# THE RISE OF MOBILE BANKING: HOW SMARTPHONES ARE CHANGING THE WAY WE BANK

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### **ABSTRACT**

The impact of mobile technology on the banking sector is examined in the article "The Growth of Mobile Banking: How Smartphones are transforming the Way We Bank." In this post, we'll look at how smartphones have changed how people engage with banks and how banks are adjusting to this change in consumer behaviour. The article analyses the difficulties banks confront in guaranteeing the security and privacy of mobile banking transactions while highlighting the advantages of mobile banking, such as ease and accessibility. The essay also covers the prospects for more innovation and market disruption in the area of mobile banking. An overview of the rise of mobile banking and how smartphones are transforming the way people bank is given in this literature review research paper. The benefits and drawbacks of mobile banking as well as the key drivers of mobile banking adoption, including ease of use, portability, privacy, and adaptability, are discussed in this article. Overall, this paper offers insightful analysis into one of the most important phenomena affecting the financial sector right now and offers suggestions for practitioners, researchers, and policymakers on how to effectively capitalise on this trend to advance financial inclusion and enhance financial well-being.

**Key Words:** Mobile, Mobile Banking, UPI, Digitalization, Smartphones, Banks etc.

### INTRODUCTION

The growth of mobile banking is the term used to describe the growing access to and management of financial services, such as checking account balances, moving money, and paying bills, via smartphones and other mobile devices. Due to the increasing usage of smartphones and the rising need for more convenience and accessible financial services, mobile banking has grown in popularity in recent years.

Also, the rise in demand for digital services as well as the opportunities and problems brought on by mobile technology have altered how banks function. Banks are able to provide their consumers with more individualised and effective services by utilising cutting-edge technologies like artificial intelligence and machine learning.

All things considered, the rise of mobile banking is altering the way we bank by making it more practical, reachable, and secure for billions of people worldwide. Only 250 million people in India have bank accounts, despite having 1.2 billion people and 900 million mobile phones. Therefore, the growing use of mobile devices has created a chance for the mobile to close a gap in the structure of financial services.

### SIGNIFICANCE OF THE STUDY:

The truly revolutionary advancement in the digital financial sector is mobile banking. It has made a significant contribution to the transformation of the conventional banking system into the digital banking environment, which speeds up and simplifies banking. In India, a number of digital banking services are now active. Nonetheless, the researcher attempts to concentrate primarily on the mobile banking service in this work. It would be important to write a research paper on the rise of mobile banking and how smartphones are altering how we bank for a number of reasons, including It would give a thorough overview of the state of mobile banking today and how technology is altering how we communicate with our banks and handle our money. It would be useful to identify the main factors that influence the adoption of mobile banking, such as speed, security, customization, and innovation, and it would offer information on how banks may use these factors to draw in and keep consumers.

Generally speaking, a study on the rise of mobile banking and how smartphones are altering our banking practices would offer insightful analysis into one of the biggest trends in the financial sector right

now and assist in educating policymakers, academics, and practitioners on the best ways to take advantage of this trend to advance financial inclusion and enhance financial well-being.

### **OBJECTIVES OF THE STUDY:**

- (1) To highlight the significant contributions of Mobile Banking.
- (2) To analyse different Mobile banking models and Services.
- (3) To figure out how smart phone are changing the way of banking.
- (4) To give suggestions to banks and consumers.

### RESEARCH METHODOLOGY:

The information utilised in this study is secondary in nature. There has been a review of research papers, different articles, and other literature on the subject. The necessary data for the study's purposes was gathered from reports made public by various banks regarding their mobile banking activities.

### **MEANING OF MOBILE BANKING:**

Mobile banking is the practise of managing financial services and transactions through the use of a mobile device, such as a smartphone or tablet. With a mobile app offered by their bank or financial institution, it enables clients to carry out a variety of banking tasks like checking account balances, moving money, paying bills, depositing cheques, and even applying for loans. Due to its ability to manage financial transactions conveniently and securely from any location at any time without having to physically visit a bank branch, mobile banking is growing in popularity.

### **EVOLUTION OF MOBILE BANKING:**

From its inception in the early 2000s, mobile banking has seen a substantial transformation. Here are some of the significant phases of its development:

- 1. SMS-based banking: In the early stages of mobile banking, customers could carry out simple tasks like checking their account balance or getting alerts via SMS.
- 2. Mobile browser-based banking: As smartphones became more popular, banks started to create websites that were mobile-friendly and accessible through mobile web browsers. This made it possible for users to carry out more complicated banking operations like money transfers and bill payment.
- 3. Apps for mobile banking: The 2007 release of the first iPhone revolutionised mobile banking. Banks started creating specialised mobile apps that could be used on smartphones and tablets and purchased through app stores. This gave users access to a variety of banking operations via an easy-to-use interface.
- 4. Sophisticated features: With features like biometric authentication, location-based services, and chatbots driven by artificial intelligence (AI), mobile banking apps have evolved over time. Several banks have even integrated voice-activated personal assistants like Siri and Alexa into their mobile apps.
- 5. Integration with other services: As mobile banking has developed, it has begun to work with other services like mobile payments and budgeting apps. Users now find it simpler to manage their funds across various platforms and devices as a result.

