

**AN ANALYTICAL STUDY OF CUSTOMER  
SATISFACTION RELATED TO E-BANKING SERVICES  
IN SELECT PUBLIC AND PRIVATE SECTOR BANKS IN  
NASHIK**

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TILAK MAHARASHTRA VIDYAPEETH PUNE**

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**In Management**

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By

**Yogini Sudhakar Nerkar**

**Reg. No. 15813007723**

Under the Guidance of

**Dr. Madhavi Sanjay Kulkarni**

DEPARTMENT OF MANAGEMENT STUDIES

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### **Annexure III**

**Tilak Maharashtra Vidyapeeth, Pune**

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I am **Yogini Sudhakar Nerkar**, Ph. D Scholar of the Tilak Maharashtra Vidyapeeth in Management subject. My thesis entitled **An Analytical Study of Customer Satisfaction Related to e-Banking Services in Select Public and Private Sector Banks in Nashik** under the supervision of **Dr Madhvi Sanajy Kulkarni** solemnly affirm that the thesis submitted by me is my own work. I have not copied it from any source. I have gone through extensive review of literature of the related published / unpublished research work and the use of such references made has been acknowledged in my thesis. The title and the content of research is original. I understand that, in case of any complaint especially plagiarism, regarding my Ph.D. research from any party, I have to go through the enquiry procedure as decided by the Vidyapeeth at any point of time. I understand that, if my Ph.D. thesis (or part of it) is found duplicate at any point of time, my research degree will be withdrawn and in such circumstances, I will be solely responsible and liable for any consequences that arises. I will not hold TMV, Pune responsible and liable in any case.

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**Signature:**

**Address:** C 301, Sundar Sankul, Near NKGSB Bank,  
Magarpatta Road Pune 411013.

**Ph.No. :** 9673300999

**E-mail:** y\_nerkar@yahoo.co.in

**Date:**

**Annexure IV**  
**CERTIFICATE OF THE SUPERVISOR**

It is certified that work entitled **An Analytical Study of Customer Satisfaction Related to e Banking Services in Select Public and Private Sector Banks in Nashik**

It is an original research work done by **Yogini Sudhakar Nerkar**

Under my supervision for the degree of Doctor of Philosophy in Management

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Signature of the Supervisor

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## **Abstract**

Banking is to be considered as pure financial service industry and responsible for the economic development of an economy upto great extent. Satisfaction of customers is the vital for retaining existing customers and attracting prospective customers to widen the level of operational activities in any concern. In India, Private and Public banks are rendering financial services. The Policies and Strategies of Private and Public banks are different that leads variation in the customers' satisfaction level. This research tries to measure the satisfaction level of customers of Public and Private Banks and factors responsible for variation in customer's satisfaction between Private and Public banks in India. The objective of the research is to get the satisfaction level, variations in satisfaction level and reasons responsible for variations in satisfaction level or dissatisfaction in public and private banks. This research is based on primary information obtained from customers of Public and Private sectors banks in India.

The satisfaction of the customers is very important factor in all service industries to enhance and improve the profitability and financial performance of the concern. Banking sector is purely financial service industry and the customer's satisfaction is much more important to run banking business successfully. The satisfaction level of the customers is varying due to different kinds of banking services and their benefit to the customers. There are so many factors that are responsible in the discrimination of the services for different types of banking customers and lead to uneven satisfaction level. In India, Private and Public sector banks are providing the financial services to the different types of customers in rural and urban areas.

Taking into consideration the scope of the study and its utility for the Banking industry the topic

**An Analytical Study of Customer Satisfaction Related To E-Banking Services In Select Public and Private Sector Banks In Nashik** was shortlisted for the study.

This study presents a framework and gives a set of ideas for using customer satisfaction principles and strategies to improve the total quality management, quality

responsiveness and possibilities of public sector, privately provided services in vulnerable communities.

The study is based on the quantitative method using the quantitative questionnaire. This type of research aims at getting answers to standardized items which will help find an explanation or develop predictions that will be true for other persons. The main idea is to develop generalizations that can answer the main question or to contribute to theory. Quantitative research begins with a hypothesis or an issue proclamation and includes a quantitative information examination.

### **Relevance, Justification & likely benefit**

This study is useful to give the proper insight of the customer satisfaction and its related strategies and policies which are practices by the maximum number of private financial institutions. The analysis in the research also address the ground difficulties of the private and public financial institutions which examine the present e saving money situation in the region. Not only e- saving but also for the overall quality improvement and sustainable development of the banking system.

### **Limitations of the study:**

- This exploration study is time bound and because of this lone a couple of parts of the issue will be taken up for consider.
- This research study was taken in a limited area only (i.e. Nashik City) and findings may vary if the area of study is changed.
- Some of the respondents may be biased in their responses and as such the analysis and conclusion based on it could vary to some extent.
- A portion of the conclusions additionally rely on optional information. To the degree these information are solid, the conclusion is considered as substantial.

### **Reliability and validity**

Legitimacy alludes to a circumstance when confirm demonstrates that the discoveries are sensible. The examination isn't viewed as legitimate if the specialist misjudged the appropriate responses of the respondents or if the respondents did not comprehend the inquiries plainly. The respondents can also be influenced by factors out of researcher's control, such as technical factors, time and mood. The results of this survey could be

influenced by the situation the respondents as they could have felt tired to precisely fill the overview.

This study will be useful to give the proper insight of the customer satisfaction and its related strategies and policies which are the practices by the maximum number of private financial institutions. The analysis in the research also address the ground difficulties of the private and public financial institutions which will examine the present e saving money situation in the region. Not only e- saving but also for the overall quality improvement and sustainable development of the banking system.

Through the study It can be said that banks need to improve all the factors which are responsible in achieving customer satisfaction regarding e-banking services. Most of the respondents are satisfied in e-banking services provided by the bank but banks need to highlight design, contents, security and charges of e-banking services. Most of the banks do not update their website and technology for a longer period of time which creates discomfort to the e-banking users. All banks but majorly public sector banks need to advance their technology with the content as per the customer requirement. The discomfort regarding the use of the each and every aspect of the e-banking portal and services included will cause reduced satisfaction level of the customers. Customers feel that it's better to go for conventional banking rather than such modern banking, because finally it's all their money and financial matter which is at stake. For gaining complete satisfaction banking needs to be more active in technology with good security and more attractive features.

This study makes some valuable contributions to the banking industry in the view of Customer Satisfaction related to E-Banking Services in Public and Private Sector Banks. The study identifies the existence of various factors which are responsible for achieving customer satisfaction in the use of e-banking services. This study also confirmed the various variables and factors which contribute toward effectiveness of customer satisfaction toward use of e-banking. In addition, the researcher has recommended the most influencing and least influencing factors for the customer satisfaction regarding the use of e-banking services.

# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

The use of information and communication technology has changed the way of conducting business transactions, and the growing demands of customers for most organizations, with the recognition of IT and digital technologies, has brought fresh, creative products, services and potential business opportunities. It is observed that one of the aspects of communication and IT has become more and more relevant and contributes to the favourable side of the banking sector. Financial companies are trying to be more and more competitive, expand the customer base daily, reduce transaction costs, boost the quality of service and respond rapidly (C., 2002).

In this era, technology has become the business enabler and business driver to run any sort of business. Nowadays the quality of the banking institutions cannot think of introducing a financial product without technological information support be it in customer service, transactions, remittances, audit, marketing, pricing or any other activity in the banks. Today Information Technology plays an important role not only to complete the event with high efficiency and effectiveness but also has the potential to innovate and meet the futuristic requirements of the stakeholders. Therefore, Information Technology has given a new definition to the business world & introduced new business paradigms which are increasingly playing a significant role in improving the services in the banking industry. In this field of e-banking which enables the customers to perform the underlying banking transactions by sitting at their office or homes through PC or LAPTOP or mobile phones. Customers can access their banking transactions through the bank website and make their transaction by self. Thus, to access banking, the customer has to use his/her login Id and password and make the essential transactions. Some financial institutions have set up additional security steps for access to online banking (Aladwani, 2001).

In the history of banking transformation, in the year 1981 four of the world premium banks started offering home bank services using the videotext system which was the

latest technology of that period, in this way online services began. Videotext then became a bit obsolete and old fashion after the introduction of online services. Because of the commercial failure of videotext and change of the technology, these banking services never became popular.

Many banks began to view web-based banking as a new strategic imperative. The attraction of banks to online banking is relatively evident as there is a diminished transaction cost, easier integration of services, interactive marketing capabilities, and other benefits that boost customer lists and profit margins. Therefore, Web banking services allow institutions to bundle more services into single packages, thereby luring customers and minimizing overhead.

In the article entitled Role of Information Systems in Banks, by Rawani and Gupta (2002) attempted to explore empirically the difference between public sector banks, private sector banks and foreign banks operating in India in the role of the information system in the banking industry.

They also concluded that to achieve a sufficient level of customer support, the use of computers and allied technology is necessary. Computers are ideally designed to handle massive transaction volumes within a short period. Efforts by public sector banks to put in the information system are in the right direction and can be expected to give them strategic advantage in future.

Customer satisfaction is one of the business terms, which provides a measurement of how many quantitatively products and services supplied by a company either to meet or to surpass customer expectation. These days, it seems like one of the key performance indicators within the business system and Part of the strategic perspective of the balanced scorecard. In this time of extreme competition, where every player has to compete for procurement of the customers, the technological support works as a critical differentiator. It has become an essential element of business strategy in which customer satisfaction drives successful private sector business. All the High performing businesses have developed specific principles, procedures and policies for achieving guarantee on customer satisfaction. This Research presents a framework and gives a set of ideas for using customer satisfaction

principles and strategies to improve the total quality management, quality responsiveness and possibilities of the public sector, privately provided services in vulnerable communities.

## **1.2 Definition of e-banking**

e-banking is banking in which the customer conducts transaction electronically via the Internet. Online banking is defined as an electronically operated payment system that enables customers to conduct financial transactions.

Electronic funds transfer by automated teller machines also intended to speed operations & to reduce costs.

In 1996 ICICI Bank became the first bank to launch its website for online banking. Citi Bank, HDFC Bank and others have embraced the use of technology for their financial products to enter a broader audience. Banks have no choice but to incorporate technology into their routine operations(G.PALANI, 2011).

## **1.3 Definition of Customer satisfaction**

Customer satisfaction is one of the most frequently used terms in the stream of marketing. It considered as a measurement of how products and services are supplied by a company to meet or surpass customer expectation. There are two general frameworks of satisfaction named as transaction-specific satisfaction and cumulative satisfaction. The first one is Transaction-specific satisfaction which means the customer's very own evaluation of his or her experience and reaction towards a particular service. Here the customers express their experience of using the product the first time. Cumulative satisfaction denotes the overall satisfaction of the experience while using the product or services. From this accumulation, the customers establish a personal standard which used to gauge service quality. Hence, it agreed that the measurement of customer satisfaction generally performed after the post-consumption assessment by the user, about the products or services gained.

## **1.4 Evolution of customer satisfaction**

The evolution of customer satisfaction has come from the old literature of satisfaction or psychology of satisfaction, which is studied from different aspects. The



considerations extend from psychological to physical and from normative to positive aspects.

The Expectations of a customer on a product decides his expected performance for that product. Consumers may have various "types" of expectations when forming opinions about a product's anticipated performance. Perceived product performance It is considered from the experiences and Research that customers judge products on a limited set of norms and attributes. Old researchers have designed their Research to manipulate actual product performance.

In various research studies, some scholars have been able to establish that customer satisfaction has a strong emotional, i.e., affective, component. However, others show that the cognitive and affective components of customer satisfaction reciprocally persuade each other over time to determine overall satisfaction.

There is value to taking a dynamic perspective on customer satisfaction. Hence, within a progressive perspective, customer satisfaction can evolve as customers repeatedly use a product or interact with a service. Thus, the satisfaction experienced with each interaction (transactional satisfaction) can influence the overall, cumulative satisfaction as the Scholars show that it is not just overall customer satisfaction, but also customer loyalty that evolves.

### **1.5 Customer Satisfaction in the Banking Sector**

Customer satisfaction is one of the most critical factors in a competitive business. When it is related to commercial banks, customer satisfaction level differentiates one bank from another, thus measuring customer satisfaction which is exceedingly essential in terms of competitive parameters. That is why banks listen to customer requirements and complain. Profitable companies are shown to be able to survive and expand without satisfied customers.

One of the great examples is the most prominent Russian bank PAO. This bank employs over 250,000 people and operates in every Russian city. The primary aim of the research was to measure the current customer satisfaction level regarding services offered by PAO. Research is conducted to reveal customer expectations, which are

crucial for the successful growth of the company. The study was conducted to analyze customer satisfaction concerning banking services.(Vershina, 2017)

According to research conducted in Madurai, Customer satisfaction is characterized as the customer's experience with the bank, its products, or services exceeds specified satisfaction objectives. Without satisfied customers, including banks, no business can exist. Plans built using the results of customer satisfaction research can be designed to target customers and processes which are most capable of extending profits. Achieving customer service contributes to loyalty to companies and repurchasing the product.

Banks can conduct their work faster and more reliably with the advent of e-delivery networks. People have to spend less time at their work in the bank. Money withdrawal by cheques is now becoming an obsolete trend. Customers can make payments using ATMs, Debit Card, Credit Card, etc..(G.PALANI, 2011).

According to Maheshwari, he compared and researched e-banking services in the Tiruchirappalli district between nationalized and private banks. Nowadays, no country can choose whether or not to adopt e-banking because of the global and competitive nature of the economy. Banks have to continually update to stay competitive with new creative, personalized products and services. It also finds out that the quality and efficiency of service still does not satisfy customers who enjoy electronic banking. Both government and banking industry care about the perception and responses of customers to the development of e-banking services. More needs to be done to create trust in customers' minds about the benefits and protection of e-banking (Maheshwari, 2011).

## **1.6 How to Measure Customer Satisfaction?**

This chapter of the thesis uses references to relevant reviewed literature to emphasize concepts and theories that are the most important for the study.

Satisfaction is a word that summarizes the taste, feelings of customers that they hold about their overall experiences with a company. Customer satisfaction is an essential part of every successful business. Thus every company strives to increase the level of

satisfaction and improve business performance. The fact is that customer satisfaction is the concept which can be manageable as well as measurable. Hence companies spend millions of money and time to attract customers and encourage them to be a loyalist.

Does the question come to like how companies can know that they are succeeding in satisfying the customers? Like, if a company knows customer expectations and attitudes and can meet the requirements, they are more likely to make successful decisions and increase customer satisfaction. As a result, the experience of customers will be precisely calculated by efficient models.

For organizations in the service sector, a questionnaire is the most appropriate way to discover customer expectations. Unlike other industries, for example, in the manufacturing industry, where there are indexes such as the size of the product, the service sector has little to do in the way of quality measurements. Generally, it happens in most of the cases that the company performs its service and claim it is fast delivered though the customer may evaluate it as moderate or slow. Hence the use of the questionnaire is required to find out the value of customers.

It is usually a costly affair to measure customer satisfaction and also to collect the data that will help to develop an efficient questionnaire. Companies should focus on understanding customer perceptions and then analyze it. Thus this is one of the essential investments that companies should make, even though payoffs will be seen only in the long run.

Today, all bank customers use various forms of E-Delivery platforms to meet their banking requirements and to perform their banking operations quickly.

Nobody has the patience today to wait in long queues for his turn to arrive. All the banking work which was manually performed earlier is now carried out using e-delivery channels. These e-banking platforms, therefore, have a considerable effect on the way banks work and thus influence the satisfaction of clients from their experience in banking. Today every bank is trying to effectively provide these e-delivery channels to increase the satisfaction of its customers. The level of satisfaction

of our customers from these electronic distribution networks must. Therefore, it must be calculated (A., 2013).

Many factors affect customer satisfaction: helpful and knowledgeable employees, service quality, competitive pricing and billing clarity are to name few.

### **1.7 Factors That Affect Customer Satisfaction**

The satisfaction of the customer at human meetings is a result of contact with the company's employees and has a direct impact on overall consumer satisfaction with the company's services. In contrast, technological satisfaction implies customer satisfaction because of engagement with company technology, which is of great importance to customers. Therefore, satisfaction cannot be interpreted merely as an aggregate measure of customer experience, but as an effect of the various components of the customer (Datta, 2010).

With the increasing trend in IT in banking, customers prefer to deal with their bank online, given the rising trend towards technology that contributes to quality and customer satisfaction. Besides, the online banking sector provides the e-bank companies and IT managers for cost-effective decision making and applications to improve the quality of customer care, build customer confidence and gain market share in this growing yet increasingly competitive business environment. Thus customer satisfaction and customer commitment are generated(Cheung, 2008).

### **1.8 Evolution of Software Application and Mobile Apps in Banking Sector**

After the evolution and introduction of smartphones and mobile applications, which is going to be executed in the direction of meeting the demands of today's digital customer, the banking industry continues to create and enable new mobile apps. However, banks and their developers quickly realized that the traditional tensions present in all online banking interactions — security vs customer friction — is alive and well in the mobile realm.

Latest mobile banking apps must provide a spontaneous, rapid and frictionless banking experience which also protects the security issues of the customers and the banks from the hackers & present fraudsters. Mobile banking apps have evolved

tremendously in recent years. The first mobile banking apps had limited functionality, partially because the technology had not evolved, and nobody had a clear read on the risks associated with mobile. At the beginning of the mobile app development period, the first generation mobile app recognized that one could not just extend a customer's threat profile.

Today the customers are using internet banking more than using just checking their account statements and the time already has passed away that much severe banking customized task is performed. The new digital banking consumer, who grew up immersed in technology, wanted to do as much of their banking business online as possible. As digital natives, they were not afraid to conduct banking via a mobile device. This behaviour seemed perfectly normal, given that they could do just about everything else on their mobile devices.

The overall online traffic of the banking operation has around 80% and surpassed the Over the recent development. The transition period of smartphone and internet period there is constant high use of the customer of such user-friendly app. which gives rich experience.

Since the acceptance of such a new way of operating banking is not sluggish, the bank also needs to be equipped with necessary changes of that capacity to respond. The futuristic directions indicate that the use of mobile banking is also going to surpass the desktop frame. The bank will take advantage of the unique opportunities of mobility — mainly around push notification, payment innovations. The innovation is continued, and in the near future, the customer will be able to use ATM without a bank card. Customer will be using mobile OTP (one-time password) in banking app which would replace the bank card.

The mobile app continues to get changed, and this will continue without any break, here it is interesting to see how banking customer adopts with the new continuous improved app. We can see that Mobile provides vast amounts of information that can be valuable from a security and fraud point of view. Many Specialized solutions can equip the bank with a wealth of information to uniquely identify a user. Cybercrime is increasing on a higher side, and the threat is always

there. At this situation, the bank needs to ensure the protection of the customer and must provide the security layers which may be invisible but must be robust.

Mobile application usage is always on an upward trajectory. The focus of all will be to shift to the robust security rather than just fast and accurate app. Part of this strategy must include a solution that detects instances

Today's mobile users want to transact with speed and have zero tolerance for the friction presented by the traditional security measures. Sometimes, mobile app users are asked to leave and the app ensures the authenticity of the customer. That gives unpleasant experience to the users.

In reality, mobile banking app has given the new definition to the banking operation and its speedy execution without any extra efforts of physical movement and waiting period. A most important step for the bank is to protect its customer from the cyber security point of view (Haddad, 2014).

### **1.9 e-banking Services**

Electronic banking which is also referred to as e-banking is a generic term comprising internet banking, telephone banking, mobile banking etc. In other words, it is one of the systematic processes of delivery of banking services and products through electronic channels such as telephone, Internet, cell phone, automated teller machine (ATM) etc. In today's scenario, e-banking means using the Internet for various banking purposes like, organize, examine, and make changes to your bank accounts and investments electronically. The world witnesses it the dependency of e-banking is increasing day by day, though the concept and scope of e-banking is still evolving. Internet banking is the umbrella concept through which customer may perform banking transaction through the use of the Internet and without physically going to the branch. There are several terms which are used for electronic banking, like phone banking, online banking, internet banking, personal computer banking, these terms can be used interchangeably.

In recent years, the current generation is witnessing the emersion of the newest technological explosion. New technologies are faster and more result-oriented and

contributing very much into newer banking culture. Although, the changed market conditions demand banks to a better understanding of consumer's needs. The success in Internet banking will be achieved with tailored financial products and services that fulfil customer wants, preferences and quality expectations which concede that customer satisfaction is the key to success in Internet banking. Banks will use different media to customize products and services to fit customers' specific needs in the future. It is notified, after the assessment of experiences of the users that transaction security, transaction accuracy, user-friendliness, and network speed are the most critical factors for success in Internet banking. On this prospect, Internet banking includes many challenges for human-computer interaction (HCI). In this state, there are at least two significant HCI challenges in Internet banking. The first and foremost challenge is related to the problem of how to increase the number of services of Internet banking and simultaneously guarantee the quality of service for individual customers. After offering so many innovative practices, the new challenges are related to the problem that how to understand customer's needs, translate them into targeted content and present them in a personalized way in the usable user interface. It was previously understood that internet banking is developed to cater to the need of HNI. It is also notified that most of the banking customer-related survey is performed on HNIs. Thereby it was emphasized recently that now is an ideal time for HCI researchers to analyze user satisfaction because there is growing interest in how to attract and increase the number of online customers in e-business and eCommerce. It was giving more Stress that HCI researchers must participate in revealing a structure of user satisfaction and determining how to evaluate it and conclude how it is related to the user experience of online customers. The core and fundamental concept of electronic banking have been defined in many ways. Electronic banking is a concept which creates and offers various distribution channels. There is a facility of banks information and services through different terminals like personal computers, mobile Internet, digital television etc.

There are two parallel concepts of modern marketing management which are customer satisfaction and service quality which go hand in hand. Because of intense close competition, service needs to be an excellent level which ultimately turns to provide a pool of satisfied customers. These two concepts are further manifested in various theory and proven models in the branch of management studies. The ultimate

goal of the companies is to provide quality service, which ultimately creates sustainable competitive advantages.

This study is designed to evaluate electronic banking, more commonly known as e-banking as a strategy related methods adopted by selected commercial private and public sector banks in Nashik to improve the customer satisfaction, which plays a significant part in the service industry. The following are the usual e-banking services provided by banks - account management; bill payment, new account opening; fund transfers; investment / brokerage services; loan facility; cash management; small business loan applications, advances; business-to-business payments; employee benefits/pension administration etc. In this regard, the study covers the analytical Part of the customer perception towards e-banking and what are the various constraints achieving customer satisfaction.

The study is focused on primary four delivery channels of banking which are named as manual banking, automated teller machine (ATM), internet banking, and telebanking. In order to ensure customer satisfaction, the bank must take utmost care of functioning and performance of these channels.

The Research includes an analysis of customers' perception of e-banking services and the quality of e-banking services (Fozia, 2013).

## **1.10 History of e-banking**

### **Online Services**

In modern times the banking customers do not always need to visit a branch to perform bank transactions. With newly established online services, clients can make payments, withdraw cash or transfer money anytime anywhere. The list of services goes as follows:

1. Banks offer a mobile banking service, which is free of charge for the customers. This service also assists in information about card and transactions on your mobile phone.



2. Online banking is also called internet banking which allows users to pay for their utilities, and also provide information about new deposits and many more.
3. There is one more service which is called auto payment which executes payment of customer bills automatically; it is created with the purpose to pay the bills.

This online banking facility is helping the customer or user to perform all their transactions online  $24 \times 7$  with a comfortable option to sit at home. The survey is going to guide whether the users of online services are recommending the services to friends. The survey is also going to guide the customer satisfaction level with the use of online services from the 2014 year onwards. The data will reveal whether the banks are approaching in the right direction or not.

In 1969, the Nationalization of banks took place in the UK. The reserve bank of India performed as regulator body of all the banks of India. In India, the Indian banking has finally taken up challenges under competitive dynamics scenario. The banking sector is successfully addressing the relevant issues to take on the multifarious challenges of globalization. Due to a growing customer base and the requirements, more number of banks employ IT professionals who are perceived to be proactive players.

As per the Reserve Bank of India, India's banking sector is sufficiently capitalized, well monitored and well-regulated. After the global economic slowdown and recession in 2008, it has been proven that our Indian financial and economic conditions in the country are a little bit conservative, protected from global hit and far superior to any other country in the world. In a league of this, India has potential to become the fifth largest banking industry in the world by 2020 and third-largest by 2025 according to KPMG-CII report, India's banking and the financial sector is expanding rapidly. The Indian Banking industry is currently worth Rs.81 trillion (the US \$ 1.31 trillion) and banks are now utilizing the latest technologies like the Internet and mobile devices to carry out transactions and communicate with the masses.

Credit, market and liquidity risk studies suggest that Indian banks are generally resilient and have withstood the global downturn well.

The Indian banking industry has recently witnessed the new rollout of innovative banking models like payments gateway and small finance banks. The central bank granted in-principle approval to 11 payment banks and ten small finance banks in FY 2015-16. RBI's new measures may go a long way in helping the restructuring of the domestic banking industry. In India, private, public banking network is spreading with 26 public sector banks, 25 private sector banks, 43 foreign banks, 56 regional rural banks, 1,589 urban cooperative banks(RBI, 2012).

### **1.11 Select Public and Private Sector Bank**

For the study, Nationalized and private banks from Nashik city has been chosen. The development of this banking network has been in the maturity stage in Nashik city. The banking sector in India is addressing the challenges of globalization successfully. Nationalization of banks took place in 1969, the public sector banks or the nationalized banks.

More number of Banks employ IT solutions, and they are perceived to be 'futuristic' and proactive players, capable of meeting the diverse requirements of the large customer base.

### **1.12 Private Banking Sector**

The network of private banking in Nashik is quite strong. The market share of private banks in Nashik is significantly useful in percentage. Historically, Private banks are performing excellently; the private sector banks played a crucial role in the growth of joint-stock banking in India. The first half of the 20th century witnessed the phenomenal growth of private sector banks. After the recommendation of Narasimhan Committee during 1991, RBI had issued necessary guidelines in January 1993 for the establishment of new banks. Due to the result of all those past initiatives, at present, 32 private banks are comprising of 24 old banks.

### **1.13 Current Scenario of Private Sector Banks-**

The growth rate of private banks is comparatively faster in Nashik city. New private sector banks are the fastest growing sector in India. Performance, effectiveness & efficiency of these banks have increased manifold times. Evaluation of this sector is not an easy task. After the bank's nationalization process done in the year 1969, the number of private sector banks increased.

Moreover, due to the presence of the new private sector banks and foreign banks, the market has become competitive and also improved the quality of services during the last two decades in India. These banks have established themselves in the new and latest system and standards with good quality of service and excellent efficiency. In the year 1993, RBI announced guidelines for the establishment of 7 new private sector banks as per the recommendations of Narasimhan Committee-1 (1991).

### **1.14 Public Sector Bank**

Another significant contributor in the Indian banking system is Public sector bank. There is a defined composition and guidelines offered by RBI to the public sectors bank. Public Sector Banks (PSBs) are banks where the government holds a majority stake (i.e. more than 50%). The shares of these banks are listed on stock exchanges. There are a total of 27 PSBs in India that includes 21 nationalized banks and 6 State bank group (SBI + 5 associates). In 2011, IDBI bank and in 2014 Bharatiya Mahila Bank was nationalized with a minimum capital of Rs 500 crores.

### **1.15 The global future of Mobile Banking**

In the futuristic dimension, Internet banking will be used to cover remote delivery channel for various kind of services like account opening, funds transfer and so on. Further, it is a desirable opportunity for banks where the key to success is customer adoption. There is an evolution in the development of internet banking. At the initial level, the bank was offering internet service for just website information about their existing products and service details. However, later at the advance level, they offer the facility of accessing accounts, fund transfer, integrated sales, investment and insurance. There is an advantage for customers as it provides an opportunity to handle their banking transactions without visiting bank tellers. There are several kinds of services available on a bank internet forum. These include e-tax payment; access the

account to check balance, online trading of shares, online remittance of money, electronic bill payment system, railway reservation.

Previous researchers identified three functional levels of Internet banking which are information provider, communication abler and transactional possible. Level one is the informational level. There are higher risk levels in transaction levels as compared to that of the other two levels. The second level is the communicative level. Because of the high level of communication possible through the Internet, it allows some interaction between bank backend system and customers. The level of communication includes email, any kind of enquiry, loan application etc. The third level is the transactional level which allows fund transfer bill payment etc.

Gradually but factually, mobile devices have given an entirely new dimension of responding to our life situation, our behaviours and the way we do our business with banks. Together with the evolution of mobile technology, customers also evolved, pushing banks to be more consumer-driven.

### **1.16 Fulfilling customer needs**

At the start of the Smartphone era, almost a decade ago, it was easy to impress customers by offering some latest features, the leap of progress was huge, even maybe it was a small change presented as a new way of dealing with convenience.

Over the years, banking customers want to simplify their life, and this becomes more practically possible because of new technological support which ultimately leads to more demands of the users. Forrester predicts that by 2017, 108 million customers in the United States alone will be using mobile banking.

It has distinguished itself from the rest of the industries just because of the synergies between banking apps and mobile technology and because of the willingness and technique of modern mobile users. Reserve bank reported that millennials' mobile banking usage is now close to 70%, compared to 18% of consumers aged 60 or over. How we handled our finances changed, banking also needed to keep up with mobile trends to survive in a mobile-first customer environment by tailoring their businesses to suit customers' needs and creating mobile apps.

