A STUDY ON ADOPTION AND PREFERENCE OF INTERNET BANKING AMONG URBAN AND RURAL CUSTOMERS WITH SPECIAL REFERENCE TO THRISSUR DISTRICT

by

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MAJOR PROJECT REPORT

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DECLARATION

DECLARATION

I, hereby declare that this project report entitled **"A STUDY ON ADOPTION AND PREFERENCE OF INTERNET BANKING AMONG URBAN AND RURAL CUSTOMERS WITH SPECIAL REFERENCE TO THRISSUR DISTRICT."** is a bonafide record of research work done by me during the course of project work and that it has not previously formed the basis for the award to us for any degree/diploma, associateship, fellowship or other similar title of any other University or society.

Vellanikkara

Aiswarya P Suresh

(2016-31-014)

CERTIFICATE

CERTIFICATE

Certified that this project report entitled **"A STUDY ON ADOPTION AND PREFERENCE OF INTERNET BANKING AMONG URBAN AND RURAL CUSTOMERS WITH SPECIAL REFERENCE TO THRISSUR DISTRICT"** is a record of project work done independently by Ms. Aiswarya P Suresh under my guidance and supervision and that it has not previously formed the basis for the award of any degree, fellowship or associateship or other similar title to them.

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Aiswarya P Suresh

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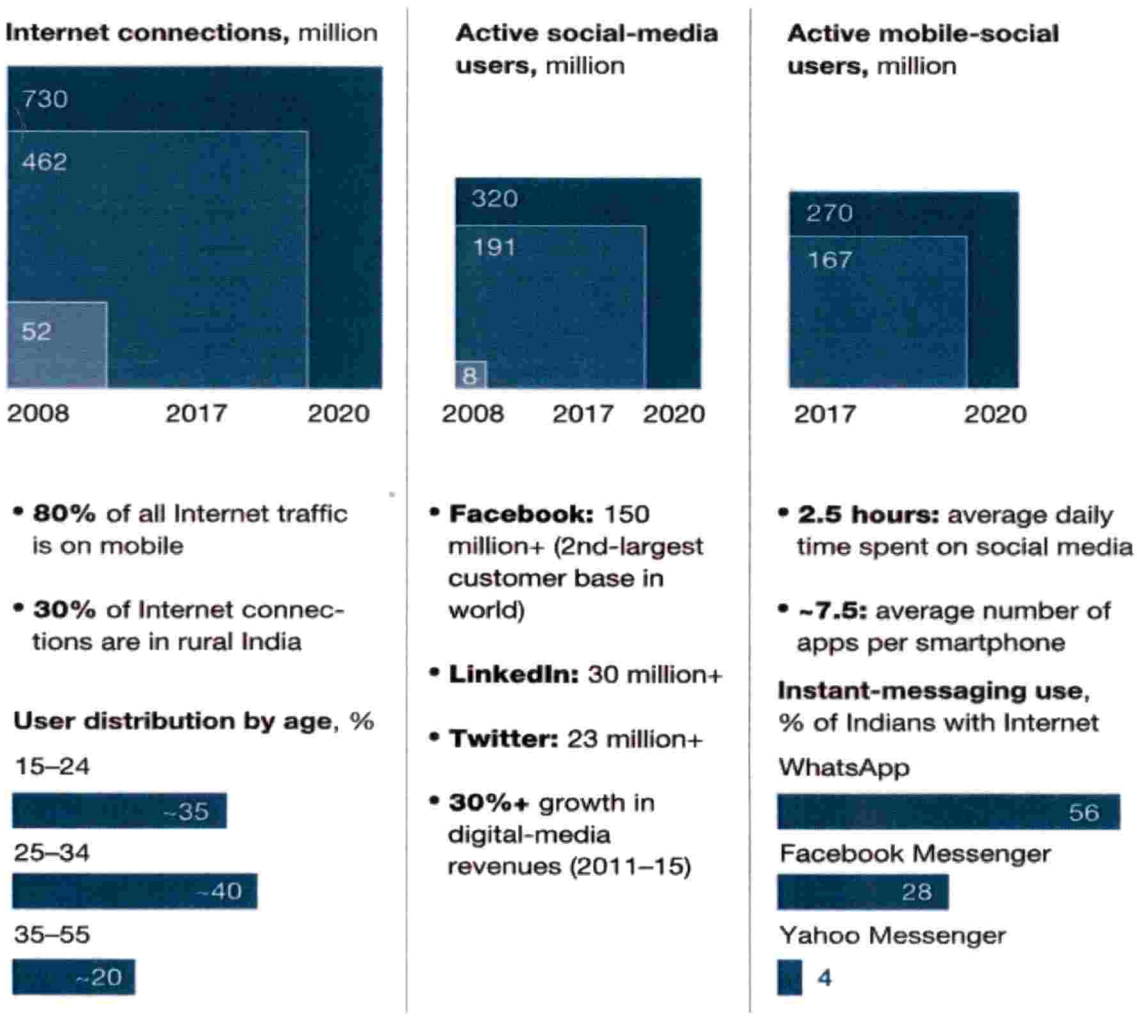
DESIGN OF THE STUDY

1.1 INTRODUCTION

Technology has revolutionised the whole world in all perspective. The new inventions are the powerful tools for the social progress. Growth and development of a society depends on the efficient management of technology. The beginning of the E-Commerce age has been the turning point for business environment, which helped them to breakout innovative and unconventional ways for doing business. Internet banking is one of the most important inventions that have changed the banking system all over the world. The story of technology in banking started with the use of punched card machines like Accounting Machines or Ledger Posting Machines. The use of technology, at that time, was limited to keeping books of the bank. It further developed with the birth of online real time system and vast improvement in telecommunications during late 1970's and 1980's resulting in a revolution in the field of banking with "convenience banking" as a buzzword. Through Convenience banking, the bank is carried to the doorstep of the customer. The1990's saw the birth of distributed computing technologies and Relational Data Base Management System. The banking industry was simply waiting for these technologies. Now with distribution technologies, one could configure dedicated machines called front-end machines for customer service and risk control while communication in the batch mode without hindering the response time on the front-end machine.

During the post distributed computing technology period, intense competition in banking sector has forced them to rethink the way they operated their business. They had to reinvent and improve their products and services to make them more beneficial and cost effective. Technology in the form of internet banking has made it possible to find alternate banking practices at lower costs. More and more people are using electronic banking products and services because large section of the banks future customer base will be made up of computer literate customer, the banks must be

able to offer these customer products and services that allow them to do their banking by electronic means. If they fail to do this, they will simply not survive. New products and services are emerging that are set to change the way we look at money and the monetary system. Moreover, Karin and Elham stated that the internet banking represents a means of revolutionize and modernise the formal traditional banking environment. Given the rising mobile-phone usage in the country, internet banking has a great potential for enabling financial services to the unbanked and underbanked, particularly in rural areas. Internet banking became widespread in the banking industry not only because it is an innovative approach to customers but also from a bank's perspective, Internet banking can reduce costs, increase the speed of service, expand the market, and improve overall customer service.



Source: Internet and Mobile Association of India (IAMAI) and IMRB International; We Are Social; Statista; McKinsey analysis

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It is believed that, in the future, Internet Banking will recede in importance as a strategic application to become a competitive necessity that must be adopted by most if not all banking and financial institutions. The expansion and upward mobility of the middle class also have transformed retail banking in India over the past decade. The new customers, who represent the opening up of the banking marketplace, are more likely than yesterdays to be attracted by one or another emerging value proposition. Most of them are rapid technology adopters, whose use of the Internet and mobile phones is growing.The declining cost of Internet access has promoted the enactment of digital technologies.The digital demand has shot up in consequence exponential growth in the number of users and Internet use. More consumers rely on the Internet and mobile phones to meet their banking needs.

The regulatory push by the government and the RBI over the past few years is also promoting more competition and the development of digital business models. It enabled the foreign players to enter the market since they can now set up wholly owned subsidiaries in the country. And this means that they can operate much as Indian-owned banks do, without restrictions on their branch footprints or their efforts to raise domestic capital. Meanwhile, the India government s initiative called the Jan Dhan (People's Money) program, has helped millions of previously unbanked customers to promote financial inclusion. About 280 million such accounts have been set up as of March 2017, allowing users to receive government subsidies and to access remittances, credit, insurance, and so on. Low-cost Indian platforms have started to promote digital payments for example, RuPay, a cheaper, domestic alternative to international credit or debit-card gateways such as MasterCard and Visa; the Unified Payment Interface (UPI), a system to facilitate the transfer of funds between bank accounts on the mobile platform; and the Bharat Interface for Money (BHIM), a mobile app based on UPI.

These developments give economic players opportunities to build innovative business models serving millions of new consumers. The new players, free of legacy issues and with much lower infrastructure costs have an advantage in reaching and serving customers. In addition, disruptions, both in technology and policy, could help

new banks create value and increase their efficiency. The banks in India has identified this opportunity and has formulated a number of initiatives to target the internet banking services at the rural population. In this study aims to offer helpful and valuable information of the existing market for internet banking in Thrissur district and the factors determining it, this includes demographic factors and social influences towards internet banking.

1.2. STATEMENT OF PROBLEM

The banks use technology and telecommunication as the backbone to reach out to the customers across different geographies. Banking services have undergone profound changes during the past decades.In order to improve the quality of customer service delivery and reduce transaction cost, banks have invested to a great extent in ICT for delivering a wide range of banking products and services. Banks all over the world have embraced innovative internet banking technologies in recent years. Although internet banking offers many advantages to both individual and corporate clientele, undoubtedly internet banking is not without certain challenges and issues in terms of security and interest of customers.

From the consumers' perspectives, Internet banking can lower services fees, and allow customers to manage their finances more conveniently, anytime and anywhere. However, despite the efforts of the banking sector, numerous consumers are still not using Internet banking services. This research investigates the factors that affect consumers' adoption of Internet banking services among urban and rural customers in Thrissur district.

1.3 OBJECTIVES

1. To identify the relation between demographic factors like age, gender, occupation, education, income and choice of internet banking among customers.
2. To identify the factors determining the choice of internet banking among rural and urban customers.

1.4. METHODOLOGY

1.4.1 Area of the study

The present study has selected Thrissur district because it is a major financial and commercial hub of Kerala wherein the technological adoption rate among consumers is considered to be high.

1.4.2 Period of the study

The present study was conducted from September 2018 to October 2018.

1.4.3 Sampling design

- The sample respondents were chosen at random using convenience sampling method covering different demographic variables such as gender, age, educational qualification, marital status, area of residence, monthly income, etc.
- A sample size of 60 customers from both rural and urban was selected.

1.4.4 Parameters of study

- Demographic conditions of the customers.
- Bank familiarity
- Security
- Convenience
- Awareness of services
- Service offered by banks and utilised by customers
- Adoption of services

1.4.5 Method of data collection:

For evaluating the specific objective designed for the study ,primary data and secondary data were collected.

1.4.5.1 Tools for data collection

- The primary data was collected from the consumers through a structured interview schedule.
- The secondary data was collected from journals, research articles, reports, journals, magazines, books and websites

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Primary data

- Primary data were collected through customer surveys to recognise the preferences of customers in online banking.

Secondary data

- Secondary data were collected from various books, journal and publications.

1.4.6 Data analysis

The collected data were analyzed using the statistical software Google Sheets and SPSS by using;

- Percentage analysis
- Ranking
- Satisfaction Index method
- Chi-Square Test

1.5 SCOPE OF THE STUDY

This study identifies the desired levels of acceptances of internet banking services by various customer groups. The main implication of the study is to enable banks to look at the present level of digital services offered and their impact on the awareness and usage level of the internet banking by the rural and urban customers. The study will also provide insights for banks to revisit their digital strategies and take suitable initiatives for better awareness and regular usage of those internet services which will ultimately reduce the service costs of the banks. This will also help the banks for fine tuning the banking activities for better customer reach.

1.6 LIMITATIONS

- The area of study is limited only in Thrissur district.
- The study focused only on Individual banking customers. The corporate banking customers were not considered as such the conclusions drawn can be generalized but not exhaustive.

- Internet banking services were still in the inceptive stages among the customers, they are unaware of the services provided through internet banking.

1.7 CHAPTERISATION

The first chapter deals about the introduction, statement of the problem, objective, methodology, scope and limitations of the study. The second chapter explains review of related literature. The third chapter deals with Internet Banking System. The fourth with data analysis and interpretation and the fifth chapter deals with summary of findings, suggestions and conclusion.

Chapter II

REVIEW OF LITERATURE

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REVIEW OF LITERATURE

2.1 INTRODUCTION

E-banking on the whole has revolutionized the banking industry across the globe. In India there is still a lack of users for internet as a medium for banking purpose, banks are therefore upgrading and bringing many electronic banking medium for customers so that online banking can be made more convenient. In Kerala many studies have not been conducted on the current status of E-banking.

Joseph et al. (1999) evaluated the impact of electronic banking on the service delivery by the banks to its customers. Researchers reviewed that when customers were in direct contact with the technology (such as internet banking), they can exercise better control, whereas when there was absence of direct contact (such as telephone banking), lesser control was perceived. A sample of 440 electronic banking customers was taken, and 300 usable questionnaires were analyzed. Six factors model was used to adequately represent the data, and the factors chosen were convenience, accuracy, efficiency, queue management, accessibility and customization. The study examined customer's perception for electronic banking services, attributes of electronic banking services and consumer perception of e-banking. The study suggested that banks should provide statements of all transactions; customers should be provided toll free numbers; and banks should also develop electronic banking facilities to meet the needs of elderly and disabled people.

Shetty V.P. (2000) technology is dramatically altering the ways in which financial services are delivered to consumers and continue to do so in future too. Electronic banking or the use of computers and electronic technology as a substitute for traditional paper based transactions, is here to stay.

Akhil Sahai, Vijay Machiraju, (2001) the World Wide Web has unleashed people's imagination and a plethora of new technologies have emerged. Since these technologies have sprung up to address different requirement, it has become imperative to understand how these different technologies fit together. This paper presents the state of the art of these different technologies and tries to present a coherent vision of their inter-operation. In the current scenario Indian customers are moving towards internet banking, slowly but steadily. Most of the big Indian banks like SBI, BOB and BOI etc., have stated providing internet banking services. In contrast to traditional banking, internet banking involves non-human interactions between customers and online bank information system.

