Satisfaction from E-Banking Services

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EXECUTIVE SUMMARY

My research project delves into the comparison of customer perceptions regarding E-banking, particularly in relation to ICICI Bank. Through surveys conducted with 70 respondents from both banks, significant insights have emerged. Despite the continual innovation in banking services, many customers remain unaware of these advancements, and even those who are aware may not fully utilize them. While banks invest substantial resources in developing new technologies like internet and mobile banking, there seems to be a gap in effectively communicating the benefits to customers. This lack of awareness might hinder the potential competitive advantage that these services could provide. Interestingly, most surveyed individuals hold savings accounts with the banks, and the most commonly utilized service is ATM/Debit Cards. Additionally, word-of-mouth recommendations from friends and family emerge as a crucial channel for customers to learn about new banking services. This underscores the importance of effective communication strategies in the banking sector to ensure customers are informed and engaged with the latest offerings. The most important channel that aware customer most regarding the innovative services is family& friends.

CHAPTER – 1

INTRODUCTION TO INDUSTRY

In ancient times, before there were modern banks, temples served as secure places to store valuable items like grain, cattle, and precious metals. People trusted temples to keep their belongings safe because they were considered sacred and well-guarded. There are records dating back to around 1700 BC in Babylon showing that temple priests or monks lent goods to merchants.

As societies developed, banking practices became more formalized. In ancient Greece, temples and various organizations began to conduct financial transactions like loans, deposits, and currency exchange. There was even a system of credit notes, allowing people to transfer money without carrying physical coins.

Individuals also played significant roles in banking. One notable figure was Pythias, who worked as a merchant banker in Asia Minor around 400 BC. Another example is a slave named Passion, who became a wealthy banker in ancient Greece after gaining freedom.

In Egypt, grain was used as a form of money alongside precious metals. State granaries functioned as banks,

particularly during the rule of the Ptolemies. The island of Delos became a significant banking center, following the model of Egyptian grain banks.

During Roman times, banking was mostly conducted by private individuals rather than large corporations. Money lending allowed people to access funds without needing physical currency. Interest rates varied widely, sometimes reaching very high levels. Loans were often taken for productive purposes like setting up vineyards.

However, by the 3rd century, the Roman Empire faced currency problems, leading to a decline in banking activities. Overall, banking during ancient times was more informal and decentralized compared to modern banking systems.

Western Banking History

In the old days, the Church said it was wrong to charge interest on loans, calling it usury. But around the 13th century, people started keeping better financial records. The earliest example we have is from 1299-1300, belonging to some Florentine merchants who also lent money to the Archbishop of Arles.

Banking, like we know it now, started in medieval Italy, in cities like Florence, Venice, and Genoa. Families like the Bardi and Peruzzi were big in banking in 14th century Florence, and the famous Medici bank started in 1397 by Giovanni Medici.

Modern Western economic history began in London's coffee houses. By 1565, the London Royal Exchange was there. Moneychangers, already called bankers, worked in these places, but the term "bank" mainly meant their offices, not what we think of banks today. Financial pros had a hierarchy, with top bankers dealing with heads of state, then city exchanges, and pawn shops at the bottom. Some European cities still have streets named Lombard Street, where pawnshops were.

Banking offices were usually near trade centers. By the late 17th century, big commerce hubs were the ports of Amsterdam, London, and Hamburg. People could invest in the East India trade by buying bills of credit from these banks, but it was risky because ship returns were often delayed, cargo changed unexpectedly, and wars caused cargo seizures and ship losses.

Capitalism

During Adam Smith's time in 1776, banks saw a big growth. They became important in changing from using gold and silver coins to using paper money, which you could exchange for the value the bank held.

This switch in how money worked also changed how ownership and investing worked. The government's role in the economy also changed a lot during this time.

Global Banking

In the 1970s and 1980s, there were some economic problems because of the rules made after the Great Depression. So, governments around the world decided to let businesses handle things themselves instead of controlling them. Big companies started working all over the world, dealing with customers and suppliers everywhere.

During the 1980s and 1990s, banking and investing became really big globally. This happened because lots of

companies, governments, and banks needed these services. Also, the financial markets were doing well, with interest rates going down in the United States and people making lots of money from investing.
Japan was a big part of this growth. They gave lots of money to American companies and
the government, making the U.S. stock market the biggest in the world. But recently, other countries are becoming important too.

Big banks started offering more services and buying other banks to get even bigger. By the year 2000, the top ten banks controlled most of the market.

Other big companies also started offering financial services like insurance and pensions, competing with traditional banks. This is changing how banking works, making it hard to tell the difference between banks and other financial companies.

Major Events in Banking History

Here are some important events in banking history:

- **Florentine banking:** Families like the Medicis and Pittis were big in banking in Florence.
- **Knights Templar:** They were among the earliest bankers in Europe and the Middle East, from 1100 to 1300.
- **Banknotes:** This is when paper money was first introduced.
- **1602**: The Dutch East India Company became the first joint-stock company.
- **1720:** The South Sea Bubble and John Law's Mississippi Scheme caused a big financial crisis in Europe.
- **1781:** The Bank of North America was created by the Continental Congress.
- **1800:** The Rothschild family started banking across Europe.
- **1930-33:** After the Wall Street Crash of 1929, 9,000 banks closed in the United States, causing a huge financial crisis.
- **1986:** The "Big Bang" deregulated London's financial markets, making it a major global banking center.
- **2008:** Washington Mutual collapsed, which was the biggest bank failure in history.

Oldest Private Bank

- **Monte Dei Paschi di Siena:** It's the oldest surviving bank, founded in 1472 in Italy's Siena city-state.
- **Rolo Banca:** Founded in 1473, it's now part of Italy's UniCredit Group.
- C. Hoare & Co: Founded in 1672.
- **Barclays:** Started by John Frame and Thomas Gould in 1690, later renamed by Frame’s son-in-law, James Barclay, in 1736.
- **Rothschild family:** Started in 1700 and still going strong.
- **Wegelin & Co.:** Founded in 1741 in Switzerland's St. Gallen, it's the oldest Swiss bank.
- **Hope & Co.:** Founded in 1762.

Oldest National Bank

- **Bank of Sweden:** Started in 1668, it was one of the first national banks.
- **Bank of England:** Established in 1694, it played a key role in shaping modern central banking.
- **Bank of America:** Known for inventing centralized check and payment processing technology.
- **Swiss banking**: Refers to the banking system in Switzerland.
- **United States Banking:** Refers to the banking system in the United States.

- **Pennsylvania Land Bank:** Founded in 1723 with support from Benjamin Franklin, it focused on providing loans for agriculture.
- **Ziraat Bank (Turkey):** Founded in 1863 to support farmers by offering agricultural loans.
- **Bulgarian National Bank**: Established in 1879, its Bulgaria's central bank, responsible for issuing currency, regulating banks, and managing government reserves.
- **Imperial Bank of Persia (Iran):** Founded in 1888, it was merged with Tejarat Bank in 1979. It played a role in the banking history of the Middle East.

History of Banking in India

For the past thirty years, India's banking system has achieved remarkable success, especially in reaching out to people across the country. It's not just in big cities anymore; banks are now present even in remote areas. This widespread access to banking services has been a significant factor in India's growth.

Since 1969, the government has been regularly shaping policies for Indian banks, and this has paid off well. Fourteen major private banks in India were nationalized as a result.

Not too long ago, people had to wait for hours at bank counters for simple tasks like getting a draft or withdrawing money. But now, they have more options. Transferring money from one bank branch to another used to take days, but now it's as quick and easy as sending an instant message or ordering a pizza. Money transactions have become a part of everyday life.
The first bank in India was established in 1786, though it was quite conservative. Since then, Indian banking has gone through three main phases:

- The early phase from 1786 to 1969.
- The period of nationalization of Indian banks up to 1991, before banking sector reforms.
- A new phase of Indian banking started after 1991, with reforms in the financial and banking sectors.

To make this write-up more explanatory, I prefix the scenario as Phase I, Phase II and Phase III.

Phase-I

In the first phase of Indian banking, several banks were established. The General Bank of India started in 1786, followed by the Bank of Hindustan and Bengal Bank. The East India Company set up the Bank of Bengal (1809), Bank of Bombay (1840), and Bank of Madras (1843), known as Presidency Banks. These three merged in 1920 to form the Imperial Bank of India, initially owned mostly by European shareholders.

Allahabad Bank was founded in 1865 by Indians exclusively, and Punjab National Bank Ltd. was established in 1894. Between 1906 and 1913, Bank of India, Central Bank of India, Bank of Baroda, Canara Bank, Indian Bank, and Bank of Mysore were founded. The Reserve Bank of India was established in 1935.

However, growth during this phase was slow, and many banks faced failures between 1913 and 1948. There were around 1100 banks, mostly small ones. To improve the functioning of commercial banks, the Government of India passed The Banking Companies Act, 1949, later amended to the Banking Regulation Act 1949. This Act gave extensive powers to the Reserve Bank of India to supervise banking in India.

During this time, public confidence in banks was low, leading to slow deposit mobilization. Many people preferred

to save with the Postal department as it was seen as safer. Additionally, most funds were given to traders rather than being invested elsewhere.

Phase-II

After India gained independence, the government took major steps to reform the banking sector. In 1955, the Imperial Bank of India was nationalized, leading to the formation of the State Bank of India. In 1969 and 1980, further nationalization occurred, bringing a significant portion of the banking sector under government ownership. These reforms aimed to expand banking services, especially in rural areas, and promote economic development.

The following are the steps taken by the Government of India to Regulate Banking Institutions in the Country:

- 1949: Enactment of Banking Regulation Act.
- 1955: Nationalization of State Bank of India.
- 1959: Nationalization of SBI subsidiaries.
- 1961: Insurance cover extended to deposits.
- 1969: Nationalization of 14 major banks.
- 1971: Creation of credit guarantee corporation.
- 1975: Creation of regional rural banks.
- 1980: Nationalization of seven banks with deposits over 200 crores.

After nationalization, public sector bank branches in India increased by about 800%, with deposits and advances soaring by 11,000%. Government ownership instilled strong faith and confidence in the public about the sustainability of these banks.

Phase-III

In this phase, significant reforms were introduced in the banking sector. In 1991, a committee chaired by M. Narasimha was formed to liberalize banking practices.

As a result, the country saw an influx of foreign banks and ATM stations, aiming to provide satisfactory service to customers. Phone banking and net banking were introduced, making the entire system more convenient and efficient. Time became more valuable than money.

India's financial system demonstrated resilience, remaining sheltered from crises triggered

by external macroeconomic shocks, unlike other East Asian countries. This resilience is attributed to a flexible exchange rate regime, high foreign reserves, limited foreign exchange exposure for banks and customers, and the non-convertibility of the capital account.

Nationalized Banks in India

The nationalization of banks in India took place in 1969 by Mrs. Indira Gandhi the then prime minister. It nationalized 14 banks then. These banks were mostly owned by businesspersons and even managed by them.

- Central Bank of India
- Bank of Maharashtra
- Dena Bank
- Punjab National Bank
- Syndicate Bank
- Canara Bank
- Indian Bank
- Indian Overseas Bank
- Bank of Baroda
- Union Bank
- Allahabad Bank
- United Bank of India
- UCO Bank
- Bank of India

Before nationalization, only the State Bank of India was nationalized in 1955. In 1960, seven State Banks of India were nationalized. The second phase of nationalization in 1980 included seven more banks. After nationalization, public sector bank branches saw an 800% increase in deposits and an 11,000% jump in advances.

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Commercial Banks in India

The Commercial Banking Structure in India:

1. Scheduled Commercial Banks in India
2. Unscheduled Banks in India

Scheduled banks in India are those included in the Second Schedule of the Reserve Bank of India (RBI) Act, 1934. As of June 30, 1999, there were 300 scheduled banks in India with a total of 64,918 branches. These include State Bank of India and its associates (8), nationalized banks (19), foreign banks (45), private sector banks (32), co-operative banks, and regional rural banks.

On the other hand, non-scheduled banks in India are banking companies that are not included in the Second Schedule of the RBI Act, 1934. These are defined in clause (c) of section 5 of the Banking Regulation Act, 1949 (10 of 1949).

The following are the Scheduled Banks in India (Public Sector):

- State Bank of India

- State Bank of Bikaner and Jaipur
- State Bank of Hyderabad
- State Bank of Indore
- State Bank of Mysore
- State Bank of Saurashtra
- State Bank of Travancore
- Andhra Bank
- Allahabad Bank
- Bank of Baroda
- Bank of India
- Bank of Maharashtra
- Canara Bank
- Central Bank of India
- Corporation Bank
- Dena Bank
- Indian Overseas Bank
- Indian Bank
- Oriental Bank of Commerce

- Punjab National Bank
- Punjab and Sind Bank
- Syndicate Bank
- Union Bank of India
- United Bank of India
- UCO Bank
- Vijaya Bank

The following are the Scheduled Banks in India (Private Sector):

- ING Vysya Bank Ltd
- Axis Bank Ltd
- IndusInd Bank Ltd
- ICICI Bank Ltd
- South Indian Bank
- HDFC Bank Ltd
- Centurion Bank Ltd
- Bank of Punjab Ltd
- IDBI Bank Ltd
- Jammu & Kashmir Bank Ltd.

The following are the Scheduled Foreign Banks in India:

- American Express Bank Ltd.
- ANZ Grid lays Bank Plc.
- Bank of America NT & SA
- Bank of Tokyo Ltd.

- Banquc National de Paris
- Barclays Bank Plc
- Citi Bank N.C.
- Deutsche Bank A.G.
- Hongkong and Shanghai Banking Corporation

INTRODUCTION OF INTERNET BANKING

Internet banking is revolutionizing the banking industry, profoundly impacting banking relationships. It's no longer necessary to visit a branch in person to withdraw cash, deposit a cheque, or request a statement of accounts. True Internet banking allows inquiries or transactions to be processed online without involving a physical branch (known as anywhere banking) and can be done at any time. Providing Internet banking is increasingly becoming a necessity rather than a luxury service. In many developed countries, net banking has become the norm rather than the exception due to its cost-effectiveness in delivering banking services.

What is E-Banking?

E-banking refers to the automated delivery of traditional banking products and services directly to customers through electronic channels. This includes systems that allow individuals or businesses to access accounts, conduct transactions, or obtain information via the Internet or other electronic networks. Customers can access e-banking services using various electronic devices such as computers, smartphones, ATMs, or telephones.