### **1.17 Improving customer experience**

It was not very long ago when people preferred to go to nearby bank branches for banking deposits. However, then bankers directed and assisted customers in the usage of telebanking and mobile banking. Banks finally spruced up their websites and started offering services on the web. However, with the mobile evolution, opening a mobile bank app on a Smartphone is a healthy alternative to going to a bank branch. The ability to access information in just a few clicks from our Smartphone changed how we access our bank accounts. With a mobile banking app, customers can check their bank balances, transfer funds, or make payments in just a few seconds.

In a recent survey which is conducted by Nielsen, it has come out that above 45% of the global respondents have already switched to mobile devices in the past six months, and more than 40 percent of the respondents admitted that they paid their bills through mobile banking.

### **1.18 Creating new sales and communication channel**

These days, customers are changing from passive recipients to hyper-informed ones who continuously look more frequently at the banking stats through the mobile app. The recent development in the current generation of the users is that they are hyperactive in terms of knowledge gaining and contemporary issues. They prefer mobile phones to know various things. Their dependency has increased very much regarding banking activity through phone banking apps. Now banking app has recognized significant channels—initially, banking app-enabled few services like checking bank balances and transferring funds. However, then it was realized that users are looking for more functions as an investment, opening saving accounts, making mortgage payment etc.

In 2015, Bank of America had reported more than 18 million active mobile banking users and its most significant annual earnings in the last decade was growth in bill payments and significant growth in money transfers. The report also showed a trend of customers opening new accounts through mobile apps, with sales increased by 50% over the previous year. Tracking customer behaviour in apps by interpreting collected data creates a chance for banks to offer products and services that better fit their customers' needs. Also, sales and marketing teams now have new channels to market

new services and to up-sell and cross-sale services since 70% of customers are personalization or better service willing to provide their banks with more information if doing so leads to increased

### **1.19 Reducing operational costs**

Two parallel positive things are going on; banking app is not just providing excellent experience but also lowering down the operational expenses of the banking by minimizing the physical structure of the bank. Citi predicted it under the title of the study "Digital Disruption" that by 2025, 30% of employees will lose their jobs because of the introduction of newer technologies. Internet channel will dominate the market thoroughly. This would be just opposite of today's scenario where customers will not go to the physical bank branch. The physical branch is opened just for human touch approach to the customers.

### **1.20 Mobile banking experience redesigned**

Mobile banking is redesigning and multiplying with pushing more innovation. The present generation is witnessing the first light of new mobile banking solutions that are on the verge of changing the entire banking experience. Technocrats are working on changing the banking experience as we know it. Their mobile solutions include all the regular services you would expect from a banking app, such as tracking expenses and making mobile payments. However, they are paving the way and raising the bar for other players on the market by building apps and integrating exciting new features.

With all simple features, one can create a goal; one can track daily expenses with set limits and also create a sense of monitor on the expenses part. Users can set aside discrete amounts of money for specific purposes and effectively hide money from them before they spend it. The exciting feature is "safe to spend" which allows users a unique experience of controlling their spontaneous spending pattern. The app is capable of calculating the budget and taking the user towards his/ her financial goal. The app offers many more features like essential notes, photos, screenshots etc. Best of all is that bank does not charge for such an app. The ultimate aim is to empower the users by enabling them to make informed decisions regarding their finances.

### **1.21 The new generations breed: mobile-only banks**

There is a new breed of the bank which is going another step of executing mobile banking adoption, and it has tried grabbing new position also, with the concept named as a new type of bank: mobile-only. While all significant banks provide some form of mobile banking, with a Smartphone app or a mobile website, these new banking players only offer digital solutions. They do not have a single physical branch.

Customization facility is attached with Atoms app which provides a soothing experience with high-end users. Opening an account is simple, and the process can be completed in just a few steps. For authorization and registration, users do not have to enter usernames or passwords or scan a photo ID since the app uses biometric security.

Currently, the banking apps rely on face and voice recognition, but soon these identification features will shift to the fingerprint id and eye scans. Some banks have implemented fingerprint id feature in their retail ATM. Once those features are commonly introduced, users will set up three forms of biometric ID, two of which are mandatory, and a six-digit pass code to access their accounts.

Some multinational Banks launched a digital banking service and created a mobile app. The app promises to make everyday banking intuitive and straightforward for every financial action, from checking account balances to making payments. There is one unique facility; the automated feature collects financial data to check how a user's account balance will look at the end of the month with the comparison of spending behaviour. If the account seems to be with small funds, it automatically sends the alert to the account holder. Just like that, if the account reflects with excessive funds, the app will intimate about the funds and give the option to allocate to other investment option.

### **1.22 The future of mobile banking**

The future of mobile banking is going to be the most spread trend of the future. The mobile banking has begun with revolutionary features which include biometric security, smart, automated savings, data analysis, and much more customized user-friendly features. So, what can we expect shortly? With the rise of virtual digital

assistants, such as Siri, Cortana, and Google Now, and apps being opened up to third-party developers, mobile banking will become completely consumer-centric. As digital assistant capabilities become smarter with every OS update, users will not even need to tap on their devices; voice commands will allow users to manage their bank accounts, make payments, and analyze their spending.

With all the techno support, innovation & speed, bankers are now required to acquire a much deeper need of the existing and prospective customers. Their data is collected to know about various details like, learning about customers' saving habits, for analyzing customers' and their spending behaviours which allow banks to create complete profiles of individuals which ultimately leads to powerful, intelligent interfaces. This will result in sophisticated portfolio management tools that allow users to obtain complex risk analyses on long-term investments and assistance when applying for mortgages or investing in emerging markets, high-yield bonds, or stock market bonds.

The actual figure shows that over one-third people across the world use smartphones and this figure in the next four years will reach 70% of users. With one in three adults relying on mobile banking by 2020, customers will push banks in one direction if they want to survive: going mobile.

As per the banking rules and regulations defined by RBI under the ministry of finance, Public Sector Banks (PSBs) are banks where the government holds a majority stake (i.e. more than 50%). These limited public banks issue their shares for public in the national stock exchange.

### **1.23 Internet banking in India**

Various developments have taken place in Indian Banking. The IT Company's network of India is mostly comprised of the services to the banking sector in long-form. Among the various developments, technology has influenced the way customer interacts with banks. Now a day, banks are offering traditional channels with electronic channels like ATM, cards, Internet banking, mobile apps. Differences in the usage of channels exist between the developed countries and developing countries. The primary evidence has suggested that people are switching from traditional channels to electronic channels. For example, the usage of digital banking in



developed countries is more than 90 percent, and the diffusion of digital channels in developing countries range from 11 percent to 25 percent. The data submitted by Capgemini in his report "World Payments Report 2014" has given a significant structural change which indicated that non-cash transactions have reached to the massive figure of 334 billion transactions. There is a higher propensity of customers to move towards digital channels. Banks which develop digital capabilities are going to benefit. These days' customers are feeling great convenience by using digital technological channels. However, banks will need to cope up with issues of customer service and frauds, which are associated with digital channels.

It was as good as a revolution which has changed the banking system definition completely. Like other parts of the world, India would not remain an exception to the revolution in electronic banking. Regulators are forming a specialized organization intending to focus retail electronic payment products. In the same regards, the most critical development is the formation and constitution of the National Payments Corporation of India. NPCI has played a significant role in the growth of electronic payments. Here we can assess the development which has taken place, by tracking the progress by just comparing the periods before and after the formation of NPCI in India.

#### **1.24 Progress of Electronic Banking in India**

The government of India has promoted electronic banking, so over the last few years, electronic banking has picked up with a perfect pace. In India, Reserve bank of India which heads all the national and private banks chalked out the mission of ensuring each transaction to be safe, efficient, ethical, and assessable and comply with international standards. The vision behind this is to develop the system of cashless transaction. Regulation is keen to promote innovation and competition to help payment system achieve international standards. During the year mid eighty and early nineties, RBI took many initiatives to promote technology adoption and technology-based solutions. The need evolved to provide cost-effective alternative system.

The initiation of electronic transfer of funds was started in the year 1990, which was called a retail fund transfer system. This facility was ensuring fund transfer between people to people. In November 2005, a robust system was launched to allow one to

one fund transfer requirement of individuals and corporates. Prepaid instruments allow a transaction for goods and services against the value stored on the payment instrument. It may be in the form of smart cards, magnetic stripe cards, internet wallets, mobile accounts, mobile wallets and paper vouchers. As per the guidelines and approval from Reserve Bank of India, selected banks were only permitted to offer services after the approval they got from the banking regulator. Indian Retail payments pose significant challenges and opportunities. Reserve Bank of India (RBI) had established the umbrella organization, National Payment Corporation of India. The organization ensures quality check and security check in each step while implementing electrification of banking aspects. Many experts discussed how these newer technologies are used to solve different requirements. Experts discussed how There are many new products which are offered in the area of electronic payment products; banks need to track the usage of these products. There is a big Concern that has given a differentiation of 'digital divide' between the rich and the poor in the private and public sector banks at the supply side.

### **1.25 Banking In Nashik**

This is the network of private and public banks in Nashik.

- Bank of Maharashtra
- Bank of India
- State Bank of India
- Central Bank of India
- Panjab National Bank
- Union Bank of India
- Canara Bank
- Karnataka Bank
- Bank of Patiyala
- Dena Bank
- Vijaya Bank
- Bank of Baroda
- Indian Overseas Bank
- Apna Bank
- Girnar Bank
- PMC Bank

- Thane Janta Sahkari Bank
- Federal Bank
- Jay Kalyan Bank
- Sarswat Co.Opr. Bank
- ICICI Bank
- HDFC Bank
- AXIS Bank
- IDBI Bank
- Tata Capital Fin Ltd.
- Merchant Bank
- HSBC
- NDCC

### **1.26 About Nashik**

Nashik is one of the most important cities of Northern Maharashtra. Nashik is the 4<sup>th</sup> largest city of Maharashtra state after Mumbai Pune Nagpur. It is situated around 200 km from Mumbai (Bombay) as well as Pune. Over the years, the city has become the centre of attraction due to Nashik has produced various prominent personalities due to its mythological, historical, social and cultural importance. One of the holy river Godavari flows through the city. There are several temples and Ghats which makes Nashik a holy place in the world.

#### **More about the city**

The research study is majorly focused on Nashik city. Nashik falls in a significant geographic area. Although the average rainfall in this region is approximately 2600 and 3000 mm, there is a wide variation in the rainfall received at various blocks. Most of the rainfall is recorded in this region between June & September. According to Indian Meteorological Department (IMD) which gives report on weather forecast, the climate of Nashik is generally compared with that of Bangalore and Pune because of its pleasant nature. According to IMD in recent years it has been observed that the temperature is rising and rainfall is low due to industrialization in Nashik.

In Nashik district, Bajra is one of the essential crops. There are although some other crops like wheat, paddy and other cereals which are grown in various parts of the

district. There are guaranteed cash productive crops like Vegetables and Onions for the last 30 years. Because of the variety of vegetables and its supply to Mumbai region, the District is known as a backup of Mumbai. With the growing industrialization, sugar cane factory has been established which promote business and economic development in the region. Economic development in rural areas took place only after the establishment of sugar factories. Since the last 20 years, agriculture business has been dominated as the largest farm business in Nashik. Some advanced farmers grow flowers in greenhouses. This type of development indicates better conditions for farmers in the Nashik region. They have taken on new machinery. By using these modern machinery; farmers are now able to cultivate farms effectively. When it comes to a climatic condition which is considered to be a major factor for industrial growth in any region, it is found suitable for allied traditional business activities such as Dairy, Poultry, Sheep & Goat rearing. The dairy business has been identified as Key business activity under S.G.S.Y. in almost all the blocks. The district has unlimited potential for dairy activity. Allied activities also have an excellent scope, as the massive market of Mumbai supports Nashik Market.

### **1.27 Nashik Industrialization**

Nashik is one of the fastest developing cities in India. Nashik Industrialization also has a great history. Since the last ten years; industrial development has grown up with high growth rate, particularly after the declaration of a five-star mega industrial estate on 2700-hectare land in Sinner block which has been one of the ambitious projects in the region. In Nashik industrial infrastructure setup, there are 180 plus medium and large industrial units. These units are currently employing 75,834 people. There are many reputed and large companies like Mahindra & Mahindra, Gabriel India, MICO, Siemens, Crompton Greaves, Kirloskar, Raymond steel, Jindal, Brook Bond, Sona Koya. There is a prestigious project IDEM of Mahindra & Mahindra established in Nashik. In addition to these industries, Nashik Regional Conventional level institutions like Dr Babasaheb Ambedkar Institute of Rural Technology & Training run by KVIC and Indian Institute of Numismatic Studies & Research Trimbakeshwar.

A software Technology Park (STP) is established in Nashik, which is run on a co-operative basis. Nashik city also has one cotton mill which is run on a co-operative basis.

### **1.28 Nashik District also has following renowned institutions**

These are some of the renowned institutions in Nashik which have national-level importance.

- Thermal Power Station
- Maharashtra Engineering Research Institute (MERI)
- Maharashtra State Health University
- Yashwantrao Chavan Maharashtra open university (YCMOU)
- Maharashtra Police Academy (MPA)
- India Security Press (ISP)
- Currency Note Press (CNP)
- HAL (Hindustan Aeronautics Limited) Fighter Plane (MIG) Production Unit

# **CHAPTER 2**

## **RESEARCH METHODOLOGY**

### **2.1 Introduction**

Research is the way of producing information about the real world. Scientific Research is a systematic, controlled empirical and critical investigation of proper Research which is a structured inquiry that utilizes acceptable scientific methodology to solve problems and create new knowledge which is generally applicable to the presumed relationships about various phenomena. By using research methodology principles and technique systematically, one can solve the research problem with high accuracy. The success of the investigation depends upon the right selection and use of tools and techniques used in the process.

A reasonable strategy causes the analyst to investigate the different models of the examination and measure them in order to fulfil the exploration goals. In this Part, the specialist clarifies the techniques and methods embraced to ponder an examination issue regarding test plan, information accumulation, and information investigation and information introduction.

### **2.2 Research Methodology**

It is proposed to deal with,

- i) Material requisite for research work.
- ii) To treat the methods of data collection.
- iii) Carve out the sample size and select the sample units as required for the study.
- iv) To explore the whole gamut of secondary data.

The research was based on the quantitative method using the quantitative questionnaire. This type of research aims at getting answers to standardized items which will help find an explanation or develop predictions that will be true for other persons. The main idea is to develop generalizations that can answer the main question or contribute to the theory. Quantitative Research begins with a hypothesis or an issue proclamation and includes a quantitative information examination. It expects to lessen to clear factors, circumstances and results considering, utilization of

estimations, examination and trial of speculations.

### 2.3 Statement of Problem

It has been explored through a thorough investigation that when an individual manages his/her own account through e-banking services for their financial transactions they face issues, which impact their loyalty towards the bank as a customer particularly for Nashik city in our research study case. Hence it is of prime importance to explore how easily they can use these e-banking services as well as how they can be loyal to bank.

### 2.4 Sample size

Sample Size 463

This means 463 or more measurements / surveys are needed to have a confidence of 99% that the real value is within  $\pm 6\%$  of the measured / surveyed value

Confidence Level: ?	99%	▼
Margin of Error: ?	6%	
Population Proportion: ?	50%	Use 50% if not sure
Population Size: ?	1561809	Leave blank if unlimited population size.

The sample size was calculated using above method which has return 463 sample size in actual the researcher has reached to 550 sample respondents in actual. The researcher has distributed the paper based questionnaire to the sample respondents in order to conduct the required survey. During the field research, respondents have reverted properly and filled the questionnaire.

Their gender was not essential, but the age was. The target sample population was in the age group of 18 to 75. The researcher asked the respondents whether they had a traditional way of using banking services or the technological way.

## 2.5 Geographical Coverage During The Research

The research scope in terms of the geographical territory has been limited to the Nashik city only. Since the concentration of the banks is more in city area as compare to other locations considering the rural part.

## 2.6 Random Sampling

Arbitrary SAMPLING was utilized amid the examination. Irregular SAMPLING is a piece of the testing system in which each example has an equivalent likelihood of being picked. A sample is basically chosen to get the unbiased representation of the total population. For a few reasons, the example does not speak to the populace; the variety is known as an examining mistake.

### Reason to use Random Sampling

It is one of a few strategies, analysts and specialists use to remove a sample from a bigger populace; different techniques incorporate stratified irregular testing and likelihood inspecting. The benefit of a basic irregular example incorporate is its usability and its exact portrayal of the bigger populace.

**Table No 2.1 Number of Respondents Selected Under Various Occupation Heads**

Occupation Heads	Students	Salaried	Business Owners	No occupation	(freelancers) Others	Total
Numbers	122	330	46	50	2	550

**There were reasons for selecting these occupation heads:**

1. It covers the sample population in its entirety (i.e. student/ working/ business/ home based (housewife etc..) and freelancers)



2. It gives us the idea for each occupation heads how they perceive the customer satisfaction and loyalty.
3. The sample respondents should be in the age group of 18-75 years.

**Data collection has been done through primary and secondary data sources, like:**

- Publication-Online & offline Research Publications
- Research articles
- Banking portal
- Consumer related portal
- Face to Face encounters
- Questionnaire and schedules
- Observation techniques

## **2.7 Scope & Limitation**

The scope of the study in terms of location covers only Nashik City.

### **Relevance, Justification & likely benefit**

This study will be useful to give the proper insight into customer satisfaction and its related strategies and policies, which are the practices by the maximum number of private financial institutions. The analysis in the Research will also address the ground difficulties of the private and public financial institutions, which will examine the present e saving money situation in the region. Not only e- saving but also for the overall quality improvement and sustainable development of the banking system. After the completion of the Research, it is possible to anticipate the specific and general benefits which may be achieved in the form of suggestion to improve the system.

## **2.8 Aims / Objectives**

The following are the specific objectives of the Research

1. To discover the consumer loyalty concerning different e-keeping money administrations given by Public and private division banks
2. To examine the present e-saving money situation in India.
3. To ponder the degree of mindfulness and the utilization of e-keeping money benefits in the investigation territory.

## **2.9 Research Problem:**

The present examination is to give top to bottom data on e-saving money administrations offered by open and private segment banks. This will empower us to comprehend the significance of e-keeping money for Indian culture and banks.

## **2.10 Hypothesis**

Some of the Hypotheses that will be tested in this study are as follows:

1. To study the influence of demographic variables (sex, age, occupation, income, educational qualifications and types of account) towards customer satisfaction with e-banking practices in the public sector and private sector banks.
2. Accessibility, Convenience, Privacy, Security, Design, Content, Speed, and fees have a positive relationship with customer satisfaction.
3. The satisfaction level of public and private sector bank customers with e-banking services provided by the bank.

## **2.11 Research Methodology:**

This segment clarifies the examination strategies, techniques and scientific edge work of the present investigation. The exploration strategies have been intended to fit the primary goals of the examination. Since there is not much research work done in the direction of e-banking and its effect on the customer satisfaction in various types of

the bank especially in Nashik city which is one of the fastest-growing city in the state as per the latest census data.

It is decided to select few nationalized banks, Private sector banks, some co-operative banks, so that a comparative analysis can be undertaken.

### **Sources of Data**

The study is based on primary as well as secondary data.

#### **a) Collecting Primary Data**

Essential information was gathered through the reactions of the clients through polls which were uniquely arranged for this investigation. The polls had questions concerning the general and financial attributes of the respondents, for example, age, religion, instructive capability, and so forth and about their experience of e-keeping money administrations. A researcher has done the pilot study by selecting ten respondents who use e-banking services of the bank. Based on their responses, some of the questionnaires were modified and then the modified questionnaire

An example size of 550 respondents was taken because it is not conceivable to cover the entire universe comprising of a considerable number of clients. Essential information likewise included data gathered by an individual meeting with Bank chiefs.

#### **b) Collecting Secondary Data**

The specialist gathered the auxiliary data as books, articles distributed in magazines, diaries, daily paper, reports, sites, and brochures, handouts of the banks, clippings and so forth.

### **2.12 Statistical Techniques**

The master assembled the assistant information like books, articles circulated in magazines, journals, daily paper, reports, and destinations, pamphlets of the banks, clippings two-way tables and by using statistical techniques like chi-square test. The simple table was constructed for analyzing the general information of the sample. In

the analysis, two-way tables were planned to construct to do comparative analysis and to know the relation of the two factors.

The information gathered from the essential and optional sources was figured and displayed in reasonable measurable tables. A similar was investigated and translated to reach appropriate surmisings and determinations—straightforward factual devices like rates, standard and development files, and so on. Outlines and graphical portrayals were utilized to feature some critical patterns.

### **2.13 Research Design**

The examination configuration utilized for this investigation is of an expressive kind. Graphic Research contemplates are those examinations which are concerned with describing the characteristics of a particular individual or a group.

#### **Activity Framework**

**Desk Research** –Validity refers to a situation when evidence proves that the findings were reasonable. Research is not considered valid if the researcher misinterpreted the answers of the respondents or if the respondents did not understand the questions clearly. Before administering to the respondents, the pilot study was carried out on the sample. After the necessary editing, these questionnaires were canvassed to the respondents. Field research was carried out for 18 months to get the proper data from the respondents.

#### **Filed Research –**

Primary data was collected in the form of a questionnaire, and the response of the target group was received in a time span of 6 months.

#### **Data Analysis and Interpretation –**

Tabulation of the data, data entry in SPSS 17, testing of hypothesis through tests took 12 months.

### **Thesis writing, summary writing and submission -**

Introduction, Conceptual framework are added with previous studies and the data. Then discussion and conclusions chapters were added in the thesis after data analysis and interpretation. Based on which summary was prepared.

### **Pilot Study –**

Various interactions were carried out, and unwanted questions were deleted in order to get the reliability range. A pilot study was conducted, which was restricted to Nashik and chosen through purposive sampling. On the basis of the results, few questions were modified and redefined.

### **Questionnaire Design –**

The questionnaire was designed in such a way that answers would reflect the ideas and thought process of the respondents with regards to the perception about the quality of the services, convenience level, motivational factors and retention policies. For the effectiveness of the questionnaire, multiple-choice questions and Likert scale type was applied. The reason for this application was to get the measurable output from the questions.

#### **2.14 Limitations of the study:**

- This exploration study was time-bound, and because of this lone, a couple of parts of the issue were taken up for consideration.
- This research study was taken in a limited area only (i.e. Nashik City), and findings may vary if the area of study is changed.
- Some interviewees were partial in their responses and, as such, their interpretation and conclusion can differ to a certain degree.
- A portion of the conclusions additionally relies on optional information. To the degree this information was reliable, the conclusion would be considered as substantial.

### **2.15 Reliability and validity**

Legitimacy alludes to circumstances when confirm demonstrates that the discoveries were sensible. The examination is not viewed as legitimate if the specialist misjudged the appropriate responses of the respondents or if the respondents did not comprehend the inquiries. The respondents can also be influenced by factors out of researcher's control, such as technical factors, time and mood. The results of this survey could be influenced by the situation the respondents were. They could have felt tired to precisely fill the overview. Also, it was led in English dialect, which is not their native language. Be that as it may, vital advances were taken to stay away from vulnerability and make clearness:

1. Nothing was changed in a questionnaire during the time answers were collected or later;
2. Special instructions were sent to respondents to provide additional guidance;
3. Questions were based on theories discussed in previous chapters to ensure validity.

For example, respondents were informed about the flow of the questionnaire and all questions raised by them were answered in a private conversation via social network. Amid the plan procedure, it was chosen to keep the inquiries straightforward and stay away from open inquiries with the goal that the respondents would effectively comprehend the inquiries. Secrecy was guaranteed with the goal that respondents would feel good while filling the questionnaire.

### **2.16 Questionnaire Is Used**

A questionnaire is one of the essential research instruments which is widely used in the Research, which consist of a series of questions. The intention behind the series of questions is to gather the information, although the questionnaire was often used for the use of statistical data and analysis.

Polls have preferences over some different kinds of studies in that they are shoddy, do not require as much exertion from the examiner as verbal or telephone surveys, and often have standardized answers that make it simple to compile data. However, such

standardized answers may frustrate users. The way likewise strongly restricts polls that respondent must have the capacity to peruse the inquiries and react to them. In this manner, for some statistic bunches directing a review by survey may not be concrete.

### **2.17 The usage of SPSS**

The full form of SPSS is a statistical package for the social sciences. SPSS is one of the popular software, generally used in the health care sciences and management research domain. During its use, it reflects the primary market.

SPSS is popularly used by the researchers in the domain like health care, data miners, survey companies, education researchers, marketing organization, and political statistic. The first SPSS manual has been depicted as one of "human science's most compelling books" for enabling familiar scientists to do their factual examination. Notwithstanding factual investigation, information administration (case choice, record reshaping, and making inferred information) and information documentation are highlights of the base programming.

#### **Statistics included in the base software:**

- Descriptive statistics: Cross tabulation, Frequencies, Descriptives, Explore, Descriptive Ratio Statistics
- Bivariate, statistics: Means, Ttest, ANOVA, Correlation (bivariate, partial, distances), Nonparametric tests, Bayesian
- Prediction for numerical outcomes: Linear regression
- Prediction for identifying groups: Factor analysis, cluster analysis (two-step, K-means, hierarchical), Discriminant
- Geospatial analysis, simulation

SPSS, which remains for a measurable bundle for the sociologies, is an application that can help in quantitative information taking care of.

# **CHAPTER 3**

## **REVIEW OF THE LITERATURE**

### **3.1 Introduction**

A literature review was done to explore the relevant existing knowledge in the field of Customer Satisfaction Related to e-banking Services in Selected Public and Private Sector Banks, the role of importance for customer's feedback in e-banking Service's initiatives in banking sector & its services. This was an exploratory study conducted in the context of Nashik city. A careful literature search was done to ensure that no such published work is available about addressing the marketing issues in business schools of Nashik city. This study, as previously mentioned, was performed to determine the strategies and plans adopted by banks for their survival and growth. This study will certainly help the existing and up-coming banking institutions in making more focused marketing efforts to gain the maximum level of satisfaction of the stakeholders and get better banking brands for customer selection.

- Various studies conducted by the researchers, committees appointed from time to time and the significant findings of these committees are referred to the studies which are related to the issue of commercialization of education. The literature reviewed can be broadly classified as below.
  - 1) Studies which are related to the issue of customer's satisfaction & expectation level in service industries
  - 2) Studies which relate with the introduction of e-banking services and its impact
  
- Nithin and Sharmila (2016)
- Nikita Gajjar (2016)
- Vijay and Shiva (2016)
- Manpreet Kaur (2017)
- Lokesh Uke (2017)



### **3.2 Studies which are Related to the Issues of Customer Satisfaction & Expectation Level in Service Industries**

Hartl (2006) insists that the behaviour of consumers is not predictable because their preferences are growing more sophisticated and differentiated. Their demand for sensory, health, process and convenience qualities have become more heterogeneous. Individuals differ from each other and even perceive the same thing differently (Smith, 2009). Many organizations have started adopting the strategy for opening the avenues for consumers to lodge their complaints. It is believed that knowing the types of complaints will help companies to have in-depth knowledge about customers' satisfaction, thus indirectly knowing the quality of services or products offered (Fornell, 2007). As indicated by Best and Andreasen, and Day and Hupperts cited in Lerman (2006:92), not all customers see it as prudent to lodge complaints. They will either cease to deal with the organizations or continue the relationship with the organizations though they continue to suffer. According to Assael (1995), customers' perceptions have triggered for consumer packaged goods companies to clarify about the selling of a product in the market. Kim (2002) intimate that customers opt for specific products or particular brands. Products can be used to exhibit customers' personality, social status, affiliation, or fulfil their internal or inner psychological needs. There are myriad factors that influence consumers' behaviour, but the most important ones will be discussed. Wilson (1992) has classified these factors into four categories such as; cultural, social, personal and psychological

#### **3.2.1 Cultural Factors**

Culture has a significant impact on a person's consumption behaviour. The cultural factors are divided into two parts; sub-culture and social class, (Engel 1993 and Kotler 1999). Engel (1993) and Solomon (1999) indicates that culture means the values, ideas and symbols that enable people to communicate, interpret and evaluate as members of society. According to Kotler (1999), culture influences a person's desires and behaviour since they start learning about it. They believe that in societies, children start learning from the various institutions' values, perceptions, needs and behaviour. Thus, culture has subcultures or groups of people like nationalities, religions, racial groups and geographical regions with values which hold them together. These subcultures are the primary tools in shaping consumer's behaviour. This has been eluded by Imrie (2002). Corroborating this, Wilson (1992) with the

view that variations in ethnic taste, cultural preferences, taboos, attitudes and lifestyles arise out of sub-cultures.

Assael (1995) accentuates that the social class is the division among people in the society. Kotler (1999) also opines that the social class is the division in society whereby members are attached to similar values, interests and behaviours. Wilson (1992) and Solomon (1999) submit that the factor which determines the social class includes power, prestige, occupation, income, education, family background and wealth. In addition to these members of a particular social class have been more similar than others. Assael (1995) indicates that the social class which belongs to influence their consumption behaviour indirectly. However, Kotler (1999) has a dissenting view. He believes that social class has a direct influence on the purchasing behaviour of people. The perceptions, needs and wants and the entire behaviour may differ from one social class to another.

