



“A STUDY ON IMPACT OF TECHNOLOGY IN THE OPERATIONS OF PUBLIC AND PRIVATE SECTOR BANKS”

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Abstract : Banking is one most creative industry in the world. Technology has provided another path for this creativity and it is just starting to be realized. Companies like Rocket Mortgage, Robinhood, Square, Ant Financial, etc. are providing a completely different view on what financial services are, and how they will be delivered. Elsewhere the unadulterated technology is the impact that it is having on business models of banks and other financial services providers. Banks now make less than half of the mortgage loans. The next phase of technology will likely be a little less obvious to consumers, as automation is applied to all types of processes and back-office operations. Those companies and individuals with an understanding of technology and financial services will continue to change the way banking is considered

Banking can't survive today without technology. Needless to say, what technology has done to us and how easy the life has become. Let's go back to the period where there were no ATM's, can one way or another tell me how life was at that point of time and how life is today. The same goes for things that we can do online these days; I don't remember going in the last 4 years. This has all happened because technology is playing a huge role in banking nowadays. You remove the word technology from banking and I can guarantee things will work but the banks will feel paralyzed. This is called impact.

CHAPTER I

1. INTRODUCTION

1.1 INTRODUCTION OF THE STUDY

Technology operations in banks means the usage of technology in the banks to help the customers in an easy manner. The technology operation means providing of Mobile Banking Service, ATM's, Cheques and Demand Drafts, UPI Applications, Debit and Credit cards and NEFT & RTGS. As the bank provide huge platform for the technology operations but they have to face lot of impact in those technology operations. In this study we are going to see about the impact of technology operations in the banks.

A sound and effective banking system is the backbone of an economy. The economy of a country can functions smoothly and without many hassles if the banking system is not only flexible but also capable of meeting the new challenges posed by the technology and other external as well as internal factors. The importance and

role of information technology for achieving this objective cannot be undermined. Technology advances have accelerated changes resulting in higher production of goods & services. The information technology has transformed the functioning of business across the world. It bridged the gap in terms of both reach and the coverage of system and in the process. enabling better decision making based on latest and accurate information and improvement in efficiency through various new processes, products and services offered by both state-owned banks, private sector banks and foreign banks and financial institutions.

The adoption of new technology has become a necessity for survival, particularly in the aftermath of liberalization, privatization, and globalization. Computers are not new to our country. In fact, the first computer was installed as early as the 60's. The initial growth was however slow. Since 1980's there has been virtual explosion in the use of computers in both manufacturing & service sectors. The Indian Banks have been lagging behind their foreign counter-parts due to a variety reason. In order to face global competition, they had to take-up computerization on a massive scale within a short span of time. This obviously resulted in a number of changes. This study is a modest attempt in understanding how technology has impacted the banking sector.

1.2 INDUSTRIAL PROFILE

A cashless transaction is an automated or online operation that may take place between two people, business, or organizations. A digital transaction is a cashless transaction which specifically involves no paper for completion of the transaction. Purchasing goods from e-commerce websites, signing of business contracts online, or even buying movie tickets through your smartphone app fall under the umbrella of digital transactions. Such operations are accurate, quicker, convenient, and certainly easier. Many are unwilling to accept that there are benefits to a cashless transaction simply because they cannot navigate their way around digital devices, or are just happier to transact using cash. Read on about an array of cashless transactions that simplify day-to-day trading.

Types of cashless payment methods

There are numerous ways to go cashless. Here are some of the best methods to help you pilot your way into a cash-free world:

- Cheques and demand drafts
- Debit and credit cards
- UPI applications
- Mobile wallets

Cheques and Demand Drafts

A cheque is one of the safest and oldest methods of cashless payment. A cheque is issued to a person or business for a specific amount. This cheque is deposited in the receiver's bank, and the money is received through a payment processed by a clearinghouse. A demand draft is safer than a cheque because it cannot be defaulted or dishonoured, unlike a cheque. The dd is signed by a banker to ensure that sufficient funds are available for a successful transaction. The disadvantage of cheques and DD's are that they are time-consuming because a person has to visit the bank and then wait for the cheque or dd to clear

Debit and Credit Cards

Debit and credit cards have caught on as a method of cashless trading. A debit card is considered by many to be safer because you are transacting with money in your account. The risk with a credit card is overspending. Debit and credit cards can be used to make purchases online as well as over-the-counter at a store.

UPI Applications

UPI stands for unified payment interface. UPI has changed the way we transact. At the core of a UPIs functionality is the fact that our mobile numbers are registered with our respective banks and linked to our accounts. A virtual payment address helps to send or receive money without entering any bank related information. Merchants would need to have a current account to receive UPI payments. UPI applications that are currently popular are BHIM, PhonePe, ICICI pocket, and SBI pay.

Mobile Wallets

Mobile wallets have become a convenient way of making payments without cash. Once you load money into your mobile wallet, you can use it wherever it is accepted. The most popular mobile wallet that is trending is Paytm. The disadvantage with mobile wallets is that it isn't linked to your account. Once you load the money into your mobile wallet, you can only spend it with a merchant who accepts payment through the said app.

NEFT & RTGS

National electronic fund transfer and real time gross settlement are electronic payment systems that allow convenient fund transfer between bank accounts. Both facilities are maintained by the RBI (reserve bank of India). The facilities can be used to transfer money only within India. The RTGS transfer window is from 8 am to 4.30pm on weekdays and bank working days. NEFT settlements happen in deferred batches between 8 am to 7 pm on bank working days.

1.3 COMPANY PROFILE

Meaning

The word "bank" is commonly regarded as derived from the Italian word banco, a bench - the Jews in Lombardy having benches in the market-place for the exchange of money and bills. When a banker failed, his bench was broken by the populace; and from this circumstance we have our word bankrupt. The concept of banking may have begun in ancient Babylonia and old Sanghvi, with merchants offering loans of grain as collateral within a barter system. Lenders in ancient Greece and during the roman empire added two important innovations: they accepted deposits and changed money. Archaeology from this period in ancient china and India also shows evidence of money lending.

Definition

Banking regulation act 1949 defines banking as, "accepting for the purpose of lending and investment, of deposits of money from the public, repayable on demand, order or otherwise and withdrawable by cheque, draft, order or otherwise".

Origination of banking sector in India

banking in India originated in the last decade of the 18th century. Among the first banks were the bank of Hindustan, which was established in 1770 and liquidated in 1829–32; and the general bank of India, established in 1786 but failed in 1791. The largest and the oldest bank which is still in existence is the state bank of India (Sc.B.). It originated and started working as the bank of Calcutta in mid-June 1806. In 1809, it was renamed as the bank of Bengal. This was one of the three banks founded by a presidency government, the other two were the bank of Bombay in 1840 and the bank of madras in 1843. The three banks were merged in 1921 to form the imperial bank of India, which upon India's independence, became the state bank of India in 1955. For many years the presidency banks had acted as quasi-central banks, as did their successors, until the reserve bank of India was established in 1935, under the reserve bank of India act, 1934. In 1960, the state banks of India were given control of eight state-associated banks under the state bank of India (subsidiary banks) act, 1959. These are now called its associate banks. In 1969 the Indian government nationalised 14 major private banks; one of the big banks was bank of India. In 1980, 6 more private banks were nationalised. These nationalised banks are the majority of lenders in the Indian economy. They dominate the banking sector because of their large size and widespread networks.

The Indian banking sector is broadly classified into scheduled and non-scheduled banks. The scheduled banks are those included under the 2nd schedule of the reserve bank of India act, 1934. The scheduled banks are further classified into: nationalised banks; state bank of India and its associates; regional rural banks (RRBS); foreign banks; and other Indian private sector banks. The term commercial banks refers to both scheduled and non-scheduled commercial banks regulated under the banking regulation act, 1949. Generally, the supply, product range and reach of banking in India is fairly mature-even though reach in rural India and to the poor still remains a challenge. The government has developed initiatives to address this through the state bank of India expanding its branch network and through the national bank for agriculture and rural development (NABARD) with facilities like microfinance.

Classification of banks in India

As mentioned above, the apex banking body is the reserve bank of India (RBI). It is the central banking institution and the supreme monetary authority in the country. Formed in 1935 under the reserve bank of India act, 1934, RBI plays a monumental role in designing the monetary policies. The main functions of RBI are to regulate the banks in the country and also provide important financial services like controlling inflation in the country and storing financial exchange reserve. Banks are classified into scheduled and non-scheduled banks. Scheduled banks can further be classified into commercial banks and cooperative banks. Commercial banks can be further classified into public sector banks, private sector banks, foreign banks and regional rural banks (RRB). On the other hand, cooperative banks are classified into urban and rural. Apart from these, a fairly new addition to the structure is payment bank.

Scheduled banks

- * Schedules banks are those that are covered under the 2nd schedule of the reserve bank of India act, 1934. A bank that has a paid-up capital of Rs. 5 lakh and above qualifies for the schedule bank category. These banks are eligible to take loans from RBI at bank rate.

Commercial banks

- * Commercial banks are regulated under the banking regulation act, 1949 and their business model is designed to make profit. Their primary function is to accept deposits and grant loans to the general public, corporate and government. Commercial banks can be divided into-

Public Sector Banks

These are the nationalized banks and account for more than 75 per cent of the total banking business in the country. Majority of investment in these banks are held by the government. In terms of volume, SBI is the largest public-sector bank in India and after its merger with its 5 associate banks (as on 1st April 2017) it has got a position among the top 50 banks of the world.

There is a total of 21 nationalized banks in the country namely below:

- State bank of India
- Bank of India
- Allahabad bank
- Bank of Maharashtra
- Canara bank
- Indian overseas bank
- IDBI bank
- Oriental bank of commerce

- Central bank of India
- Corporation bank
- Andhra bank
- UCO bank
- Bank of Baroda
- Union bank of India
- United bank of India
- Vijaya bank
- Dena bank
- Indian bank
- Punjab & Sindh bank
- Punjab national bank
- Syndicate bank

Private Sector Banks

These include banks in which major investment or equity is held by private shareholders. All the banking rules and regulations laid down by the RBI will be applicable on private sector banks as well. Given below is the list of private-sector banks in India-

- HDFC bank
- ICICI bank
- Axis bank
- Yes bank
- IndusInd bank
- Kotak Mahindra bank
- DCB bank
- Bandhan bank
- IDFC bank
- City union bank
- Tamilnadu mercantile bank
- Nainital bank
- Catholic Syrian bank
- Federal bank
- Jammu and Kashmir bank
- Karnataka bank
- Dhanlaxmi bank
- South Indian bank
- Lakshmi villas bank
- RBL bank

- Karur Vysya bank
- City union bank

Foreign Banks

A foreign bank is one that has its headquarters in a foreign country but operates in India as a private entity. These banks are under the obligation to follow the regulations of its home country as well as the country in which they are operating. Citi bank, standard chartered bank and HSBC are some leading foreign banks in India.

Regional Rural Banks

These are also scheduled commercial banks but they are established with the main objective of providing credit to weaker sections of the society like agricultural labourer's, marginal farmers and small enterprises. They usually operate at regional levels in different states of India and may have branches in selected urban areas as well. Other important functions carried out by RRBS include-

- Providing banking and financial services to rural and semi-urban areas
- Government operations like distribution of wages of workers, distribution of pensions etc.
- Para-banking facilities like debit cards, credit cards and locker facilities

Small Finance Banks

This is a niche banking segment in the country and is aimed to provide financial inclusion to sections of the society that are not served by other banks. The main customers of small finance banks include micro industries, small and marginal farmers, unorganized sector entities and small business units. These are licensed under section 22 of the banking regulation act, 1949 and are governed by the provisions of RBI act, 1934 and

Co-Operative Banks

Co-operative banks are registered under the cooperative societies act, 1912 and they run by an elected managing committee. These work on no-profit no-loss basis and mainly serve entrepreneurs, small businesses, industries and self-employment in urban areas. In rural areas, they mainly finance agriculture-based activities like farming, livestock and hatcheries.

Payments Bank

This is a relatively new model of bank in the Indian banking industry. It was selected by RBI and is allowed to accept a restricted deposit. The amount is currently limited to Rs. 1 lakh per customer. They also offer services like ATM cards, debit cards, net-banking and mobile-banking.