Traditional banks offer services like accepting deposits, providing banking services, and making loans. E-banking, on the other hand, uses the Internet to deliver these services, such as account opening, fund transfers, and bill payments.

There are two main ways e-banking can be offered: through existing banks with physical branches establishing online platforms, or through banks operating solely online. For example, Citibank offers e-banking services alongside its physical branches, providing services like account inquiries, fund transfers, and bill payments through its website. E-banking is usually provided at no extra cost to customers and offers convenience, while also allowing banks to operate more efficiently.

E-banking services are delivered through the Internet using web browsers. Customers need Internet access and web browser software to access these services, with the bank's computer systems handling web servers, databases, and web applications.

Security is a major concern in e-banking. Banks employ various methods to ensure security, including identification and authentication of customers, encryption of messages to prevent interception, and the use of firewalls to protect against external intruders. These security measures aim to instill confidence in customers and safeguard their financial information during online transactions.

History of E-Banking

On October 1, 2000, the electronic signatures bill became effective, recognizing online-signed documents as legally valid. Some banks are planning to implement electronic checks once they establish necessary security measures.

The range of e-banking services is expected to expand in the future. Some banks intend to introduce electronic money and electronic checks. Electronic money can be stored in computers or smart cards, allowing consumers to make small-value purchases online. Electronic checks will resemble paper checks but can be sent electronically from buyers to sellers, endorsed electronically by the seller, and processed for collection by the seller's bank from the buyer's bank. Additionally, banks aim to offer customers more products and services such as insurance and mortgages.

Evolution of E-Banking

The journey of technology in banking began with punched card machines, initially used for basic accounting tasks. However, advancements in telecommunications and the birth of online real-time systems in the late 1970s and 1980s marked a significant shift. This period saw the emergence of "convenience banking," where services were brought directly to the customer's doorstep, revolutionizing the banking experience.

In the 1990s, distributed computing technologies and Relational Database Management Systems (RDBMS) came into play, offering new possibilities for the banking industry. These technologies enabled the configuration of dedicated front-end machines for customer service and risk control, while communication occurred in batch mode without affecting response times. Intense competition prompted banks to rethink their operations, leading to the reinvention and enhancement of products and services to improve efficiency and cost-effectiveness.

The advent of E-banking further transformed the banking landscape, offering alternate banking practices at reduced costs. With a growing population of computer-literate customers, banks had to adapt by providing electronic banking products and services to remain competitive. Failure to do so could result in obsolescence. Moreover, the continuous evolution of technology continues to introduce new products and services, shaping the future of banking and the monetary system.

Need for E-Banking

Traditionally, banking transactions required customers to visit a branch in person to withdraw cash, deposit a check, or request a statement of accounts. However, with the advent of Internet banking, these transactions can now be conducted online without the need to visit a branch. Internet banking, also known as online banking or e-banking, has become more of a necessity than a luxury in many developed countries. It offers a convenient and cost-effective way for customers to access banking services anytime, anywhere. Banks have been at the forefront of adopting technology to enhance their offerings and efficiency. They utilize electronic and telecommunication networks to deliver a wide range of value-added products and services. These delivery channels include direct dial-up connections, private networks, and public networks, with devices such as telephones, personal computers, and Automated Teller Machines (ATMs).

With the widespread popularity of personal computers and easy access to the Internet and World Wide Web (WWW), banks increasingly use the Internet as a channel for interacting with customers. Internet banking allows customers to perform various banking activities online, ranging from checking account balances to transferring funds and paying bills. The range of products and services offered by banks through Internet banking varies widely in terms of content and sophistication.

Types of E-Banking

The common assumption is that Internet banking is the only method of on-line banking.

- PC Banking - The forerunner to Internet banking has been around since the late 1980's and is still widely used today. Individual banks provide software which is loaded on to an SME's office computer. The SME can then access their bank account via a modem and telephone link to the bank. Access is not necessarily via the Internet.
- Internet Banking - Using a Web browser, a user can access their account, once the bank's application server has validated the user's identity.
- Digital TV Banking-Using the standard digital reception equipment (set top box and remote control), users can access their bank account. Abbey National and HSBC services are available via Digital TV providers. One of its main selling points is that no account details are transmitted via the World Wide Web;
- Text Phone Banking - HSBC have introduced this service to allow customers with text phones to check their balance, pay bills and transfer money.

Internet banking can be categorized into two main groups:

1. Traditional banks and building societies: These institutions use the Internet as an additional service to provide businesses with access to their accounts. They typically have physical branches on the High Street.
2. Internet-only banks: These banks operate exclusively online and do not have physical branches on the High Street. As a result, they have lower overhead costs and can offer higher interest rates and lower fees to their customers.

Features of E-Banking

- Exceptional rates on Savings, CDs, and IRAs.
- Checking accounts with no monthly fees, free bill payment, and rebates on ATM surcharges.
- Credit cards with low interest rates.
- Easy online applications for all accounts, including personal loans and mortgages.
- 24-hour account access for convenient banking.
- Quality customer service with personalized attention.
- Quick services provided to customers.
- Enables transfer of funds between accounts and banks.
- Facilitates exchange of statistical information among banks.
- Supports foreign exchange operations.
- Inter-bank applications such as settlement of funds between banks.
- Provides facilities like demat operation, ATM operation, and online banking.

Benefits of E-Banking

For Banks

1. **Cost Savings:** Banks can save money in the long run by eliminating the need for tellers and physical branches, leading to reduced operational costs.
2. **Expanded Customer Base:** The Internet allows banks to reach a broader market without geographic limitations, attracting a well-off customer base. It also levels the playing field for small banks seeking to grow their customer base.
3. **Increased Efficiency:** Providing Internet banking services allows banks to operate more efficiently with nearly paperless transactions.

4. **Enhanced Customer Service and Satisfaction:** Internet banking offers customers a full range of services, including some not available at physical branches. Customers can
5. access information, forms, and applications online, improving efficiency and reducing wait times.
6. **Improved Image:** Offering Internet banking services enhances a bank's image as modern and cutting-edge, even for customers who may not use the service themselves.

For Customers

1. **Bill Pay:** This service allows customers to set up bill payments to individuals or companies through Internet banking. Customers can select the recipient and Bill Pay will withdraw the necessary funds from their account and send the payment via paper check or electronic transfer.
2. **Other Important Facilities:** E-banking provides customers with control over various aspects of managing their bank accounts. They can buy and sell securities, check stock market information, monitor currency rates, view balances, track cleared checks, transfer money, and review transaction history—all without visiting a physical bank branch. Additionally, Internet banking is often offered for free, with no required minimum balance, and customers may enjoy better interest rates.

Internet Banking

Internet banking, also known as online banking, has evolved from PC banking and utilizes the Internet as the primary platform for conducting various banking activities. These activities include transferring funds, paying bills, checking account balances, managing mortgages, and purchasing financial products. Customers access their accounts through a web browser, connecting to the bank's server via the Internet.

A "true Internet bank" provides retail customers with account balances and transactional capabilities exclusively through the World Wide Web. Internet banks may also be referred to as virtual, cyber, net, interactive, or web banks. E-banking encompasses a broad range of alternate delivery channels in the banking industry, reflecting the shift towards electronic business practices.

To effectively navigate this landscape, it's essential for banks to engage in conversations with their customers to understand their preferences and needs. Prioritizing investments in services such as image delivery, commercial cash management, and online bill pay can enhance customer satisfaction and drive business growth in the digital age.

Main Concept of E-Banking

In a survey conducted by the Online Banking Association, security emerged as the top concern among member institutions regarding online banking. Protecting customers' privacy and guarding against fraud are dual imperatives in this regard.

To address these concerns, various measures are employed. "Banking Securely: Online Banking via the World Wide Web" provides insights into Internet commerce and outlines how one company manages secure banking for its financial institution clients and their customers. Additionally, "Security and Encryption on the Web" offers basic information on the transmission of confidential data, while "How Encryption Works" by PC Magazine Online serves as a primer on encryption techniques.

A multi-layered security architecture, comprising firewalls, filtering routers, encryption, and digital certification, is utilized to safeguard account information from unauthorized access. These measures ensure a robust security framework for online banking operations.

Internet Banking in India

Internet banking is revolutionizing the banking sector and profoundly impacting banking relationships. According to Morgan Stanley Dean Witter Internet research, the web holds greater significance for retail financial services compared to other industries. Internet banking encompasses the use of the Internet to deliver banking products and services. It is categorized into four main levels:

Level 1: Basic functionality sites that provide access to deposit account data.
Level 2: Sites offering expanded services beyond basic functions, such as bill payment and fund transfers.
Level 3: More advanced platforms that include personalized financial management tools and customized account options.
Level 4: Highly sophisticated offerings allowing integrated sales of additional products and access to diverse financial services, including investment and insurance products.

Drivers of Change

Advantages once monopolized by large financial institutions have significantly diminished. The Internet has democratized access, providing customers worldwide with equal opportunities. Internet banking serves as a cost-efficient channel for financial institutions. Consumers are increasingly adopting Internet banking due to its numerous

benefits. The ability to access accounts anytime, anywhere via the World Wide Web represents a convenience previously unimaginable. The six primary drivers of Internet banking, in order of importance, are:

- Improve customer access
- Facilitate the offering of more services
- Increase customer loyalty
- Attract new customers
- Provide services offered by competitors
- Reduce customer attrition

The banking sector in India is encountering unparalleled competition from non-traditional banking entities, which are now providing banking and financial services online. Deregulation of the banking sector, along with the emergence of new technologies, is facilitating the rapid and efficient entry of new competitors into the financial services market.

Features of Internet Banking

Internet banking offers a range of features that are similar to those available through phone banking or visiting a local branch. While these features may vary between banks, typical offerings include:

- Transfer of funds between accounts.
- Payment of bills.
- Viewing balance and statements.
- Creation, viewing, and maintenance of standing orders.
- Efficiency in customer relationship management (CRM).

- Introduction of new and innovative products and services.
- Door-to-door services.
- Participation in the evolutionary trend at a global level.

Advantages Of E-Banking

1. **Convenience**: Online banking sites are available 24/7, offering flexibility and eliminating the need to wait in queues.
2. **Ubiquity:** Access your accounts from anywhere, even when out of state or country, allowing for instant management of finances.
3. **Transaction speed:** Online transactions are executed and confirmed quickly, often at or faster than ATM processing speeds.
4. **Efficiency:** Manage all bank accounts, including IRAs and CDs, from one secure site, enhancing organization and accessibility.
5. **Effectiveness:** Sophisticated tools such as account aggregation, stock quotes, and portfolio management programs aid in asset management and financial planning.
6. **Cost-effectiveness:** Online banking is a cheaper alternative for both customers and banks, reducing overhead costs associated with physical branches.
7. **From snob value to necessity:** Online banking has shifted from being a luxury to a necessity, as customers increasingly rely on its convenience and accessibility for their banking needs.

Disadvantage of E-Banking

1. **Start-up may take time:** Registering for online banking may require providing identification and signing forms at a bank branch. Additional paperwork, such as a durable power of attorney, may be necessary for joint account management.
2. **Learning curves:** Navigating banking websites can be complex initially, requiring time and effort to become familiar with the interface. Tutorials may be available to assist in the learning process.
3. **Bank site changes:** Banks frequently update their online platforms, sometimes rearranging features or requiring users to re-enter account information. Adjusting to these changes can be inconvenient and may require additional learning.

How E-Banking Can Easy your Life

Indian banks are striving to simplify your life by offering a wide range of services accessible at your fingertips. With the exponential growth of Internet banking, around 78 percent of the customer base of banks like ICICI Bank is now registered for online banking. Here are some of the services you can avail:

1. **Bill Payment Service:** Easily pay utility bills, service bills, and insurance premiums online. Set up standing instructions for recurring bills to ensure timely payments without any charges.
2. **Fund Transfer:** Transfer funds between accounts within the same or different banks seamlessly. Transfer money anywhere in India with just the payee's account number and bank details, and enjoy quicker transactions compared to traditional methods.
3. **Credit Card Services:** Pay credit card bills, apply for additional cards, request credit line increases, and report lost cards online. You can also avail loans against your credit card.
4. **Railway Pass:** Book railway passes for local trains online, with delivery at your doorstep. This service is available

in select cities like Mumbai, Thane, Nasik, Surat, and Pune, with nominal charges.

5. **Investing Through Internet Banking:** Open fixed deposit accounts, trade in the stock market, purchase mutual funds, and manage your demat account seamlessly online. Investors can easily link their bank and demat accounts for automatic transactions.
6. **Prepaid Mobile Recharge:** Recharge prepaid mobile cards online within minutes. Simply select the operator, enter the mobile number, and recharge amount to top up your phone instantly.
7. **Online Shopping:** Enjoy convenient online shopping through banking partnerships with various shopping websites. Purchase a wide range of products and services, including railway and air tickets, with payment directly from your bank account.

Overall, Internet banking offers unmatched convenience, flexibility, and efficiency, making everyday banking tasks simpler and more accessible than ever before.

Mobile Banking Use Cases

A mobile user has to be seen from his context when using the application. Needs and expectations are not generic, but bound to this context.
As a typical mobile banking user, we consider someone who already is an electronic banking user shows significant affinity to technology and often finds himself in situations where he cannot (or does not want to) rely an infrastructure necessary for electronic banking.
In the following, we introduce four use cases. These have been developed in the course of two group discussions; each group consisted of mobile banking users and mobile commerce experts. The groups focused on identifying real-life situations in which

the use of mobile banking provides an informational added value. The resulting situations have been aggregated to the use cases the use cases are not exhaustive, but representative: Each case stands for a series of cases, which are similar in the depth of the desired information and/or the conditions of the usage. For each use case we identify the most important, concrete need that the user has in this particular situation.
Use Case 1: On-the-Go Balance Checking

User Context: The user is frequently on the move and needs quick access to their account balance without relying on infrastructure for electronic banking.
User Need: The user needs to check their account balance quickly and conveniently while on the move.

Use Case 2: Urgent Bill Payment

User Context: The user realizes they forgot to pay a bill while away from home and needs to make an urgent payment.
User Need: The user needs to make a bill payment immediately, even without access to a computer or traditional banking infrastructure.

Use Case 3: Emergency Fund Transfer

User Context: The user is in a situation where they urgently need to transfer funds to a family member or friend.
User Need: The user needs to transfer funds quickly and securely from their account to another account, even in emergency situations.