### **3.2.2 Social Factors**

Reference groups, family and its role and status constitute the social factors, which influence the consumers' buying behaviour (Wilson, 1992). Reference groups which according to Kotler cited by Wilson (1992:105) are those groups that have a direct and indirect influence on the behaviour of their members. These groups include four types; principal, secondary, aspirational and dissociative (Wilson 1992), membership groups. Primary membership groups are those members, who interact with each other and are of the informal types. These include family, neighbours, colleagues and friends. Secondary groups are the formal members who often interact less. Among them are trade unions, religious groups and professional associations. Expectations are those who wish to unite as a group, while dissociative groups reject their values and behaviour.

The most significant group that gives much pressure to the individual, according to (Kotler 1999) is the family. They say that there are two types of families; family of orientation and family of procreation. The family of orientation comprises the buyer's parents which preach them about religion, politics, economics, and sense of personal ambition, self-worth and love. The family of procreation is made up of the consumer's spouse and children. Kotler (1999) contends that the family of procreation

influences everyday behaviour. Couples without children or those who have small families may spend luxuriously, for instance, on entertainment. The pattern of expenditure changes as the size of the family begins to increase, the children grow older, or the couples start to ageing. Someone from a wealthy family may spend lavishly as compared to his colleague, who is a poor one.

Assael (1995) points out that, apart from the fact that family members influence themselves for their buying decisions, & they also undertake collective decisions. The father and mother usually take most of the purchasing decisions. However, with constant changes in society, children are also influenced by family consumption decisions. Apart from this, parents also teach their children to make choices for consumption. A family's collective decisions emanate when the risk is involved in the purchasing is high. Therefore, all members decide to reduce the risk to the barest minimum or take risky decisions since all will bear the consequences. Other factors for making a collective decision are those either, when the decisions are of utmost importance, or when there is much time at their disposal.

The role which individuals play as well as their status in society influences their purchasing behaviour. According to Kotler (1999), roles are the activities of individuals who are expected to bring out a status attached to it by society. The intimate further that the position of an individual occupies be it in the family, organization and society goes with roles and status.

### **3.2.3 Personal Factors**

To a large extent, an individual decision for purchasing is influenced by the characteristics he possesses. These characteristics include his age and lifestyle, occupation, economic status, life cycle and personality and self-concept, (Kotler 1999). Kotler (1999) submits that ageing correlates with a person's buying habits. For example, as a person grows old, demand for food, clothing, furniture and leisure changes. In the same way, a person's purchasing behavior is dictated by the life cycle of the family. For example, the purchasing behavior of a spinster differs from a married woman with family.

Economic status, like the income of a person, determines his purchasing behaviour

Engel (1993). A person who earns more is likely to lead a luxurious life and vice versa. For example, blue-collared workers are likely to buy more clothes while the white-collared workers purchase more suits and ties (Kotler 1999). In the same vein, personality and lifestyle have an impact on one's consumption behaviour. Kotler (1999) states that lifestyle is the way a person lives. This is exhibited in his activities, interests and opinions. To them, personality is the unique psychological characteristic which is responsive to someone's environment. Personality takes the form of features such as autonomy, domination, sociality, autonomy and defence. Both personality and lifestyle influence a person's decision-making.

### **3.2.4 Psychological Factors**

These factors include motivation, perception, learning, beliefs and attitudes. Motivation is the force that carries a person to search for satisfaction (Kotler, 1999). Wilson (1992) distinguished between two types of needs that carry a person to crave for satisfaction. Biogenic needs are physiological such as hunger, thirst and discomfort. Psychogenic needs are psychological, which include recognition, esteem and belonging. Perception, according to Wilson (1992), is how a motivated person sees in a given situation and how he behaves. Kotler (1999) on the other hand thinks it is the process through which people select, (selective attention) organize (selective distortion) and interpret (selective retention) information to a meaningful picture about the universe. According to them, because of these three perceptual processes, individuals can see the same object in different ways. Selective attention is where the individuals shift numerous information which comes across their way. Selective distortion is whereby people interpret or distort information to fit into what they have already conceived. That means, they will accept information that confirms to what they have preconceived. Selective retention is when people remember or retain information that is by their beliefs, attitudes, values and interests.

Learnings are the changes in an individual's behaviour as a result of an experience (Schewe and Hiam, 1998). Wilson (1992) has the view that when the learning experience is positive, then there may be a repeated purchase and vice versa. On the other hand, a person is likely to extend the negative learning experience for other products of the same manufacturer and even to the country of origin. Beliefs and attitudes also affect the buying behaviour of people. Kotler (1999) indicates that belief

is the notion that someone has. The belief may be based on real knowledge, opinion and faith. Attitude, on the other hand, is the evaluation, feelings and tendencies of a person regarding something.

### **3.2.5 Situational**

Scheweand Hiam (1998) and Engel (1993) intimate that consumers' behaviour is corresponding to the situation. A person's behaviour depends on the conditions of the surroundings & atmosphere a person finds himself in (Solomon 1999). Engel (1993) asserts that situations are one of the most pervasive influences on consumers' behaviour because behaviour always happens within some situational context. Situational factors are grouped into four categories.

The communication system also influences the purchasing habit of consumers. Two types of communication systems are available, personal and non-personal. The conversation between the consumer and salespeople or other consumers is personal communication. Non-personal communication concerns incentives such as advertising, consumer programs and publications. Both situations encourage consumers to choose to buy.

In addition to this, purchase/usage circumstances affect the behaviour of buyers (Assael 1995). Purchase/usage area is the place where the goods are obtained or where the transaction takes place. These are the physical properties of the place (such as layout, lights and painting) and the locations of the place in general and flow of information which is mainly on data of products or services, for example (prices, products types and products attributes) and music (Assael 1995). Generally, a conducive purchasing environment entices the consumer to make purchases and vice versa. Time influences one's consumption habit. These are the resources of the individual that he apportions to his activities. The individual's priorities determine the time style (Solomon, 1999). Seasons or occasions also show time (Assael, 1995). For example, on occasions like Christmas and Easter, customers travel or buy more. Also, they buy different types of products depending on the season. Wilson (2000) has explained the consumer purchasing behaviour with a matrix, and this is shown in figure 2.1. He stresses that buying behaviour can be professional. When purchasing is done regularly, it is known as professional. Things that are bought regularly include

(groceries, petrol &lunch). Exceptional buying covers such things as (schooling, accommodation and medication) while leisurely buying entails causal browsing, impulse buying and therapeutic shopping. The writer, however, points out that it is not easy to distinguish between these types of buying behaviour because there is no clear borderline.

### **3.3 Concepts of Customer Satisfaction**

Both customers and banks give much importance to the satisfaction of their customers. Innovative efforts are being taken by banks to offer high-quality products and services to their customers. Customers also want the best value for their money and are sparing no effort in selecting the best products and services, (Strategic Direction, 2007). Once the customers are satisfied and have a positive image or intentions about a particular organization, it will take some time for competitors to snatch or convince them to switch over to them. Benefits derived by companies from customer's satisfaction includes loyalty, repurchasing to increase sales or profit, speak convincingly about the products or services to purchase, (He and Song, 2009 and Sit 2009). As pointed out by Assael (1995), the economic viability of the firm lies in the hands of consumers. According to Solomom (1999), there are various types of customers or consumers. They may be individuals, groups, organizations, communities or nations. The banking industry, like any other industry, has intensified its efforts to satisfy consumers through the provision of quality services. This severe form of competition is intense, and all banks seek to keep old and new customers.

Quality, satisfaction and values are the concepts that featured prominently in the customer satisfaction literature. Explaining these concepts will be very useful. This chapter looks at the literature review. Primarily, it reviews the literature on consumer behaviour, concepts of customer satisfaction, the SERVQUAL and the SERVPERF models and the empirical studies in the banking sector using SERVQUAL and SERFPERF.

Consumer Behavior Hartl (2006) states that the behavior of consumers is not predictable since their preferences are getting more sophisticated and differentiated. Their demand for sensory, health, process and convenience qualities have become more heterogeneous. Individuals differ from one another and even perceive the same

thing differently (Smith, 2009). Many organizations lately have adopted a strategy of opening avenues for consumers to lodge their complaints. It is believed that knowing the types of complaints will give a helping hand to companies to have in-depth knowledge about customers' satisfaction, thus indirectly knowing the quality of services or products offered, (Fornell, 2007). As indicated by Best and Andreasen, and Day and Hupperts cited in Lerman (2006:92), not all customers will see it as prudent to lodge complaints. They will either stop dealing with the organizations or will continue the relationship with the organizations though they face suffering. According to Assael (1995), consumers' perceptions have triggered consumer packaged goods companies to specify goods in the market. Kim (2002) intimates that products can be used to exhibit consumers' personality, social status, affiliation, or to fulfil their internal or inner psychological needs.

There is a myriad of factors that influence consumers' behaviour but the most important ones will be discussed. Wilson (1992) has classified these factors into four; cultural, social, personal and psychological.

### **3.3.1 Cultural Factors**

Culture has a significant impact on a person's consumption behaviour. The cultural factors are divided into two; sub-culture and social class, (Engel 1993 and Kotler 1999). Engel (1993) and Solomon (1999) indicates that culture has the values, ideas and symbols that enable people to communicate, interpret and evaluate as members of society. According to Kotler (1999), culture influences a person's desires and behaviour since it is being taught. They believe that in societies in which children nurture, they learn from the various institutions' values, perceptions, wants and behaviours. Thus, culture has subcultures or groups of people like nationalities, religions, racial groups and geographical regions with values which hold them together. These subcultures are the primary tools shaping consumer's behaviour. This has been alluded to by Imrie (2002). Corroborating this, Wilson (1992) is of the view that variations in ethnic taste, cultural preferences, taboos, attitudes and lifestyles arise out of sub-cultures.

Assael (1995) accentuates that social class is the division amongst people in society. Kotler (1999) also suggests that social class is whereby members are bonded with

similar values, interests and behaviours. Wilson (1992) and Solomon (1999) submit the factors that determine the social class that includes power, prestige, occupation, income, education, family background and wealth. In addition to this, members of a particular social class are more similar than others. Assael (1995) indicates that the social class influences his consumption behaviour indirectly. However, Kotler (1999) has a dissenting view. They believe that social class has a direct influence on the purchasing behaviour of people. The perceptions, needs and desires and the entire behaviour may differ from one social class to another.

### **3.3.2 Social Factors**

The role of reference groups, family and status, constitute the social factors that influence consumers' buying behaviour (Wilson, 1992). Reference groups, according to Kotler cited by Wilson (1992:105) are the groups that have a direct and indirect influence on the behaviour of their members. These groups are of four types; primary membership groups, secondary membership groups, aspiration groups and dissociative groups (Wilson 1992). Primary membership groups are the ones whose members interact and are of the informal types. These include families, neighbors, colleagues. Among them are trade unions, religious groups and professional associations. Aspiring groups are those that want to come together as a group, while dissociative groups reject their values and conduct.

The most significant group that stresses much pressure on the individual, according to (Kotler 1999) is the family. They note that there are two types of families; family of orientation and family of procreation. The family of orientation comprises the buyer's parents who train them about religion, politics, economics, and sense of personal ambition, self-worth and love. The family of procreation is made up of the consumer's spouse and children. Kotler (1999) contended that the family of procreation influences everyday behaviour. Couples with no children or those who have small families may spend luxuriously, for instance, on entertainment. The pattern of expenditure changes as the size of the family begins to increase, the children become older, or the couples start ageing. Someone from a wealthy family may spend lavishly as compared to his colleague from a poor background. Assael (1995) points out that apart from the fact that family members influence themselves in buying decisions, they also undertake collective decisions.



The parents usually make most of the purchasing decisions. However, with a constantly changing society, children also influence family consumption decisions. Apart from this, parents also teach their children to make consumption choices. A family's collective decisions emanate when the risk involved in the purchasing is high. Therefore, all members decide to at least reduce the risk to the barest minimum or take risky decisions since all will bear the consequences. Other factors for making a collective decision are when the decisions are of utmost importance and when there is much time at their disposal. Roles, individuals play, as well as their status in society, influence their purchasing behaviour. According to Kotler (1999), roles are the activities of individuals who are expected to be carried out while status is the general esteem attached to it by society. The intimate further that the position an individual occupies be it in the family, organization and society goes, with roles and status.

### **3.3.3 Personal Factors**

To a large extent, an individual decision to buy is influenced by the characteristics he possesses. These characteristics include his age and lifestyle, occupation, economic status, lifestyle and personality and self-concept, (Kotler 1999). Kotler (1999) submits that ageing correlates with a person's buying behaviour. For example, the demand for food, clothes, and furniture, recreation changes as a person grows older. In the same vein, the buying behaviour of a person is determined by the family's lifestyle. For instance, the buying behaviour of spinster is different from a married woman with a family. Economic condition like the income of a person determines his purchasing behaviour Engel (1993). A person who earns more is likely to lead a luxurious life and vice versa. For example, blue-collared workers are likely to buy more clothes compared to white-collared workers, who purchase more suits and ties, (Kotler 1999). In the same way, personality and lifestyle have an impact on one's consumption behaviour. Kotler (1999) notes that lifestyle is the way a person lives. This exhibits in his activities, interests and opinions. To them, personality is a unique psychological characteristic that is responsive to someone's environment. Personality is seen in terms of features like self-adaptation, dominance, sociability, autonomy and defence — the influence of personality and lifestyle on decision-making.

### 3.3.4 Psychological Factors

These factors include motivation, perception, learning, beliefs and attitudes. Motivation is the force that drags a person to search for satisfaction (Kotler, 1999). Wilson (1992) distinguished between two types of needs that motivate the persons to crave for satisfaction. Biogenic needs are physiological such as hunger, thirst and discomfort. Psychogenic needs are also the same as psychological, which include recognition, esteem and belonging. Perception, according to Wilson (1992), is how a motivated person sees in a given situation and how he will behave. Kotler (1999) on the other hand thinks it is the process through which people select, (selective attention) organize (selective distortion) and interpret (selective retention) information to a meaningful picture about the universe. According to them, because of these three perceptual processes, individuals can see the same object in different ways. Selective attention is where the number of the individual shift of information which comes across his ways. Selective distortion is whereby people interpret or distort information to fit into what they have already conceived. This means they will accept information that confirms what they have preconceived. Selective retention is when people remember or retain information that is by their beliefs, attitudes, values and interests. Learning is the change in an individual's behaviour as a result of an experience (Schewe and Hiam, 1998). Wilson (1992) is of the view that when the learning experience is positive, there are chances of repeated purchase and vice a versa. On the other hand, the negative learning experience is likely to be extended to other products of the producers and also to the country of origin. Beliefs and attitudes also affect the buying behaviour of people. Kotler (1999) indicates that belief is the notion that someone has. The belief may be based on real knowledge, opinion and faith. Attitude, on the other hand, is evaluation, feelings and tendencies of a person regarding something.

**Situational:** Schewe and Hiam (1998) and Engel (1993) suggest that consumers' behaviour is situational. A person's behaviour depends on the conditions of the person or the environment he finds himself in (Solomon 1999). Engel (1993) asserts that situations are one of the most pervasive influences on consumers' behaviour because behaviour always happens within some situational context. Situation factors are divided into four categories: communication, buying, use and time. Methods of communication also influence consumer purchasing behaviour. Two types of

communication methods exist: personal and non-personal. The conversation between the consumer and the salesman or with other consumers is personal communication. The stimulus for non-personal contact includes ads, customer programming and publications. Both conditions allow customers to select their purchases. Also, purchase/usage situations affect the behaviour of buyers (Assael, 1995). Purchase/usage area is the place where goods are obtained from or where the transaction takes place. These are the physical properties of the place (such as layout, lights and painting) and the locations of the place in general and the information which flows are primary data of products or services for example (prices, products types and products that attributes) and music (Assael 1995).

Generally, a conducive purchasing environment tempts the consumer to make purchases and vice a versa. Time influences one's consumption behaviour. It is the resources of the individual that he apportions to his activities. The individual's priority determines his style of the time (Solomon, 1999). Seasons or occasions are also seen in time (Assael 1995). For example, on occasions like Christmas and Easter, consumers travel or buy more. Also, they buy different types of products depending on the season. Wilson (2000) has explained the consumer purchasing behaviour with a matrix, and this is shown in figure 2.1. He indicates that buying behaviour can be professional. When purchasing is done regularly, then it is professional. Things that are bought regularly include (groceries, petrol and lunch). Exceptional buying covers such things as (schooling, accommodation and medication) while leisurely buying entails causal browsing, impulse buying and therapeutic shopping. The writer, however, points out that it is not easy to distinguish between these types of buying behaviour because there is no clear borderline.

The above discussions have given us a profound idea about consumer's behaviour. Consumers act by themselves or are induced by environmental forces which include groups or individuals. Some actions of individuals are situational. It is left to the individuals to use their discretion to shift through the information available and make informed choices. Capture the essential aspects of consumer behavior; the stage is set to look at the concepts of customer satisfaction.

### **3.4 Quality**

ISO 9000 (2005) suggests that quality is the extent to which a bunch of inbuilt features (relating to a product, a process or a system) meets their requirements. The inbuilt features can be physical, sensory, behavioural, temporal, ergonomic or functional while requirements are the stated needs or expectation be it implied or obligatory. Crosby and Juran cited in Fox (1993:4) define quality as conformance to requirements or specifications and fitness for use, respectively. Dale and Bunney (1999) explain that Crosby is of the view that quality cannot be compared and adjectives such high, low, excellent and good cannot be used to describe quality. Parasuraman (1991) notes that quality is the meeting point of the needs and the expectations of customers. Therefore, the yardstick for determining service quality is the expectations of customers and not the policy of the bank. This view has been corroborated by Ting (2004) and Jamali (2007). Bitner and Hubbert and Rust and Oliver cited in Nguyen and LeBlanc (1998:53) put forward that the quality of service is the view of customers about how superior or excellent the service received or is used. Metawa and Almosawi (1998) suggest that the quality of service is a function of the experience of customers since services must be used first. According to (Zeithaml (1988), the interaction or the relationship between customers and service organizations induce perceptions of customers' quality. The attitude of service providers can also serve as a quality indicator for the customer. Alluding to this, Owusu-Frimpong (1999) claims a receptive attitude of workers is a key ingredient for giving customers a good impression about the bank and its services. Consumers also consider the physical environment when evaluating the service quality of banks in terms of infrastructure, design and general atmosphere. Likewise, the duration of the service delivery gives a positive or a negative impression on customers. Short waiting time may give a good impression about the bank that its services are of high quality and vice a versa. Bowen and Schneider cited in Ennew and Binks (1996:6) on the other hand, think that the quality of the service will partially be based on the customer interactions with the organization rendering their services. They further indicate that customers who are willing to participate actively in the delivery of service are likely to expect to receive a better quality of service. The reasons are that the service provider will understand their needs and circumstances. Also, customers involved in the service delivery process will have an insight into the impediments on the way of the service organization and therefore be sympathetic in their quality expectations.

According to Burke (2005), purchase of service is different from a product purchased. There are individuals in the company who do not contact the agency that sells the product to the customer. The consumer forms his judgments about the quality of the product based on advertisements and recommendations. On the other hand, consumers are moved either positively or negatively by the service provider, and therefore the provision of service is both a personal and a psychological thing, (Schneider and Bowen, 1985). Athanassopoulos (2001) have given a summary of the literature about the criteria of customers used to measure the quality of services. The production of services is likely to be inseparable from their consumption. Services are heterogeneous indicating that their performance often varies from provider to provider, from customer to customer. Services cannot be placed in a time capsule and thus be tested and retested over time Gronroos and Kotler cited in Athanassopoulos (2001) intimates that customers generally evaluate service quality by its outcome, the process of the service delivery and the context. According to Zeithaml (1993), consumers' access services and products through three processes. These are pre-purchase or search qualities, experience qualities and credence qualities. Search qualities are the features that consumers look out for before buying and are those they can see, feel or touch. On the other hand, experience qualities are post-purchase features that customers assess while credence features are those not easy for consumers to assess during the post-purchase period. Bank services are of the experience and credence types and therefore, difficult to assess by customers. Customers cannot evaluate these types because they do not have the required skills, expertise and knowledge to carry out the evaluation. Consequently, before purchasing, customers place a high premium on the image and reputation of the bank. Owusu-Frimpong (1999) contends that because services of banks are of the credence type, friends and fellow customers constitute the main source of information for customers. This has been confirmed by the results of a study of Tan and Chua in Ting (2006:99). Burke (2005) claim that there are two ways of service organizations which can improve on service quality. First, a good human resources management policy must be adopted to ensure employees' satisfaction. It is believed that with the necessary support from management, employees strive hard to provide high-quality service to customers. Also, the organization has to implement its organizational values, policies and procedures to leverage the delivery of high service quality to customers.

### 3.5 Satisfaction

The ISO 1002 (2004) states that the satisfaction should be up to the extent, which is the requirement of the customers whereas (ISO 9000 2005) requirements mean that it needs are implied or obligatory. According to Oliva (1992), satisfaction is whereby the service provider meets the expectations and norms of the customers. This idea is shared by Anderson (1994). Westbrook and Oliver (1991) postulate that satisfaction is when a consumer cognitively compares actual performance with expected performance. In Kotler's (1991) opinion the satisfaction is the post-purchase evaluation of products or services, taking into consideration the expectations. Fecikova (2004) summarizes the literature about the definition of satisfaction and indicates that satisfaction emanates from the process of assessing what was produced.

Abdullah and Rozario (2009) accentuate that various internal and external factors may influence the level of customer satisfaction. This suggests that the determination of satisfaction is robust. Veloutsou (2005) indicates that overall customer satisfaction is not a static process but keeps on changing when the customer gets an experience with the service provider. In the same thinking, Scotland Communities cited that in the European Institute of Public Administration (2008:15) has listed the following as the difficulties associated with the concept of satisfaction:

- *It is not static, but changes over time; new experiences and levels of awareness will alter the potential levels of satisfaction that could be achieved.*
- *It is likely to be complicated, and the result of mix experiences can be there, before, during and after.*
- *It occurs in social contexts which are varied and keeps changing and maybe unpredictable or inexpressible to the service user.*
- *It may be difficult to express the reasons for satisfaction; mainly where less tangible aspects of services are being considered.*
- *It may be easier to express the reasons for dissatisfaction, mainly if this is an exceptional state.*
- *Without understanding the causes of satisfaction, there is a danger that we might treat a "good result" as a reason not to change anything, seeing it mainly as a PR tool.*

Jamal and Nazer (2002) explain that the customer satisfaction is not linked with only the view of customers regarding the reliability of the service delivered but also based on the experience of the customer with the service delivery process. Kotler (2003) contended that high customer retention is an indicator of customer/s satisfaction. In Reichheld (1993) opinion the customer's satisfaction alone is not enough and cannot guarantee loyalty to organizations as between 65% to 85% of customers who switch to other organizations, are satisfied customers. What is needed is full customer satisfaction to ensure customer loyalty and improvement in the performance of organizations (Jones and Sasser, 1995).

The Kano model specifies three types of categories which attribute that in different scenario of satisfaction to customers; 'must-be', one dimensional and needs to be attractive. (Baki 2009, Wang and Ji 2010). According to them, the 'must-be' is whereby customers are not satisfied if the service or product quality fails to meet their expectations. There is no corresponding increase in satisfaction until the service or product attributes above expectation. Another attribution is one- dimensional or performance needs. In this case, when the customer distinguishes the service or product of high quality, satisfaction is also high and vice a versa. Finally, the attraction or the excitement needs to be corresponding to increase in satisfaction when the service or the product performance increases but a decrease in performance does not lead to a decrease in customer's satisfaction.

### **3.6 KANO Model**

It is also believed that there is a correlation between the satisfaction of employees and customer's satisfaction. The results of the study of Schneider (1980) suggest that frontline employees handle customers well if they thought they had been treated well by management. Customers feel glad and satisfied with the services provided to them when they see the bank employees also in a good mood—Levesques and McDougall research (1996) on consumer service determinants in Canadian retail banking. Quality of service dimensions, the bank's features, and the competitiveness of the interest rates are factors. In a related development, service problems and the bank's service recovery ability impacted the customer's satisfaction and which can lead to switching over. Customers who encountered service problems were likely to switch over to

other banks and inform others to follow suit since they were not satisfied. Similarly, resolving a problem does not necessarily improve the customer's satisfaction.

### **3.7 Value**

Value, according to Zeithaml (1988), is the importance attached to services based on their usage and the amount paid in exchange. Woodruff (1997) indicates that value is what customers derive from the transactions made, e.g. quality benefits worth and utilities and what the customer used for the exchange (a price or the sacrifice made). He again intimates that value emanates from learnt perceptions, preferences and the overall assessment made by customers. He accentuated that perceived value is higher than quality. Also, the value can be defined in four ways; value in low price, values wanted in satisfaction, value is the quality of the price paid for and what is received in exchange for what is given out. It is also argued that value judgments are based on both financial and non-financial costs. That is, the sacrifices made in using the service and the gains made in exchange for the service (Hauser and Urban, 1986). Corroborating this, Lam (2004) points out that, customers assign value to a product or service based on expected price and quality. Based on this, Zeithmal (1988) intimates that value is situational and personal than quality. It varies with the consumption process. Lam (2004) contended that when the expected value is more than cost, the value of customers is high and vice a versa. Rust and Oliver (1994) cited in Nguyen and LeBlanc (1998:54) suggest that there must be a rise in value when quality rises and price falls.

Treacy and Wiersema cited in Bick (2004:301) contend that customers buy different types of valued products. Since values are different, corporate bodies should select their customers and scale down their value focus. Value standard shores up in connection with customers' expectations. Woodruff (1997) claims that there are two types of customers' value. The first is the value or the expected value that customers get from the organization. The second is how the organization also values its customers.

Treacy and Wiersema cited in Bick (2004:301) have come out with three value concepts that the business organizations should bear in mind. These are value proposition, value-driven operating model and value disciplines. The value



proposition is the expected assurance which is not verbally stated. It is given to customers by the management of organizations that they will provide particular values like price, quality, performance, selection or convenience. The value-driven operating model is the auxiliary supporting systems in delivering value (value proposition) to customers. These include; management systems, operating processes, business structure and culture. The management of organizations handles the last one, values of followers can integrate both the value proposition and the value-driven operating model to beat all their competitors in the markets and provide the highest value to customers.

According to them, there are three value disciplines; operational excellence, product leadership and customer intimacy. Operating excellence is the provision of a combination of low price and services, which is devoid of problems to customers. Product leadership, on the other hand, refers to the delivery of the highest quality and best-performing products in the market. This is possible when organizations keep on innovating to improve products quality. Customer's intimacy concerns the establishment of a relationship with customers, supporting and providing what they want in order to enable them to get the needed value from the product or service.

### **3.8 Relationships among the Concepts of Customers Satisfaction**

Light has been thrown on the three concepts that are most often used to refer to customer satisfaction. A cursory glance at the relationship between these concepts will be desirable.

#### **3.8.1 Customer Satisfaction and Quality**

Oliver cited in Ting (2004:408) there are enumerated differences between service quality and satisfaction. They indicate that the dimensions of service quality are correctly or directly connected with the rendering of the service. At the same time, satisfaction is based on many factors that concern the provision of the service, directly and indirectly. Customers do not hold their perceptions for the quality of service on experiences/problems faced with both the service provider and the service environment. On the other hand, past experiences form the basis for evaluation of satisfaction. Also, quality is supposed to be ascertained by external clues such as price and reputation, while conceptual clues like equity and regret immediate satisfaction.

Also, ideals and excellence in connection with service delivery are the clues to service quality. In the same vein, satisfaction perceptions are based on predictions or norms for service delivery. Oliver, however, indicates that it is complicated to draw a line between satisfaction and quality of service. Parasuraman (1988) postulate that satisfaction can be experienced and happened during or at the transactional level, while quality is seen to be taking place at the global level. Oliver (1997) believes that quality judgments are more specific, and those of satisfactions are holistic. Quality judgments have a connection with cognitive judgments, while that of satisfaction relates to effective judgments.

As noted by Ting (2004), researchers are divided over the antecedents of service quality and satisfaction. While some believe service quality leads to satisfaction, others think in the opposite direction. Authors like Parasuraman (1988) and Bitner (1990) are of the view that satisfaction leads to quality while others such as Cronin and Taylor(1992) and Anderson Sullivan (1993) have a contrary view. Empirical studies regarding the above issue support the assertion made by the latter. The studies of Tam (2000), Petrick and Backman (2002) and Cronin and Taylor (1992) suggest that satisfaction leads to quality. Newman (2001) also submits that there is a correlation between the quality of service and customer satisfaction. Enhanced service quality leads to customer satisfaction with its ripple effects such as; customer's loyalty and improvement in the existing relationship between the organization and customers. Others are that customers will bear with the service provider when the organization is not able to deliver as well as customers canvassing for the organization to get more customers.

It can be gathered from the above that the two concepts are the same and are being used interchangeably. Authors such as DeRuyter (1997) Rust and Zahorik (1993) and Boulding (1993) think that quality and satisfaction are closely connected and are synonymous and interchangeable. Thus, both concepts refer to meeting the requirements of customers. Therefore, making a clear distinction between them will be a difficult task.

### **3.8.2 Value, Satisfaction and Quality**

According to Zenithal and Bitner, cited in Kangis and Voukelatos (1997:280), four

main factors constitute customer's perceptions of service quality, satisfaction and value. These services encounter the evidence of service, image and price. Service encounter refers to both verbal and non-verbal attitudes which form the base for intangible service quality such as the environment where the service is provided like equipment and layout of the room or building. Evidence of service is whereby customers base their search level of service provided on sure proof like employees, process and physical evidence. This is because services are intangible, and they are produced and consumed at the same time. Zeithaml and Bitner have furnished with three proofs; employees, process and physical evidence.