1.4 NEED FOR THE STUDY

The Indian banking industry is going through a period of intense change, where liberalized business environment has affected the banking business by way of increasing competition, rising customer expectations, shrinking spreads and increasing disintermediation. There are different types of banks starting from public sector banks to private sector banks and co-operative banks. These Banks cater to the needs of various sections of Indian society. A number of the public sector banks focus and work in rural areas while others are mainly available in urban areas. Opening gates to Private sector banks in India led to various liberal financial reforms and modernization of Indian banking sector. ICICI, HDFC, Axis bank are a few nicely-identified private sector banks. Private sector banks usually function in the cities and upcoming towns. With introduction to superior and better technology, user-friendly policies. Banking has turn out to be simpler and speedy. Their customer friendly policies and straightforward accessibility have made them in style and trusted amongst people. With private banks and superior technology, the banking sector has progressed to turn into faster, exact and easier. Public sector banks largely dominate the Indian Banking industry; however, their share has been declining. Their inefficiencies came into picture only when the market competition and new glares started eating up their share. The setting up of a new company's environment has resulted in new changes for the public sector banks to retain their share. Ongoing changes in the structure of Indian banking are clearly visible. While the share of public sector banks in the total assets of the banking sector has shown a steady decline, the new private sector banks and foreign banks have succeeded in enhancing their position. No doubt, PSBs have strong distribution network all over the country. But the strength of the earlier periods has now become a concern for these banks. As compare to the tech-equipped distribution network of the new private sector banks and foreign banks, PSBs banks have found it difficult to upgrade them on the technology front. PSBs have started embracing technology to improve customer service and design innovative products to increase sales opportunities. In the face of growing competition, the policy changes and the operational environment in respect of the Indian banking system, there has been an increased focus on Technology is to be important on banking operations. In this regard, it is required to focus on Technology on Banking operations of public and private sector banks. An analysis of the review of literature available on Technology in banks reveals that the work done by the research in the subject area of Technology on banking operations of public sector and private sector banks has been scant in India. Most of the research studies focused on Human resources training and development, Retail Banking, Internal Marketing on Banking, Customer satisfaction, Organizational effectiveness, Quality of work like and appraisal system in various public and private sector banks. Comprehensive comparative study on technology practices in Andhra Bank and ICICI Bank, which are public sector and private sector bank in the post liberalization period, has not been attempted by any researcher so far. This thesis analyses the banking growth vis-à-vis technological growth in the banking industry. Therefore, Technology in Banking – An impact study in the operations of public and private sector banks

1.5 OBJECTIVES OF THE STUDY

- To study the relation between technology and quality of the service with respect to Public Sector Bank and Private Sector Bank and to understand the preferences of the customers.
- To analyses the perceptions of the customers and employees on the technology operations in bank.
- To compare the impact of technology on the performance of Public sector Bank and Private Sector Bank in pre and post Electronic - Banking period.

1.6 SCOPE OF THE STUDY

- The study was undertaken to know the impact of technology towards banker. The problem of the banker is, their customers are not aware of technology service which is provided by themselves. The study also focusses on the customer perception that how to instruct about the technology services in easy manner. In my study I have used both the primary and secondary data.
- The study is confined to Coimbatore Region.
- The study covers the technology providers and the users of the public and private sector banks.
- The study has put forward the technology service provided by the banks and the impact of the bankers.
- **The scope of the study is to find out the impact of bankers towards technology operations.**

1.7 LIMITATIONS OF THE STUDY

- Confining the study to only two banks one from public sector and another from private sector, that to in the Coimbatore City.
- As the sources of secondary data vary descriptions in data reporting exist.
- Samples were selected conveniently.
- The sample size does not represent the total population.

1.8 CHAPTER SCHEME

The study is presented in V Chapters

Chapter I – Introduction – Industrial Profile- Company Profile- Objectives of the Study - Scope of the Study- Need for The Study- Limitation of the Study.

Chapter II – Research Methodology- Indian Banking – Technology in Banking- Information Technology- Internet Banking- Online Banking- Traditional Banking to E- Banking (Pre-E- Banking to Post E- Banking)

Chapter III – Research Methodology- Collection Data-Primary Data- Study Population and area, Sample Size Determination, Sampling Method.

Chapter IV- Data Analysis and Interpretation

Chapter V- Findings, Summary and Suggestion

CHAPTER II

REVIEW OF LITERATURE

To make one's project effective, it is better to go through the project done by others earlier. This gives a complete idea about the project. It also helps to correct the mistakes done in the earlier project. Summing up, it improves one's project. So, with this idea, let us see few of the projects done by others earlier.

Indian Banking

Rao N.V.M, Prakash Singh and Maheshwari Neeru (2005) scrutinises a comparison of numerous models using metric method. The different rudiments of the metric comprise revenue generation, value proposition, infrastructure etc. A mathematical model has been advanced to analyse whether investments in e-initiative increased productivity and profitability in the Indian banking system. The model suggests that the performance of the banking sector has improved considerably. Profitability, customer satisfaction, and many other parameters show a market improvement.

Sahoo B. K., Sengupta J. K. and Mandal A. (2007) attempts to examine the trends of the Indian commercial banks for the period: 1997-98 to 2004-05. First, the increasing average annual trends in TE for all ownership groups indicate an affirmative gesture about the effect of the reform process on the performance of the Indian banking sector. Second, the higher cost efficiency accrual of private banks over nationalized banks indicate that nationalized banks, though old, do not reflect their learning experience in their cost minimizing behaviour due to X inefficiency factors arising from government ownership.

Daddihal V.S. and Kulakarni P.K. (2008) analyses the changes in Virtual Banking which includes Automated teller machines, Shared ATM Network, Electronic fund Transfer at Point of Scale, Smart Card, Phone Banking and Internet Banking and related services.

Diwanji Abizer (2010) reveals that Indian banks had to clean up their systems and practices to ensure stability in a recovering economy. Four challenges must be addressed before success can be achieved.

Moushumi Datta (2010) identified the emerging trends in Internet banking, ATM's, Credit cards and debit cards, Mobile phone usage, 24-hour banking service, Unhindered competition amongst banks, privatization of the banking sector, Participation of Foreign investment, Increased presence and influence of foreign banks.

Technology in Banking

Walfried M Lassar; Chris Manolis; Sharon S Lassar (2005) distinguishes between innate consumer innovativeness, a generalized personality trait, and internet domain-specific or actualized innovativeness in order to explore consumer characteristics' impact on adoption. Data are analysed using logistic regression. Findings - While results confirm the positive relationship between internets related innovativeness and online banking them also surprisingly show that general innovativeness is negatively related to online banking.

George Rigopoulos and Dimitrios Askounis (2007) explained that Technology Acceptance Model (TAM) have been used for measuring users' attitude towards adoption of several IT based services. We present the model developed, as well as initial results from a relevant survey at a Greek bank's target users' group.

Sonja Grabner-Krauter and Rita Faullant (2008) confirm the influence of internet trust on risk perception and consumer attitudes towards internet banking. Propensity to trust is a determinant not only for interpersonal relationships but also for trust in technological systems

Sarangapani A. and Mamatha T. (2008) described that Information Technology (IT) has become an integral part of the banking system. The study discusses the recent developments in the Indian banking industry, various IT initiatives, e-security aspects, cyber laws and the RBI guidelines to regulate the e-security issues.

Saroj Kumar Datta and Sukanya Kundu (2008) focus on the impact of information technology on Indian PSBs and how this is affecting the level of their customer satisfaction.

Information Technology

Sohani A.K. (2009) explains that The State Bank of India is facing challenges from different players in the banking industry. With the help of numerous technological initiatives, it is working to bring about organizational improvements in order to withstand the competition.

Khushboo Khanbelwal M.S and Shwetha Choudhary M.S. (2010) have tried to identify the impact of information technology. The research work is based on secondary data comprising of case analysis. And their findings are Information technology has greatly impacted the entire banking system of our country and its application in banking has a very prospective future in India.

Chai Lee Goi, (2006) revealed that there are several underlying forces coming together have caused the E-banking development in Malaysia. The development mainly because of new marketing strategy specially to create E-Customer Relationship Management (E-CRM) and to improve banking activities. The other reasons are development of technology, applications and tools, as well as supported by the government.

Jarunee Wonglimpiyarat's (2007) studied with the business strategy in managing payment innovations. Particularly, the study looks at the smart card - electronic cash (e-cash) innovation in the financial service industry. The smart card e-cash has yet to overcome obstacles to its diffusion.

Rashi Sawhney (2008) assesses the current status of developments in electronic banking (e-banking) and explores how it differs from conventional banking. He identifies emerging trends and risk management issues related to rapid developments in the area of e-banking that raise challenges for both banks and bank supervisors.

Dhekra Azouzi (2009) aims to check if the current and prompt technological revolution altering the whole world has crucial impacts on the Tunisian banking sector.

Sadia Samar Ali and Bharadwaj R.K. (2010) analyses that Globalisation has been regarded as the standard process for success. Financial institutions are providing better service to have competitive advantage.

Internet Banking

Gupta Ankur (2006) attempted to highlight the importance of data protection in internet banking and dwell upon possible legal recourses which may adopted keeping in mind the current legal framework in India with regards regulation of Information Technology.

Murali Raman (2008) analysed that Internet banking is one of the most popular services utilized by the Malaysian retail banking customers in recent years.

Pekka Laukkanen, Suvi Sinkkonen and Tommi Laukkanen (2008) identified three groups of internet banking non-adopters, namely postpones, opponents and rejecters. The data were collected by conducting an extensive postal survey among the retail banking customers in Finland who had not adopted internet banking.

Nisha Gupta, Deepak Garg and Anita Rani (2008) Concluded that the adoption of Internet banking in India will have its own advantages to both the banks and the ultimate customers.

Ganesan R and Vivekananda K (2009) analyses that Internet banking has made it easy to carry out the personal or business financial transaction without going to bank and at any suitable time. This facility enables to transfer money to other accounts and checking current balance alongside the status of any financial transaction made in the account.

Rohaya Shaari and Hafizi Muhamad Ali (2009) analysed the question as to how bank managers perceive the strategic and operational issues of Internet banking.

Sofri Yahya, Harashid and Thakur Rajendar Singh (2009) discussed the factors that are affecting the acceptance of this form of banking in the Indian market.

The purpose of the **Vasista T.G.K and Suneela M. (2010)** paper is to discuss the Reserve bank of India's one of the focus points such as facilitating and protecting the customer. So, proposal aspects of Internet banking with the adoption of systems perspective and exploration of recent technological trends are done as a part of research prospects to the above-mentioned point by Reserve bank of India but not to differ the efforts of Reserve bank of India if it has already put.

Online Banking

Tahir Masood Qureshi (2008) This era can safely be attributed as technology revolution. The quick expansion of information technology has imbibed into the lives of millions of people. Rapid technology advancements have introduced major changes in the worldwide economic and business atmosphere. Online banking is also one of the technologies which are fastest growing banking practices nowadays. It is vital to extend this new banking feature to clients for maximizing the advantages for both clients and service providers.

Madhurima Deb and Kavita Chavali (2009) investigate the significance of E- Trust and E- loyalty in the context of online banking. The work done is original in the sense that the study depicted several dimensions of E- loyalty to have lucid understanding of the impact of E- Trust on each of these dimensions. The study would benefit Managers and Academicians who would develop an in-depth knowledge about factors affecting E- Trust and E-loyalty in the context of online banking.

Alain Yee-Loong Chong, Keng-Boon Ooi, Binshan Lin, and Boon-In Tan (2010) examine the factors that affect the adoption of online banking in Vietnam. Perceived usefulness, perceived ease of use, trust and government support were examined to determine if these factors are affecting online banking adoption. Data was analyzed by employing correlation and multiple regression analysis. The results showed that perceived usefulness, trust and government support all positively associated with the intention to use online banking in Vietnam. Contrary to the technology acceptance model, perceived ease of use was found to be not significant in this study.

Traditional Banking to E- banking (Pre e-banking to Post e-banking)

Uppal. R. K. (2008) describes that excellent mapping for the banks is a need of the hour. The author concludes that average productivity & profitability is the highest in case of New Private Sector Banks and Foreign Banks in post- e- banking period. During this period, PSBs has made tremendous and remarkable improvement in many parameters of productivity. But still they are lagging behind in performance when they compare them with Foreign Banks and New Private Sector Banks.

Dhekra Azouzi (2009) aims to check if the current and prompt technological revolution altering the whole world has crucial impacts on the Tunisian banking sector. For instance; age, gender and educational qualifications seem to be important and they split up the group into electronic banking adopters and traditional banking defenders and so, they have significant influence on the customers' adoption of e-banking.

Filomina P George, Mercia Selva Malar S. and Sudheendran M (2009) state the Advancement in computer technology and Internet has shown its effect on traditional banking business in India. As Internet became more easily accessible, banks capture new business opportunities.

Dr. Dhiraj Sharma & Dr. R.K Uppal (2010) on their paper they attempt to link banking technology with the financial productivity of Indian commercial banks. Till date, it is a matter of debate whether Technology leads to better financial returns. There is no conclusive evidence that IT induction improves financial

performance of an organization. The scholars call it “IT Productivity Paradox”. However, for Indian banking industry, the correlation between Technology induction and financial productivity is negative though statistically insignificant and low.