Use Case 4: Travel Expense Tracking

User Context: The user is traveling and wants to track their expenses in real-time without the need for manual record-keeping.
User Need: The user needs to monitor their spending and track expenses easily while on the go, ensuring they stay within budget during their travels.

The rise of online banking has brought about new players in the financial industry, like online banks and brokers, who offer personalized services through their websites. This has led to increased competition, pushing traditional banks to innovate and improve their products and services to stay ahead.

Mobile and wireless technology has further opened up opportunities for financial institutions to reach more customers and enhance their loyalty. With mobile devices, banks can offer a wide range of services, from paying bills on the go to receiving stock price updates during lunch breaks. The challenge now is to make these services easily accessible and user-friendly for customers.

Benefits	**Description**
Expand and diversify customer base by reaching out to new markets.	Creating wireless applications and services designed for the broader mobile market will help attract valuable new customers to mobile banking platforms and expand their reach to international markets.
Boost the portion of spending or financial activity a customer allocates to the bank's products and services.	Offering personalized wireless access to financial information is convenient for busy customers. Allowing them to do urgent transactions anytime, anywhere strengthens our relationship with them and keeps more of their business with us.
Increase the total value of assets managed by the bank, the number of transactions processed, and the revenue generated from fees charged for various banking services.	Giving customers flexible access to financial information and accounts lets them do transactions when it suits them best. This leads to more transactions, boosting fee revenue.
Broaden and improve the recognition and reputation of the bank's brand in the market.	Each time customers check their stock portfolio or pay bills wirelessly, it strengthens the brand's reputation for convenience, service, and innovation. This can also spread awareness through word-of-mouth, helping to grow the market.

General Conditions of Mobile Banking

Mobile banking is a popular service offered by banks, allowing customers to manage their finances through their mobile phones. Banks support this because it's convenient for customers and reduces costs by replacing bank clerks with a central web server. As more people use Internet-enabled mobile phones, banking apps have become the next step in electronic banking.

Mobile banking offers even more advantages than electronic banking. Almost everyone

has a mobile phone, so it reaches all social levels. Plus, you can use it anytime, anywhere. Mobile phones are also more secure than personal computers.

However, despite these benefits, many customers still don't use mobile banking apps. The reasons for this disappointment need to be analyzed. Instead of focusing on current apps, let's start from the beginning and look at what customers actually want from these applications.

Customer requirements for mobile banking applications Set of customer requirements

Technical Requirements:

- Support for both types of devices (e.g., smartphones and feature phones)
- Adaptation to different device specifications
- Compatibility with various network operators
- Minimal data usage during transmission

Usability Requirements:

- Ability to work offline when necessary
- Simple and intuitive data input method
- Ability to resume usage from the same point
- One-click access for common tasks

Design Requirements:

- Option to personalize the application according to user preferences
- Scalability to accommodate future updates and expansions
- Notification of important events or updates
- Wide range of functionality to meet diverse user needs

Security Requirements:

- Encryption of data during transmission to ensure privacy
- Authorization process to control access to sensitive information
- Simple and straightforward authorization method to enhance user experience.

General Consideration

Creating a mobile banking application involves more than just transferring an existing Internet application to a mobile device. It requires tailoring the application to meet the unique needs and constraints of mobile users and devices. To develop effective mobile banking applications, we need to follow two steps: First, identify the general characteristics of mobile usage that are relevant. Second, closely observe the user and their context when they want to use mobile banking.

Characteristics of the Mobile Use

The use of mobile applications faces specific restrictions due to the nature of mobile devices and networks. These restrictions include:

- **Limited input and display capabilities:** Mobile devices like phones or PDAs have constraints on input methods and screen sizes, impacting the design of mobile banking apps.
- **Dependence on mobile network operators (MNOs):** Access to certain infrastructure, such as SIM cards, is controlled by MNOs, requiring negotiations with them for app functionality.
- **Expensive mobile data transmission:** Mobile data usage can be costly, especially for circuit-switched transmission, influencing the design to minimize data usage.
- **Transmission of sensitive data:** Mobile banking involves transmitting sensitive data, necessitating robust security measures to protect user information.
- **Potential disruptions in usage:** Mobile usage can be interrupted at any time due to factors like network outages or geographic changes, requiring measures to ensure transactions aren't incomplete.

Mobile Banking: No wires, No worries, New Customers

Mobile communication devices are transforming banking transactions over wireless networks and the Internet. To attract and retain customers, banks need to offer their full range of services across various mobile and wireless devices without disrupting their current infrastructure and delivery channels. Technologies like Wireless Networks, Mobile Gateways, Wireless Application Protocol (WAP), and Wireless Markup Language (WML) are crucial in implementing mobile banking strategies.

In addition to traditional channels like branch and ATM banking, most major banks now offer e-banking as an extension of their services. The next phase in this evolution is wireless mobile banking, accessible anytime and anywhere from mobile phones and personal digital assistants (PDAs). With the widespread availability and affordability of mobile devices, banks have a powerful delivery mechanism to provide services and 24/7 access to customers, regardless of their location.

Unlike PC-based e-banking, mobile banking offers banks the opportunity to engage with customers in an unrestricted environment. The benefits for banks include higher customer satisfaction and loyalty, revenue from transaction-based fees, lower ownership costs, and integrated customer relationship management channels.

Mobile Banking Applications

WAP-banking:

WAP banking is the most common solution for mobile banking and is based on micro-websites following the WAP

standard (Wireless Application Protocol). It functions similarly to electronic banking using HTTP, where the client sends a request and receives a response with page content stored on or dynamically generated by a standard web server. The main difference lies in the use of a WAP gateway for protocol conversion. Banks must take special precautions to secure their web servers and WAP gateways against unauthorized access, especially since sensitive data is processed. Authentication is typically ensured via a PIN (personal identification number) while transaction authorization is done using transaction numbers (TAN), similar to electronic banking. This requires users to carry a TAN list with them to make transactions securely.

SMS-banking:

SMS-banking utilizes the Short Message Service (SMS) in GSM networks to exchange text messages of up to 140 bytes. In this method, the bank generates SMS messages containing account balance or transaction data and sends them to the customer's mobile device upon request. The customer sends an SMS with a request to the bank and receives the desired data as a response. To ensure security, customers include a PIN for authorization in every SMS sent to the bank. Banks must pay attention to the security of the Short Message Service Center (SMSC), which handles message routing, and often run their own SMSC to secure sensitive data. However, data transmission between the SMSC and the mobile device lacks encryption, posing a security concern.

Mobile Network Provide the Following Competitive Advantages

1. **Always-On Access:** Mobile networks allow users to access banking services 24/7, similar to how cable internet reduced dial-up delays.
2. **Wide Network Coverage:** Over 90% of the population in developed countries is covered by 2G mobile networks, which continue to expand.
3. **Personalized Experience:** SIM cards enable personalized functionality, tailored to individual preferences, including security keys and virtual credit cards.
4. **Global Protocols like WAP:** Protocols like WAP facilitate communication between computers and mobile devices, ensuring data is properly formatted for display on phones.
5. **Faster Data Processing:** Improvements in bandwidth and data transmission speed make mobile banking more efficient and cost-effective.
6. **Enhanced Security:** Mobile banking transactions can be safeguarded by private keys stored on SIM cards, turning mobile phones into secure digital wallets.

Drawbacks of E-Banking

E-banking, like any service, has its drawbacks. Some incidents have led to customer information being disclosed, although banks usually address these quickly. One common fear is that money transferred electronically might vanish, but banks reassure customers this shouldn't happen. Internet-only banks may struggle to maintain high interest rates. Other concerns include penalties for phone transactions and limited access to cash via ATMs.

Transactions may not be as instant as expected, as they're still processed through clearing systems, taking up to three working days. To address these risks, banks must prioritize security and meet customers' demands for a safe online environment. This report highlights current and future risks in e-banking, helping businesses minimize them while staying competitive.

Security

Security is a big concern with online banking, but banks work hard to keep your info safe. They use encryption to protect data during transmission, making it almost impossible for hackers to access. However, the weakest point is user authentication, where you have to enter a username, password, and answers to security questions. Here are some tips to stay safe:

- Make sure the website starts with "https://" and has a closed padlock symbol.
- Use strong passwords with a mix of letters and numbers, and change them often.
- Don't write down your login info or share it with anyone.
- Clear your browser's cache after banking and always sign out when done.
- Don't leave your computer unattended while banking.
- Avoid using public computers or Wi-Fi for banking; they're less secure.
- Use recommended security software like firewalls and antivirus programs.
- Keep your web browser updated with the latest patches.
- Don't respond to emails asking for account info or directing you to fake websites. Contact your bank directly to verify any suspicious emails.

Internet Banking in India

Internet banking in India is divided into three types based on the level of access granted:

1. **Information Only System:** This type of system provides general information such as interest rates, branch locations, and bank products. Customers can download application forms, but there is no interaction with the bank's application system. No customer identification is done, so there is no risk of unauthorized access to the bank's production systems.
2. **Electronic Information Transfer System:** Here, customers can access account-specific information like balances and transaction details. However, interaction is limited to reading the information, and authentication is done through passwords. Data is retrieved from the bank's application system either in batch mode or offline, and direct access through the internet is not possible.
3. **Fully Electronic Transactional System**: This system enables bi-directional capabilities, allowing customers to submit transactions online for immediate update. It requires high security and control, with web servers and application systems linked over a secure infrastructure. This system covers various technologies including computerization, networking, security, inter-bank payment gateways, and legal infrastructure.

It includes services such as:

- ATM
- Debit cards
- Smart cards
- Mobile banking

The Indian Scenario

In the Indian scenario, several factors are driving the adoption of Internet banking:

1. **Improved Customer Access:** Internet banking provides customers with convenient access to their accounts anytime and from anywhere via the World Wide Web.
2. **Enhanced Service Offerings:** Banks can offer a wider range of services through their online platforms, providing added convenience and value to customers.
3. **Increased Customer Loyalty:** By offering convenient and efficient online banking services, banks can enhance customer satisfaction and loyalty.
4. **Attraction of New Customers:** Internet banking allows banks to attract new customers, particularly those who value the convenience and flexibility of online banking.
5. **Competitive Edge:** Banks need to keep pace with competitors by providing online banking services, as it has become an expected feature in the banking industry.
6. **Reduction in Customer Attrition:** By offering online banking services, banks can reduce the likelihood of customers switching to competitors who provide such services.

Emerging Challenges

1. **Increasing Demand for Electronic Services:** Customers are increasingly seeking low-cost electronic banking services, driving pressure on financial institutions to offer home banking.
2. **Adoption of Open Standards:** Open standards for banking functionality are emerging, leading to a more competitive Internet banking market.
3. **Growing Customer Awareness:** Customers are becoming more aware of their banking options and are demanding transparency in financial services.
4. **Global Competition:** Global players are entering the Internet banking market, intensifying competition for customers.
5. **Integration with E-Commerce:** Banks are integrating their services with web-based e-commerce platforms, and electronic payments are becoming more prevalent.
6. **Convenient International Transactions:** The Internet and deregulation trends are making international transactions more convenient, eliminating geographic boundaries.
7. **Shift to Banking Portfolios:** Customers are moving towards unbundled product purchases, shifting away from traditional one-stop shopping.

E-Banking in World Wide

E-banking has seen significant growth worldwide since its inception, with notable progress in countries like Estonia, Republic of Korea, and Brazil. In the European Union, around 60 million people, or 18% of the adult population, use online banking, with France experiencing a rapid annual growth rate. Estonia stands out as a leader in internet banking, with 18% of its population using online banking, thanks to user-friendly software and free transactions.

Latin America has shown strength in online retail banking, driven by banks like Bradesco and Banco do Brazil in Brazil. Mexico has also seen substantial growth, with the number of online bank users tripling from 2000 to 2001. However, the expansion of online banking in Latin America may face challenges due to the relatively low percentage of the population with bank accounts.

In Australia, while overall internet usage is high, the adoption of online banking by major banks lags behind. Nevertheless, e-finance is experiencing growth globally, including in developing countries like India and Republic of Korea, where online banking is flourishing. In Asia, Republic of Korea leads in online brokerage and mobile banking, with rapid development also seen in countries like Thailand, Malaysia, and Singapore.

In Bangladesh, there's a notable gap between the computerization levels of foreign banks and local commercial banks. However, 75% of local banks are planning to introduce e-banking, indicating dynamic improvements. Sub-Saharan Africa lags behind in internet banking, but the region has seen significant advancements in microfinance.

Scope of the study

1. The study was limited to the NOIDA area due to time constraints, as visiting branches in other cities or states was not feasible within the timeframe.
2. All classes of customers were considered in the study, ensuring representation from different demographic groups.
3. The focus of the study was on the e-banking service sector.
4. The data collected directly from the customers of the bank provides a realistic source of information.

Objective of Study

1. To investigate the factors influencing customer perception towards e-banking services offered by HDFC and ICICI Bank.
2. To assess the current and future prospects of e-banking from the perspective of customers.
3. To identify the primary challenges encountered by customers when using e-banking services.

Methodology

1. **Survey Design: The** first step in the methodology was to design a comprehensive survey questionnaire. This questionnaire included questions aimed at understanding the factors influencing customer perception towards e-banking, assessing current and future prospects of e-banking, and identifying the major problems faced by customers while using e-banking services.
2. **Sampling:** The next step involved selecting a representative sample of in-house customers from HDFC and ICICI banks in the city of study (NOIDA). The sample selection process aimed to ensure diversity across different customer segments, such as age, income level, and usage frequency of e-banking services.
3. **Data Collection**: Data collection was conducted through the administration of the survey questionnaire to the selected sample of customers. Various methods such as in-person interviews, telephone surveys, or online surveys may have been used depending on the feasibility and preferences of the customers.
4. **Data Analysis:** Once the data was collected, it was subjected to thorough analysis. Statistical techniques such as descriptive analysis, correlation analysis, and regression analysis may have been employed to derive meaningful insights from the data and address the research objectives effectively.
5. **Interpretation and Conclusion:** Finally, the findings obtained from the data analysis were interpreted in the context of the research objectives. Conclusions were drawn regarding the factors influencing customer perception towards e-banking, the current and future prospects of e-banking, and the major problems faced by customers. Recommendations may have also been provided based on the study findings.

