

# Overview of E-Banking Challenges and Prospects in India

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**Abstract - E-banking, sometimes referred to as online banking, virtual banking, or internet banking, is a system that makes it possible to conduct financial operations including money transfers, loan and EMI payments, deposits, and cash withdrawals virtually using the internet. E-banking is now an integral part of the financial system. As compared to traditional bank branches, online banking is thought to be far more secure. As compared to more conventional banking methods, it offers superior performance every time. The evolution of electronic banking in India is only getting started. The banking industry is evolving as a result of increased competition and technological advancements. The research aims to highlight the importance and challenges of e-banking. This study employed a secondary data research approach, using data drawn from online databases housing scholarly works on topics connected to electronic banking. This research was conducted to provide an update on the state of online banking in India and to analyse its advantages and challenges. The banking industry is reaping the benefits of e-banking by increasing client happiness and loyalty. Banks owe to their consumers to make their lives simpler, and this means making their services available through many distribution channels and internet options.**

**Keywords - E-banking, Electronic, Internet, Banks, Consumers.**

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## INTRODUCTION

The ease of banking nowadays has made it possible for consumers to maintain their bank accounts with their hard-earned money in a safe manner. Everything can now be done with the push of a mouse, and individuals may move money from one account to another without spending hours in line. The conventional means of transaction have been replaced by a wide range of choices, including debit cards, credit cards, e-wallets, online banking, mobile banking, and so forth. Cheques were the primary means of payment for a very long time before technological advancements occurred, and payments made via electronic means were previously only permitted for big, lump sum payments for transactions with high values. Even small payments are now made simpler by e-banking, making it easier for customers to settle their bills. Customers' use of e-banking services gives banks an opportunity to recoup their investment and create a market where they can compete.

## CONCEPT OF E-BANKING

E-banking is often understood to be banking conducted through the Internet (Hertzum et al., 2004). Bank transfers, payments and settlements, documentary collections and credits, corporate and household loans, card businesses, and some others are all examples of E-banking services that may be provided to individual and corporate customers over the internet and were defined by UNCTAD (2002). Online banking was first seen as a strategic need by a

growing number of financial institutions in the late 1990s. Banks sought out online banking as a means of retaining consumers and fostering loyalty. The phrase "electronic banking" refers to any method through which a consumer may conduct financial transactions with a financial institution without physically visiting that institution. In 1995, an American bank called the Maryland Presidential Bank began allowing customers to create bank accounts online, marking the beginning of the modern era of electronic banking services. Via e-banking, users may have access to a wide range of banking goods and services, both low and high in monetary worth. Internet banking, also known as personal computer banking, online banking, cyber banking, virtual banking, etc., refers to any banking activity or service that can be accessed over the internet and is thus accessible to users at any time and from any location.

The history of e-banking in India dates back to the early 2000s when banks started offering basic services such as balance inquiries and funds transfer through the internet. Over the years, e-banking has evolved, and today, customers can perform a wide range of transactions through various electronic channels.

The purpose of this review article is to provide an overview of the challenges and prospects of e-banking in India. The objectives of the article are to describe the current status of e-banking adoption in India, identify the challenges faced by e-banking in

India and to discuss the prospects of e-banking in India

## NEED AND BENEFITS OF E-BANKING

E-banking, which was created as a consequence of the information and technology revolution, is one of the significant breakthroughs in banking that have occurred in the previous three decades. These IT breakthroughs completely altered how the banking industry operated since e-banking gave rise to a brand-new category of financial services by fusing the internet with conventional retail financial services. E-banking offers the ability to conduct simple banking operations or transactions online. Among them are checking and savings accounts; personal loans and home finance, cards, both credit and debit and services for private banking.

E-banking has made banking much less complicated and more efficient, saving customers both time and effort. The mission of E-primary Banking is to make it simple and secure for consumers to do a variety of financial activities online. These may include automated deposits, automatic bill payments from customers' bank accounts, online loans, and many more options. Customers are required to make an initial enquiry with their financial institution, after which they must visit the website of their financial institution and enter their user name and password. Only then will consumers have complete access to their accounts. This method is quite easy to understand and susceptible to scrutiny. All that is required of them is a secure web browser. Internet browsers that support 128-bit encryption are necessary for this sort of online banking because it protects consumers by encrypting all of the sensitive data that is passed between a user's computer and the bank. This kind of online banking is becoming more popular. In the end, this leads to improved levels of happiness among consumers.

