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NAAC Accredited Grade 'A' (3rd Cycle) & ISO 9001: 2015 (Certified)

TITLE OF THE PROJECT

A STUDY ON PRESENCE OF E-BANKING FRAUDS IN INDIA.

A Project Submitted to

University of Mumbai for partial completion of the degree of

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Under the Faculty of Commerce

By

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Under the Guidance of

MR. NIRAV GODA

THAKUR COLLEGE OF SCIENCE AND COMMERCE

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Certificate

This is to certify that **MR. OHM JIGNESH BHAVSAR** has worked and duly completed his Project Work for the degree of Bachelor in Commerce

(Banking & Insurance) under the Faculty of Commerce and his project is entitled,
“A STUDY ON PRESENCE OF E-BANKING FRAUDS IN INDIA”

Under my supervision.

I further certify that the entire work has been done by the learner under my guidance and that no part of it has been submitted previously for any Degree or Diploma of any University.

It is his own work and facts reported by his personal findings and investigations.



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Principal

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Declaration by Learner

I the undersigned MR. OHM JIGNESH BHAVSAR hereby, declare that the work embodied in this project work titled


“A STUDY ON PRESENCE OF E-BANKING FRAUDS IN INDIA”

Forms my own contribution to the research work carried out under the guidance of

MR.NIRAV GODA, result of my own research work and has not been previously submitted to any other University for any other Degree/ Diploma to this or any other University.

Wherever reference has been made to previous works of others, it has been clearly indicated as such and included in the bibliography.

I, hereby further declare that all information of this document has been obtained and presented in accordance with academic rules and ethical conduct.



Certified by

Name and signature of the Guiding Teacher
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Name and Signature of the learner

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ABSTRACT

This paper is a study about E-banking and Frauds Of E-Banking that occur in India. E-

Banking has an important role in the nation's economy. It plays an important and compulsory instrument in today's world.

In this research, we will learn about the features, importance, types, and various form of E-Banking. It also shows the advantages and disadvantages of E-Banking.

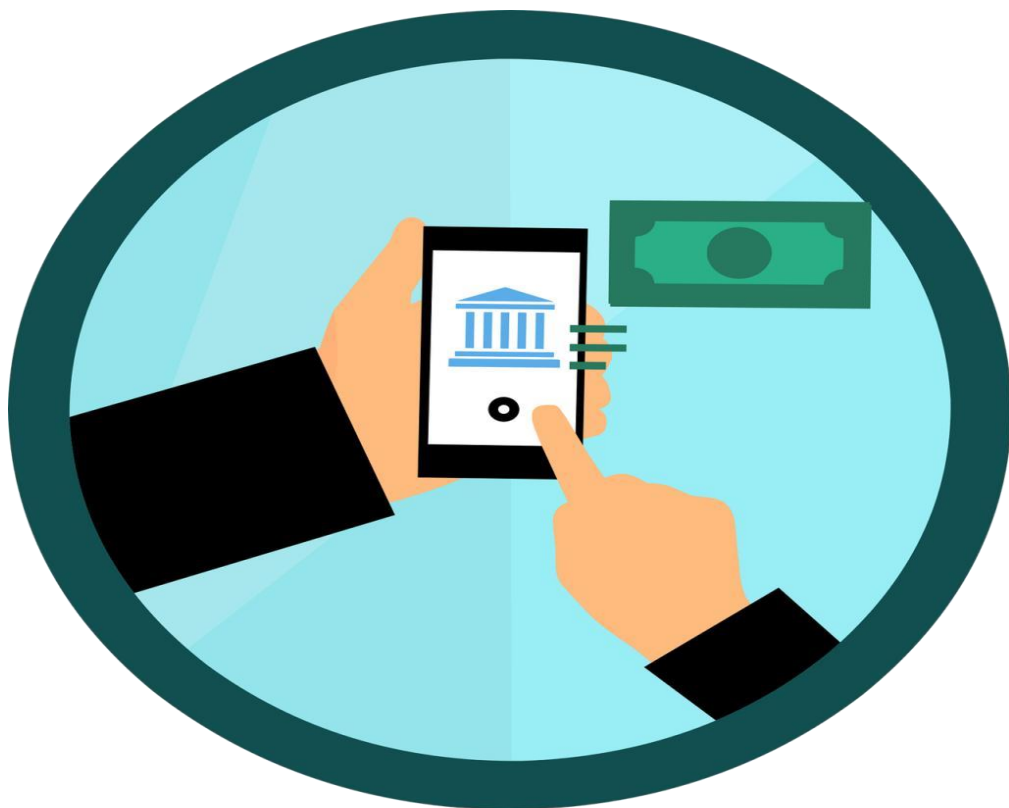
Due to the increase in E-Banking Services, The frauds have also increased. Electronic Banking Frauds has been an issue of concern all over the world. It leads to problems such as Bank Bankrupt, Reduction of Customer or Defamation of Goodwill. This paper study about the nature, types, major channels of frauds, and significant rise of frauds in India.

This study provides measures to prevent and control Electronic Fraud in India. It shows a method to prevent frauds, guidelines by RBI to control frauds in India, and areas to improve security.

It's a study about how to detect Electronic Fraud, how to control Electronic Frauds and improvements to be made for controlling Electronic frauds.



CHAPTER 1. INTRODUCTION



INTRODUCTION

Information technology (I.T) has become an important & compulsory instrument in today's world. The Banks are highly evolved in globalized, liberalized and privatized and a competitive environment. In order to survive in the market bank has to use a developed information technology. It has introduced new business concept and facilities to bank. It has a major and important role in improving and growing the service in the banking sector. Indian banking sector has indicates tremendous development due to changes that are taking place with the help of information technology(I.T). Electronic banking has emerged at a great scale from such a innovative development.

Modern development of technology in banking sector helps to solve various problems and providing service at faster pace. IT helps is as a cure for most of ills that banking sector faces in day to day work .even at present India is a relative unbanked country as the credit to GDP ratio is one of the lowest in the developing economics . So Indianbanks are facing dual challenge of increasing perception and high growth orbit. The bank industry can kill two birds with one arrow with the use of technology in bankingsector. There is a tremendous progress in the field of technology which has reduced the world to a global village and it has brought enormous changes in the banking industry.

E-banking is an entity that permits borderless banking facilities and service anytime, anywhere and anyhow required by banking. If a person has a computer cell phones with an internet connectivity, they can use e-banking service by connecting to banks websites to perform any activity. It delivers banking facility through computer-controlled system.

Here the banks are not involve directly with the customer. The customer doesn't have to visit banks premises. Nowadays most of the core banking facilities are performed through internet banking. under e-banking banks provide service through electronic modes like mobile banking , telephone banking , debit card , credit card , smart card , automated teller machine (ATM) , electronic fund transfer (EFT) system, cheque transaction payment system and mainly through internet banking . due to development in information technology , most banks in India has migrated to internet banking platform and moved transaction to payment card (debit and credit card)and to electronic channels likes ATMs , internet banking and mobile banking . Which leads of frauds minds through online i.e. internet banking frauds. Fraudsters have also followed customer into the space. However the response of most of the banks to frauds in these area needs further improvement there by avoiding putting the entire onus on the customer into this space. However the response of most of the banks to frauds in these areas needs further improvement thereby avoiding putting the entire onus on the customer. These is also a lack of clarity amongst banks on the reporting of these instances as frauds.

There is need for all banking institute to have wide framework on fraud governance with particulars emphasis on tackling electronic channel based frauds. This note endeavors to bring out the challenges and suggest a framework which can be implemented across banks to effectively tackle the electronic frauds menace. the definition of banking frauds is a follows “a deliberate act of omission or commission by any person, carried out in the course of a banking transaction or in the books of account maintained manually or under computer system in banks, resulting into wrongful gain to any person for a temporary period or otherwise, with or without any monetary loss to the bank.”

FEATURES OF E-BANKING

The important features of e-banking are as follow:

Faster transaction

E-banking provides a faster banking service. At a fast pace. It provides the facility of instant fund transfer to its customers. It creates time utility by saving time for customers as funds get transferred very fast from one person's account to another account. The whole system of e-banking is automatic which works over the internet.

People don't need to wait in the queue to transfer their funds, or making payments of bills and services, one can easily pay or transfer money through the e-banking portal or devices. It helps customer to easily access their account with the help of devices with an internet connection.

Lowers transaction cost

E-banking help in reducing the cost involved in making transactions. Electronic transfer is known as one of the easiest and cheapest modes of doing transactions. It reduces certain charges by

Decreasing the manpower requirement as the workload is reduced.

The whole transaction can be taken place through online banking portals or devices with internet connectivity. It helps in maintaining the record of transactions digitally which helps in reducing the paperwork in organizations. There is no need to manually enter and store data which reduces the transaction cost.

Provide 24*7 services

This is one of the most important beneficial services of e-banking. It provides customers all-time access facility to their respective accounts. One can easily access their account anywhere at any time with no limitations. It creates a place and time utility.

It provides convenience to the customer as they can perform transactions as per their wishes. One can make payment or withdrawal at any time of the day. Its helps customer to check their account or to get solved their issue at any time.

Reduces the chances of error

E-banking helps in reducing the chance of error. It reduces the role of human error by reducing the humans in the whole transacting process. E-banking systems work fully automated with the help of the internet. The data is been saved on the banking portal. There is no need to manually maintain every record in books of account which leads to low chances of human error which also minimized the risk of error.

Develops loyalty in customers

E-banking helps the banks to develop more customers which help in developing a large number of loyal customers. Through the help of e-banking services banks can serve their customer well. They can provide fast and better services.

Customers can get a user-friendly interface from banking portals. They can avail themselves services from any time anywhere. One can use the banking service while sitting on the couch of their home which makes customers feel more comfortable and important. It answers every question of the customer at any time of the day. This develops a sense of loyalty among customers when they are happy with the services of their banks.

Remove geographical barriers

E-banking has removed all the distance barriers for performing transactions which help in creating place utility. It has removed all the distance barriers the customers are used to face while traditional methods of performing transactions.

E-banking provides the facility of quick transfer of funds from one place to another. One can transfer funds both nationally and internationally. All the systems are connected online which facilitates easy transfer of funds.

Electronic Banking



Provide better productivity

E-banking has an efficient role in increasing the productivity of businesses. The whole financial transaction system is supported by automated software systems. These systems are specially designed for doing a transaction of funds.

It reduces the workload of the business organization and the time required for the commencement of the transaction .there is no need to store the data manually because all the transactional data are automatically stored digitally. It increases the overall productivity of the business and organization.

Reduce frauds in transaction

Another important feature of e-banking is helped in continuous monitoring and maintenance of accounts. One can easily track every detail of the transaction of her account. One can easily track if any fraud is done by anyone in the financial transaction.

It provides complete detail of all those who can modify your banking activities and commits fraud.it thereby adds transparency to your account which reduces the overall chances of fraud.

IMPORTANCE OF E-BANKING

Convenience guaranteed

While easy access is one of the many benefits of online banking, it also makes e-banking highly convenient to use. There is no need to wait in the long queue for banking transactions it can be easily eliminated with the help of an e-banking portal. Moreover, with the mobile banking option available for almost all banks, the transaction has become easier one can easily transfer or pay using an e-banking portal transaction can be performed on fingertips even if one is in traffic or in the middle of work with the help of e-banking. This makes it even easier to check your balance before making a cashless payment to avoid fraud.

Easy access

One can easily access e-banking services with the help of the internet, one make transactions at any time of a day from anywhere with the help of e-banking. One can easily access the information of account with the help of e-banking. Even if it is the last day to make a payment of bill one can rely on e-banking. Online banking can be performed any time of the day from home or office with the help of e-banking. Not just that, instead of being physically present for a huge amount of transaction, one can safely transfer funds at any time completely hassle-free

Security assured

Since online service is one of the major services offered by banks. So the banks take care that it should be highly secure from frauds and malware practices, e-banking is a highly secured platform. Banks generally use encryption devices to keep client information secure and protected and there is no security breach.it ultimately provides you security from online frauds and accounts hacking.

No hidden fees

Despite the convenience being provided by the bank, there are no hidden fees associated with making an online transaction. All you are charged is a nominal some normal transaction convenience and the rest is managed by your bank.

Monitor your accounts closely

Lastly, managing and budgeting your account is made simpler when you have access to e-banking and good budgeting application at your fingertips. Real-time expenses can be monitored while estimating your monthly savings and expenses or while making purchases.

Lesser paperwork:

Since the information about the transaction is stored automatically on e-banking services, so there is no need to maintain manual books of accounts or data. Due to the digital recording of information, there is reduce of paperwork which makes the process easier to handle. Also, it is environment friendly

A reduced margin of human error:

There is reduce in the chance of human error in e-banking because the information is saved automatically in digital form. Which helps to keep a record of transactions, here all the information is relayed electronically, there is no room for human error.