CHAPTER- 2
LITERATURE REVIEW

Author Name: **Malhotra & Pooja Singh**
Topic: **Determinants of Internet banking adoption by banks in India**
Date: **December, 2010.**

This study aims to provide an overview of the current status of internet banking in India, assessing the extent of internet banking services offered by various banks and examining the factors influencing the scope of these services. The data for the study were collected through a survey of bank websites conducted in July 2008, with a sample comprising 82 banks operating in India as of March 31, 2007. Multiple regression analysis was employed to investigate the determinants of the extent of internet banking services.

The results of the study reveal that private and foreign internet banks have excelled in providing a broader range and more advanced internet banking services compared to public sector banks. Significant determinants affecting the extent of internet banking services include the size of the bank, the bank's experience in offering internet banking, financing patterns, and ownership structure.

However, the study acknowledges limitations in the scope and size of its sample, as well as other variables such as market dynamics, environmental factors, and regulatory frameworks that may influence banks' decisions to offer internet banking services comprehensively.

The primary purpose of the study is to address significant knowledge gaps concerning the landscape of internet banking in India. The findings are expected to be beneficial for various stakeholders, including government entities, regulators, commercial banks, financial institutions, cooperative banks planning to adopt internet banking, bank customers, and researchers. By identifying areas where banks lag in internet banking adoption and service provision, the study aims to inform strategic decision-making and facilitate improvements in the delivery of banking products and services.

Understanding the factors influencing the extent of internet banking services is crucial for economists studying growth determinants and for the development of relevant technologies. Additionally, the study contributes to the empirical literature on the diffusion of financial innovations, particularly internet banking, in developing countries like India.

Author Name: **Polaris Software Lab Limited (POLS.BO)**
Topic: **Polaris Software and IndusInd Bank launch INTELLECT PRIVACY Internet Banking Security Card, PR Newswire**
Date: **May, 2010.**

In this study, Polaris Software Lab Limited, a prominent Financial Technology Company, introduced Intellect (TM) PRIVACY, a cutting-edge online and internet banking security solution. This technology, developed based on state-of-the-art technology and four patents filed by the Indian Institute of Technology Madras, aims to safeguard both customers and banks from various cyber threats, including phishing attacks such as deceptive emails, key/screen loggers, brute force/dictionary attacks, and Trojans.

Intellect PRIVACY employs multi-factor dynamic authentication technology to authorize online banking transactions securely. This system provides a completely secure platform for conducting online banking activities. Professor L S Ganesh, Coordinator of the program, emphasized the collaborative effort between the Department of

Computer Science and Engineering and the Department of Management Studies at IIT Madras to design a cost-efficient and user-friendly internet security technology suitable for the rapidly growing e-commerce landscape. The approach adopted for this development was the Cost-Usability-Security (CUS) framework.

IndusInd Bank, recognizing the importance of enhancing security for web-based transactions, became the first organization to adopt Intellect PRIVACY. This security solution involves a simple plastic card that customers can use to generate a one-time password (OTP) for various online banking transactions, including signing on to their accounts. Banks have the flexibility to issue booklets containing a specified number of cards to customers, ensuring convenience and security for multiple transactions. Importantly, the card itself holds no intrinsic value, and customers can easily manage its lifecycle, including requesting a new booklet and reporting lost cards through online banking channels.

Author Name: **Azouzi**
Topic: **The Adoption of Electronic Banking in Tunisia, Journal of Internet Banking and Commerce**
Date: **June, 2009.**

This paper delves into the impact of the ongoing technological revolution on the banking sector in Tunisia. It seeks to understand the behavior of customers regarding the adoption

of electronic banking in the country. Through empirical research conducted in Tunisia, the study identifies various factors that influence customers' attitudes toward e-banking.

Among the factors examined, age, gender, and educational qualifications emerge as significant determinants that divide the customer base into adopters of electronic banking and defenders of traditional banking methods. The study underscores the importance of these demographic variables in shaping individuals' decisions regarding the adoption of e-banking services.

Despite governmental incentives and widespread awareness of the benefits of e-banking, the research reveals that many Tunisian customers still prefer conventional banking methods. This reluctance to embrace electronic banking is attributed, in part, to concerns about potential losses due to transaction errors or cyberattacks by hackers.

Overall, the study highlights the complex interplay of factors influencing the adoption of e-banking in Tunisia, shedding light on both the drivers and barriers to its uptake among the population. This understanding is crucial for policymakers and financial institutions seeking to promote the growth of electronic banking services in the country.

Author Name: **B. Dizon, J.A.**
Topic: **Special Feature: Electronic Banking.**
Date: **January, 2009.**

This study underscores the shifting landscape of banking, where traditional brick-and-mortar branches are being complemented and, in some cases, supplanted by e-banking facilities. While larger banks historically conducted the majority of their operations through physical branches, there has been a significant investment in e-banking infrastructure within the finance sector. This investment aims to provide clients with 24-hour, queue-free services accessible through various channels such as ATM machines, mobile phones, and the Internet.

The appeal of e-banking primarily lies in its convenience, catering to the modern-day demand for instant results without the need to wait in long queues at bank branches. Francisco M. Caparros, Jr., a senior vice-president at Asia United Bank and president of Banc Net, highlights this aspect, emphasizing how clients increasingly value efficiency and accessibility in banking services.

Moreover, e-banking streamlines transaction processes by eliminating much of the paperwork traditionally associated with banking activities. This reduction in administrative tasks is particularly appealing to clients who prefer hassle-free banking experiences. Ferdinand G. La Chica, first vice-president and marketing group head for Sterling Bank of Asia, underscores the importance of security in online banking, noting the reliance on user authentication measures such as usernames, passwords, and additional security tokens to safeguard against theft and unauthorized access.

Innovative initiatives, such as the appointment of local merchants like sari-sari stores as third-party agents by the Rural Bank Association of the Philippines, further expand the reach of banking services to underserved communities. These informal outlets provide opportunities for individuals and small-income businesses, particularly those in rural areas, to access banking services without the need to travel to urban centers.

Overall, the study highlights the transformative impact of e-banking on the banking sector, emphasizing its role in enhancing convenience, efficiency, and accessibility for clients while also addressing security concerns and expanding financial inclusion initiatives.

Author Name: Uppal, R.K. & Chawla R.
Topic: E-Delivery Channel-Based Banking Services: An Empirical Study. Institute of Chartered Financial Analysts of India (Hyderabad).
Date: Feb, 2009.

This study delves into customer perceptions regarding e-banking services through a survey conducted in Ludhiana district, Punjab, in October 2008. The survey encompassed 1,200 respondents, evenly distributed among three bank groups: public sector, private sector, and foreign banks. The research explores various aspects of customer perceptions related to e-banking services, including the necessity of such services, their quality, concerns about bank frauds, the future outlook of e-banking, customer preferences regarding banks, comparative analysis of banking services across different bank groups, preferences regarding the use of e-channels, and the challenges faced by e-bank customers.

A significant finding of this study is that customers across all bank groups express interest in e-banking services. However, they encounter several challenges, such as inadequate knowledge about e-banking, poor network connectivity, lack of infrastructure, inconvenient locations of banking facilities, instances of ATM card misuse, and difficulties in opening accounts. In response to these challenges, the paper proposes strategies aimed at enhancing e-banking services. These strategies include customer education initiatives, organizing seminars and meetings to raise awareness, improving network and infrastructure facilities, offering online shopping facilities, and ensuring the proper functioning and installation of ATM machines.

Furthermore, the study highlights that a majority of professionals, business-class customers, and individuals with varying levels of education perceive e-banking as having improved the quality of customer services provided by banks. This positive perception underscores the potential benefits of e-banking in enhancing overall customer

experience and satisfaction within the banking sector.

Overall, the findings of this study provide valuable insights into the perceptions and experiences of bank customers regarding e-banking services, along with recommendations for addressing existing challenges and further improving the quality and accessibility of such services.

Author Name: **Reeti, Sanjay, and Malhotra A.**
Topic: **The Customer's perspective s regarding e-banking in an e merging economy.**
Date: **June, 2009.**

Understanding customer perspectives on e-banking is crucial for banks operating in emerging economies like India. Factors influencing customer perceptions, attitudes, and satisfaction with e-banking services play a vital role in shaping banks' strategic decisions. This study, conducted in the northern part of India, aimed to uncover these factors.

The key findings suggest that customers' usage of e-banking services is influenced by factors such as the type of account they hold, their age, and profession. Among e-banking services, balance inquiry is deemed most useful by customers. Security and trust are identified as the most significant factors affecting customer satisfaction, while slow transaction speeds emerge as the most common challenge faced by e-banking users.

These insights provide valuable guidance for banks in crafting their e-banking strategies to better meet the needs and expectations of their customers in emerging economies like India.

Author Name: **Awamleh**
Topic: **Diffusion of Internet Banking amongst educated consumers in a high-income non-OECD country**
Date: **July, 2007.**

This study investigates the internet banking preferences of educated banking consumers in the UAE and explores the factors influencing their intention to adopt or continue using internet banking services. Despite the UAE's leading position in the banking sector regionally, internet banking has not been fully leveraged as a value-added tool to enhance customer relationships and achieve cost advantages.

The study employs the Technology Acceptance Model (TAM) to identify factors affecting customers' intentions regarding internet banking adoption and continued usage. Data from both internet banking users and potential users in the UAE are analyzed using factor analysis and multiple regression analysis.

Relative usefulness, defined as the degree to which a new technology surpasses existing ones, emerges as a significant factor influencing both adoption and continued usage of internet banking. The study finds significant differences between users and non-users of internet banking across several identified factors.

For internet banking users, factors such as relative usefulness, perceived risk, computer efficacy, and image significantly impact continued usage. Among non-users, relative usefulness and result demonstrability are significant factors. The study also explores the effects of demographic variables such as age, gender, income, and e-commerce usage.

The findings carry implications for banks in the UAE, suggesting the need to emphasize the relative usefulness of internet banking and address perceived risks to encourage adoption and continued usage. Future research directions are also outlined to further explore these factors and their implications for internet banking adoption in the UAE.

Author Name: Nitsure R.R.
Topic: E-Banking: Challenges and Opportunities.
Date: December, 2004.

This article explores the challenges and opportunities presented by e-banking in the banking industry. While e-banking has the potential to revolutionize banking by reducing transaction and delivery costs, there are significant hurdles faced by developing countries with low information and telecommunication technology penetration.
Key concerns discussed in the paper include the "digital divide" between wealthy and impoverished populations, differing operational environments for public and private sector banks, security and authentication issues, management and regulatory challenges, and insufficient financing for small and medium-sized enterprises (SMEs).

Addressing these challenges is crucial for realizing the benefits of e-banking initiatives and ensuring inclusive access to financial services, particularly in developing economies. Efforts to bridge the digital divide, enhance security measures, streamline regulations, and provide adequate financing for SMEs are essential steps toward leveraging the opportunities presented by e-banking.

Author Name: Asghar
Topic: Banking In a Cloud of Electrons.
Date: March 17, 2004.

The study emphasizes the enduring significance of online banking and the web channel in the financial services industry. It underscores that e-banking is not just a passing trend but represents the future of banking distribution channels. Successful e-banking initiatives have emerged through a combination of innovation and accumulated experience.

To fully leverage the potential of e-banking, financial institutions must capitalize on both innovation and experience. This entails recognizing the revenue-generating opportunities offered by e-banking and integrating them seamlessly with traditional banking services. Achieving a win-win scenario in e-banking implementation requires not only robust Internet infrastructure but also a strategic alignment with core traditional banking operations.

In essence, the study underscores the importance of embracing e-banking as an integral part of the overall banking experience, ensuring that it complements and enhances traditional banking services for customers.

CHAPTER – 3

INTRODUCTION OF ICICI BANK

ICICI BANK PROFILE

INTRODUCTION

ICICI Bank Limited is not only one of India's largest private sector banks but also an esteemed player in the global financial landscape. Established in 1994, ICICI Bank has rapidly expanded its footprint to become a leading provider of banking and financial services, catering to diverse needs of both corporate and retail clients.

Headquartered in Mumbai, with a registered office in Vadodara, ICICI Bank operates through a vast network of 5,900 branches and 16,650 ATMs across India. This extensive branch and ATM network ensures widespread accessibility of banking services to customers across urban and rural areas of the country.

Moreover, ICICI Bank has successfully expanded its presence beyond the Indian borders, establishing a global footprint in 17 countries. It operates subsidiaries in the United Kingdom and Canada, and has branches in the United States, Singapore, Bahrain, Hong Kong, Qatar, Oman, Dubai International Finance Centre, China, and South Africa. Additionally, the bank has representative offices in strategic locations such as the United Arab Emirates, Bangladesh, Malaysia, and Indonesia.

In the United Kingdom, ICICI Bank's subsidiary has further expanded its reach by establishing branches in Belgium and Germany, demonstrating its commitment to serving customers in key European markets.

Recognized by the Reserve Bank of India (RBI) as a Domestic Systemically Important Bank (D-SIB), ICICI Bank holds a significant position in the Indian banking sector. Alongside other major players like the State Bank of India and HDFC Bank, ICICI Bank is considered "too big to fail," reflecting its systemic importance and robust presence in the Indian financial landscape.

With a comprehensive range of banking and financial services, including investment banking, life and non-life insurance, venture capital, and asset
management, ICICI Bank continues to be at the forefront of innovation and
customer service excellence in the global banking industry. Its unwavering commitment to delivering value-driven solutions and leveraging cutting-edge technology underscores its status as a trusted financial partner for millions of customers worldwide.

Vision

Our vision is to become the foremost provider of financial services in India and to establish ourselves as a prominent global banking institution.

Mission

To achieve our vision, we are committed to leveraging our talented workforce, cutting-edge technology, agility, and financial resources to:

- Position ourselves as the preferred banking partner for our customers by delivering superior-quality products and services.
- Expand our business horizons globally, reaching new markets and customers.
- Actively contribute to unlocking India's full economic potential.
- Maintain a robust financial position and diversify our revenue streams across various businesses and regions.
- Uphold the highest standards of governance and ethical conduct.
- Make positive contributions to the communities and markets where we operate.
- Create sustainable value for our stakeholders, including customers, employees, shareholders, and society at large.

History

ICICI Ltd. was founded on 5 January 1955, with Sir Arcot Ramasamy Mudaliar serving as its inaugural Chairman. Originally established as a joint venture between the World Bank, India's public-sector banks, and public-sector insurance companies, ICICI Ltd. aimed to provide project financing to Indian industry. In 1994, ICICI Bank was established as a wholly owned subsidiary of ICICI Ltd. in Vadodara. Initially named the Industrial Credit and Investment
Corporation of India Bank, it later changed its name to ICICI Bank. The merger of ICICI and two of its wholly-owned retail finance subsidiaries, ICICI Personal
Financial Services Limited and ICICI Capital Services Limited, with ICICI Bank in October 2001 resulted in ICICI Ltd. being privatized.