Jun and Cai (2001) identified one of the very important service quality dimensions of Internet banking service quality is reliability. The online banking environment has grown tremendously over the past several years and will continue to grow as financial institutions continue to strive to allow customers to complete money transfers, pay bills, and access critical information online. During this same time, online banking has been plagued by Internet criminals and fraudsters attempting to steal customer information. Phishing, pharming, and other types of attacks have become well known and are widely used as a means for fraudsters to obtain information from customers and access online banking accounts.

Shastri (2001) analyzed the effect and challenges of new technology for banks. Technology has brought a sea change in the functioning of banks. The earlier manual system of preparation of vouchers is slowly being automated thereby saving a lot of time and effort. The use of automated teller machines (ATMs) and introduction of IT are more than in the past.

Chellappa (2002) argue that not all but most transactions are conducted through Web browsers that connect to merchant sites. According to them, consumer perceptions of

security are developed through visibly sufficient mechanisms that are carried out through the processes of encryption, protection, verification and authentication. The mechanisms of encryption, digital authentication, protection, and verification of on-line identity influence the Internet customers' perception on information security and increase the likelihood of consumer confidence and trust.

Singh and Singh (2002) described that technology has provided customers new ways of delivering the products. Banks began to look e-banking as a mean to replace traditional banking. E-banking products and services like ATM, EFT were a source of differentiation for all the banks. The researchers analyzed the revised technology adoption life cycle model. Customers were divided into five categories that are innovators, visionaries, pragmatists, conservatives and sceptics and application of technology and marketing of banking services was done on that basis. The authors explained that the banks required a dynamic strategic technique for adoption of innovative technology. As customers became more sophisticated, it becomes imperative for the banks to consider the use of technology to respond to the continuous changing requirement.

Aggarwal (2003) in his paper looked for such avenues where E-banking could play a significant role in E-democracy. The author discussed two case studies on the implementation of e-banking in digital democracy. One was farmer service and other was e-seva. While applying e-banking in e-democracy, services become more secure, efficient, transparent and fast. It becomes a win-win situation for all, for banks its low cost, for government its better service, for business it is fast and secure, and for citizens it is transparent and efficient. The author evaluated that E-banking could be used for successful online bill payment, online brokerage, online account management, anywhere banking, etc. The author concluded that e-banking services provide one stop service and informational unit that provides great benefits to banks, customers, employers and government.

Bauer et al. (2005) in their study validated a measurement model for the construction of website portals quality based on three dimensions that were core services, additional services and problem solving services. These dimensions were major determinants of consumer quality perception for e-banking services. However, security, trustworthiness represented the basic demands of portal users. E-banking web-portal represented a bundle of services and functions. It could not be described as a one dimensional customer rating. In fact, it was represented by multi-dimensional and multi-factor construct. The author concluded that by comparing e-service quality model with traditional service quality model, more detailed insights in the field of quality perception were required in order to have detailed vision about quality.

Walfried M. Lassar, Chris Manolis, Sharon S. Lassar, (2005) explored the relationship between consumer innovativeness and self-efficiency on the internet, online banking adoption and electronic commerce. To understand the relationship, they used technology adoption model (TAM) which suggested that use of technology based system totally depends upon the consumers feeling and attitude towards it. The findings of the study suggested that level of consumers' innovations matters when it comes to adapting and utilizing e-banking products and procedures. The results showed that products like telephone banking, EFT, online banking required active consumer role in using the product, while in bill payment, consumer needs only set up process initially and then monitor on a semi-regular basis. The author concluded that banks offering e-banking need to recognize the importance of consumer innovation characteristics so that consumer can be well benefited.

Flavian et al. (2006) explored how customers' perception of traditional bank influences their decision to adopt the services of the internet. The researchers found that if the customer trusts in brick and mortar bank then it was possible that they feel more motivated to use the online services offered by the same bank due to trustworthiness of the customer in the traditional banking system. The results of the study suggested

that to use internet banking; trust, income, age, sex, education and employment were the most affecting factors for the use of online banking services and the banks can reduce their costs and widen their market through online banking adoption.

Jain and Hundal (2006) described the importance of mobile banking and barriers in the adoption of mobile banking. The paper examined the forces that can act as barriers in mobile banking service adoption. The objective of the study was to find the reasons why the people had not fully accepted the technology though it provided much advantage to the banking customers as compared to previous technologies. The paper attempted to identify the various barriers, viz. access problems, dissatisfaction and inability of service providers in the adoption of mobile banking services. The results of the study indicated that consumers got disheartened by the complicated function while accessing the mobile banking services which lead to rise in their dissatisfaction level, as no proper guidance was provided to them. The researchers suggested that service providers should be aware of the problems of their customers. The findings of the study gave a brief outlook for the practical implication for managers and policy- makers who have to make strategies and decisions in order to cater the unexplored service market.

Malhotra and Singh (2006) analyzed the implications of internet banking for the Indian banking industry. The Study describes the current state of internet banking in India and discusses its implications for the Indian banking industry. Particularly, it seeks to examine the impact of Internet banking on banks' performance and risk. Empirical analysis has been done for a panel of 88 banks for the period 1998-2005 to see the impact of internet on bank's performance. The data set comes from the publicly available data source on bank's financial statements and income-expense reports sent to the regulators and Banking Associations. Using information drawn from the survey of scheduled commercial bank's websites, the results show that nearly 57 percent of the Indian commercial banks are providing transactional internet banking services. The

univariate analysis indicates that internet banks are larger banks and have better operating efficiency ratios and profitability as compared to non-internet banks. Internet banks rely more heavily on core deposits for funding than non-internet banks do. However, the multiple regression results reveal that the profitability and offering of internet banking does not have any significant association, on the other hand, internet banking has a significant and negative association with risk profile of the banks.

V. Leeladhar (2006) Deputy Governor, RBI has described technology as a key driver in the banking industry, the infusion of which has led to new business models and processes. This has revolutionized the provisioning of banking services through introduction of new distribution channels. Banks which have not made enough investments in technology are at peril as they will soon find their customer base eroding. Those banks, which have invested in technology, have gained great mileage through improved competitive advantage and are potentially poised to attract increased market share. Technology adoption has also improved the quality of risk management systems in banks. In India at present considerable divergence exists in the adoption and usage of technology by banks for internal operations as well as for customer interface.

Manoharan (2007) highlighted the e-payment system in India and its performance impact on Indian banking sector. The author described that competition in banking industry had forced the banks to rethink the way they operate their business. So, e-banking has made it possible to find alternate banking practices. In the paper, the author divided the payment system in India into three parts, i.e., large value payment system, retail payment system, and retail electronic system. Each one includes different categories of e-payment. The author studied the performance of various Indian payments systems in the last three years in which RTGS emerged as the principal payment system in India for wholesale payment. The study focused that having a huge opportunity of e-payment system in India still 90 per cent of transactions were

cash based. So, an effort should be made to increase the use of e-payment, and RBI should make efforts to strengthen the legal framework of electronic banking system.

Malhotra and Singh (2007) carried out a study to find the I-banking adoption by the banks in India. The study suggests that larger banks or banks with younger age, private ownership and lower branch intensity possess high probability of adoption of this new technology. Banks with lower market share also perceive I-banking technology as a means to increase the market share by attracting more and more customers through this new channel of delivery.

Laukkanen,Sinkkonen & Laukkanen, (2008) study on ,**"Segmenting bank customers by resistance to mobile banking"**,highlighted about the role of self efficacy in bank customers risk perceptions towards the internet banking .Further , it demonstrated that psychological barriers are even higher determinants of the resistance than the usage and value , which are constructs related to ease of use and to the usefulness determining the acceptance .The research methodology included Analysis of Variance as a tool to analyze the statistical differences .Measurement development was faced based upon the Consumer resistance theory.

Dr. Ceylan Onay, Bogazici University, Dr. Emre Ozsoz, Dr. Aslı Deniz Helvacıoğlu (2008) "The impact of Internet-Banking on Bank Profitability-The Case of Turkey" The study implies that internet has changed the dimensions of competition in the retail banking sector by adding a new distribution channel to retail banking. It has also provided opportunities for emerging countries to build up their financial intermediation infrastructure through the leapfrogging effect as recent literature has argued. The study analyzed the effects of online banking activities on the performance of the banking sector in Turkey, an emerging market and a candidate for membership to the EU. The results provide some evidence that investment in e-banking is a gradual process. The internet banking variable has had a positive effect on the performance of

the banking system in Turkey in terms of returns to equity only with a lag of two years.

Raja et al. (2008) evaluated the impact of e-payment system on the business opportunities. They identified that due to the growth of internet users, various electronic payment mechanisms had been developed to cater the diversity of applicants. The researchers classified the e-payments into three main groups, namely, cash like systems, check like systems, and hybrid systems which were further classified into credit cards, debit cards and electronic cheques. They identified three main issues related to e-payment that were security issues, low interest among businessmen, and heavy reliance on traditional payment methods. They also analyzed that there were technical and cultural problems which hinder the path of e-payments. However, to make e-payments more effective, security threats should be reduced; and people should be realized that traditional payment methods were more time consuming than electronic payment methods. They should also be realized that plastic card payments were more convenient, easier and more secure than cash or cheques.

Uppal & Chawla, (2009) study about "E-Delivery Channel-Based Banking Services: An Empirical Study customer perceptions about e-banking services"highlighted about the customer perceptions about e-banking services in India.The research methodology included survey of 1200 respondents in Ludhiana and respondents included public , private and foreign bank sector .The present study investigated the customer perceptions regarding the necessity of e-banking services , bank frauds , future of e-banking , preferences of banking customers regarding banks , comparative study of banking services in various groups of banks, preferences regarding the use of e-channels and the problems faced by e-banking customers .The study depicted that customers of all bank groups are interested in e-banking services but at the same they face problems like inadequate knowledge , poor knowledge , lack of infrastructure and difficulty they face in opening an account .The paper thus framed suitable strate-

gies like customer education ,seminars, proper meetings , proper installation of ATM machines ,proper networking and infrastructure facilities etc

Malhotra, P & Singh, B, (2009) the financial products and services have become available over the Internet and technology, which has thus become an important distribution channel for a number of banks. Banks boost technology investment spending strongly to address revenue, cost and competitiveness concerns. The purpose of present study is to analyze such effects of IB and its' impact on the credit cards in India, where no rigorous attempts have been undertaken to understand this aspect of the banking business.

K. Saikrishna (2009) this article discusses the innovations in information technology being used in the Indian banking system. The advent of technology in banking has widened the scope for entry in the new markets and has helped the banks to develop innovative products, services and effective delivery channels. This article is also portraying the advanced use of credit cards for the financial transactions of the individual which is an innovative Information technology that is being used in the Indian Banking System.

R.K.Uppal (2010) in present day banking, total automation of banking operations is an imperative need for all banks to attract more customers, provide efficient services, and survive in the emerging new competition, apart from the profit motive which is the primary objective of the business. In order to achieve these goals of business, various channels have been developed through technology. 'Mobile Banking' is one of the best alternative channels available to customers for quick, correct and efficient service at anytime and anywhere. The present paper is devoted to explore the extent of Mobile banking in Indian banking industry where cell phone users are increasing at unexpected rate. Time period taken for study is 2000 - 2001 to 2006 - 2007 because this period is the eye-witness of infant condition of IT and during the same period IT

became mature. Simple statistical tools like average, standard deviation, coefficient of variation were used to calculate the efficiency of various bank groups providing the service of M-banking. On the basis of analysis, the paper concludes that the private sector banks are on the top in providing the M-banking services to their customers and have high profitability as compared to other bank groups under study except foreign banks. The paper also highlights the benefits of M-banking to customers as well as to bankers and suggests some strategies with their possible solutions like to spread awareness regarding M-banking and to increase its area and scope to enhance M-banking services in India, particularly in rural and semi-urban areas.

Sourabh Sharma & K.S.Thakur, (2010) paper is a survey of public and private sector bank customers' responses toward computerization of banking services. The objective of this paper is to measure the customers' awareness, perception, and the level of satisfaction with regard to Virtual Banking Services offered by the Indian public and private sector banks in the city of Jaipur. This survey declares that in comparison, private sector bank customers are satisfied with regard to ATM, I-Banking and IVRS services. However, the study also reveals that public sector banks are preparing to take on private sector banks in this regard.

Pooja Malhotra, Balwinder Singh, (2010) This exploratory study is an attempt to portray the present status of telephone banking in India and the extent of telephone banking services offered by the banks. In addition, it seeks to examine the factors affecting the extent of telephone banking services. The purpose of the study is to help fill significant gaps in knowledge about the telephone banking landscape in India. This paper contributes to the empirical literature on diffusion of financial innovations, particularly telephone banking, in a developing country, like India.

Thamaraiselvan Natarajan, Senthil Balasubramanian, S. Manickavasagam (2010) explain that in the retail banking context, convergence of technologies have

given birth to different channels of distribution like Automatic Teller machines (ATM), internet banking, and mobile banking. This enables the customer to avail the banking services at anytime and anywhere. These technological interfaces are known as self service technologies (SSTs). Customers availing banking services through these SSTs get more benefits in terms of time, cost and energy. Despite these benefits the customer trial, adoption and repeat usage of SSTs vary among banking customers. Although the kinds of service one can avail from these SST are similar, the patronage among the SSTs differs. The SST channel choice could be attributed to various factors viz., Nature of service to be availed or purpose, Perceived risk, Requirements and Benefits. When it comes to predicting customer priority among alternatives, Analytical hierarchy process (AHP) has been proved as an effective technique. This paper explores the factors influencing customer choice of SSTs by employing AHP technique.

Vijay M. Kumbhar (2011) In his research paper "Factors Affecting the Customer satisfaction In E-Banking: Some evidences Form Indian Banks". This study evaluates major factors (i.e. service quality, brand perception and perceived value) affecting on customers' satisfaction in e-banking service settings. This study also evaluates influence of service quality on brand perception, perceived value and satisfaction in e-banking. Required data was collected through customers' survey. For conducting customers' survey likert scale based questionnaire was developed after review of literature and discussions with bank managers as well as experts in customer service and marketing. Collected data was analyzed using principle component (PCA) using SPSS 19.0. A result indicates that, Perceived Value, Brand Perception, Cost Effectiveness ,Easy to Use, Convenience, Problem Handling, Security/Assurance and Responsiveness are important factors in customers satisfaction in e-banking it explains 48.30 percent of variance. Contact Facilities, System Availability, Fulfillment, Efficiency and Compensation are comparatively less important because these dimensions explain 21.70 percent of variance in customers' satisfaction. Security/Assurance, Responsiveness, Easy to Use, Cost Effectiveness and Compensation are predictors of

brand perception in e-banking and Fulfillment, Efficiency, Security/Assurance, Responsiveness, Convenience, Cost Effectiveness, Problem Handling and Compensation are predictors of perceived value in e-banking.

