

# SCHOOL OF FINANCE AND COMMERCE GREATER NOIDA

# PROJECT REPORT

ON

### "CONSUMER PREFERENCE TOWARDS ONLINE BANKING SERVICE PROVIDE BY PNB AND SBI"

Submitted in partial fulfillment of the requirement of under graduate program (B.COM Honours)

Submitted By

ABHAY KUMAR THAKUR

Admission NO. - 17GSFC101017

Enrollment NO. - 1708101002

B.Com Honors

Batch-(2017-2020)

# **CERTIFICATE**

This is to certify that Abhay Kumar Thakur a student of B.Com (Hons.) of school of commerce and finance under the Golgotias University has successfully completed the research on the project "consumer preference toward online banking services provide by PNB and SBI" under the supervision and guidance of Prof. Nipur Mishra.

The project report which he is submitting in his genuine and original work to the best of my knowledge.

Place:	
Date:	Signature

Name:-Prof.Nipur Mishra

# **DECLARATION**

I hereby declare that the project work entitled "Consumer preference toward online banking services provide by PNB and SBI" submitted by me under graduate program B.Com (honors) to School of finance and commerce, Galgotias University, Greater Noida is my original work and has not been submitted earlier either to Galgotias university or any other institute/body for the fulfillment of the requirements of any other course of study. I also declare that no chapter of this project is copied, either in whole or in part from any other document. Some references have been taken from books, internet and other learning sources, which are duly mentioned in the bibliography section.

Student name- Abhay kumar Thakur Admission No.- 17GSFC101017 Enrolment No.- 1708101002

Date -

Place-

# **ACKNOWLEDGEMENT**

I would like to express my special thanks of gratitude to Prof. Nipur Mishra who gave me the golden opportunity to do this wonderful project on the topic "Consumer preference toward online banking service provided by SBI and PNB", which also helped me in doing a lot of Research and I came to know about so many new things I am really thankful to them.

Secondly I would also like to thank my friends and Companion who helped me a lot in finalizing this project within the limited time frame.

Thank you

Abhay Kumar Thakur Adm.No.- 17GSFC101017 Eno.No.-1708101002

# **INDEX**

S.No.	Particular	Pg.No
1	Introduction	6
2	Objective of the study	6
3	Overview of online banking	7
4	Different type of online banking	11
5	Security issues of net banking	17
6	RBI guidelines	22
7	About SBI and PNB	24
8	Data Analysis and Interpretation	26
9	Finding	39
10	Conclusion	40
11	Recommendation	41
12	Questionnaire	42
13	Bibliography	44

### INTRODUCTION

Electronic banking, or e-banking, is the term that describes all transactions that take place among companies, organizations, and individuals and their banking institutions. First conceptualized in the mid-1970s, some banks offered customers electronic banking in 1985. However, the lack of Internet users, and costs associated with using online banking, stunted growth. The Internet explosion in the late-1990s made people more comfortable with making transactions over the web. Despite the dotcom crash, e-banking grew alongside the Internet.

- Online banking (or internet banking or E-banking) allows customers of a financial institution to conduct financial transactions on a secure website operated by the institution, which can be a retail or virtual bank, credit union or building society.
- ❖ Online banking is the practice of making bank transactions or paying bills via the Internet. Thanks to technology, and the Internet in particular, people no longer have to leave the house to shop, communicate, or even do their banking. Online banking allows a customer to make deposits, withdrawals, and pay bills all with the click of a mouse.

### **OBJECTIVE OF THE STUDY**

The main objectives of the study are:-

- ✓ To Understand the concept of online banking.
- ✓ To analyze the importance, function and limitation of E-banking.
- ✓ To know the different types of E-banking.
- ✓ To know the securities problems that occur when we do the E-banking.
- ✓ To analyze the present E-banking trends of SBI and PNB with the help of primary data.
- ✓ To differentiate the various payment method of E-banking in PNB and SBI.
- ✓ To examine the impact and problems faced by consumer for while E-banking service like ATM, Internet service, etc.

# RESEARCH MYTHOLOGY

This study is based on both primary and secondary data are:-

<u>Primary source</u>:-This study is based on primary data collected through a structured questionnaire widely circulated among the hundred respondent among the consumer preference toward online banking service provided by SBI and PNB.

<u>Secondary source</u>:- The secondary source of data is collected from website, textbook, magazine and report etc.

# **LIMITATION OF THE STUDY**

The major limitation of study are:-

- A small size of hundred respondent are taken to primary data analysis.
- I have not use modern statistical tool to analyze the data.
- Due to shortage of time, I have not been able to make a depth study,etc.

### AN OVERVIEW OF ONLINE BANKING

#### **DEFINITION**

Online banking is an electronic payment system that enables customers of a financial institution to conduct financial transactions on a website operated by the institution, such as a retail bank, virtual bank, credit union or building society. Online banking is also referred as internet banking, e-banking, virtual banking and by other terms. ② Online banking or E-banking is an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution. Online banking is the practice of making bank transactions or paying bills via the Internet. Thanks to technology, and the Internet in particular, people no longer have to leave the house to shop, communicate, or even do their banking.

#### **HISTORY**

- Before online banking, at-home banking was available from a few major banks.
- ❖ By 2006, 80 percent of U.S. banks offered online banking.
- Today, online banking is a standard offering from many banks and credit unions.

National Online Bank Day is Oct. 8. It's hard to imagine there was once a time when all banking was conducted at actual brick-and-mortar financial institutions. Even the simple task of checking your account balance used to require a trip to the bank. Today, you can check your account balance, send money, withdraw cash, transfer funds and more — right from your smartphone, computer or tablet.

Although so many people take advantage of the digital banking tools offered online today, most people don't know the full history of online banking. Learn how this innovative form of banking evolved and gained mainstream popularity — and also learn how you can save money with an online bank.

Banking has come a long way since the days of regular visits to tellers. Now a customer can take a picture of a check with his phone to deposit it into a savings or checking account and receive SMS banking alerts in the form of texts. The evolution of online banking started in the 1980s when the definition and the practice of internet banking were far different than what exists today.

### ✓ 1981: New York City Banks Test At-Home Banking

The early version of what was considered online banking began in 1981. New York City was the first place in the U.S. to test out the innovative way of doing business by providing remote services as four of its major banks — Citibank, Chase Manhattan, Chemical Bank and Manufacturers Hanover — made homebanking access available to their customers.

### ✓ 1983: Bank of Scotland Institutes First UK Internet Banking Services

The Bank of Scotland offered customers the first UK internet banking service called Homelink. People had to connect to the internet through their TVs and telephones to pay bills and transfer money. What is now known as online banking was formed during this time.

## ✓ 1994: Stanford Federal Credit Union Offers U.S. Internet Banking

In October 1994, Stanford Federal Credit Union became the first financial institution in the U.S. to offer internet banking to all of its customers. A year later, Presidential Bank became the first bank in the country to offer customers

access to their accounts online. The advantages of internet banking systems began to catch on as many other banks soon followed Presidential Bank's lead.