Zeithaml and Bitner are of the view that a high service price is associated with an equally high-quality consumer expectation. A low price will prompt customers to be apprehensive about the quality of the service and the capability of the organization to render quality service. This point is not wholly accurate. Usually, a low priced thing, in general, does not connote inferior or superior quality. Reidenbach (1995) asserts that value is more practicable or is a possible thing than satisfaction since it includes not only the benefits accrued but for the price. According to him, value is dynamic that must be managed.

On the other hand, satisfaction is derived from the value proposition offered in specific products/markets. Cronin (2000) claims that value precedes satisfaction. They further accentuated that quality affects value. The results of the Nguyen & LeBlanc (1998) study also suggest that a relationship exists between quality and quality of service and value. It is clear from the literature that value is the worth or the importance attached to or gains and loss derived from purchases or consumption of services. Satisfaction and quality are also seen as the meeting of the requirements of customers. It could, therefore, be inferred that the requirements are the same as the importance attached to the services. Therefore, the three concepts; quality, satisfaction and value are the same and are being used interchangeably.

### **3.9 Review of Literature Related to Demonetization and Its Effects**

**Nithin and Sharmila (2016)** studied demonetization and its impact on Indian Economy. In their opinion demonetization has a short term negative impact on different sectors of the economy, and such impacts are solved when the new currency

notes are widely circulated in the economy. They also argued that the government should clear all the problems created by the demonetization and help the economy to work smoothly.

**Nikita Gajjar (2016)** deliberated a study on Black Money in India: Present Status and Future Challenges and Demonetization. She explained the framework, policy options and strategies that the Indian Government should adapt to tackle with this issue and the future challenges to be faced by the Government.

**Vijay and Shiva (2016)** examined demonetization and its complete financial inclusion. They felt that demonetization is in the long-term interest of the country. They expressed that it had given a temporary problem, but it taught financial lessons. It influenced banking industries to make a considerable investment in digitalization of banking services.

**Manpreet Kaur (2017)** conducted a study on demonetization and impact on Cashless Payment System. She said that the cashless system in the economy has many fruitful benefits such as less time-consuming, less cost, paper less transaction.

**Lokesh Uke (2017)** researched on demonetization and its effects in India. He studied the positive and negative impact of demonization in India. The study was based on secondary data available in newspaper, magazines etc. The primary purpose of demonetization is to eradicate the black money and curb corruption.

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Government of India has become successful to some extent. Demonetization harmed a short duration on Indian financial markets. However, he said that the real impact would be shown in future.

**Sweta Singhal (2017)** researched Demonetization and E-Banking in India. It was a case study to check the awareness level of people of rural areas in India about e-banking facilities and how much it has increased after demonetization. A sample size

of 100 was used with ANOVA test to show that rural people differ much more than urban people in their awareness level as well as usage level of e-banking. It was found that urban male youth has higher awareness and usage of e-banking. She felt that the study would also be helpful for banks to improve their e-banking facilities.

## CHAPTER 4

### DATA ANALYSIS AND INTERPRETATIONS

#### 4.1 Introduction

The data collected after the survey and interviews with respondents and then tabulated, interpretations are described in this chapter. The Questionnaires distributed to the respondents those who were having their account in the bank, in this survey we found out that the respondents of Nashik city have their accounts in Public Sector bank, Private sector banks, and some other type banks.

The results are presented using Tables and Charts by using **MS Excel**, and statistics was carried out using **SPSS 17.00**.

**Table No. 4.1 Number of Respondents**

	<b>Particulars</b>
<b>Total Number of Respondents</b>	550

*Source: Primary Data*

The findings from the study are presented in the form of four different heads

1. Demographic Analysis
2. Factor Analysis
3. Descriptive statistics.
4. Hypothesis testing.

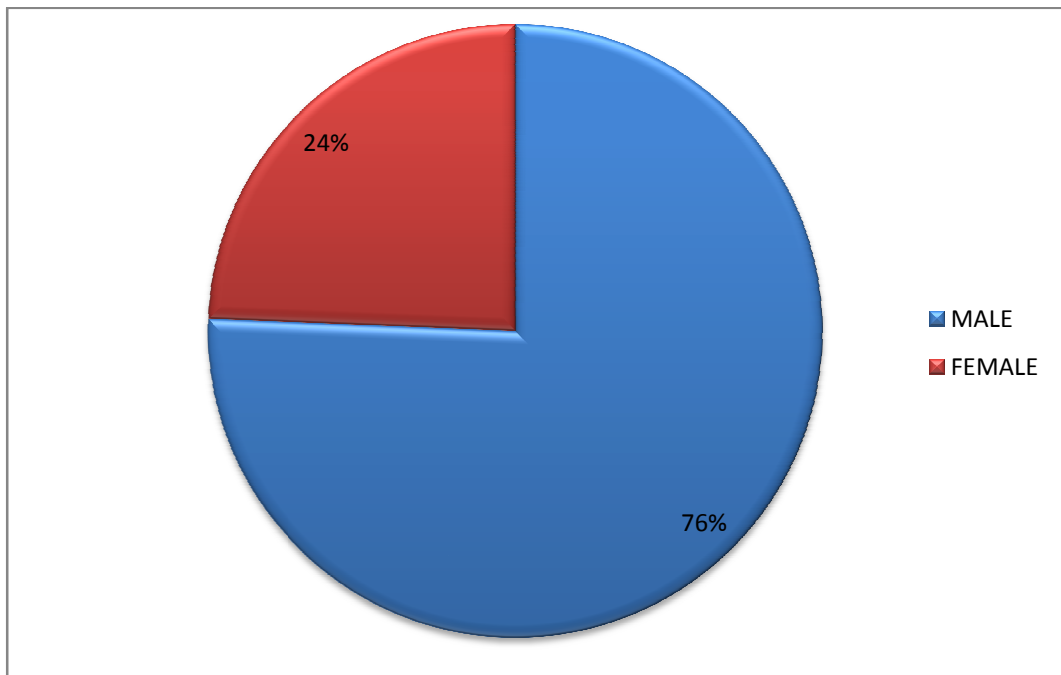
## 4.2: Demographic Analysis

### 4.2.1 Gender

**Table No. 4.2 Gender of Respondents**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MALE	416	75.6	75.6	75.6
	FEMALE	134	24.4	24.4	100.0
	Total	550	100.0	100.0	

*Source: Primary Data*



**Graph No. 4.1 Gender of Respondents**

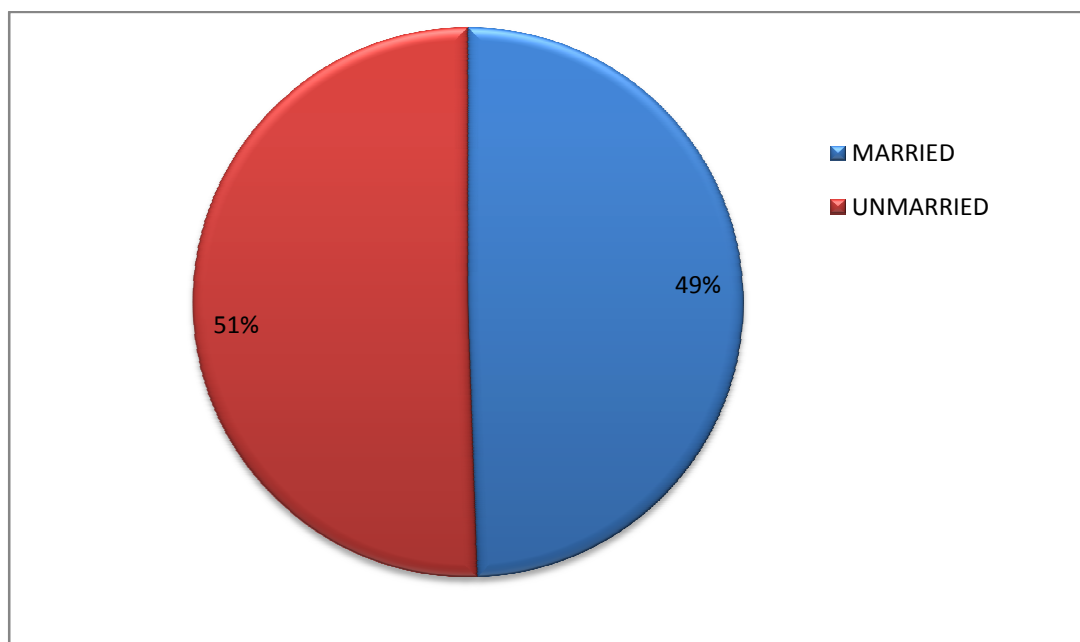
The respondents who were analyzed for the study were maximum male, around 75.6%, and the remaining 24.4% were females. Out of the number of persons visiting the banks were mostly males, so a maximum number of males responded for the study.

#### 4.2.2 Marital Status

**Table No. 4.3 Marital Status of Respondents**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MARRIED	272	49.5	49.5	49.5
	UNMARRIED	278	50.5	50.5	100.0
	Total	550	100.0	100.0	

*Source: Primary Data*



**Graph No. 4.2 Marital Status of Respondents**

Out of a total of 550 respondents, 49.5% of respondents are married, and the remaining 50.5% are unmarried. Here it was found that the young people, mostly students, formed the dominant group among the respondents than those who were unmarried. The maximum number of students and young professionals had their accounts in the bank, and they preferred the e-banking services.



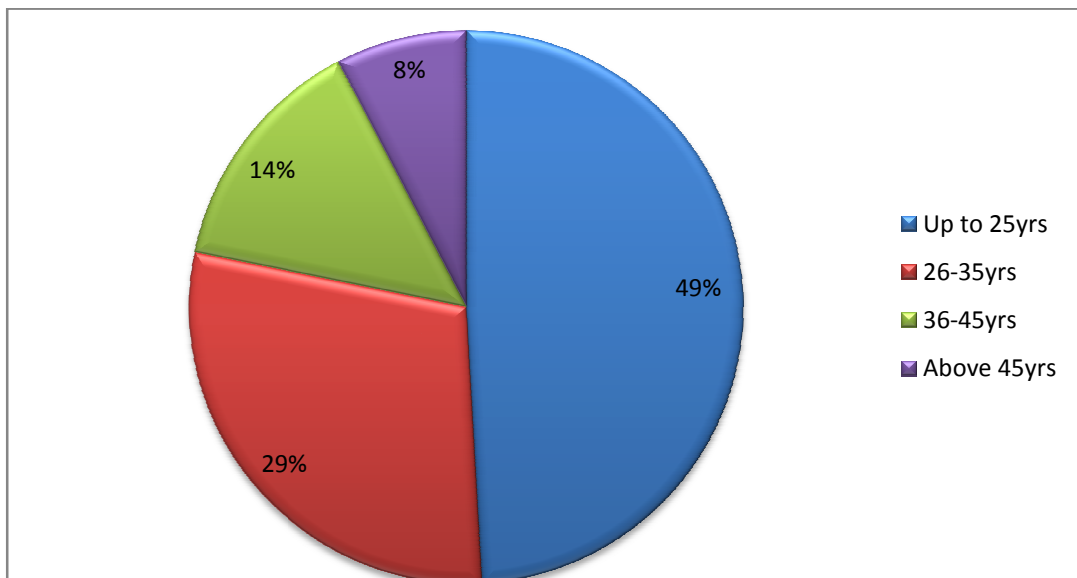
### 4.2.3 Age

During the study, we found that age is a significant and meaningful factor in the study of the awareness of e-banking services. It was seen during the study the different age groups of the respondents were having a different level of awareness regarding e-banking services provided by banks.

**Table No. 4.4 Age Group of Respondents**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Up to 25yrs	270	49.1	49.1	49.1
	26-35yrs	160	29.1	29.1	78.2
	36-45yrs	78	14.2	14.2	92.4
	Above 45yrs	42	7.6	7.6	100.0
	Total	550	100.0	100.0	

Source: Primary Data



**Graph No. 4.3 Age Group of Respondents**

The study shows that out of all respondents, 49.1% are under the young age group, i.e. below 25 years age-group, and 29.1% of respondents are in the age group between 26 to 35 years. Remaining 14.2% are under 36 to 45 years, and only 7.2% of respondents' age is more than 45 years. In the banks, the frequency of the young people falling under the age group of 35 years is more. It is also found that the

banking transactions are mostly done by the young, and this age group regularly does middle-aged people and e-banking.

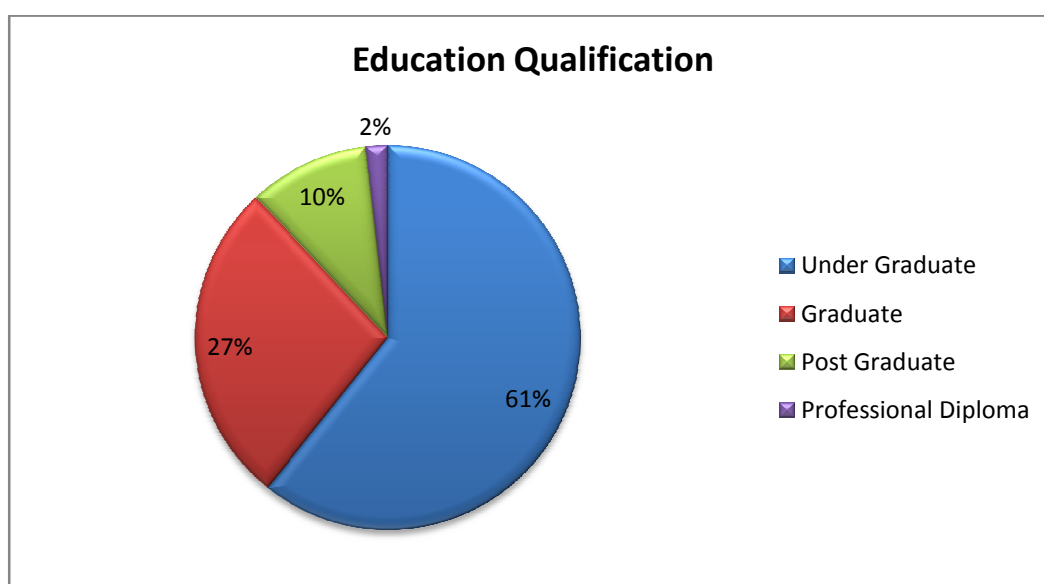
#### 4.2.4 Education Status

The qualifications of the respondents were needed to be studied for the awareness of the e-banking services, which is again very useful for determination of literacy level of the respondents and it is directly responsible for knowing various aspects of e-banking. The well literate people know well about e-banking services.

**Table No. 4.5 Education Qualification of Respondents**

<b>Under Graduate</b>	<b>61%</b>
<b>Graduate</b>	<b>27%</b>
<b>Post Graduate</b>	<b>10%</b>
<b>Professional Diploma</b>	<b>2%</b>

*Source: Primary Data*



**Graph No. 4.4 Education Qualification of Respondents**

Out of total respondents, 60.4% are undergraduates, 27.3% completed their graduation, and 10.2% are postgraduates and the remaining having other education. Out of 550 respondents' maximum are well qualified, and that will help them to get the aid of e-banking services.

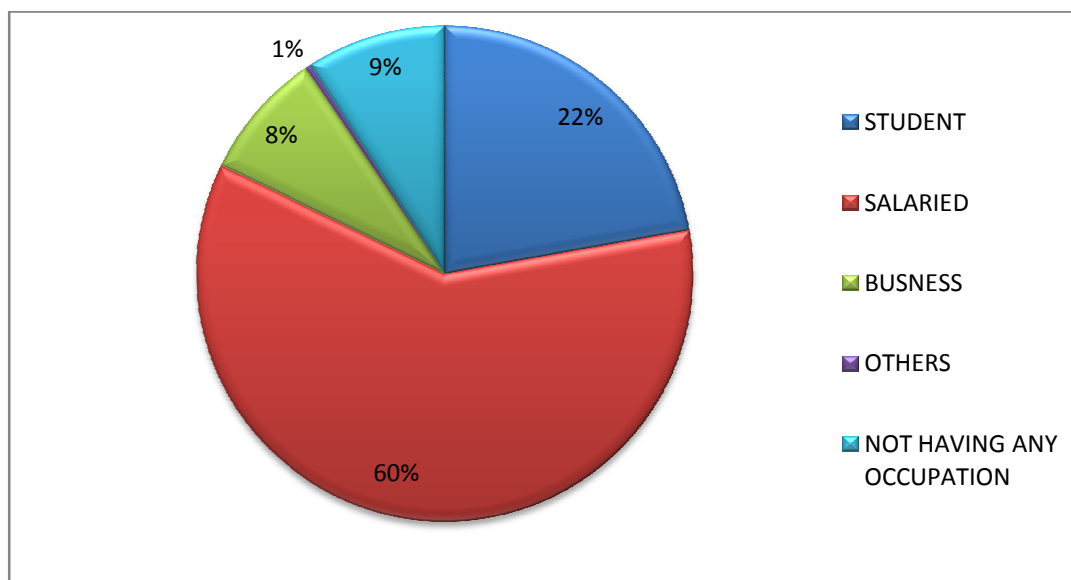
#### 4.2.5 Occupation

Occupation of the customer is one of the critical determinants for availing banking services. A researcher had distributed the questionnaire to the customers having accounts in the banks as we found they are from several different occupations, which is interpreted as follows.

**Table No. 4.6 Occupation of Respondents**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	122	22.2	22.2	22.2
	Salaried	330	60.0	60.0	82.2
	Business	46	8.4	8.4	90.5
	Others	2	.4	.4	90.9
	Not having any Occupation	50	9.1	9.1	100.0
	Total	550	100.0	100.0	

Source: Primary Data



**Graph No. 4.5 Occupation of Respondents**

Out of total respondents, 22.2% of respondents are students and have no income. A significant group of respondents are salaried persons, and they are working in

different private and government firms (60.0%). Moreover, the 8.4% of customers have a business.

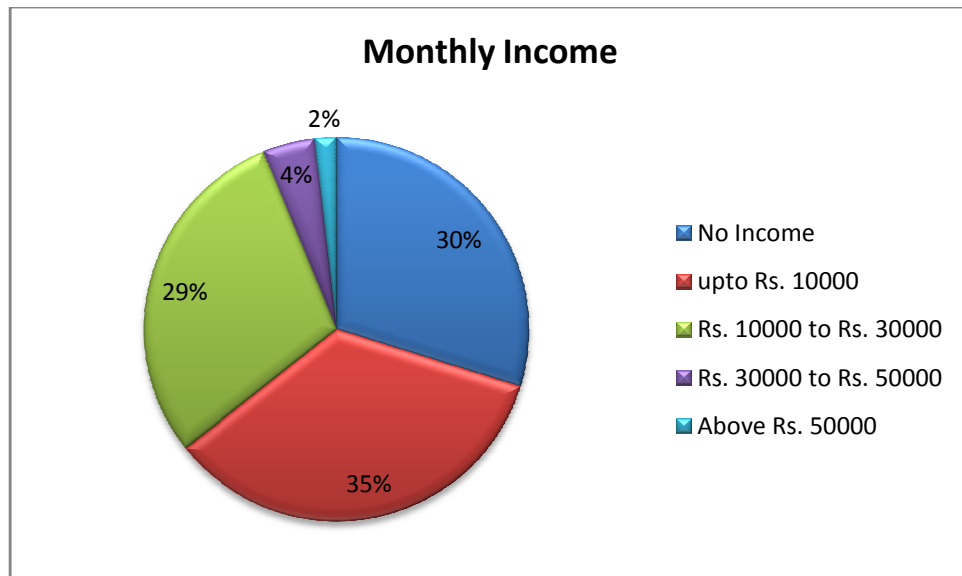
#### 4.2.6 Income Level

The critical component of the demographic profile of respondents is gross monthly income. The majority (34.5%) respondents earn up-to Rs. 10,000 per month while only 1.8% of respondents earn above Rs. 50000 monthly. The percentage of respondents who do not earn is 29.8% they get the savings from another person in their family, and they are mostly students.

**Table No. 4.7 Monthly Income of Respondents**

<b>No Income</b>	<b>30%</b>
<b>upto Rs. 10000</b>	<b>35%</b>
<b>Rs. 10000 to Rs. 30000</b>	<b>29%</b>
<b>Rs. 30000 to Rs. 50000</b>	<b>4%</b>
<b>Above Rs. 50000</b>	<b>2%</b>

*Source: Primary Data*



**Graph No. 4.6 Monthly Income of Respondents**

#### 4.2.7 Bank Details

**Table No. 4.8 Name of Bank in Which Respondents have Account**

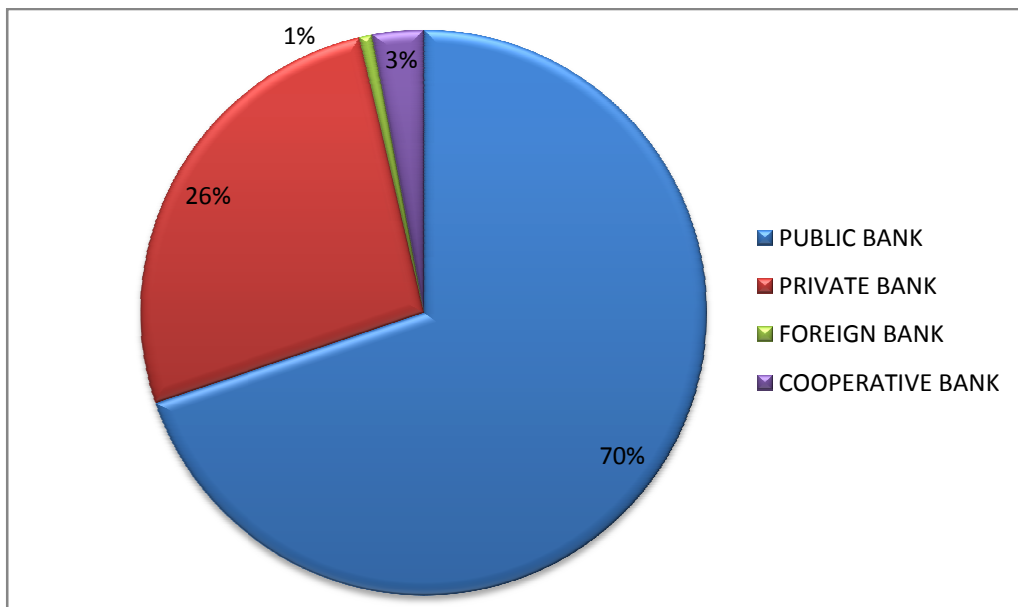
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bank of Maharashtra	74	13.5	13.5	13.5
	Bank of India	46	8.4	8.4	21.8
	State Bank of India	182	33.1	33.1	54.9
	Central Bank of India	32	5.8	5.8	60.7
	Panjab National Bank	6	1.1	1.1	61.8
	Union Bank of India	18	3.3	3.3	65.1
	Canara Bank	10	1.8	1.8	66.9
	Karnataka Bank	2	.4	.4	67.3
	Bank of Patiyala	2	.4	.4	67.6
	Dena Bank	6	1.1	1.1	68.7
	Vijaya Bank	2	.4	.4	69.1
	Bank of Baroda	4	.7	.7	69.8
	Indian Overseas Bank	2	.4	.4	70.2
	Apna Bank	2	.4	.4	70.5
	Girnar Bank	2	.4	.4	70.9
	PMC Bank	2	.4	.4	71.3
	Thane Janta Sahkari Bank	4	.7	.7	72.0
	Federal Bank	2	.4	.4	72.4
	Jay Kalyan Bank	2	.4	.4	72.7
	Sarswat Co.Opr., Bank	2	.4	.4	73.1
	ICICI Bank	24	4.4	4.4	77.5
	HDFC Bank	86	15.6	15.6	93.1
	AXIS Bank	28	5.1	5.1	98.2
	IDBI Bank	2	.4	.4	98.5
Tata Capital Fin Ltd.	2	.4	.4	98.9	
Merchant Bank	2	.4	.4	99.3	
HSBC	2	.4	.4	99.6	
NDCC	2	.4	.4	100.0	
Total	550	100.0	100.0		

Source: Primary Data

**Table No. 4.9 Type of Bank, the Respondents, have Account**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Public Bank	384	69.8	69.8	69.8
	Private Bank	146	26.5	26.5	96.4
	Foreign Bank	4	.7	.7	97.1
	Cooperative Bank	16	2.9	2.9	100.0
	Total	550	100.0	100.0	

Source: Primary Data



**Graph No. 4.7 Type of Bank, the Respondents, have Account**

During the study, we contacted people from different areas of Nashik city to collect data from those who are account holders of a particular bank. The various banks responded by respondents are divided into four categories, i.e. private bank, public sector bank, foreign bank and cooperative bank. Majorly (69.8%) of the respondents have their bank account in public banks, while 26.5% of respondents have their bank account in private banks. Only 0.7% of respondents have their bank account in foreign banks, and only 2.9% of respondents have their bank account in cooperative banks.

#### 4.2.8 Type of e-banking Services Used

	Count of Service Usage
Only ATM & other Card Services	550
INTERNET BANKING	215
MOBILE BANKING	10

Here researcher asked about, which e-banking services they avail. It was found that all 550 respondents use the ATM card. As the table shows a good number of customers (48.2%, i.e. 215) are using internet banking meanwhile for one or more work-related to any banking transactions and requirement, they go to the internet facility. Only 1.8% of customers are using mobile banking, which is less in number.

Means we are considering all these three facilities under e-banking

#### 4.2.9 Since How Many Years Respondents are Using e-banking Services

**Table No. 4.10 Number of Year Since e-banking Services Used by Respondents**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 2 Yrs	266	48.4	48.4	48.4
	2 - 5 Yrs	188	34.2	34.2	82.5
	5 - 10 Yrs	86	15.6	15.6	98.2
	Above 10 Yrs	10	1.8	1.8	100.0
	Total	550	100.0	100.0	

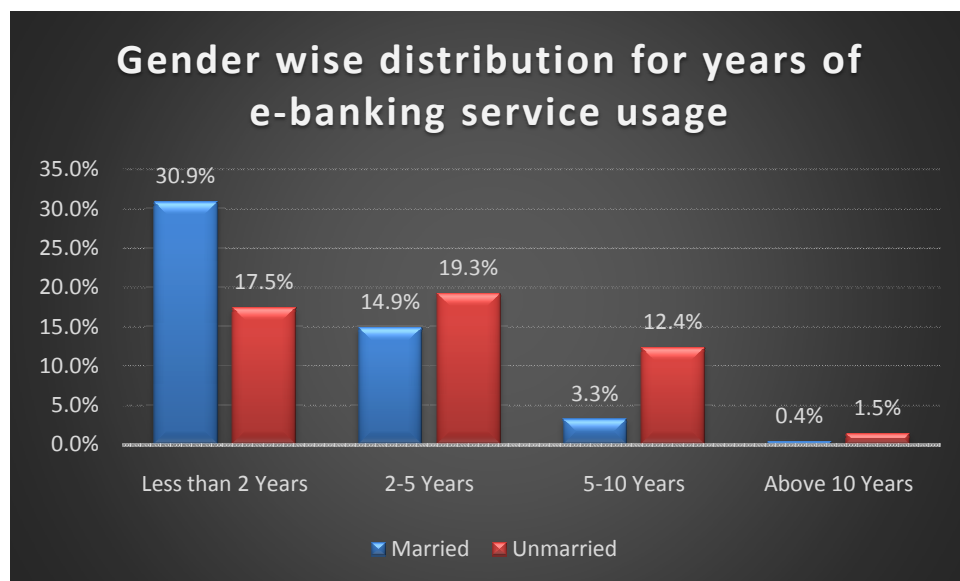
In this study, the respondents are bank account holders, and a suitable group uses the e-banking services; now there was an important thing to ask as to how long they have been using e-banking services. The result was that 48.4% of respondents are using their e-banking services since last two years, while 34.2% of respondents using since 3-5 years. 15.6% of respondents are using e-banking services from the last 5-10 years, and only 1.8% is using these services from the last ten years and above.

**4.2.10 Relevance between the gender of respondents and the number of the year since customers use e-banking services.**

The table is prepared using crosstabs feature of SPSS. The objective behind preparing this table is to understand whether there are specific changes in the use of the e-banking services by different genders. This helps in analyzing how frequently they use e-banking services (male or female). The table is prepared for this configuration of use of e-banking as per the gender of customers.

**Table No. 4.11 Gender wise distribution for years of e-banking service usages**

Gender	Less than 2 Years	2-5 Years	5-10 Years	Above 10 Years
<b>Male</b>	36.0%	26.9%	11.3%	1.5%
<b>Female</b>	12.4%	7.3%	4.4%	0.4%



**Graph No. 4.8 Number of the year since e-banking Services are used by Gender of Respondents**



### Chi-Square Tests

	<i>Value</i>	<i>df</i>	<i>Asymp. Sig. (2-sided)</i>
Pearson Chi-Square	1.769 <sup>a</sup>	3	.600
Likelihood Ratio	1.784	3	.597
Linear-by-Linear Association	.016	1	.899
N of Valid Cases	550		

- a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 2.44.

In the study, both male and female participated out of which higher number are males rather than females. The percentage of use of e-banking by the male or female is as follows. For major male group, 36.0% of the total 550 customers use e-banking since last two years, 26.9% use since last five years, 11.3% use since last Ten years and only 1.5% use for more than ten years. For the group of female, 12.4% of the total 550 customers use e-banking since last two years, 7.3% use since last five years, 4.4% use since last Ten years and only 0.4% use for more than ten years.