TYPES OF E-BANKING

Banks offer various types of services through electronic banking portals. These are of three types:

Type 1

This is one of the basic levels of services that banks offer through their websites. Through these services banks offer detail about its product and services to customers, further some banks can receive and reply to queries through e-mail too.

Type 2

In this type, banks allow their customers to submit applications or instructions for different services, check their account balance, etc. however banks don't permit their customers to any baseless or fund-based transaction on their account.

Type 3

In this type, banks allow their customer to operate their accounts for fund transfer, bill payment, and purchase and redeem securities, etc.

Most traditional banks offer e-banking services

As an additional method of providing service. Further, many new banks deliver banking services primarily through the internet or other electronic delivery channels. Also, some banks are only on the internet without any physical branches anywhere in the country.

Therefore, banking portals are of two types:

Informational websites

These websites generally offer information about banks and its product and services to customers.

Transactional websites

These websites allow the customer to conduct a transaction on their account with the help of banks portals. Further, this transaction can differ from simple retail account balance inquiry to large business-to-business funds transfer, the following table lists some common retail and wholesale e-banking services offered by banks and financial institutions are:

Retail services

- Account aggregation
- Bill payments
- Account management
- New account opening
- Consumer wire transfer
- Investment services
- Brokerage services

Wholesale services

- Loan application and approval
- Cash management
- Business-to-business payment
- Account management
- Employee benefits
- Commercial wire transfers
- Pension administration
- Small business loan application, approvals, or advances

VARIOUS FORMS OF E-BANKING

Automated teller machine (ATM)

An automated teller machine is an automatic teller machine (ATM) is an electronic computerized telecommunication device that allows a financial institution's customers to directly use a secure method of communication to access their bank accounts, or make cash withdrawals (or cash advances using a credit card) and check their account balance without the help of human bank teller.

Telebanking

Undertaking a host of banking-related services including financial transactions from the convenience of customer chosen place anywhere across the globe at the time of the day. This is possible only with the help of telebanking services. By dialing the given telebanking number the customer can get access to their customer account. In this, the entire banking can be done with the help interactive voice response (IVR) system. There are a sufficient amount of hunting lines available, through which customer calls will hardly fail. It provides various services such as:

- Balance and transaction inquiry
- Statement of the account by fax, e-mail, or ordinary mail.
- Cheque book request etc.

Smart card

A smart card usually contains an embedded 8-bit microprocessor (a kind of computer chip). The microprocessor is under the contact pad on the one side of the card. Think of the microprocessor as replacing the usual magnetic stripe present on a credit card or debit card.

The microprocessor on the smart card is there for security. The host computer and card reader actually communicate to the microprocessor. The microprocessor enforces access to the data on the card.

The chips in these cards are capable of many kinds of transactions.

Debit card

A debit card is a card that deducts money from customer accounts when it is used. The money which is deducted is only from the account through which the card is linked, it is also known as “bank cards” or “check cards”. The debit card is generally used for making purchases, paying bills, buying goods or services, or withdrawing money from automated teller machines or merchants.

Debit cards are different from credit cards, while in a credit card one had to pay later after the use of on a given period. Whereas if you use a debit card, the money is directly deducted from your current or saving account.

E-cheque

E-cheque is the electronic version or representation of a paper cheque. In recent years, we had seen a tremendous increase in e-commerce transactions which is also due to e-cheque. In an e-cheque, the transaction is taken place online with the help of digital signatures (based on public-key cryptography) to replace handwritten signatures.

Other forms of electronic banking

- Direct deposit
- Electronic check conversion
- Cash value store
- Electronic bill payment etc.

ADVANTAGES AND DIS-ADVANTAGES OF E-BANKING

Advantages of E-Banking

- An online account is simple to open and easy to access or operate.
- It's convenient because one can pay the bills and transfer your funds nearly anywhere in the world
- Ones don't have to stand in a queue to pay bills. Also, you don't have to keep receipts of all of your transactions or bills as you can e-easily view them online.
- It is available 24/7* of the day. One can perform their task from anywhere and at any time even at night or on holidays or even when the bank is closed. It helps in creating time and place utility. The only thing which one has to have is an active internet connection.
- It is fast and efficient, funds get transferred from one account to another with a click of the fingertips. One can manage several account online through the help of internet banking portals.
- One can keep an eye on the transaction and account balance all the time which leads to a reduction of frauds and malpractices.
- One can get to know about any fraudulent activity or threats to their account before it poses any severe damage with the help of e-banking.
- It's is a great medium for the banks to endorse their product and services.
- More online services include loans and investment options.

.Dis-Advantages of E-Banking

- Understating the usage of internet banking can be difficult at first. That said some sites offer a demo on how to access online accounts (not all banks offer this). So a person who is new to technology might face some difficulty.
- You can't have access to online banking if you don't have an internet connection; thus without the availability of internet access, it may not be useful.
- Security of transactions is a big issue. Your account detail might be get hacked by unauthorized people over the internet.
- Password security is a must. After receiving your password change once had to memorize it. Otherwise, you can't operate your account or it can be misused.
- Your banking information may be spread out on several devices, making it more at risk.
- If the bank's server is down then one can't access their account.
- If the bank's server is down, due to the loss of network connectivity or a slow connection, then it might be hard to know if your transaction went through or not. You might get overly marketed too and become annoyed by notifications. That said, these can easily be turned off.

HISTORY OF E-BANKING FRAUDS

Online banking was first started in the '80s. The term online became famous in the late '80s. Online banking during the formative years included usage at the terminal, keyboard, and TV (or monitor) intending to approach the banking system using a phone line. Online services started in New York in 1981 when four of the city's major banks (Citibank, Chase Manhattan, Chemical and Manufacturers Hanover) offered home banking services using the videotext system. Later on, the concept of videotext became popular in France. In the UK, the first home online banking services were set up by the Nottingham Building Society (NBS) in the year 1983. It was based on the UK's Prestel system and used a computer, such as the BBC Micro, or keyboard (Tandata) connected to the telephone system and television set. It provided customers an option to make bill payments for gas, electricity, and telephone companies and accounts with other banks. It was Stanford Federal Credit Union which offered online internet banking services to all of its customers.

Internet banking refers to the use of the Internet as a remote delivery channel for banking services such as opening a deposit account or transferring funds at different accounts etc. 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 basic level, Internet banking includes the setting up of a web page by a bank to give information about its product and services. At an advanced level, it involves the provision of facilities such as accessing accounts, funds transfer, enabling integrated sales of additional process, and access to other financial services such as investment and insurance. There is an advantage for customers as it provides the opportunity to handle their banking transactions without visiting bank tellers. The services through Internet banking are e-tax payment; access the account to check balance, online trading of shares, online remittance of money, electronic bill payment system, railway reservation, transfer of funds from one customer's account to other, application of loan, etc. Internet banking channel is convenient compared to bank branch system because stakeholders can access their account at any time. Banks leveraged the advantage of the Internet by offering online services in recent years.

Thulani et al. identified three functional levels of Internet banking which are informational, communicative, and transactional. Under the informational level, it has been identified that banks have the marketing information about the bank's products and services on a standalone server. The risk is very low as informational systems have no path between the server and the bank's internal network. The communicative level of Internet banking allows some interaction between the bank's systems and the customer. This level of interaction is limited to e-mail, account inquiry, loan application, static file updates and it permits no fund transfer. Transactional level Internet banking allows bank customers to electronically transfer funds to/from their accounts, pay bills and conduct other banking transactions online. There are higher risk levels in transaction levels as compared to that of the other two levels.

CHAPTER 2.
LITERATURE
REVIEW



LITERATURE REVIEW

Hani A. Al Haliq & Ahmad A. Al Muhirat(2020)

Their research aims to examine the extent of consumer loyalty with electronic saving money (e-keeping money) benefits in the Saudi keeping money area and to address issues with nature of administrations by concentrating on the accompanying: (i) simplicity of utilization; (ii) data security and unwavering quality and its part in affecting their client reception of electronic administrations; (iii) the instruments of checking and control over these administrations. The examination utilized scientific and enlightening approach to these administrations, gathering essential information through an overview. It inspected different parts of electronic administrations gave by banks in Saudi Arabia to reveal more insight into these administrations and client desires, while additionally considering present day thinks about in this field as optional information. The outcome demonstrated that Saudi banks have prevailing with regards to accomplishing noteworthy consumer loyalty by enhancing their electronic administrations, encouraging electronic exchanges, enhancing handling execution and improving the particulars of electronic administrations. Also, they have accomplished successful correspondence with their clients and in addition the speed of applications.

Notwithstanding, there is a non-attendance of mindfulness and direction for clients about the e-managing an account framework. The consequences of this examination prompt to a few proposals for enhancing the electronic administrations gave by banks in Saudi Arabia to upgrade consumer loyalty.

(Karimzadeh and Alam, 2012)

Have said that the major obstacles in development of electronic banking are legal issues, security issues and technical issues due to which e banking frauds are committed in order to prevent the same and have development of e- banking proper implementation e legislations are to be made, security policies to be adapted to build up the confidence in the minds of customers that e- banking is safe and secured to use, awareness to be done on preventive measures to be taken by customers to avoid the incidence of e banking frauds.

(Kundu and Rao, 2014)

E banking frauds are safe crime does not harm or cause any injury to the body of the fraudster. It is difficult to find the fraudsters of e banking crimes and even the investigators are finding it difficult to locate the fraudsters. Around 455 fraud case were reported during 01.01.2007 to 30.09.2010 which includes credit card frauds, ATM frauds, staff frauds etc. the few of suggestions made to prevent e banking frauds are security policy to be framed by banks, monitor internal management, provide training to the staff handling e banking system, regular up gradation of technology and banks to have compulsory in house grievance settlement body, more and more investigating cells to be established and appointment of efficient investigators to be made.

(Khanna and Arora, 2009)

Indicated that lack of training and low compliance level of Reserve Bank of India guidelines are the main reasons of e banking frauds. They have suggested that a regular internal control one banking system one of the preventive measure for which quality training is needed to be provided to the banks staff, the people who are handling and have internal control over electronic banking system because generally fraudsters tries to identify loopholes in the control procedures.

(Jamwal and Padha, 2009)

Reserve Bank of India had formed a Working Group to find out the challenges faced in internet banking. The group found that the major issues are relating to technology and security issues, legal issue and regulatory and supervisor issue. One the bases of the report prepared and submitted by working group to Reserve Bank of India (RBI), RBI prepared the various guidelines to be followed by banks. Banks are reluctant to implement the same because there is no monitoring committee set up to keep a check, so inspite of guidelines provided to take safety and security measures yet the cases of e banking frauds are on increase every year.

(Soni and Soni, 2013)

The various mandated recommendation on preventive measures were given by Gopalakrishna Working Group (GGWG) on safe and secured e-banking services such as each bank to create a separate information security body that will exclusively work for information security management, to frame security policy and get it approved from board and policy to be at least reviewed annually but banks did not implement the same.

(Parameshwara, 2013)

G. Gopalkirshna committee set up by RBI in 2011 recommended certain suggestions out of which one of it states that fraud review council must be formed in all banks by the fraud risk management group to review frauds and take preventive steps regularly

(Pasricha and Mehrotra, 2014)

According to the survey done around 2760 fraud cases were reported relating to technological issues which are nearly about 65% of the total number of fraud cases. It is observed that security issues are also faced by customers due to loopholes in technology which leads to data stealing and data is misused by fraudsters making the customers suffer huge losses. Therefore technology is needed to be up graded on regular basis.

(Singh, 2012)

the article states that various kinds phishing techniques practiced by the fraudsters. The various cases were reported by ICICI Bank and later on even by UTI bank and state bank of India and others. In India there are several cases relating to attacks on genuine websites.

(Doiphode, 2014)

States that in order to have safe and secured e banking the bank staff handling and controlling e banking system must be adequately trained and properly selected. Thus it is always advisable to select the person who is honest and dedicated to his work for the various posts in the e-banking system operating, controlling and handling department.

(Jassal and Sehgal, 2013)

Even if few banks have framed security policies they are proved to be ineffective because there are various loopholes and mistakes or they are incomplete, or inefficient, in most of the banks security policies for users does not contain the tips for the users about do's and don'ts, security policies for banks are ambiguous and they do not explain clearly privacy statements to the customers, there is inadequate policies even for user Ids and passwords, network providing hardware & software systems are also not properly designed and upgraded regularly, back up policies are also not framed in proper manner.

(Chavan, 2013)

Has stated that the meaning of electronic banking is providing banking services and products to the customers through electronic delivery channel such as internet banking, mobile banking ATM facilities and Credit cards etc.