Gupta & Mishra (2012) examined the new emerging trends of E-banking in Indian banking industry. The study found that there are many challenges faced by banks in E-banking and there are many opportunities available with the banks. It concluded that banking sector will need to master a new business model by building management and customer services. It also suggested that banks should contribute intensive efforts to render better services to their customers.

Daneshvar and Ramesh (2012) have analyzed the panel data of two public banks to examine impact of IT investments on profitability and productivity of Indian public sector banks. It uses correlation analysis to measure the strength of inter-relationships between the IT variables (amount of IT investments and number of ATMs) and banks' performance indicators. Further, the study applies multiple regression analysis to evaluate the impact of strategic variables on banks' performances. Regression analysis used four independent variables in terms of 'number of ATMs', 'number of employees', 'number of branches' and 'staff costs as percentage of total expenses' and predicted three dependent variables in terms of 'deposits', 'ROA' and 'profit per employee' as banks' performance variables. The results indicate that investments on IT contributed to increased amount of deposits and return on assets (ROA) as profitability, profit per employees as productivity indicator and decreased the net NPA ratio and staff cost. Finally, the study shows that public banks tried to adopt cost reduction and assets quality strategies to compete in the Indian bank market.

Yong Hoe Hong, Boon Heng Teh, Gowrie Vinayan (2013) "Investigating the Factors Influence Adoption of Internet Banking in Malaysia: Adopters Perspective" purpose of this research was to investigate the factors that influence adopters to take up

the Internet banking services in Malaysia. The sampling units in this survey are the adopters of Internet banking who were using it for at least six months. The results showed that Complexity, Security and customer experience were the influencing factors of Internet banking services. However, Individual Characteristics was found to be partially influencing the adopters in their decision to adopt the Internet banking facilities.

Trivedi & Patel (2013) analyzed the problems faced by customers while using e-banking facilities in India. It observed that most of the customers know about the e-banking services offered by their bank. The study found that there is a significant difference amongst different problems identified while using e-banking services. It also found that some problems affect more and some problems affect less in use of banking services. It concluded that all the reasons are not equally responsible for not using e-banking services.

Haq & Khan (2013) analyzed the challenges and opportunities in the Indian Banking sector. The study showed that only 28 per cent banking clients were using internet banking after evaluating the population characteristics. It found that there was no significant relationship in between age and use of cyber banking. It also depicted that there is no relation in between gender and the adoption of internet banking. It observed that qualification in terms of education and income of the respondents were playing the role in the acceptance of online banking. The study suggested that it is the need of time that financial literacy of the users should be increased through various programs which should be run by banks to increase the awareness of internet banking.

Rakesh H M & Ramya T J (2014) In their research paper titled "A Study on Factors Influencing Consumer Adoption of Internet Banking in India" tried to examine the factors that influence internet banking adoption. Using PLS, a model is successfully proved and it is found that internet banking is influenced by its perceived reliability,

Perceived ease of use and Perceived usefulness. In the marketing process of internet banking services marketing expert should emphasize these benefits its adoption provides and awareness can also be improved to attract consumers' attention to internet banking services.

Y. V. Rao and Srinivasa Rao Budde (2015) In their study titled "Banking Technology Innovations in India: Enhancing Customer Value and Satisfaction" studies the development in information and technology enable banks in value added services to be effective in satisfying customer needs by adopting new innovative solutions in banking services to meet perceived value and expectations. Regardless of their size, profitability and growth demand that banks focus on serving customers at the right time, with the right level of service and at the right cost. Several factors are driving this customer focus. Number one, today's customers expect personalized pricing and portfolio mixes. Banks that can't deliver will suffer reduced profitability. While banks, by default, sell every product to every customer, digital banking allows customization, providing the data and analytics capabilities needed to examine each customer's profitability and offer individualized or segmented products and pricing

J. Sethuraman, C. Vijayabhanu and C. Therasa (2016) In their research paper titled "A Study on Channel Preferences among Urban and Rural Banking Customers" tried to examine the expansion of banking channels from branch to off-site formats have ushered in changes in the banking habits of customers across geographies. The expansion of the channels by banks were mainly intended as experience enhancement tools in addition to migrating the customers and reduce the operational costs through brick and mortar format. But whether the improvements in the channel paradigm have reached the urban, semi urban and rural banking customer is a big question and the study is intended to bring out the channel usage matrix of customers across banks and across geographies and the impact of these channels on the last mile customers having accounts across banks. The results of the study confirmed that whether the channel

offerings by banks are really reaching customers across rural, semi urban and urban bank customers and translate into usage more than the awareness.The implications for banks will be two fold. It will help banks to know the awareness level of their digital channels among their customers. It will also enable them to undertake research on the usage .

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Chapter III

INTERNET BANKING SYSTEM

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3.1 INTRODUCTION

Present financial arena in India is witnessing unforeseeable changes and innovations. Technological advancement and spread of information technology have forced the creation of new markets to meet the growing needs of the economy. It is the age of innovations where supply of products and services is to fulfil the expectations of the customers at lower rate at minimum risks. Demand for newer products and services, has forced the banking industry to solicit new business ideas. Thus internet banking is an unforeseeable improvement in the array of available financial products and processes. The introduction of internet banking encircles wide range of changes in the financial system.

3.2 Internet banking

Internet banking can be defined as the use of electronic delivery channels for banking products and services, and is a subset of electronic finance. The most important electronic delivery channels are the Internet, wireless communication networks, automatic teller machines (ATMs), and telephone banking. Internet banking is a subset of e-banking that is primarily carried out by means of the Internet. Internet banking is a web-based service that enables a bank's customers to access their account. It allows customers to log on to bank's website with the help of a bank issued identification and a personal identification number. The range of products and services offered by each bank differ widely in their content.It also led to the emergence of a new type of banks called "virtual banks" which operate through the internet and do not exist physically.

The most significant benefit of internet banking is the ready accessibility of bank accounts at all times. The inconvenience of visiting and waiting at the banks is also eliminated, which results in, enhanced customers satisfaction, reduced customer

and increased customer base. From the bankers perspective, introduction of internet banking has considerably reduced transaction cost for the banks. Internet banking means any user with a personal computer and a browser can get connected to his banks website to perform any of the virtual banking works. In internet banking system the bank has a centralised database that is web-enabled. All the service that the bank has permitted on the internet are displayed in menu. Any services can be selected and further interaction is dictated by the nature of service. The traditional branch of bank is now giving place to an alternative delivery channels with ATM network. The branch offices of banks are interconnected through terrestrial or satellite links, there would be no physical identity for any branch. It would be a borderless entity permitting anytime, anywhere banking. The network which connects the various locations and gives connectivity to the central office within there are set up. SWIFT is a live example of intranet application.

Around the world, internet or online banking has been available for the last 15 years, anthem proprietary systems are good in their way. But their customers are locked in. Of the open internet based financial services currently available, majority are simple sets of web pages providing customer information along with the account checking facilities. Full internet banks or self-help financial software packages like 'Quicken' can develop and survive. The internet banking will be a part of a range of services offered by the banks to their customers, who will have different financial needs at different stages in their careers, or according to their lifestyle.

3.2.1 Evolution of Internet banking

Banks and financial institutions serve a very large number of clients within a nation or across the world. These institutions provide service through a network of branches and carter to the needs of their customers different areas with personalised service. Traditionally the banks applied "pen and ink" as a tool for recording data in several ledgers, books and registers. Banks depended on newspaper and other media publicity to reach their potential customers whenever any important message to be

conveyed on a mass scale. Manual services were slow and sturdy were customers had to wait in large queues before the counters, extending their services, for their turn to be attended by the bank staff.

Transmission of data from sister branches of the same institutions were done conventionally through manual process. It was costly and time taking where the banks and other institutions had to engage a large number of personnels to carry-out and later to check and re-check the accuracy of the tasks undertaken by them. Despite these steps, errors in calculations and wrong data copied or incorporated went undetected and poses serious problems at the time of reconciliation of the accounts. The advent of technology brought developments in banking sector, the latest service delivery mechanism through internet i.e. e-banking started from the early eighties. In late 1980s, the term online got popularised and it was referred to a banking medium of using a terminal, keyboard and monitor to access the banking system through a phone line. Another term used for this was 'Home Banking' and in it, customers were using a numeric keypad to send tones down a phone line with instructions to the bank. In 1981, e-banking has started in New York with offering home banking service using videotex system by Citi-Bank, Chase Manhattan Bank, Chemical bank and manufacturers Hanover bank. Although due to failure of videotex system, Home Banking was not able to gain popularity except in France and UK.

In 1983, Bank of Scotland provided UK's first home online banking service to the banking customers of Nottingham Building Society. This online banking service was based on Prestel system of UK and used a computer like BBC Micro or keyboard connected to the telephone and television system. This system was called Homelink and it enabled customers to view their bank statements online, online fund transfer and online bill payment. To pay bills or transfer funds, customers need to send a written instruction having details of intended transaction to Nottingham Building Society who set the details upon the Homelink system. The usual recipients of this service were electric company, Gas Company, telephone companies and other banks. The account holder has to provide details of the payment through Prestel into Nottingham Building Society system. Then, a cheque of payment amount has to be send by Not-

tingham Building Society to the payee and an instruction giving details of the payment was sent to the account holder. Later, BACS was used to directly transfer the payment. In Oct. 1994, Stanford Federal Credit Union was the first financial institution that provided internet banking facility to its all members. Today, a number of banks are functioning as internet only banks. These internet only banks do not have a physical bank branches like their predecessors. They differentiate themselves by providing better rate of interest and internet banking facility.

3.3 Internet banking - Indian Scenario

Indian banking sector caught up to the world of technology during the early nineties. The banking sector in India has been dominated by the public sector banks, who hold between them more than 80% of total asset base. The private sector banks mainly concentrated their operations at country's urban areas where they've taken the lead of implementing technology in their operations and have succeeded in building up a substantial base of technology savvy, high-end customers. ICICI bank was the first Indian bank to provide internet banking facility. Citibank and HDFC Bank followed with internet banking services in 1999. Several initiatives have been taken by the Government of India as well as the Reserve Bank to facilitate the development of e-banking in India.

The Government of India enacted the IT Act, 2000 with effect from October 17, 2000 which provided legal recognition to electronic transactions and other means of electronic commerce. The Reserve Bank is monitoring and reviewing the legal and other requirements of e-banking on a continuous basis to ensure that e-banking would develop on sound lines and e-banking related challenges would not pose a threat to financial stability. A high level Committee under chairmanship of Dr. K.C. Chakrabarty and members from IIT, IIM, IDRBT, Banks and the Reserve Bank prepared the "IT Vision Document 2011-17" for the Reserve Bank and banks which provides an indicative road map for enhanced usage of IT in the banking sector. The Reserve Bank

of India constituted a working group on Internet Banking. The group divided internet banking products into three types based on the levels of access granted. They are:

(i) Information Only System: General purpose information like interest rates, branch location, bank products and their features, loans and deposit calculations provided in the banks website. Customers can download various types of application forms through this portal. The communications can be done easily through email. There is no interaction between customer and the bank's application system. No identification of customer is done. In this system, there is no possibility of an illegal person to use the production systems of the bank through the internet.

(ii) Electronic Information Transfer System: The system provides customer specific information in the form of account balances, transaction details, and statements of accounts. Information provided in such system will be in 'read only' format. Customer identification and authentication is done through password. The information is fetched from the bank's application system either in batch-mode or offline mode. In this case, the bank's customers can't obtain the application system, directly using the internet.

(iii) Fully Electronic Transactional System: This system allows bi-directional capabilities. Transactions can be submitted by the customers for online update. This system requires high degree of security and control. In this environment web server and application systems are linked over secured infrastructure. It comprises technology covering computerization, networking and security, inter-bank payment gateway and legal infrastructure.

Following is the products and services offered to the customers through Internet Banking:

- Automated Teller Machines (ATMs)
- Internet Banking

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- Mobile Banking
- Phone Banking
- Telebanking
- Electronic Clearing Services
- Electronic Clearing Cards
- Smart Cards
- Electronic Fund Transfer

3.4 Advantages of Internet Banking

1. **Round the clock banking**

Internet banking facilitates customers to perform basic banking transactions round the clock globally. There is no restricted office.

2. **Convenient banking**

Customers can access the bank's services by simply sitting at their office or at home through personal computers, laptops or through mobile phones.

3. **Low cost banking**

The cost of transactions through internet banking is much less than any other traditional mode. There's also much savings on the cost of infrastructure as the banks can have access to a greater number of customers without the commitment costs of physically opening new branches. Moreover, requirements of staff at the banks can also be reduced to a greater extent.

4. **Speed banking**

The increased speed of responses to customers demands will lead to greater customer satisfaction and handling a large number of transactions at a lesser time. Thus, it increases the customers' convenience to a greater extend and facilitates better customer retention.

5. **Service banking**

Banks can also offer many cash management products like instant cash credit, one day credit, immediate payment of bills, transfer of funds, etc., which is possible only under internet banking.

6. **Quality banking**

Internet banking allows the possibility of improved quality and enlarged range of services being made available to customers.

3.5 Disadvantages of E-Banking

1. Impersonal: Absence of face to face interaction makes it very impersonal. Thus, customers who are more comfortable in dealing with people in physical bank setting that provide those personalised services rather than mechanical interaction; e-banking is not a good option for them.

2. Lack of trust: Still many customers do not trust online mode of service especially for money related transactions. Users who are not seasoned in e- banking feel very uncomfortable as they have doubt regarding the correctness of the transaction done by them online. As they require some kind of proof of transaction as receipt, to verify their transactions.

3. Difficult for first timers: For the beginners, it appears as a complex mode of service as customer find it complicated to navigate through bank's website. While opening an account online, bank's website requires a number of information and that seems time taking and inconvenient process to the first time users.

4. Security fraud: People generally hesitate to have an online bank account due to the security risk involved in it. Although, it is not a big issue for banks providing e-banking services, as they prioritize security. To avoid security risk, banks use the most advanced security system in protecting their websites.

3.6 Benefits of Internet Banking

Following is the benefits received by different stakeholders of our society from internet banking services.

3.6.1 Benefits to Consumers:

General consumers have been significantly affected in a positive manner by internet banking. Many of the ordinary tasks have now been fully automated resulting in greater ease and comfort.