R. K. Uppal (2011) analyses the performance of major banks in terms of productivity and profitability in the pre and post e-banking period. The paper concludes that performance of all the banks under study is much better in post-e-banking period and further foreign banks are at the top position, whereas the performance of the public sector banks is comparatively very poor. The paper suggests some measures to tackle the challenges faced by the banks particularly public sector banks. At the end, paper suggests how public sector banks can convert the emerging challenges into opportunity

Public Sector and Private Sector Banks

Kangis and Voukaltos (1997) compares the customers’ expectations and perceptions of SQ in public and private sector banks in their study. The study reveals that customers of private sector banks were found to have lower level of difference between perceptions and banks. Convenient location, opening hours, friendliness and courtesy of employees were not considered as important factors by the customers of both sector banks.

In their paper, **Ram Mohan. T and Subhash C. Ray (2001)** attempt a comparison between PSBs and their private sector counterparts based on measures of

efficiency and productivity that use quantities of outputs and inputs. Both measures are relevant in attempting a comparison between the private and public sectors.

In the study of **A M Rawani and M P Gupta (2002)** makes an attempt to explore empirically the difference in the role of Information Systems (IS) in the banking industry. The study indicates that IS plays a supportive role in public sector banks and a strategic role in private and foreign sector banks. The study also indicates that the future impact of IS does not vary significantly with the banking groups.

Meenakshi Rishi and Sweta C. Saxena (2004) highlight the role of labour unions in public sector banks and their initial opposition to technological adoption. This study charts out the path of technological innovation in the Indian banking industry post economic liberalization (1991-2) and identifies initial conditions in terms of competitive environment and regulatory pressures that have contributed to the diffusion of these innovations.

T T Ram Mohan and Subhash C Ray (2004) attempts a comparison of performance among three category of banks – public, private and foreign – using physical quantities of inputs and outputs, and comparing the revenue maximization efficiency of banks during 1992 -2000. The findings show that PSBs performed significantly better than private sector banks.

Sunil Kumar (2008) examines the objective of his analysis is to explore the relationship between technical efficiency and profitability in India PSBs using the ‘efficiency – profitability matrix’. The study is confined to cross - sectional data for the year 2005. A non – parametric technique named DEA was applied for computing TE scores for 27 PSBs. The overall level of technical inefficiency in the Indian public sector banking industry has been found to be around 11.5 percent. Also, banks affiliated with the SBI group outperformed the banks in the NB group in terms of operating efficiency.

Sunil Kumar and Rachita Gulati (2008) examine the issue of convergence of efficiency levels among Indian public sector banks (PSBs) during the post-reforms period spanning from 1992/1993 to 2005/2006. That is, the banks with low level of efficiency at the beginning of the period are growing more rapidly than the highly efficient banks. In sum, the study confirms a presence of convergence phenomenon in the Indian public sector banking industry.

R.K. Uppal (2009)¹⁴⁷ analyses the responses of 768 customers of public sector bank, Indian private sector bank & Foreign Bank (each one from these groups) operating in Amritsar district of Punjab. It may be inferred that there is significant difference among three bank groups with regard to the time customers have to spend to transact a business. The e-banks are more efficient in regard to time factor.

Kajal Chaudhary and Monika Sharma (2011) discussed that the economic reforms in India started in early nineties, but their outcome is visible now. Increased competition, new information technologies and thereby declining processing costs, the erosion of product and geographic boundaries, and less restrictive governmental regulations have all played a major role for Public Sector Banks in India to forcefully compete with Private and Foreign Ban

CHAPTER III

RESEARCH METHODOLOGY

Research Design

This research paper A Study on Impact of Technology in The Operations of Public and Private Sector Banks. The population of the study covers Coimbatore city. Research is a systematic way to collect the information and get the accurate knowledge with a methodology so that the derived knowledge can be used to make decisions. In short, research is a process of planning, acquiring, analyzing and publicizing relevant data, information and insights to decision makers in ways that mobilize the organization to take appropriate actions that, in turn, maximize business performance.

Collection of data:

The type of research methodology is descriptive and analytical. The data collected for the study includes both primary and secondary data.

Secondary Data:

The secondary data was collected from the following:

Reserve Bank of India: Bulletin, Statistical Tables Relating to Banks in India, Reports on Trend and Progress of Banking in India.

Indian Banks Association: IBA Bulletins, IBA Publications

Websites – jccc@ugcinfonet. www.rbi.org.in, www.jstore.org, www.springerlink.com,

www.emeraldinsight.com, www.scribd.com, www.banknetindia.com, www.en.wikipedia.org/wiki/Bank,

www.business-standard.com

Primary Data:

The data has been collected through a well-structured questionnaire and having discussion with sample respondents. In order to eclipse the customer perceptions towards “Impact of Technology Operation in Public and Private Sector Bank”.

Study population and Area:

The primary data was collected in Coimbatore city only because it is not feasible to collect the data universally. Coimbatore is a cost important city, fast growing in population, industrial development, service sector and financial sectors. Therefore, Coimbatore city is selected for the focus study as it is the representative of cross section of the society.

Sample Size Determination:

Selecting an appropriate sample size is a critical aspect in research with particular reference to this study. Since the banking customers a sample of 100 is convincing enough for both customers and employees as a true representative and this was considered for the purpose of this study. The convincing sample method has been used for both customers and employee study.

Questionnaire Design

The questions in questionnaire were identified through the analysis of recent writings and publications from various sources of information relevant to the research topic analyzed in review of literature. The questionnaire was in English. Participants were asked to express the level of their satisfaction. A five-point Likert scale was used to measure all the statements (1 = Extremely Satisfied to 5 = Extremely Dissatisfied and 1= Strongly Agree to 5= Strongly Disagree). The questionnaire has been designed for customers to determine the customer satisfaction level in terms of technology and service quality in the banking sector, has collected through SERVQUAL dimensions concept and to analyses the customers perceptions on usage & problems of the major technological services and with a sample size of 100.

Data Collection Procedure

The researcher obtained a permission from the Department of Commerce to conduct the study. The researcher then circulated the questionnaire and data collection which lasted for 6 months.

For customers, the data was collected by issuing questionnaire. All the data were collected from bank customers through personal contact approach.

Tools of Analysis

An unbiased selection of samples is important for the study so that the sample represents the population conceptually. Simple random sampling method is therefore used to get the data from the samples. This method is used because it assigns equal probability to each unit of the population to be included in the sample.

Sampling Method is **SIMPLE PERCENTAGE ANALYSIS**

$$\frac{\text{No of Respondents}}{\text{Total No of Respondents}} * 100$$

Attribution

CHAPTER IV

TABLE 4.1

Gender of The Respondents

S. No	Gender	Count of Gender
1	Female	56
2	Male	46
	Total	100

Interpretatio

The table represent the Gender of users of Nationalized bank account and who uses the technology operations. The maximum level of members using of bank account is Male it is of 56%. This chart states that the usage of nationalized bank account is male members.

Chart 4.1

GENDER OF THE RESPONDENTS

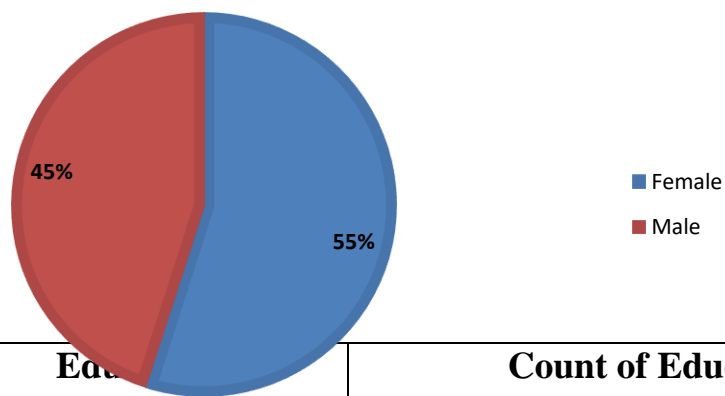


TABLE 4.2

S. No	Education	Count of Education
1	Degree	78
2	Diploma	10
3	High School	12
4	Illiterate	2
	Total	100

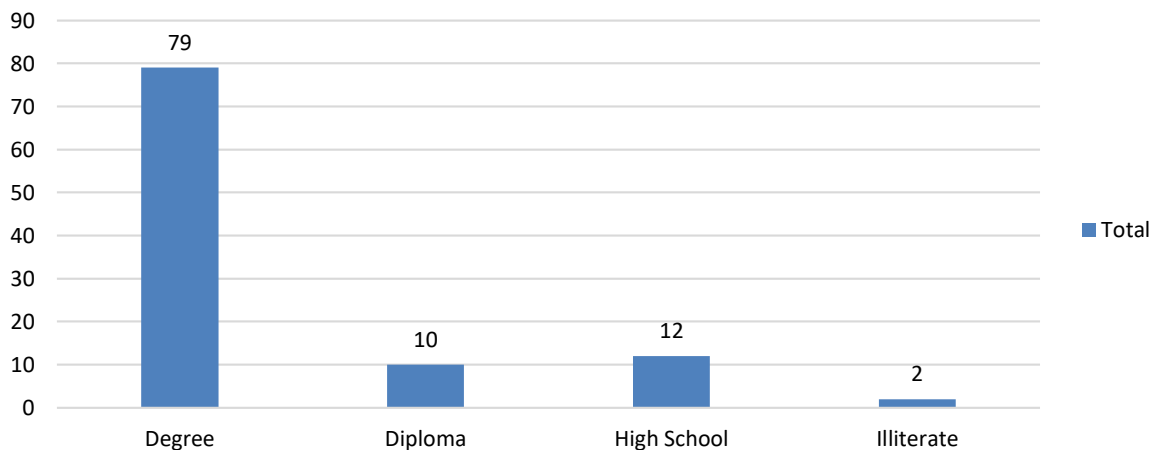
Qualification of the Respondents

Interpretation

The table represent the technology operation of bank is used by the educated persons who are graduate, that is degree holders is of 78%.

Chart 4.2

S. No	Status of Usage	Count of Status of Usage
1	1- 5 Years	45.10
2	10-15 Years	8.82
3	5-10 Years	26.47
4	Above 15 Years	3.92
5	Less than 1 year	15.69
	Total	100

Qualification of the Respondents**Table 4.3**

Status of Bank Account Usage of The Respondents Interpretation

The table represent the status of usage of Nationalized bank account of the customers. The maximum level of status of bank account usage is 1-5 years it is 45.10%. This chart states that the usage of nationalized bank account is around 1-5 years.

Chart 4.3
STATUS OF BANK ACCOUNT USAGE OF THE RESPONDENTS

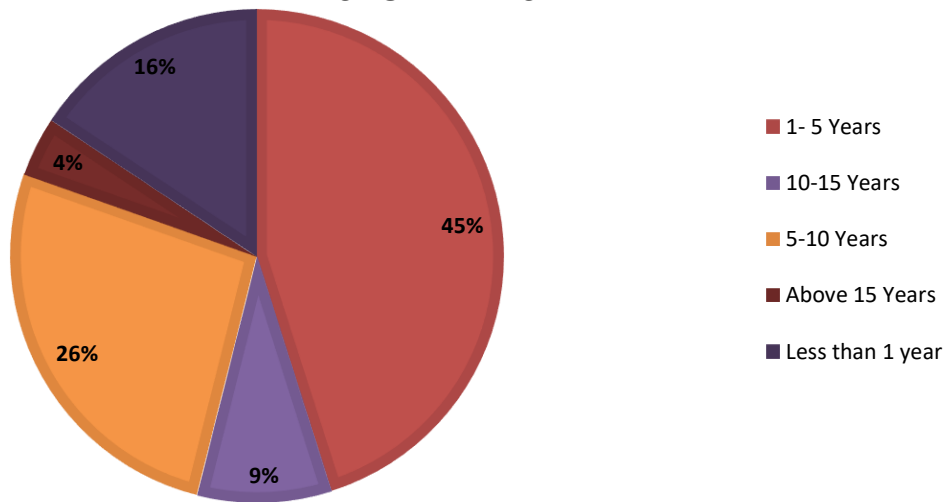


TABLE 4.4
Age of the Respondents

S. No	Age	Count of Age
1	18-30 Years	63
2	31-50 Years	32
3	50 and Above	7
	Total	100

Interpretation

The table represent the age of the respondents. It states that the online transactions are used mostly used by the age group of 18- 30 years it of 63%.