### Indian Banking Sector's Modern Financial Developments in E-Banking:

Development in the banking sector has resulted in novel product design, many electronic systems, and a wide range of online payment options. All of this gave the modern financial system its most well-known moniker, innovative banking. The major focus of innovation banking is on client happiness and ease. The most important reason for incorporating innovation into the existing banking industry was to make use of technology in order to deliver improved services to consumers. In the competition to develop technologically, the internet served as the foundation for innovation banking. Since document and labour-intensive procedures have been supplanted by intelligent automation, there have been significant changes in the banking industry since the advent of the internet, including increased efficiency, better operation control, and cost reduction. These improvements have resulted in improved productivity

and profitability. Because there were so many problems with the old banking system, it was clear that something had to be done to improve things, and that something was the technology introduced to products and services related to banking. Among of them are discussed below:

- i. **Automated Teller Machines (ATMs):** Automatic teller machines, or ATMs, are also often used. An cash machine (ATM) is, at its most fundamental level, an electronic computerised telecommunications device that enables customers to carry out monetary transactions, such as cash withdrawals or cash deposits, utilising their ATM cards, and to procure a summary of their outstanding balance without the guidance of a financial institution employee or teller. An ATM can be found in most modern banks and other financial institutions. To put it another way, it is a self-service solution that is simple to use.
- ii. **Tele Banking:** Telephone banking is the second type of innovation that can be found in the realm of e-banking. This type of banking makes it possible for customers of a bank to carry out a wide range of financial transactions over the phone rather than having to travel to a physical location or use an automated teller machine. Telephone banking, on the other hand, is open for a substantially longer period of time than traditional bank branches, and some banking firms even give their customers round-the-clock access to the amenities they offer. Customers may do a variety of financial tasks through telephone banking, including: accessing account balances; seeing a list of recent transactions; and paying bills electronically. Transferring money from one customer's account to another's, if necessary Telephone banking has reduced transaction processing costs by obviating the need for consumers to visit a bank office for non-cash withdrawal and deposit transactions, which is one of its main advantages.
- iii. **Smart Cards:** Smart cards, often called chip cards or integrated circuit cards (ICCs), are small plastic cards with computer chips inserted within. On one side of the card, the microprocessor is covered up by a touch pad for further security. Consider the microprocessor as taking the place of the traditional magnetic stripe seen on credit cards and debit cards. Security is the purpose of the smart card's microprocessor. In fact, the microprocessor and host computer "speak" to one other. The microprocessor on the card prevents unauthorised access to the data stored on the card. Chips embedded in these cards allow for a broad variety of functions to be carried out, including the opportunity to

withdraw money, initiate deposits, and check balances.

- iv. **Use a debit card:** Check cards and bank cards are both common names for debit cards. Debit cards, often known as plastic payment cards, are an alternative to using cash or a personal check as a form of payment. They look like standard bank or debit cards, making them convenient for use at ATMs. Debit cards, however, vary from credit cards in that they allow you to "pay now," while credit cards do not. To put it simply, when someone uses a debit card to make a purchase, the money is instantly deducted from their bank account.
- v. **E-Cheque:** One of the newest developments in online banking is the e-Cheque, a new form of payment that is especially useful for customers who don't have access to a secondary payment method like a credit or debit card. Electronic checks are used to transfer funds directly from a customer's bank account to the vendor's. An electronic check may only be sent by a client whose bank account is the sole payment option associated with one's bank account. But, one cannot send electronic checks if the consumer also uses a different payment method.
- vi. **A direct deposit:** The term "direct deposit" refers to the practise of depositing funds directly into a recipient's bank account rather than via a third party. Direct deposits are most often used to pay people's salaries, wages, and other bills directly into their bank accounts. While physical money payments into the payee's bank account are less usual, direct deposits may also be performed electronically utilising internet, mobile, and telephone banking services.
- vii. **Electronic Bill Payment:** An electronic bill is a kind of e-banking technology that enables a client to pay a debt to a third party, such as a utility company, a retailer, or an individual, by means of an electronic transfer of funds or a credit card payment. These deposits are made electronically using a federal payment system managed by banks or in conjunction with the government.
- viii. **Electronic Check Conversion:** Checks are utilised as a source of data throughout the electronic check conversion process, including the check number, account number, and the institution's unique identification number. After the data is ready, an electronic money transfer—a one-time payment made from a client account—is made.
- ix. **Cash Value Stored:** A payment card that stores its value locally, as opposed to having the funds held in an external account at a financial institution, is referred to as having a "stored value." Cards with stored value are not the same as debit cards since the credit limit on a credit card is set by the card's issuer. This is in contrast to cards with cash value, which require the user to deposit money with