#### √ 1996: NetBank Is Founded

The evolution of internet banking continued with one of the first truly successful internet-only banks, NetBank — which was founded in 1996 and closed in 2007.

### √ 1999: Bank of Internet USA Is Founded

Bank of Internet USA was officially founded as part of the incorporation of Bofl Holding Inc. on July 6, 1999, making it America's oldest internet bank; it opened for business on July 4, 2000. The conveniences and perks of internet banking became obvious to many customers: higher interest rates online than with traditional banks, greater access to accounts, and online banking transfers, to name a few.

### √ 2001: Bank of America Has 3 Million Online Customers

In 2001, Bank of America made history as the first financial institution to gain more than 3 million online banking customers, about 20 percent of its customer base at the time. More people were starting to realize the advantages of online banking.

### ✓ 2006: 80% of US Banks Offer Internet Banking

As the evolution of online banking continued, it slowly gained popularity in e-commerce. When big-name banks began to offer online products and services, e-banking seemed to gain legitimacy for consumers. By 2006, online banking had become mainstream: An overwhelming 80 percent of banks in the U.S. were offering internet banking services.

### ✓ 2009: Ally Bank Is Launched

In 2009, Ally transformed GMAC Bank into what we know today as Ally Bank, joining the ranks of internet-only banks. In recent years, it has repeatedly been named the top online bank in GOBankingRates' annual Best Banks rankings.

### √ 2010: Online Banking Is Growing Faster Than the Internet

In a 2010 survey on consumer billing and payment trends, Fiserv, a financial services technology company, found that online and mobile banking were growing at a faster pace than the internet. Online banking has continued to evolve as more innovations and conveniences have been offered.

Bank of Internet USA has introduced a number of new and technologically advanced products and services since its inception, including mobile internet banking apps for the most popular mobile devices, mobile check deposit, Pop money for money transfer via text or email and EMV-chip debit cards.

### √ 2018: Online Banking Is Standard Practice

Online banking has become so widespread today that customers expect accounts to include free online banking, and many banks only operate on the internet, effectively decreasing overhead costs to offer more competitive rates on savings accounts and enjoy higher profit margins.

# **FUNCTION/FEATURES OF ONLINE BANKING**

The features of online banking are:-

- Viewing account balances.
- Viewing recent transactions.
- Downloading bank statements, for example in PDF format.
- Viewing images of paid cheques.
- Ordering cheque books.
- Download periodic account statements.
- Downloading applications for M-banking, E-banking.
- Funds transfers between the customer's linked accounts.
- Paying third parties, including bill payment and third party fund transfers.
- > Investment purchase or sale.
- Loan applications and transactions, such as repayments of enrolments.
- Credit card applications.
- Register utility billers and make bill payments.
- Financial institution administration.
- Management of multiple users having varying levels of authority.
- Transaction approval process etc.

#### **ADVANTAGE OF ONLINE**

The advantage of online banking are:-

- ❖ <u>Customer's convenience</u>:-Direct banks are open for business anywhere there is an internet connection. They are also 24 hours a day, 365 days a year open while if internet service is not available, customer services is normally provided around the clock via telephone. Real-time account balances and information are available at the touch of a few buttons thus, making banking faster, easier and more efficient.
- More efficient rates: -The lack of significant infrastructure and overhead costs allow direct banks to pay higher interest rates on savings and charge lower mortgage and loan rates. Some offer high-yield checking accounts, high yield certificate of deposits (CDs), and even no-penalty CDs for early withdrawal. In addition, some accounts can be opened with no minimum deposits and carry no minimum balance or service fees.
- Services: Direct banks typically have more robust websites that offer a comprehensive set of features that may not be found on the websites of traditional banks. These include functional budgeting and forecasting tools, financial planning capabilities, investment analysis tools, loan calculators and equity trading platforms. In addition, they offer free online bill payments, online tax forms and tax preparation.
- ❖ <u>Mobility</u> Internet banking also includes mobile capabilities. New applications are continually being created to expand and improve this capability or smart-phones and other mobile devices.
- **Transfers**:-Accounts can be automatically funded from a traditional bank account via electronic transfer. They will also accept direct deposits and withdrawals that the customer authorizes such as payroll deposits and automatic bill payment.
- ❖ <u>Ease of use</u>:-Online accounts are easy to set up and require no more information than a traditional bank account. Many offer the option of inputting the customer's data online or downloading the forms and mailing them in. If the customer runs into a problem, he has the option of calling or e-mailing the bank directly.
- Environment friendly: Internet banking is also environmentally friendly. Electronic transmissions require no paper, reduce vehicle traffic and are virtually pollution-free.

# THE DISADVANTAGES OF INTERNET BANKING

The disadvantage of online banking are:-

- \* <u>Bank relationship</u>:-A traditional bank provides the opportunity to develop a personal relationship with that bank. Getting to know the people at your local branch can be an advantage when a customer needs a loan or a special service that is not normally offered to the public. They can help customers solve problems such as reversing an undeserved fee.
- ❖ <u>Transaction issues</u>:-Sometimes a face-to-face meeting is required to complete complex transactions and address complicated problems. A traditional bank can host meetings and call in experts to solve a specific issue.
- Service issues:- Some direct banks may not offer all the comprehensive financial services such as insurance and brokerage accounts that traditional banks offer. Traditional banks sometimes offer special services to loyal customers such as preferred rates and investment advice at no extra charge.
- Security:-Direct banks are subject to the same laws and regulations as traditional banks and accounts are protected by the FDIC. Sophisticated encryption software is designed to protect your account information but no system is perfect. Accounts may be subject to phishing, hacker attacks, malware and other unauthorized activity. Most banks now make scanned copies of cleared checks available online which helps to avoid and identify check fraud.
- **Connectivity**:-Another issue is that sometimes it becomes difficult to note whether your transaction was successful or not. It may be due to the loss of net connectivity in between, or due to a slow connection, or the bank's server is down.

**Different Method of E-banking** 

**Introduction** 

Electronic banking, also known as electronic funds transfer (EFT), is simply the use of electronic means to transfer funds directly from one account to another, rather than by cheque or cash. You can use electronic funds transfer to:-

- Have your paycheck deposited directly into your bank or credit union checking account.
- Withdraw money from your checking account from an ATM machine with a personal identification number (PIN), at your convenience, day or night.
- Instruct your bank or credit union to automatically pay certain monthly bills from your account, such as your auto loan or your mortgage payment.
- Have the bank or credit union transfer funds each month from your checking account to your mutual fund account.
- Have your government social security benefits check or your tax refund deposited directly into your checking account.
- Buy groceries, gasoline and other purchases at the point-of-sale, using a check card rather than cash, credit or a personal check.
- Use a smart card with a prepaid amount of money embedded in it for use instead of cash at a pay phone, expressway road toll, or on college campuses at the library's photocopy machine or bookstores.
- Use your computer and personal finance software to coordinate your total personal financial management process, integrating data and activities related to your income, spending, saving, investing, recordkeeping, bill-paying and taxes, along with basic financial analysis and decision making.