Thus, the customers are reduced in the use of e-banking from more number of years. In the case of both male and female, the higher number of respondents is using e-banking for last two years, and very few people are using e-banking for a long time. *Since the p-value of as per chi-square test is more than the 0.05 at 95% confidence level, no significant associated relationship can be formed between gender of respondents and since how long the e-banking services used by them.*

#### **4.2.11 Relevance between the gender of respondents and overall satisfaction of consumer from e-banking services**

##### ***Hypothesis***

Null Hypothesis: There is not any significant relationship between gender of the customers and overall satisfaction of customer from e-banking services.

Alternate Hypothesis: There is a significant relationship between gender of the customers and overall satisfaction of customer from e-banking services.

**Table No. 4.12 Gender of Respondents \* Overall Satisfaction of Customer From e-banking Services Cross Tabulation**

Count							
		Overall Satisfaction of Customer From e-banking Services					Total
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Gender of Respondents	Male	6	12	168	160	70	416
	FEMALE	0	6	54	50	24	134
Total		6	18	222	210	94	550

The table describes the relationship between the gender of customers and overall satisfaction of customer from e-banking services. Most of the respondents experience the satisfaction of the e-banking services provided by their banks. However, the above table shows there is a slight difference in the satisfaction level of the male and female. The females' satisfaction percentage is 55.22%, and male satisfaction percentage is 55.28%. It shows there are minor differences in the satisfaction level.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.623 <sup>a</sup>	4	.588
Likelihood Ratio	4.158	4	.381
Linear-by-Linear Association	.078	1	.780
N of Valid Cases	550		

- a. Three cells (30.0%) have expected count less than 5. The minimum expected count is 1.46.
- b. At 95% Level of Confidence

The application of Chi-square test found that the P-value, i.e. 0.588, which is more than 0.05.

*So we failed to reject the Null Hypothesis.*

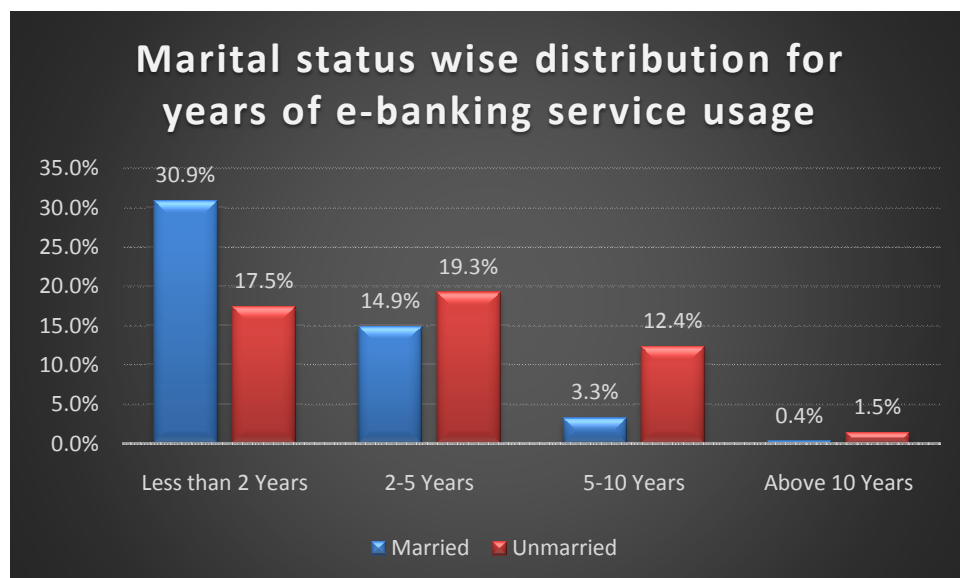
It depicts that *there is no significant relationship and association between the gender of the customers and overall satisfaction of customer from e-banking services*

**4.2.12 Relevance between the marital status of respondents and number of the year since customers use e-banking services.**

The table is prepared by using crosstabs feature of SPSS. The objective behind preparing this table is to understand whether there is a certain change in the use of the e-banking services with effect on the marital status of the e-banking users. This helps in analyzing how many years the users used the e-banking and whether it changes due to the marital status of the users. The table is prepared for this configuration of the period of use of e-banking to the marital status of the customers.

**Table No. 4.13 Marital status wise distribution for years of e-banking service usages**

Marital Status	Less than 2 Years	2-5 Years	5-10 Years	Above 10 Years
<b>Married</b>	30.9%	14.9%	3.3%	0.4%
<b>Unmarried</b>	17.5%	19.3%	12.4%	1.5%



**Graph No. 4.9 Marital status wise distribution for years of e-banking service usages**

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	55.261 <sup>a</sup>	3	.000
Likelihood Ratio	58.702	3	.000
Linear-by-Linear Association	54.831	1	.000
N of Valid Cases	550		

- a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 4.95.

In the study,, both married and unmarried people participated out of which higher numbers of respondents were married. The percentage of use of e-banking by the married and unmarried people is as follows. From the significant group of married people, 30.9% of the total 550 customers use e-banking since last two years, 14.9% use since last five years, 3.3% use since last Ten years and only 0.4% use for more than ten years. Moreover, from the group of unmarried respondents, 17.05% of the total 550 customers use e-banking since last two years, 19.3% use since last five years, 12.4% use since last Ten years and only 1.5% use for more than ten years.

Thus, the crosstab shows that marital status affects the time duration of the use of e-banking services. The higher number of unmarried people uses e-banking services for five years as compared within. However, a higher number of married people uses e-banking services for two years. So in this comparison and relevance shows there is a specific effect of marital status for the use of e-banking services.

*Since the p-value of as per chi-square test is less than the 0.05 at 95% confidence level, there is a significant relationship can be formed between marital status of the respondents and since how long the e-banking services used by them. Means the marital status of customer affects the use of e-banking services.*

#### 4.2.13 Relevance between the marital status of respondents and overall satisfaction of consumer from e-banking services

##### *Hypothesis*

Null Hypothesis: There is not any significant relationship between the marital status of the customers and overall satisfaction of customer from e-banking services.

Alternate Hypothesis: There is a significant relationship between the marital status of the customers and overall satisfaction of customer from e-banking services.

**Table: 4.14 - Marital Status of Respondents \* Overall Satisfaction of Customer From e-banking Services Cross Tabulation**

		Count					Total
		Overall Satisfaction of Customer From e-banking Services					
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Marital Status of Respondents	Married	2	10	100	116	44	272
	Unmarried	4	8	122	94	50	278
Total		6	18	222	210	94	550

Above table describes the relationship between the marital status of the customers and the overall satisfaction of customer from e-banking services. Most of the respondents experience the satisfaction of the e-banking services provided by their banks. However, the above table shows there is a difference in the satisfaction level of the married and unmarried. The married people satisfaction percentages are 58.82% and unmarried people satisfaction percentages are 51.79%. It shows there are differences in the satisfaction level.

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.612 <sup>a</sup>	4	.223
Likelihood Ratio	5.513	4	.222
Linear-by-Linear Association	.671	1	.413
N of Valid Cases	550		

- a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 2.97.

The application of Chi-square test found that the P-value, i.e. 0.223, which is more than 0.05.

*So we failed to reject the Null Hypothesis.*

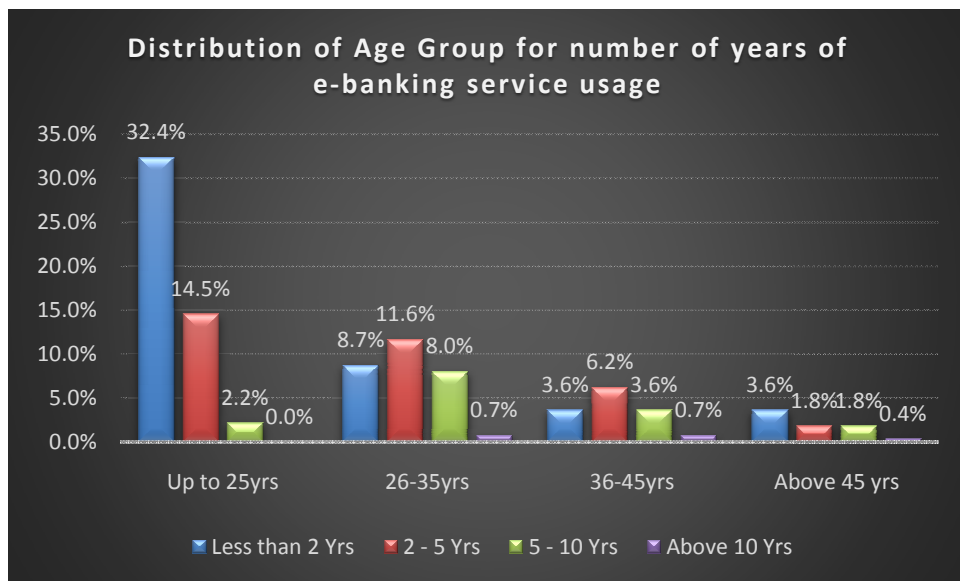
It depicts that *there is no significant relationship and association between the marital status of the customers and overall satisfaction of customer from e-banking services*

#### **4.2.14 Relevance between the age of respondents and number of years since customers use e-banking services.**

The table is prepared by using crosstabs feature of SPSS. The objective behind preparing this table is to understand whether there are specific changes in the use of the e-banking services, which gets affected as per the age of the e-banking users. This helps in analyzing how many years the users used the e-banking. The table is prepared for this configuration of the period of use of e-banking to the age group of the customers.

**Table No. 4.15 Distribution of Age Group for number of years of e-banking service usages**

Age Group	Less than 2 Years	2 - 5 Yrs	5 - 10 Yrs	Above 10 Yrs
Up to 25yrs	32.4%	14.5%	2.2%	0.0%
26-35yrs	8.7%	11.6%	8.0%	0.7%
36-45yrs	3.6%	6.2%	3.6%	0.7%
Above 45 yrs	3.6%	1.8%	1.8%	0.4%



**Graph No. 4.10 Distribution of Age Group for number of years of e-banking service usages**

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	96.108 <sup>a</sup>	9	.000
Likelihood Ratio	106.369	9	.000
Linear-by-Linear Association	54.768	1	.000
N of Valid Cases	550		

a. 4 cells (25.0%) have expected count less than 5. The minimum expected count is .76.

In the study, various age groups of people participated, which were grouped into the four categories and analyzed to find since how many years they were using e-banking

services. In this relevance, the percentage use of e-banking by the different age group of people is as follows. From the young age group upto 25 years' age of people, 32.4% of the total 550 customers use e-banking since last two years, 14.5% use since last five years, 2.2% use since last Ten years and no-one used for more than ten years. From the age group of 26-35 years, 8.7% of the total 550 customers use e-banking since last two years, 11.6% use since last five years, 8.0% use since last Ten years and only 0.7% use for more than ten years. From the age group of 36-45 years, 3.6% of the total 550 customers use e-banking since last two years, 6.2% use since last five years, 3.6% use since last Ten years and only 0.7% use for more than ten years. From the older age group of higher than 45 years, 3.6% of the total 550 customers use e-banking since last two years, 1.8% use since last five years, 1.8% use since last Ten years and only 0.4% use for more than ten years. From this, it can be analyzed as there is a change in the use of e-banking services.

Thus, the crosstab shows that the age group affects the time duration of the use of e-banking services. So in this comparison and relevance shows there are specific effects of the age of people in the use of e-banking services.

*Since the p-value of as per chi-square test is less than the 0.05 at 95% confidence level, there is a significant relationship can be formed between the age of the respondents and since how long the e-banking services used by them. Means age of customer affects the use of e-banking services.*

#### **4.2.15 Relevance between the Age of respondents and overall satisfaction of consumer from e-banking services**

##### ***Hypothesis***

Null Hypothesis: There is not any significant relationship between the age of the customers and overall satisfaction of customer from e-banking services.

Alternate Hypothesis: There is a significant relationship between the age of the customers and overall satisfaction of customer from e-banking services.



**Table No. 4.16 Age Group of Respondents \* Overall Satisfaction of Customer  
From e-banking Services Cross tabulation**

Count							
		Overall Satisfaction of Customer From e-banking Services					Total
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Age Group of Respondents	Up to 25 yrs	4	10	96	122	38	270
	26-35 yrs	2	2	70	52	34	160
	36-45 yrs	0	2	34	28	14	78
	Above 45 yrs	0	4	22	8	8	42
Total		6	18	222	210	94	550

It describes the relationship between the age of customers and overall satisfaction of customer from e-banking services. Most of the respondents experience the satisfaction of the e-banking services provided by their banks. However, in this, the AGE GROUPS up to 25 years and older people of the age group above 45 years have a higher percentage of dissatisfaction experience. For example, in AGE GROUP up to 25 years, around 5.63% of customers rated dissatisfaction related e-banking and 9.78% of customers of above 45 years feel dissatisfaction of e-banking services. This shows that there is a relationship between the age group of the customers and the satisfaction level of the e-banking users.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24.556 <sup>a</sup>	12	.016
Likelihood Ratio	25.219	12	.012
Linear-by-Linear Association	.549	1	.459
N of Valid Cases	550		

- a. Six cells (30.0%) have expected count less than 5. The minimum expected count is .46.
- b. At 95% Level of Confidence

The application of Chi-square test found that the p-value = 0.016 which is lower than 0.05 at 95% confidence level (p-value<0.05). So we found sufficient evidence to reject the null hypothesis.

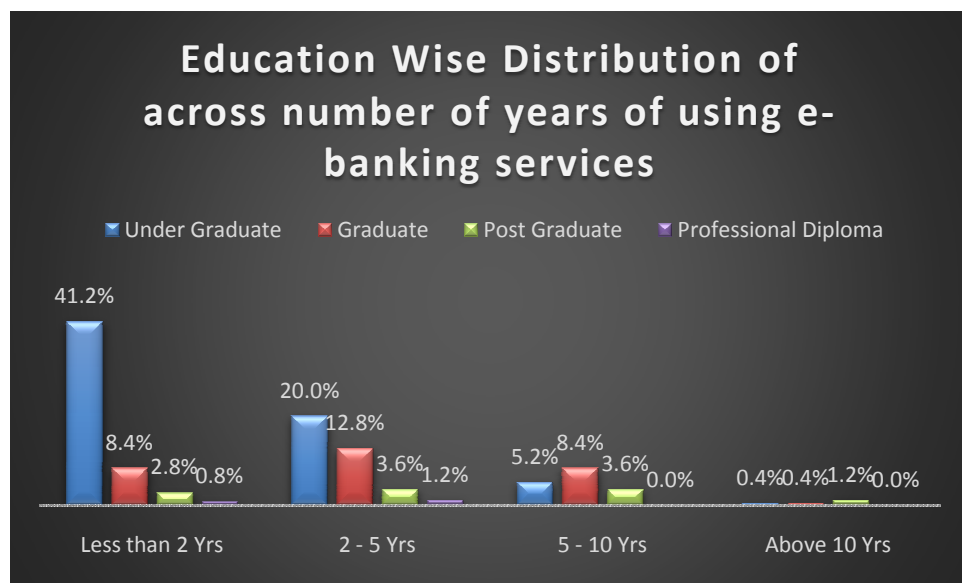
It depicts that *there is a significant relationship between the age of the customers and overall satisfaction of customer from e-banking services*  
*Hence, the null hypothesis is rejected.*

**4.2.16 Relevance between the education qualification of respondents and number of years since customers use e-banking services.**

The table is prepared by using crosstabs feature of SPSS. The objective behind preparing this table is to understand whether there are specific changes in the use of the e-banking services with effect as to their educational qualifications. This helps in analyzing how many years the users used the e-banking, whether any changes due to the education of the users. The table is prepared for this configuration of the period of use of e-banking to the education of the customers.

**Table No. 4.17 Education Wise Distribution of across number of years of using e-banking services**

Educational Qualification	Less than 2 Years	2 - 5 Yrs	5 - 10 Yrs	Above 10 Yrs
<b>Under Graduate</b>	41.2%	20.0%	5.2%	0.4%
<b>Graduate</b>	8.4%	12.8%	8.4%	0.4%
<b>Post Graduate</b>	2.8%	3.6%	3.6%	1.2%
<b>Professional Diploma</b>	0.8%	1.2%	0.0%	0.0%



**Graph No. 4.11 Education Wise Distribution of across number of years of using e-banking services**

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	105.119 <sup>a</sup>	9	.000
Likelihood Ratio	94.808	9	.000
Linear-by-Linear Association	61.049	1	.000
N of Valid Cases	550		

+a. 6 cells (37.5%) have expected count less than 5. The minimum expected count is .18.

In the study, people participated having various educational qualifications which are grouped into the four significant heads and analyzed as to find effects of the different groups using e-banking services. In this relevance, the percentage of use of e-banking by the different qualified people is as follows. From the people who are in the undergraduate category, 37.45% of the total 550 customers are using e-banking since last two years, 18.18% use since last five years, 4.7% use since last Ten years and 0.36% use for more than ten years. From the graduate category, 7.63% of the total 550 customers are using e-banking since last two years, 11.6% use since last five years, 7.63% use since last Ten years and only 0.36% use for more than ten years. From the post-graduates' respondents, 2.54% of the total 550 customers are using e-banking since last two years, 3.27% use since last five years, 3.27% use since last Ten years and only 1.0% use for more than ten years. From the people who had done professional diploma, 0.72% of the total 550 customers are using e-banking since last two years, 1.0% use since last five years, no-one uses since last Ten years and also no-one uses for more than ten years. From this, it can be analyzed as there is a change in the use of e-banking services.

Thus, the crosstab shows that the education qualification affects the time duration of the use of e-banking services. So in this comparison and relevance show, there is a specific effect of education of people in the use of e-banking services.

Since the p-value of as per chi-square test is less than the 0.05 at 95% confidence level, there is a significant relationship can be formed between the education of the respondents and since how long the e-banking services used by them. Means qualification of customer affects the use of e-banking services.

#### 4.2.17 Relevance between the education qualification of respondents and overall satisfaction of consumer from e-banking services

##### *Hypothesis*

Null Hypothesis: There is not any significant relationship between the education qualification of the customers and overall satisfaction of customer from e-banking services.

Alternate Hypothesis: There is a significant relationship between education qualification of the customers and overall satisfaction of customer from e-banking services.

**Table No. 4.18 Education Qualification of Respondents \* Overall Satisfaction of Customer From e-banking Services Cross Tabulation**

Count							
		Overall Satisfaction of Customer From e-banking Services					Total
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Education Qualification of Respondents	Under Graduate	6	14	124	140	50	334
	Graduate	0	4	78	48	20	150
	Post Graduate	0	0	16	18	22	56
	Professional Diploma	0	0	4	4	2	10
Total		6	18	222	210	94	550

The table describes the relationship between the education qualification of customers and overall satisfaction of customer from e-banking services. Most of the respondents experience the satisfaction of the e-banking services provided by their banks. As shown in the table the agreement percentage toward satisfaction is varied by the customer having different education qualification. This shows that there is a relationship between the age group of the customers and the satisfaction level of the e-banking users.

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	35.473 <sup>a</sup>	12	.000
Likelihood Ratio	35.342	12	.000
Linear-by-Linear Association	6.243	1	.012
N of Valid Cases	550		

- a. 10 cells (50.0%) have expected count less than 5. The minimum expected count is .11.

The application of Chi-square test found that the p-value = 0.000 which is lower than 0.05 at 95% confidence level (p-value<0.05). So we found sufficient evidence to reject the null hypothesis.

It depicts that *there is a significant relationship between education qualification of the customers and overall satisfaction of customers from e-banking services*

*Hence, the null hypothesis is rejected.*

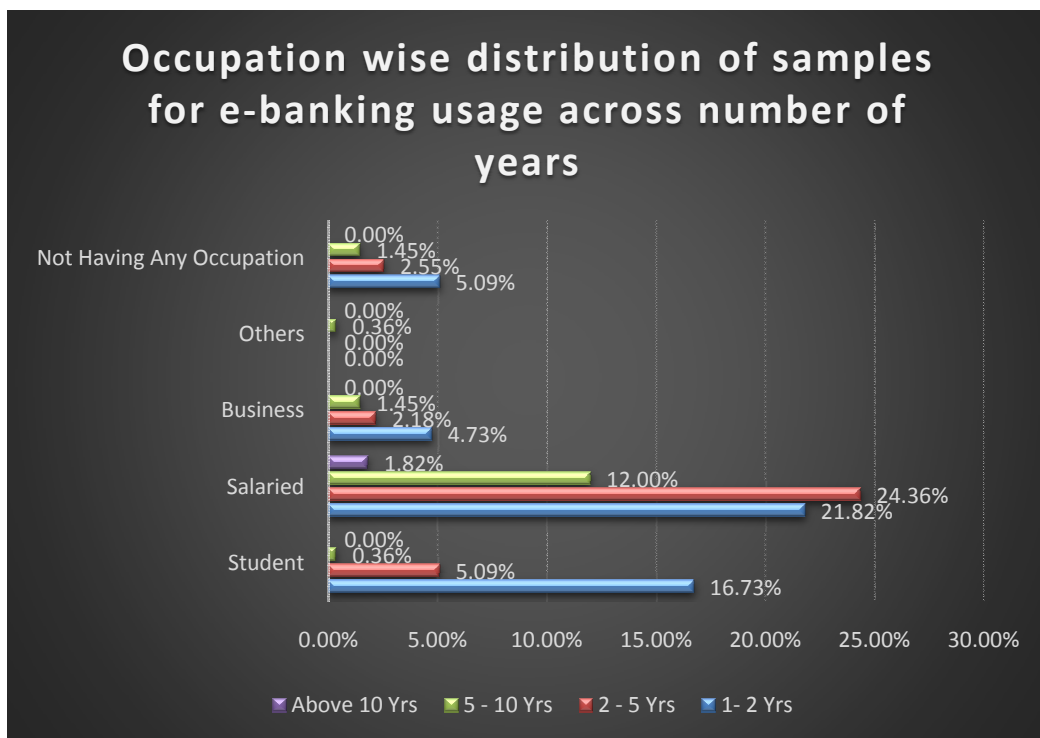
#### **4.2.18 Relevance between the occupation of respondents and number of years since customers use e-banking services.**

The table is prepared by using crosstabs feature of SPSS. The objective behind preparing this table is to understand whether there are certain changes in the use of the e-banking services will get affected as per the occupation of the respondents. This

helps in analyzing how many years the users used the e-banking, and any changes found related to the occupation of the users. The table is prepared for this configuration of the period of use of e-banking to the occupation of the customers.

**Table No. 4.19 Occupation wise distribution of samples for e-banking usage across number of years**

Occupation	Less than 2 Years	2 - 5 Yrs	5 - 10 Yrs	Above 10 Yrs
<b>Student</b>	16.73%	5.09%	0.36%	0.00%
<b>Salaried</b>	21.82%	24.36%	12.00%	1.82%
<b>Business</b>	4.73%	2.18%	1.45%	0.00%
<b>Others</b>	0.00%	0.00%	0.36%	0.00%
<b>Not Having Any Occupation</b>	5.09%	2.55%	1.45%	0.00%



**Graph No. 4.12 Occupation wise distribution of samples for e-banking usage across number of years**

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	75.262 <sup>a</sup>	12	.000
Likelihood Ratio	83.557	12	.000
Linear-by-Linear Association	3.869	1	.049
N of Valid Cases	550		

- a. 7 cells (35.0%) have expected count less than 5. The minimum expected count is .04.

In the study, people participated having various occupations in their carrier life which are grouped into the five significant heads and analyzed to find the different groups using e-banking services. In this relevance, the percentage of use of e-banking by the people with the different occupation is as follows. From the respondents who are students 16.7% of the total 550 customers are using e-banking since last two years, 5.1% use since last five years, 0.4% use since last Ten years and no one uses for more than ten years. From the salaried people, 21.8% of the total 550 customers are using e-banking since last two years, 24.4% use since last five years, 12.0% use since last Ten years and only 1.8% use for more than ten years. From the respondents who are having a business, 4.7% of the total 550 customers are using e-banking since last two years, 2.2% use since last five years, 1.5% uses since last Ten years and only 0.0% use for more than ten years. From the people who had specific another profession, no-one, of the total 550 customers is using e-banking since last two years, and since last five years, no-one is using since last Ten years and also no-one using from more than ten years. Moreover, finally, from the people who are not in any profession, 5.1% of the total 550 customers are using e-banking since last two years and 2.5% since last five years, 1.5% use since last Ten years and also no-one uses for more than ten years from this it can be analyzed that there is a change in the use of e-banking services.

Thus, the crosstab shows that the occupation of the respondents affects the time duration of the use of e-banking services. Thus in this comparison and relevance shows there are specific effects of education of people in the use of e-banking services.

Since the p-value of as per chi-square test is less than the 0.05 at 95% confidence level, there is a significant relationship can be formed between the occupation of the respondents and since how long the e-banking services used by them. Means occupation of customer affects the use of e-banking services.

#### 4.2.19 Relevance between the occupation of respondents and overall satisfaction of consumer from e-banking services

##### *Hypothesis*

Null Hypothesis: There is not any significant relationship between the occupation of the customers and overall satisfaction of customer from e-banking services.

Alternate Hypothesis: There is a significant relationship between occupation qualification of the customers and overall satisfaction of customer from e-banking services.

**Table No. 4.20 Occupation of Respondents \* Overall Satisfaction of Customer From e-banking Services Cross Tabulation**

Count		Overall Satisfaction of Customer From e-banking Services					Total
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Occupation of Respondents	Student	0	6	52	48	16	122
	Salaried	6	6	136	116	66	330
	Business	0	2	10	28	6	46
	Others	0	0	2	0	0	2
	Not Having Any Occupation	0	4	22	18	6	50
Total		6	18	222	210	94	550

This table describes the relationship between the occupation of customers and overall satisfaction of customer from e-banking services. Most of the respondents experience the satisfaction of the e-banking services provided by their banks. However, it is



found that there is a specific impact of occupation on the satisfaction level. As shown in the table the agreement percentage toward satisfaction is varied the students are more satisfied with the e-banking services (around 88%) and it is lower for salaried people where satisfaction level is 55.15%. This shows that there is a relationship between the age group of the customers and the satisfaction level of the e-banking users.

### Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	28.044 <sup>a</sup>	16	.024
Likelihood Ratio	31.003	16	.013
Linear-by-Linear Association	.243	1	.622
N of Valid Cases	550		

a. Twelve cells (48.0%) have expected count less than 5. The minimum expected count is .02.

b. At 95% Level of Confidence

The application of Chi-square test found that the p-value = 0.024 which is lower than 0.05 at 95% confidence level (p-value<0.05). So we found sufficient evidence to reject the null hypothesis.

It depicts that *there is a significant relationship between the occupation of the customers and overall satisfaction of customer from e-banking services*

*Hence, the null hypothesis is rejected.*

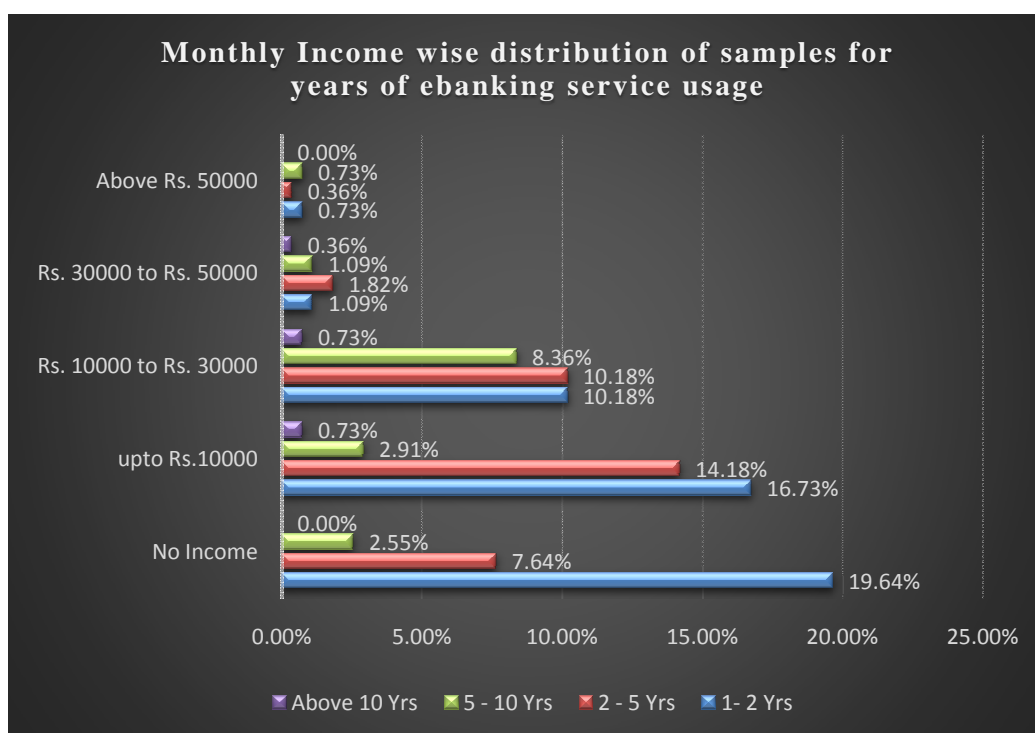
#### **4.2.20 Relevance between the monthly income of respondents and number of years since customers use e-banking services.**

The table is prepared by using crosstabs feature of SPSS. The objective behind preparing this table is to understand whether there are specific changes in the use of the e-banking services as per their educational qualification. This helps in analyzing how many years the users used the e-banking and any changes found due to the

education of the users. The table is prepared for this configuration of the period of use of e-banking to the education of the customers.