- Customer's account is extremely accesses able with an online account.
- Customer can withdraw cash at any time through ATMs, besides withdrawing cash customers can also have mini banks statements, balance inquiry at these ATMs.
- E banking has also greatly helped in payment of utility bill. Now there is no need to stand in long queues outside banks for his purpose.
- The Growth of credit card usage also owes greatly to E-banking. Now a customer can shop worldwide without any need of carrying paper money with him.
- Banks are available 24 hours a day, seven days a week and they are only a mouse click away.

3.6.2 Benefits to Banking Industry:

Banking industry has also received numerous benefits due to growth of Internet banking infrastructure. There are highlighted below:

- The growth of E-banking has greatly helped the banks in controlling their overheads and operating cost.
- Many repetitive and tedious tasks have now been fully automated resulting in greater efficiency, better time usage and enhanced control.
- The rise of Internet banking has made banks more competitive. It has also led to expansion of the banking industry, opening of new avenues for banking operations. Internet banking has greatly helped the banking industry to reduce paper work, thus helping them to move the paperless environment.
- Internet banking has also helped bank in proper documentation of their records and transactions. The reach and delivery capabilities of computer networks, such

as the Internet, are far better than any branch network.

3.6.3 Benefits to General Economy:

Internet banking served so many benefits not only to the bank itself, but also to the society as a whole. This has resulted in creation of a better enabling environment that supports growth, productivity and prosperity. Internet banking made finance economically possible:

- Lower operational costs of banks
- Automated process
- Accelerated credit decisions
- Lowered minimum loan size to be profitable.
- Potentially lower margins:
  - Lower cost of entry
  - Expanded financing reach
  - Increased transparency.
- Expand reached through self-service:
  - Lower transaction cost
  - Make some corporate services economically feasible for society
  - Make anytime access to accounts and loan information possible

Conclusion

New technologies enabled banks to serve and assist customers not only in branches, but anywhere in the world at any time and through any delivery channel a customer cares to select. With the convenience of digital channels, customers are visiting branches less often and they use online and mobile technology for their banking needs more often. Internet banking has transformed the traditional banking system into a customer friendly system, which helped to strengthen the banking relations in the whole banking industry. Therefore internet banking should be taken as a mandate by the banks, where the banks could cater the banking customers effectively. Based

on the current scenario banking functions are not restricted to the traditional and physical branch banking system, where banking staff's need to be there personally for enabling banking transactions. However there is a strong requirement of customer awareness regarding internet banking services among the customers and it can be served through proper scanning and analysis of the prevailing market.

Through internet banking, customers can access the banking services without even visiting the bank branch, it could be accessed from anywhere at any time anywhere and this is known as "anywhere banking". Providing internet banking is no more considered as an additional feature of a banking institution, but now it is became an essential feature of a bank.

Chapter IV

ANALYSIS OF ADOPTION AND PREFERENCE OF INTERNET BANKING AMONG RURAL AND URBAN CUSTOMERS WITH SPECIAL REFERENCE TO THRISSUR DISTRICT

Chapter IV

Data Analysis

4.1 SOCIO ECONOMIC CONDITIONS OF THE CUSTOMERS

Demographic conditions are an economic and sociological combined total measure of a customers work experience and of his or her family, economic and social position in relation to others, based on income, education, and occupation, etc. Demographic conditions are more commonly used to depict an economic difference in society as a whole.

4.1.1 Gender wise distribution of respondents

Table 4.1.1 The gender wise distribution of the customer

GENDER	NO.OF RESPONDENTS		Total
	Rural	Urban	
MALE	35 (58.33)	27 (45)	62 (51.67)
FEMALE	25 (41.67)	33 (55)	58 (48.33)
TOTAL	60	60	120 (100)

Source: Primary Data

Note: Figures in parenthesis indicate percent to total.

The table 4.1.1 indicates that among the total respondents 51.67% were men and 48.33% of them were women. When the adoption of internet was in its early stages of adoption, men were three times more likely to use and participate in it. Although those gaps have diminished, and women are accessing the internet services to greater extend, however, men are more frequent and intense users of the Internet than women

4.1.2 Age wise distribution of the respondents

Table 4.1.2 Representing the age wise distribution of the respondents

Age	Response Count		Total
	Rural	Urban	
Below 20 Years	9 (15)	5 (8.33)	14 (11.67)
21-30 Years	38 (63.33)	35 (58.33)	73 (60.83)
31-40 Years	11 (18.33)	6 (10)	17 (14.17)
41-50 Years	0 (0)	6 (10)	6 (5)
51 years and above	2 (3.33)	8 (13.33)	10 (8.33)
Total	60	60	120 (100)

Source : Primary Data

Note: Figures in parenthesis indicate percent to total.

Age is an important factor which influences customer behaviour, the respondents have been divided in to above categories. The above table indicates that among the total respondents 11.67% were below 20 years, 60.83% were between 21-30 years, 14.17% were between 31-40 years above 50 years and 8.33% of them were above 51 years. Therefore majority of the respondents were between 21-30 years of age group. It can be inferred that customer's awareness, adoption and preferences do vary according to the age.

4.1.3 Marital status wise distribution of respondents

Table 4.1.3 : The Marital status wise distribution of the customer

Marital Status	No.of Respondents		Total
	Rural	Urban	
Married	16 (26.67)	25 (41.67)	41 (34.17)
Unmarried	44 (73.33)	35 (58.33)	79 (65.83)
Total	60	60	120 (100)

Source: Primary Data

Note: Figures in parenthesis indicate percent to total.

The above table shows that among the total respondents 65.83% were unmarried and 34.17% of them were married. Therefore majority of the respondents were unmarried.

4.1. 4 Educational Qualification of respondents

Table 4.1.4 Educational Qualification of respondents

Qualifications	No.of Respondents		Total
	Rural	Urban	
Undergraduate	7 (11.67)	5 (8.33)	12 (10)
Graduate	15 (25)	21 (35)	36 (30)
Professional	18 (30)	17 (28.33)	35 (29.17)
Post graduate	14 (23.33)	16 (26.67)	30 (25)
Others	6 (10)	1 (1.67)	7 (5.83
Total	60	60	120 (100)

Source : Primary Data

Note: Figures in parenthesis indicate percent to total.

Customer education is also critical to the adoption of internet banking as some customers need to be aware of the benefits of these services and how to use them. Although internet banking provides a fast and convenient way to perform banking transactions, customers are still reluctant to adopt and make use of these online services. Education plays a vital role regarding to the attitude towards technology adaptability and usage. Educated customers are more comfortable in understanding and using technology like the internet or electronic banking than those who are not well educated. From the table 4.1.4 it indicates that among the total respondents all are well edu-

cated; 30% were graduates, 29.17% were professionally qualified and 25% of the respondents were post graduates. Majority of the respondents were Graduates.

4. 1. 5 Occupation wise distribution of respondents

Table 4.1.5 Occupational Status of Respondents

Occupation	No.of Respondents		Total
	Rural	Urban	
Government	9 (15)	10 (16.67)	19 (15.83)
Private	21 (35)	16 (26.67)	37 (30.83)
Business	2 (3.33)	5 (8.33)	7 (5.83)
Self-employment	2 (3.33)	4 (6.67)	6 (5)
Student	19 (31.67)	14 (23.33)	33 (27.50)
Others	7 (11.67)	11 (18.33)	18 (15)
Total	60	60	120 (100)

Source : Primary Data

Note: Figures in parenthesis indicate percent to total.

The table 4.1.5 indicates that 15.83% of the respondents were government employees, 30.83% were employed in private organizations. 27.5% of the respondents were students and 15% of them were from other professions. It can be stated that if customers from private organisations have relatively more opportunity to use computer or Internet in their workplace than others. For example, The customers who are holding managerial, IT professionals, technical and marketing jobs tend to have a better understanding of Internet banking, which has advantages for saving time and cost. Therefore majority of the respondents were employed in Private organizations.

4.1.6 Income wise distribution of respondents

Income wise classification of the customers were given in the table. Income is an important economic variable which determines the economic status of the respondents as well as the standard of living of the people.

Table 4.1.6: Monthly Income of the respondents

Income	No.of Respondents		Total
	Rural	Urban	
Below ₹10000	13 (22)	12 (25)	25 (20.83)
₹10000-₹25000	17 (28)	14 (25)	31 (25.83)
₹25000-₹50000	17 (28)	15 (27)	32 (26.67)
₹50000 Above	2 (3)	11 (18)	13 (10.83)
Nil	11 (18)	8 (13)	19 (15.83)
Total	60	60	120 (100)

Source : Primary Data

Note: Figures in parenthesis indicate percent to total.

The analysis of the above table 4.1.7, does indicate that that the adoption of Internet banking is high among ₹ 10000 – Rs. 25000 (25.8%) and ₹ 25000 - ₹ 50000 (26.7%) , as opposed to other income groups. Income is a popular demographic variable for segmenting markets because income levels influence consumer wants and determine their buying behaviour and it indicates that the use of Internet banking is also found mainly among customers with higher income. The 15.83% of the customers are not earning any income, 20.83% of respondent's monthly income was below ₹ 10000 and only 10.83% of them were earning an income of above ₹. 50000. Therefore majority of the respondents were earning an Income of ₹ 25000 - ₹ 50000 per month.

4.1.7 CHI SQUARE ANALYSIS OF DEMOGRAPHIC FACTORS AND ADOPTION OF INTERNET BANKING

The Chi-Square Test was used in testing the selected variables to determine their significance in this research.

Null Hypothesis (H_0) :-

- There is no significant relationship between Age and Adoption of Internet Banking
- There is no significant relationship between Gender and Adoption of Internet Banking
- There is no significant relationship between Educational qualification and Adoption of Internet Banking
- There is no significant relationship between Occupational status and Adoption of Internet Banking
- There is no significant relationship between Income status and Adoption of Internet Banking

Alternate Hypothesis (H_1)

- There is a significant relationship between Age and Adoption of Internet Banking
- There is a significant relationship between Gender and Adoption of Internet Banking
- There is a significant relationship between Educational qualification and Adoption of Internet Banking
- There is a significant relationship between Occupational status and Adoption of Internet Banking
- There is a significant relationship between Income status and Adoption of Internet Banking

Table 4.1.7 CHI SQUARE ANALYSIS OF DEMOGRAPHIC FACTORS AND Access OF INTERNET BANKING.

Sl no	Variables	Access of internet banking		$\chi 2$	p-value
		Yes	No		
1	**Age**				
	Below 20 Years	3	11	127.917	0.000
	21-30 Years	66	7		
	31-40 Years	10	7		
	41-50 Years	6	0		
	Above 51 Years	10	0		
2	**Gender**				
	Male	52	10	0.133	0.0715
	Female	43	15		
3	**Educational Status**				
	Undergraduate	0	12	30.583	0.000
	Graduate	31	5		
	Professional	33	2		
	Post Graduate	28	2		
	Others	3	4		
4	**Occupational Status**				
	Government	18	1	41.400	0.000
	Private	33	4		
	Business	6	1		
	Self-employment	5	1		
	Students	20	13		

	Others	13	5		
5	Income Status				
	Below ₹10000	19	6	10.833	0.029
	₹10000-₹25000	25	5		
	₹25000-₹50000	30	2		
	₹50000 Above	15	0		
	Nil	8	10		

Source:Primary Data

Analysis of Table 4.1.7 shows the relationship between different demographic factors like age , gender, educational qualification, occupational status, income status of respondents and access of internet banking by the customers. It revealed that the relationship between age and access of internet banking of respondents was high. This implied that there is significant relationship between age and access of internet banking by the respondents. The calculated value of $\chi 2$ (127.917) at $P \leq 0.05$ level, df = 4. The null hypothesis (H_0) "There is no significant relationship between Age and Adoption of Internet Banking", was rejected while the alternative hypothesis (H_1) "There is a significant relationship between Age and Adoption of Internet Banking" was accepted.

The relationship between gender and access of internet banking of respondents in the Clusters was low. This implied that there is no significant relationship between gender and access of internet banking by the respondents. The calculated value of $\chi 2$ (0.133) at $P \geq 0.05$ level, df = 1. The null hypothesis (H_0) "There is no significant relationship between Gender and Adoption of Internet Banking", thus, is accepted while the alternative hypothesis (H_1) "There is a significant relationship between Gender and Adoption of Internet Banking" was rejected.

Incase of Educational qualification and Adoption of Internet Banking, there is a significant relationship between both. The calculated value of $\chi 2$ (30.583) at $P \leq 0.05$ level, df = 4. The null hypothesis (H_0) "There is no signifi-

cant relationship between Educational qualification and Adoption of Internet Banking", thus, is rejected while the alternative hypothesis (H_1) "There is a significant relationship between Educational qualification and Adoption of Internet Banking" was accepted.

It revealed that the relationship between occupational status and access of internet banking of respondents was high. This implied that there is significant relationship between occupational status and access of internet banking by the respondents. The calculated value of $\chi 2$ (41.40) at $P \leq 0.05$ level, df = 5. The null hypothesis (H_0) "There is no significant relationship between Occupational status and Adoption of Internet Banking" was rejected while the alternative hypothesis (H_1) "There is a significant relationship between Income status and Adoption of Internet Banking" was accepted.

The analysis shows that there's a significant relationship between income status of the respondents and access of internet banking among the respondents. The calculated value of $\chi 2$ (10.833) at $P \leq 0.05$ level, df = 4. The null hypothesis (H0) "here is no significant relationship between Income status and Adoption of Internet Banking" is rejected and

4.2 ADOPTION AND PREFERENCE OF INTERNET BANKING SERVICES

Internet banking means that banking services such as loan application, account balance inquiry, fund transfer and so forth are provided by a bank through the internet. Internet banking has evolved into a "one step service and information unit" that promises great benefits to both banks and consumers. Internet banking offers also new value to customers. With the help internet, banking is no longer bound to time or geography. Adoption is the acceptance and continued use of a product, service or idea. Here the customers adoption and preference of internet banking is analyzed. From the analysis of the data collected we can understand that in both rural and urban areas most of the respondents are bank account holders.

4.2.1 Type of Bank

Table 4.2.2: Type of banks customer prefer to use.

Type of bank	No.of Respondents		Total
	Rural	Urban	
Public bank	34 (56.67)	33 (55)	67 (55.83)
Private bank	24 (40)	24 (40)	48 (40)
Foreign bank	2 (3.33)	3 (5)	5 (4.17)
Total	60	60	120 (100)

Source : Primary Data

Note: Figures in parenthesis indicate percent to total.