Chart 4.4
AGE OF THE RESPONDENTS

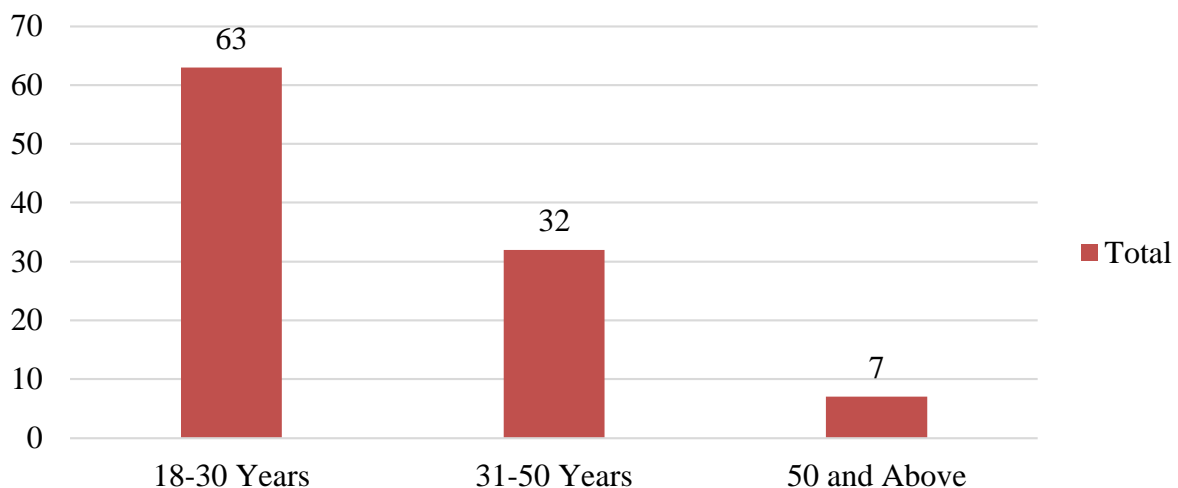
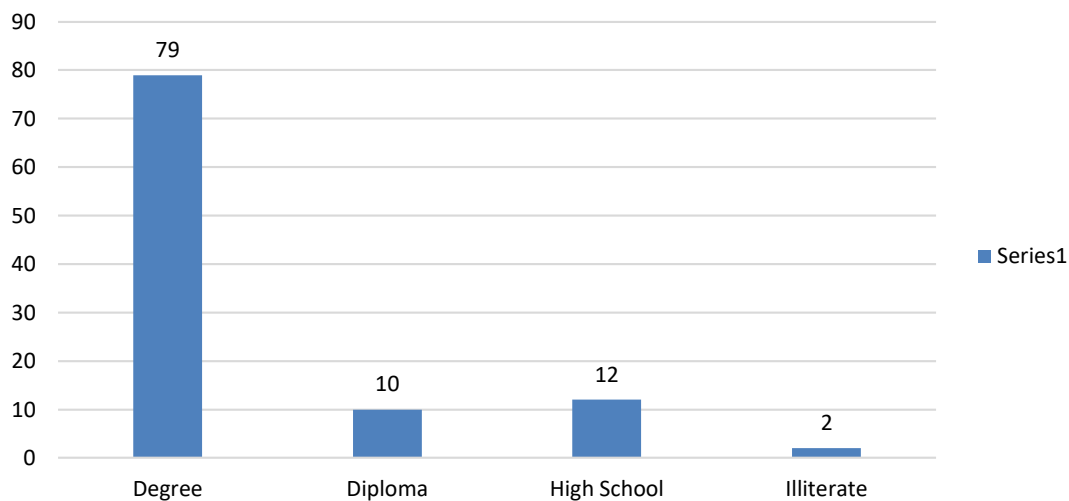


Table 4.5**Profession of the Respondents**

S. No	Profession	Count of Profession
1	Home-Maker	14
2	Private Employee	40
3	Self-Employed	19
4	Student	29
	Total	100

Interpretation

The table represent the Profession of the respondents. It states that the online transactions are used mostly used by the private employees and next to that the students are using it. It is of 40% and 29%.

Chart 4.5**Qualification of the Respondents****Table 4.6****Monthly Income of the Respondents**

S. no	Monthly Income	Count of Monthly Income
1	10,000 – 30,000	33
2	30,000 – 50,000	9
3	50,000 and Above	42
4	Up to 10,000	15
5	Nil	8
	Total	100

Interpretation

The table represent the monthly income is 50, 000 and above because the online transaction is mostly used by the private employees.

Chart 4.6

MONTHLY INCOME OF THE RESPONDENTS

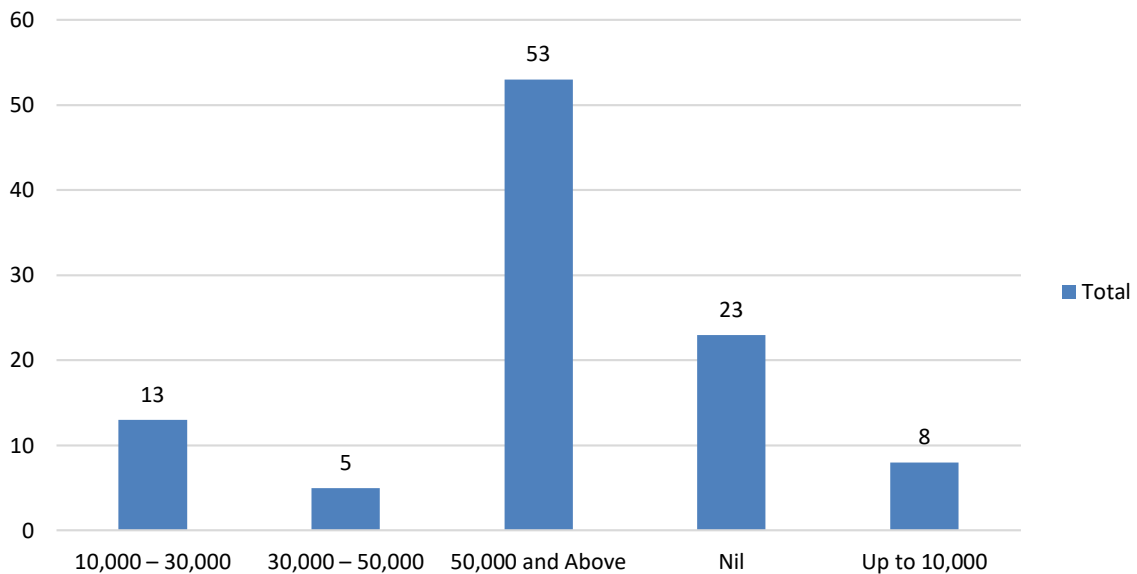


Table 4.7

Category of bank which is used by the respondents

S. No	Category of The Bank	Count of Category of The Banks
1	Nationalized Bank	57
2	Private Bank	46
	Total	100

Interpretation

The table represent that the respondents think that the nationalized is technologically advanced. This bar diagram states that 57% of respondents think like that.

Chart 4.7

Category of the bank

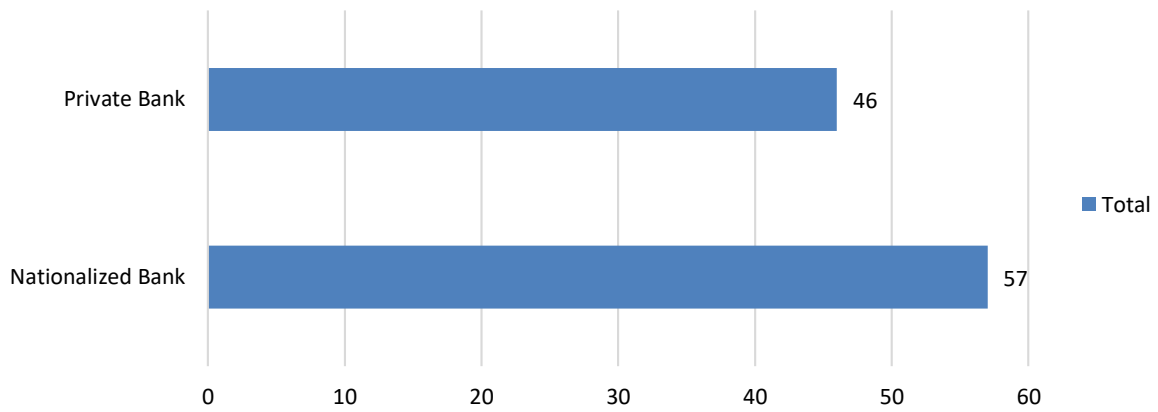


Table 4.8

Attribution of the respondents towards the value of bank

S. No	Which attribute of the bank do you value the most?	Count of Which attribute of the bank do you value the most?
1	Quality Service	39
2	Technology Service	23
3	Trust	33
4	Type of Bank	8
	Total	100

Interpretation

The respondents attribute the value of bank by its quality of service it is of 39%. The maximum respondent choses the bank for the quality of service.

Chart 4.8

ATTRIBUTE OF THE BANK VALUE THE MOST

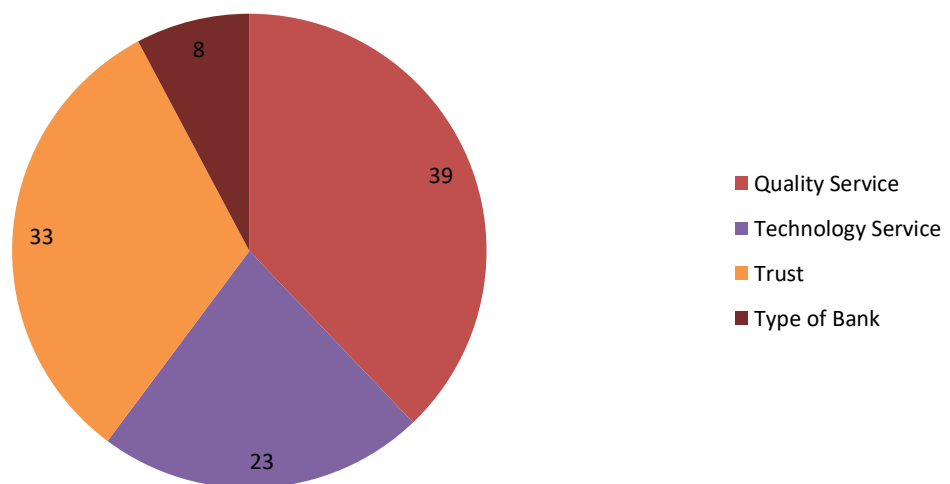


Table 4.9
Factor Promotes to Use the New Techniques in Banking

S. No	Factor Promotes to Use the New Techniques in Banking	Count of Factor Promotes You to Use the New Techniques in Banking
1	Cost Effectiveness	16
2	Ease of Use	51
3	Reduce the Time of Transaction	29
4	Technology Savvy	7
	Total	100

Interpretation

The table represent that the factors promotes to use the new techniques in banking is for the ease of use. It is of 51%.

Chart 4.9

Factor Promotes To Use The New Techniques In Banking

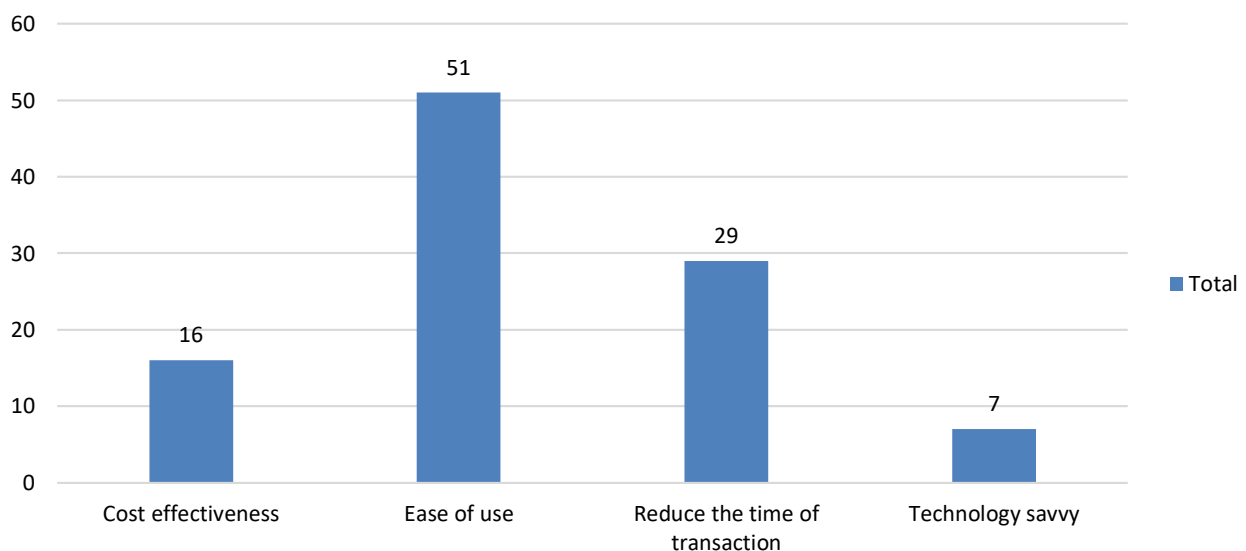


Table 4.10
Count of Computer Usage Level

S. No	Computer Usage Level of The Respondent	Computer Usage Level
1	Advanced Computer Knowledge	24
2	Average Knowledge	55
3	Beginner	12
4	Expert	11
5	No Knowledge About Computer	1
	Total	100

Interpretation

The table represent that the respondent's computer usage level maximum of the respondents that is 53% of the respondents have average knowledge about the computer.