**Table No. 4.21 Monthly Income of Respondents**

Monthly Income	Less than 2 Years	2 - 5 Yrs	5 - 10 Yrs	Above 10 Yrs
<b>No Income</b>	19.64%	7.64%	2.55%	0.00%
<b>upto Rs.10000</b>	16.73%	14.18%	2.91%	0.73%
<b>Rs. 10000 to Rs. 30000</b>	10.18%	10.18%	8.36%	0.73%
<b>Rs. 30000 to Rs. 50000</b>	1.09%	1.82%	1.09%	0.36%
<b>Above Rs. 50000</b>	0.73%	0.36%	0.73%	0.00%



**Graph No. 4.13 Monthly Income wise distribution of samples for years of ebanking service usage**

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	69.490 <sup>a</sup>	12	.000
Likelihood Ratio	68.935	12	.000
Linear-by-Linear Association	47.251	1	.000
N of Valid Cases	550		

- a. 9 cells (45.0%) have expected count less than 5. The minimum expected count is .18.

In the study, people participated having different income levels which are grouped into the five significant heads and analyzed to find the different groups using e-banking services. In this relevance, the percentage of use of e-banking by the differently earned people is as follows. From the people who are not having any earnings viz. students, 19.6% of the total 550 customers are using e-banking since last two years, 7.6% use since last five years, 2.5% use since last Ten years and no one uses for more than ten years. From the people who earn up to Rs. 10000, 16.7% of the total 550 customers are using e-banking since last two years, 14.2% use since last five years, 2.9% use since last Ten years and only 0.7% use for more than ten years. From the respondents with income level Rs. 10000 to 30000, 10.2% of the total 550 customers are using e-banking since last two years, 10.2% use since last five years, 8.4% use since last Ten years and only 0.7% use for more than ten years. From the people who had income between Rs. 30000, and Rs. 50000, 1.1% of the total 550 customers are using e-banking since last two years, 1.8% use since last five years, 1.1% use since last Ten years and 0.4% use for more than ten years. From the people who had income above Rs. 50000, 0.7% of the total 550 customers are using e-banking since last two years, 0.4% use since last five years, 0.4% use since last Ten years and no one uses for more than ten years. From this, it can be analyzed that there is a change in the use of e-banking services.

Thus, the crosstab shows that the monthly income affects the time duration of the use of e-banking services. So in this comparison and relevance shows that there are specific effects of the monthly income of people in the use of e-banking services.

Since the p-value of as per chi-square test is less than the 0.05 at 95% confidence level, there is a significant relationship can be formed between monthly income of the respondents and since how long the e-banking services used by them. Means income of customer affects the use of e-banking services.

#### 4.2.21 Relevance between the monthly income of respondents and overall satisfaction of consumer from e-banking services

##### *Hypothesis*

Null Hypothesis: There is not any significant relationship between the monthly income of the customers and overall satisfaction of customer from e-banking services.

Alternate Hypothesis: There is a significant relationship between the monthly income of the customers and overall satisfaction of customer from e-banking services.

**Table No. 4.22 Monthly Income of Respondents \* Overall Satisfaction of Customer From e-banking Services Crosstabulation**

Count							
		Overall Satisfaction of Customer From e-banking Services					Total
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
MONTHLY INCOME OF RESPONDENTS	No Income	0	10	76	56	22	164
	UP To Rs.10000	4	4	70	86	26	190
	Rs. 10000 to Rs. 30000	2	4	68	54	34	162
	Rs. 30000 to Rs. 50000	0	0	6	10	8	24
	ABOVE Rs. 50000	0	0	2	4	4	10
	Total		6	18	222	210	94

This table describes the relationship between the income level of customers and overall satisfaction of customer from e-banking services. Most of the respondents experience the satisfaction of the e-banking services provided by their banks. However, it is found that there is a specific impact of monthly income on the satisfaction level. As shown in the table the agreement percentage towards satisfaction is increased as the monthly income of the respondents' increases and disagreement reduces.

<b>Chi-Square Tests</b>			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	29.855 <sup>a</sup>	16	.019
Likelihood Ratio	30.841	16	.014
Linear-by-Linear Association	10.722	1	.001
N of Valid Cases	550		

- a. Eleven cells (44.0%) have expected count less than 5. The minimum expected count is .11.
- b. At 95% Level of Confidence

The application of Chi-square test found that the p-value = 0.019 which is lower than 0.05 at 95% confidence level (p-value<0.05). So we found sufficient evidence to reject the null hypothesis.

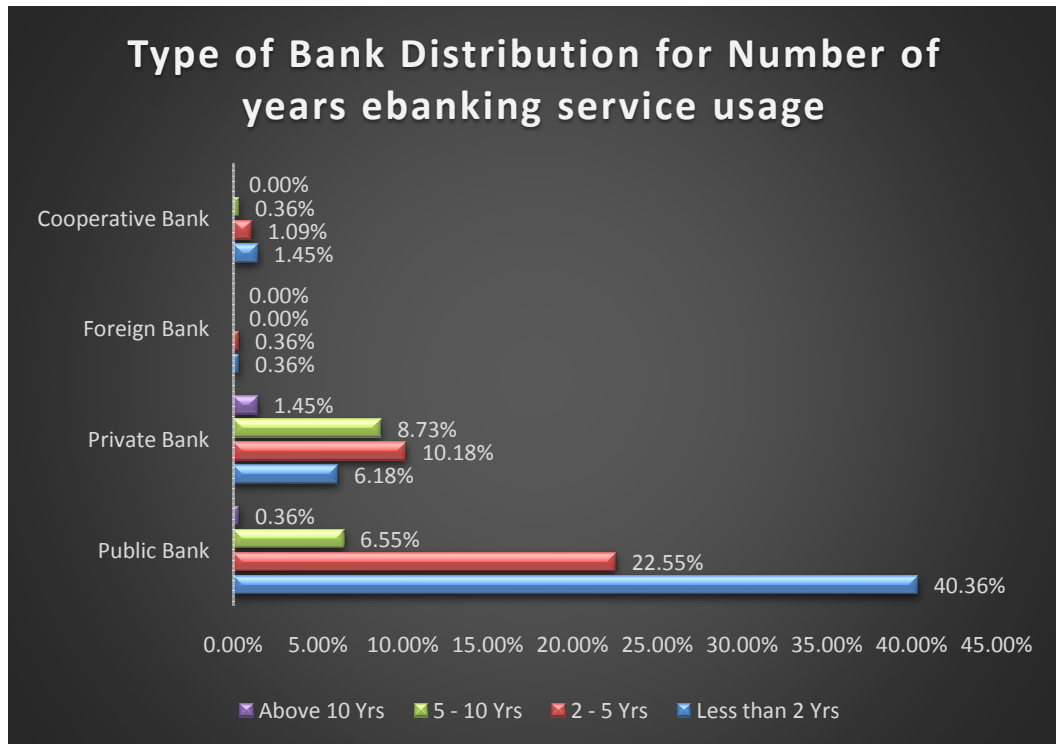
It depicts that *there is a significant relationship between the monthly income of the customers and overall satisfaction of customers from e-banking services*  
*Hence, the null hypothesis is rejected.*

**4.2.22 Relevance between the Type of Bank of respondents account and number of years since customers use e-banking services.**

The table is prepared by using crosstabs feature of SPSS. The objective behind preparing this table is to understand whether there are specific changes in the use of the e-banking services as per their educational qualification. This helps in analyzing how many years the users used the e-banking and any changes found due to the education of the users. The table is prepared for this configuration of the period of use of e-banking to the education of the customers.

**Table No. 4.23 Type of Bank The Respondents Have Account**

Type of Bank	Less than 2 Years	2 - 5 Yrs	5 - 10 Yrs	Above 10 Yrs
<b>Public Bank</b>	40.36%	22.55%	6.55%	0.36%
<b>Private Bank</b>	6.18%	10.18%	8.73%	1.45%
<b>Foreign Bank</b>	0.36%	0.36%	0.00%	0.00%
<b>Cooperative Bank</b>	1.45%	1.09%	0.36%	0.00%



**Graph No. 4.14 Type of Bank Distribution for Number of years ebanking service usage**

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	80.362 <sup>a</sup>	9	.000
Likelihood Ratio	77.901	9	.000
Linear-by-Linear Association	30.558	1	.000
N of Valid Cases	550		

- a. 7 cells (43.8%) have expected count less than 5. The minimum expected count is .07.

In the study people participated have their account in the different banks which are grouped into the four significant heads, i.e. Public Bank, Private Bank, Foreign Bank, Cooperative Bank and analyzed it form how many years they are using e-banking services. In this relevance, the percentage of use of e-banking by the people is as follows.

From the people those who are having an account in Public bank, 19.6% of the total 550 customers are using e-banking since last two years, 7.6% use since last five years, 2.5% use since last Ten years and no one uses for more than ten years. From the people who earn up to Rs. 10000, 40.4% of the total 550 customers are using e-banking since last two years, 22.5% use since last five years, 6.5% use since last Ten years and only 0.4% use for more than ten years. From the people those who are having an account in Private banks, 6.2% of the total 550 customers are using e-banking since last two years, 10.2% use since last five years, 8.7% use since last Ten years and only 1.5% use for more than ten years. From the people those who are having an account in Foreign banks, 0.4% of the total 550 customers are using e-banking since last two years, 0.4% use since last five years, no one uses for more than ten years. From the people those who are having an account in Cooperative banks, 1.5% of the total 550 customers are using e-banking since last two years, 1.1% use since last five years, 0.4% use since last Ten years and no one uses for more than ten years. From this, it can be analyzed that there is a change in the use of e-banking services.

Thus, the crosstab shows that the bank type affects the time duration of the use of e-banking services. So in this comparison and relevance shows there isa specific effect of type of bank where the respondents have an account of the duration of use of e-banking services.

*Since the p-value of as per chi-square test is less than the 0.05 at 95% confidence level, there is a significant relationship can be formed between the type of bank where the respondents have an account and since how long the e-banking services used by them. Means type of bank affects the use of e-banking services.*

#### 4.2.23 Relevance between the Type of Bank of respondents account and overall satisfaction of consumer from e-banking services

##### *Hypothesis*

Null Hypothesis: There is not any significant relationship between the type of bank where the customers are having an account and overall satisfaction of customer from e-banking services.

Alternate Hypothesis: There is a significant relationship between the type of bank where the customers are having an account and overall satisfaction of customer from e-banking services.

**Table No. 4.24 Type of Bank The Respondents Have Account \* Overall Satisfaction of Customer From e-banking Services Cross tabulation**

Count		Overall Satisfaction of Customer From e-banking Services					Total
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Type of Bank The Respondents Have Account	Public Bank	6	16	150	164	48	384
	Private Bank	0	2	56	44	44	146
	Foreign Bank	0	0	4	0	0	4
	Cooperative Bank	0	0	12	2	2	16
Total		6	18	222	210	94	550

This table describes the relationship between the type of bank where the customers have an account and overall satisfaction of customer from e-banking services. Most of the respondents experience the satisfaction of the e-banking services provided by their banks. However, it was found there is a positive impact on the type of bank on the satisfaction level. As shown in the table that the disagreement towards satisfaction of e-banking is very less or none in the Private sector, foreign and cooperative banks. But a particular percentage of dissatisfaction level found in e-banking services of Public sector banks.



### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	43.370 <sup>a</sup>	12	.000
Likelihood Ratio	45.231	12	.000
Linear-by-Linear Association	1.023	1	.312
N of Valid Cases	550		

- a. 11 cells (55.0%) have expected count less than 5. The minimum expected count is .04.

The application of Chi-square test found that the p-value = 0.000 which is lower than 0.05 at 95% confidence level (p-value<0.05). So we found sufficient evidence to reject the null hypothesis.

It depicts that *there is a significant relationship between the type of bank where the customers are having an account and overall satisfaction of customer from e-banking services.*

*Hence, the null hypothesis is rejected.*

### 4.3 Factor Analysis

Factor analysis is a branch of multivariate statistical analysis which concentrates with the internal relationships of a set of variables. It is a synthesis of variables- that analyses distinct factors at work among the variables. These new entities are themselves variables, hypothetical variables, which are fewer than the raw variables.

Factor analysis is applied to the response of the respondents towards various statements related to e-banking issues. There are 64 statements to know the attitude of customers towards e-banking and to get the opinion about the satisfaction level regarding their services.

The factor analysis identifies the different factors which prominently affect the satisfaction level of the customer.

The factor analysis has been done by using varimax rotation with Kaiser Normalization; the details of factor analysis are given below.

Table of communalities shows how much of the variance in that variables have been accounted for by the extracted factors.

**Table No. 4.25 Variables Extracted Factors**

Variable No	Communalities	Variables							
		F1	F2	F3	F4	F5	F6	F7	F8
A1	e-banking services allow easy access to recent and historical transactions	.665							
A2	Customers can access to the details of bank charges, details on funds transfer between accounts, information on interest rates, foreign exchange rates, contact details for complaints, frequently asked questions page, in addition to the availability of search engine	.690							
A3	e-banking service practices involve consistency of performance and Dependability	.657							
A4	Customers of e-banking services possess the required skills and knowledge	.734							
A5	Politeness, respect, consideration and friendliness of	.612							

Variable No	Communalities	Variables							
		F1	F2	F3	F4	F5	F6	F7	F8
	contact personnel								
A6	Quick response and the ability to get help if there is a problem or question	.690							
A7	Provision of caring and individualized attention to customers provided by call centres or web administrators	.674							
A8	e-banking system takes care of the users, and suggest alternatives for them to complete their transactions within the closure hours in case of urgent needs	.697							
A9	e-banks provide a data recovery system for uninterrupted transactions in case of power failure	.611							
A10	e-banking service providers are making an effort to understand the customer's needs	.616							
A11	Banks provide 24 hours e-based monitoring and assistance for e-banking services	.662							
A12	e-banking have more interpersonal interaction with customers throughout the service delivery process which may avoid	.649							

Variable No	Communalities	Variables							
		F1	F2	F3	F4	F5	F6	F7	F8
	miscommunications between the users and the service providers								
A13	e-banks provide help-desk services and online help facilities, and the customer service officers are friendly when addressing complaints	.906							
A14	e-banking provides customer feedback services	.906							
B1	Customers can access e-banking services anytime and anywhere		.622						
B2	There is no queue while using e-banking services		.600						
B3	e-banking services save time as compared to conventional banking		.674						
B4	e-banking transaction is easy to use		.671						
B5	e-banking services are user friendly		.593						
B6	e-banking service facilities ensure access to the account when abroad		.708						
B7	e-banks spend a great deal of time and money for developing e-banking functionality to allow customers an easy and convenient way to manage their money		.637						

Variable No	Communalities	Variables							
		F1	F2	F3	F4	F5	F6	F7	F8
C1	Confidential information is delivered safely from banks to customers			.652					
C2	The consent of customers the financial information is not passed to other organizations			.718					
C3	Third parties are not able to assess customer's financial details			.731					
C4	e-banks keep customers information private and confidential			.713					
C5	e-banks ensure the protection of personal information, risk of fraud and financial losses			.662					
C6	Customers trust that their banks are more concerned about privacy issues			.696					
C7	Privacy factor influences the adoption of e-banking services			.576					
D1	Customers are satisfied with the security system of the e-banking service providers				.696				
D2	Banks consider security as the most critical issue of e-banking practices				.694				
D3	e-banking users have freedom from danger, risk and doubt about security.				.651				

Variable No	Communalities	Variables							
		F1	F2	F3	F4	F5	F6	F7	F8
D4	The banking infrastructure is reliable in correcting erroneous transactions of e-banking				.643				
D5	Banks will compensate for any losses due to security reason or infringements				.697				
D6	e-banking user perceives that his banking details are secure and no one can access it				.704				
D7	The security factor is a prime factor for the adoption of e-banking services				.756				
E1	Ergonomic visual layout is particularly important for using e-banking services					.639			
E2	e-banking service medium has an attractive screen layout and design					.562			
E3	e-banking service medium has flashy graphics and colour configuration					.569			
E4	The design with appropriate use of the graphical user interface is also considered as an essential determinant for using e-banking services					.665			
E5	The design is keeping customers informed a language they can understand					.596			

Variable No	Communalities	Variables							
		F1	F2	F3	F4	F5	F6	F7	F8
E6	e-banking involves the correct technical functioning and accuracy of service promised					.623			
F1	e-banks provide clear, understandable and straightforward guidance screen						.617		
F2	e-banks provides the appropriate information to the user's purposes						.695		
F3	Information credibility affects the acceptance of e-banking						.710		
F4	Up-to-date contents of information largely influence the adoption of e-banking						.732		
F5	e-banking services are upgraded compared to when they first started using the services						.716		
F6	Appealing aesthetic content have a positive impact on attracting potential customers						.496		
F7	Provides graphics and text on the e-banking medium to perform transactions easily						.645		
G1	Speed of e-transactions flow is critical to user satisfaction							.731	
G2	e-banking service medium is not a frequent connection breakdown							.653	
G3	Easy to navigate the medium							.670	

Variable No	Communalities	Variables							
		F1	F2	F3	F4	F5	F6	F7	F8
	due to smooth speed								
G4	Transition is efficient with no waiting time							.631	
G5	Response speed to the complaint is satisfactory							.569	
G6	Speed of e-transactions flow is faster than traditional banking channels.							.638	
G7	Customers are highly satisfied with Promptness of the delivery of e-banking services							.690	
G8	The willingness of customers to provide prompt e-banking services.							.651	
H1	Fees are essential attributes to decide using e-banking system								.680
H2	e-banks provides convenience and flexibility at a lower cost than traditional branch banking								.634
H3	Price of service fees is acceptable								.733
H4	e-banks charge with the negligible annual fee								.672
H5	Customers will continue services even if the bank charges a high annual fee								.682
H6	Efficient and speedy e-banking transaction with lower transaction cost								.710



Variable No	Communalities	Variables								
		F1	F2	F3	F4	F5	F6	F7	F8	
H7	Compared to other banks, your bank offers attractive service costs									.675
H8	Compared to other banks, your bank provides more free services									.625
Extraction Method: Principal Component Analysis.										

Total eight factors are derived from the factor analysis, which is as follows

**Factor 1: ACCESSIBILITY**

**Factor 2: CONVENIENCE**

**Factor 3: PRIVACY**

**Factor 4: SECURITY**

**Factor 5: DESIGN**

**Factor 6: CONTENTS**

**Factor 7: SPEED**

**Factor 8: FEES & CHARGES**

#### 4.3.1 Factor 1: ACCESSIBILITY

**Definition:** Evaluation of the convenience of property/services relative to the people who will be using it. May refer to ingress and egress for the customer or user-friendly approach of staff services or lack of obstructions for a person with disabilities.

In this factor, 14 statements are combined, which areas related to the accessibility of the e-banking services provided by the banks. These 14 variables include access to recent and historical transactions, access to the details of bank charges, consistency of performance and Dependability, Politeness, respect, consideration and friendliness of contact personnel, Quick response and the ability to get help if there is a problem or question, Provision of caring and individualized attention to customers provided by call centres or web administrators takes care of the users, provide data recovery

system for uninterrupted transactions, provide 24 hours e-based monitoring and assistance for e-banking services, have been loaded.

#### **4.3.2 Factor 2: CONVENIENCE**

**Definition:** The customer journey changes dramatically when the conveyance is defined by the simplicity of design and ability to open and manage accounts online or with a mobile device or flexible working hours. Banking can now be available to local and digitally engaged consumers worldwide.

In this factor, seven statements are combined, which areas related to the convenience of the various e-banking services provided by the bank. These variables include access e-banking services anytime and anywhere, no queue while using e-banking services, e-banking transactions are easy to use, e-banking services are user friendly, e-banking service facilities ensure access of account when abroad, service beyond the banking hours, message about the completion of a transaction.

#### **4.3.3 Factor 3: PRIVACY**

**Definition:** Banking secrecy, alternately known as financial privacy, banking discretion or bank safety is a conditional agreement between a bank and its clients that all other activities remain secure, confidential and private.

In this factor, seven statements are combined, which are related to the privacy issues and availability of such facilities in e-banking services. It includes variables as, Confidential information delivered safely from banks to customers, Without The consent of customers the financial information is not passed to other organizations, Third parties are not able to assess customer's financial details, E-banks keep customers information private and confidential, E-banks ensure the protection of personal information, risk of fraud and financial losses, Customers trust that their banks are more concerned about privacy issues, Privacy factor influences the adoption of e-banking services.

#### **4.3.4 Factor 4: SECURITY**

**Definition:** Security in the banking terms means security towards direct financial loss to the customer due to the breach of confidential privacy/fraud (whether accidental or deliberate) if so, proper compensation is paid instead of that, also the customer must be compensated if the customer has suffered distress, embarrassment or inconvenience.

Security is one of the most important factors; the study found and categorized the seven variables in this factor, which includes Customers satisfaction with the security system of the e-banking service providers. Banks consider security as the most critical issue of e-banking practices; e-banking users have freedom from danger, risk and doubt about security, the banking infrastructure is reliable in correcting erroneous transactions of e-banking, Banks will compensate for any losses due to security reason or infringements, e-banking users perceive that his banking details are secure. No one can access it; Security factor is a prime factor for the adoption of e-banking.

#### **4.3.5 Factor 5: DESIGN**

**Definition:** Is a layout of the display on screen as an appealing place to perform a financial transaction or to gather information. Customer point of view design means the display of all relevant information is a clear simple background, colour and textures, no complex animation, readable fonts, language preferences, the contact information on each page.

The design factor is determined through the variables of different statements asked the customer. In this factor 6 variables, i.e. Ergonomic visual layout are particularly crucial for using e-banking services, e-banking service medium has attractive screen layout, and design, e-banking service medium has flashy graphics, and colour configuration, The design with appropriate use of graphical user interface is also considered as an essential determinant for using e-banking services, The design is keeping customers informed in a language they can understand, e-banking involves the correct technical functioning and accuracy of service promised.

#### **4.3.6 Factor 6: CONTENTS**

**Definition:** Contents refer to textual, aural or visual published on websites, its means any creative element text, examples, applications, images, archived Email messages, data e-services audio and video files and so on, it is the primary key behind the traffic generation to e-banking

This factor is determined by factor analysis which combined the variables which are related to the content of the user-interface and the system of e-banking. This factor contains seven variables included, E-banks provide clear, understandable and straightforward guidance screen, E-banks provide the appropriate information to the user's purposes, Information credibility affects the acceptance of e-banking, Up-to-date contents of information largely influences the adoption of e-banking, e-banking services are upgraded compared to when they first started using the services, Appealing aesthetic content have a positive impact on attracting potential customers, Provides graphics and text on the e-banking medium to perform transactions efficiently.

#### **4.3.7 Factor 7: SPEED**

**Definition:** Speed can be defined as the frequency of network connection, the time to navigate the internet banking website, the amount of time customer spends for page response and the rate that bank responds to the complaints of the customer. Usually, the speed of e-banking is affected by the wide-ranging and high-resolution graphics and inefficient host server speed which have a significant relationship on customer satisfaction towards e-banking.

One of the essential attributes of the e-banking is speed. The several contents which are related to the speed of these services are combined in the factor of the speed of the transactions of the e-banking services provided by the bank, in which eight variables are included, these are Speed of e-transactions flow which is critical to user satisfaction, e-banking service medium is not frequent connection breakdown, Easy to navigate the medium due to smooth speed, Transition is efficient with no waiting time, Response speed to the complaint is satisfactory, Speed of e-transactions flow is faster than traditional banking channels, customers are highly satisfied with

Promptness of the delivery of e-banking services, Willingness of customers to provide prompt e-banking.

#### 4.3.8 Factor 8: FEES AND CHARGES

**Definition:** A fee is the price one pays as remuneration for services; it is paid to organizations for rendering banking services.

The economic and financial aspects are very crucial for every kind of service. So the issues in the e-banking services are related to fees. The different statements which are related to financial aspects are combined under the factor fees. It includes eight statements; fees are essential attributes to decide using e-banking system, E-banks provide convenience and flexibility at a lower cost than traditional branch banking, Price of service fees is acceptable, E-banks charge with the negligible annual fee, Customers will continue services even if bank charges high annual fee, Efficient and speedy e-banking transaction with lower transaction cost, Compared to other banks, your bank offers attractive service costs, Compared to other banks, your bank provides more free services.

**Table No. 4.26 Comparison between Factors Regarding Satisfaction and Importance**

Factor No.	Factor Name	Average of Mean Score	Rank
1	Accessibility	4.04	2
2	Convenience	3.98	5
3	Privacy	4.08	1
4	Security	3.96	6
5	Design	3.92	7
6	Contents	4.02	3
7	Speed	4.00	4
8	Fees & Charges	3.91	8

From Table, it can be inferred that when considering the satisfaction level of the bank, account holder regarding the e-banking services provided by the banks, there are different factors responsible for customer satisfaction. Among the factors, the most critical factor and in which factor the people are more satisfied can be inferred from the average of the mean score of all variables included in a particular factor. From that

score, we will give the rank the first rank for the highest score of satisfaction and then in descending order ranks get lowered. The table shows the people are most satisfied with the privacy factor of e-banking and least satisfied with the fees of e-banking.

So it is necessary to think the bank about the fees of the e-banking services so this factor satisfaction can be improved.

#### 4.4 Descriptive Statistics of Various Statements Related to the Study of Customer Satisfaction Towards e-banking

This study has taken to find out customer satisfaction towards the use of e-banking services. For this analysis, the researcher has framed 64 statements where the response has been given on 5 Point rating scale. The participants have been asked to indicate how frequently the statement mentioned or have importance towards the use of e-banking services of the respective banks. The responses range from 1- Strongly Disagree to 5-Strongly Agree.

In these statements, if the responded score is higher, then it indicates a high level of satisfaction towards the statement or that particular variable

The descriptive statistics of the responses about the statements are mentioned in the table with their mean score of 5-point ranking scale.