(Singh, 2012)

Has defined online banking as system which allows customers to use banking services from a personal computer by connecting with the banks computer over the telephone wires. E-banking benefits the banks by reducing their cost and also catching up the customers from the remotest areas. E banking is benefited to the customers also as 2X 7 banking services are available to them, banking services are provided to the customers at their home or offices some other benefits are electronic transfer of funds, online bill payments, anytime cash withdrawals from ATMs, Credit card facilities, customers can access the accounts online through internet banking etc. Even the merchant and traders are benefited avoids all the problems involved in handling the cash, increase in business due to increase in purchasing power of the credit cardholders, trading at international level can be done easily. Due to e banking there is globalization of trade and establishment of e commerce which will lead to development and overall growth of the nation.59% of the respondents were unaware about the e banking.

(Chakrabarty, 2013)

According to the survey conducted by Reserve Bank of India around 1,76,547 banking fraud cases were reported and the amount involved was Rs 31401.01 crores out of which 1,69,190 cases were reported in the commercial banks and amount involved was Rs 29910.12 crores. Public sector Banks reported 29653 cases, 93331 cases were reported in Private sector Banks and 46206 cases were reported in Foreign Banks. 65% of fraud cases were committed because of technology related issues such as internet banking frauds, credit card frauds, and other e-banking frauds.

(Raghavan and Parthiban, 2014)

There are various frauds committed in e-banking sector relating to Automatic Teller Machine, credit card frauds such as phishing attacks, identity theft; data stealing, hacking, cracking, malware attacks and many more this is leading to huge financial losses to the country at large.

CHAPTER 3.

FRAUDS IN E-BANKING



FRAUDS IN E-BANKING

Frauds are conscious and deliberate actions by a person, intending to alter the truth of facts for selfish personal gain. Fraud is a premeditated act of criminal deceit, trickery, or falsification by a person or group of persons to alter facts, to obtain undue personal monetary advantages. Frauds committed in the banks are called banking frauds, while the use of electronic to commit banking frauds is termed electronic banking fraud as frauds associated with electronic banking perpetrated using ATM. POS. internet and mobile banking platform.

NATURE OF ELECTRONIC FRAUD IN INDIA

E-Banking frauds can take the form of corrupting the programs and even breaking into the safety of the system by a specialist or computer programmer. The manipulation technology (ICT) to defraud banks gives more insight into the latest friction of the technological revolution. When computers are invented the intention of their inventor is to effortless cash and hasten data processing. That, it has been doing efficiently by giving timely and accurate information.

Like other mechanical and electrical devices e-banking has also lent itself to heinous acts. What is meant to assist in daily data operations has turned out to be an undoing? While basking into the euphoria of its efficiency, banks are also grasping with its fraudulent manipulations. The liability of computer to control manipulation, frauds, and forgeries continue to give the banking system nightmares.

Any type of act distinctly associated with data or computer manipulation in which victims involuntarily suffer or could have injuries or damage, suffered loss, or in which perpetrator receive or could have received gain is referred to as a "computer crime". The adoption of ICT in banking is generally referred to as electronic banking (e-banking) and the implementation strategies of banking services have become a subject to fundamental importance and concerns to all banks and indeed a pre-requisite for local and global competitiveness. This is because it directly affects the management plans and product, decision, and service to be offered by banks. The internet and indeed the e-banking had continued to change the way banks and their corporate relationship are organized worldwide and the variety of innovations in service delivery.

A 2003 report of a technical committee on e-banking of central banks of India (CBN) defines e-banking as “a means whereby banking business is transacted using automated processes and electronic devices such as personal computer, internet, card payment, telephones, and electronic channels. It further states that some banks practices electronic banking for information purpose, some fund transfer and other financial transaction, while other facilitates simple transaction such as checking account balance as well as transmission of information. Many systems involve a combination of these capabilities.

TYPES OF ELECTRONIC FRAUDS IN INDIA

These are some of the types of electronic fraud in India.

Online fraud

Card information is at the time of an online transaction. Fraudsters then use the card information to make online purchases or assume an individual identity.

Money laundering

Transfer of money into and out of a mobile wallet from or to a bank account is now possible. Cash-in from the bank account of an individual and cash out to a different bank account of another individual can be used as a platform for laundering unaccounted money.

Hacking

Hacker fraudsters obtain unauthorized access to the card management platform of the banking system. Counterfeit cards are then issued for the purpose of money laundering.

Triangulation /site cloning

Customers enter their card detail on fraudulent bank sites and these are then misused. Hackers used to create a clone of the official sites and when an individual tries to do a transaction over their fraud takes place.

Lost/ stolen cards

It refers to the use to the use of a card lost by a legitimate account holder for an unauthorized/illegal purpose

Accounts take over fraud

An individual illegally obtains the personal information of valid customers and takes control of the card account.

Unauthorized e-mail/text messages

Asking for account information for updating bank records is sent by fraudsters. The customer information is then misused for misappropriating funds.

Unauthorized access

This type of may arises when access rights for making entries are given to unauthorized people.

Debit card skimming

A machine or camera is installed at an ATM in order to pick up card information and PIN number when a customer uses their card.

ATM frauds

A fraudster acquires customer cards or PIN and withdraws money from the machine

Mobile banking application against incorrect mobile number

For bank customer who does not use mobile banking an employee of the bank could attach an associate's mobile number to the bank accounts and install a mobile application on his mobile device. The customer's account is compromised by the association and they do not get any notification about the same

Creating fake and non –existent users on mobile platform

Most of the banks appoint a third-party vendor to develop a mobile application to be integrated with their core banking system. The vendor may create two unauthorized users with the right to initiate and verify the transaction, and transfer funds from the organization to his associate's wallets effectively stealing money from the bank.

SIM swap

It means replacing the old SIM with the new one, when the old gets lost or damaged, or when one needs a differently sized SIM card. If a fraudster manages such a swap. He can carry out numerous fraudulent transactions using the mobile number of the victim. The user has no access to their account and receives no notification. The user with another handset, on knowing the PIN can transact in the account.

Unauthorized deduction from mobile wallets

Employees of the mobile wallet services provider may misuse the balance stored in the wallets of the customers, especially a dormant or infrequent customer account, by making the unauthorized deduction.

MAJOR CHANNELS FOR ELECTRONIC FRAUDS IN INDIA

The influence of sophisticated machines like electronic fund transfer, computer manipulation on bank fraud is very significant. The majority of frauds committed in the banking sector are usually committed through electronic transfer and computer manipulation. Most of the frauds cases recorded in the bank in India are ICT and computer-related through the following:

Mobile telephone banking

Mobile phones are increasingly being used for financial services in India. Banks are enabling the customers to conduct some banking services such as fund transfer and account inquiry through the mobile telephone. Mobile telephone banking notifies the customer of any transaction on their account.

Automated teller machine (ATM)

This is an electronic device that allows a bank's customers to check their account balances and make withdrawals at any time without the need of a human teller. Many ATMs also allow people to deposit cash and cheque, transfer money between their bank account, or even buy mobile phone recharge cards. To make deposits, withdraw cash, or transfer funds between the accounts, you generally insert an ATM card and enter your personal identification number

(PIN). Some ATMs impose a surcharge, or usage fee, on consumers who are not members of their institution or on the transaction at the remote location.

Smart card

This is a card issued to a customer by a member bank of SMARTCARD India limited to aid in their transactions. The card issued to the customer is usually PIN-protected (personal identification number), and each cardholder has different passcode/access or password different from any other users. Such a password must be kept secret and secure and must change anytime it becomes known to anyone.

Personal computer (PC)

PC banking refers to computer software and hardware and telecommunication to enable retail customer's access to both specific accounts and general information on a bank's product and services through a personal computer.

Electronic fund transfer (EFT)

This is an electronic-oriented payment mechanism. It allows customer accounts to be credited electronically within 24 hours (ugwu, et al, 1999). Mark (1975) classified the basic elements of the EFT system into three: cleansing network characteristics, remote service on point of sales characteristics, and pre-authorized debit or credit characteristics.

Internet banking channels

Internet is a global network of computers. It is a collection of computer networks, computers, and millions of users who shares a compatible means for interacting with one another to exchange information (awe, 1998).



SIGNIFICANCE RISE IN REPORTED FRAUD CASE

Bank frauds jumped more than twofold in the previous fiscal on delayed detection even as the reserve bank of India mandated implementation of early warning signals by lenders.

Banks frauds worth more than Rs 1.85 lakh crore were reported in the year ended June 2022 compared with over Rs 71,500 crore in the previous fiscal, according to the RBI's annual report for 2021-22.

“Frauds have been predominantly occurring in the loan portfolio (advances category), both in terms of number and value. there was a concentration of large value frauds, with the top 50 credit-related frauds constituting 76% of the total amount reported as frauds during 2021-22 the annual report said.

Public sector banks- that witnessed a 234% year-on-year rise in fraud cases-accounted for 80% of the total such reported instances, private banks, which reported a more than 500% rise, formed over 18% of the total fraud cases.

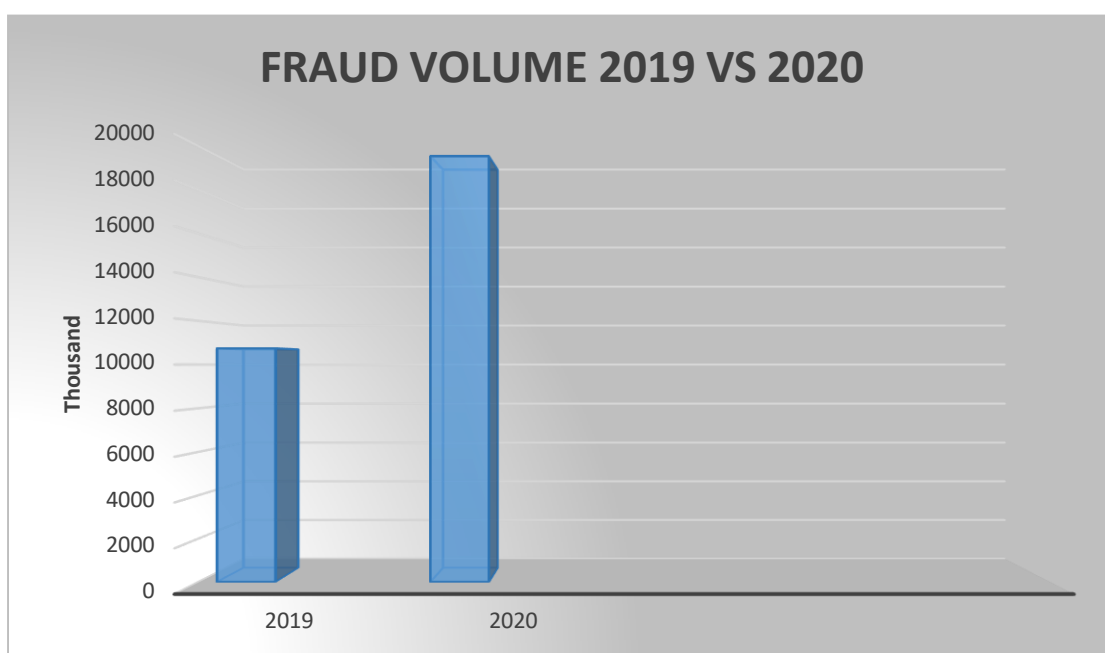
The rise in reported frauds cases

.in Rs crore

Entity	2019-20	2020-21	2021-22
State-Owned Banks	38260.87	63283.00	148400.00
Private Banks	2478.25	6742.00	34211.00
Foreign Banks	256.09	955.00	972.00
Financial Institution	164.70	553.00	2048.00
Small Finance Banks	6.19	8.00	11.00
Payments Banks	0.90	2.00	2.00
Local Area Banks	0.04	0.02	0.43
Total	41167.04	71543.02	185644.43

The table below shows that 19,531 fraud cases were reported for Deposit Money Banks in 2020 as against 10,743 in year 2019. Although, there was 82% increase in reported fraud cases as compared with 2019, we also witnessed marginal reduction in attempted fraud value and actual loss is N 4,368,437,371.64 and N 2,196, 509, 038.78 respectively. Also, there was a decrease of 2.65% in actual loss due to fraud in 2020 when compared with 2019.

Year	Fraud Volume	Attempted Fraud Value (N)	Actual Loss Value (N)
2019	10,743	4,374,512,776.64	2,256,312,660.00
2020	19, 531	4,368,437,371.64	2,196,509,038.78



CHAPTER 4.
PREVENTION
AND
CONTROL



PREVENTION AND CONTROL OF ELECTRONIC FRAUDS IN INDIA

Although the incidence of fraud is neither limited to the banking industry nor peculiar to the Indian economy, however, the high rate of fraud within the banking industry, calls for urgent attention intending to find solutions. Frauds in their effect reduce organizational assets and increase its liabilities. With regards to the banking industry, it may engender crises of confidence among the banking public, impede the going concern status of the bank and ultimately lead to bank failure. It has become necessary to review and strengthen existing rules and enact new laws to stem the problem. Recommended solutions are

Internal audit function

This function is being altered to include fraud risk management in its scope. The changing technological landscape requires the old ways of internal auditing to give way to new, technologically equipped audit functions. Annual audit planning may no longer be fully effective and flexible audit plans are the need of the hour, as fraud risk assessments require extensive use of forensic and data analytics solutions.