There are various method of E-banking are:-

#### **AUTOMATED TELLER MACHINES (ATM)**

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

#### **TELE BANKING**

By dialing the given Telebanking number through a landline or a mobile from anywhere, the customer can access his account and by following the user-friendly menu, entire banking can be done through Interactive Voice Response (IVR) system.

#### **SMART CARD:**

A smart card usually contains an embedded 8-bit microprocessor (a kind of computer chip). The microprocessor is under a contact pad on 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 "talk" 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**:

Debit cards are also known as check cards. Debit cards look like credit cards or ATM (automated teller machine) cards, but operate like cash or a personal check. Debit cards are different from credit cards. While a credit card is a way to "pay later," a debit card is a way to "pay now." When you use a debit card, your money is quickly deducted from your checking or savings account.

#### **DIGITAL WALLET:**

E-wallet is a type of electronic card which is used for transactions made online through a computer or a smartphone. Its utility is same as a credit or debit card. An E-wallet needs to be linked with the individual's bank account to make payments. E-wallet has mainly two components, software and information. The software component stores personal information and provides security and encryption of the data. The information component is a database of details provided by the user which includes their name, shipping address, payment method, amount to be paid, credit or debit card details, etc.

#### **DIGITAL CASH:**

Digital currency or digital money is a balance or a record stored in a distributed database on the Internet, in an electronic computer database, within digital files or within a stored-value card. Examples of digital currencies include crypto currencies, virtual currencies, central bank digital currencies and e-Cash. Digital currencies exhibit properties similar to other currencies, but do not have a physical form of banknotes and coins. Not having a physical form, they allow for nearly instantaneous transactions. Usually not issued by a governmental body, virtual currencies are not considered a legal tender and more easily enable ownership transfer across governmental borders.

#### **KIOSK BANKING:**

This is the latest development on the remote baking front, also known as 'Touch-screen' banking. A kiosk is a self- service banking terminal that can be operated with both credit & debit cards. The Debit/credit card can be swiped at against the card reader at the kiosk and account accessed post entering the ATM PIN. Currently, very few banks like Citibank offer this facility to their customers at select ATM centers across the country. Unlike an ATM, which is primarily used for cash transactions like withdrawals, deposits, etc., a kiosk is

primarily used for non-cash transactions like cheque book request, printing bank account statements, funds transfer etc. The number of transactions a particular location is expected to be able to support is key here along with the types of transactions required.

#### **NEFT: National Electronic Funds Transfer (NEFT)**

NEFT is electronic funds transfer system, which facilitates transfer of funds to other bank accounts in over 63000 bank branches across the country. This is a simple, secure, safe, fastest and cost effective way to transfer funds especially for Retail remittances.

#### **RTGS: Real Time Gross Settlement (RTGS)**

It is an electronic form of funds transfer where the transmission takes place on a real time basis. In India, transfer of funds with RTGS is done for high value transactions, the minimum amount being Rs 2 lakh. The beneficiary account receives the funds transferred, on a real time basis. The main difference between RTGS and National Electronic Funds Transfer (NEFT) is that while transfer via NEFT takes place in batches (with settlements and transactions being netted off), in the case of RTGS, the transactions are executed individually and on gross basis. The customer initiating the funds transfer through RTGS has to have the Indian Financial System Code (IFSC) of the beneficiary's bank, along with the name of the beneficiary, account number and name of the bank. The bank branches, both at the initiating and receiving end, have to be RTGS- enabled for the transaction to be processed. Customers with Internet banking accounts can do RTGS transactions on their own.

#### IMPS:

Using IMPS, a relatively newer service, users can transfer money immediately from one account to the other account, within the same bank or accounts across other banks. Similar to NEFT, there is no minimum amount for transactions, but the maximum amount possible is Rs 5 lakhs. Users can carry out Person to Person (P2P), Person to Account (P2A) and Person to Merchant (P2M) transactions from their mobile, Internet or ATM. One of the advantages of IMPS transaction is that it is available 24X7 and even on holidays. This can be payments for utility bills, mobile or DTH recharge, credit card bills, grocery bills, travel ticketing, online shopping and even educational institutes fee payments through this channel.

#### **MOBILE BANKING:**

Mobile banking is the act of doing financial transactions on a mobile device (cell phone, tablet, etc.). This activity can be as simple as a bank sending fraud or usage activity to a client's cell phone or as complex as a client paying bills or sending money abroad. Advantages to mobile banking include the ability to bank anywhere and at any time.

Disadvantages include security concerns and a limited range of capabilities when compared to banking in person or on a computer.

#### **DEMAT SERVICE:**

In India, shares and securities are held electronically in a dematerialized account, instead of the investor taking physical possession of certificates. A Dematerialized account is opened by the investor while registering with an investment broker (or sub-broker). The Dematerialized account number is quoted for all transactions to enable electronic settlements of trades to take place. Every shareholder will have a Dematerialized account for the purpose of transacting shares. Access to the Dematerialized account requires an internet password and a transaction password. Transfers or purchases of securities can then be initiated.

#### ONLINE DEMAND DRAFT:

A demand draft is a negotiable instrument similar to a bill of exchange. A bank issues a demand draft to a client (drawer), directing another bank (drawee) or one of its own branches to pay a certain sum to the specified party (payee). A demand draft can also be compared to a cheque. However, demand drafts are difficult to countermand. Demand drafts can only be made payable to a specified party, also known as pay to order. But, cheques can also be made payable to the bearer. Demand drafts are orders of payment by a bank to another bank, whereas cheques are orders of payment from an account holder to the bank.

OTHER E-BANKING SERVICE, ETC.

**SECURITY ISSUES OF NET BANKING** 

**INTRODUCTION:** 

The Internet has made banking, shopping, and conducting other financial transactions online quite convenient. But when it comes to your money, you want to make sure your transactions are safe. Security of a customer's financial information is very important, without which online banking could not operate. Presently, Internet banking customers only need a computer with access to the Internet to use Internet banking services. Customers can access their banking accounts from anywhere in the world. Each customers is provided a login ID and a password to access the service. It is indeed easy and convenient for customers. However, the use of password does not provide adequate protection against Internet fraud such as phishing. The problem with password is that when it has been compromised, the fraudsters can easily take full control of online transactions. In such cases, the password is no longer works as an authentication token because we cannot be sure who is behind the keyboard typing that password in. However, easy access and convenience should not be at the expense and mercy of the security of information. This is important in order to ensure the confidentiality of information and that it is not being manipulated or compromised by the fraudsters.