**Table No. 4.27 Mean Score of 5-Point Ranking Scale.**

Variable No.		Strongly Disagree (Rating-1=Min)	Disagree (Rating-2)	Neutral (Rating-3)	Agree (Rating-4)	Strongly Agree (Rating-5=Max)	Mean	Std. Deviation
	<b>ACCESSIBILITY</b>							
A1	e-banking services allow easy access to recent and historical transactions	8	4	22	106	410	4.65	0.73
A2	Customers can access to the details of bank charges, details on	2	38	110	286	114	3.86	0.84

Variable No.		Strongly Disagree (Rating-1=Min)	Disagree (Rating-2)	Neutral (Rating-3)	Agree (Rating-4)	Strongly Agree (Rating-5=Max)	Mean	Std. Deviation
	funds transfer between accounts, information on interest rates, foreign exchange rates, contact details for complaints, frequently asked questions page, in addition to the availability of search engine							
A3	e-banking service practices involves consistency of performance and Dependability	2	12	158	118	260	4.13	0.93
A4	Customers of e-banking services possess the required skills and knowledge	8	32	124	214	172	3.93	0.95
A5	Politeness, respect, consideration and friendliness of contact personnel	16	32	74	180	284	4.11	1.03
A6	Quick response and the ability to get help if there is a problem or question	12	32	134	196	176	3.89	0.99
A7	Provision of caring and individualized attention to customers provided by call centres or web administrators	8	42	70	160	270	4.17	1.01
A8	e-banking system takes care of the users, and suggest alternatives for them to complete their transactions within the closure hours in case of	24	10	20	198	298	4.34	0.96

Variable No.		Strongly Disagree (Rating-1=Min)	Disagree (Rating-2)	Neutral (Rating-3)	Agree (Rating-4)	Strongly Agree (Rating-5=Max)	Mean	Std. Deviation
	urgent needs							
A9	E-banks provide data recovery system for uninterrupted transactions in case of power failure	8	22	140	280	100	3.80	0.83
A10	e-banking service providers are making an effort to understand the customer's needs	20	38	114	156	222	3.95	1.10
A11	Banks provide 24 hours e-based monitoring and assistance for e-banking services	2	26	128	180	214	4.05	0.92
A12	e-banking have more interpersonal interaction with customers throughout the service delivery process which may avoid miscommunications between the users and the service providers	4	34	122	144	246	4.08	0.99
A13	E-banks provide help-desk services and online help facilities, and the customer service officers are friendly when addressing complaints	22	38	134	182	174	3.81	1.08
A14	e-banking provides customer feedback services	22	38	134	182	174	3.81	1.08
	<b>CONVENIENCE</b>							
B1	Customers can access e-banking services anytime and anywhere	12	10	34	118	376	4.52	0.86
B2	There is no queue while	6	26	198	224	96	3.69	0.85



Variable No.		Strongly Disagree (Rating-1=Min)	Disagree (Rating-2)	Neutral (Rating-3)	Agree (Rating-4)	Strongly Agree (Rating-5=Max)	Mean	Std. Deviation
	using e-banking services							
B3	e-banking services save time as compared to conventional banking	6	30	130	138	246	4.07	1.00
B4	e-banking transaction are easy to use	12	46	152	136	204	3.86	1.08
B5	e-banking services are user friendly	18	66	126	180	160	3.72	1.10
B6	e-banking service facilities ensure access to account when abroad	24	34	88	172	232	4.01	1.11
B7	E-banks spend a great deal of time and money for developing e-banking functionality to allow customers an easy and convenient way to manage their money	22	38	58	224	208	4.01	1.06
	<b>PRIVACY</b>							
C1	Confidential information is delivered safely from banks to customers	6	4	42	120	378	4.56	0.76
C2	The consent of customers the financial information is not passed to other organizations	10	20	170	208	142	3.82	0.92
C3	Third parties are not able to assess customer's financial details	12	44	156	102	236	3.92	1.11
C4	E-banks keep customers information private and confidential	8	44	80	202	216	4.04	0.99
C5	E-banks ensure the protection of personal	8	2	52	160	328	4.45	0.80

Variable No.		Strongly Disagree (Rating-1=Min)	Disagree (Rating-2)	Neutral (Rating-3)	Agree (Rating-4)	Strongly Agree (Rating-5=Max)	Mean	Std. Deviation
	information, risk of fraud and financial losses							
C6	Customers trust that their banks are more concerned about privacy issues	12	20	134	254	130	3.85	0.90
C7	Privacy factor influences the adoption of e-banking services	34	14	132	126	244	3.97	1.16
	<b>SECURITY</b>							
D1	Customers are satisfied with the security system of the e-banking service providers	6	8	84	168	284	4.30	0.86
D2	Banks consider security as the most important issue of e-banking practices	22	18	160	196	154	3.80	1.01
D3	e-banking users have freedom from danger, risk and doubt about security.	22	68	146	110	204	3.74	1.19
D4	The banking infrastructure is reliable in correcting erroneous transactions of e-banking	4	14	90	208	234	4.19	0.85
D5	Banks will compensate for any losses due to security reason or infringements	8	38	170	156	178	3.83	1.01
D6	e-banking users perceive that his banking details are secure and no one can access it	20	44	102	180	204	3.92	1.09
D7	Security factor is prime	20	22	110	196	202	3.98	1.03

Variable No.		Strongly Disagree (Rating-1=Min)	Disagree (Rating-2)	Neutral (Rating-3)	Agree (Rating-4)	Strongly Agree (Rating-5=Max)	Mean	Std. Deviation
	factor for adoption of e-banking services							
	<b>DESIGN</b>							
E1	Ergonomic visual layout are particularly important for using e-banking services	6	4	28	146	366	4.57	0.72
E2	e-banking service medium have attractive screen layout and design	10	38	196	248	58	3.56	0.84
E3	e-banking service medium has flashy graphics and color configuration	20	32	168	126	204	3.84	1.10
E4	The design with appropriate use of the graphical user interface is also considered as an essential determinant for using e-banking services	6	20	180	180	164	3.87	0.92
E5	The design is keeping customers informed in a language they can understand	8	38	92	206	206	4.03	0.97
E6	e-banking involves the correct technical functioning and accuracy of service promised	34	34	154	186	142	3.67	1.11
	<b>CONTENTS</b>							
F1	E-banks provide clear, simple and understandable guidance screen	4	2	54	90	400	4.60	0.74
F2	E-banks provide the appropriate information	6	18	222	210	94	3.67	0.83

Variable No.		Strongly Disagree (Rating-1=Min)	Disagree (Rating-2)	Neutral (Rating-3)	Agree (Rating-4)	Strongly Agree (Rating-5=Max)	Mean	Std. Deviation
	to the user's purposes							
F3	Information credibility affects the acceptance of e-banking	24	32	180	154	160	3.72	1.08
F4	Up-to-date contents of information largely influences the adoption of e-banking	10	32	94	260	154	3.94	0.92
F5	e-banking services are upgraded compared to when they first started using the services	12	16	22	122	378	4.52	0.88
F6	Appealing aesthetic content have positive impact on attracting potential customers	0	16	186	268	80	3.75	0.73
F7	Provides graphics and text on the e-banking medium to perform transactions easily	14	30	132	164	210	3.96	1.03
	<b>SPEED</b>							
G1	Speed of e-transactions flow is critical to user satisfaction	16	6	58	176	294	4.32	0.92
G2	e-banking service medium is not frequent connection breakdown	12	46	140	196	156	3.80	1.01
G3	Easy to navigate the medium due to smooth speed	16	22	122	192	198	3.97	1.00
G4	Transition is efficient with no waiting time	8	36	114	196	196	3.97	0.98
G5	Response speed to complaint is satisfactory	16	42	72	178	242	4.07	1.07
G6	Speed of e-transactions flow is faster than traditional banking	8	34	172	144	192	3.87	1.01

Variable No.		Strongly Disagree (Rating-1=Min)	Disagree (Rating-2)	Neutral (Rating-3)	Agree (Rating-4)	Strongly Agree (Rating-5=Max)	Mean	Std. Deviation
	channels.							
G7	Customers are highly satisfied with Promptness of the delivery of e-banking services	8	42	72	180	246	4.12	1.00
G8	The willingness of customers to provide prompt e-banking services.	8	30	146	184	182	3.91	0.97
	<b>FEES &amp; CHARGES</b>							
H1	Fees are essential attributes to decide using e-banking system	18	14	50	92	376	4.44	0.99
H2	E-banks provides convenience and flexibility at a lower cost than traditional branch banking	12	18	194	226	100	3.70	0.88
H3	Price of service fees is acceptable	24	68	130	98	230	3.80	1.23
H4	E-banks charge with the negligible annual fee	6	42	160	158	184	3.86	1.01
H5	Customers will continue services even if the bank charges a high annual fee	34	78	98	108	232	3.77	1.29
H6	Efficient and speedy e-banking transaction with lower transaction cost	6	24	166	176	178	3.90	0.94
H7	Compared to other banks, your bank offers attractive service costs	16	54	128	148	204	3.85	1.11
H8	Compared to other banks, your bank provides more free services	28	22	110	164	226	3.98	1.11

Source: Primary Data

The table shows the descriptive statistics of all the statements and variables about which the researcher asked and which is included in the study. These variables are related to the satisfaction of the customer related to e-banking services. The satisfaction variables are related to the various aspects of the e-banking services, and these aspects are determined in the factor analysis in which study finds eight major factors and all statements are clubbed under those factors.

In this study, the customers are asked about the satisfaction level of the different aspects and contents of e-banking and were told to rate their satisfaction level on a five-point Likert scale.

It can be eagerly said that the overall responses from customers are inclined towards the satisfaction of each variable and statement. As on the five-point Likert scale, the mean score calculated is 3, and taking the mean score of the responses for each variable study found all statements' scores greater than 3.

Among all the highest mean of the statements reveal that e-banking services allow easy access to recent and historical transactions, and it got a score of 4.65, which comes under the factor of ACCESSIBILITY. The least score means the statement of DESIGN factor, which reveals that e-banking service medium has attractive screen layout and design and mean score is 3.56; it is better but low amongst all. This means banks need to concentrate on the design aspects of the website and to make the user interface very friendly to improve customer satisfaction.

The factor ACCESSIBILITY contains the 14 variables which are related to the proper accessibility of the e-banking services by the bank and which got good satisfaction score from the group of respondents. Some of the variables having good scores are explained. Quick response from bank related to queries (Mean=3.89), proper call centre assistance (Mean=4.17), easy access to recent and historical transactions (Mean=4.65), providing 24-hrs e-banking services (Mean=4.05), customer feedback services (Mean=3.81) such parameters are helped to increase the customer satisfaction.

The factor CONVENIENCE contains the seven variables which are related to the convenient use of e-banking services by the customer, which got good satisfaction score for each statement. Some of the statements are mentioned here like, Customers can access e-banking services anytime and anywhere (Mean=4.52), e-banking transactions are easy to use (Mean=3.86), e-banking service facilities ensure access of account when abroad (Mean=4.01) etc. and such parameters are helped to increase the customer satisfaction.

The factor PRIVACY contains seven variables which are related to the use of the e-banking services and maintaining the privacy of transactions and which got an excellent satisfaction score. It is found that this is very important and priority concern of anybody, and banks are always trying to make the very appropriate system for it. Study shows the customers are satisfied with this, it includes Confidential information which is delivered safely from banks to customers (Mean=4.56), E-banks keep customers information private and confidential (Mean=4.04), E-banks ensure the protection of personal information, risk of fraud and financial losses (Mean=4.45) such parameters help a lot to the customers and from the survey it is found that customers are satisfied from the e-banking services provided by the bank in this manner.

The factor SECURITY contains seven variables which are related to the security issues when customers are using the e-banking services, and the statements included in this factor also gave good satisfaction score. This includes the security system of the e-banking service providers (Mean=4.30), banking infrastructure is reliable in correcting erroneous transactions of e-banking (Mean=4.19); e-banking users perceive that his banking details are secure. No one can access it (Mean=3.92) such parameters help a lot to the customers. From the survey, it is found that customers are satisfied with the security-related issues of e-banking services provided by the bank.

The fifth-factor DESIGN contains six variables which are related to the design aspects of the interface of e-banking services and the statements included in this factor also got good satisfaction score, but somewhat lower than other factors. The banks need to concentrate on these factors and also think to improve the design aspects of the different interface included in e-banking services. It includes e-banking service

medium to have attractive screen layout and design (Mean=3.56), the design is keeping customers informed in a language they can understand (Mean=4.03), such parameters help a lot to the customers and the design with appropriate use of graphical user interface which is also considered as an essential determinant for using e-banking services.

The sixth factor CONTENTS contains the seven variables which are related to the content of the website of the e-banking interface and the all information related to the customer while doing transactions. The statements included in this factor also got good satisfaction score. This content of the website helps the customer to find transactions better in e-banking. It includes E-banks provide clear, understandable and straightforward guidance screen (Mean=4.60), E-banks provides the appropriate information to the user's purposes (Mean=3.67), Up-to-date contents of information largely influences the adoption of e-banking (Mean=3.94) such parameters helped a lot to the customers, the improvement in the contents will attract the customer more to use e-banking. From the survey, it is found that customers are satisfied with the content-related issues of e-banking services provided by the bank.

One of the identified factors, SPEED contains eight variables which are related to the speed of e-transactions carried out during the use of e-banking by customers. The speed of transactions matters more to customer satisfaction, and the statements included in this factor also got good satisfaction score. It includes e-banking service medium is not frequent connection breakdown (Mean=3.80), Response speed to the complaint is satisfactory (Mean=4.07), Customers are highly satisfied with Promptness of the delivery of e-banking services (Mean=4.12) such parameters helped a lot to the customers, the improvement in the speed will help people. From the survey, it is found that customers are satisfied with the speed related issues of e-banking services provided by the bank.

In the last factor, i.e. FEES AND CHARGES contain eight variables which are related to charges of using the e-banking by customers. It matters to the customer satisfaction, and the statements included in this factor also got good satisfaction score. It includes fees which are essential attributes to decide using e-banking system (Mean=4.44), E-banks charge with the negligible annual fee (Mean=3.86), Compared



to other banks, your bank offers attractive service costs (Mean=3.85). In the same line customers think that lower the cost of e-banking, more satisfaction will be delivered. Such parameters helped a lot to the customers, the improvement in this matter will help people, and from the survey, it was found that customers are satisfied from the fees related issues of e-banking services provided by the bank.

#### 4.5 Hypothesis Testing

##### 4.5.1 Hypothesis

Null Hypothesis: The Factor “Accessibility of e-banking services” is not having a significant positive relationship with customer satisfaction using e-banking services.

Alternate Hypothesis: The Factor “Accessibility of e-banking services” has a significant positive relationship with customer satisfaction using e-banking services.

**Table No.4.28 Correlations Satisfaction of Customer From e-banking Services**

		Overall Rank For Factor-1 “Accessibility”
Overall Satisfaction of Customer From e-banking Services	Pearson Correlation	.158**
	Sig. (2-tailed)	.000
	N	550
**. Correlation is significant at the 0.01 level (2-tailed).		

The above table shows that the correlation calculated by Karl Pearson method is 0.158, which indicates the positive relationship among the factor accessibility and satisfaction of customers toward e-banking services provided by banks.

**Table No.29 ANOVA Overall Satisfaction of Customer From e-banking Services**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	28.016	4	7.004	10.790	.000
Within Groups	353.759	545	.649		

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Between Groups	28.016	4	7.004	10.790	.000
Within Groups	353.759	545	.649		
Total	381.775	549			

The ANOVA table shows that the correlation is significant at 1% level of significance (sig. <0.01). This indicates that at a confidence level of 99%, the ANOVA test proves that there is sufficient evidence to reject the null hypothesis.

*Hence the Null Hypothesis is rejected*

*Thus it can be inferred that The Factor “Accessibility of e-banking services” has a significant positive relationship with customer satisfaction from e-banking services.*

#### **4.5.2 Hypothesis**

Null Hypothesis: The Factor “Convenience of e-banking services” is not having a significant positive relationship with customer satisfaction from e-banking services.

Alternate Hypothesis: The Factor “Convenience of e-banking services” has a significant positive relationship with customer satisfaction from e-banking services.

**Table No. 4.30 Correlations Convenience of e-banking services**

		Overall Rank For Factor-2 “Convenience”
Overall Satisfaction of Customer From e-banking Services	Pearson Correlation	.163 <sup>**</sup>
	Sig. (2-tailed)	.000
	N	550
**. Correlation is significant at the 0.01 level (2-tailed).		

The above table shows that the correlation calculated by Karl Pearson method is 0.163, which indicates the positive relationship among the factor Convenience of e-banking services and satisfaction of customers toward e-banking services provided by banks.

**Table No. 4.31 ANOVA Convenience of e-banking services**

Overall Satisfaction of Customer From e-banking Services					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16.084	4	4.021	5.993	.000
Within Groups	365.691	545	.671		
Total	381.775	549			

The ANOVA table shows that the correlation is significant at 1% level (sig. <0.01). This indicates that at a confidence level of 99%, the ANOVA test proves that there is sufficient evidence to reject the null hypothesis.

*Hence the null hypothesis is rejected.*

*Thus it can be inferred that The Factor “Convenience of e-banking services” has a significant positive relationship with customer satisfaction from e-banking services.*

#### 4.5.3 Hypothesis

Null Hypothesis: The Factor “PRIVACY of e-banking services” is not having a significant positive relationship with customer satisfaction from e-banking services.

Alternate Hypothesis: The Factor “PRIVACY of e-banking services” has a significant positive relationship with customer satisfaction from e-banking services.

**Table No. 4.32 Correlations PRIVACY of e-banking services**

		Overall Rank For Factor-3 “Privacy”
Overall Satisfaction of Customer From e-banking Services	Pearson Correlation	.104*
	Sig. (2-tailed)	.015
	N	550
*. Correlation is significant at the 0.05 level (2-tailed).		

The above table shows that the correlation calculated by Karl Pearson method is 0.104, which indicates a positive relationship among the factor privacy of e-banking services and satisfaction of customers towards e-banking services provided by banks.

**Table No. 4.33 ANOVA PRIVACY of e-banking services**

Overall Satisfaction of Customer From e-banking Services					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.309	4	1.577	2.289	.005
Within Groups	375.465	545	.689		
Total	381.775	549			

The ANOVA table shows that the correlation is significant at 1% level (sig. <0.01). This indicates that at a confidence level of 99% the ANOVA test proves that there is sufficient evidence to reject the null hypothesis

*Hence the null hypothesis is rejected.*

*Thus it can be inferred that The Factor “privacy of e-banking services” has a significantly positive relationship with customer satisfaction from e-banking services.*

#### **4.5.4 Hypothesis**

Null Hypothesis: The Factor “SECURITY of e-banking services” is not having a significantly positive relationship with customer satisfaction from e-banking services.

Alternate Hypothesis: The Factor “SECURITY of e-banking services” has a significant positive relationship with customer satisfaction from e-banking services.

**Table No. 4.34 Correlations SECURITY of e-banking services**

		Overall Rank For Factor -4 “Security”
Overall Satisfaction of Customer From e-banking Services	Pearson Correlation	.196**
	Sig. (2-tailed)	.000
	N	550

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The above table shows that the correlation calculated by Karl Pearson method is 0.196, which indicates a positive relationship among the factor SECURITY of e-banking services and satisfaction of customers toward e-banking services provided by banks.

**Table No. 4.35 ANOVA SECURITY of e-banking services**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	28.907	4	7.227	11.162	.000
Within Groups	352.867	545	.647		
Total	381.775	549			

The ANOVA table shows that the correlation is significant at 1% level (sig. <0.01). This indicates that at a confidence level of 99% the ANOVA test proves that there is sufficient evidence to reject the null hypothesis.

***Hence the null hypothesis is rejected.***

***Thus it can be inferred that The Factor “Security of e-banking services” has a significantly positive relationship with customer satisfaction from e-banking services.***

#### **4.5.5 Hypothesis**

Null Hypothesis: The Factor “DESIGN of e-banking services” is not having a significant positive relationship with customer satisfaction from e-banking services.

Alternate Hypothesis: The Factor “DESIGN of e-banking services” has a significant positive relationship with customer satisfaction from e-banking services

**Table No. 4.36 Correlations Design of e-banking services**

		Overall Rank For Factor-5 “Design”
Overall Satisfaction of Customer From e-banking Services	Pearson Correlation	-.025
	Sig. (2-tailed)	.560
	N	550

The above table shows that the correlation calculated by Karl Pearson method is 0.025, which indicates the negative relationship among the factor Design of e-banking services and satisfaction of customers toward e-banking services provided by banks.

**Table No. 4.37 ANOVA Design of e-banking services**

Overall Satisfaction of Customer From e-banking Services					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.568	4	1.142	1.650	.160
Within Groups	377.207	545	.692		
Total	381.775	549			

The ANOVA table shows the positive correlation s not significant at 1% level (sig. >0.01). This indicates that at a confidence level of 99%, the ANOVA test proves that there is no sufficient evidence to reject the null hypothesis, so the *null hypothesis is accepted*.

*Hence it can be inferred that The Factor “Design of e-banking services” is not having a significantly positive relationship with customer satisfaction from e-banking services.*

#### 4.5.6 Hypothesis

Null Hypothesis: The Factor “CONTENTS of e-banking services” is not having a significant positive relationship with customer satisfaction from e-banking services.

Alternate Hypothesis: The Factor “CONTENTS of e-banking services” has a significant positive relationship with customer satisfaction from e-banking services.

**Table No. 4.38 Correlations Contents of e-banking services**

		Overall Rank For Factor-6 “Contents”
Overall Satisfaction of Customer From e-banking Services	Pearson Correlation	.041
	Sig. (2-tailed)	.342
	N	550

The above table shows that the correlation calculated by Karl Pearson method is 0.041, which indicates the positive relationship among the factor Contents of e-banking services and satisfaction of customers towards e-banking services provided by banks.

**Table No. 4.39 ANOVA Contents of e-banking services**

Overall Satisfaction of Customer From e-banking Services					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.326	4	1.081	1.561	.008
Within Groups	377.449	545	.693		
Total	381.775	549			

The ANOVA table shows that the correlation is significant at 1% level (sig. <0.01). This indicates that at a confidence level of 99% the ANOVA test proves that there is sufficient evidence to reject the null hypothesis

***Hence the null hypothesis is rejected.***

*Thus it can be inferred that The Factor “Contents of e-banking services” has a significant positive relationship with customer satisfaction from e-banking services.*

#### 4.5.7 Hypothesis

Null Hypothesis: The Factor “SPEED of e-banking services” is not having a significant positive relationship with customer satisfaction from e-banking services.

Alternate Hypothesis: The Factor “SPEED of e-banking services” has a significant positive relationship with customer satisfaction from e-banking services.

**Table No. 4.40 Correlations Speed of e-banking services**

		Overall Rank For Factor-7 “Speed”
Overall Satisfaction of Customer From e-banking Services	Pearson Correlation	.029
	Sig. (2-tailed)	.497
	N	550

The above table shows that the correlation calculated by Karl Pearson method is 0.029, which indicates the positive relationship among the factor Speed of e-banking services and satisfaction of customers toward e-banking services provided by banks.

**Table No. 4.41 ANOVA Speed of e-banking services**

Overall Satisfaction of Customer From e-banking Services					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	29.270	5	5.854	9.034	.000
Within Groups	352.504	544	.648		
Total	381.775	549			

The ANOVA table shows that the correlation is significant at 1% level (sig. <0.01). This indicates that at a confidence level of 99% the ANOVA test proves that there is sufficient evidence to reject the null hypothesis

***Hence the null hypothesis is rejected.***



*Thus it can be inferred that The Factor “Speed of e-banking services” has a significant positive relationship with customer satisfaction from e-banking services.*

#### 4.5.8 Hypothesis

Null Hypothesis: The Factor “FEES & CHARGES of E-banking services” is not having a significant positive relationship with customer satisfaction from e-banking services.

Alternate Hypothesis: The Factor “FEES & CHARGES of e-banking services” has a significant positive relationship with customer satisfaction from e-banking services.

**Table No. 4.42 Correlations Fees and Charges of e-banking services**

		Overall Rank For Factor-8 “Fees & Charges”
Overall Satisfaction of Customer From e- banking Services	Pearson Correlation	.191**
	Sig. (2-tailed)	.000
	N	550

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The above table shows that the correlation calculated by Karl Pearson method is 0.191, which indicates the positive relationship among the factor Fees & charges of e-banking services and satisfaction of customers toward e-banking services provided by banks.

**Table No. 4.43 ANOVA Fees and Charges of e-banking services**

Overall Satisfaction of Customer From e-banking Services					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	17.701	4	4.425	6.625	.000
Within Groups	364.073	545	.668		
Total	381.775	549			

The ANOVA table shows that the correlation is significant at 1% level (sig. <0.01). This indicates that at a confidence level of 99% the ANOVA test proves that there is sufficient evidence to reject the null hypothesis

*Hence the null hypothesis is rejected.*

*Thus it can be inferred that The Factor “Fees & charges of e-banking services” has a significant positive relationship with customer satisfaction from e-banking services.*

#### **4.5.9 Hypothesis**

Null Hypothesis: There will be no significant difference in the satisfaction level of the customers for e-banking services who have their account in Public sector banks and who have an account in a private bank.  $\mu_d = 0$ . (where,  $\mu_d = \mu_1 - \mu_2$ )

Alternate Hypothesis: There will be a significant difference in the satisfaction level of the customers for e-banking services who have their account in Public sector banks and who have an account in a private bank.  $\mu_d \neq 0$ . (where,  $\mu_d = \mu_1 - \mu_2$ )

Where;

$\mu_1$  is mean score of 5 points Likert scale of the opinion by customers having an account in Public Sector Bank regarding customer satisfaction for e-banking

$\mu_2$  is mean score of 5 points Likert scale of the opinion by customers having an account in Private Sector Bank regarding customer satisfaction for e-banking

**Table No. 4.44 Respondents' Opinion Regarding Satisfaction Level For e-banking Services**

Statement	Options and Rating	No. of respondents Having account in Public Sector Bank		No. of respondents Having account in Private Sector Bank	
		N	%	N	%
<b>Overall Satisfaction of Customer From e-banking Services</b>	Strongly Agree – 5	48	12.50	46	27.71
	Agree – 4	164	42.70	46	27.71
	Neutral – 3	150	39.06	72	43.37
	Disagree – 2	16	04.16	02	01.20
	Strongly Disagree -1	06	01.56	00	00.0
	<b>Total</b>	384	100.0	166	100.0

Above table presents results pertaining that the satisfaction level of the e-banking facility by comparing public sector banks and private sector banks. Moreover, here we found that the respondents mostly have an account in the public sector bank, i.e. out of 550 respondents 384 are having an account at public sector bank, and remaining 166 are at private or other banks. However, out of these, we found that 55.20% of the customers of public sector bank are satisfied with their e-banking services as compared to 55.42% customers are satisfied with e-banking services of Private Bank, which seems to be quite similar. However, disagreement percentage is higher in the public sector bank, which is 5.66% as compared to private sector bank, i.e. 1.2%.

**Table No. 4.45 Descriptive Statistics For Hypothesis**

Overall Satisfaction of Customer From e-banking Services	Public Sector Bank (N=30)		Private Sector Bank (N=30)		The difference in means ( $\mu_1 - \mu_2$ )	The relationship exists in Means
	Mean ( $\mu_1$ )	Std. Deviation	Mean ( $\mu_2$ )	Std. Deviation		
	3.60	0.81	3.81	0.85		

Here the researcher gives a score to each option from 1 to 5 on five-point Likert scale, lower for disagreement and higher score for agreement for the confidence level. After taking the mean of all the opinions, we found that for public sector bank the mean

score is 3.60 and for private sector banks the satisfaction regarding the e-banking is higher which is 3.81, which difference is -0.21, and it is higher than value zero. This will provide the strong sense that the satisfaction level of the customer regarding the use of e-banking services from the public sector bank and private sector bank has a difference. So here it can be found that  $\mu_d \neq 0$  (where  $\mu_d = \mu_2 - \mu_1$ )

For testing the hypothesis for significance, the researcher used **Chi-Square Tests** to test hypotheses about population means and this is, two independent samples with the goodness of fit **Chi-Square Tests**

By using the goodness of fit **Chi-Square Tests** with Sample-1 n = 384 and sample-2 n=166, the following results were obtained,

<b>Chi-Square Tests</b>			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	28.751 <sup>a</sup>	4	.000
Likelihood Ratio	30.257	4	.000
Linear-by-Linear Association	7.712	1	.005
N of Valid Cases	550		

- a. Two cells (20.0%) have expected count less than 5. The minimum expected count is 1.81.
- b. At 95% Level of Confidence

The application of Chi-square test found that the calculated value of Chi-square is 28.751, which is higher than the Chi-square tabulated value for 4df 4 and 95% level of confidence, i.e. 0.711. Also the p-value = 0.000 which is lower than 0.05 at 95% confidence level (p-value<0.05). So we found the overwhelming evidence to reject the null hypothesis.

It depicts that *there will be a significant difference in the satisfaction level of the customers for e-banking services who have their account in Publics sector bank and who have an account in a private bank*

*Hence, the null hypothesis is rejected.*

# **CHAPTER 5**

## **FINDINGS**

### **FINDINGS**

The findings of the study related to the satisfaction of the customer about e-banking services are mentioned below.

#### **5.1 DEMOGRAPHIC ANALYSIS**

##### **5.1.1 Gender**

The respondents who were analyzed for the study are more males, around 75.6% and the remaining 24.4% are females. Out of the number of persons who visited the banks are mostly males so that the maximum numbers of males are responded for the study.

##### **5.1.2 Marital Status**

Out of a total of 550 respondents, 49.5% of respondents are married, and the remaining 50.5% are unmarried. Here it is found that the young people, mostly students, form the dominant group among the respondents those are unmarried. The maximum numbers of students and young professionals have their account in the banks, and they prefer the e-banking services also.

##### **5.1.3 Age**

The study shows that out of all respondents, 49.1% are under the young age group, i.e. below 25 years, and 29.1% of respondents are in the age group between 26 to 35 years. Remaining 14.2% are between 36 to 45 years, and only 7.2% of respondents' age is more than 45 years. In the banks, the frequencies of the young people falling under the age group of the 35 years are more. It is also found that the young and middle-aged people mostly do the banking transactions, and this age group regularly does the use of e-banking.

##### **5.1.4 Education Status**

Out of total respondents, 60.4% are undergraduates, 27.3% have completed their graduation, and 10.2% are postgraduates and remaining has other education. Out of

550 respondents' maximum are well qualified, and that will help them to get the aid of e-banking services.

### **5.1.5 Occupation**

Out of the total respondents, 22.2% are students and have no income. A significant group of respondents are salaried persons, and they are working in different private and government firms (60.0%). Moreover, the 8.4% of customers have a business.

### **5.1.6 Income Level**

The critical component of the demographic profile of respondents is gross monthly income. The monthly income of respondents to use maximum times banking services which acts to be a trigger for availing e-banking services. The majority (34.5%) respondents earn up-to Rs. 10,000 per month while only 1.8% of respondents earn above Rs.50000 monthly. The percentage of respondents who do not earn is 29.8% they get the savings from another person in their family, and they are mostly students.

### **5.1.7 Bank Details: Type of Bank**

During the study, we had contacted people from different areas of Nashik city and collected data from those who are account holders of a particular bank. The various banks used by respondents are divided into four categories, i.e. private bank, public sector bank, foreign bank and cooperative bank. Majorly (69.8%) of the respondents have their bank account in public banks, while 26.5% of respondents have their bank account in private banks. Only 0.7% of respondents have their bank account in foreign banks, and only 2.9% of respondents have their bank account in cooperative banks.

### **5.1.8 Type of e-banking Services used**

Here we found that all 550 respondents use the ATM card. As the table shows a good number of customers (48.2%, i.e. 215) use internet banking, meanwhile for one or more work-related to any banking transactions, they go to the internet facility. Only 1.8% of customers use mobile banking which is less in number. Here the DEBIT and CREDIT card is used through the internet.

Means we are considering all these three facilities under e-banking

### **5.1.9 Since how many years' respondents are using the e-banking services**

In this study, the respondents are bank account holders, and a suitable group is using the e-banking services; now there is an important thing to ask how long they have been using e-banking services. The results were that 48.4% of respondents are using their e-banking services since last two years, while 34.2% of respondents are using since 3-5 years. 15.6% of respondents are using e-banking services of the bank from the last 5-10 years, and only 1.8% is using these services from the last ten years and above.

## **5.2 Factor Analysis**

Total eight factors are derived from the factor analysis, which is as follows

**Factor 1: ACCESSIBILITY**

**Factor 2: CONVENIENCE**

**Factor 3: PRIVACY**

**Factor 4: SECURITY**

**Factor 5: DESIGN**

**Factor 6: CONTENTS**

**Factor 7: SPEED**

**Factor 8: FEES & CHARGES**

### **5.2.1 Factor 1: ACCESSIBILITY**

In this factor, 14 statements are combined, which are related to the accessibility of the e-banking services provided by the banks.