CCTV camera

The management of the bank should install the close circuit television (CCTV) camera at all the ATM locations and strategic positions within the banking hall.

Automated analysis tools

Today, the industry is increasingly aware of the need for automated analysis tools that identify and report fraud attempts promptly. Solution providers are providing real-time transaction screening, third-party screening as well as compliance solutions

Networking and routine checks

To prevent computer and ICT fraud, better networking and routine check of money transfers and transactions would frustrate the fraudsters.

High-level ICT consciousness

ICT should be subjected to a high level of security consciousness to guard against improper use, that is, posting and diversion.

Regular rotation of bank staff

The management of the bank should ensure regular rotation of duties and staff to prevent an individual from staying too long on a computer system or in a department. Also, there should be inter-branch and intra-bank regular rotation of bank staff.

Issued of operating guidelines

With the rapid growth in users and wider coverage of mobile phone networks, mobile banking is increasingly coming up as a significant delivery channel for extending banking services to customers. Putting the onus on banks, the Central Bank of India (CBN) should issue operative guidelines to regulate this channel, suggesting reporting of suspicious transactions to its financial intelligence unit.

Deep learnings

Internet payment companies providing alternatives to traditional money transfer methods are using deep learning, a new approach to machine learning and artificial intelligence that is good at identifying complex patterns and characteristics of cybercrime and online fraud.

Deploying advanced tools and technology

Owing to the heavy reliance on telecom operators for its services, the prevention, and detection of fraud in mobile banking have become even more complex. To keep a check on frauds, banks need to incorporate a greater level of scrutiny, by deploying advanced tools and technology capable of protecting the customers against unethical activities.

Effective control

An effective control is the most potent antidote against fraud. Human supervision of ICT high waves can bring the incidence of ICT manipulation to the barest minimum. Relevant laws: the national assembly should propose relevant bills that can curb electronic fraud in India.

For example:

- Cyber security and information protection bill.
- Electronic transactions protection bill.
- Computer security and protection bill.

GUIDE LINES BY RBI TO CONTROL FRAUDS IN INDIA

Maintenance of Information

Information concerning referred transactions have to be maintained by the banks and should permit reconstruction of an individual transaction, including the following information

- Transaction nature
- Type of currency
- Amount transacted
- Date of transaction
- Parties to the transaction.

Risk Perception Parameters

Customers should be categorized as low, medium, and high risk based on the nature of the business activity, location of the customer and his clients, payment mode, status in the society

Monitoring

The accounts of Multi-Level Marketing companies' accounts have to be monitored regularly as they deal with public money with a promise of higher profits. When banks suspect any unusual dealing like a large number of cheques with similar dates and amounts, should intimate the issue to RBI and FIN –IND.

FIN-IND

Banks are under obligation to report if suspicion arises about any transaction and if required to provide customer account information to the Financial Intelligence Unit of India.

Benami Accounts

Bankers are under legal obligations not to keep any anonymous account or accounts in fictitious name or in the name of persons whose identity is not disclosed.

KYC Adherence

The internal Audit should be well versed with KYC policies and procedures. They should check KYC procedures followed in the branches and comment on the shortcomings if any. Further, this has to be noticed by the Audit Committee of the Board every quarter.

Threshold limit

Special attention has to be given by the banks for the transactions involving large amounts and unusual transactions. Key indications have to be set by the banks for such accounts based on customers' data, background, sources of funds, etc. Accounts of bullion dealers and jewelers should be scrutinized regularly. Periodical Suspicious Transactions Reports (STR's) has to be submitted to Financial Intelligence Unit-India (FIN-IND). Again a periodical review of risk categorization has to be made.

Special Attention to Money Laundering Threats

A variety of cards are issued by banks to customers who assist in banking transactions. Generally, this is carried through the services of agents. Hence, bankers should ensure that appropriate KYC procedures are duly applied before issuing such cards. And even the agents should also be subjected to such measures.

Wire Transfers

Wire transfers are the mode through which funds can be transferred across the globe. It's the most preferable mode used by terrorists. Any suspicious transaction has to be reported immediately to FIN-IND. Accordingly, all wire transfers have to provide the following information:

- § It must be accompanied by accurate and meaningful originator's information
- § Name and address of the originator account details.



AREAS TO IMPROVE SECURITY

Many institutions impose transaction limits as a way to stop fraud. Urban calls this a "stop-gap measure" and suggests these additional steps:

Account-level check

Look at the types of transactions that are happening -- what is typical behavior, logins, when they happen. "then if they start logging in at night or over the weekend, that's a red flag to hold transactions until you can talk to the business owner, stopping fraud from taking place," urban says. The key is to use analytics to scope "out of the ordinary" transactions. "Look across all of the customer's behavior to spot what is unusual for that account holder."

Create unique account user ids

Make sure users all have different log-in identification. Do not let them use the same user name and password. There should be a unique user name for each person for the institution to be able to create unique profiles of use for each of the users. "This is similar to the PCI requirements; for anyone who accesses data, they each need a separate log-in."

Dual control

Have two unique users approve transactions. "If you can implement that, it goes a long way in reducing the chances of criminals stealing from the same account with a single user login, and it also stops the threat of internal fraud as well," Urban says

Multi-factor authentication

Even though this solution is susceptible to man-in-the-middle and man-in-the-browser attacks, urban sees it as an effective layer of protection. "a lot of times business owners will ask 'I have so many users on the account' how many tokens will I need?' you need a unique token for every user."

SMS messaging

This out-of-band message to users and account owners is important. It can be bypassed if a criminal can get into and change numbers or email contacts. But urban says an institution can get around that by contacting the old number or email when a change is requested to verify that it was the account holder -- not a criminal -- making that request. "This is something that banks already do with address changes," urban says. "You need to realize that criminals will go in and change email and phone number contact information, so it is a heads-up that something is taking place."

IP-email address controls

Only allowing certain email address/IP locations to go to the bank's online website to do transactions is another good control to put in place. It can be overcome, but it is another good layer of control. Urban notes "what's the risk that someone has just changed their phone and email contact information and is coming in from another email IP location to make these transactions? If they're coming in from another IP address, by looking at the risk, the institution can stop and look at it and question the transaction."



CHAPTER 5. RESEARCH METHODOLOGY



RESEARCH METHODOLOGY

OBJECTIVE OF THE STUDY

- To know the role of internet in banking sector
- To understand the e-banking scope and development in India
- To know the challenges of online banking system
- To know the activities being provided by electronic banking system
- To highlight the various ways of e-banking frauds done by the fraudsters
- To understand different types of banking frauds
- To manage and prevent e-banking fraud
- To assess the degree of customer satisfaction relating to e-banking service.

SCOPE OF THE STUDY

- The study will be able to reveal the preferences of the customer regarding the e-banking services
- It also helps the banks to know whether the e-banking services can really satisfy the customer needs
- This study is based on detail study of e-banking frauds in India banking sector
- This study is taken place to create awareness on e-banking frauds
- To find and suggest the remedial measures to prevent e-banking frauds

HYPOTHESIS OF THE STUDY

- There are not any significance difference awareness of e-banking traditional users and new users
- There is not any relation between occupation and awareness of e-banking users
- There is not any relation between age and awareness of e-banking users
- There is not any relation between gender and awareness of e-banking users
- There is not any significance difference in the user's perception towards security and privacy satisfaction regarding use of e-banking services.

LIMITATION OF STUDY

- This survey study is collected from a very small amount of population. So we can't say that this is the real data of net banking of whole country.
- People are not confident enough about the e-banking services which makes them rely on traditional banking.
- There is minimal awareness about frauds of e-banking among the customer
- People don't take the survey seriously
- Due to shortage and safety purpose survey is only collected through online mode.



TYPES OF RESEARCH

The research is primarily both exploratory as well as descriptive in nature.

The sources of information are both primary and secondary data

A well –structured questionnaire was prepared to collect the perception of the respondent, through this questionnaire

RESEARCH METHOD

Research can be defined as systematized efforts of gain new knowledge. A research is carried out by different methodology, which has their own pros and cons.

Research methodology is a way to solve research problem along with the logic behind them. Thus when we talk of the research methodology we not only take of research method but also context of our research study and explain why we are using a particular method or techniques and why we are not using other so that research result are capable of being evaluated either by the researchers himself or by others

TYPES OF DATA

The data is collected from the following sources:

- **Primary Data**

Primary data is the first hand data which is collected from the number of respondents.

Here structured questionnaire was used to collect primary data through surveys.

- **Secondary Data**

Secondary data has been collected for other useful resources and information essential required in order to successfully complete the project report and frauds figures from the internet, books, magazines as well as notes.

Sample Size

Sample size of 80+ consumer has been selected as a sample size for research.

Sample Method

- Sample Method

Random sampling is used as research process.

- Data Representation technique and tools

Columns Charts and Pie-Charts has used for the representation

Data Collection method

- Survey method.
- Survey Instrument: Questionnaire.
- Method of Surveys: Through the online interaction and collection of data with the help of questionnaire.

CHAPTER 6.
DATA ANALYSIS
AND
INTERPRETATION

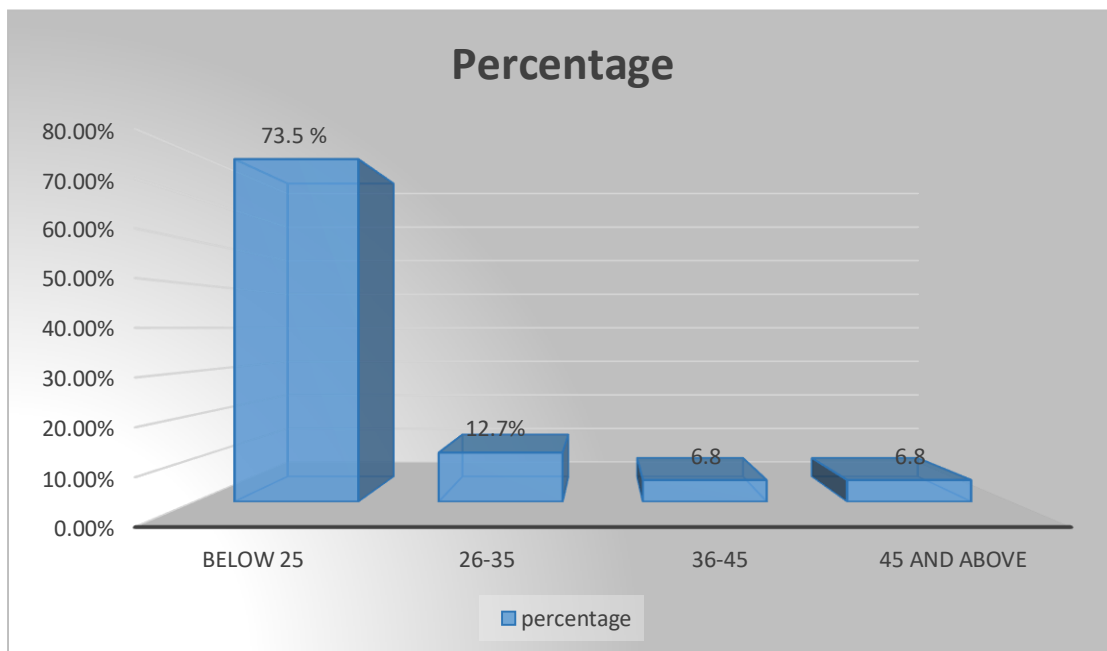


DATA ANALYSIS AND INTERPRETATION

ANALYSIS AND INTERPRETATION OF DATA

1). Age Group.