the card's issuer before using the card. The names of individual account holders are often included on debit and credit cards when they are issued, however stored-value cards, such as gift cards, may be given out without the issuer's name being included. Prepaid cards with stored value may either be discarded once the value has been spent or have more money loaded onto them.

## CHALLENGES RELATED TO E-BANKING

The following is a discussion of the e-banking-related difficulties present in the Indian context.

- i. **Security Risk:** Concerns about security and other related matters have risen significantly in the banking industry (**Prema C, 2011**). Many customers are wary of using e-banking services owing to worries about their security, as reported by **Kuisma T., T. Laukkanen, and M. Hiltunen (2007)**. It has been shown that 43percent of the total of Indian internet users are still reluctant to utilise online banking owing to safety concerns, as reported by the **IAMAI Report (2006)**. In order to increase the use of internet banking, banks must first persuade customers of this fact, which is their main problem.
- ii. **Privacy/ Confidentiality Risk:** One of the main deterrents to using electronic banking services is the danger of revealing private or sensitive information and the concern about identity theft. A significant portion of customers think that their identity would be in danger if they use online banking services.
- iii. **The Problem of Trust:** Customers worry that their banks may misuse their personal information for marketing and other purposes without their knowledge or permission (**Andrews S. and Shen A., 2000**). Most customers have reservations about adopting electronic banking since they don't trust the system. Consumers generally choose conventional banking over online banking due to a lack of trust in the security of online transactions. They worry that utilising their bank's website online may leave them vulnerable to scams and frauds (**Ingle and Pardeshi 2012**). Before they get a confirmation message, online banking customers always have some reservations or queries regarding the completion of a transaction.
- iv. **Consumer Understanding:** Customers' familiarity with and understanding of e-banking remain in their infancy in the Indian market. Banks are unable to publicise all of the details on the functionality, advantages, and features of online banking. As a result, one of the biggest obstacles to the growth of electronic banking is clients' lack of interest

in emerging technology. (Karimzadeh and Alam, 2012).

- v. **Reduced Internet penetration in India:** The online banking system has evolved throughout the years. Although in North America, the internet was used for most banking transactions, in 2011, Indians used e-banking 60% of the time, up from 1% in 2006. (Infosys Report, 2012). It follows that issues of both internet availability and education continue to be pressing in the Indian context. IAMAI's 2006 found that 22% of internet users did not know how to transfer money online. So, the number of internet users and their level of expertise provide the greatest obstacles.
- vi. **Inadequate Infrastructure:** To be implemented successfully and to cover a wider area, Internet banking requires regular support from an effective infrastructure. Due to subpar infrastructure in terms of unkempt setup, power connection, insufficient satellite, internet, and broadband connections, e-banking hasn't been successful in reaching rural and semi-urban areas.
- vii. **Operational Conditions:** India is a nation with many different cultures and languages (National Conference Proceedings, 2014), yet this makes operating technique for online banking a little challenging since it may be tough to present instructions or guidelines in various languages. Technology has come up with a solution to this, but it still doesn't cover illiterate individuals, and ATMs can't ensure the same operational standards from all users, leading to severe wear and tear.
- viii. **Technical Illiteracy:** Many lower-class mobile users have trouble using Mobile Banking since the technical rules and regulations are difficult for them to grasp. Customers often buy smart phones in consideration of their budget, and such smart phones sometimes come with capabilities that are insufficient for mobile banking, which limits the use of e-banking.
- ix. **Educating the Staff:** At private sector banks, educating the staff is a simpler process since they have young, energetic employees who are computer proficient, however in public sector banks, educating the staff is a challenging effort because the current staff is considerably less computer knowledgeable. Despite this, after depending on it for more than 10 years, they have been able to achieve in a big degree.
- x. **Consumer Education:** When it comes to private banks, customers have always had access to online banking services since the institutions' inception. When working with conventional public sector banks, however, it may be difficult to persuade customers of the benefits of this programme due to its traditional nature. It might be challenging to officially educate clients about using e-banking. In light of this, banks choose to entice clients to use these expanding banking

services by offering financial incentives like a free debit card, free access to online banking, regular and timely information about monthly account statements through email, etc.