Chart 4.10

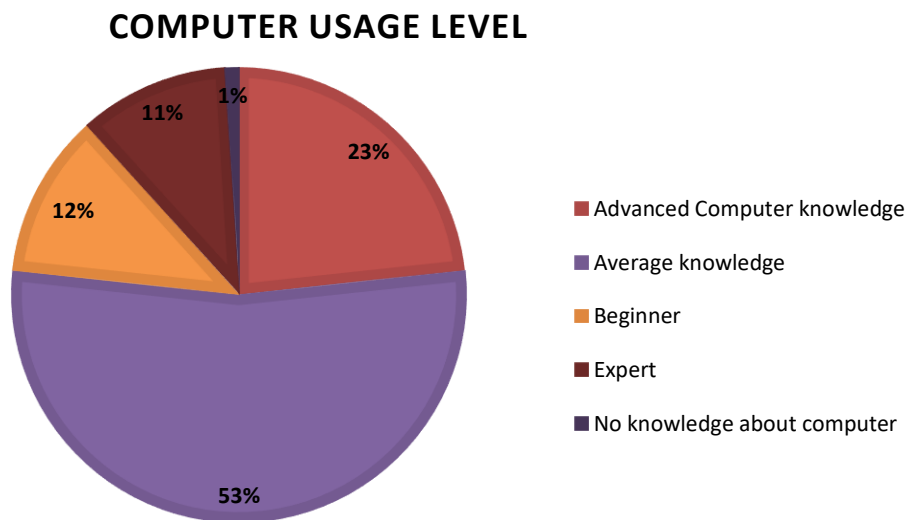


Table 4.11

Level of Usage of Technology Services

S. No	Level of Usage of Technology Services	Count of Level of Usage of Technology Services
1	ATM / Debit card service	48
2	Credit card services	1
3	E- Payment	10
4	NEFT / RTGS / EFT's	7
5	Online banking services	29
6	Uses of E-Mail	8
	Total	100

Interpretation

The table represent that the level of usage of technology service by the respondents. Maximum of the respondents that is 48% uses the service of ATM/ Debit cards for their making payments.

Chart 4.11

Level of Usage of Technology Services

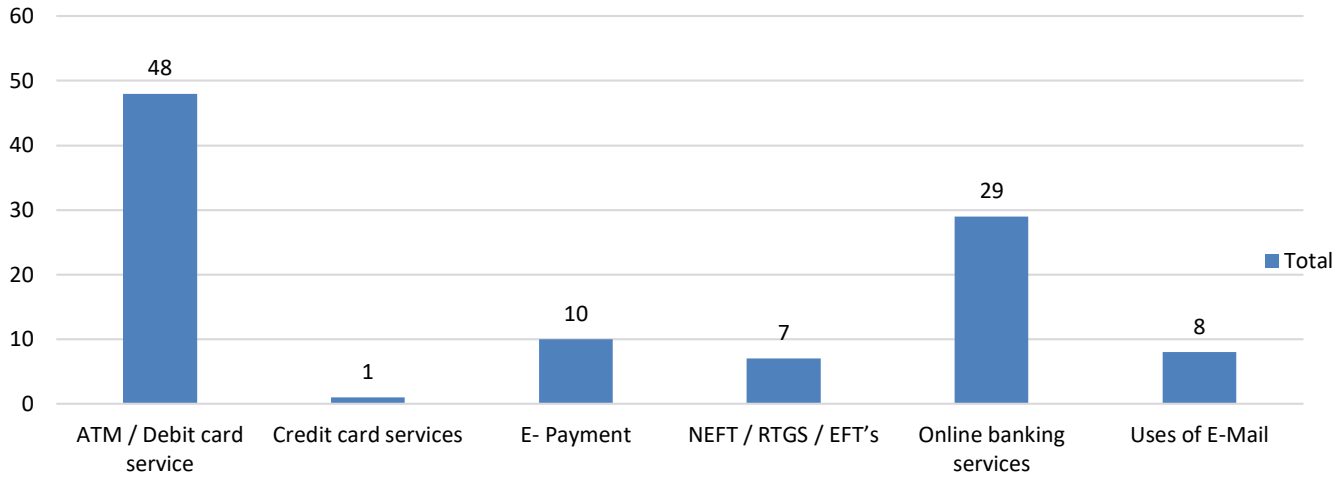


Table 4.12

Frequency level of using the service of Branch Banking

S. No	Frequency level of using the service of Branch Banking	Count of frequently using of the branch banking services per month
1	1- 3 times	45
2	3-8 times	10
3	more than 10 times	4
4	Nil	44
	Total	100

Interpretation

The table represent the frequency level of using the service of branch banking per month by the respondents. Maximum of the respondents that is 45% uses the service of branch banking for 1-3 times in a month or nil.

Chart 4.12

Frequently Using Of The Branch Banking Services Per Month

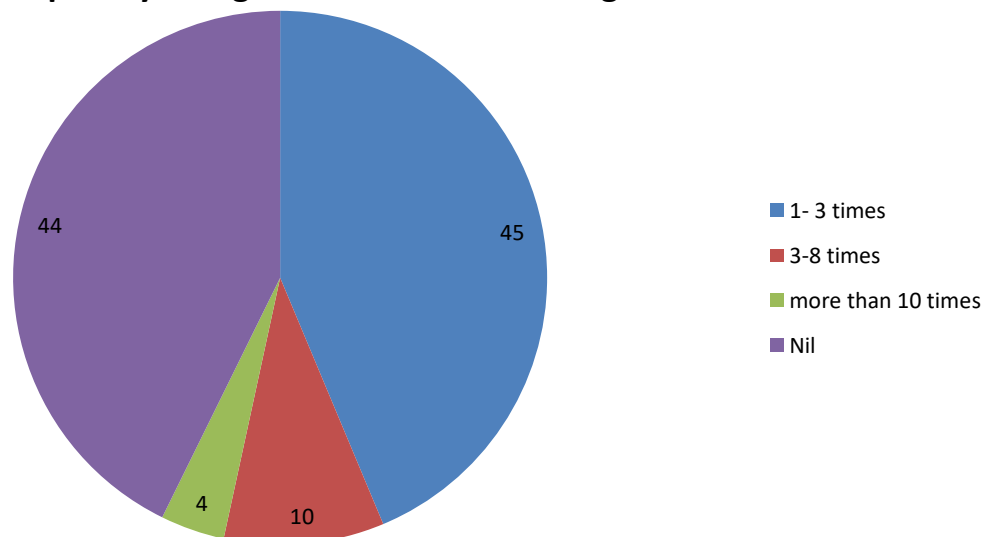


Table 4.13
Frequency level of using the service of ATM

S. No	Frequency level of using the service of ATM	Count of Frequency level of using the service of ATM
1	1- 3 times	51
2	3-8 times	24
3	more than 10 times	18
4	Nil	10
	Total	100

Interpretation

The table represent the frequency level of using the service of ATM per month by the respondents. Maximum of the respondents that is 51% uses the service of ATM for 1-3 times in a month.

Chart 4.13

Frequency level of using the service of ATM

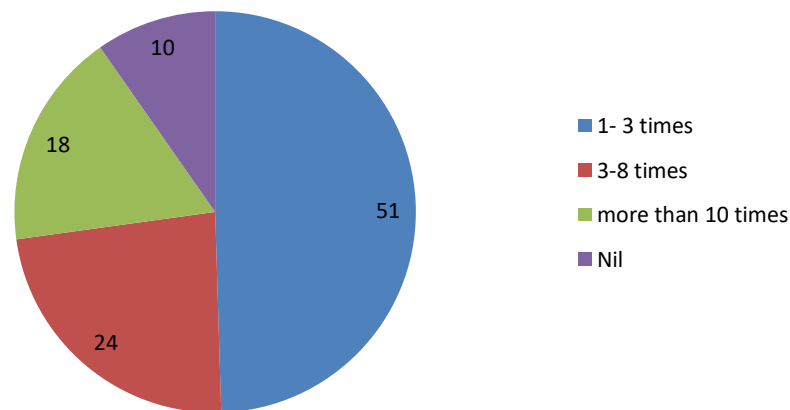


Table 4.14
Frequency level of using the service of Internet banking

S. No	Frequency level of using the service of Internet banking	Count of Frequency level of using the service of Internet banking
1	1- 3 times	19
2	3-8 times	20
3	more than 10 times	53
4	Nil	11
	Total	100

Interpretation

The table represent the frequency level of using the service of Internet Banking per month by the respondents. Maximum of the respondents that is 53% uses the service of Internet banking for more than 10 times in a month.

Chart 4.14

Frequency level of using the service of Internet banking

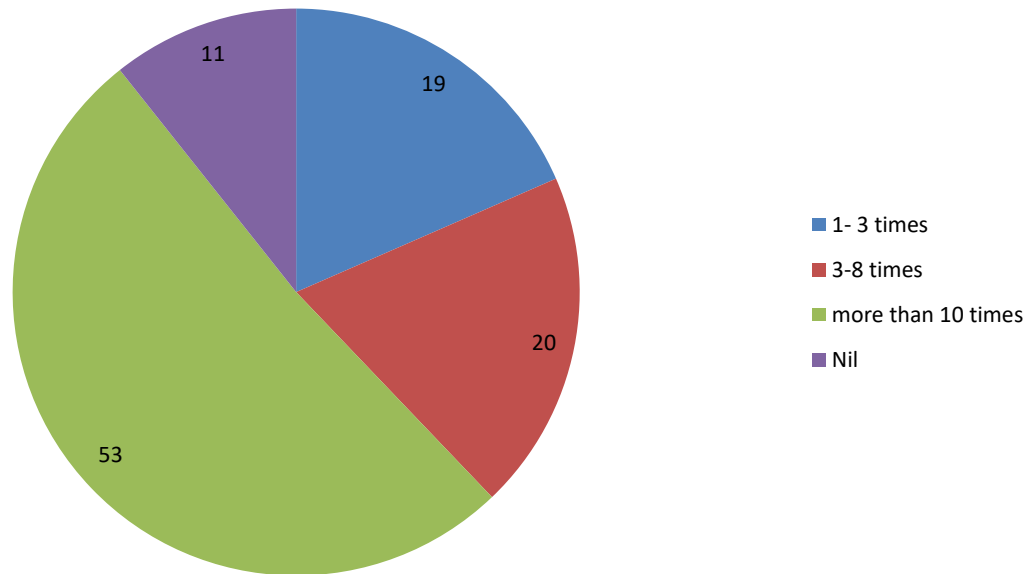


Table 4.15

Frequency level of using the service of Mobile banking

S. No	Frequency level of using the service of Mobile banking	Count of Frequency level of using the service of Mobile banking
1	1- 3 times	30
2	3-8 times	38
3	more than 10 times	22
4	Nil	11
	Total	100

Interpretation

The table represent the frequency level of using the service of Mobile Banking per month by the respondents. Maximum of the respondents that is 38% uses the service of Internet banking for more than 3-8 times in a month.

Chart 4.15

Frequency level of using the service of Mobile banking

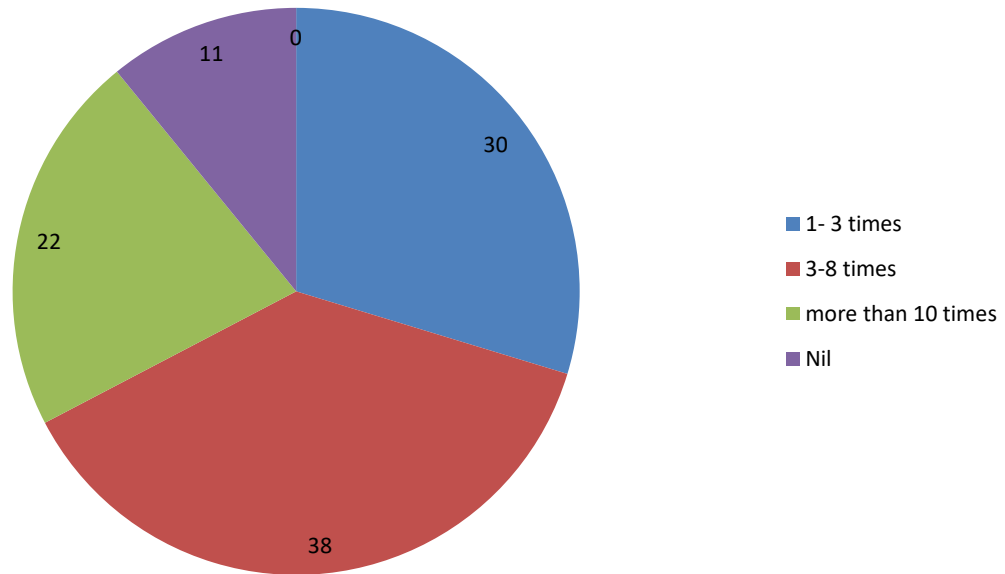


Table 4.16
Satisfaction on Technology usage of ATM Services

S. No	Satisfaction on Technology usage [ATM Services]	Count of Satisfaction on Technology usage [ATM Services]
1	Dissatisfied	1
2	Extremely Dissatisfied	1
3	Extremely Satisfied	27
4	Neutral	11
5	Satisfied	63
	Total	100

Interpretation

The table represent the satisfaction level of the customers who uses the ATM services. The customers are satisfied while using the ATM service which is of 63%.