#### TYPES OF FRAUDS

Today, there are many fraud are happening while doing online banking. So, there are various types of fraud are:-

#### TROJAN ATTACK:

The attacker installed a Trojan, such as key logger program, on a user's computer. This happens when users visited certain websites and downloaded programs. As they are doing this, key logger program is also installed on their computer without their knowledge. When users log into their bank's website, the information keyed in during that session will be captured and sent to the attacker. Here, the attacker uses the Trojan as an agent to piggyback information from the user's computer to his backyard and make any fraudulent transactions whenever he wants.

#### • MAN-IN-THE MIDDLE:

The attacker creates a fake website and catches the attention of users to that website. Normally, the attacker was able to trick the users by disguising their identity to make it appear that the message was coming from a trusted source. Once successful, instead of going to the designated website, users do not realize that they actually go to the fraudster's website. The information keyed in during that session will be captured and the fraudsters can make their own transactions at the same time.

#### • PHISHING:

One of the primary methods a hacker gains access to account information is through phishing, or tricking the victim into giving up the information voluntarily. A hacker might

send an e- mail or even call, pretending to be a representative of the bank and informing you about some irregularities with your account. All you need to do to sort things out is to provide your password or other account information to verify your identity. If you ever receive a communication that appears to be from your bank and requests this type of information, contact your bank by phone immediately. Do not give out account information to a caller, and do not click any links provided in any e-mails that claim to be from your bank. You should also ensure that any employees with access to the company's accounts follow the same procedures. Step 1 (attacker sends spoof email) Original Website Step 2 (victim access accesses the attacker website) 2 Attacker Victim 1 Website.

#### KEY LOGGERS:

Key loggers are malware programs that record keystrokes and other data, allowing a hacker to capture your password as you enter it. Maintaining up-to-date antivirus suites on your company computers can prevent these malicious programs from gaining a foothold, and setting up your network's firewall to monitor outgoing traffic can help you determine when an infection occurs. Many key loggers and viruses use email to travel from computer to computer, so adding anti-virus protection to your company's email server can help filter out these attacks.

#### SPYWARE:

Spyware is the number one way that online banking credentials are stolen and used for fraudulent activities. Spyware works by capturing information either on your computer, or while it is transmitted between your computer and websites. Often times, it is installed through fake "pop up" ads asking you to download software. Industry standard Antivirus products detect and remove software of this type, usually by blocking the download and installation before it can infect your computer.

#### VIRUSES:

Viruses are designed to compromise your computer systems, and allow others to gain access to your files, etc. This is different than spyware in that a virus may search for information considered to be of value, where spyware will wait for input or action from whomever is using the computer. A system that is compromised may be used to attack other systems, denying people legitimate access to services. An example would be the recent activities of the group called "Anonymous." This group took over computer systems around the world, and used them to launch attacks on websites. These types of attacks are called "denial of service" attacks. One of the most common scenarios with viruses is where they will discover financial data such as payroll files, bank account information, and credit card information. This information is then transferred to criminals who sell it on the black market, or worse – use it for blackmail. Criminals can get anywhere from pennies to

hundreds of dollars for each piece of information, depending on what it is and how they can exploit it.

#### HACKING:

Hacking works similarly to viruses. A hacker uses software to probe for vulnerabilities, and then uses programming techniques, software utilities, or system commands to exploit the vulnerability. The primary objective is to gain access to your system. Once this access is obtained, you can think of it like a burglary – they search for anything of value and often times leave damage behind. More threatening are those hackers who simply take control of your system and wait, to see what information becomes available or what other systems they can gain access to.

#### • MAN IN THE BROWSER:

Man in the browser is a security attack where the perpetrator installs a Trojan horse on a victim's computer that's capable of modifying that user's Web transactions as they occur in real time. According to security expert Philipp Guhring, the technology to launch a man in the browser attack is both high-tech and high priced. Use of the tactic has been limited to financial fraud in most cases, due to the resources required. Both Firefox and Internet Explorer on Windows have been successfully targeted.

#### • IDENTITY THEFT:

Identity theft refers to all types of crime in which someone illicitly obtains and uses another person's personal data through deception or fraud, typically for monetary gain. With enough personal information about an individual, a criminal can assume that individual's identity to carry out a wide range of crimes. Identity theft occurs through a wide range of methods—from very low-tech means, such as check forgery and mail theft to more high-tech schemes, such as computer spyware and social network data minimizing.

#### SPAM:

Spam is an electronic 'junk mail' or unwanted messages sent to your email account or mobile phone. These messages vary, but are essentially commercial and often annoying in their sheer volume. They may try to persuade you to buy a product or service, or visit a website where you can make purchases; or they may attempt to trick you into divulging your bank account or credit card details.

#### NIGERIAN SCAM:

Nigerian or Frauds 409 or 419 are basically the lottery scam in which some overseas persons are involved to cheat innocent persons or organizations by promising to give a good amount of money at nominal fee charges. Their intention is to steal money in the form of fee against the lottery prize.

#### **STEPS TO SECURE & MINIMIZE ONLINE BANKING**

There are some steps for secure and minimizing online banking are:-

#### ➤ Install Latest Security Software:

Prevention is better than cure and the same is true for all online transactions. The World Wide Web is full of malware, spam and spyware and the best protection to avoid your security being compromised is to use good antivirus software. One can also seek to purchase a full version of protection software rather than an anti-virus which can guard against phishing, malware and Trojans.

#### Use Auto Update for All Software:

If you thought your security on the internet was not at risk thanks to all the protective software that you may have installed, think again. Even a small glitch in any of the software being used actively can lead to possible hacking attempt. The most commonly hacked software includes web mail clients and web browsers. Make sure that you always have updated to the latest version of your browser and mail clients like thunderbird and Firefox. Web browser companies release patches as updates regularly to cover any such security glitch in the software. If you find it hard to manually check and update their software, the best way is to keep the auto update option enabled for all software in your computer.

#### Look for Encryption Signs:

Before entering any confidential information or sensitive data on any webpage, check if the website us using proper encryption. Encryption is a security measure that helps protect data while travelling over the various networks on the internet. The basic sighs of encryption include an internet protocol or url address starting with https (where s stands or security) as well as a sign displayed a closed padlock located in the right corner of the screen.

#### Use Different Passwords:

A recent study has revealed that majority of the people use common passwords for a number of transactions including sensitive transactions like net banking and credit cards for the convenience of recollecting. Using the same password makes you at high risk, as if hackers can somehow get access to one password, they would virtually have access to all your accounts. The best way to keep you safe in the virtual world is to use unique passwords for different transactions.

#### > Cash on delivery option:

If any sites are offering cash on delivery option, don't hesitate to use it as it is a good safety tip at no cost. Many sites give this option, but many of us ignore it mainly because of our carelessness in going through all details.