The table 4.2.1 indicates that 55.83% of the respondents held their bank accounts in public sectors banks and 40% in private banks. Even though the private banks are more proactive in their approach towards innovative, swift and accessible services most of the customers prefer the status symbol and overall service features of the banks. Therefore majority of respondents prefer to hold their accounts in public banks. The 4.17% of the respondents had their bank accounts in foreign banks. Therefore majority of the respondents transacted through Public Banks.

4.2.2 Customers Multiple Accounts

Table 4.2.2 Customers having multiple accounts .

Multiple Accounts	No.of Respondents		Total
	Rural	Urban	
Yes	28 (47)	31 (52)	59 (49.17)
No	32 (53)	29 (48)	61 (50.83)
Total	60	60	120 (100)

Source : Primary Data

Note: Figures in parenthesis indicate percent to total.

The table 4.2.2 indicates that 49.17% of the respondents held multiple bank accounts and 50.83% of them held single bank accounts. Therefore majority of the respondents held accounts in Single Bank.

Table 4.2.2.1 shows the number of accounts held by each customer.

No.of Account	No.of Respondents		Total
	Rural	Urban	
Single account	32 (53)	29 (48)	61 (50.83)
Two accounts	19 (32)	22 (37)	41 (34.17)
More than 2 accounts	9 (15)	9 (15)	18 (15)
Total	60	60	120 (100)

Source : Primary Data

Note: Figures in parenthesis indicate percent to total.

The table 4.2.2.1 indicates that 50.83 percent of respondents are single account holders, 34.17 percent of respondents are having two accounts and only 15 percent of respondents are holding more than two accounts in the bank.

4.2.3 Attributes of the banks

Table 4.2.3 shows various attributes of the banks that respondents values the most.

Attributes	Rural			Urban		
	Score	Index	Rank	Score	Index	Rank
Quality of Service	236	79	I	251	84	I

Technology Used	205	68	III	203	68	III
Trust	210	70	II	219	73	II
Location	144	48	IV	134	45	IV
Type of bank	105	35	V	93	31	V

Source : Primary Data

Table 4.2.3 shows that in both rural and urban areas, the Quality of Service provided by the banks is the most valued attribute by the customers. Quality in servicing customers is an important marketing construct for banks, Without the focus on service quality, banks may face complaints from customers. Generally it is stated that, if a bank gives its great services to one customer, it gain three, and loses nine when give poor service to one customer, hence it is better to gains three than losing nine, generating adverse word of monthly publicity and some may switch to other banks. However, with focus on quality of services, the banks can gain more customers.

4.2.4 Bank account of usage

Table 4.2.4 shows the how long the respondents used the bank account

No.of Years	No.of Respondents		Total
	Rural	Urban	
Less than 1 year	11 (18)	9 (15)	20 (16.67)
1 - 5 years	26 (43)	20 (33)	46 (38.33)
5 - 10 years	18 (30)	15 (25)	33 (27.50)
Above 10 years	5 (8)	16 (27)	21 (17.50)
Total	60	60	120 (100)

Source: Primary Data

Note: Figures in parenthesis indicate percent to total.

The above table 4.2.4 shows how long the respondents have started using a bank account. 38.33 percent of customers were using the bank accounts from 1 - 5 years, 27.50 percent of them were using bank accounts from 5 - 10 years.

4.2.5 Aware of Internet Banking services offered by the banks

Table 4.2.5 shows the respondents awareness about internet services offered by the banks.

Aware	No.of Respondents		Total
	Rural	Urban	
Yes	56 (93)	54 (90)	110 (91.67)
No	4 (7)	6 (10)	10 (8.33)
Total	60	60	120 (100)

Source: Primary Data

Note: Figures in parenthesis indicate percent to total.

The table 4.2.5 indicates that 91.67% of the respondents were aware of E–Banking Services offered whereas 8.33% were ignorant. Therefore majority of the respondents were Aware of the various E-Banking Services offered by their respective banks.

4.2.6 Respondents Internet Access

Table 4.2.6 shows the respondents facility to access internet.

Internet Access	No.of Respondents		Total
	Rural	Urban	
Yes	60 (100)	60 (100)	120 (100)
No	-	-	
Total	60	60	120 (100)

Source: Primary Data

Note: Figures in parenthesis indicate percent to total.

The table 4.2.6 indicates that 100% of both rural and urban respondents had access to internet whereas there's no respondents that did not have any access to the internet.

4.2.6.1 Medium through internet is accessed

Table 4.2.6.1 shows the medium through which the respondents access internet.

Medium	No.of Respondents		Total
	Rural	Urban	
Dial-Up connection	2 (3.33)	0	2 (1.67)
Wireless Connection	7 (11.67)	9 (15)	16 (13.33)
Cellular network	36 (60)	40 (66.67)	76 (63.33)
Both wireless & cellular network	10 (16.67)	11 (18.33)	21 (17.5)
Both cable & cellular network	5 (8.33)	0	5 (4.17)
Total	60	60	120 (100)

Source: Primary Data

Note: Figures in parenthesis indicate percent to total.

The table 4.2.6.1 indicates that 63.33% of the respondents were using cellular network to access internet, 17.5% were using both wireless and cellular networks, 13.33% were using wireless network, 4.17% were using both cable and cellular networks as their medium for availing internet services. Therefore majority of the respondents were using cellular network as the medium for accessing the internet services.

4.2.7 Access to Internet Banking services

Table 4.2.7 Respondents access to internet banking services.

Access to Internet Banking Services	No.of Respondents		Total
	Rural	Urban	
Yes	44 (73.33)	51 (85)	95 (79.17)
No	16 (26.67)	9 (15)	25 (20.83)
Total	60	60	120 (100)

Source: Primary Data

Note: Figures in parenthesis indicate percentage to total

From the table 4.2.7 we can understand that 73.33% of rural respondents access the internet banking services, as in the case of urban area the 85% of respondents use internet banking services. From the customers' perspective who access the internet banking, It allows them easily access to their accounts, financial services without any glitches and time saving in managing their finance.

4.2.7.1 Reasons for accessing internet banking services

Although there are several factors that affects the customers in the selection of the internet banking, convenience, easy to monitor, bill payment management, simplifying government remittances, easy management of cash flow are some of the major reasons identified.

Table 4.2.8.1 Reasons for accessing internet banking services.

Factors	Rural			Urban		
	Score	Index	Rank	Score	Index	Rank
Convenience	141	64	II	171	67	I
Easy to monitor	129	59	III	142	56	III

Specialised services	102	46	V	120	47	V
Simplifying Govt. remittances	128	58	IV	127	50	IV
Easy management of cash flow	167	76	I	161	63	II

Source: Primary Data

No.of Respondents : Rural = 44, Urban = 51

The table 4.2.7.1 indicates the reasons for the respondents to access the internet banking services. In rural area the customers major reason for accessing internet banking is Easy management of cash flow followed by convenience. In case of the urban customers, convenience is the main reason for accessing internet banking services followed by easy management of cash flow. It is convenient for the customers when Internet Banking services are available 24 hours a day and 365 days of the year. You can undertake banking transactions from the comfort of your home or office at the click of a button. The third reason for both rural and urban customers is the easiness in monitoring the transactions and account balance all the time, This facility also helps to keep the account safe and you can get to know about any fraudulent activity or threat to your account before it can pose your account to severe damage. Internet banking also helps to simplify the complexities in government remittances, banks provide online tax forms and tax preparation services. Other reason for opting internet banking services is because of the specialised services offered. Many banks offer specialised and convenient tools to enable easier financial management. Services such as investment analysis tools, money monitoring tools, Sweep-in facility, loan calculators, online bill payments etc. are available.

4.2.7.2 Reasons for not accessing internet banking services

But despite all the pros associated with online banking, there are some disadvantages and risks associated with it as well, which effects the customers in selection

of internet banking. There are several reasons for not selecting internet banking services some of the major reasons identified are, Tedious Process, Limited access to internet, Lack of operational knowledge, Insecurity, Perception of risk, Satisfied with traditional banking, Social influence.To analyze the reasons why respondents are not accessing the internet banking services, the respondents were asked to rank each variables in the order of their preference. For the first rank a weightage of 5 was given and for the 5th rank, weightage assigned was 1 (i.e.for rank 1 to 5, weightage of 5 to 1 were given respectively). The scores obtained were summed up to arrive the total score for each option. Higher score obtained variable was considered as the most influencing factor and the lower score obtained variable was considered as the least influencing factor.

Table 4.2.7.2 Reasons for not accessing internet banking services.

Factors	Rural			Urban		
	Score	Index	Rank	Score	Index	Rank
Tedious Process	31	39	V	22	49	III
Lack of operational knowledge	41	51	III	21	47	IV
Insecurity	66	83	I	49	109	I
Perception of risk	57	71	II	45	100	II
Satisfied with traditional banking	36	45	IV	20	44	V

Source: Primary Data

No.of Respondents : Rural = 16, Urban = 9

The table 4.2.7.2 indicates that the main reason the rural and urban customers for not accessing internet banking service is insecurity. While banks typically offer secure web pages to conduct your business transactions, this doesn't guarantee complete

safety, which makes the customers reluctant to access internet banking. Customer's perception of risk in transacting on the internet is the second reason why both rural and urban customers are not accessing the internet. Lack of operational knowledge is the third reason which makes rural customers reluctant to use this services and they are satisfied with the traditional banking services. And last reason for not accessing the services is because they find the internet banking as a tedious process. Incase of urban customers, the third reason for not accessing this service is because it is a tedious process which is followed by lack of operational knowledge among customers. And last reason for not accessing this services is because they are satisfied in traditional banking.

4.2.8 Security and privacy policies of banks

The banks adopted numerous standard privacy policies to respect the privacy of its customers and keep customers' information secure and confidential. The Bank also educates and conducts regular training programs for all staff to keep them aware of the importance of customers' privacy and requires them to comply with strict standards of security and confidentiality. Internet banking primarily uses two means for security. One system uses the Personal Identification Number (PIN) associated with a given account coupled with a Transaction Authentication Number (TAN) to perform a transaction. Where a PIN is always the same with the same account, a TAN would be different for every transaction.

The system is more complex than this, but essentially, it ensures that online banking conducted with the use of web browsers capable of a secure kind of transaction would be able to maintain online privacy successfully. The other system of protecting online privacy in online banking uses encryption and keys, where all transactions are encrypted and can only be decrypted by temporary keys given to the computer after the transaction.

Users can protect their own online privacy and their online banking practices by ensuring that their computers are safe. Antiviral programs can run periodic scans

on computer systems in order to ensure that no viruses or other bugs are inside the computer which would then violate online privacy when performing online banking.

Table 4.2.8: Respondents knowledge of banking agreement on privacy and security policies of banks.

Awareness of privacy and security policy	No.of Respondents		Total
	Rural	Urban	
Yes	23 (38)	33 (55)	56 (46.67)
No	37 (62)	27 (45)	64 (53.33)
Total	60	60	120 (100)

Source: Primary Data

Note: Figures in parenthesis indicate percentage to total

The table 4.2.8 indicates that only 46.67% of the respondents read the privacy and security policies whereas 53.33% of them were ignorant. Therefore majority of the respondents were not aware of the various Privacy and Security Policies provided by their respective banks while availing E-Banking Services.

4.2.9 Security of financial information

Table 4.2.9 Responses on the security of financial information

Security	No.of Respondents		Total
	Rural	Urban	
Very Secured	5 (8.33)	13 (21.67)	18 (15)
Secured	21 (35)	22 (36.67)	43 (35.83)
Not sure	18 (30)	16 (26.67)	34 (28.33)
Unsecured	16 (26.67)	9 (15)	25 (20.83)

Total	60	60	120 (100)

Source: Primary Data

Note: Figures in parenthesis indicate percentage to total

The table 4.2.9 indicates that 15% of the respondents felt very secure about the financial information shared while banking electronically, 35.83% felt secure, 28.83% were neutral or not sure and 20.83% of them felt unsecured. Therefore majority of the respondents felt Secure while sharing their Financial Information with their respective banks while banking electronically.

4.3 Awareness and adoption of innovative internet services.

India is in the midst of a digital revolution, with Internet users going beyond just search and social networking and moving to more mature activities like online shopping and banking. 51% of Indians use online banking channels and 26% of Indian customers prefer to access services via their bank's website, and the same number would prefer to use a mobile app rather than talk to a human agent. The following table shows the responses of rural and urban customers regarding their awareness and availment of different innovative services offered by their respective banks through internet.

4.3.1 Awareness and availment of innovative internet services among Rural respondents

Table 4.3.1 Responses of rural customers awareness and availment of innovative internet banking services.

Service	Aware and avail		Aware but do not avail services		Unaware		Total
	Count	%	Count	%	Count	%	
ATM	56	93%	4	7%	0	0%	60

EFT	38	63%	17	28%	5	8%	60
EBP	33	55%	21	35%	6	10%	60
NEFT	27	45%	21	35%	12	20%	60
E-Cheque	9	15%	23	38%	28	47%	60
Tele banking	13	22%	36	60%	11	18%	60
Mobile banking	39	65%	19	32%	2	3%	60
Digi cash	15	25%	24	40%	21	35%	60
Netcash	15	25%	19	32%	26	43%	60
Demat account	12	20%	19	32%	29	48%	60
Tax Filing	16	27%	26	43%	18	30%	60
Investments	17	28%	25	42%	18	30%	60

Source: Primary Data

The analysis of the table 4.3.1 indicates that of the total respondents awareness and adoption of the various innovative services offered through internet banking. 93% of the respondents were aware of the ATM services, 7% were aware but did not avail service; 63% were aware, 28% were aware but did not avail and 8% were unaware of Electronic Fund Transfer; 55% were aware, 35% were aware but did not avail and 10% were unaware of Electronic Bill Payment; 45% were aware, 35% were aware but did not avail and 20% were unaware of NEFT ; 15% were aware, 38% were aware but did not avail and 47% were unaware of E-Cheque; 22% were aware, 60% were aware but did not avail and 18% were unaware of Tele Banking services; 65% were aware and availed the mobile banking services, 32% were aware but did not avail and 3% were unaware; 25% were aware and availed, 40% of the respondents were aware but did not avail and 35% were unaware of Digicash services; 25% were aware, 32% were aware but did not avail and 43% were unaware of Net cash; 20% were aware, 32% were aware but did not avail and 48% were unaware of Demat account; 27%

were aware, 43% were aware but did not avail and 30% were unaware of Tax filing services offered by the internet banking services; 28% were aware and used internet banking for making investments, 42% were aware but did not avail and 30% were unaware of Investments.