Chart 4.16

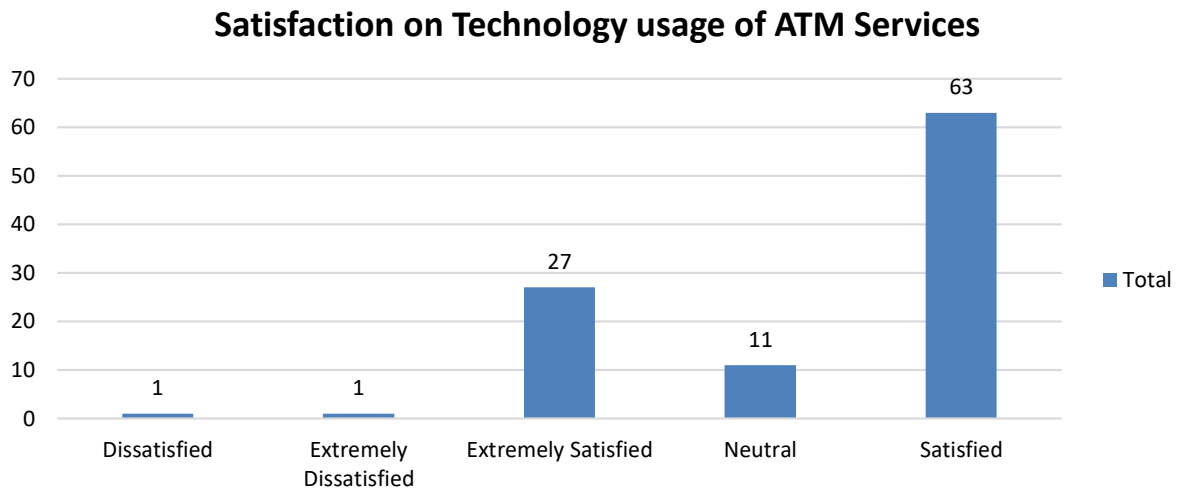


Table 4.17

Satisfaction on Technology usage of Internet banking

S. No	Satisfaction on Technology usage [Internet banking Services]	Count of Satisfaction on Technology usage [Internet banking Services]
1	Dissatisfied	3
2	Extremely Satisfied	27
3	Neutral	24
4	Satisfied	49
	Total	100

Interpretation

The table represent the satisfaction level of the customers who uses the Internet banking services. The customers are satisfied while using the Internet Banking service which is of 63%.

Chart 4.17

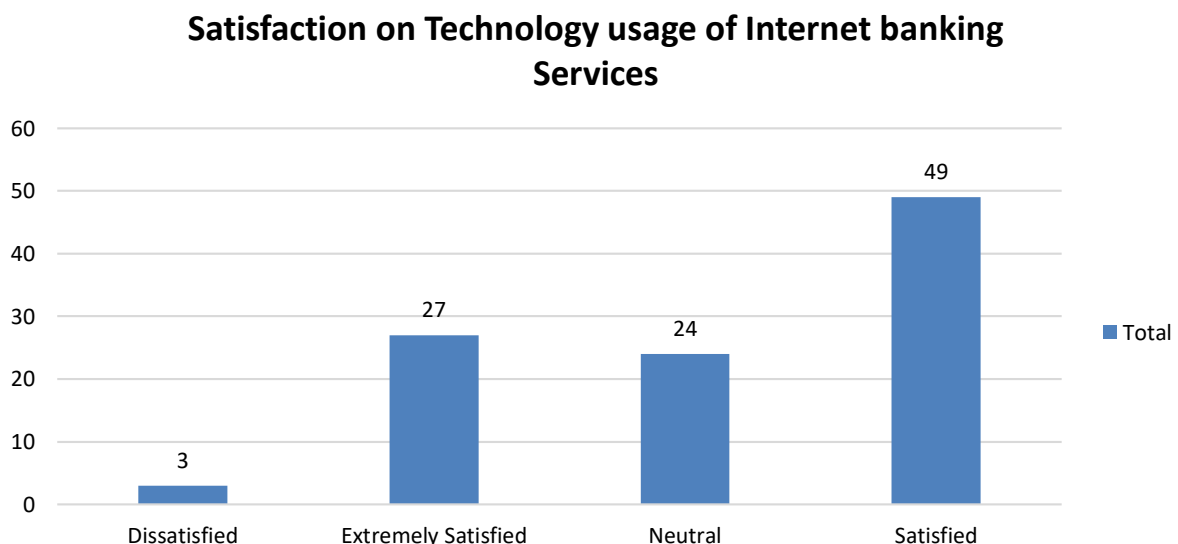
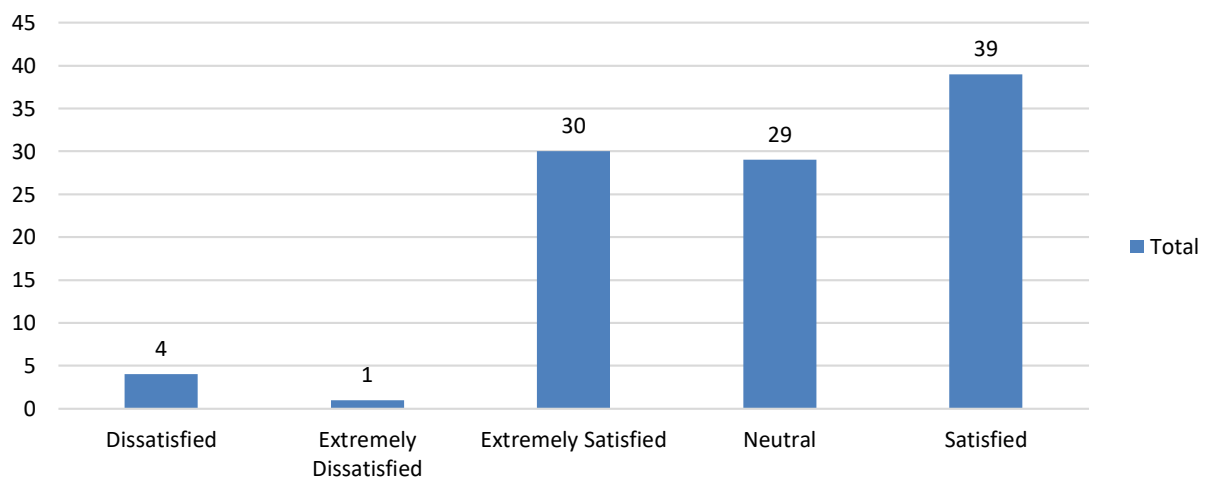


Table 4.18**Satisfaction on Technology usage of Mobile banking**

S. No	Satisfaction on Technology usage [Mobile Banking services]	Count of Satisfaction on Technology usage [Mobile Banking services]
1	Dissatisfied	4
2	Extremely Dissatisfied	1
3	Extremely Satisfied	30
4	Neutral	29
5	Satisfied	39
	Total	100

Interpretation

The table represent the satisfaction level of the customers who uses the Mobile banking services. The customers are satisfied while using the Mobile Banking service which is of 39%.

Chart 4.18**Satisfaction on Technology usage of Mobile Banking services****Table 4.19****Satisfaction on Technology usage of Other banking Service**

S. No	Satisfaction on Technology usage Other Services	Count of Satisfaction on Technology usage Other Services
1	Dissatisfied	5
2	Extremely Dissatisfied	2
3	Extremely Satisfied	10
4	Neutral	31
5	Satisfied	55
	Total	100

Interpretation

The table represent the satisfaction level of the customers who uses the Other banking services. The customers are satisfied while using the Mobile Banking service which is of 39%.

Chart 4.19

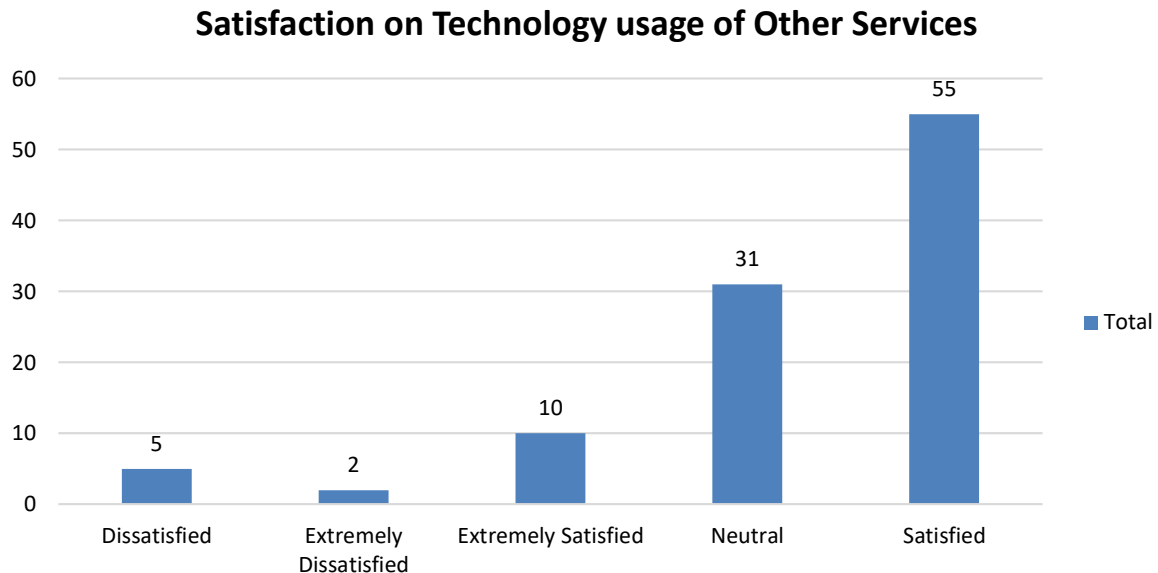


Table 4.20

Problems of technology Usage [ATM Problem]

S. No	Problems of technology Usage [ATM Problem]	Count of Problems of technology Usage [ATM Problem]
1	Never	27
2	Often	20
3	Rarely	56
	Total	100

Interpretation

The table represent the problem faced by the respondents in technology usage in ATM Problem. 56% of the respondents had rarely problem on ATM Service.

Chart 4.20

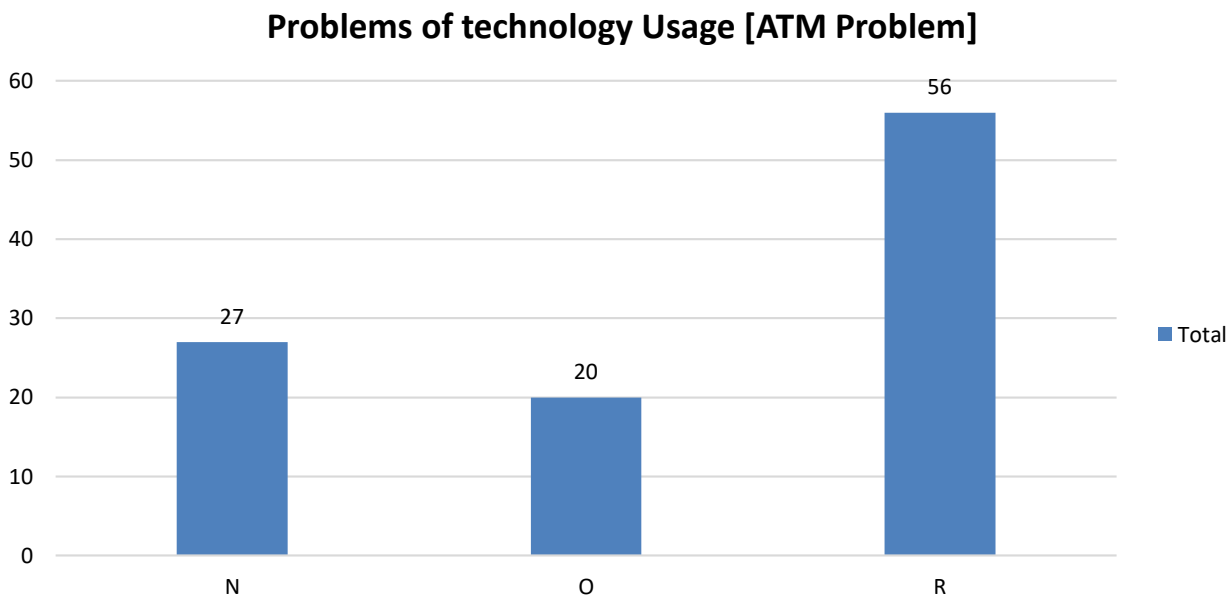


Table 4.21

Problems of technology Usage [Internet Banking Problem]

S. No	Problems of technology Usage [Internet Banking Problem]	Count of Problems of technology Usage [Internet Banking Problem]
1	Never	22
2	Often	27
3	Rarely	54
	Total	100

Interpretation

The table represent the problem faced by the respondents in technology usage in ATM Problem. 56% of the respondents had rarely problem on ATM Service.