During the 1990s, ICICI transitioned from being a development financial institution focusing solely on project finance to a diversified financial services group offering a wide range of products and services. ICICI Bank introduced Internet Banking operations in 1998. The bank's shareholding in ICICI Bank was reduced to 46% through public offerings of shares in India in 1998 and in the form of American depositary receipts on the NYSE in 2000. ICICI Bank acquired the Bank of Madura Limited in an all-stock deal in 2001 and sold additional stakes to institutional investors during 2001–02. In 1999, ICICI became the first Indian company and the first bank or financial institution from non-Japan Asia to be listed on the NYSE.

In 2002, ICICI, ICICI Bank, and its subsidiaries ICICI Personal Financial Services Limited and ICICI Capital Services Limited merged in a reverse merger. During the financial crisis of 2007–2008, customers flocked to ICICI ATMs and branches in certain locations due to rumors of bank failure. The Reserve Bank of India issued a clarification on the financial strength of ICICI Bank to dispel the rumors.

In 2015, ICICI introduced an outward remittance platform called ‘Money2World,’ allowing fully online outward remittance transactions for both non-ICICI and ICICI customers. In March 2020, the board of ICICI Bank Ltd. approved an investment of ₹10 billion (US$130 million) in Yes Bank, resulting in a 5% ownership interest in Yes.

Services

ICICI Net Banking, also known as Internet Banking, provides a wide range of facilities to its customers, attracting an increasing number of users. Some of the e-banking facilities offered by ICICI Bank include:

Transfer Funds Online: Easily transfer money between accounts or to other beneficiaries.
Account-2-Card Fund Transfer: Transfer funds directly from your bank account to your debit card.
Link Your Bank/Card/De-mat Accounts: Connect your various accounts for easier management.

Use Your Debit Card Online: Make secure online transactions using your ICICI debit card.
Pre-paid Mobile Recharge: Recharge your prepaid mobile phone conveniently through net banking.
Pay Your Utility Bills: Settle your utility bills, such as electricity and water, online.
Send a Smart Money Order: Send money orders electronically through the Smart Money Order service.
Open Fixed Deposits and Recurring Deposits: Initiate fixed or recurring deposits online.
Order a Demand Draft / Pay Order: Request demand drafts or pay orders digitally.
Subscribe for Mobile Banking: Sign up for mobile banking services for added convenience.
Request a Cheque Book: Order a new cheque book online.
Request a Change of Address: Update your address details through net banking.
Stop Payment Request: Place a request to stop payment on a particular cheque or transaction.
Request a Debit Card: Apply for a new debit card or request a replacement online.
Monthly Bank Account Statement by E-mail: Receive your monthly account statements via email.
Re-issue/Upgrade of ATM/Debit Card: Request a replacement or upgrade for your ATM/debit card.
Link Bank Accounts to ATM/Debit Card: Associate your bank accounts with your ATM/debit card.
Renewal / Premature Closure of FD/RD: Renew or prematurely close fixed deposits or recurring deposits.
De-block/Activate ATM/Debit Card: Unblock or activate a blocked ATM/debit card.
Secure Mailbox: Access a secure mailbox for communication with the bank.
Request a Duplicate Physical Bank Statement: Obtain a duplicate physical bank statement upon request.
Acquisitions

1996: ICICI Ltd. - A diversified financial institution headquartered in Mumbai.
1997: ITC Classic Finance - Engaged in hire, purchase, and leasing operations.
1997: SCICI (Shipping Credit and Investment Corporation of India) - A financial institution.
1998: Anagram (ENAGRAM) Finance - Primarily engaged in retail financing of cars and trucks.
2001: Bank of Madura - Acquired by ICICI Bank.
2002: The Darjeeling and Shimla branches of Grind lays Bank - Acquired by ICICI Bank.
2005: Investitsionno-Kreditny Bank (IKB), a Russian bank - Acquired by ICICI Bank.
2007: Sangli Bank - A private sector unlisted bank, acquired by ICICI Bank.
2010: The Bank of Rajasthan (BOR) - Acquired by ICICI Bank for ₹30 billion (US$380 million).

Subsidiaries

- ICICI Prudential Life Insurance
- ICICI Lombard
- ICICI Prudential Mutual Fund
- ICICI Securities
- ICICI Bank Canada
- ICICI Bank UK PLC
- ICICI Bank US
- ICICI Bank Regional Subsidiaries

Recognition

The Brand Trust Report, launched in 2011, has ranked ICICI in the 15th place as the most trusted brand of India.

ICICI Bank Services

ICICI Net Banking / Internet Banking

ICICI net banking, or internet banking, offers a wide range of convenient facilities and has been attracting an increasing number of customers. With its immense range of

services, it boasts one of the largest customer bases in the industry. Here are some key features of ICICI net banking:

Linking Multiple Accounts: Customers can link multiple accounts with the same customer ID, providing ease of management and access.
View Transactions Online: Customers can conveniently view all their transactions online, eliminating the need to visit a physical bank branch.
Fund Transfers: ICICI net banking allows customers to transfer funds not only between accounts within the same bank but also to accounts in other banks.
Transfer Funds to Credit Cards: Customers can easily transfer funds from their bank accounts to their credit cards, facilitating timely payments and avoiding late fees.
Auto Debit for Credit Card Transactions: Auto debit feature ensures seamless payment of credit card bills for transactions made through the credit card.
Online Account Statements: Customers can access their account statements online and even receive them via email, eliminating the need for physical statements and branch visits.
Online Tax Filing: ICICI net banking provides the convenience of filing taxes online, saving time and effort for customers.

Mobile Banking

Using mobile banking services provided by ICICI Bank offers customers the convenience of conducting banking operations anytime and anywhere. Here are some of the key features and services available through ICICI Bank's mobile banking platform:

Convenience: With mobile banking, customers can perform banking operations from anywhere, whether they are at home, in a meeting, or even at a movie hall. This convenience allows customers to access their bank accounts whenever they need to, without being tied to a physical location.

Discreet and Personalized: Mobile banking provides a discreet and personalized way to access banking services. Customers can access their account information securely and privately, ensuring confidentiality and peace of mind.

User-Friendly: ICICI Bank's mobile banking platform is designed to be user-friendly and intuitive, making it easy for customers to navigate and perform transactions on them
mobile devices. The menu layout is simple and accessible, allowing customers to quickly find the services they need.

Empowering: Mobile banking empowers customers by giving them control over their finances. With access to banking services on their mobile phones, customers can manage their accounts, transfer funds, pay bills, and more with just a few taps.

Range of Services: ICICI Bank's mobile banking platform offers a wide range of services to meet the diverse needs of customers. Some of the services available include:

- Account balance inquiry
- Fund transfers between accounts
- Bill payments
- Mobile recharges
- Transaction history
- Credit card payments
- Account statement requests
- Cheque book requests, and more.

Bank Account	Credit Card	Demat	Loan	Other Services
Funds Transfer*	Balance Details	Holding Enquiry	Provisional Income Tax Certificate	Locate Branch
Bill Payment+	Last Payment Details	Transaction Status	Final Income Tax Certificate	Locate ATM
Balance Enquiry	Payment Due Date	Bill Enquiry	Reset Letter	Phone Banking Number
Last 5 Transactions	Reward Point Status	ISIN Enquiry	Rescheduled Letter	Prepaid Mobile Recharge*
Cheque Book Request			Loan Agreement Copy	Apply for Bank Products
Stop Cheque Request				Status of Service Request Raised
Cheque Status Enquiry				

Insta Banking

Insta Banking makes your banking simpler, faster, and more convenient. Through these5 great channels - Internet Banking, Mobile Banking, ICICI Bank ATMs, Instant Voice Response (IVR) Banking and I Mobile - you can do your day today banking anytime, anywhere.

Internet Banking

ICICI Bank brings convenience and security to your desktop. Now you can check your account balance, transfer funds, download your account statement, and pay bills or even book tickets online, from the comfort of your home or in the middle of a busy day at the office. Explore the power of simpler and smarter Banking whether you are a Banking, Credit Card, Loan or De-mat customer.

ATM Banking

1. 24/7 Banking: ICICI Bank's extensive network of ATMs allows customers to conduct banking transactions at any time of the day or night, providing flexibility and convenience for busy schedules.

2. User-Friendly Interface: The ATMs are equipped with user-friendly graphic screens and easy-to-follow instructions, ensuring a smooth and hassle-free banking experience for customers. Instructions are available in multiple local languages, catering to the diverse needs of customers across different regions.

3. Wide Network Coverage: With over 4,883+ ATMs and 1,626+ branches across India, ICICI Bank ensures that customers are never too far from an ATM. This extensive network coverage makes it convenient for customers to access banking services wherever they are located.

4. ATM Locator: Customers can easily find the nearest ICICI Bank ATM using the ATM Locator feature on the ICICIBank.com website. This feature helps customers locate nearby ATMs for quick and convenient access to banking services.

I Mobile

ICICI Bank's I Mobile represents a groundbreaking advancement in banking technology, providing customers with a wide array of functionalities at their fingertips. With this innovative mobile application, you can effortlessly transfer funds, make credit card payments, pay utility bills, check your account balance, and much more, all free of charge. Don't wait any longer – download the I Mobile application onto your phone via SMS and unlock the full potential of mobile banking.

Introducing the 2nd generation I Mobile, ICICI Bank brings you a platform with enhanced features, a smarter interface, quicker navigation, and improved functionality. This next-generation mobile banking solution is designed to make banking on the move faster, easier, and more convenient than ever before. Whether you're using GPRS-enabled mobile handsets or SMS, I Mobile allows you to connect directly to your bank account, providing seamless access to your finances.

Key services available with I Mobile include:

- Payment of utility bills and credit card bills
- Transfer of funds to any bank account
- Payment of insurance premiums
- Placement of service requests such as ordering cheque books, requesting bank account statements, checking cheque status, and balance enquiry**.**

Access the following ICICI Bank services via I Mobile:

Bank Account

Funds transfer

- Bill Payment
- Balance Enquiry
- Last 5 transactions
- Cheque Book Request
- Stop Cheque request
- Cheque status Enquiry

Credit Card

- Balance Details
- Last Payment Details
- Payment Due Date
- Reward Point Status

De-mat A/c

- Holding Enquiry
- Transaction Status
- Bill Enquiry
- ISIN Enquiry

Loan A/c

- Provisional IT Certificate
- Final IT Certificate
- Reset Letter
- Rescheduled Letter
- Loan Agreement Copy

M Shop

- Prepaid Mobile Recharge

Other Services

- Status of Service Request Raised
- Locate US

IVR Banking

ICICI Bank's Instant Voice Response (IVR) Banking is a convenient and user-friendly service that provides immediate assistance for all your banking queries over the phone. Whether you need to check your account balance, inquire about recent transactions, or perform fund transfers, IVR Banking offers a hassle-free solution. The service is fully automated and available 24/7, allowing you to access banking services at your convenience.

With IVR Banking, you can securely conduct transactions using just your ATM PIN for your account and credit card. This ensures that your interactions are protected and your sensitive information remains confidential. Whether you have inquiries related to your savings account, credit cards, De-mat account, or bonds, IVR Banking provides prompt and accurate responses to meet your banking needs.

TV Banking

ICICI Bank introduces a pioneering concept in banking with its TV Banking service. This innovative initiative allows customers to access a wide range of banking information while enjoying their favorite television shows or sports events. With TV Banking, you can conveniently stay updated on your financial matters without needing to visit a branch or access online banking platforms.

Whether you're interested in learning more about available loan options, checking account details, or exploring deposit schemes, TV Banking provides comprehensive information at your fingertips. This service leverages the power of television to deliver banking services directly to your living room, offering a seamless and integrated banking experience

CHAPTER - 4

RESEARCH METHODOLOGY

What is Research…?

Research is a systematic and methodical process of inquiry that involves the investigation, collection, analysis, and interpretation of data to answer questions, solve problems, or generate new knowledge. It typically follows a structured approach and employs various methodologies, techniques, and tools to gather relevant information and draw meaningful conclusions.

Methodology

Methodology refers to the systematic approach or framework that guides the process of conducting research or investigations. It outlines the steps, techniques, procedures, and principles used to gather, analyze, interpret, and draw conclusions from data. Methodology is crucial for ensuring that research is conducted in a rigorous, transparent, and replicable manner, regardless of the field or discipline.

Research methodology refers to the systematic and organized approach or framework that guides the process of conducting research. It encompasses the strategies, techniques, procedures, and principles used by researchers to gather, analyze, interpret, and draw conclusions from data. Research methodology is essential for ensuring that research is conducted in a rigorous, systematic, and reliable manner, regardless of the field or discipline.

Title

The title of this report is **“Satisfaction from E-banking services”.**

Objectives of the Study

- To investigate the factors influencing customer perception towards e-banking services provided by ICICI Bank.
- To assess the current and future prospects of e-banking as perceived by customers.

- To identify the major challenges and problems encountered by customers when using e-banking services.

Nature

The project utilized a descriptive research method, combining primary and secondary sources to explore factors influencing customer perception of ICICI Bank's e-banking services. Primary data collection methods included surveys and interviews, while secondary sources provided background information and industry insights.

Type of research

Descriptive research aims to break down vague problems into specific, manageable components. Its focus is on generating new ideas and insights by providing detailed descriptions and analyses of phenomena.

Research Design

The research design serves as the blueprint for collecting, measuring, and analyzing data. In this study, the aim is to determine the extent of preferences for E-Banking over traditional banking among service class individuals. The research design is descriptive, focusing on providing detailed descriptions and analyses of the phenomena under investigation. The study targets customers of ICICI Bank in NOIDA. Convenient sampling method was employed for sample selection, with efforts made to include individuals of all age groups and genders across various socioeconomic classes.

Research Instrument

The data gathering instrument utilized in this study was a questionnaire. Additionally, interviews were conducted to gain deeper insight into participants' buying practices, thereby verifying the accuracy of the data provided. To complement the primary data and enhance the process of inference drawing, secondary data was collected from various published sources such as magazines, journals, and newspapers.

