It conclude that most of the customer are satisfied with their bank online payment system and rest of customer are average satisfied from their bank online payment service.

10. Do you use the service of alternative bank?

SNO	PARTICULAR	RESPONDENT	%age
1.	Yes	38	76%
2.	No	12	24%

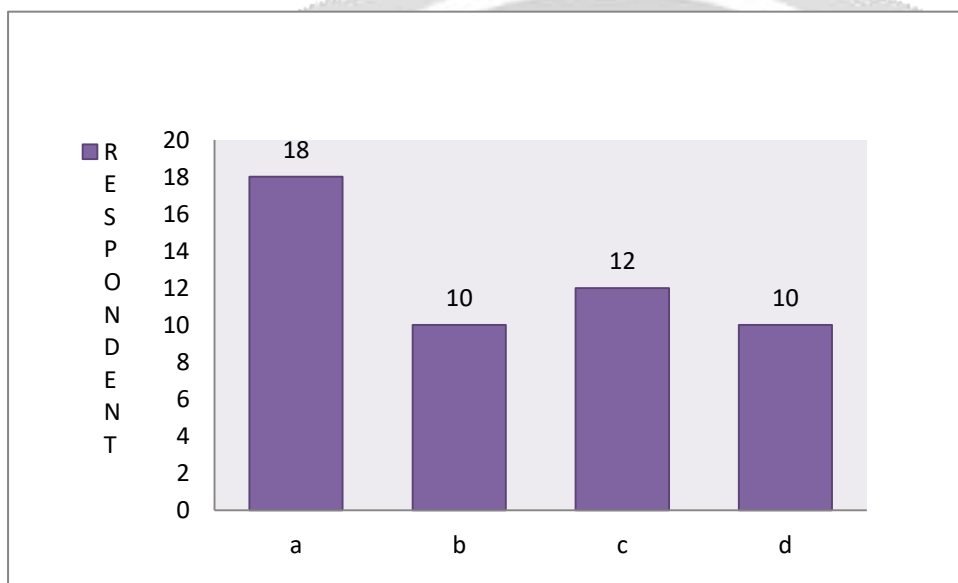


INTERPETATION:

The result analysis shows that 76% respondent used the service of alternate bank and 24% respondent replied no.

11. What do you feel about overall service quality of your bank?

SNO	PARTICULAR	RESPONDENT	%age
1.	Excellent	18	36%
2.	Very Good	10	20%
3.	Good	12	24%
4.	Average	10	20%

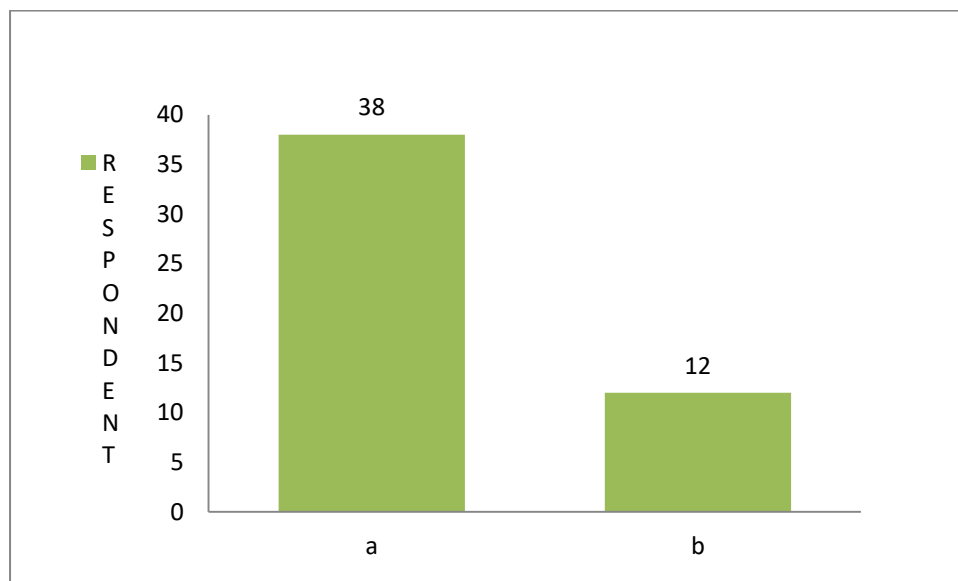


INTERPETATION:

The result analysis shows that 36% respondent says that their bank service quality are Excellent , 24% respondent says Good , 20% says Very Good and rest of 20% says Average. It conclude that the service provided by the bank is excellently satisfied to their respective customers.