#### Dealing with Offers:

You might be getting lot of promotional mails and coupons as mails from retail companies. But while utilizing such offers, it is recommended to go directly to the seller site rather than entering details in the coupon link, which will be usually sent by third parties.

- Check Website's Digital Certificate:
  - Before doing any transaction from online retailers and merchant websites, make sure to check for safe digital certificates that can authenticate the website. Independent services like VeriSign for example is a popular authentication service provider which helps users to make sure that the website they are dealing with is genuine and not some fraudulent imposter.
- ➤ Avoid Using Public Computers:
  - Always use personal computers or electronic gadgets like phones or tablets to complete any financial transaction over the internet. Never use any public computers or your friend's mobile for such sensitive transaction as their security may have been compromised. Also make sure you always connect to the internet using a secured Wi-Fi connection which is password protected. Doing financial transactions over a public Wi-Fi connection is highly unsafe and not recommended.
- Stay Away from Phishing Emails Seeking Confidential Information: Any promotional mails from your bank or any third party websites or vendors seeking your sensitive banking information must be ignored as spam. A lot of innocent people have been trapped by such phishing websites and emails in the past coming in the name of banks, RBI, IT department etc. Any mail seeking your banking information by offering lucrative lottery or content winnings must never be encouraged.
- Buy From Reputed Merchants:
  Doing online transaction from reputed merchant websites and e-commerce platforms make sure your security is not compromised.

# **ONLINE BANKING IN INDIA-GUIDELINES BY RBI**

The Reserve Bank of India had set up a Working Group on Internet Banking to examine different aspects of Internet Banking. The Group had focused on three major areas of E-banking:-

- (i) technology and security issues,
- (ii) legal issue
- (iii) regulatory and supervisory issues.

Accordingly, the guidelines were issued by RBI on June 14, 2001 for implementation by banks. As per original internet banking guidelines, all banks intending to offer transactional services on the Internet were required to obtain prior approval from RBI. However later on July 20 2005, this restriction was removed thus no prior approval of the Reserve Bank of India is required for offering Internet Banking services. The banks intending to offer the internet banking should have Bank's Board approved Internet Banking policy to ensure the compliance of RBI guidelines.

Some of the internet banking guidelines are:

- The bank should also submit a security policy covering recommendations of RBI and a certificate from an independent auditor that the minimum requirements prescribed have been met.
- Banks will report to RBI every breach or failure of security systems and procedure
- The guidelines issued by RBI on Risks and Controls in Computers and Telecommunications should be adhered to.
- Only institutions who are members of the cheque clearing system in the country
  were permitted to participate in Inter-bank payment gateways for Internet
  payment. Each gateway must nominate a bank as the clearing bank to settle all
  transactions. Payments effected using credit cards, payments arising out of cross
  border e-commerce transactions and all intra-bank payments (i.e., transactions
  involving only one bank) were excluded for settlement through an inter-bank
  payment gateway
- All settlement should be intra-day and as far as possible, in real time. However Inter-bank payment gateways must have capabilities for both net and gross settlement.
- Banks must make mandatory disclosures of risks, responsibilities and liabilities of the customers in doing business through Internet.
- Banks must ensure that KYC guidelines are followed.
- Banks are permitted to offer Internet based foreign exchange services, for permitted underlying transactions, in addition to the local currency products.
   Internet based platform for dealing in foreign exchange, should allow only reporting and initiation of foreign exchange related transactions, with the actual trade transactions being permitted only after verification of physical documents. Banks

- should comply with FEMA regulations in respect of instructions involving cross-border transactions.
- All licensed StCBs, DCCBs, UCBs and RRBs which have implemented Core Banking Solution (CBS) and migrated to Internet Protocol Version 6 (IPv6) can offer Internet Banking (View only) facility to their customers, without prior approval of RBI. The cooperative banks offering Internet Banking (View only) facility to their customers should ensure that the facility is strictly for non-transactional services such as balance enquiry, balance viewing, account statement download, request for supply of cheque books, etc. and no online fund-based transactions are allowed.
- CRAR of not less than 10 per cent.
- Net worth is Rs.50 crore or more as on March 31 of the immediate preceding financial year.
- Gross NPAs less than 7 % and Net NPAs not more than 3%
- The bank should have made a net profit in the immediate preceding financial year and overall, should have made net profit at least in three out of the preceding four financial years.
- It should not have defaulted in maintenance of CRR/SLR during the immediate preceding financial year.
- It has sound internal control system with at least two professional directors on the Board.
- The bank has a track record of regulatory compliance and no monetary penalty has been imposed on the bank for violation of RBI directives/guidelines during the two financial years, preceding the year in which the application is made.
- All RRBs which have implemented CBS and have also migrated to Internet Protocol Version 6 (IPv6) and fulfilling the following criteria may offer Internet Banking with transactional facility to their customers with prior approval of RBI.
- It has sound internal control system which should be approved by a CISA qualified independent auditor.
- The bank should not have accumulated losses.

STATE BANK OF INDIA (SBI)

Bank of India is an multinational public sector banking and financial service statutory body. It is government corporation Statutory body headquarter in Mumbai Maharashtra ranked as 236<sup>th</sup> in fortune global 500 list of the world biggest corporation of 2019. It is largest bank in India with as 23% market share in assets, besides share one fourth of the total on deposit of market.

Formerly. - Imperial Bank of India

> Type. - Public Sector

➤ Traded - NSE,BSE,LSE,BSE SENSEX Constituent, CNX Nifty

. Constituent

➤ ISIN - INE062A01020

➤ Industry - Banking, financial services

➤ Headquarters -State Bank Bhawan, M.C. Road, Nariman Point,

Mumbai, Maharashtra, India

➤ Area served -Worldwide

➤ Revenue -Increase ₹2.79644 trillion (US\$39 billion) (2019)

➤ Operating income -Increase ₹554.36 billion (US\$7.8 billion) (2019)

➤ Net income - Increase ₹8.62 billion (US\$120 million) (2019)

➤ Total assets -Increase ₹50.80914 trillion (US\$710 billion) (2019)

➤ Owner -Government of India (61.23%)

➤ Total customer. – 42crore user in India

# PUNJAB NATIONAL BANK(PNB)

Punjab National Bank (PNB) is a Banking and Financial service bank owned by the Government of India with its headquarters is in New Delhi, India. The bank was founded in 1894. It is the second largest public sector bank (PSB) in India, both in terms of business and its network. The bank has over 115 million customers, 11,000+ branches and 13,000+ ATMs post merger with United Bank of India and Oriental Bank of Commerce, effective from 1 April, 2020.

Type. - Public Sector

Traded - NSE,BSE

➤ Industry - Banking, financial services

➤ Headquarters -New Delhi, India

➤ Area served -India and other few country.