4.3.2 Awareness and availment of innovative internet services among Urban respondents

Table 4.3.2 Responses of urban respondents awareness and availment of innovative internet banking services.

Service	Aware and avail		Aware but do not avail services		Unaware		Total
	Count	%	Count	%	Count	%	
ATM	58	97%	2	3%	0	0%	60
EFT	45	75%	11	18%	4	7%	60
EBP	36	60%	17	28%	7	12%	60
NEFT	30	50%	23	38%	7	12%	60
E-Cheque	8	13%	35	58%	17	28%	60
Tele banking	15	25%	36	60%	9	15%	60
Mobile banking	42	70%	16	27%	2	3%	60
Digicash	9	15%	23	38%	28	47%	60
Netcash	10	17%	24	40%	26	43%	60
Demat account	9	15%	27	45%	24	40%	60
Tax Filing	12	20%	31	52%	17	28%	60
Investments	12	20%	25	42%	23	38%	60

Source :Primary Data

The analysis of the table 4.3.2 indicates that of the total respondents awareness and adoption of the various innovative services offered through internet banking. 97% of the respondents were aware of the ATM services, 3% were aware but did not avail service; 75% were aware, 18% were aware but did not avail and 7% were unaware of Electronic Fund Transfer; 60% were aware, 28% were aware but did not avail and 12% were unaware of Electronic Bill Payment; 50% were aware, 38% were aware but did not avail and 12% were unaware of NEFT ; 13% were aware, 58% were aware but did not avail and 28% were unaware of E-Cheque; 25% were aware, 60% were aware but did not avail and 13% were unaware of Tele Banking services; 70% were aware and availed the mobile banking services, 27% were aware but did not avail and 3% were unaware; 15% were aware and availed, 38% of the respondents were aware but did not avail and 47% were unaware of Digicash services; 17% were aware, 40% were aware but did not avail and 43% were unaware of Net cash; 15% were aware, 45% were aware but did not avail and 40% were unaware of Demat account; 20% were aware, 52% were aware but did not avail and 28% were unaware of Tax filing services offered by the internet banking services; 12% were aware and used internet banking for making investments, 42% were aware but did not avail and 38% were unaware of Investments.

Therefore from the tables we can understand that majority of the respondents in rural and urban were aware and availed the ATM services, followed by Mobile Banking and Electronic Fund Transfer; whereas some of them despite being aware of NEFT, Tele Banking, Demat, E-Cheque and Digicash were not availing these services; while only a meagre percentage where not aware of ATM,Electronic Fund Transfer (EFT), Mobile Banking and Electronic Bill Payment services that were being offered through Internet Banking. And Rural respondents are utilising Investments services provided by their respective banks than the urban customers. E-Cheque, Digicash, Net cash, Demat account, Tax Filing are the services that has been least utilised by the respondents of the study.

4.4 Transactions preferred while Internet Banking

Table 4.4 Transactions preferred while Internet Banking

Transactions	Rural			Urban		
	Score	Index	Rank	Score	Index	Rank
Money Transfer	373	62.17	I	369	61.50	I
Request a demand draft	297	49.50	X	233	38.83	X
Pay bills	301	50.17	XI	355	59.17	III
Online ticket booking	318	53	VIII	336	56.00	VI
Checking current balance	344	57.33	III	342	57.00	V
Online shopping	334	55.67	IV	345	57.50	IV
Order a cheque book	327	54.50	VI	313	52.17	VIII
Create deposits online	338	56.33	V	335	55.83	VII
Online mobile recharging	353	58.83	II	362	60.33	II
E-filing of Income Tax returns	323	53.83	VII	310	51.67	XI

Source: Primary Data

To analyze the most preferred transactions customers preferred to use through internet banking, respondents were asked to rank each variables in the order of their preference. For the first rank a weightage of 7 was given and for the 7th rank, weightage assigned was 1 (i.e. for rank 1 to 7, weightage of 7 to 1 were given respectively). The

scores obtained were summed up to arrive the total score for each option. Higher score obtained variable was considered as the most influencing factor and the lower score obtained variable was considered as the least influencing factor.

Based on the ranks shown in table 4.5 it is observed that both rural and urban respondents consider Money Transfer as the key factor followed by online mobile recharging. After the first two, as per the ranking the checking current account, online shopping, create deposits online, order a cheque book, E-filing of Income Tax returns etc, as the order in which these transaction are preferred while transact electronically by the respondents in rural area. And incase of urban, it is followed by pay bills, on-line shopping, checking current account balance, online ticket booking create deposits online etc, as the order in which these transaction are preferred while transact electronically.

In both cases, amongst the above listed transactions the least preferred service is request a demand draft.Therefore the table 4.5 indicates that from the above listed transactions majority of the respondents availed Internet Banking Service primarily for Money transfer.

4.5 Transactions Availed while Internet Banking in Rural and Urban

Table 4.5.1 Transactions Availed while Internet Banking by Rural respondents

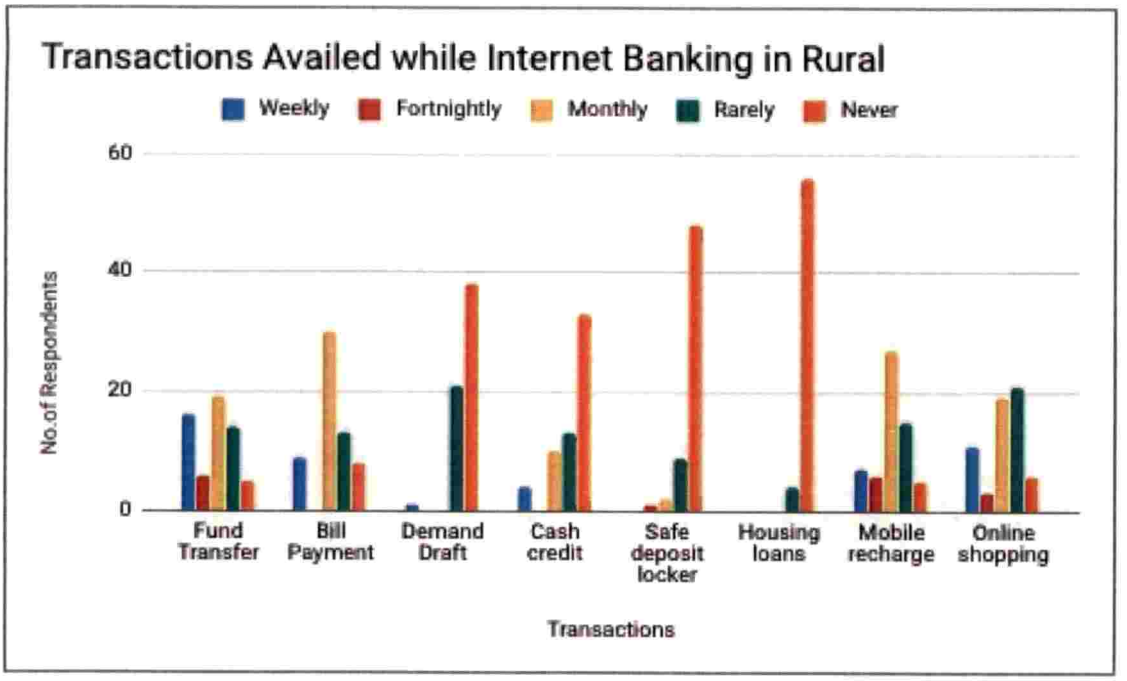
Services	No.of Respondents					Total
	Weekly	Fortnightly	Monthly	Rarely	Never	
Fund Transfer	16 (27)	6 (10)	19 (32)	14 (23)	5 (8)	60
Bill Payment	9 (15)	0	30 (50)	13 (22)	8 (13)	60
Demand Draft	1 (2)	0	0	21 (35)	38 (63)	60
Cash credit	4 (7)	0	10 (16)	13 (22)	33 (55)	60
Safe deposit locker	0	1 (2)	2 (3)	9 (15)	48 (80)	60

Housing loans	0	0	0	4 (7)	56 (93)	60
Mobile recharge	7 (12)	6 (10)	27 (45)	15 (25)	5 (8)	60
Online shopping	11 (18)	3 (5)	19 (32)	21 (35)	6 (10)	60

Source: Primary Data

Note: Figures in parenthesis indicate percentage to total.

Chart 4.5.1 Transactions Availed while Internet Banking in Rural



The above table indicates the frequency of each transaction availed through internet banking by the rural respondents. The frequency of usage has been categorized based on weekly, fortnightly, monthly, rarely and never. It indicates that of the total respondents 7% rarely used the housing loans through internet and 93% never used. 27% of the respondents used fund transfer on weekly basis, 10% used it fortnightly, 32% used it monthly. 15% used internet banking services to avail Bill Payment on a weekly basis, 50% used it monthly, 22% used it rarely and 13% never used this service; 80% of the rural respondents had never used the safe deposit locker through internet, 15%

used it rarely and only 2% of the respondents use this service fortnightly. 7% used cash credit services on weekly basis, 16% used it monthly and 22% rarely used it and 55% of them never used this service. Therefore analysis of the above table indicates that of the total respondents, the most used services which provided through internet banking are, Fund transfer, Bill payment, Mobile recharge and Online shopping.

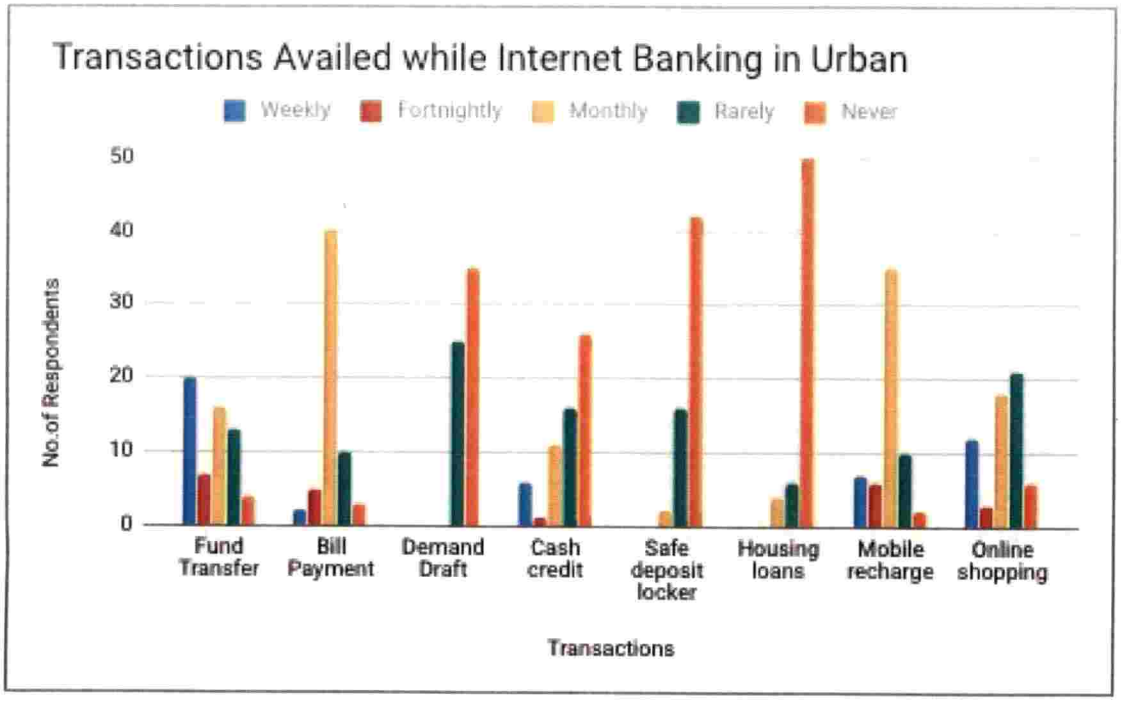
Table 4.5.2 Transactions Availed while Internet Banking by Urban respondents

Transactions	**No.of Respondents**					**Total**
	Weekly	**Fortnightly**	**Monthly**	**Rarely**	**Never**	
Fund Transfer	20 (33)	7 (12)	16 (27)	13 (22)	4 (6)	60
Bill Payment	2 (3)	5 (8)	40 (67)	10 (17)	3 (5)	60
Demand Draft	0	0	0	25 (42)	35 (58)	60
Cash credit	6 (10)	1 (2)	11 (18)	16 (27)	26 (43)	60
Safe deposit locker	0	0	2 (3)	16 (27)	42 (70)	60
Housing loans	0	0	4 (7)	6 (10)	50 (83)	60
Mobile recharge	7 (12)	6 (10)	35 (58)	10 (17)	2 (3)	60
Online shopping	12 (20)	3 (5)	18 (30)	21 (35)	6 (10)	60

Source: Primary Data

Note: Figures in parenthesis indicate percentage to total

Chart 4.5.2 Transactions Availed while Internet Banking in Urban



The analysis of the above table indicates that of the total respondents 33% used internet banking services to avail Fund Transfer on a weekly basis, 12% used it fortnightly, 27% used it monthly, 22% used it rarely and 6% never used this service; 67% used internet banking services to avail Bill Payment on fortnightly basis, 27% used it monthly, 22% used it rarely ,3% used it for a weekly basis and 6% never used this service. Incase of Demand Draft only 42% of respondents rarely used this service and 58% of them never used this service. 83% of urban respondents never used the Safe deposit locker service provided through internet banking, 10% of the respondents rarely used this service and 7% used it on monthly basis. 58% of the respondents used Mobile recharge services provide through internet banking, 12% used internet banking services to avail mobile recharge on a weekly basis, 10% used it fortnightly. The 20% of respondents accessed internet banking services to avail online shopping on a weekly basis, 5% used it fortnightly, 30% used internet banking services to avail online shopping. Therefore analysis of the above table indicates that of the total respon-

dents, the most used services which provided through internet banking are, Fund transfer, Bill payment, Mobile recharge and Online shopping.

The responses of the rural and urban customers on the usage of internet banking services doesn't shows not much difference. Both the respondents mostly used internet banking services to avail were Fund transfer, Bill payment, Mobile recharging and Online shopping

4.6 Consumers Perspective on the Adoption of Internet-banking Technology

Consumers perspective on adoption of internet banking services is studied under different heads. They are studied based on the Characteristics, Responsiveness, Security, User friendliness, Accessibility and Efficiency.

Table 4.6 Consumers Perspective on the Adoption of Internet-banking Technology.