Chart 4.21

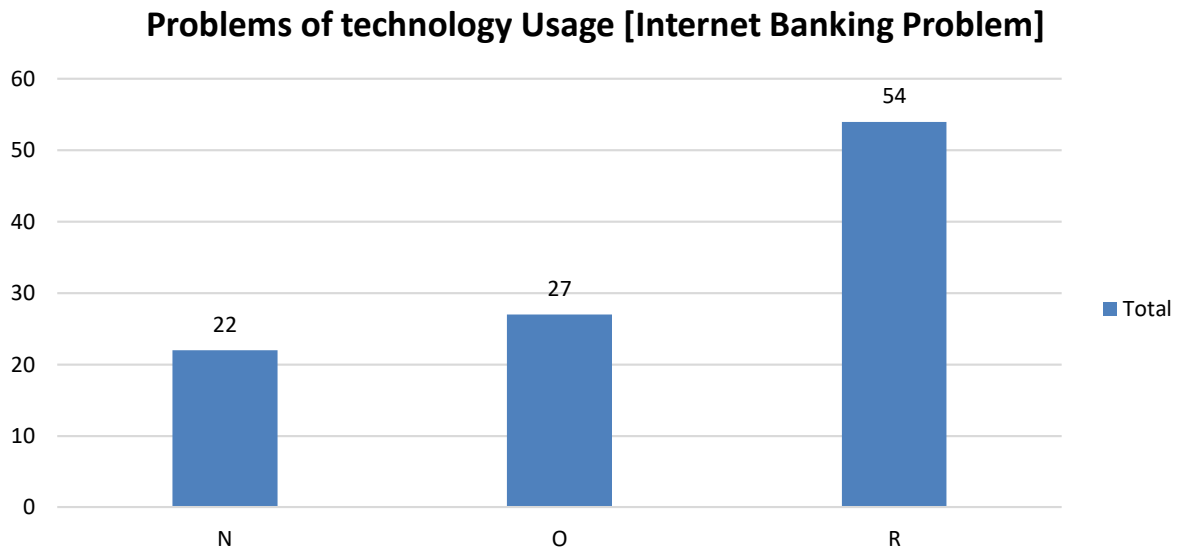


Table 4.22

Satisfaction level of various Services Quality Dimension- Accuracy

S. No	Satisfaction levels regarding the various Services Quality Dimension [Accuracy]	Count of Satisfaction levels regarding the various Services Quality Dimension [Accuracy]
1	Dissatisfied	7
2	Extremely Satisfied	6
3	Neutral	3
4	Satisfied	87
	Total	100

Interpretation

The table represent the Satisfaction level of various Services Quality Dimension- Accuracy of the respondents of 87%.

Chart 4.22

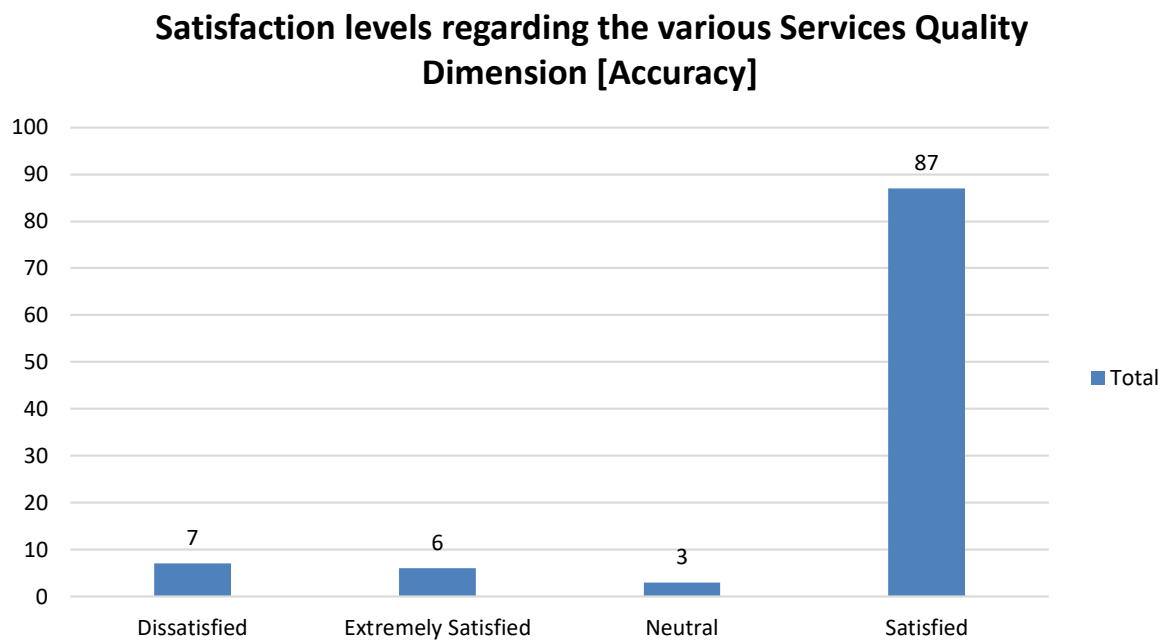


Table 4.23

Satisfaction levels various Services Quality Dimension- Security

S. No	Satisfaction levels regarding the various Services Quality Dimension [Security]	Count of Satisfaction levels regarding the various Services Quality Dimension [Security]
1	Dissatisfied	1
2	Extremely Satisfied	27
3	Neutral	16
4	Satisfied	59
	Total	100

Interpretation

The table represent the Satisfaction level of various Services Quality Dimension- Security of the respondents of 59%.

Chart 4.23

Satisfaction levels regarding the various Services Quality Dimension [Security]

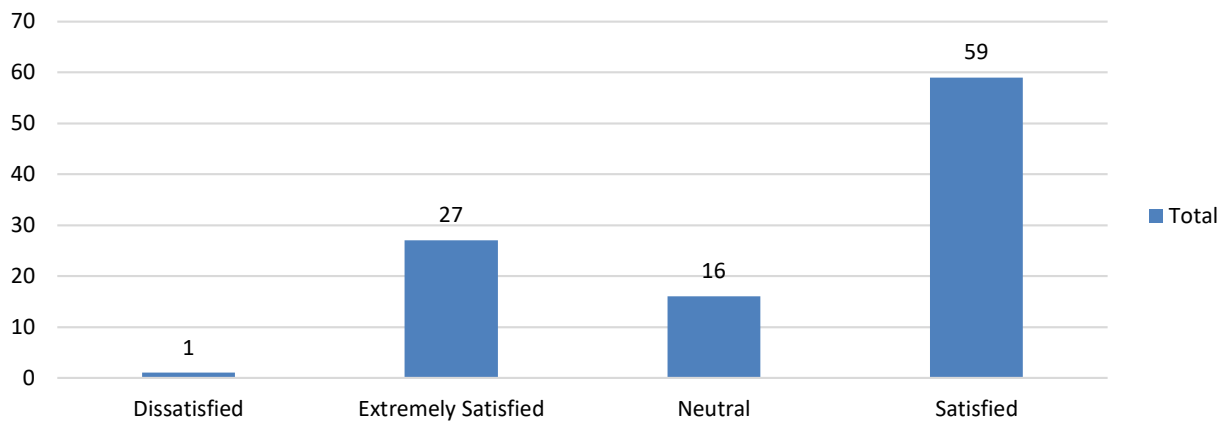


Table 4.24

Satisfaction levels various Services Quality Dimension- Customer Service

S. No	Satisfaction levels regarding the various Services Quality Dimension [Customer Service]	Count of Satisfaction levels regarding the various Services Quality Dimension [Customer Service]
1	Dissatisfied	4
2	Extremely Dissatisfied	2
3	Extremely Satisfied	22
4	Neutral	32
5	Satisfied	58
	Total	100

Interpretation

The table represent the Satisfaction level of various Services Quality Dimension- Customer Satisfaction of the respondents of 58%.

Chart 4.24

Satisfaction levels regarding the various Services Quality Dimension [Customer Service]

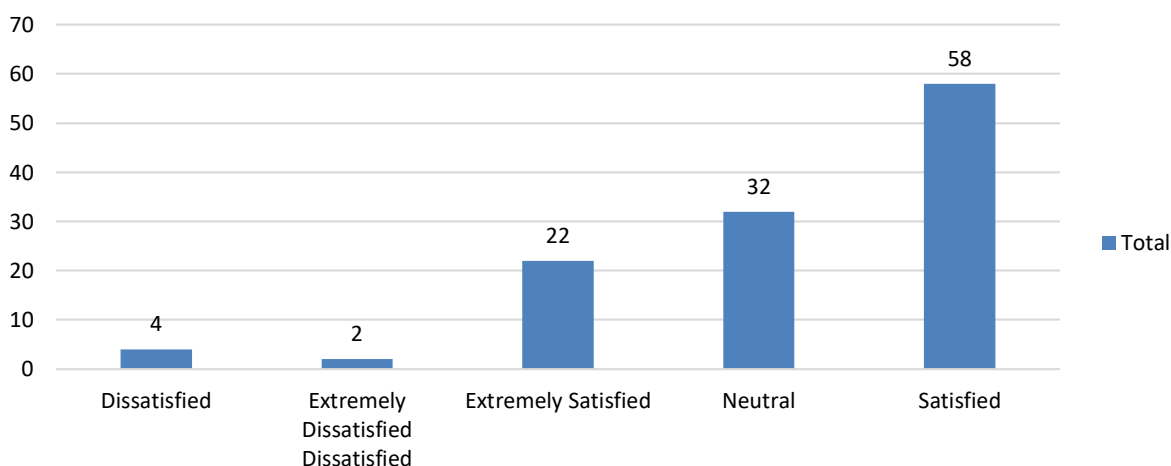


Table 4.25

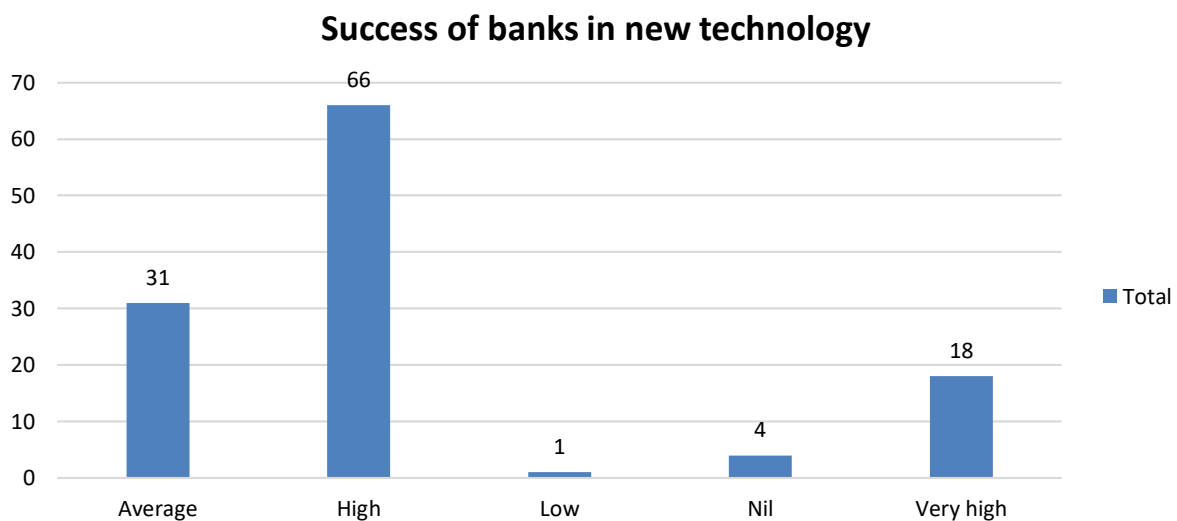
Success of Banks in New Technology

S. No	Success of Banks in New Technology	Count of Success of Banks in New Technology
1	Average	31
2	High	66
3	Low	1
4	Nil	4
5	Very high	18
	Total	100

Interpretation

The table represent the Success of the new technology in the banks that the respondents says that the success is very high that is of 66%.