➤ Revenue - ₹58,688 crore (US\$8.2billion) (2019)

➤ Operating income -₹12,995 crore (US\$1.8 billion) (2019)

➤ Net income - ₹9,975 crore (US\$1.4 million) (2019)

➤ Total assets -₹774,949crore (US\$110 billion) (2019)

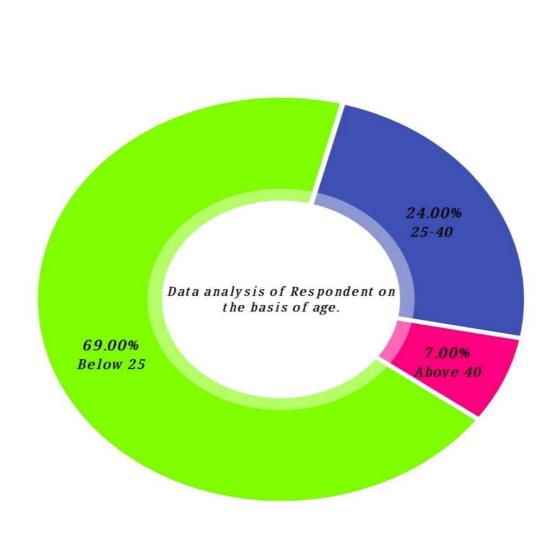
➤ Owner -Government of India

 $\triangleright$  Total customer. -11.50 crore user in India

# **DATA ANALYSIS AND INTERPRETATION OF DATA**

1.Data analysis on the basis of Respondent's age group:-

Age group	Frequency	Percentage%
3elow 25	69	69%
25-40	24	24%
Above 40	7	7%
Гotal	100	100%

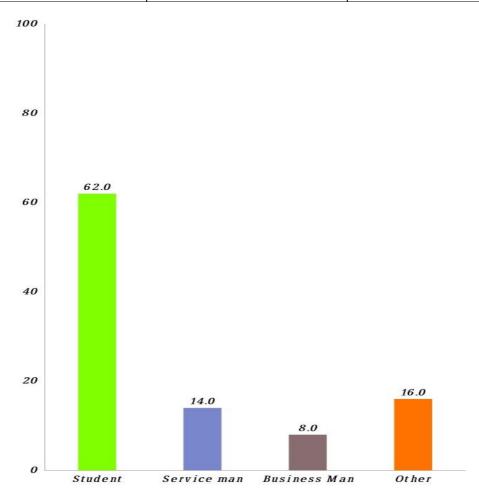


<u>Interpretation</u>:- According to primary data of survey analysis of 100 respondent we analyze that the people age below 25 years use 69% online banking and the people age group between 25 to 40 use 24% online banking and above 40 use 7% online banking.

# 2. Data analysis on the basis of Respondents Occupation:-

Occupation	Frequency	%
Student	62	62

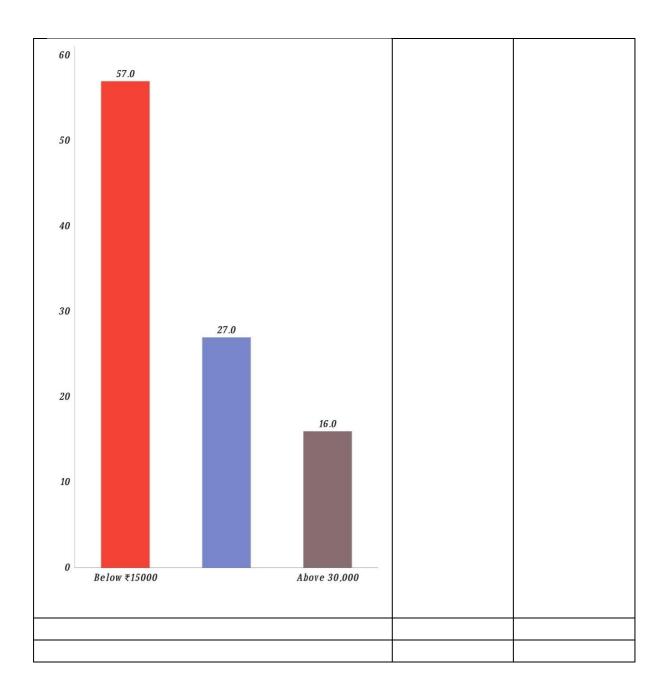
Service man	14	14
Business Man	08	8
Other	16	16
Total	100	100%



**Interpretation**:-according to survey of hundred respondent we find that 62% of a student and 14% serviceman 8% businessman and 16% Other are used online banking.

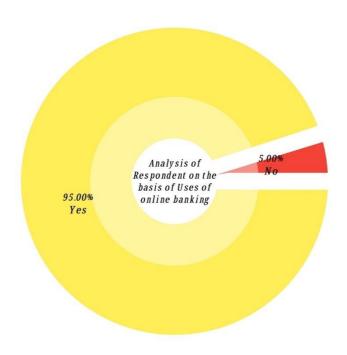
# 3. Analysis of Respondent on the basis of Monthly Income:-

Income(₹)	Frequency	Percentage
Below 15,000	57	57
15,000-20,000	27	27
Above 30,000	16	16



Interpretation:- Among hundred respondent 57% people belong to Below ₹15,000,and 27% people belong to ₹15,000 to 30,000 and 30% people lie above 30,000.

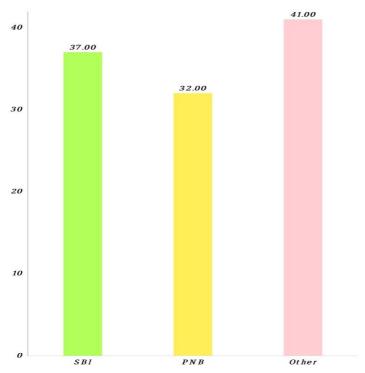
4. Analysis of Respondent on the basis of Uses of online banking:



Interpretation:- Among 100respondent,95% people used online banking and 5% people in Not using online banking.

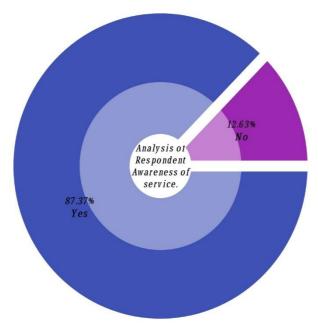
# 5. Analysis on the basis of Bank Account Holder:-

Bank's Name	Frequency	%
SBI	37	37
PNB	32	32
Other	41	41
Total	100	100%



Interpretation:- Among 100 respondent 32% people prefer PNB and 37% prefer SBI and 41% prefer Other bank Account.