Factors		Rural			Urban		
		Score	Index	Rank	Score	Index	Rank
Characteristics	Brand image	245	81.7	III	239	79.7	IV
	Prompt services	248	82.7	II	247	82.3	III
	Convenience	239	79.7	IV	249	83	II
	Time saving	267	89	I	262	87.3	I
Responsiveness	Accuracy	259	86	I	255	85	I
	System availability	247	82	III	231	77	IV
	Quick turnaround time	253	84	II	249	83	II
	Personalised attention	232	77	IV	233	78	III

Security	Secure in providing personal information	232	77	IV	232	77	IV
	Accessibility of ATM Centre's	245	82	II	237	79	II
	Multiple security controls	236	79	III	233	78	III
	Standardized process	255	85	I	244	81	I
User friendly	Easy navigation through web pages	247	82	III	240	80	III
	Educative Demo	230	77	IV	218	73	IV
	Clarity of Processes	248	83	II	243	81	II
	Ease of use	254	85	I	256	85	I
Accessibility	Round the clock service 24/7	252	84	I	254	85	I
	Swift connectivity	232	77	IV	277	76	IV
	Proximity	243	81	III	232	77	III
	Facilitates online shopping	248	83	II	243	81	II
Efficiency	Cost Effectiveness	256	85	I	254	85	II

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	Innovation	246	82	IV	241	80	IV
	Reliability	248	83	III	253	84	III
	Trust	253	84	II	258	86	I

Source: Primary Data

Based on the ranks shown in table 4.6, There are several characteristics that influences the customers to adopt internet banking. Brand image of the banks, prompt services, convenience, and time saving are the main factors among them. It is observed that the respondents from both rural and urban considered time saving as the key characteristics which influence the customer perspective in the Adoption of E-banking Technologies. In rural it is followed by the prompt services provided by the banks through internet banking. And brand image of the banks followed by the convenience in usage is the third and fourth factors which influence the rural customers perspective on adoption of internet banking. It also indicates that for the urban customers convenience is the second factor which influence customers perspective in adopting internet banking. Brand Image of banks doesn't impose much influence on customers.

Responsiveness is a bank's promptness in addressing customer request and complaints. It is measured based on the different factors like accuracy, system availability, quick turnaround time, personalized attention, etc. From the study, the respondents from rural and urban consider accuracy as the key factor which influence the customers perspective on adoption of internet banking followed by quick turnaround time. The third factor which influence customer preference in rural area is system availability. Whereas personalised attention is ranked as fourth by the rural customers. Incase of urban customers, Personalised attention is ranked third which is followed by the system availability.

Online banking accounts are frequently targeted by cybercriminals. Security issues remains as a major concern for customers and organisations alike. Even though it gives Customers 24/7 access to information about accounts, extensive functionality, time and cost savings, convenience and complete security. Important factors are Se-

cure in providing personal information, Accessibility of ATM Centre's, Multiple security controls, Standardized process. Both rural and customers consider Standardized process as the key factor which influence customers perspective in adoption of internet banking. Standardized process helps to increase the performance, efficiency and reduce the risk.

In internet banking the most important factor which attracts the customers attention is the user-friendliness of their website. The factors are easy navigation through web pages, easy and educative Demo, clarity of processes and ease of use. In both rural and urban, customers consider ease of usage of internet banking websites is the key factor which leads to the adoption of services which is followed by the clarity of the processes. The transparency and clarity in its processes are the factors which can be considered as the performance standards, which attracts more customers to adopt internet banking services.

Major factor which make internet banking popular among the customers is its easy accessibility. The round the clock services 24/7 provided by the banks through internet banking where the bank customers to get access to their accounts and general information easily, which makes it a key factor for adopting the internet banking services.

Efficiency is the another factor which influences Consumers Perspective on the Adoption of Internet-banking Technology. It is claimed that the importance of the trust and rigorous security controls for the efficient internet banking. Therefore the urban customers reason of taking internet banking services may be the trust to the banks which provide services. And incase of the rural customers cost effectiveness is the key factor which shows the efficiency of the banks which leads to adoption of internet banking services.

4.7 Customers satisfaction towards Internet Banking

It is important to measure the level of satisfaction of customers towards internet banking services in order to know whether it is fulfilling their needs and expectations.

In order to analyse the level of satisfaction of customers towards the internet banking services, satisfaction index was used.

- There were five point scale in the survey schedule based on which the customers responses range from highly satisfied, partially satisfied, satisfied, dissatisfied and highly dissatisfied.
- Score for calculation of satisfaction index

  Highly satisfied - 5

  Partially satisfied - 4

  Satisfied - 3

  Poorly satisfied - 2

  Not satisfied – 1
- Actual score received = (total number of responses of 'highly satisfied'*5) + (total number of responses of 'partially satisfied'*4) + (total number of responses of 'satisfied' *3) + (total number of responses of 'poorly satisfied'*2) +(total number of responses of 'not satisfied' *1)

$$\textit{Satisfaction Index} = \frac{\textit{Actual score}}{\textit{Number of Respondents} \times \textit{Maximum score}} \times 100$$

- Based on satisfaction Index value, the total customers (120) were divided into five categories via, Not satisfied customers (AI value ≤ 30), Poorly satisfied customers (AI value > 30 but ≤ 50), Satisfied customers (AI value > 50 but ≤ 70), Partially satisfied customers (AI value > 70 but ≤ 90) and highly satisfied customers (AI value > 90)

Table 4.7 Customers satisfaction towards internet banking.

Level of Satisfaction	No.of Respondents		Total
	Rural	Urban	
Highly satisfied	15 (25)	11 (18)	26 (22)
Partially satisfied	17 (28)	27 (45)	44 (37)
Satisfied	21 (35)	17 (28)	38 (31)
Poorly satisfied	4 (7)	3 (5)	7 (6)
Not satisfied	3 (5)	2 (3)	5 (4)
Total	60	60	120

Source: Primary Data

Note: Figures in parenthesis indicate percentage to total.

Table 4.7 .1 Customers satisfaction towards internet banking.

Area	Total score	Index	Level of satisfaction
Rural	219	73	PrS
Urban	222	74	PrS

Source: Primary Data

Table 4.7.1 indicates that the customers were partially satisfied towards the internet banking. The study find out that most of the customers are partially satisfied with the internet banking services provided by their banks. The main reason behind this is the lack of knowledge about the services provided through internet banking and the insecurity of providing financial informations are some of the factors that affect the adoption and preference of internet banking leading to a decrease their satisfaction level.

4.8 Limitations of Internet Banking

Table 4.8 Limitations of internet banking.

Limitations	Rural		Urban		Total
	Yes	No	Yes	No	
Confidentiality	37 (62)	23 (38)	39 (65)	21 (35)	120
Tampering of information	32 (53)	28 (47)	41 (68)	19 (32)	120
Handling technology	26 (43)	34 (57)	32 (53)	28 (47)	120
Structural changes	30 (50)	30 (50)	36 (60)	24 (40)	120
Changing customer needs	39 (65)	21 (35)	34 (57)	26 (43)	120
Leaving the operation unfinished	34 (57)	26 (43)	41 (68)	19 (32)	120
Technical glitches	28 (47)	32 (53)	40 (67)	20 (33)	120
Too many steps in processing transaction	25 (42)	35 (58)	19 (32)	41 (68)	120
Lack of human touch	28 (47)	32 (53)	27 (45)	33 (55)	120

Source: Primary Data

The analysis of the table 4.8 indicates that of the total in rural respondents 38% were satisfied with Confidentiality of Internet Banking Services availed whereas 62% were not; 47% were contented with tampering of information whereas 53% find it as a limitation of internet banking; 57% were satisfied in the manner in which their respective banks were Handling Technology whereas 43% of respondents find it as an limitation of internet banking; The rural respondents are equally satisfied (50%) and

dissatisfied in the manner in which their respective banks were managing Structural Changes in internet banking; 35% were satisfied in the manner in which their respective banks were handling the changing customers needs whereas 65% were not; 57% of the customers find leaving the operations unfinished as a limitation, 53% were satisfied in the manner in which their respective banks were providing Solution to Technical Glitches whereas 47% were not; 53% felt that Lack of Human Touch was not a factor which hindered them from availing internet banking services whereas 47% did feel so.

The protection of sources, sometimes also referred to as the confidentiality of sources, is a right accorded to the customers under the law. 35% of the urban customers were satisfied with the Confidentiality of Internet Banking Services availed whereas 65% were not. Tampering of information is a disruptive manner to alter and misuse customers informations for fraudulent activities, in case of urban customers 32% of customers were contended with tampering of information were as 68% find it as a threat to the privacy of their financial information. Compared to rural customers, customers in urban area only 47% are satisfied with the manner in which their respective banks were Handling Technology whereas 53% of respondents find it as an limitation of internet banking; 40% were satisfied in the manner in which their respective banks were managing Structural Changes whereas 60% find it makes the functioning of internet banking more complex. 43% were satisfied in the manner in which their respective banks were handling the changing customers needs whereas 57% were not; 68% of the customers find leaving the operations unfinished as a limitation, 68% were satisfied in the manner in which their respective banks were providing Solution to Technical Glitches whereas 32% were not; 55% felt that Lack of Human Touch was not a factor which hindered them from availing internet banking services whereas 45% did feel so.

Chapter V

SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION

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5.1 Introduction

Change has become the essence of today's life. Nothing can evade change. This changes is augmented by development of technology of telecommunications and electronic data processing. Banking which forms a core industry of any economy should always be growth oriented and introduction of new technology is a positive step towards banks growth. This has considerably offered opportunities to the banks to enhance their performance and to expand client base to a greater extent. The advent of Internet has initiated an electronic revolution precisely in the Indian Banking sector. The flexible and dynamic nature of communication networks has helped the core capabilities i.e. products, services and advice through the internet. In India banks acts as the primary financial intermediaries who facilitates commercial transactions via internet, which is the emerging trend, where they offer new innovative banking products and services to their clients through internet banking.

This study was primarily conducted to examine the influence of demographic factors on the consumer adoption, satisfaction level, awareness of innovative services, risk factors and resolutions offered in the overall adoption and preference of internet banking among the rural and urban customers with special reference to Thrissur district.

Specific Objectives

The specific objectives addressed in by the study were as follows:

1. To identify the relation between demographic factors like age, gender, occupation, education, income and choice of internet banking among customers.
2. To identify the factors determining the choice of internet banking among rural and urban customers.

Data was collected from a total sample of 120 consisting of the following:

1. 60 customers from the Rural area of Thrissur district.
2. 60 customers from the Urban area of Thrissur district.

Tools like percentage analysis, rank order scale, satisfaction index, chi square was used for statistical analysis.

The present study will help the customers to understand the different services offered by the banks through internet banking system. The study also helps the banks and other financial intermediaries to frame suitable plans to evolve a good product and services through internet banking, which could help them to strengthen their client base and to improve their performance. Moreover the study can help to identify the limitations of the existing system which affects the adoption of internet banking services and suggest some improvements to if any.

5.2 Major findings

The major findings and emanating conclusions are summarized in the succeeding sections.

1. With respect to the gender, it was clear that 51.67 per cent of the customers were male and 48.33% of them were women. It indicates that men are more frequent and intense users of the Internet than women.
2. Regarding the age group of the customers, majority of the customers were in the age group of 21-30, it clearly indicates that awareness and adoption of new technologies among the age group of 21-30 is very high.
3. From the study it was clear that majority of the customers (30 percent) were graduates, 29.17% were professionally qualified and 25% of the respondents were post graduates.
4. 15.83% of the respondents were government employees, 30.83% were employed in private organizations. 27.5% were students and 15% of them were from other professions. Therefore majority of the respondents were employed in Private organizations.

5. Monthly income of customers indicate that majority of them earned income in the range ₹ 25000 - 50000 per month. Income is a popular demographic variable for segmenting markets because income levels influence consumer wants and determine their buying behaviour and it indicates that the use of Internet banking is also found mainly among customers with higher income.
6. The Analysis reveals that there is a significant relationship between age, educational qualification, occupation, income and access to internet banking among the customers. Whereas, it is also shown that there's no significant relationship between gender and access to internet banking by the customers.

5.2.1 The Findings on Usage of Banking Services Among Customers

1. Majority of rural (56.67%) and urban (55%) respondents held their bank accounts in Public banks. Even though the private banks are more proactive in their approach towards innovative, swift and accessible services most of the customers prefer the status symbol and overall service features of the banks. Therefore majority of respondents prefer to hold their accounts in public banks.
2. While considering the customers having multiple accounts, Out of the total respondents, 49.17% of the respondents held multiple bank accounts and 50.83% of them were single account holders.
3. Majority of the customers are single account holders (50.83%), 34.17 percent of respondents are having two accounts and only 15 percent of respondents are holding more than two accounts in the bank.
4. In case of both rural and urban customers, the Quality of Service provided by the banks is the most valued attribute by the customers, with focus on quality of services, the banks can gain more customers .
5. Majority of the customers in rural (43%) and urban (33%) were using the banking services for 1-5 years; 30 percent of rural banking customers and 25 percent of the urban customers were availing the bank accounts for 5-10 years. With shows the customers familiarity with banking services.

5.2.2 The findings on adoption and preference of internet banking services

1. While considering the respondents awareness about internet services offered by the banks, Out of total respondents, 91.67 percent of respondents were aware about the internet banking services offered by the banks.

6. It is to be noted that 100% respondent have internet accessibility, majority of the rural and urban customers use Internet services. And majority of both rural and urban customers used Cellular networks to access the internet services. More precisely while 63.33% of internet users use cellular networks, 17.5% of internet users depends on wireless and cellular networks. So it is clear that non availability of internet facility or lack of internet browsing capability cannot consider as a major reason for not using online banking services. .

7. Out of the total respondents, 73.33% of the rural respondents access the internet banking services, as in the case of urban area the 85% of respondents use internet banking services.

    - In rural the customers (73.33%) major reason for accessing internet banking is Easy management of cash flow followed by convenience. In case of the urban customers (85%), convenience is the main reason for accessing internet banking services followed by easy management of cash flow. It is convenient for the customers when Internet Banking services are available 24 hours a day and 365 days of the year. You can undertake banking transactions from the comfort of your home or office at the click of a button.
    - But despite all the pros associated with online banking, there are some disadvantages and risks associated with it as well, which effects the customers in selection of internet banking. In both rural (26.67%) and urban (15%), the main reason the rural and urban customers for not accessing internet banking service is insecurity. While banks typically offer secure web pages to conduct your business transactions, this doesn't guarantee

complete safety, which makes the customers reluctant to access internet banking.