12. Did you face any trouble during the use of online payment mode?

SNO	PARTICULAR	RESPONDENT	%age
1.	Yes	38	76%
2.	No	12	24%

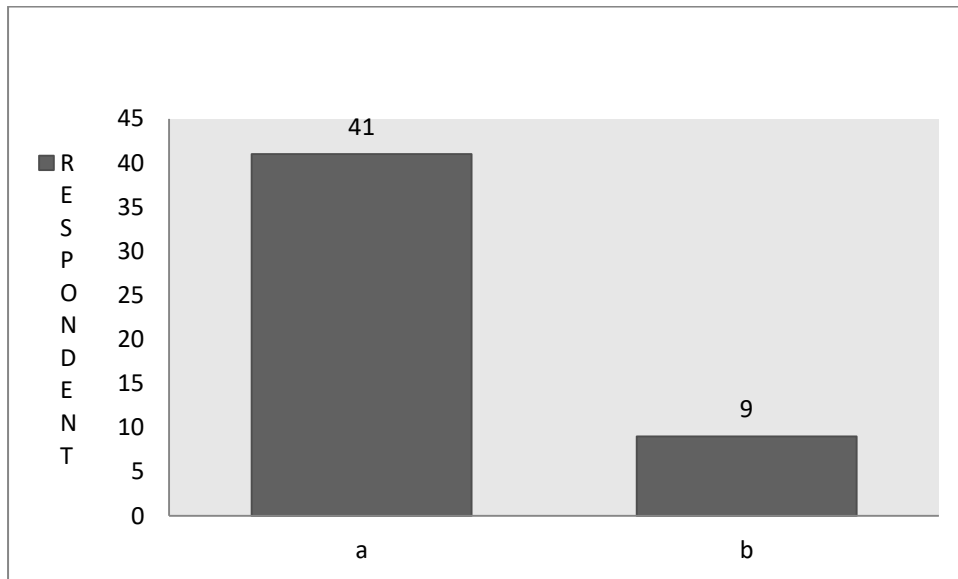


INTERPETATION:

The result analysis shows that 76% respondent face the problem during Online Payment services and the 24% respondent says that they didn't face the problem. It concluded that most of the customer face the trouble during used of online payment system due to the advance technology.

13. Would you recommend this bank online payment service to your friend's relatives associates?

SNO	PARTICULAR	RESPONDENT	%age
1.	Yes	41	82%
2.	No	9	18%



INTERPETATION:

The result analysis shows that 82% respondent refer to open account in their bank due to their service to other and rest of 18% respondent says not to refer their bank to other.

FINDINGS OF THE STUDY

- Most of the respondents are having Saving A/CS.
- Most of the respondents are satisfied with the service offered by their Bank.
- Majority of the customers rates good, very good and excellent because of the customer service offered by the bank
- People are now looking forward for better customer service in addition to the brand name in which they are investing and the returns they are getting. That reason can be increasing customer satisfaction and quality services offered by the bank.

- Most of the respondents who lies under the age of 21-30 are using E-banking services as near about 40 respondents are using these services because under the age of these respondents they are having more knowledge about the services of e-banking
- Most of respondent are business man are using E-banking services as near about 48 respondents are using E-banking services. Because the benefits which are having while using these services more benefited by the business man people so they are availing these services more than the other respondents.
- Among the overall percentage of the customers whose having their account in the bank which we have conducted in our survey should be the 76% and they are using the services of single bank.
- The overall percentage of businessmen having complete knowledge about E-banking services provided by the bank while opening an account by a common people have no awareness of e-banking services.
- Online Payment services provided in terms of ATMs, Debits Cards, Credits Cards, Phone Banking, Mobile Banking, Internet Banking etc, of which the first six have been covered. Amongst these Debits Card scores the largest used services status (38%), Net Banking (24%), Phone Banking (20 %).
- A study of factors , influencing the usage was made by listing out various factors such as all time availability ,ease of use, nearness etc., and amongst the various factors status symbol is ranked as the major motivating factor ,followed by all time availability , friends ,ease of use and direct access in decreasing order of importance. Quite interestingly, security symbol scored the least motivating factors.
- When asked to list various benefits accruing from the usage of e-banking, time saving. The other benefits accruing to the people include ready availability of funds removal of middlemen and no rude customer relation executives.
- Among the users, various problems that are encountered while using e-banking services. Firstly they highly considered difficulty is claiming false transactions are the objectives were surveying.