Sample design and Size

This research project employs a descriptive research design. Judgment and convenience sampling methods will be utilized to gather information about online banking, chosen due to the interest in exploring gender, age, or occupation disparities within the population regarding online banking. A structured questionnaire has been prepared for conducting this research, and a sample of 70 customers from ICICI Bank has been selected.

Sampling Size

The survey is designed to target 70 respondents. While larger samples generally yield more reliable results than smaller ones, limitations in time and budget led to the restriction of the sample size. The respondents encompass various income groups and professions.

Sampling Unit

The sampling unit for this study is the customers of ICICI Bank located in NOIDA, Uttar Pradesh.

Tools and Techniques of Analysis

The collected data will be analyzed using statistical techniques such as bar graphs and pie charts.

DATA COLLECTION

To gather all relevant information regarding the extent of customer awareness of the E-banking facilities offered by ICICI Bank, a direct personal interview method with a structured questionnaire was adopted for collecting primary data. Secondary data was collected through internet research by browsing various websites and from records available with the bank.

SOURCE OF DATA

1. Primary Data
2. Secondary Data

Secondary Data

- Sources for articles on E-Banking were collected from journals and magazines published periodically.
- Additionally, information was gathered through internet research.

Primary Data

A structured questionnaire was employed to collect primary data from respondents, focusing on various aspects of e-banking preferences among the service class. The questionnaire encompassed inquiries regarding the frequency of usage, factors impacting the utilization of e-banking services, perceived benefits, encountered challenges, and reasons for non-usage. It featured a mix of open-ended, dichotomous, and multiple-choice questions.

Need of the Study

1. Analyzing the trajectory of online banking service growth.

2. Advocating for the advancement of E-banking services within the banking industry.

3. Incorporating customer perceptions regarding internet banking into considerations.

Hypothesis

Ease of use

Ho: Ease of use does not influence the use of E Banking services.
H1: Ease of use does influence the use of E Banking services.

Direct access

Ho: Direct Access does not influence the use of E Banking services.

H1: Direct Access does influence the use of E Banking services.

Friends/relatives

Ho: Friends/Relatives do not influence the use of E Banking service s.
H1: Friends/Relatives do influence the use of E Banking services.

Scope of the Study

1. Limited to NOIDA due to time constraints, preventing visits to branches in other cities or states.
2. Included all customer classes in the study.
3. Focused on the E-Banking service sector.
4. Data directly collected from customers of the bank, providing a realistic source.

Limitation of Study

- Findings may not fully represent the actual situation due to reliance on a sample.
- Potential bias in respondents' responses cannot be completely eliminated.
- Changes in e-banking practices during the research period could impact results.
- Limited to the NOIDA area, potentially limiting generalizability.
- Sample size of 70 may not fully represent the entire population.
- Respondents' busy schedules may have limited their willingness to provide detailed responses.
- Merely asking questions may not always yield accurate information.
- Relevance of findings may diminish due to evolving environmental factors.

CHAPTER – 5

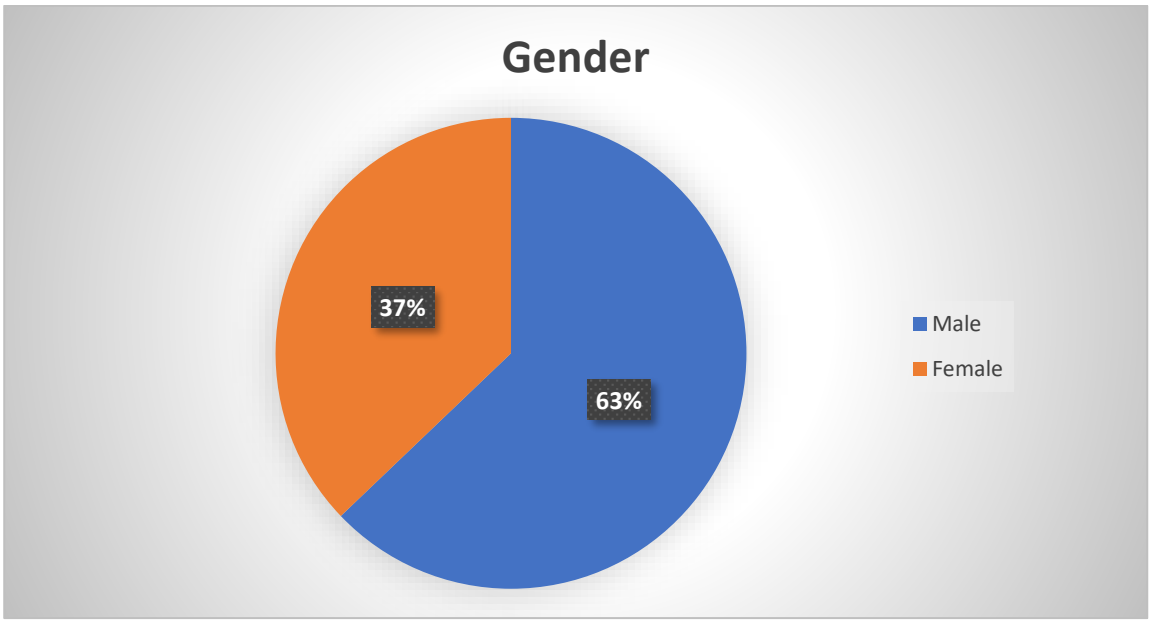
DATAANALYSIS &INTERPRETATION AND

FACTS & FINDINGS

DATA ANALYSIS & INTERPRETATION

- **Gender**

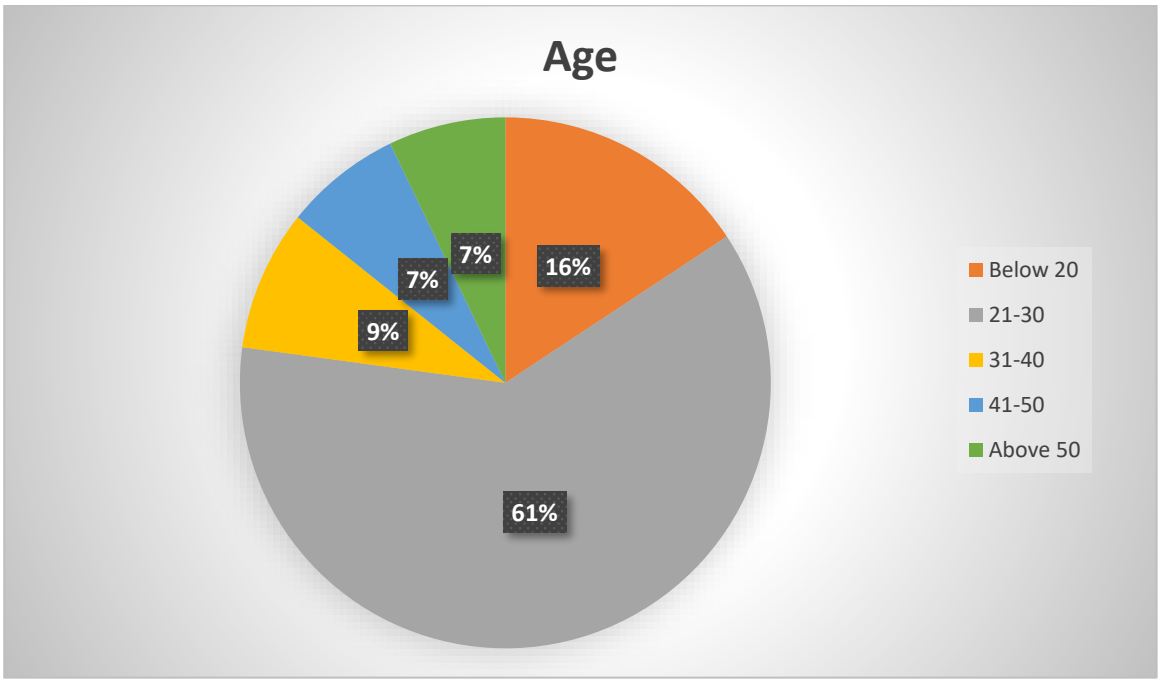
Male	44
Female	26
Total	**70**



The data shows that 63% of E-banking users are male, with only 37% being female. This suggests a gender disparity in E-banking adoption, possibly due to differences in internet literacy and trust levels in online transactions.

- **Age**

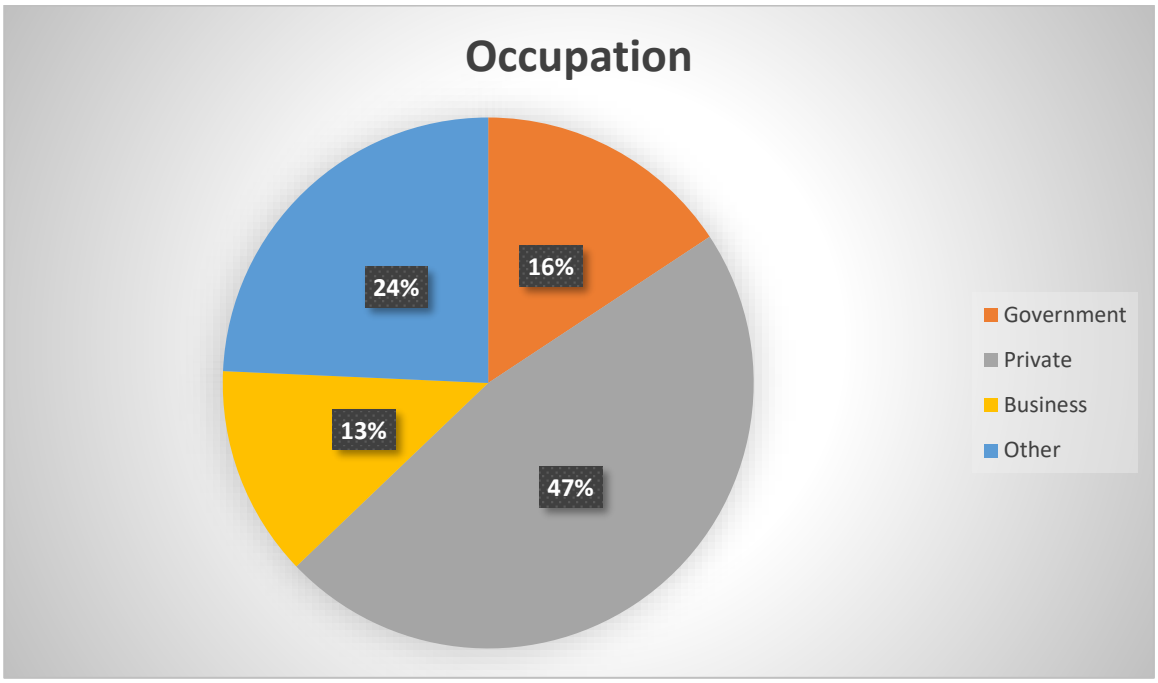
Age	**No. of Respondent**
Below 20	11
21-30	43
31-40	06
41-50	05
Above 50	05
Total	**70**



The data reveals that 61% of respondents are aged between 21-30 years, while 16% are below 20 years old. This suggests that E-banking is most popular among younger individuals, with the least usage seen among those above 50 years old

- **Occupation**

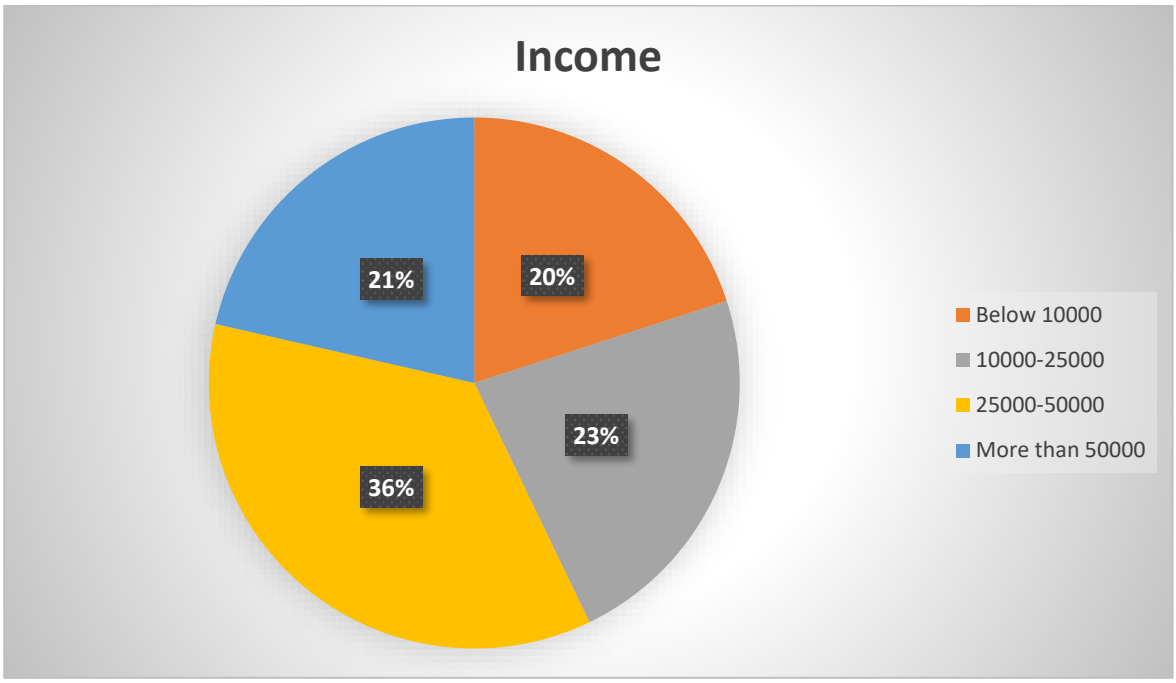
Occupation	**No. of Respondent**
Government	11
Private	33
Business	09
Other	17
Total	**70**



The data reveals that the largest group of E-banking users, comprising 47%, are individuals employed in private sector jobs. Their preference for E-banking is primarily driven by its time-saving benefits. Additionally, 24% of respondents fall into the "other" category, which includes students and housewives. These groups also value E-banking for its time-saving advantages, with students often possessing comprehensive internet knowledge. Moreover, 16% of respondents work in government organizations, while 13% are businessmen, both of whom utilize E-banking due to its efficiency in saving time.