Particulars	No. of respondent	Percentage
Below 25	63	78.8%
26-35	9	11.3%
36-45	4	5%
45 and above	4	5%

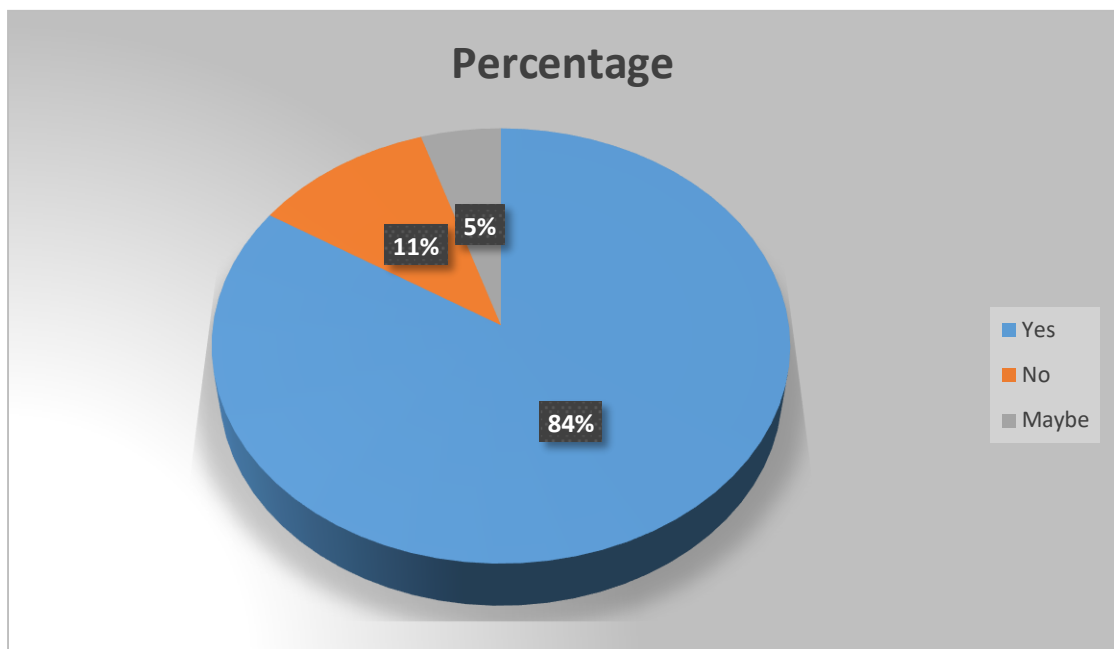


Interpretation

From the following table it is seen that the age group which is more actively participated in the survey is age group below 25. The data show that 78.80% of the data is collected from age group below 78.80. The age group 26-35 had filled 11.30% of data. And only 5% of data is collected from 36-45 and 45 and below age group.

2). Are you Aware of E-Banking Service?

Particulars	No. of respondent	Percentage
Yes	68	84%
No	9	11.1%
Maybe	4	4.9%

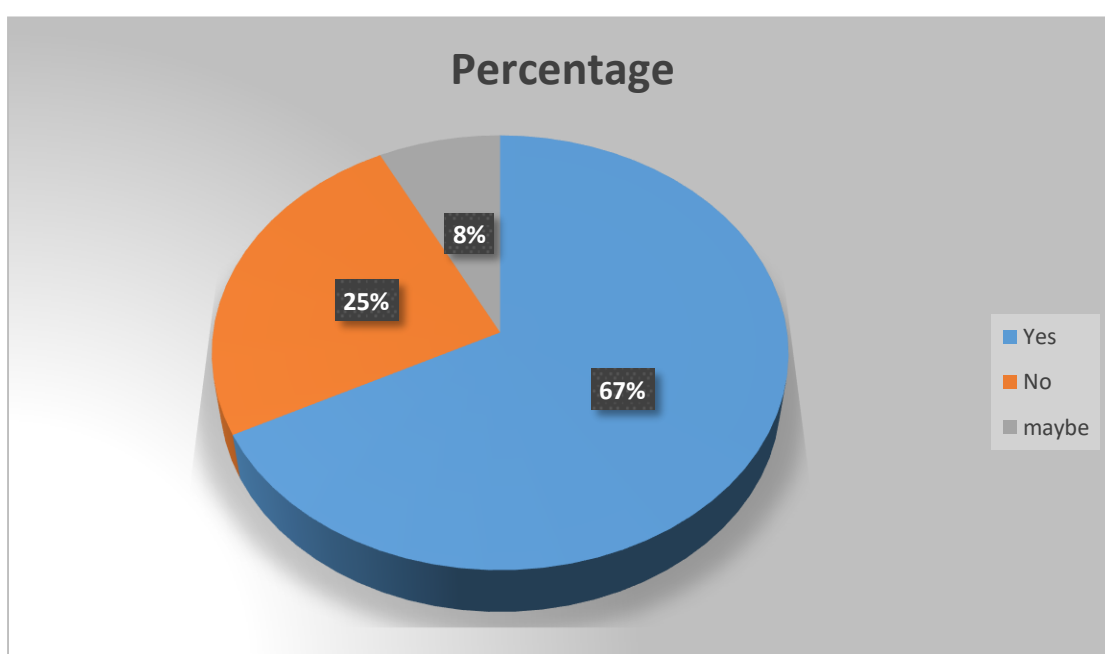


Interpretation

From the following data is seen that 84% of people are aware of E-banking Services. Whereas 11% are not aware of E-banking Services, and 5% of people are not sure about the awareness of E-Banking Services.

3). Do you use any E-Banking Services?

Particulars	No. of respondent	Percentage
Yes	54	67.5%
No	2	25%
Maybe	6	7.5%

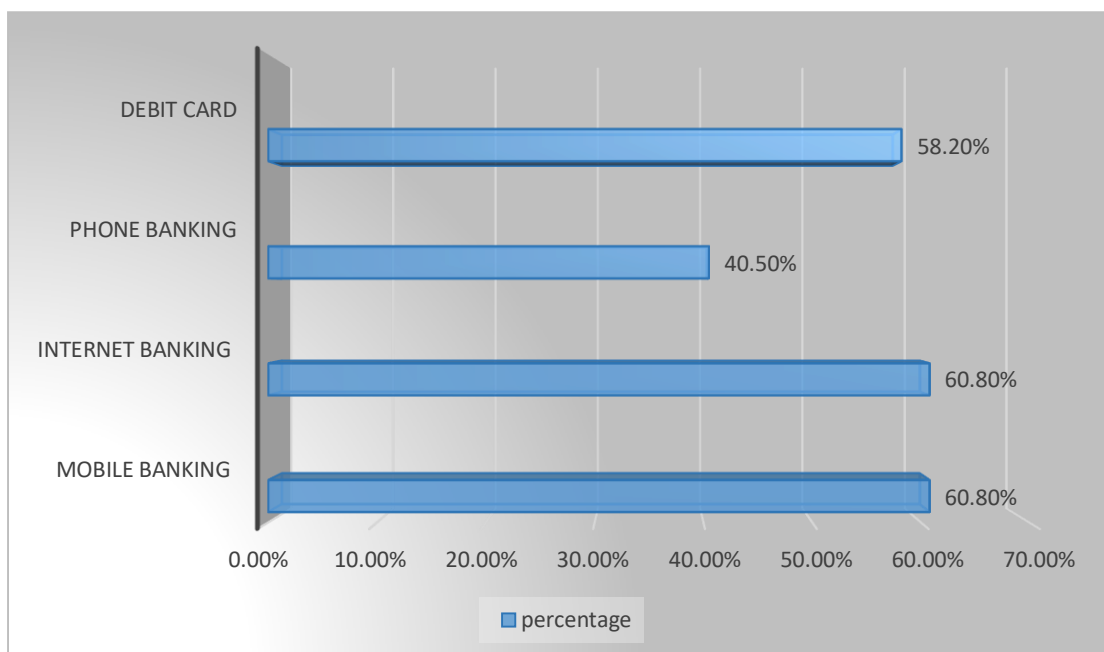


Interpretation

From the following data it is seen that 67% of people use any type of E-Banking Services. Whereas 25% of people had not used any E-Banking Services, and 8% are not sure about any use of any E-Banking Service.

4). Which of the following E-Banking Services are you aware of ?

Particulars	No. of respondent	Percentage
Mobile Banking	48	60.8%
Internet Banking	48	60.8%
Phone Banking	32	40.5%
Debit Card	46	58.2%

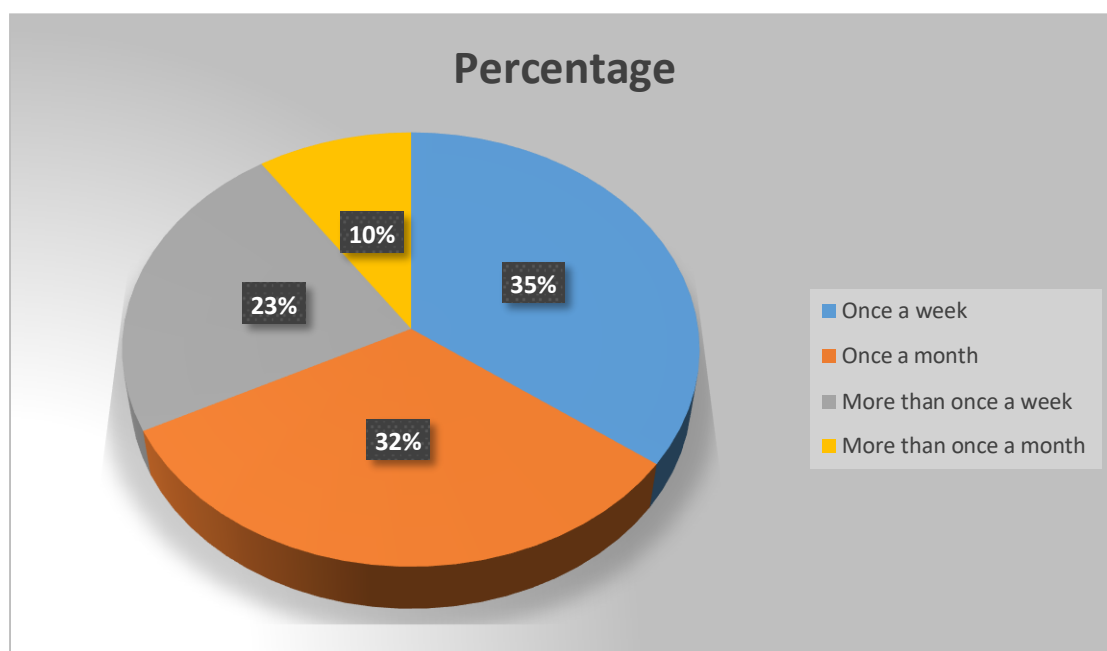


Interpretation

From the following data it is seen that 58.20% of people are aware of Debit Card E-banking Service. Whereas 60.80% of people are aware of Mobile Banking and Internet Banking service. Which is comparatively higher than other Banking Services and 40.50% are aware of Phone Banking Service.

5). How often you use E-Banking Services?

Particulars	No. of respondent	Percentage
Once a Week	26	35.2%
Once a Month	24	32.4%
More than once a Week	17	19.6%
More than once a Month	7	9.5%

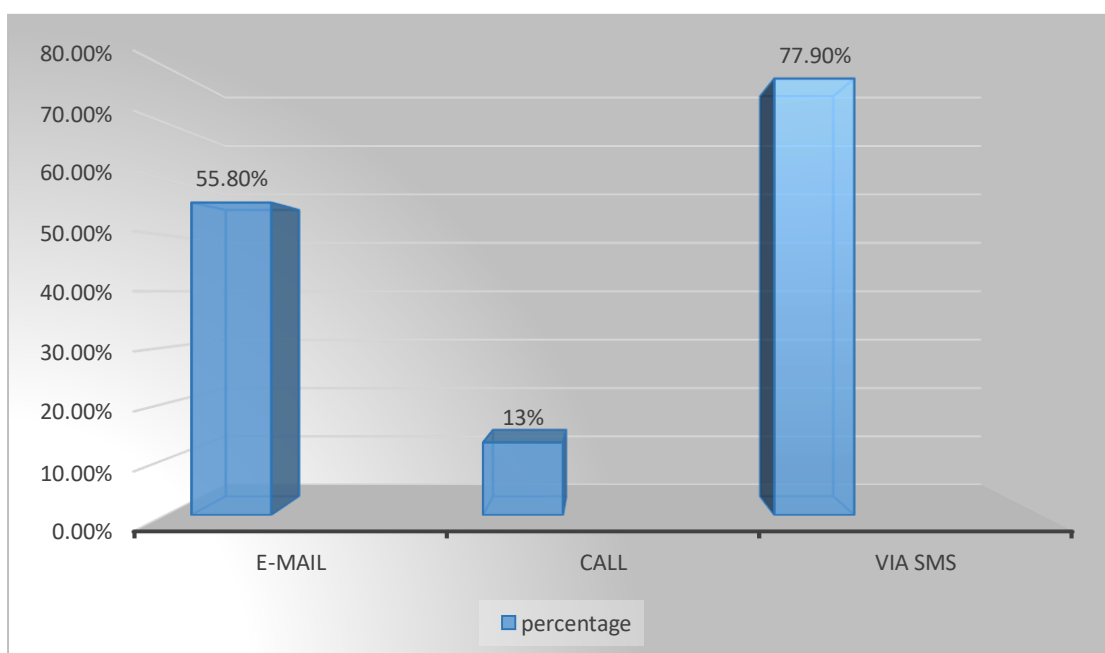


Interpretation

From the following data it is seen that 32% of people use E-Banking Service once in a month. Whereas 35% of people use E-Banking Service once a week, Which is comparatively higher than other. 23% of people use of E-Banking Service More than once a week and only 10% of people use of E-Banking Service More than once a month.

6).How does your Bank provide E-Banking detail to you?