Chart 4.25



CHAPTER V

FINDINGS

Gender- The Gender of users of Nationalized bank account and who uses the technology operations. The maximum level of members using of bank account is Male it is of 56%. This chart states that the usage of nationalized bank account is male members.

Education- The technology operation of bank is used by the educated persons who are graduate, that is degree holders is of 78%.

Status of Bank Account Usage The status of usage of Nationalized bank account of the customers. The maximum level of status of bank account usage is 1-5 years it is 45.10%. This chart states that the usage of nationalized bank account is around 1-5 years.

Age- The table represent the age of the respondents. It states that the online transactions are used mostly used by the age group of 18- 30 years it of 63%.

Profession- The Profession of the respondents. It states that the online transactions are used mostly used by the private employees and next to that the students are using it. It is of 40% and 29%.

Monthly Income- The monthly income is 50, 000 and above because the online transaction is mostly used by the private employees. It is 42%.

Category of the banks most technologically advanced- The respondents think that the nationalized is technologically advanced. This bar diagram states that 57% of respondents think like that.

Attribute of the bank value the most- The respondents attribute the value of bank by its quality of service it is of 39%. The maximum respondent choses the bank for the quality of service.

Factor promotes to use the new techniques in banking- The factors promotes to use the new techniques in banking is for the ease of use. It is of 51%.

Computer usage level- The respondent's computer usage level maximum of the respondents that is 53% of the respondents have average knowledge about the computer.

Level of Usage of Technology Services- The level of usage of technology service by the respondents. Maximum of the respondents that is 48% uses the service of ATM/ Debit cards for their making payments.

Usage of the branch banking services (per month)- The frequency level of using the service of branch banking per month by the respondents. Maximum of the respondents that is 45% uses the service of branch banking for 1-3 times in a month or nil.

Usage of the ATM services (per month)- The frequency level of using the service of ATM per month by the respondents. Maximum of the respondents that is 51% uses the service of ATM for 1-3 times in a month.

Usage of the Internet Banking services (per month)- The frequency level of using the service of Internet Banking per month by the respondents. Maximum of the respondents that is 53% uses the service of Internet banking for more than 10 times in a month.

Usage of the Mobile Banking services (per month)- The frequency level of using the service of Mobile Banking per month by the respondents. Maximum of the respondents that is 38% uses the service of Internet banking for more than 3-8 times in a month.

Satisfaction on Technology usage of ATM Services- The satisfaction level of the customers who uses the ATM services. The customers are satisfied while using the ATM service which is of 63%.

Satisfaction on Technology usage of Internet banking Services- The satisfaction level of the customers who uses the Internet banking services. The customers are satisfied while using the Internet Banking service which is of 63%.

Satisfaction on Technology usage of Mobile Banking services- The satisfaction level of the customers who uses the Mobile banking services. The customers are satisfied while using the Mobile Banking service which is of 39%.

Satisfaction on Technology usage of Other Services- The satisfaction level of the customers who uses the Other banking services. The customers are satisfied while using the Mobile Banking service which is of 55%.

Problems of technology Usage [ATM Problem]- The problem faced by the respondents in technology usage in ATM Problem. 56% of the respondents had rarely problem on ATM Service.

Problems of technology Usage [Internet Banking Problem]- The problem faced by the respondents in technology usage in ATM Problem. 56% of the respondents had rarely problem on ATM Service.

Satisfaction levels regarding the various Services Quality Dimension [Accuracy]- The Satisfaction level of various Services Quality Dimension- Accuracy of the respondents of 87%.

Satisfaction levels regarding the various Services Quality Dimension [Security]- The Satisfaction level of various Services Quality Dimension- Security of the respondents of 59%.

Satisfaction levels regarding the various Services Quality Dimension [Customer Service]- The Satisfaction level of various Services Quality Dimension- Customer Satisfaction of the respondents of 58%.

Success of banks in new technology- The Success of the new technology in the banks that the respondents says that the success is very high that is of 66%.

SUGGESTIONS

Several meetings with the customers and employees of Andhra Bank and ICICI Bank and an analytical study has given a fair idea as to the work ability of technology in banking, the pros and cons of its applicability in the day to day life, its shortcomings due to technological and human factors. The following suggestions are made

Security: Appropriate technologies for encryption of data for secured transactions regular and multiple backup, extensive use of password and other forms of authorization is need to adopt. To increase the security for ATMs it is advised to share the security guards by establishing group ATMs, as one or two guards may not face the dangers.

Suggestion for Public sector Banks: Some of the out dated and impracticable rules and regulations of public sector banks are still testing the patience of the customers and forcing them to search for a possible alternative. Unless and until the banks discard rules that are a hindrance to the smooth functioning of routine bank work, people may be forced to knock the doors of private banks.

Fraud: Ultra tech cyber criminals are now a days, are daringly using their sixth sense techniques to transfer large amount of cash into some account or secretly transfer valuable and vital technical and business information causing unbearable loss to the customers, banking managements and also to the government. Therefore, bank must do their best to educate and warn its customers.

Trust: The cyber dons must be caught and given severe punishments to deter prospective dons from doing the crimes and also to instill trust, confidence, and feeling of genuineness in the customer.

ATM: It is suggested that the limit of (1) number of transactions and (2) maximum withdrawal of cash in case of Andhra Bank must go to make the customers feel truly happy.

Credit cards: Number of complaints against credit cards is high from customers and there is high accumulation of bad debts in the bank's balance sheet. It is suggested that the managements take a tough and appropriate decision.

Lower Cost: It is suggested that banks reduce the service charges for their products and services offered to a minimal low as large number of banking activities naturally provide a fairly larger share of income.

Ease of Use: Literates are also finding it difficult to operate internet banking and ATM machines. Banks must take the initiative to consider conducting of practical training sessions for educating customers at their branches, on the usage of internet banking interface and ATMs

Mobile ATMs and Mobile Banks: It is becoming increasingly expensive to open new branches and new ATMs. So, banks can expand their e-banking hands into towns and rural areas in the form of mobile ATMs and mobile banks.

It is suggested that the government to assimilate modern technology of networking system, it should eliminate the blocks to a 24x7 supply of electricity which is the key element.

Employee Behavior: from this study it is crystal clear that the customers are less satisfied with the behavior of bank employees. It is suggested that every bank pay more attention to increase the communication skills of the employees.

Suggestions to customers: it is advisable to type correct URL into the browser and log off immediately after the online banking session and keep changing the passwords at regular intervals to avoid clandestine copying. The passwords must be so, that it is difficult and complex to make a duplicate and dupe the customers. Never share them with any person.

Preventive measures: there are some complaints that networking system of the e-bank are getting stalled due to virus, hacking and some other technical reasons. Therefore, the banks must take all the steps and precautionary measures to prevent such incidents from recurring again and again.

Accuracy: Bank customers must realize that accuracy in filling the requisite forms saves them from the hassles of heart burn. Double checking and verification are a must for both bankers and customers and the latter can be called on phone or via other methods.

Upgradation of technology: As regular upgradation of technology is very costly and hence, banks are advised to enter into partnership among themselves for reaping maximum benefits through consultations and coordination's with reputed information technology companies.

Cooperation of employees: recommendation from one colleague to another regarding usefulness of a particular process, can be more powerful. Cooperation coordination

Cooperation among Banks: Though there is cut throat competition among banks it is recommended that a fair degree of cooperation among the employees will greatly benefit all the banks. For example, an ATM placed a centralized location may be shared by many banks which will simplify operational abilities and be cost effective. Network sharing is also recommended through strategic alliance.

Knowledge of Employee: There is a general lack of knowledge or skill to handle sophisticated level of technology, therefore management should introduce compulsory training programs, so that there is perceptible change in their knowledge to handle more complex procedures of e-channels.

Educating customers: Banks must seek the financial cooperation of corporate giants to conduct road shows and occasional classes to educate customers with different educational, cultural, age, health, social and ethical backgrounds to efficiently use the banking services.

Priority of preference: Banks must take steps to see that veterans, sick people, Pregnant Ladies and disabled are sent home quickly by giving them first preference in the banking work, irrespective of their time of arrival.

Utility of internet banking: It seen that from the study that the internet usefulness has a positive influence on its use. Therefore, internet banking acceptance would increase when customers find it more useful. Banks should plan marketing campaigns to increase consumer awareness would result in better acceptance of internet banking.

Mobile Banking: The new banking application is loaded onto the SIM card of the mobile and alters the handset menu. The customer gets a banking option on the mini browser menu with access to the basic services like Balance enquiries, change PIN, Statement, Payment, Transfer and Activate/ Register.

Suggestion for Private Sector Banks: it would be better for private sector banks to reduce hidden charges and higher rates of processing fees collected on various banking activities. It would also be nice if they could allow opening of accounts with zero balance or minimum Rs. 500 balance which would allow large number of customers both in urban and rural areas, this would help in increasing their customer base. Providing group insurance to all the customers would go a long way in creating goodwill and wellness atmosphere. Informing customers by phone or by e-mail about the need to operate the bank accounts periodically will exhibit their duty mindedness and concern and care.

Bio Metric ATMs: As India has around fifty percent of illiterates, it is advised to ICICI Bank to open biometric ATMs.

CONCLUSION

Most people hate receipts – except for when it comes to getting an update on their bank statement. So, crowd give a ways and contests and offer promotions on your receipt. Fun interaction encourages people to come back for a repeat visit. Sometimes we are missing the mobile messages sent from bank for every transaction. So, the banks can keep customer's email as an alternative. So, we would have the track of our transaction. Some of the request can be done in branch only like signature change. If that's can be changed in online rather visiting branch.

It will be a good. Some of the Interactive Voice Response (IVR) calls are chargeable. Make those as toll-free all banks. Though advanced technology is used, to avoid frauds, banks should not promote wireless swiping of cards. Customers are not aware of this type of technology and may result in loss of funds.

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A STUDY ON IMPACT OF TECHNOLOGY IN THE OPERATIONS OF PUBLIC AND PRIVATE
SECTOR BANKS

1. Name *

2. Gender *

Female

Male

3. Age *

18-30 Years

31-50 Years

50 and Above

4. Education *

Illiterate

High School

Diploma

Degree

5. Profession *

Government Employee

Private Employee

Self-Employed

Student

Home-Make

6. Monthly Income *

Up to 10,000
 10,000 – 30,000
 30,000 – 50,000
 50,000 and Above
 Nil

Specific Questions

7. Name of the Bank (that you are the Customer) *

8. Status of Usage (Bank Account) *

Less than 1 year
 1- 5 Years
 5-10 Years
 10-15 Years
 Above 15 Years

9. Which category of the banks do you consider as most technologically advanced? *

Nationalized Bank
 Private Bank

10. Which attribute of the bank do you value the most? *

Quality Service
 Technology Service
 Trust
 Type of Bank

11. Which factor promotes you to use the new techniques in banking? *

- Reduce the time of transaction
- Cost effectiveness
- Ease of use
- Technology savvy

12. How familiar are you with computer usage level of your bank? *

- No knowledge about computer
- Beginner
- Average knowledge
- Advanced Computer knowledge
- Expert

13. Level of Usage of Technology Services *

- Uses of E-Mail
- ATM / Debit card service
- Credit card services
- Online banking services
- E- Payment
- NEFT / RTGS / EFT'

14. How frequently do you use the following banking services per month? *

	Nil	1- 3 times	3-8 times	more than 10 times
Branch Banking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATM	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet Banking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobile Banking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. Satisfaction on Technology usage *

	Extremely Satisfied	Satisfied	Neutral	Dissatisfied	Extremely Dissatisfied
ATM Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet banking Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobile Banking services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. Problems of technology Usage *

	Often	Rarely	Never
ATM Problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet Banking Problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobile banking problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. Satisfaction levels regarding the various Services Quality Dimension *

	Extremely Satisfied	Satisfied	Neutral	Dissatisfied	Extremely Dissatisfied
Accuracy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Security	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Easy and Convenient Banking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customer Service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. The contribution of new technology to the success of banks in your opinion is *

- Very high
- High
- Average
- Low
- Nil

19. What suggestions you can give to the development of technology to the Indian banking industry?