- **Income**

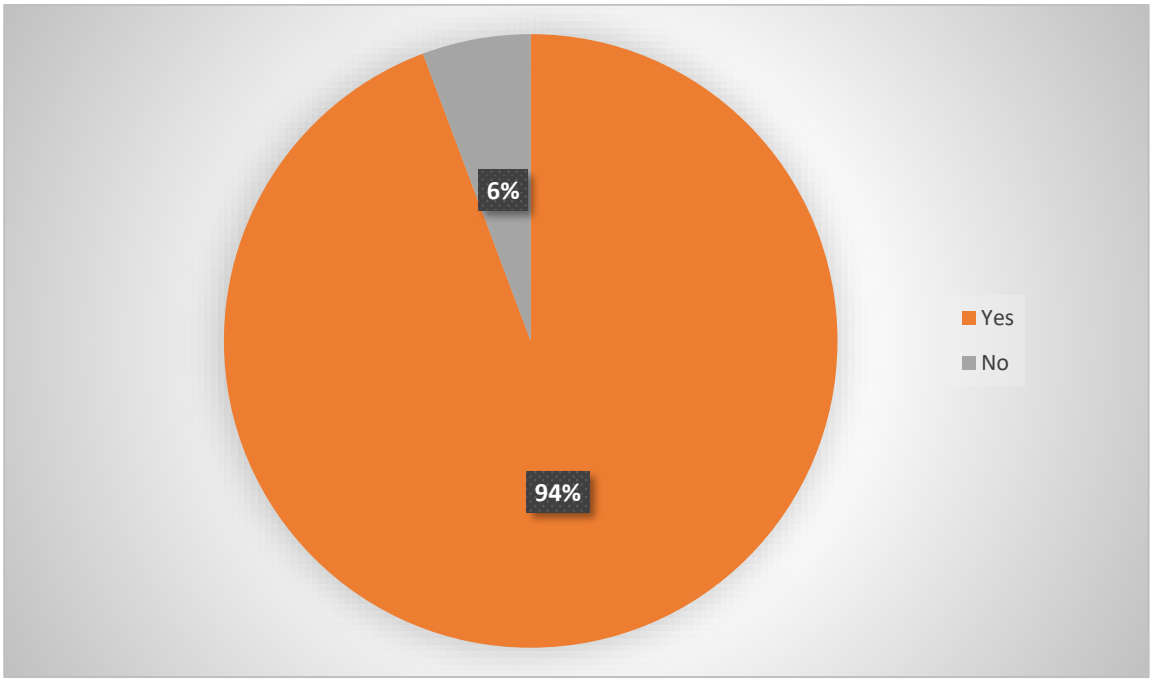
Income	**No. of Respondent**
Below 10000	14
10000-25000	16
25000-50000	25
More than 50000	15
Total	**70**



The findings indicate that the largest proportion of E-banking users, comprising 36%, have an income falling within the range of 25,000 to 50,000. Following closely, 23% of respondents have an income between 10,000 to 25,000. Additionally, 21% of users earn more than 50,000, while 20% have an income below 10,000. These results suggest that E-banking is utilized across various income brackets, with a significant portion belonging to the middle-income range.

1. Do you think E-Banking Services is necessary in present scenario?

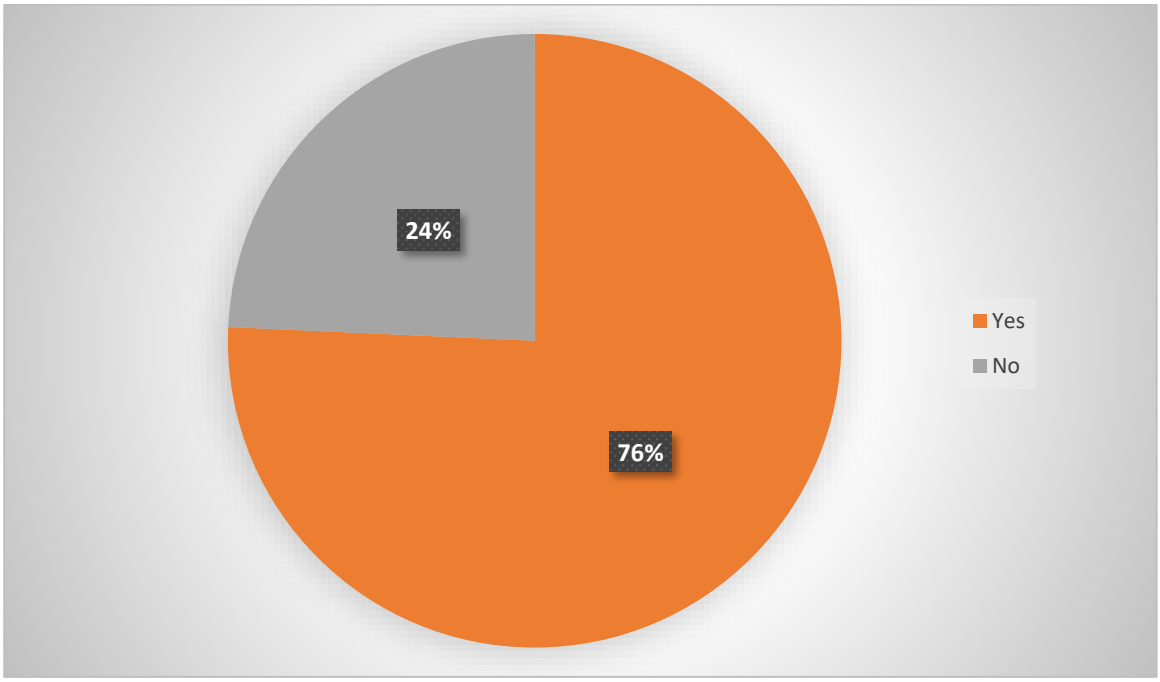
Options	**No. of Respondent**
Yes	66
No	04
Total	**70**



E-banking facilities are indispensable and highly beneficial in today's context, making tasks much easier and more convenient.

2. Did you know about the online banking services offered by your bank when you opened your account?

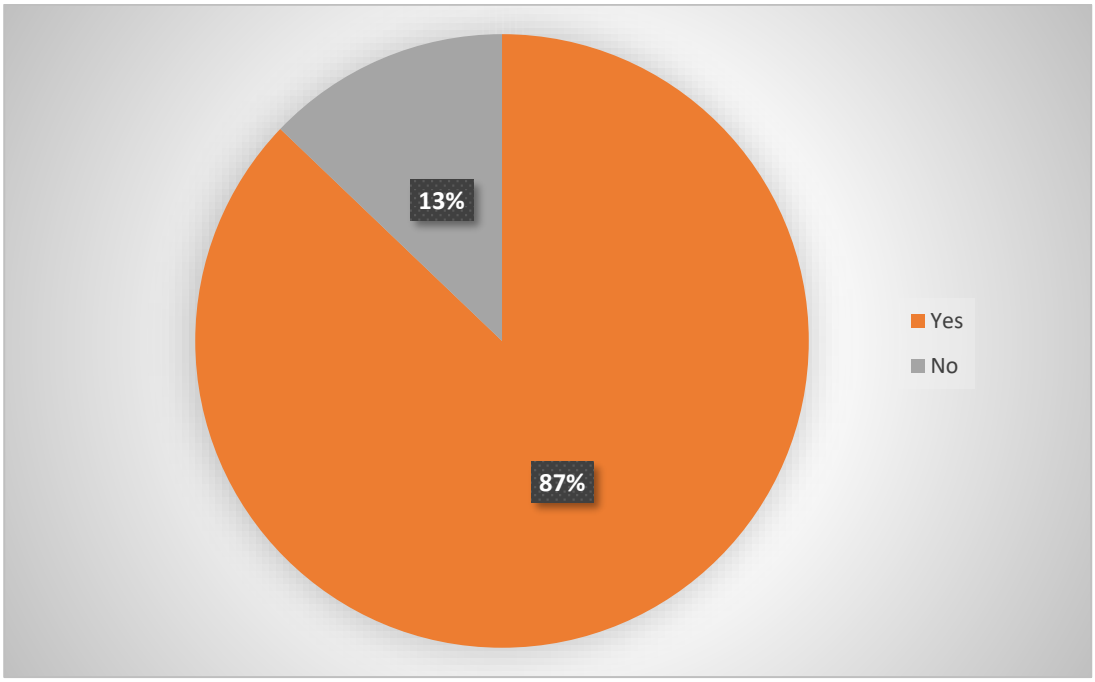
Options	No. of Respondent
Yes	53
No	17
Total	**70**



According to the survey, 76% of respondents were aware of the E-banking services provided by their bank, while 24% were not aware at the time of opening their account. This lack of awareness could be attributed to various factors such as limited information provided by the bank or the absence of E-banking services when they initially opened their accounts. However, some respondents became aware over time as the services became available.

3. Are you Availing E-Banking Services?

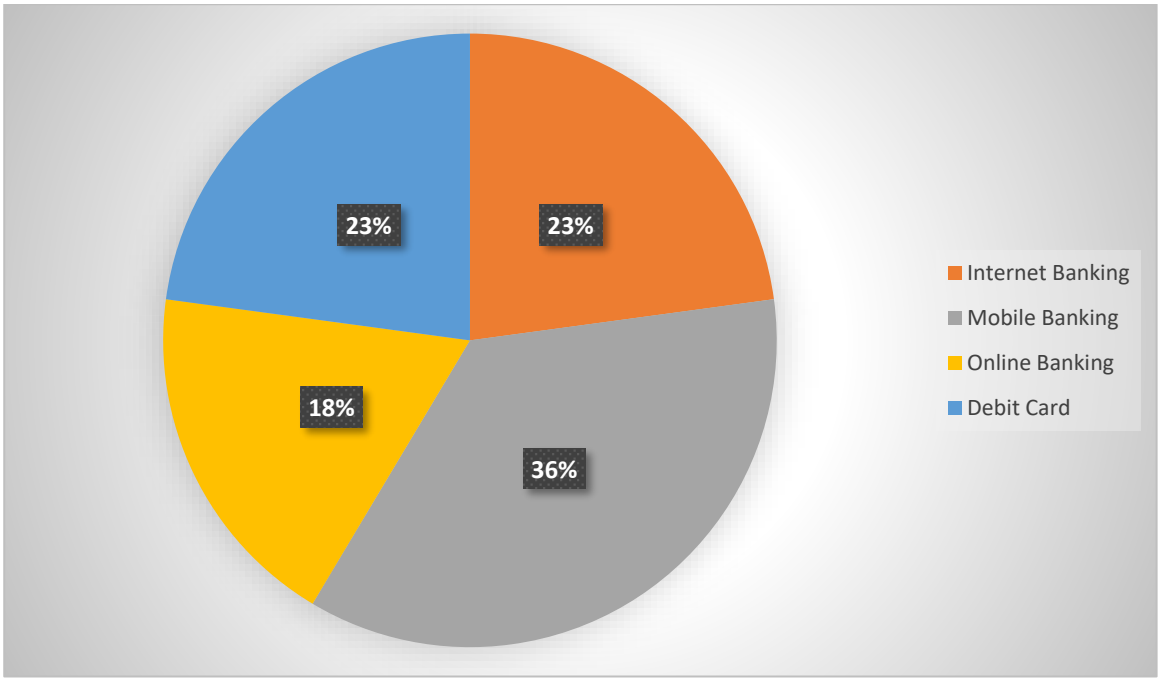
Options	**No. of Respondent**
Yes	61
No	09
Total	**70**



The results indicate that 87% of respondents who are aware of E-banking are availing its services, while 13% are aware but not yet using them, possibly due to them continued trust in traditional banking methods.

4. Which online banking services are you familiar with?

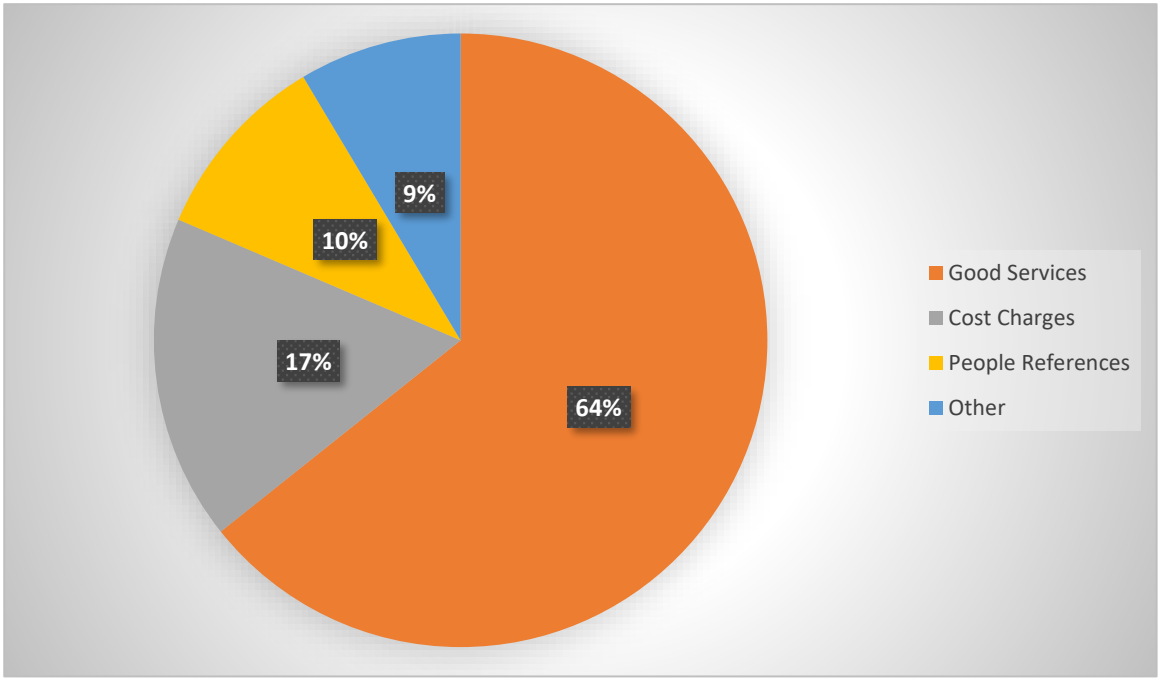
Options	No. of Respondent
Internet Banking	16
Mobile Banking	25
Online Banking	13
Debit Card	16
Total	**70**



According to this study, nearly every customer is utilizing more than one E-banking service, with Mobile banking being the most popular at 36% among respondents, followed by Debit Card at 23%, Internet banking at 23%, and Online banking at 18%. This trend illustrates the preference for Mobile banking among respondents, likely due to its user-friendly nature and minimal requirement for technical or computer knowledge.