Particulars	No. of respondent	Percentage
E-Mail	43	55.8%
Call	10	13%
Via SMS	60	77.9%

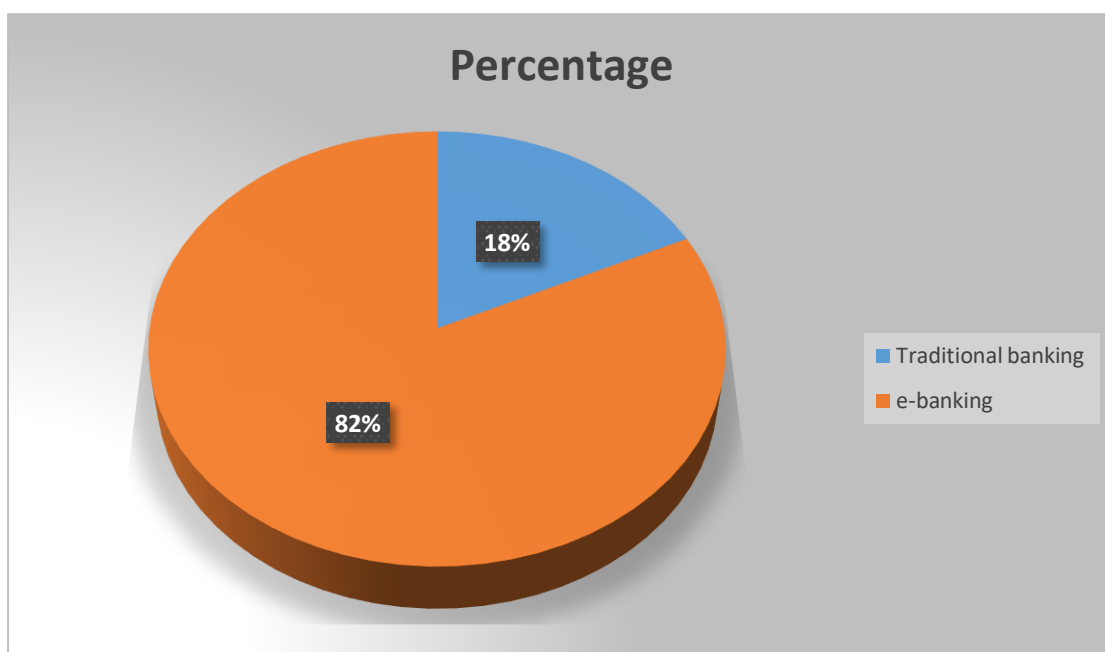


Interpretation

From the following data is shown that 77.90% of bank provide E-Banking detail through VIA SMS which is higher than any another services. whereas 55.80% of bank provide E-Banking detail through E-mail and 13% of bank provide detail through Call.

7). Which mode of Banking do you prefer?

Particulars	No. of respondent	Percentage
Traditional banking	14	17.9%
E-Banking	64	82.1%

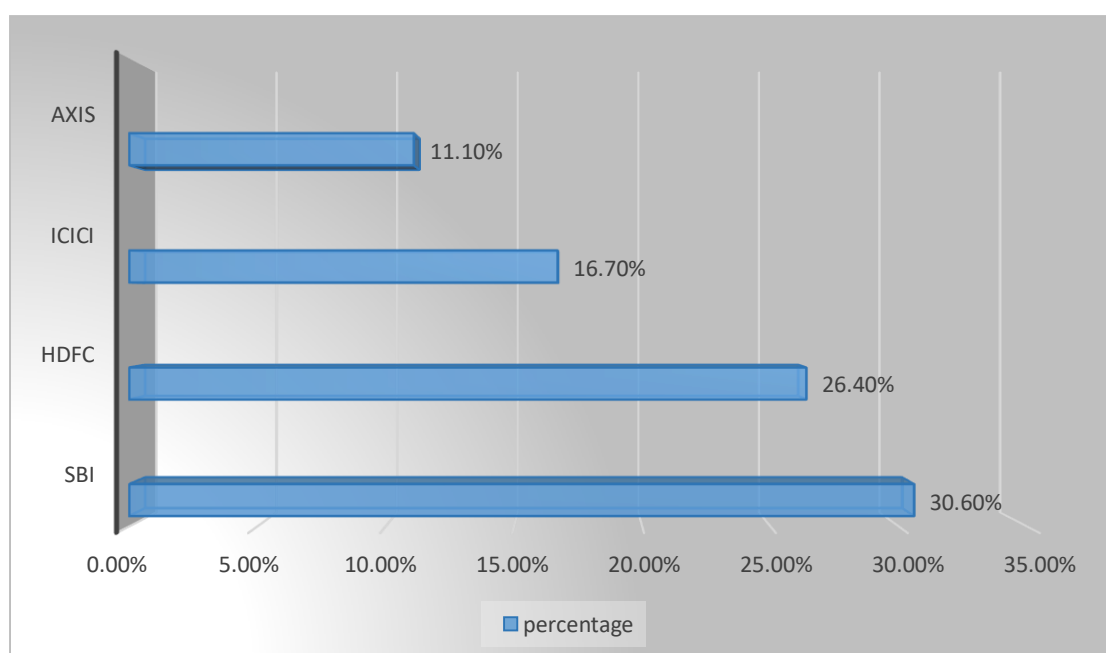


Interpretation

From the data it is seen that 82% of people prefer E-Banking mode of Banking, which comparatively higher. Whereas 18% of people prefer Traditional mode of banking.

8). Which bank according to you provide better Banking Services ?

Particulars	No. of respondent	Percentage
SBI	22	30.6%
HDFC	19	26.4%
ICICI	12	16.7%
AXIS	8	11.1%
Other's	11	15.2

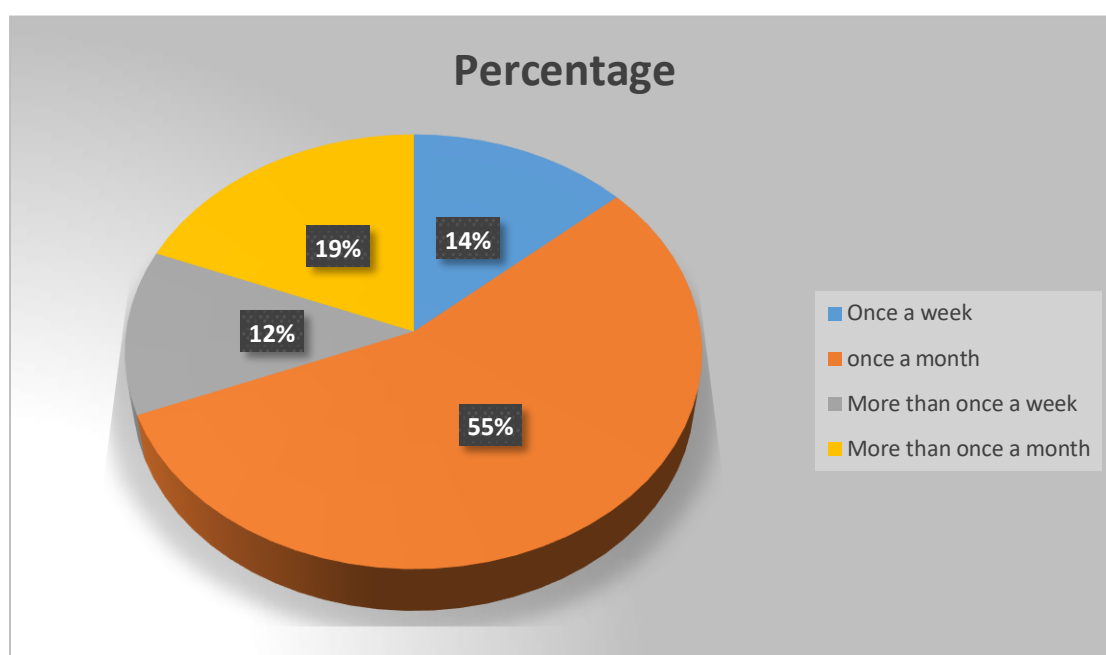


Interpretation

From the following data it is seen that 30.6% of people think that SBI provide better Banking Banking Services than, HDFC which is 26.4%, whereas 16.7% of people think that ICICI provide better service than other , whereas 11.1% of people think that AXIS provide better service than others and 15.2% people think that various others banks provide better services than above banks.

9). How many times do you visit your bank branch after you started using E-Banking Service ?

Particulars	No. of respondent	Percentage
Once a week	10	13.5%
Once a month	41	55.4%
More than once a week	9	12.2%
More than once a month	14	18.9%

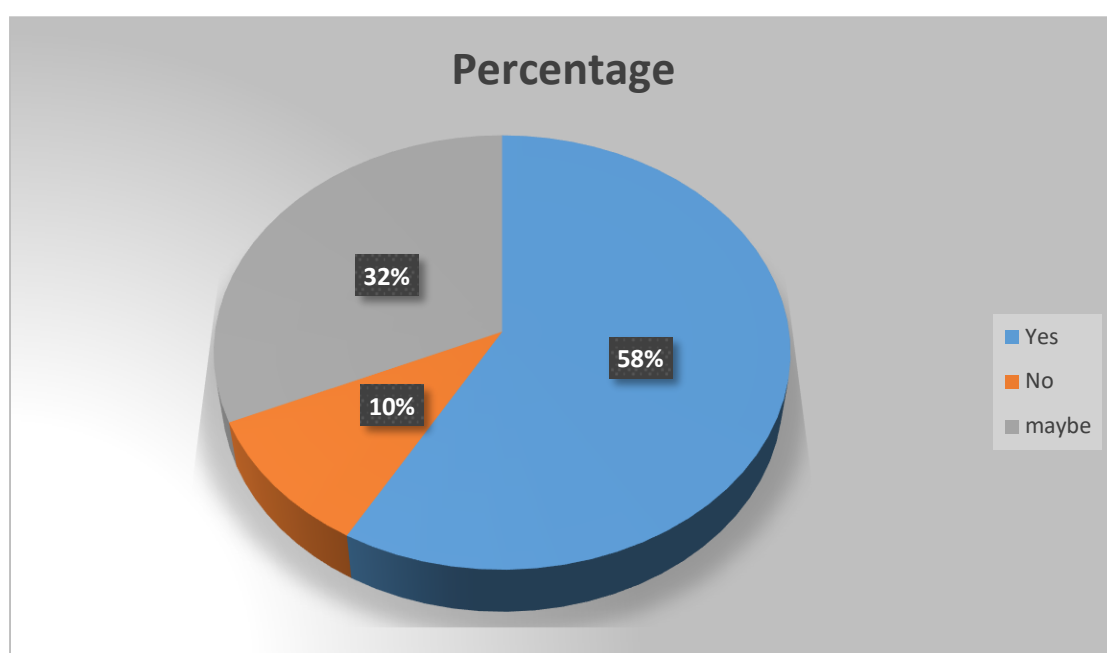


Interpretation

From the following data it is seen that 55% of people visit their banking branch once a month, since they started e-Banking which is the highest. Whereas 19% people visit their banking branch more than once a month, since they started using E-banking. 14% of people visit their banking branch once a week, since they started using E-Banking . and 12% people visit their banking branch more than once a week , since they started using E-banking , which is the lowest.

10). Do you feel Indian E-Banking System is customer friendly?

Particulars	No. of respondent	Percentage
Yes	46	58.2%
No	8	10.1%
Maybe	25	31.6%

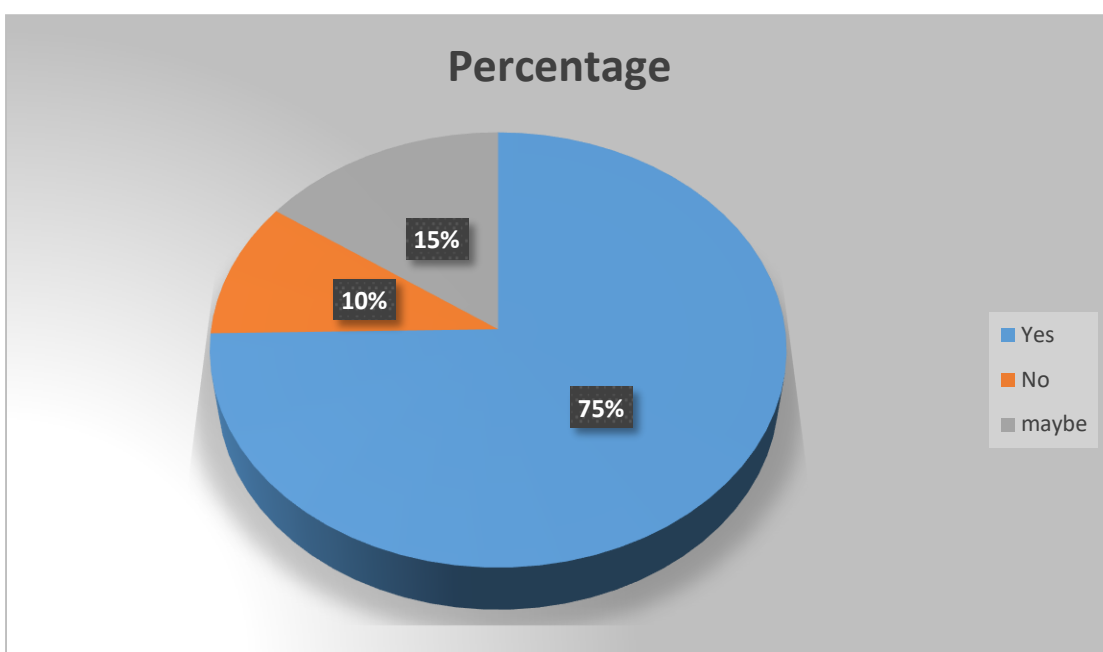


Interpretation

From the following data it is seen that 58% of people felt that Indian E-banking System is customer friendly , which is the highest. Whereas 32% of people feel are not sure about use of Indian E-Banking System is customer friendly and 10% people feel that Indian Banking System is not cutomer friendly which is the lowest.