In conclusion, mobile banking has advanced significantly in a short period of time and is likely to continue to do so as technology progresses and consumer expectations shift.

### MOBILE BANKING MODEL AND SERVICES

Although mobile banking methods and services differ by nation and financial institution, the following are typically offered:

- 1. SMS-based banking: This is the most fundamental type of mobile banking, allowing users to carry out standard banking operations including checking account balances, transferring money, and paying bills using SMS messages.
- 2. Apps for mobile banking: The most well-liked type of mobile banking, apps for mobile banking give users access to a variety of banking functions, including account management, bill payment, fund transfer, mobile cheque deposit, and more.
- 3. USSD-based banking: Using short codes that are entered into the phone's keypad, USSD (Unstructured Supplementary Service Data) banking is a quick and secure way to access mobile banking services.

- Customers who don't have access to a smartphone or an internet connection will find this to be especially helpful.
- 4. Mobile wallets: Customers can save and access their payment and financial information on their mobile devices using mobile wallet apps. This includes mobile money wallets, which let users save and transfer money digitally, as well as digital wallets, which let users keep their credit and debit card information.
- 5. NFC-based transactions: Near Field Communication (NFC) is a technology that enables customers to use their mobile devices to perform contactless transactions. This is especially common in nations like Japan and South Korea that have highly developed mobile banking infrastructure.

Financial institutions may also provide value-added services like financial education, incentive programmes, and individualised financial advice in addition to these mobile banking models. These services are designed to give consumers a thorough and practical banking experience that caters to their specific requirements and preferences.

### HOW SMART PHONE ARE CHANGING THE WAY OF BANKING

The way we bank is changing significantly thanks to smartphones in a number of ways. Here are a few illustrations:

- 1. Convenience: With mobile banking apps, users can conduct financial transactions whenever and wherever they choose, eliminating the need to go to a physical branch. Those with busy schedules and those who reside in rural places now have easier access to banking because to this ease.
- Speed: Mobile banking enables quicker transactions, particularly for common chores like transferring
  money between accounts and paying bills. Compared to the time it used to take to make these
  transactions in person or through more conventional ways, customers may now do it in a matter of
  seconds.
- 3. Security: To safeguard user information and thwart fraud, mobile banking apps employ cutting-edge security methods. One-time passwords, encryption, and biometric authentication are some of the features that assist make sure that user data is kept private and transactions are secure.
- 4. Personalization: Based on consumer banking activity, mobile banking apps leverage data analytics to offer clients personalised recommendations and services. Customers may benefit from better financial management and more educated financial choices thanks to this.
- 5. Innovation: New technologies like mobile payments, chatbots, and voice-activated assistants are being driven by mobile banking innovation in the financial sector. With the help of these technologies, banking is becoming more user-friendly, convenient, and personalised, transforming how we interact with our banks and manage our accounts.

In general, cell phones have transformed the banking sector, improving client accessibility, convenience, and security. It will be fascinating to observe how mobile banking will change banking in the future as technology develops more.

## IMPACT OF MOBILE TECHNOLOGY ON THE BANKING INDUSTRY

The banking sector has been significantly impacted by mobile technology, especially in terms of how clients engage with their financial institutions. Some significant effects of mobile technology on the banking sector include the following:

- 1. Mobile banking: With the development of mobile technology, users may now access banking services more easily via their smartphones and tablets. Mobile banking has become increasingly popular as a result, enabling users to check account balances, view transaction histories, transfer money, pay bills, and more all from their mobile devices.
- Digital payments: The development of digital payments, including mobile wallets and peer-to-peer
  payment services, has also been aided by mobile technology. These payment methods have gained
  significant acceptance because they are quicker, more practical, and more secure than conventional
  payment methods.
- 3. Financial inclusion: Mobile technology has contributed to a rise in financial inclusion, particularly in developing nations where a large number of individuals lack access to conventional banking services. People may now access financial services and engage in the formal economy more easily thanks to mobile banking and digital payments.
- 4. Cost savings: By eliminating the need for physical branches and staff, mobile technology has allowed banks to significantly reduce costs. As a result, banks are now able to provide rates and fees that are more attractive to customers.

5. Client engagement: Lastly, mobile technology has made it possible for banks to interact with their clients in new ways through channels like social media, smartphone apps, and other online platforms. As a result, customers now have access to a more individualised and responsive banking experience, which has strengthened the bonds between banks and their clients.