CONCLUSION

This study attempt to identify key quality attributes of internet banking services (ONLINE PAYMENT SERVICES) by analyzing internet banking customer and their comments on banking experience. The finding of this study shows that despite of many advantages of online banking. The findings of this study show that despite of many advantages of online banking. People still consider it as an alternative for analyzing their banking records. Although every bank today provide the facility of online banking but most of the people use it only once a month. This reason is that in case of internet banking interpersonal interaction with customer is seldom possible. Identification and measurement of customer's experience of the internet banking services provide a frame of reference and their related quality dimension. The main factors which persuade people to use online banking are comported & convenience and the facility which attracts them most is quality and quantity of information. Therefore the implementation of quality initiative should being with defining customer's need and preference and their related quality dimension. There is still a lot needed for the banking system to make reforms and train their customers for using internet for their banking account. Going through the survey the main problem lies that still customer have a fear of hacking of accounts and thus do not on for internet banking. Banks are trying their level best by providing the best security options to the customer from opening an internet bank account.

Bank are providing free internet banking services also so that the customer can be attracted. By asking the bank employ we came to know that maximum numbers of internet bank account holders are youth and business man. E-Banking is an innovative tool that is fast becoming a necessity it is a successful strategic we upon for banks to remain profitable in a volatile and competitive marketplace of today. If proper training should be given to customer by the bank employs to open an account will be beneficial secondly the website should be made friendlier from where the first time customers can directly make and access their account.

It helped me in studying satisfaction about services and products offered to consumers.

Since the opening up of the banking sector, private banks are in the fray each one trying to cover more market share than the other.

I am sure the bank will find my findings relevant and I sincerely hope it uses my suggestion se n listed, which I hope will take them miles ahead of competition.

In short, I would like to say that the very act of the concerned management at OBC in giving me the job of critically examining consumer satisfaction towards financial products and services of the company is a step in their continual mission of making all round improvements as a means of progress .

LIMITATIONS OF STUDY

- As a research is based on a sample, therefore, the finding may not reveal the factual information about the research problem, though an utmost care will be taken to select a truly representative sample.
- There may be some bias in the responses of the respondents which cannot be ruled out fully.
- Sudden change in the e- banking practices during the course of research can affect the results.
- The study is limited to areas of Meerut only.
- The sample size of only 50 was taken from the large population for the purpose of study, so there can be difference between results of sample from total population.
- People were reluctant to go in to details because of their busy schedules.
- Merely asking questions and recording answer may not always elicit the actual information sought.



SUGGESTIONS & RECOMMENDATIONS

- As per the customer, the few of banks have a complicated process to use the online payment system, so that banks need some changes to make their online payment service in the financial market, banks should adopt better strategies to attract more customers.
- Return on investment company reputation and premium outflow are the most preferred attributes that are expected by the respondents. Hence greater focus should be given to these attributes
- Internet banking facility must be made available in all branches of bank.
- Prompt dealing with permanent customer and speedy transaction without harassing the customers.
- Fair dealing with the customer. The staff should be cooperative, friendly and must be capable of understanding the problems of the customers.
- Give proper training to customer for using Online payment system or E- Banking.
- Create a trust in mind of customer towards security of their accounts.
- Provide a platform where the customers can access different account at single time without extra charge.

BIBLIOGRAPHY

- a. Chellappa, R., and Pavlou, P. Perceived information security, financial liability and consumer trust in electronic commerce transactions. *Logistics Information Management*, 15, 5, 2002, 358–368.
- b. Hsieh, C. E-commerce payment systems: critical issues and management strategies. *Human Systems Management*, 20, 2001, 131–138.
- c. Peha, J. M., and Khamitov, I. M. PayCash: a secure efficient internet payment system. *Electronic Commerce Research and Applications*, 3, 2004, 381–388.
- d. Guan, S., and Hua, F. A multi-agent architecture for electronic payment. *International Journal of Information Technology and Decision Making*, 2, 3, 2003, 497–522.
- e. Mukherjee, A., and Nath, P. A model of trust in online relationship banking. *International Journal of Bank Marketing*, 21, 1, 2003, 5–15.
- f. Linck, K., Pousttchi, K., Wiedemann, D. G. Security issues in mobile payment from the customer viewpoint. In *Proceedings of the 14th European Conference on Information Systems (ECIS 2006)*, Goteborg, Schweden, 2006, 1–11.
- g. Kousaridas, A., Parissis, G., and Apostolopoulos, T. An open financial services architecture based on the use of intelligent mobile devices. *Electronic Commerce Research and Applications*, 7, 2008, 232–246.
- h. Chou, Y., Lee, C., and Chung, J. Understanding M-commerce payment systems through the analytic hierarchy process. *Journal of Business Research*, 57, 2004, 1423–1430.
- i. Stroborn, K., Heitmann, A., Leibold, K., and Frank, G. Internet payments in Germany: a classificatory framework and empirical evidence. *Journal of Business Research*, 57, 2004, 1431–1437.
- j. Tsiakis, T., Sthephanides, G. The concept of security and trust in electronic payments. *Computers and Security*, 24, 2005, 10–15.