11). Do you think E-Banking create time and place utility?

Particulars	No. of respondent	Percentage
Yes	59	74.7%
No	12	10.1%
Maybe	8	15.2%

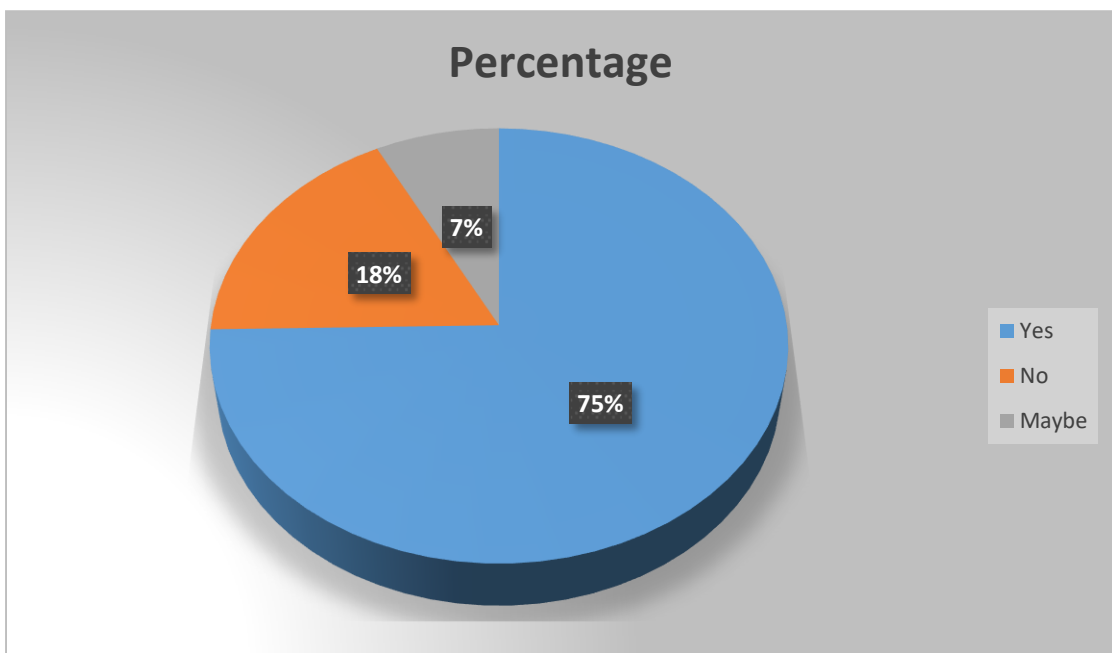


Interpretation

From the following data it is seen that 75% of people think E-Banking create time and place utility, which is the highest. Whereas 15% of people are not sure about that E-Banking create time and place utility, and 10% of people are used to think that E-Banking does not create time and place utility, which is the lowest.

12). Do you have knowledge about E-Banking Frauds?

Particulars	No. of respondent	Percentage
Yes	59	74.7%
No	14	17.7%
Maybe	6	7.6%

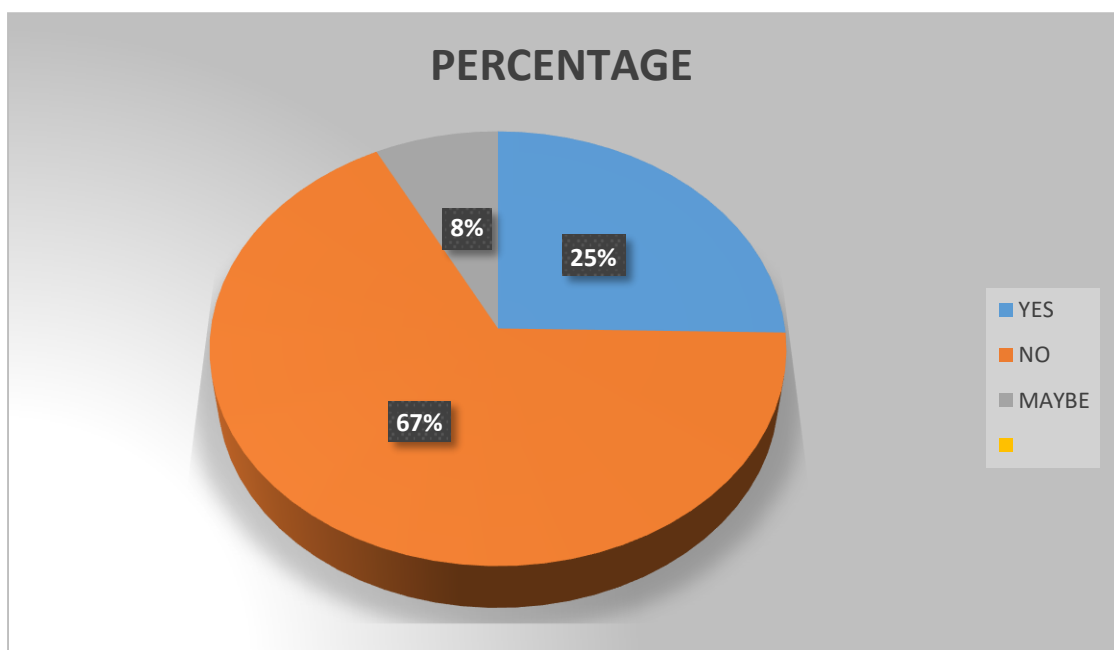


Interpretation

From the following data it is seen that 75% people have knowledge about E-Banking Frauds, which is the highest. Whereas 18% of people does not have knowledge about E-banking Frauds and 8% of people are not sure about whether they have proper knowledge about E-Banking Frauds, which is the lowest.

13). Are you been victim of e-banking fraud?

Particulars	No. of respondent	Percentage
Yes	20	25.3%
No	53	67.1%
Maybe	6	7.7%

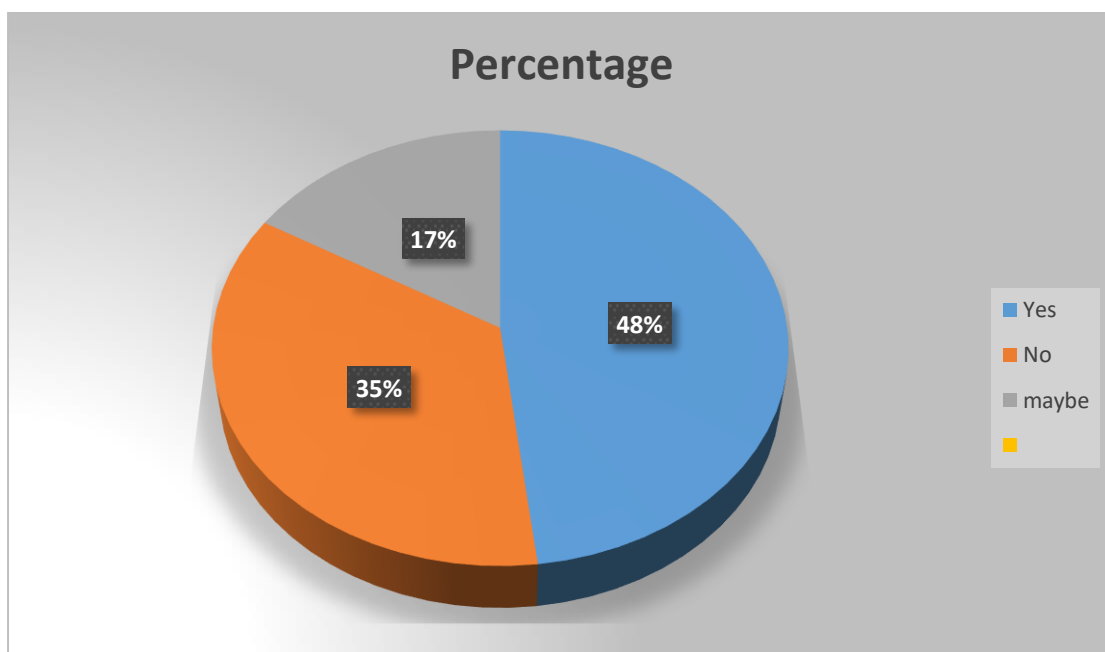


Interpretation

From the following data it is seen that 67% of people are not been a victim of any E-banking Frauds, which is the highest. Whereas 25% of people are been a victim of any E-banking Frauds and 8% of people are not sure about been a victim of any E-banking Frauds, which is the lowest.

14). Have you received any Fraud Call ?

Particulars	No. of respondent	Percentage
Yes	38	48.1%
No	28	35.4%
Maybe	13	16.5%

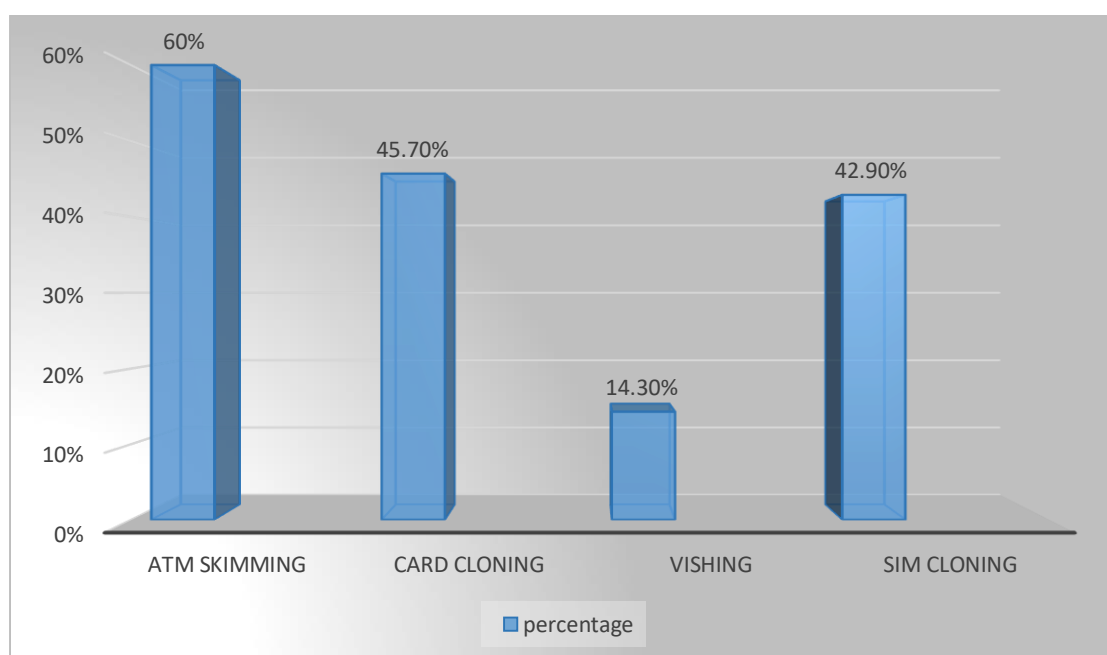


Interpretation

From the following data it is seen that 48% of people have received any Fraud Call, which is the highest . whereas 35% of people have not received any Fraud Call and 17% of people are not sure about receiving of any Fraud Call, which is the lowest.

15). Which E-Banking Frauds do you know about ?