5. What factors do you consider when selecting online banking services?

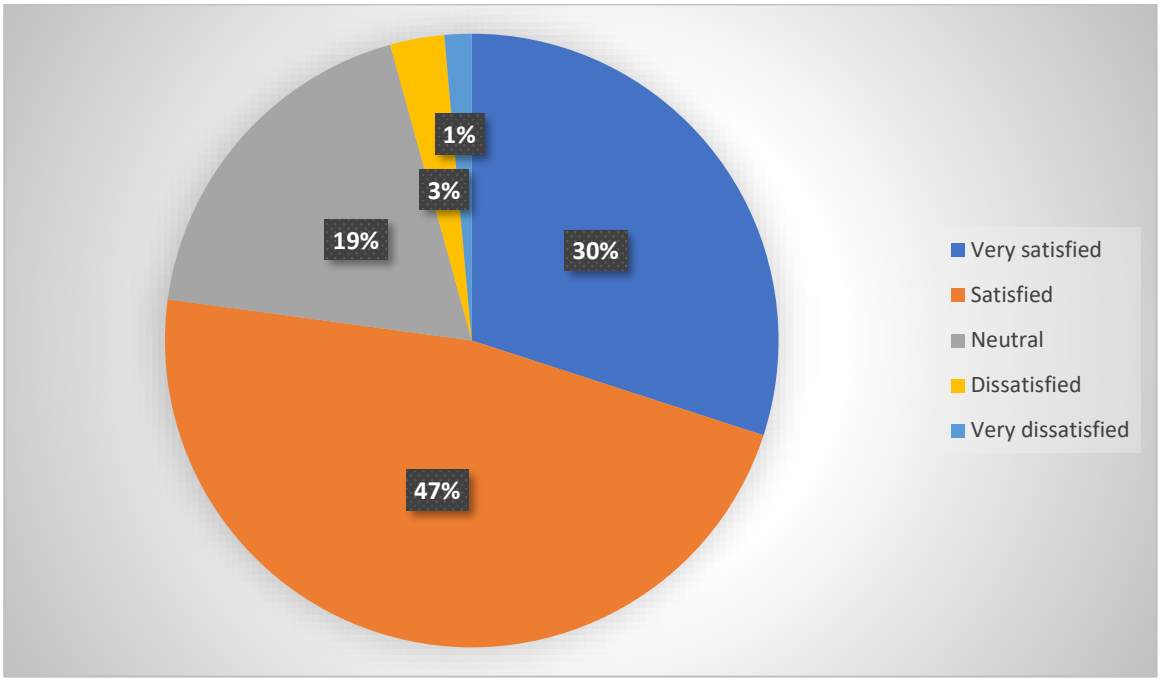
Option	No. of Respondent
Good Services	45
Cost Charges	12
People References	07
Other	06
Total	**70**



64% of people prefer good services over cost charges, followed by people references, and then cost charges. This indicates that most people prioritize good services over cost charges, suggesting that they are less concerned about service costs and prioritize quality service.

6. How satisfied are you with your bank's online banking services?

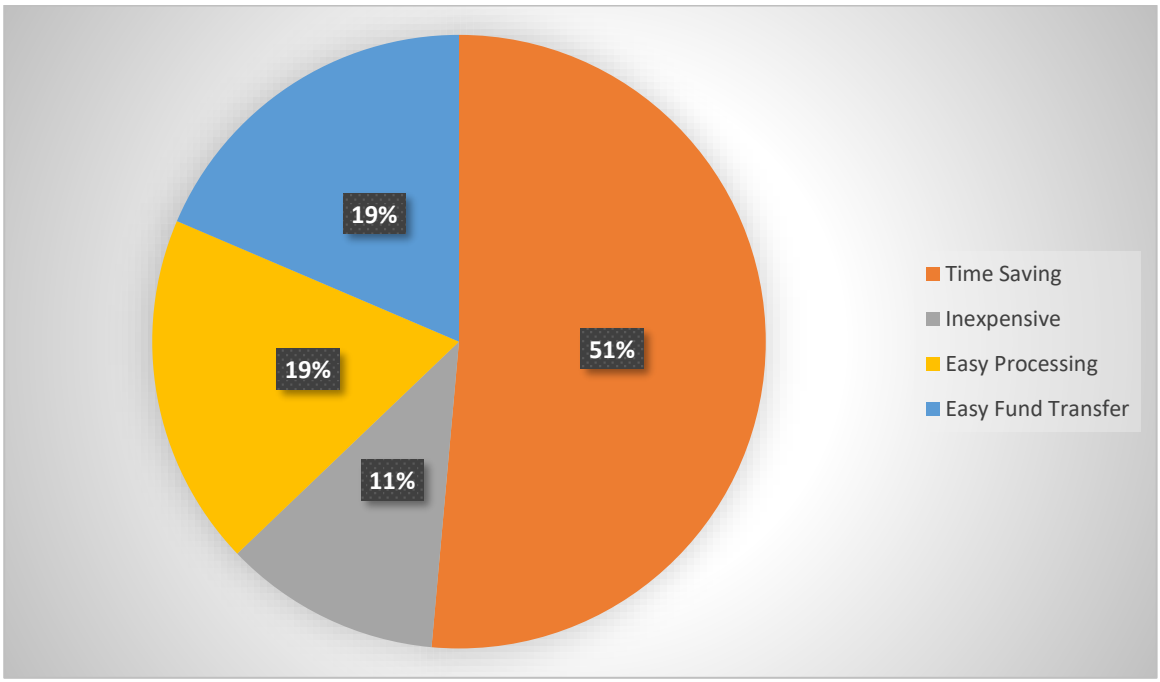
Option	No. of Respondent
Very satisfied	21
Satisfied	33
Neutral	13
Dissatisfied	02
Very dissatisfied	01
Total	**70**



The majority of customers highly appreciate the facilities provided by banks, indicating their satisfaction with the e-banking services. Specifically, 47% of respondents are satisfied with the e-banking services provided by their bank, while 30% are very
satisfied. Only 3% of respondents express dissatisfaction with the e-banking services provided by their bank.

7. What benefits do you experience from using online banking services?

Option	No. of Respondent
Time Saving	36
Inexpensive	08
Easy Processing	13
Easy Fund Transfer	13
Total	**70**



The majority of respondents perceive the primary benefit of E-banking services to be time-saving convenience. They express that E-banking significantly alleviates their time constraints, addressing a major challenge they face. Consequently, they appreciate this feature of E-banking as it greatly enhances their efficiency and saves valuable time.

CHAPTER - 6

FACTS & FINDINGS OF THE STUDY

From our study, we observed that out of 70 respondents, 44 were male and 26 were female who reported using E-banking services provided by banks. It was noted that
males generally exhibited a higher level of knowledge regarding banking transactions
and the range of services offered by banks compared to females. Among females, particularly those who were employed, demonstrated awareness of certain banking services, albeit not comprehensively. Therefore, for the purpose of our analysis, we focused on individuals who possessed knowledge of all the E-banking services
provided by banks.

The majority of respondents in the age group of 21-30 reported using E-banking
services, with approximately 25 respondents falling within this category. This trend
can be attributed to the fact that individuals in this age bracket typically possess
greater familiarity and understanding of E-banking services compared to other
age groups.

Among the respondents, the majority who are employed in private sector jobs, approximately 33 individuals, are utilizing E-banking services. This inclination
can be attributed to the perceived benefits associated with E-banking, which are particularly advantageous for individuals employed in the private sector.

The majority of respondents using E-banking services have an income ranging from 25,000 to 50000. Interestingly, there is relatively little difference in usage among
those with incomes between 10000 to 25,000.

The overall percentage of private jobholders with complete knowledge about e-
banking services provided by the bank while opening an account is 73%, while those
with no awareness of e-banking services is 27%. Thus, it can be concluded that
nearly 73% of the population has awareness about e-banking services.

Among those who are aware (a total of 70 individuals), 61 persons use e-banking
services, which constitutes 87% of the total population studied.

E-banking encompasses services such as ATMs, Debit Cards, Credit Cards, Phone Banking, Mobile Banking, and Internet Banking, among others. Among these, Mobile Banking are the most widely used service (36%). Debit card and Internet Banking
closely follows with a usage rate of 23%, Online Banking has the lowest usage rate, with only 18% of respondents utilizing this service.

In the study of factors influencing usage, various factors such as all-time availability, ease of use, and nearness were considered. Among these, status symbol was identified as the major motivating factor, followed by all-time availability, recommendations from friends, ease of use, and direct access, in decreasing order of importance. Surprisingly, security concerns were ranked as the least motivating factor.

When respondents were asked to list the benefits of e-banking, time-saving received the highest percentage score at 51%, followed by inexpensiveness (11%), easy processing (19%), and easy fund transfer (19%). Interestingly, the

easy processing feature was ranked higher than the inexpensiveness of e-banking services. Other benefits mentioned by respondents included the ready availability of funds, removal of middlemen, and avoidance of interactions with rude customer service representatives.

Among e-banking users, the most significant problems encountered include difficulty in claiming false transactions, followed by issues such as card misplacement and misuse, forgetting passwords, time consumption, and internet connectivity problems. These problems are perceived as significant hurdles in the usage of e-banking services, while issues like card misplacement and misused, password forgetting, time consumption, and internet connectivity are considered to be less concerning.

Among non-users of e-banking services, the most important factors considered for not using these services are the lack of access to the internet or mobile devices, followed by concerns about hidden costs. Dissatisfaction with traditional banking and fear of insecurity are also significant factors.

Based on our interpretation, it's apparent that a direct comparison between the two banks isn't straightforward. Both banks offer services that excel in different areas. For example, HDFC Bank's net banking services are perceived to be better than ICICI's, while mobile banking services are relatively similar for both. However, ICICI Bank stands out in terms of phone banking satisfaction. Overall, it's challenging to determine which bank provides superior services overall, as preferences vary across different service categories. Out of 50 respondents, 29 preferred HDFC Bank's e-banking services, while 21 favored ICICI Bank's. This suggests that most respondents perceive HDFC Bank's services to be better overall compared to ICICI Bank's.

CONCLUSION

This study aimed to identify key quality attributes of internet banking services by analyzing customer feedback on their banking experiences. Despite the numerous advantages of online banking, many people still view it as an alternative for reviewing their bank records. Although most banks offer online banking facilities, usage remains relatively low, with many people accessing it only once a month. This is partly because online banking lacks interpersonal interaction with customers. Understanding and measuring customer expectations of internet banking services provide insight into quality dimensions relevant to customers. The main factors driving people to use online banking are comfort, convenience, and the availability of quality information. Therefore, implementing quality initiatives should start with defining customer needs and preferences and their related quality dimensions.

However, significant challenges remain for the banking system to reform and educate customers about using the internet for banking. Many customers still fear account hacking, despite banks' efforts to provide robust security options. Banks are offering free internet banking services to attract customers, and it's observed that the majority of internet bank account holders are youth and businesspeople. E-banking is becoming increasingly necessary and is a strategic tool for banks to remain profitable in today's competitive marketplace.

Proper training provided by bank employees can encourage more customers to open internet bank accounts. Additionally, websites should be made user-friendly to enable easy access for first-time customers. In the future, advancements in technology to ensure the safety and privacy of e-transactions, along with guidelines from regulatory bodies like the RBI, will likely contribute to the rapid growth of internet banking in India.

RECOMMENDATION

As time progresses, people are gradually accepting technology, but there still exists perceptual blocking that hinders the growth of internet banking. It's a common human tendency to resist change and stick to familiar routines, which contributes to the slow acceptance of internet banking accounts.

To address these challenges and foster the growth of internet banking, several measures can be taken:

1. Banks should adhere to RBI norms and regulations, ensuring that facilities are provided as per the guidelines. Prompt services should be offered to customers, and bank officers should not hesitate to provide facilities in accordance with RBI norms, especially to units facing financial difficulties.
2. Internet banking facilities should be made available in all branches of banks to ensure accessibility for customers across different locations.
3. Each section of banks should be computerized, even in rural areas, to enhance efficiency and accessibility to banking services.
4. Personalized banking services should be prioritized to meet the evolving needs of customers.
5. The coverage of ATMs in rural areas should be expanded to ensure that people in these areas can access banking services conveniently.
6. Banks should focus on providing prompt service to permanent customers, ensuring speedy transactions without causing inconvenience.
7. Fair treatment of customers is essential, with bank employees encouraged to be cooperative, friendly, and capable of understanding customer issues.
8. Proper training should be provided to customers for using internet banking effectively and securely.
9. Building trust among customers regarding the security of their accounts is crucial for promoting internet banking adoption.
10. Banks should provide a platform where customers can access different accounts simultaneously without incurring additional charges, enhancing convenience and usability.

APPENDIX

Dear Respondent,

We are conducting a research study. We will appreciate your cooperation in this regard by filling up the questionnaire carefully. I assure you that the information provided by you will be kept confidential and will be used for academic purpose only.

Please put a tick (v) in appropriate brackets.

Questionnaire On "Satisfaction from E-Banking Services"

A. Personal Information

Name of the customer:_____.

Address:_____

Phone no.:_____.

Age:_____.

B. General Information

1. Do you think that E-banking services are necessary in present scenario.

a) Yes

b) No

2. From which bank you are availing these services.

a) SBI Bank

b) PNB Bank

c) HDFC Bank

d) ICICI Bank

e) Others (Please Specify)

3. Did you know about the online banking services offered by your bank when you opened your account?

a) Good service

b) Cost charges

c) People References

d) Other (Please specify)

4. What is the reason for selecting this particular bank?

a) Good brand

b) Good Service

c) Other References

d) Other (Please specify)

5. Which type of E-Banking services you want to use.?

a) Transfer funds online

b) Online purchase and payment.

c) Regular checking of bank statement.

d) Request any card or cheque book services.

e) Other (Please specify)

6. Are you satisfied with your E-Banking Service?

a) Yes

b) No

7. Give rating of your E-Banking Services.

a) Excellent

b) Very good

c) Good

d) Average

e) Below average.

8. Which type of problem are you facing while using E-banking services.

a) More time taking in fund transfer.

b) Slow speed in working.

c) Critical Process.

d) Not easy for Non educated persons.

e) Other (Please specify)

9. If given any option to switch, which bank you prefer for using E-Banking service & why?

a) SBI Bank

b) PNB Bank

c) HDFC Bank

d) ICICI Bank

e) Other (Please specify)

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