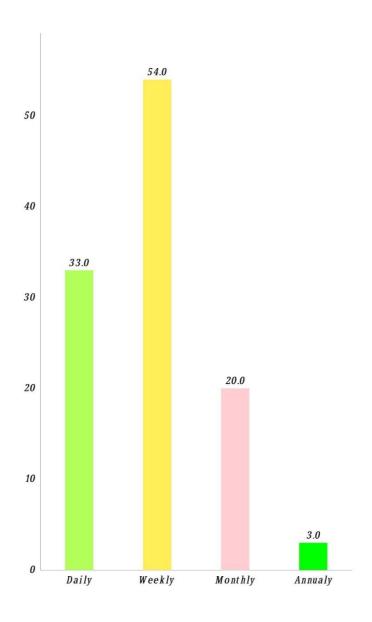
6. Analysis of Respondent Awareness of about service:-



Interpretation:-Among 100respondent 83% people are aware about online services provided by bank and 17 % people are not aware about the online services which is provided by bank.

# 7. Analysis of Respondent Uses on the basis of time:-

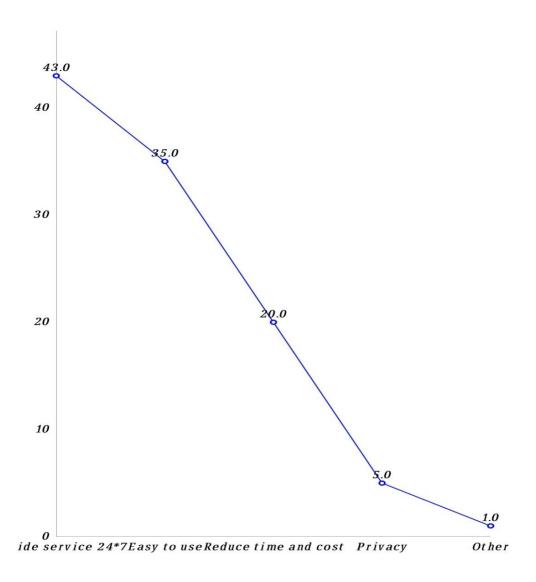
Time	No. of people	%
Daily	33	33
Weekly	54	54
Monthly	20	20
Annually	3	3
Total	100	100%



Interpretation:-Among 100 respondent founded 33% people or users daily use internet banking and 54% people use weekly and 20% people use monthly and 3% people use annually of online banking.

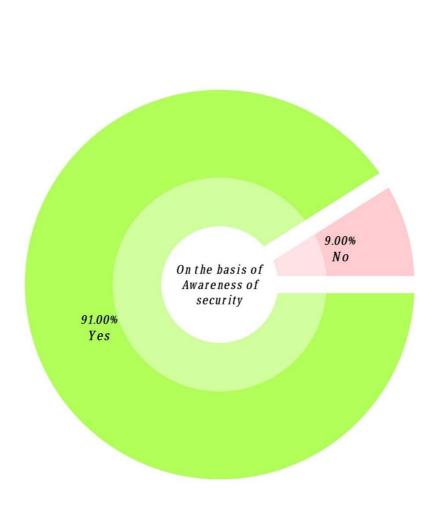
# 8. Analysis on the basis of Function:-

Function	No. of people	%
Provide service 24*7	43	43
Easy to use	35	35
Privacy	5	5
Reduce time and cost	20	20
Other	1	1
Total	100	100%



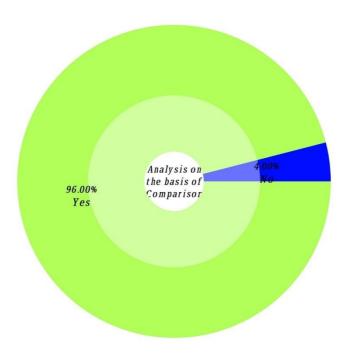
Interpretation:-Among hundred respondent it founded 43% of people use online banking because it provides services 24\* 7 hours and 35% people use online banking because it is easy to use and 20% people use online banking because it save time and cost and 5% people use online banking because it provide privacy 1% people use because of other reason.

9. On the basis of Awareness of security:-



Interpretation:-Among hundred respondent 91% people are aware about online banking trades and 9% people are not aware about online banking threat.

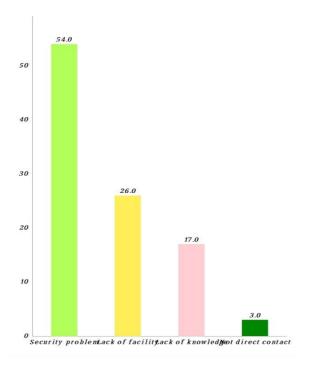
# 10. Analysis on the basis of Comparison:-



Interpretation:-Among hundred respondent 96% people prepare online banking is suitable in modern era and 4% people are not preferred they prefer traditional banking is suitable for them.

# 11. Analysis on the basis of drawback:

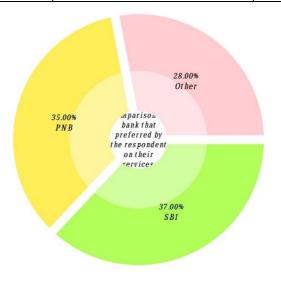
Reason	No. of people	%
Security problem	54	54%
Lack of facility	26	26%
Lack of knowledge	17	17%
Not direct contact with	3	3%
bank		



Interpretation:-among hundred respondent, 54% people are facing problem of security problem and 26% people facing problem of lack of facility and 17% people are facing problem of lack of knowledge and 3% people are facing the problem of not direct contact with bank.these are the following reasons because of people not referring the online banking services.

12. Comparison of bank that preferred by the respondent on their services:

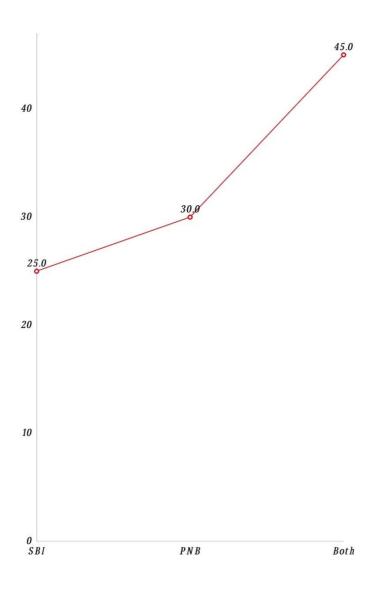
*	1	-
Bank	No.of people	%
SBI	37	37
PNB	35	35
Other	28	28



Interpretation:-According to survey of hundred respondent 37% people prefer for SBI and 35% prefer people prefer PNB and dress 28% people paper other banks.