Particulars	No. of respondent	Percentage
ATM Skimming	42	60%
Card Cloning	32	45.7%
Vishing	10	14.3%
SIM Cloning	30	42.9%
Offers	1	1.4%
None	1	1.4%
UPI Frauds	1	1.4%

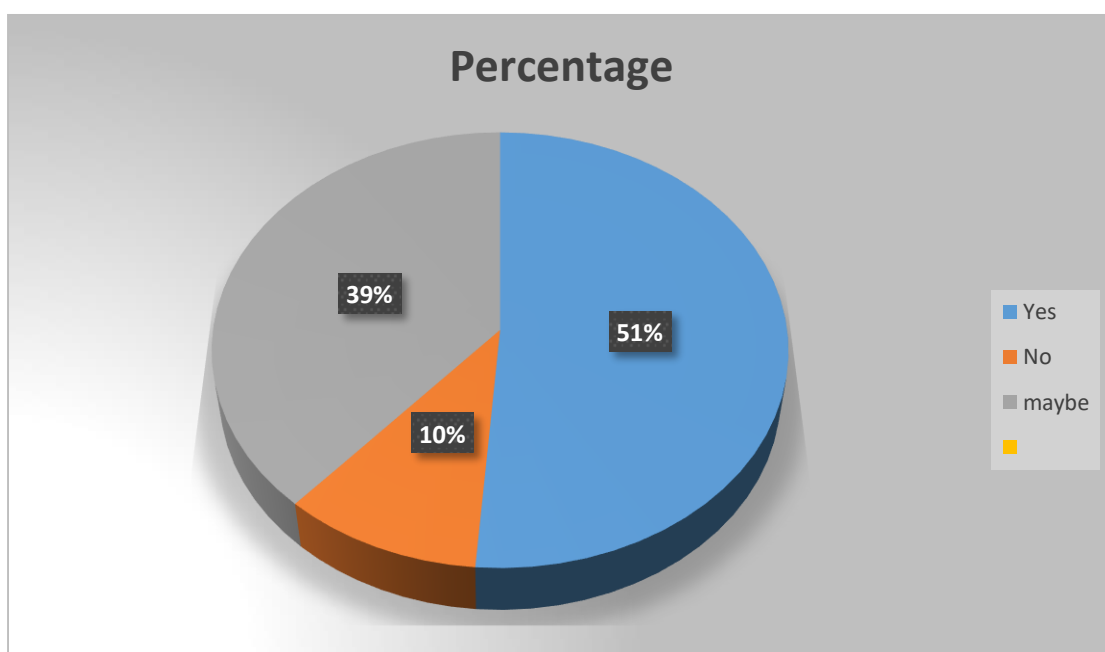


Interpretation

From the following data it is seen that 60% of people know about ATM Skimming Frauds, which is the highest. Whereas 45.70% of people know about Card Cloning frauds, 42.90% of people know about SIM Cloning Fraud and 14.30% of people know about Vishing which, is the lowest

16). Do you trust the security of E-Banking Services?

Particulars	No. of respondent	Percentage
Yes	40	51.3%
No	8	10.3%
Maybe	30	38.5%

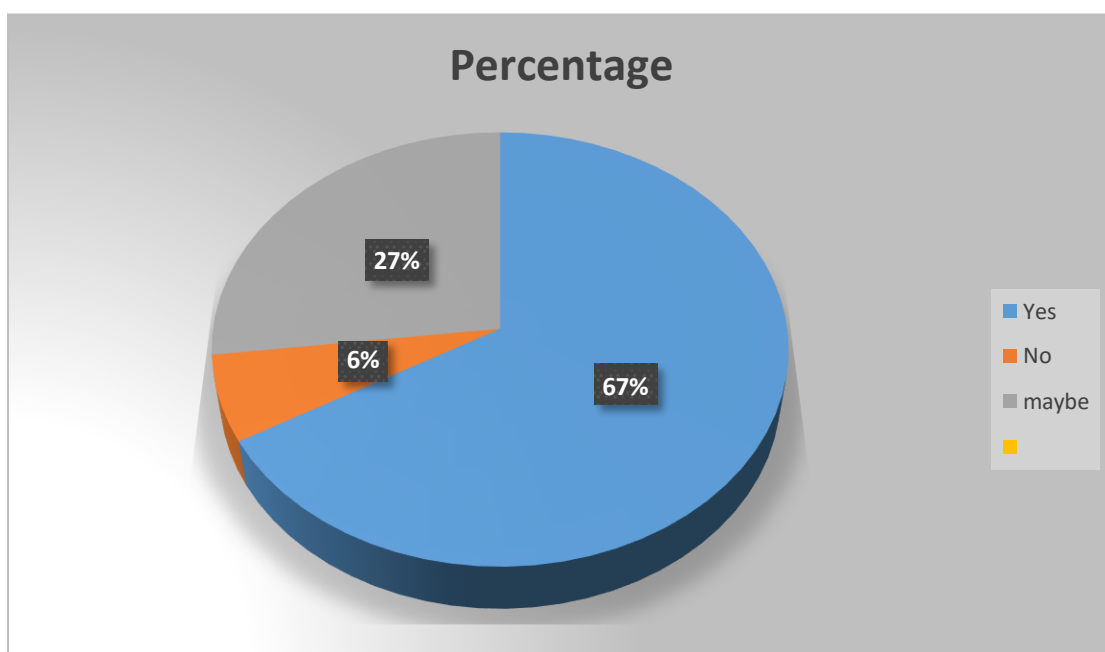


Interpretation

From the following data it is seen that 51% of people trust the security of E-Banking Services, which is the highest. Whereas 39% of people are not sure about whether they trust the security of E-Banking Services and 10% of people do not trust the security of E-Banking Services which is the lowest.

17).Are you satisfied using E-Banking ?

Particulars	No. of respondent	Percentage
Yes	52	66.7%
No	5	6.4%
Maybe	21	26.9%



Interpretation

From the following data it is seen that 67% of people are satisfied using E-Banking , which is the highest. Whereas 27% of people are not sure whether they are satisfied or not using E-Banking and 6% of people are not satisfied of using E-Banking which is the lowest.

SWOT ANALYSIS

STRENGTH

- It offers superior and user-friendly technology.
- It offers anytime – anywhere banking, it provides instant information that is available to users as soon as the transaction place.
- Minimize the use of paperwork
- Stores the data physical which helps in future
- Reduce the cost of a transaction
- Faster response to customer queries and complaints better customer relationship management.
- Improved management accountability and transparency
- Improve trade relationship among banks and customers.
- Development and growth in the banking sector
- Provide confidentiality
- Develop better banking services.

WEAKNESS

- Complexity in the online transaction. The people, not tech-savvy cannot operate bank accounts online unless they are made aware of the E-Banking culture.
- There is a 'digital divide' as the poor are excluded from the use of the internet and so from the financial system.
- The usage of Internet Banking is dependent upon the availability of the internet which means when the server is down the whole system is paralyzed.
- The confidentiality and integrity of data and information over the internet are still a major concern in India.
- Ineffective maintenance of technological infrastructure in some branches.
- Lack of physical presence of bankers which at the time of customer grievance proves to be a negative point.
- Still, there are some banking personnel are not adequately trained and equipped to handle e-banking which creates barrier and limitation in the system.

OPPORTUNITIES

- India is a growing economy with a large number of savers and investors. It holds immense potential for market expansion.
- One of the biggest opportunities for the Indian banking sector is the Indian customer.
- Integration of domestic banks with foreign markets offers countless opportunities to the Indian banking sector to get exposure to the world.
- It creates employment opportunities for youth.
- Better development in areas like risk management and CRM (Consumer Relation Management)
- There still lies a large untapped rural market in India which in the coming year needs to be explored for better research of the banking sector. That leads to greater “financial inclusion”.
- Advancement in the current IT base to avoid system failures and provide an efficient and secure platform for online transactions. Safe and secure payment gateway.

THREATS

- One of the major threats is that it's not secure all the time, lately, there have been cases where frauds have tricked through spam, sites, social media, etc to give out their personal information.
- In times of fierce competition if the bank does not timely upgrade technology they will have to face and suffer losses of the customer and well as profit.
- The E-Banking framework suffers some loopholes which allow criminals to take advantage of the situation. It needs to be more stringent to prevent fraud.
- The risk of frauds is the threat
- Lack of customer loyalty
- Proportion workforce incapable of handling e-banking business result inefficiency
- High transaction costs for banks if their customers do not often transact online because huge investment goes into setting up of internet banking system.



FINDINGS

- From the survey taken, one could come to know that the use of E-Banking is mostly done by teenagers and adults between the age group of 18-35.
- In the survey about awareness of E-Banking, more than 75% of people are aware of E-Banking.
- More than 50% of people rely on e-banking services. They carry on a transaction with the help of E-Banking portals.
- There is a somewhat same amount of awareness of banking services like Debit Card, Mobile Banking and Internet banking. Whereas people are less aware of phone banking service comparing to others.
- People make use of e-banking service mostly either once a week or once a month, there is comparatively less use of E-Banking more than once a month.
- Most people get detail about their E-Banking services or transaction via SMS or E-Mail.
- People used to prefer E-Banking more, rather than Traditional Banking.
- According to a public survey most people used to feel that SBI use to provide better banking service than others.
- After studying the survey we came to know that most people used to visit their traditional branch once a month.
- Most people think that E-Banking help to create time and place utility. one can carry on a transaction from anywhere at any time.
- There is very little awareness about E-Banking frauds among the people most people are still not aware of the frauds in e-banking.
- Most people are not victims of E-banking but still, more than 30% of people have suffered from E-Banking Frauds.
- People mostly know about ATM Skimming , E-Banking frauds.
- People are neutral while trusting in e-banking services. Half of the people's opinions are that they feel safe while using E-Banking but half of them are not assured about it.
- Most people are satisfied using E-Banking services.

SUGGESTION

- The bank should arrange the program to make people learn online banking. So that the customer does not have to rush to a bank which ultimately saves their time also.
- The bank should think about how people will adopt their services
- Online banking is better, so it should be used instead of the traditional banking system. It's is a wastage of time and resources.
- For online banking, English is necessary everybody should know basic knowledge regarding English.
- Knowledge regarding how to do online banking and basic computer operating knowledge is necessary. So the consumer must know about it.
- E-banking services should make their sites user-friendly
- a bank should educate people about the use of genuine sites and give security tips on via payment through debit and credit card.
- Encryption should be there it plays a crucial role in online security
- By all banks access to Internet banking, should be allowed only after entering OTP (One time password) which comes in registered mobile number
- Awareness should be spread among the consumer about the existence of banking frauds.
- Banks should make it compulsory for customers to change their e-banking password after a certain period, for safety purposes.
- The issue increasing in E-Banking needs to be addressed by Amendment of New Laws.

CONCLUSION

- E-Banking has become an important and compulsory instrument in today's world.
- E-Banking enables better business anywhere and anytime.
- E-Banking represents a tremendous opportunity in India.
- The main aim of E-Banking is to making transactions through online poses and make a customer more beneficial.
- Life of people become very fast with the help of Banking System.
- People don't like to stand in a queue in banks they prefer to do an electronic transaction.
- E-Banking helps in controlling corruption in India.
- As we have discussed our E-Banking system faced a lot of frauds.
- There is a need for the development of prevention and controlling methods to control frauds.
- E-Banking needs a lot of improvement for preventing and controlling E-Banking frauds.
- There is a need to aware people about the frauds involved in a financial transaction through E-banking.
- People are having unnecessary insecurity in their minds while doing transactions using ATM, Internet banking, and Mobile Banking.
- Steps are taken by RBI to control frauds but they are not sufficient for improvement.

APPENDIX

Questionnaire

Name of participant: -

Occupation:-

Address:-

Contact no: -

E-Mail:-

Q1). Age group?

- 18-25
- 26-35
- 36-45
- 45 and Above.

Q2).Are you aware of E-Banking Services?

- Yes
- No
- Maybe

Q3).Do you use any E-Banking Services?

- Yes
- No
- Maybe

Q4).Which of the following E-Banking Service are you aware of?

- Internet Banking
- Mobile Banking
- Phone Banking
- Debit Card

Q5).How often you use E-Banking services?

- Once a week
- Once a month
- More than once a week
- More than once a month

Q6).How does your bank provide E-banking detail to you?

- E-Mail
- Via SMS
- Call
- Others

Q7).Which mode of Banking do you prefer?

- Traditional Banking
- Internet Banking

Q8).Which bank according to you provide better E-Banking Services?

- SBI
- ICICI
- HDF
- AXIS
- Others

Q9).How many times do you visit your bank branch, since you started using E-Banking?

- Once a week
- Once a month
- More than once a week
- More than once a month

Q10).Do you feel Indian E-Banking System is Customer Friendly?

- Yes
- No
- Maybe

Q11).Do you think E-Banking creates Time and Place Utility?

- Yes
- No
- Maybe

Q12).Do you have knowledge about E-Banking Frauds?

- Yes
- No
- Maybe

Q13).Are you been a victim of any E-Banking Frauds?

- Yes
- No
- Maybe

Q14).Have you received any Frauds Call?

- Yes
- No
- Maybe

Q15).Which E-Banking Frauds do you know about?

- ATM Skimming
- Card Cloning
- Vishing
- SIM Cloning
- Others

Q16).Do you trust the security of E-Banking Services?

- Yes
- No
- Maybe

Q17).Are you satisfied using E-Banking Services?

- Yes
- No
- Maybe

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