8. Majority of the respondents were not aware of the various Privacy and Security Policies provided by their respective banks while availing E-Banking Services. Only 46.67% of the respondents read the privacy and security policies whereas 53.33% of them were ignorant.
9. Majority of the respondents felt Secure while sharing their Financial Information with their respective banks while banking electronically. Out of total respondents 15% of the them, felt very secure, 35.83% felt secure, 28.83% were neutral or not sure and 20.83% of them felt unsecured.

5.2.3 Findings on Awareness and availment of innovative internet services among The Customers.

- Majority of the respondents in rural and urban were aware and availed the ATM services, followed by Mobile Banking and Electronic Fund Transfer; whereas some of them despite being aware of NEFT, Tele Banking, Demat, E-Cheque and Digicash were not availing these services.
- In Rural, 93% of the respondents were aware of the ATM services, 7% were aware but did not avail service, 63% were aware, 28% were aware but did not avail the Electronic Fund Transfer; 55% were aware, 35% were aware but did not avail and 10% were unaware of Electronic Bill Payment; 45% were aware, 35% were aware but did not avail the NEFT services; 38% were aware but did not avail and 47% were unaware of E-Cheque;60% were aware but did not avail and 18% were unaware of Tele Banking services; 65% were aware and availed the mobile banking services; 40% of the respondents were aware but did not avail and 35% were unaware of Digicash services; 32% were aware but did not avail and 43% were unaware of Net cash; 32% were aware but did not avail and 48% were un-aware of Demat account 43% were aware but did not avail and 30% were unaware

of Tax filing services offered by the internet banking services; 42% were aware but did not avail and 30% were unaware of Investments.

- In Urban, 97% of the respondents were aware of the ATM services; 75% were aware of Electronic Fund Transfer; 60% were aware of Electronic Bill Payment; 50% were aware NEFT; 58% were aware but did not avail and 28% were unaware of E-Cheque; 60% were aware but did not avail and 13% were unaware of Tele Banking services; 70% were aware and availed the mobile banking services; 38% of the respondents were aware but did not avail and 47% were unaware of Digi-cash services; 45% were aware but did not avail and 40% were unaware of Demat account; 52% were aware but did not avail and 28% were unaware of Tax filing services offered through internet banking. 12% were aware and used internet banking for making investments, 42% were aware but did not avail and 38% were unaware of Investments.

5.2.4 Findings on Transactions preferred while Internet Banking

Based on the rural and urban customers responses, Money Transfer can be considered as the key transaction that customers preferred to use through internet banking which is followed by online mobile recharging. And incase of urban, it is followed by pay bills. It indicates that, majority of the respondents availed Internet Banking Service primarily for Money transfer.

5.2.5 Findings on Transactions Availed while Internet Banking in Rural and Urban

The responses of the rural and urban customers on the usage of internet banking services doesn't shows not much difference. Both the respondents mostly used internet banking to avail Fund transfer, Bill payment, Mobile recharging and Online shopping services.

5.2.6 Findings on Consumers Perspective on the Adoption of Internet-banking Technology

Regarding the customers perspective on the adoption of internet-banking technology, there are various factors which impact the customers in the adoption of internet banking. Some of the factors are Characteristics of the banks, Responsiveness, Security, User friendliness, Accessibility, Efficiency. These factors were sub-divided into multiple statements and ranked based on customers preference.

There are various characteristics that influence the customers to adopt internet banking. The brand image of the banks, prompt services, convenience, and time-saving are the main statements among them. It is observed that the respondents from both rural and urban regarded time-saving as the key characteristics which influence the customer perspective in the Adoption of E-banking Technologies.

Responsiveness is a bank's promptness in addressing customer request and complaints. It is contained different statements like accuracy, system availability, quick turnaround time, personalized attention, etc. The respondents from rural and urban consider accuracy as the key factor which influences the customers perspective on adoption of internet banking followed by quick turnaround time.

Security issues continue as a major concern for customers and organisations alike. Important statements regarding Security are Secure in providing personal information, Accessibility of ATM Centre's, Multiple security controls, Standardized process. Both rural and customers consider the Standardized process as the key factor which influences customers perspective in the adoption of internet banking. The standardized process helps to increase the performance, efficiency and reduce the risk

In internet banking, the most important factor which attracts the customer's attention is the user-friendliness of their website. The statements are easy navigation through web pages, easy and educative Demo, clarity of processes and ease of use. In both rural and urban, customers consider ease of usage of internet banking websites is the key factor which leads to the adoption of services which is followed by the clarity of the processes.

Accessibility of the services is a major factor which makes internet banking popular among the customers. The round the clock services 24/7 provided by the banks through internet banking where the bank customers to get access to their accounts and general information easily, which makes it a key statement for adopting the internet banking services.

Efficiency is another factor which influences Consumers Perspective on the Adoption of Internet-banking Technology. It is claimed that the importance of trust and rigorous security controls for efficient internet banking. Therefore the urban customers' reason of taking internet banking services may be the trust to the banks which provide services. And in the case of the rural customer's cost-effectiveness is the key statement which shows the efficiency of the banks which leads to the adoption of internet banking services.

5.2.7 Findings on Customers Satisfaction Towards Internet Banking

The customers were partially satisfied towards the internet banking. The study find out that most of the customers are partially satisfied with the internet banking services provided by their banks. The main reason behind this is the lack of knowledge about the services provided through internet banking and the insecurity of providing financial informations are some of the factors that affect the adoption and preference of internet banking leading to a decrease their satisfaction level

5.2.8 Findings on Limitations of Internet banking

- In rural 38% were satisfied with Confidentiality of Internet Banking Services availed whereas 62% were not; 47% were contented with tampering of information whereas 53% find it as a limitation of internet banking; 57% were satisfied in the manner in which their respective banks were Handling Technology whereas 43% of respondents find it as a limitation of internet banking; The rural respondents are equally satisfied (50%) and dissatisfied in the manner in which their respective banks were managing Structural Changes in internet banking; 35% were

satisfied in the manner in which their respective banks were handling the changing customers needs whereas 65% were not; 57% of the customers find leaving the operations unfinished as a limitation, 53% were satisfied in the manner in which their respective banks were providing Solution to Technical Glitches whereas 47% were not; 53% felt that Lack of Human Touch was not a factor which hindered them from availing internet banking services whereas 47% did feel so.

- The protection of sources, sometimes also referred to as the confidentiality of sources, is a right accorded to the customers under the law. 35% of the urban customers were satisfied with the Confidentiality of Internet Banking Services availed whereas 65% were not. Tampering of information is a disruptive manner to alter and misuse customers pieces of information for fraudulent activities, in case of urban customers 32% of customers contended with tampering of information were as 68% find it as a threat to the privacy of their financial information. Compared to rural customers, customers in urban area only 47% are satisfied with the manner in which their respective banks were Handling Technology whereas 53% of respondents find it as a limitation of internet banking; 40% were satisfied in the manner in which their respective banks were managing Structural Changes whereas 60% find it makes the functioning of internet banking more complex. 43% were satisfied in the manner in which their respective banks were handling the changing customers needs whereas 57% were not; 68% of the customers find leaving the operations unfinished as a limitation, 68% were satisfied in the manner in which their respective banks were providing Solution to Technical Glitches whereas 32% were not; 55% felt that Lack of Human Touch was not a factor which hindered them from availing internet banking services whereas 45% did feel so.

SUGGESTIONS

From the analysis of the collected data and the findings figured out, some suggestions were also drawn out as follows:

1. Banks should focus on increasing the awareness level of The RBI Guidelines with respect to internet banking services, which will be gain customers trust and it also helps to reduce the customer's perceived risk.
2. The banks should try to increase the awareness levels for the various services provided through internet banking through suitable customer awareness programs, seminars, workshops etc, which would help to increase the preference for internet banking.
3. Banks need to emphasize more on the Housing loan, safe locker, cash credit services etc, that are provided through Internet banking.
4. Implementation of an effective personal communication system by introducing customer chat rooms, personalising the web pages, etc would help to reduce the service gap between branch banking and internet banking.
5. Internet banking services should be customized on basis of age, gender, occupation etc so that needs and requirements of people are met accordingly and the banks should conduct a practical demonstration on internet banking services to prospective and new customers
6. The bank should provide both offline and online information and assistance to the customer for facilitating easy transactions
7. Simple & easy to use Mobile applications software for Online banking services should be made available to customers at free of cost

CONCLUSION

Internet banking is promoting a rapid growth in the banking industry in India and it is having major effects on banking relationships. Banking is now no longer confined to the traditional brick and mortar system, where one has to be at the branch in person to withdraw cash or deposit a cheque or request a demand draft, etc. Thus it can be concluded that Internet banking adoption in Thrissur district is only at its primitive stages. From the study, it is also evident that there's no significant difference between the rural and urban customers in Thrissur district, with respect to the adoption and preference of internet banking The use of Internet banking is only confined to a few consumer segments in rural and urban areas. The risks associated with Internet banking are many, which the banks have to model using sophisticated systems and extensive use of technology. The functional model can be used to prioritize perceptual variable concerning consumer behaviour so that value to the consumer can be maximized. Providing internet banking is increasingly becoming a 'need to have service' than 'nice to have service'. The banks can also focus on different consumer groups in rural and urban areas of Thrissur, by providing pieces of information and awareness among them to maximize its client base and to increase the revenues from Internet banking. The banks cannot avoid the Internet banking phenomenon where the banks are more proactive in their approach towards innovative, swift, accessible and cost-effective services, but to gain a competitive advantage, they must structure their business models to suit to customers conditions.

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APPENDIX

No: URBAN/RURAL

A STUDY ON ADOPTION AND PREFERENCE OF INTERNET BANKING AMONG URBAN AND RURAL CUSTOMERS WITH SPECIAL REFERENCE TO THRISSUR DISTRICT

1. Gender: ☐ Male ☐ Female

2. Marital Status:

☐ Married ☐ Unmarried ☐ Widowed ☐ Divorced

3. Age:

☐ Below 20 years ☐ 21-30 years ☐ 31-40 years

☐ 41-50 years ☐ 51 years and above

4. Educational Qualification:

☐ Under Graduation ☐ Graduation ☐ Professional

☐ Post Graduation ☐ Other

5. Occupational Status:

☐ Government ☐ Private ☐ Business

☐ Self employment ☐ Student ☐ Others

6. Monthly Income:

☐ Below ₹10000 ☐ ₹10000 - ₹25000

☐ ₹25000 - ₹50000 ☐ ₹50000 Above

7. Do you have a bank account?

☐ Yes ☐ No

8. In which bank do have your account?

☐ Public bank ☐ Private bank ☐ Foreign bank

10. a) Do you hold accounts in multiple branch?

☐ Yes ☐ No

b) How many accounts do you have?

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11. Which attribute of the bank do you value the most?

Attributes	Rank
a. Quality of Service	
b. Technology used	
c. Trust	
d. Location	
e. Type of bank	

12. How long have you used bank accounts?

☐ Less than 1 year ☐ 1 - 5 years

☐ 5 - 10 years ☐ Above 10 years

13. Are you aware of E-banking services offered by the banks?

☐ Yes ☐ No

14. a) Do you have account access to internet?

☐ Yes ☐ No

b) By what medium do you access the internet?

☐ Dial-Up connection ☐ Cable

☐ Wireless ☐ Cellular network

15. Do you access internet banking services?

☐ Yes ☐ No

a) If yes, What are the reasons for using internet banking services?

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Factors	Rank
a. Convenience	
b. Easy To Monitor	
c. Specialised services	
d. Simplify Government remittances	
e. Easy management of cash flow	

b) If not, What are the reasons for not using internet banking services?

Factors	Rank
a. Tedious Process	
b. Lack of operational knowledge	
c. Insecurity	
d. Perceptions about risk	
e. Satisfied with traditional banking services	

16. As a practice do you read the banking agreement privacy and security policies of your Bank prior to E-banking?

☐ Yes ☐ No

17. Are you aware of the preventive measures which can be applied to secure your transactions online?

☐ Yes ☐ No

18. How secure do you feel with your financial information being available and managed over the internet?

☐ Very Secure ☐ Secured

☐ Not sure ☐ Unsecured

19. Specify your awareness of the following innovative E banking services :

Services provided by the banks	**Aware**	**Aware but do not avail these services**	**Unaware**
ATM			
EFT (Electronic Fund Transfer)			
EBP (Electronic Bill Payment)			
NEFT			
E-Cheque			
Tele banking			
Mobile banking			
Digicash			
Netcash			
Demat account			
Tax Filing			
Investments			

20. Which of the following transactions would you prefer doing through Internet-Banking ?

Transactions	**Rank**
Money transfer	

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Request a demand draft	
Pay bills	
Online ticket booking	
Checking current balance	
Online shopping	
Order a cheque book	
Create deposits online	
Online mobile recharging	
E-filing of Income tax returns	

21. How frequently do you use any of the below listed options while availing Internet-Banking services ?

Service	**Weekly**	**Fortnightly**	**Monthly**	**Rarely**	**Never**
Fund transfer					
Bill payment					
Demand draft					
Cash credit					
Safe deposit locker					
Housing loan					
Mobile recharge					
Online shopping					

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22 Consumers perspective on the Adoption of Internet-banking Technology?

a. Characteristics

Factors	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
Brand image					
Prompt services					
Convenience					
Time saving					

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b. **Responsiveness**

Factors	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
Accuracy					
System Availability					
Quick Turn Around Time					
Personalized Attention					

c. **Security**

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Factors	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Secure in providing Personal information					
Accessibility of ATM Centre's					
Multiple Security Control					
Standardized Processes					

d. **User friendly**

Factors	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Easy Navigation through Web pages					
Educative Demo					
Clarity of Processes					
Ease of use					

e. **Accessibility**

Factors	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Round the Clock Service 24/7					
Swift connectivity					

Proximity					
Facilitates online shopping					

f. **Efficiency**

Factors	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
Cost effectiveness					
Innovation					
Relaibality					
Trust					

23. To what extent are you satisfied with your banks Internet-banking services ?

☐ Highly Satisfied ☐ Satisfied

☐ Neutral ☐ Dissatisfied

☐ Highly dissatisfied

24. Limitations of Internet-banking

Problems	**Yes**	**No**
Confidentiality		

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Internet banking can be tampered with by others		
Handling technology		
Structural changes		
Changing customer needs		
Leaving the operation unfinished		
Technical glitches		
Too many steps in processing transaction		
Lack of human touch		