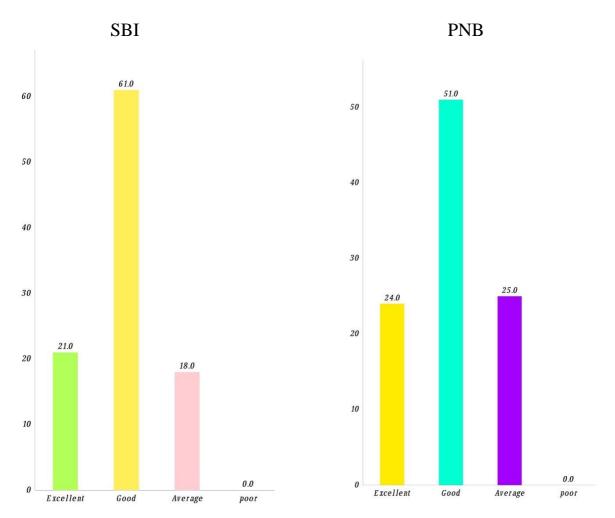
13. Analysis of comparison of bank on the basis of Growth in future:-

Bank	No.of people	%
SBI	25	25
PNB	30	30
Both	45	45



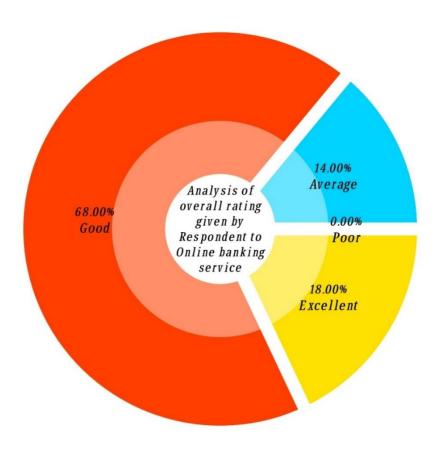
Interpretation:-According to survey of 100respondent ,25% people is saying SBI has been best future growth and 30% people prefer PNB is best preferable growth and 45% people is saying both will be having best future growth.

14. Analysis on the basis of rating of SBI and PNB.



Interpretation:-According to 100 respondent point of view, the respondent is given first preference to SBI and second preference is given to PNB.

15. Analyse of overall rating given to online banking:-



Interpretation:-According to survey of hundred respondent,18% people is given five point rating and 68% people given 4 point rating and 14% people given 3 point rating to the online banking.

### **FINDING**

- ❖ Hundred respondent is respond this study but out of which 95% people is using internet and 5% people is not using internet.
- ❖ On the basis of occupation, out of hundred respondent 62% percent are student and 14% are serviceman and 8% are businessman and 16% are other using online banking service.
- ❖ Out of hundred respondent,32% respondent are preferred PNB bank and 37% respondent are paper SBI and 41% respondent are preferred other bank.
- ❖ On the basis of survey ,there are 83% people who are aware about online banking services and 12% people are not aware about online banking services.
- ❖ According to survey,43% people prefer online services because it provide services 24\*7hrs and 35% is prefer because it is easy to use and 20% people use Online service because it reduce time and cost and 5% people is prefer because of privacy and 1% people prefer because of other reason.
- ❖ From overall survey ,we observed that 91% respondent are aware about all the online threats and fraud and 9% are not aware about online threats and fraud.
- Out of hundred respondent 80% people is update his bank account regularly and 20% people is not updated his person is bank account regularly.
- As, we observed from the overall survey there are 96% respondent professor online banking is better than traditional banking and 4% people are prefer traditional banking is more better than online banking.
- ❖ From the overall survey, as the reason behind limitation of online banking services are 17% of people are not perfect because of lack of knowledge 26% is not working because of lack of facility 54% people are not fine because of secretary problem and 3% are not preferring because of not direct contact with bank.
- ❖ From the overall survey as we analyzed that people are first preference to SBI than PNB but in some services people prefer PNB as compared to SBI.

### **CONCLUSION**

From the overall survey, we conclude that there is need for providing better and customized services to the customers. Banks must be concerned about the attitudes of customers with regard to acceptance of internet banking. The importance of security and privacy for acceptance of internet banking has been noted in many earlier studies and it was found that people claim that they have knowledge about security issues but they have no clear idea about all kind frauds. The present study shows that customers are more reluctant to accept new technologies or methods that might contain little risk. Hence, banks should design the website to address security and trust issues.

This survey was conducted with 100 respondent of Greater Noida, Uttar Pradesh only so we can't say about the real trends of online service of SBI and PNB and other bank all over the India.

As we observed that respondent have some limitation also behind not using all online services like some of having lack of knowledge, some having lack of facility and some having security problem and some having Network issue and other reason also.

Another reason is that some people also want to disclose his/her personal data truly with someone. So we can't perfectly analyze it is been correct or not.

Due to shortage of time this data is collected from only particular group of people not from all types of people.

### **RECOMMENDATION**

- The bank the awareness or knowledge to his costumer and public about how to use online banking facility.
- Bank have to provide the training or demo to how they they can use
   Online banking service provided by them.
- Bank also have to require special type of software where there is less chance of fraud.
- Bank also require to focus on the service and provide 24\*7 service regularly in better way, etc.

# **QUESTIONNAIRE**

<b>T</b>	1 1	. • 1	
Personal		Atail	•
i Cisonai	ιu	ıcıan	

1. i)Nameii)Phone number
2. Age- i)Below 25 ii)25-40 iii)40-60 iv) Above 60
3. Sex-i)Male ii)Female iii)Other
4. Marital status i)Married Ii) Unmarried
5. Education Qualification i)High school ii)UG Iii)PG Other
6. Occupation i) Business man ii) Service man iii) student Other
7. Monthly income i)below 15,000 ii)15,000-30,000 iii) Above
30,000
Question
Q-1 Are you use Online banking?
I)yesIl)No
Q-2 In which bank do you have an account?
I) SBI 11) PNB III) Other
Q-3 Are you aware about all the banking service provided by PNB and SBI?
I) Yes 11) No
Q-4 How frequently do you use Online banking service?
I) Daily ll) weekly Ill) Monthly IV) Annually
Q-5 why do you avail of online banking
I) Provide service 24*7II) Easy to use III) privacy IV) save time and cost V) Others

transaction?
I) Yes II) No
Q-7 Does your bank upgrade online banking services regularly?
I)Yes II)No
Q-8 Do you think online banking is better than traditional banking system
I) Yes II) No
Q-9 What is the drawback of online banking services?
I) Lack of knowledge II) Lack of facility III) Security problem IV) Not direct Contract with Bank
Q-10 Which bank provide better service?
I) SBI II) PNB III) Other
Q-11 which bank is probably in future?
I) SBI II) PNB III) Both
Q-12. Your opinion attitude toward the facility provide by SBI?
I) Excellent II) good III) Average IV) Poor
Q-13 your opinion attitude toward the facility provide by PNB?
I) Excellent II) Good III) average IV) Poor
Q-14 Overall satisfaction level e-banking provided by SBI and PNB?
I) Excellent II) Good III) Average IV) Poor

Q-6 Are you aware of the security treat and and fraud in online banking services? And familiar with the method of transaction to secure online

# **BIBLIOGRAPHY**

- www.google.com
- www.wikipedia.com
- www.investopedia.com
- www.sbi.co.in
- www.pnb.co.in
- www.rbi.org.in
- Books and Magazines