- xi. **Restricted Business:** Another challenge with e-banking is that not all money transfers can be completed in this manner; in order to make deposits and withdrawals, for example, a physical visit to the bank is still required. Although some financial institutions may have automated customer-facing tasks, many others still rely on manual operations (back end). As a result, the customers are restricted in certain ways due to a lack of understanding and technical challenges.
- xii. **Technology Cost:** There is a hefty outlay of capital for the purchase of personal computers and other equipment necessary for online banking. The expense of maintaining modems, routers, and the whole IT infrastructure is rather significant.

## E-BANKING-RELATED PROSPECTS

One cannot disregard the multiple chances for the growth of e-banking in the Indian setting after discussing the challenges linked to e-banking there, which are described below:

- i. **Growing Number of Internet Users & Computer Literacy:** The ease with which online banking services may be implemented depends in large part on the knowledge of individuals about internet technology. As a result, it is evident that the number of internet users in India is growing, which presents a tremendous potential that must be fully realised by persuading more internet users to use online banking services.
- ii. **Untouched Rural Markets:** 70% of India's population is regarded to be the country's untapped banking market, providing enormous potential for e-Banking growth in India. All metropolitan regions have access to financial services, however only a few large villages have banks. The majority of Indians are still concentrated in rural areas; hence e-banking must expand its service area.
- iii. **Efforts undertaken by government agencies to increase citizens' knowledge of personal finance:** Online banking and inclusive development are two areas where financial knowledge makes a big difference. Customers' use of conventional banking and Internet banking is influenced by their degree of education (Servon and Kaestner R, 2008). The government, the IRDA, SEBI, RBI, and other financial institutions have made significant efforts to encourage internet banking usage and promote financial literacy. In order to teach pupils how to utilise e-banking, several themes on

the subject have been included into school curricula. To boost the use of electronic banking, information is also given to retirees, managers, and homemakers. the **RBI Report (2012b)**.

- iv. **Competitive Benefit for Banks:** Banks may also benefit from e-banking by being more competitive. E-banking is profitable for financial institutions for a number of reasons, including reduced operating expenses, improved contacts with customers, and an expansion of the bank's geographic reach (**D'Silva et al., 2010**). As a result, the competitive advantage those banks have gained through e-banking gives them the chance to manage their e-banking operations successfully.
- v. **Consumer Opportunities:** In India, there is a significant opportunity for e-banking due to the rise in customer use. The development of online banking services has had a significant impact on consumers. Clients may use online banking to pay their bills and manage their accounts from home or the workplace. Credit/debit card use has also grown. Hence, by using e-banking services, customers may access banks around-the-clock.

## CONCLUSION

The concept of e-banking has gained attention over time in the Indian context. Several banks in the public and private sectors have successfully introduced e-banking services because it is beneficial for both the institutions and the customers. The role of information and technology in supporting e-banking has been extraordinary. The face of Indian banking has been totally transformed by several financial advances, including ATMs, credit cards, RTGS, debit cards, mobile banking, etc. Yet, there is still a need for more creative solutions since e-banking continues to encounter a number of obstacles, including risks to security, privacy, and trust, as well as a lack of consumer awareness of the benefits of e-banking, an unsupportive infrastructure, low levels of computer literacy among current personnel, etc. The Indian government is working with several public banks and financial institutions to develop an E-banking system that is more dependable, secure, and safe. The potential for the growth of e-banking in India are also highlighted in this study. Major potential include untapped rural markets, banks' competitive edge, an increase in internet users, government of India initiatives, etc. Online services offered by local banks still have a long way to go before they are comparable to those offered by foreign banks. It must be acknowledged that effective infrastructure may help Indian banks reach a wider audience. This essay provides a basic analysis and overview of Indian e-banking. Previous research shows that Indian consumers are open to using online banking services, but expansion will take some time. Research in this area might be done ahead of time to determine what

variables influence customers' decisions to utilise online banking.

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