### **5.2.2 Factor 2: CONVENIENCE**

In this factor, seven statements are combined, which are related to the convenience of the various e-banking services provided by the bank.

### **5.2.3 Factor 3: PRIVACY**

In this factor, 7 statements are combined which are related to the privacy issues and availability of such facilities in e-banking services.

### **5.2.4 Factor 4: SECURITY**

Security is one of the most critical factors found and categorized the seven variables in this factor, which includes. Customers are satisfied with the security system of the e-banking service providers.

### **5.2.5 Factor 5: DESIGN**

The design factor is determined through the variables of different statements asked the customers. It includes six statements which resemble the design aspects of the e-banking portal.

### **5.2.6 Factor 6: CONTENTS**

This factor is determined by factor analysis which combines the variables which are related to the content of the user-interface and the system of e-banking. This factor contains the seven variables which are based on the various aspects of the content of the facility of e-banking.

### **5.2.7 Factor 7: SPEED**

One of the essential attributes of the e-banking is speed. The content which is related to the speed of these services is combined with the transactions of the e-banking services provided by the bank, in which eight variables are included.

### **5.2.8 Factor 8: FEES AND CHARGES**

The economic and financial aspects are very crucial for every kind of services. So the issues in the e-banking services are related to fees. The different statements which are related to financial aspects are combined under the factor fees. It includes eight statements.



**Table No. 5.1 Comparison between Factors Regarding Satisfaction and Importance**

<b>Factor No.</b>	<b>Factor Name</b>	<b>Average of Mean Score</b>	<b>Rank</b>
1	Accessibility	4.04	2
2	Convenience	3.98	5
3	Privacy	4.08	1
4	Security	3.96	6
5	Design	3.92	7
6	Contents	4.02	3
7	Speed	4.00	4
8	Fees & Charges	3.91	8

From Table, it can be inferred that when considering the satisfaction level of the bank account holder regarding the e-banking services provided by the banks, there are different factors responsible for customer satisfaction. Among the factors, the most crucial factor where people are more satisfied can be inferred from the average mean score of all variables included in a particular factor. From that score, we will give ranks, the first rank for the highest score of satisfaction and then in descending order rank gets lowered. The table shows that people are most satisfied with the privacy factor of e-banking and least satisfied with the fees of e-banking.

So it is necessary to think the bank about the fees of the e-banking services so this factor satisfaction can be improved more.

### **5.3 Hypothesis Testing**

At the actual findings of the study, there is various hypothesis derived for satisfying the objectives of the research, which is mentioned in the following table.

**Table No. 5.2 Demographics Hypothesis Testing**

<b>Hypothesis</b>	<b>P-Value</b>	<b>The decision regarding the Null Hypothesis</b>
There is a significant relationship between the <b>Gender</b> of the customers and their satisfaction from e-banking services	<b>0.588</b>	<b>Accepted</b>
There is a significant relationship between <b>Marital status</b> of the customers and their satisfaction from e-banking services	<b>0.223</b>	<b>Accepted</b>
There is a significant relationship between the <b>Age</b> of the customers and their satisfaction from e-banking services	0.016	Rejected
There is a significant relationship between <b>Education qualification</b> of the customers and their satisfaction from e-banking services	0.001	Rejected
There is a significant relationship between the <b>Occupation</b> of the customers and their satisfaction from e-banking services.	0.024	Rejected
There is a significant relationship between <b>Monthly income</b> of the customers and their satisfaction from e-banking services	0.019	Rejected
There is a significant relationship between <b>Type of bank</b> where the customers having an account and their satisfaction from e-banking services	0.000	Rejected
There is a significant difference in the satisfaction level of the customers for e-banking services who have their account in Publics sector bank and who have an account in a private bank. $\mu_d \neq 0$ . (where, $\mu_d = \mu_1 - \mu_2$ )	0.000	Rejected

**Table No. 5.3 Factors affecting e-banking services Hypothesis Testing**

Hypothesis	Karl Pearson Method & ANOVA	The decision regarding the Null Hypothesis
The Factor, "Accessibility of e-banking services", has a significant positive relationship with customer satisfaction from e-banking services.	0.158	Rejected
The Factor, "Convenience of e-banking services", has a significant positive relationship with customer satisfaction from e-banking services.	0.163	Rejected
The Factor " <b>PRIVACY of e-banking services</b> " has a significant positive relationship with customer satisfaction from e-banking services.	0.104	Rejected
The Factor " <b>SECURITY of e-banking services</b> " has a significant positive relationship with customer satisfaction from e-banking services.	0.196	Rejected
The Factor " <b>DESIGN of e-banking services</b> " has a significant positive relationship with customer satisfaction from e-banking services	<b>-0.025</b>	<b>Accepted</b>
The Factor " <b>CONTENTS of e-banking services</b> " has a significant positive relationship with customer satisfaction from e-banking services.	0.041	Rejected
The Factor " <b>SPEED of e-banking services</b> " has a significant positive relationship with customer satisfaction from e-banking services.	0.029	Rejected
The Factor " <b>FEES &amp; CHARGES of e-banking</b> " services" has a significant positive relationship with customer satisfaction from e-banking services.	0.191	Rejected

**Table No. 5.4 Overall Hypothesis Testing**

Sr. No.	Hypothesis	Questions	Findings
1	There is not any significant relationship between gender of the customers and overall satisfaction from e-banking services	<ol style="list-style-type: none"> <li>1. You are satisfied with the e-banking services provided by your bank</li> <li>2. What is your gender</li> </ol>	<p>It shows there is a slight difference in the satisfaction level of the male and female. The females' satisfaction percentages are 55.22%, and male satisfaction percentages are 55.28%. It shows there are minor differences in the satisfaction level.</p> <p>Depicts that <i>there is no significant relationship and association between gender of the customers and overall satisfaction of customer from e-banking services</i></p> <p><i>Hence, the null hypothesis is failed to reject</i></p>
2	There is not any significant relationship between the marital status of the customers and overall satisfaction from e-banking services	<ol style="list-style-type: none"> <li>1. You are satisfied with the e-banking services you used which have been provided by your bank</li> <li>2. What is your Marital Status</li> </ol>	<p>There is a difference in the satisfaction level of the married and unmarried. The married people satisfaction percentages are 58.82% and unmarried people satisfaction percentages are 51.79%. It shows there are differences in the satisfaction level.</p> <p>Depicts that <i>there is no significant relationship and association between the marital status of the customers and overall satisfaction of customer from e-banking services.</i></p> <p><i>Hence, the null hypothesis is failed to reject</i></p>
3	There is not any significant	<ol style="list-style-type: none"> <li>1. You are satisfied with</li> </ol>	The AGE GROUPS up to 25 years and older people of the age

Sr. No.	Hypothesis	Questions	Findings
	relationship between the age of the customers and overall satisfaction from e-banking services.	<p>the e-banking services provided by your bank</p> <p>2. What is your Age</p>	<p>group above 45 years have a higher percentage of dissatisfaction experience. For example, in AGE GROUP up to 25 years, around 5.63% of customers rated dissatisfaction related e-banking and 9.78% customers of above 45 years feel dissatisfaction of e-banking services. This shows that there is a relationship between the age group of the customers and the satisfaction level of the e-banking users</p> <p><i>Depicts that there is a significant relationship between the age of the customers and overall satisfaction of customer from e-banking services.</i></p> <p><i>Hence, the null hypothesis is rejected.</i></p>
4	There is not any significant relationship between the education qualification of the customers and overall satisfaction from e-banking services.	<p>1. You are satisfied with the e-banking services provided by your bank</p> <p>2. What is your education</p>	<p>There is a relationship between the age group of the customers and the satisfaction level of the e-banking users.</p> <p><i>Depicts that there is a significant relationship between education qualification of the customers and overall satisfaction of customer from e-banking services</i></p> <p><i>Hence, the null hypothesis is rejected</i></p>
5	There is not any significant relationship between the occupation of the	1. You are satisfied with the e-banking services	The agreement percentage toward satisfaction is varied, the students are more satisfied with the e-banking services (around 88%),

Sr. No.	Hypothesis	Questions	Findings
	customers and overall satisfaction from e-banking services	<p>provided by your bank</p> <p>2. Write your occupation</p>	<p>and it is lower for salaried people which satisfaction level is 55.15%. This shows that there is a relationship between the age group of the customers and the satisfaction level of the e-banking users.</p> <p>Depicts that <i>there is a significant relationship between the occupation of the customers and overall satisfaction of customer from e-banking services</i></p> <p><i>Hence, the null hypothesis is rejected.</i></p>
6	There is not any significant relationship between the monthly income of the customers and overall satisfaction from e-banking services.	<p>1. You are satisfied with the e-banking services you used provided by your bank</p> <p>2. What is your monthly income</p>	<p>There is a positive impact on monthly income on the satisfaction level. As the study shows the agreement percentage toward satisfaction is increased as the monthly income of the respondents' increases, and disagreement reduces.</p> <p>Depicts that <i>there is a significant relationship between the monthly income of the customers and overall satisfaction of customer from e-banking services</i></p> <p><i>Hence, the null hypothesis is rejected</i></p>
7	There is not any significant relationship between the type of bank where the customers are having an account and overall	<p>1. You are satisfied with the e-banking services provided by your bank</p>	<p>It is found that there is a positive impact on the type of bank on the satisfaction level. As the study shows that the disagreement towards satisfaction of e-banking is very less or none in the Private sector, foreign and cooperative</p>

Sr. No.	Hypothesis	Questions	Findings
	satisfaction from e-banking services.	2. In which type of bank do you have account	<p>banks. However, a particular percentage of dissatisfaction level found in Public sector banks' e-banking services.</p> <p>Depicts that <i>there is a significant relationship between the type of bank where the customers are having an account and overall satisfaction of customer from e-banking services.</i></p> <p><i>Hence, the null hypothesis is rejected</i></p>
8	The Factor, "Accessibility of e-banking services", is not having a significant positive relationship with customer satisfaction from e-banking services.	<p>1. Do you think the Factor "Accessibility of e-banking services" is responsible for overall satisfaction for using e-banking services</p> <p>2. You are satisfied with the e-banking services provided by your bank</p>	<i>From the study, it can be inferred that The Factor "Accessibility of e-banking services" has a significantly positive relationship with customer satisfaction from e-banking services</i>
9	The Factor, "Convenience of e-banking services", is not having a significant positive relationship with customer satisfaction from e-banking services.	1. Do you think the Factor "Convenience of e-banking services" is responsible for overall satisfaction for using e-	<i>From the study, it can be inferred that The Factor "Convenience of e-banking services" has a significant positive relationship with customer satisfaction from e-banking services</i>

Sr. No.	Hypothesis	Questions	Findings
		banking services 2. You are satisfied with the e-banking services provided by your bank	
10	The Factor “PRIVACY of e-banking services” is not having a significant positive relationship with customer satisfaction from e-banking services.	1. Do you think the Factor “PRIVACY of e-banking services” is responsible for overall satisfaction for using e-banking services 2. You are satisfied with the e-banking services provided by your bank	<i>From the study, it can be inferred that The Factor “privacy of e-banking services” has a significant positive relationship with customer satisfaction from e-banking services.</i>
11	The Factor “SECURITY of e-banking services” is not having a significant positive relationship with customer satisfaction from e-banking services.	1. Do you think the Factor “SECURITY of e-banking services” is responsible for overall satisfaction for using e-banking services 2. You are satisfied with the e-banking services provided by	<i>From the study, it can be inferred that The Factor “Security of e-banking services” has a significant positive relationship with customer satisfaction from e-banking services.</i>



Sr. No.	Hypothesis	Questions	Findings
		your bank	
12	The Factor “DESIGN of e-banking services” is not having a significant positive relationship with customer satisfaction from e-banking services.	<ol style="list-style-type: none"> <li>1. Do you think the Factor “DESIGN of e-banking services” is responsible for overall satisfaction for using e-banking services</li> <li>2. You are satisfied with the e-banking services provided by your bank</li> </ol>	<i>From the study, it can be inferred that The Factor “Design of e-banking services” is not having a significant positive relationship with customer satisfaction from e-banking services</i>
13	The Factor “CONTENTS of e-banking services” is not having a significant positive relationship with customer satisfaction from e-banking services.	<ol style="list-style-type: none"> <li>1. Do you think the Factor “CONTENTS of e-banking services” is responsible for overall satisfaction for using e-banking services</li> <li>2. You are satisfied with the e-banking services provided by your bank</li> </ol>	<i>From the study, it can be inferred that The Factor “Contents of e-banking services” has a significant positive relationship with customer satisfaction from e-banking services.</i>
14	The Factor “SPEED of e-banking services” is not having a significant positive relationship with customer satisfaction	<ol style="list-style-type: none"> <li>1. Do you think the Factor “SPEED of e-banking services” is responsible</li> </ol>	<i>From the study, it can be inferred that The Factor “Speed of e-banking services” has a significant positive relationship with customer satisfaction from e-banking services.</i>

Sr. No.	Hypothesis	Questions	Findings
	from e-banking services.	<p>for overall satisfaction for using e-banking services</p> <p>2. You are satisfied with the e-banking services provided by your bank</p>	
15	The Factor “FEES & CHARGES of E-banking services” is not having a significant positive relationship with customer satisfaction from e-banking services.	<p>1. Do you think the “FEES &amp; CHARGES of E-banking services” is responsible for overall satisfaction for using e-banking services</p> <p>2. You are satisfied with the e-banking services provided by your bank</p>	<i>From the study, it can be inferred that The Factor “Fees &amp; charges of e-banking services” has a significant positive relationship with customer satisfaction from e-banking services</i>
16	There will be no significant difference in the satisfaction level of the customers for e-banking services who have their account in Publics sector bank and who have an account in a private bank. $\mu_d = 0$ . (where, $\mu_d = \mu_1 - \mu_2$ )	<p>1. You are satisfied with the e-banking services provided by your bank</p> <p>2. In which type of bank do you have account</p>	Presents results pertaining that the satisfaction level of the e-banking facility by comparing public sector bank and private sector bank. Moreover, here we found that the respondents mostly have an account in the public sector bank, i.e. out of 550 respondents 384 are having an account in public sector bank, and remaining 166 are in private or other banks. However, out of these, we found that 55.20% of the customers of

Sr. No.	Hypothesis	Questions	Findings
			<p>public sector bank are satisfied with their e-banking services and as compared 55.42% customer are satisfied with e-banking services of Private Bank, which seems to be quite similar. However, disagreement percentage is higher in the public sector bank, which is 5.66% as compared to private sector bank, i.e. 1.2%.</p> <p style="text-align: center;"><i>Depicts that <b>there will be a significant difference in the satisfaction level of the customers for e-banking services who have their account in Publics sector bank and who have an account in a private bank</b></i></p> <p style="text-align: center;"><i>Hence, the null hypothesis is rejected</i></p>

It shows that out of 16 hypotheses drawn 13 hypotheses proves the significant relationship among the selected variables.

Only in the case of 3 hypotheses i.e.

1. There is a significant relationship between **gender** of the customers and overall satisfaction from e-banking services
  
2. There is a significant relationship between the **marital status** of the customers and overall satisfaction from e-banking services
  
3. The Factor “**DESIGN of e-banking services**” has a significant positive relationship with customer satisfaction from e-banking services. The null hypothesis is accepted means; it does not prove the relationship between these variables.

This means these three factors are not that supported or having effects with the satisfaction level of the customer regarding e-banking services provided by banks.

All remaining null hypothesis are significantly rejected means there is significant relationship exists.

#### **5.4 Summary**

In the end, it can be said that banks need to improve all the factors which are responsible for achieving customer satisfaction regarding e-banking services. Most of the respondents are satisfied in e-banking services provided by the bank, but banks need to highlight design, contents, security and charges of e-banking services. Most of the banks do not update their website and technology for a more extended period which creates discomfort to the e-banking users. All banks but majorly public sector banks need to advance their technology with the content as per the customer requirement. The discomfort regarding the use of every aspect of the e-banking portal and services included will cause reduced satisfaction level of the customers. Customers feel that it is better to go for conventional banking rather than such modern banking because finally, it is all their money and financial matter which is at stake.

So, for gaining complete satisfaction, banking needs to be more active in technology with good security and more attractive customer centric features.

## **CHAPTER 6**

### **CONCLUSION**

Finally, it can be concluded that the IT technology in India is growing fast day by day; people are making use of it in all walks of their life. It is used for various purposes in the society from railway reservations to running any technological products. The businesses all over are taking this opportunity to meet the growing demands of the customers. The organizations are using such technologies to grow business and to help the customers. In this respect, the financial institutions are making use of such technologies for improving their services to improve customer communication with customer relationship management.

The study proves that e-banking service is a significant milestone, and it plays a vital role in customer satisfaction. The maximum number of users find e-banking services beneficial and need of the era.

This study makes some valuable contributions to the banking industry in the view of Customer Satisfaction related to e-banking Services in Public and Private Sector Banks. The study identifies the existence of various factors which are responsible for achieving customer satisfaction in the use of e-banking services. This study also confirmed the various variables and factors which contribute toward the effectiveness of customer satisfaction toward the use of e-banking. Also, the researcher has recommended the most influencing and least influencing factors for customer satisfaction regarding the use of e-banking services.

The survey confirms the various aspects to be implemented by the banks to achieve the satisfaction of the use of e-banking services and try to attract the account holders to use e-banking services more prominently.

This study confirms the significant relationship of demographic variables (sex, age, occupation, income, educational qualifications and types of account) towards customer satisfaction with e-banking practices in the public sector and private sector banks. It further shows different identified factors like Accessibility, Convenience,

Privacy, Security, Design, Content, Speed, fees of e-banking services which have a positive relationship with customer satisfaction.

When comparing Public Sector banks with Private sector banks, it is found that Public sector banks are at an advantage because they have a large number of branches and a good number of customers as they serve all income group people and customers need minimum amount for opening an account with them, but they lack in covering e-banking services.

On the other hand, private sector banks are providing many services and facilities like e-banking services to their customers for a long time, targeting rich and higher group people, but they have less number of customers.

The result is that Public sector banks are somewhat lacking in coverage of e-banking services. However, they also have come up with all possibilities and facilities which will help them shortly.

Secondly, the literacy rate also directly affects the use of e-banking services. Therefore, it is required to provide all, desired knowledge, awareness sessions about the benefits and uses of e-banking services.

Finally, the growing awareness of E-banking will benefit every individual immensely and help the nation in all financial matters to reach the top of the world.

## **CHAPTER 7**

### **RECOMMENDATIONS**

Services at the banks need to be well managed, forthcoming, which is an essential thing to attract any customer towards the use of e-banking services. The bank should manage the e-banking services in such a manner that the customer will get satisfied and get more inclined towards e-banking and develop loyalty towards banks. By personalizing messaging and services, customers are more likely to develop faith and respect for all the banking services.

The recommendations can be given based on the analysis of the results. To make the working of the e-banking services, more effective these suggestions can be considered.

#### **The study suggests the following aspects**

1. Age has a significant relationship with customer satisfaction, adult customers are more reluctant to join new technology as they do not possess the necessary computer literacy to conduct it, so following strategies should be applied by banks
  - a) Bank should organize seminar and conference to educate the customers regarding the uses of online banking as well as develop faith and trust among customers with regards to the security and privacy of their accounts.
  - b) Banks should segment the market according to age groups and focus on their needs and preferences.
  - c) The adult customer still has a notion that online banking is not secure for conducting financial operations; here, the banks should increase the level of faith and trust.
  
2. Educational qualifications and occupation have a significant relationship with satisfaction; this suggests that banks need to focus more on their marketing strategies. Financial literacy program in branches targeting a wide range of customers across the socio-economic spectrum is one way of doing it.

3. Monthly income has a significant relationship with e-banking in terms of satisfaction; here official training should be organized by the banks for customers of all income groups at the time of opening an account in order to increase customers' awareness about e-banking rather than targeting only high touch customers and members.
4. Public sector banks should be more focused on multifunctional activities for an online platform with traditional banking services (e.g. Fund transfer, balance enquiry, etc.) through e-banking. The promotion of e-banking services is mostly done through bank officials and by bank employers. Online advertisement, T.V. and radio advertisement are considered least favoured for the promotion of e-banking among customers from the banker perspective.
5. The security of transactions is critical in any financial matter so the bank should take care with following recommendations
  - a) The bank should configure security systems and firewalls of the highest security with the level of protection according to customer requirements.
  - b) The bank should increase its ability to control and manage the various risks inherent of e-transaction activity. Banks should implement more security to minimize risk and Increase customer authentication such as personal identification number, audit trail for the transaction.
  - c) The bank executive who has been taking care of the e-banking services need to verify all the transactions for the security of the customer's account.
  - d) The bank must develop trust among customers that the bank will compensate for the losses due to security reasons, satisfying with a security system.
  - e) Using biometrics such as voice identification and eye scanning to be implemented to increase security.
6. The design and content aspects of the user interface for e-banking should be appropriately designed with all specified contents and should be easy to



handle. It should be user friendly and critical work of banking like financial transaction, statements and changing of passwords will be done in the most non-complicated way. Some of the banks in the public sector should do some modification in the design aspects of e-banking interface as it has a lower satisfaction score.

7. The banker should reduce the cumbersome formalities for getting internet banking facility and Individualized interactions based on customer communication preferences.
8. There is a need of thinking about the charges taken by the bank for the use of E-banking services which will help boost of customers' faith on the e-banking services, its use and they can avail these services more. A higher number of customers will also get attracted towards these services.
9. The study identifies the areas of improvement, which is required to increase the level of customer satisfaction towards E-banking services in Nashik city.
10. Here study recommended that for increasing use of the e-banking services, there is need for more awareness to be created about e-banking facility to the customer, which increases adoption level through an increase in customer satisfaction.
11. The Bank should try to improve the suggested factors for customer satisfaction from this study, like design aspects, then it will lead the customer to use e-banking services.
12. Finally, this study provides good literature on banking services, especially e-banking service, which will enable researchers to do academic and dynamic research in the future.

#### **SCOPE FOR FURTHER STUDY**

Further study can be carried out by analyzing the extent of use technology products through the perception of customers; they also face specific problems in operating or

using the services for their transactions which necessitates a study on the nature of the problems faced by the users; a comparative study also can be carried out between different types of banks in order to get more knowledge on the area where the concentration is needed to provide efficient service and face the competition effectively; Perception of the customers not using the Information Technology products offered by the banks may also be studied to understand the opinion of the Customers about the utility of the services.

## **SCOPE & LIMITATION**

The scope of the study in terms of location covers only Nashik City .

### **Relevance, Justification & likely benefit**

This study is useful to give the proper insight into customer satisfaction and its related strategies and policies which are practices by the maximum number of private financial institutions. The analysis in the research also addresses the ground difficulties of the private and public financial institutions which examine the present e saving money situation in the region. Not only e- saving but also for the overall quality improvement and sustainable development of the banking system.

### **Limitations of the study:**

- This exploration study is time-bound, and because of this lone, a couple of parts of the issue will be taken up for consideration.
- This research study was taken in a limited area only (i.e. Nashik City), and findings may vary if the area of study is changed.
- Some of the respondents may be biased in their responses, and as such, the analysis and conclusion based on it could vary to some extent.
- A portion of the conclusions additionally relies on optional information. To the degree this information is reliable, the conclusion is considered as substantial.

### **Reliability and validity**

Legitimacy alludes to a circumstance when confirm demonstrates that the discoveries are sensible. The examination is not viewed as legitimate if the specialist misjudged the appropriate responses of the respondents or if the respondents did not comprehend the inquiries. The respondents can also be influenced by factors out of researcher's control, such as technical factors, time and mood. The results of this survey could be influenced by the situation the respondents as they could have felt tired to precisely fill the overview. Also, it is led in English dialect, which is not their native language. Be that as it may, vital advances were taken to stay away from vulnerability and make clearness:

1. Nothing had been changed in a questionnaire during the time answers were collected or later;
2. Special instructions were sent to respondents to provide additional guidance;
3. Questions were made based on theories discussed in previous chapters to ensure validity.

For example, respondents were informed about the flow of the questionnaire and all questions raised by them were answered in a private conversation via social network. Amid the plan procedure, it was chosen to keep the inquiries straightforward and stay away from open inquiries with the goal that the respondents would effectively comprehend the inquiries. Secrecy was guaranteed with the goal that respondents would feel good while feeling the questionnaire.

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## QUESTIONNAIRE

It gives me immense pleasure to welcome you as one of the respondents in an innovative based study on “**An Analytical Study of Customer Satisfaction Related To e-banking Services In Select Public and Private Sector Banks In Nashik**”. Kindly spare some of your valuable time to fill up the enclosed set of questionnaires. The purpose of the questionnaires is to collect data and information regarding your satisfaction with e-banking services offered by your banks. **Note** Kindly answer to every question carefully. The data and information provided by you will be kept strictly confidential and used for the said purpose only.

### Profile of the Respondent:

Name	
Gender	Male / Female
Marital Status	Unmarried / Married
Age in years	
Educational Qualifications	Under graduate / Graduate / Post graduate / Professional
Occupation	
Monthly income	Rs.
Residing area	
Bank Name	
Duration of using e-banking	
Awareness of e-banking services	ATM / Internet Banking / Mobile Banking

### PART- I

### ACCESSIBILITY

E-banking services allow easy access to recent and historical transactions.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Customers can access to the details of bank charges, details on funds transfer between accounts, information on interest rates, foreign exchange rates, contact details for complaints, frequently asked questions page, in addition to the availability of search engine.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banking service practices involve consistency of performance and dependability.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Employees of e-banking services possess the required skills and knowledge.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree



Politeness, respect, consideration and friendliness of contact personnel				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Quick response and the ability to get help if there is a problem or question.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Provision of caring and individualized attention to customers provided by call centres or web administrators				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

e-banking system takes care of the users, and suggest alternatives for them to complete their transactions within the closure hours in case of urgent needs				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banks provide a data recovery system for uninterrupted transactions in case of power failure.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

e-banking service providers are making an effort to understand the customer's needs				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Banks provide 24 hours of e-based monitoring and assistance for e-banking services.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banking has more interpersonal interaction with customers throughout the service delivery process, which may avoid miscommunications between the users and the service providers.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banks provide help-desk services and online help facilities, and customer service officers are friendly when addressing complaints.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banking provides customer feedback services.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

**PART- II****CONVENIENCE**

Customers can access e-banking services anytime and anywhere.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

There is no queue while using e-banking services.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

e-banking services save time as compared to conventional banking				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banking transaction is easy to use.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banking services are user friendly.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banking service facilities ensure access to the account when abroad.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banks spend a great deal of time and money for developing e-banking functionality to allow customers an easy and convenient way to manage their money.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

**PART- III****PRIVACY**

Confidential information is delivered safely from banks to customers.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

The consent of customers the financial information is not passed to other organizations.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Third parties are not able to assess customer's financial details.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banks keep customers information private and confidential.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banks ensure the protection of personal information, risk of fraud and financial losses.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Customers trust that their banks are more concerned about privacy issues.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Privacy factor influences the adoption of e-banking services.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

#### **PART- IV**

#### **SECURITY**

Customers are satisfied with the security system of the e-banking service providers.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Banks consider security as the most critical issue of e-banking practices.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banking users have freedom from danger, risk and doubt about security.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

The banking infrastructure is reliable in correcting erroneous transactions of e-banking.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Banks will compensate for any losses due to security reason or infringements.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banking users perceive that his banking details are secure and no one can access it.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

The security factor is a prime factor for the adoption of e-banking services.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

**PART- V**

**DESIGN**

Ergonomic visual layout is particularly important for using e-banking services.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banking service medium has an attractive screen layout and design.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banking service medium has flashy graphics and colour configuration.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

The design with appropriate use of the graphical user interface is also considered as an essential determinant for using e-banking services.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

The design is keeping customers informed in a language they can understand.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banking involves the correct technical functioning and accuracy of service promised.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

**PART- VI**

**CONTENT**

E-banks provide clear, understandable and straightforward guidance screen.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banks provides the appropriate information to the user's purposes.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Information credibility affects the acceptance of e-banking.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Up-to-date contents of information largely influence the adoption of e-banking.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banking services are upgraded compared to when they first started using the services.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Appealing aesthetic content has a positive impact on attracting potential customers.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Provides graphics and text on the e-banking medium to perform transactions efficiently.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

**PART-VII**

**SPEED**

Speed of e-transactions flow is critical to user satisfaction				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banking service medium is not a frequent connection breakdown.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Easy to navigate the medium due to smooth speed.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Transition is efficient with no waiting time.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Response speed to the complaint is satisfactory.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Speed of e-transactions flow is faster than traditional banking channels.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Customers are highly satisfied with Promptness of the delivery of e-banking services.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

### **PART-VIII**

### **FEES AND CHARGES**

The willingness of employees to provide prompt e-banking services.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Fees are essential attributes to decide using e-banking system.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banks provides convenience and flexibility at a lower cost than traditional branch banking				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Price of service fees is acceptable.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

E-banks charge with the negligible annual fee.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Customers will continue services even if the bank charges a high annual fee.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Efficient and speedy e-banking transaction with lower transaction cost.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Compared to other banks, your bank offers attractive service costs.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Compared to other banks, your bank provides more free services.				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Thanks for your valuable time.

Respondent Signature

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