### CHALLENGES AND OPPORTUNITIES ASSOCIATED WITH MOBILE BANKING

### **Challenges:**

- 1. Security risks: Phishing, malware, and hacking are just a few of the cyberattacks that mobile banking is susceptible to. To safeguard consumer data and transactions, banks must deploy cutting-edge security procedures.
- 2. Technical problems: System malfunctions and glitches can cause inconvenience to consumers, harm the bank's reputation, and result in losses of money.
- 3. Lack of knowledge and trust: Because of security worries, many consumers, especially elderly persons and people who live in rural regions, may not be aware of mobile banking or may not trust it.
- 4. Connection problems: In some places, it may be difficult to have a dependable and quick internet connection for mobile banking.

# **Opportunities**:

- 1. Convenience and accessibility: Mobile banking gives users access to their accounts around-the-clock, enabling them to manage their finances whenever and wherever they choose.
- 2. Financial inclusion: By increasing financial access for disadvantaged groups like those residing in rural or remote areas, mobile banking helps promote financial inclusion.
- 3. Cost savings: As mobile banking eliminates the need for physical branches and lowers transaction fees, it can help banks and clients save money.
- 4. Personalization: Depending on a customer's banking habits and preferences, mobile banking apps can offer customised services and recommendations.
- 5. Innovation: The field of mobile banking is rapidly developing, and new tools and features are frequently created to enhance consumer satisfaction and boost security.

In general, in order to assure mobile banking's continuous expansion and success, these issues must be resolved. At the same time, mobile banking's opportunities bring about a number of advantages for both banks and customers.

# REVIEW OF LITERATURE

Vijayalakshmi and Sivasankaran in "A Systematic Literature Review on Mobile Banking: A Multi-Dimensional Perspective" (2019) provide an extensive overview of mobile banking research from a multidimensional perspective, including customer adoption, technology, security, and regulatory issues. The authors stress the importance of additional study on the benefits and drawbacks of mobile banking, especially in underdeveloped nations.

"Mobile Banking in Developing Countries: A Systematic Review and Future Research Agenda" by Kwak and Lee (2018): This review examines the challenges and opportunities of mobile banking in developing countries, including infrastructure, cultural barriers, and user adoption. The authors suggest various avenues for further study, such as how mobile banking affects the financial inclusion rate, the function of regulation, and the efficacy of mobile banking in alleviating poverty.

Sharma, S. K., & Al-Muharrami, S. (2018). While new technologies are constantly being developed, the study of how societies adapt these innovations is a dynamic and expanding field of study. The advent of mobile banking is one of the most recent technical developments, and it has presented both customers and banks with a number of opportunities and concerns. Recent banking industry trends are discussed, and a connection is made between mobile banking and more conventional banking methods. The primary advantages of mobile banking and the primary obstacles to its widespread use are examined. Big data and cloud computing, two cutting-edge technologies, are also explored in the context of the banking business. This chapter examines the factors that contribute to the growing popularity of mobile banking, and it offers scholars and policymakers in developing countries some theoretical and practical takeaways.

Otamurodov, H. H. (2017). With the use of their mobile phones or tablets, customers of participating banks and credit unions can access their accounts and make various financial activities remotely. Customers can check their account balances and view a history of their activities, pay bills online, and transfer money to other accounts, all from the convenience of their mobile devices. The author of this paper analyses the history,

existing condition, and potential future impact of mobile banking on the international monetary system. The investigation led to a number of recommendations for improving mobile banking in the Republic of Uzbekistan.

Gupta, S. (2013). The banking and payment sector is seeing a global change because of mobile technologies. It presents fresh chances for banks to serve their already-banked customers better in industrialised countries and attract a previously untapped clientele in emerging markets. But as new companies enter these sectors, the banking industry faces enormous hurdles as the ecosystem shifts.

Hanudin Amen, Rizal Hamid etc in their study titled 'Undergraduate Attitudes and Expectations for Mobile Banking' (December,2006) surveyed undergraduates at FT, Labuan about their attitudes towards using mobile banking to conduct Islamic financial transactions. The views and expectations of students towards mobile banking have been studied. Students' demographics and social backgrounds were also investigated for their role in the research. Students at the Labuan International Campus of the University Malaysia Sabah were used for the sampling. Convenience sampling was used to contact a total of 615 students. The results also show that young adults are more likely to learn about and use mobile banking than older adults.

Riivari, J. (2005). Mobile phones have proliferated in the recent decade. There are now three times as many smartphone users as there are online PC users, and these people are getting increasingly discerning and picky. This paper explores the how and why financial institutions throughout Europe are adopting mobile banking and other mobile services as a strategic new marketing strategy for fostering meaningful connections with clients. Examples demonstrate how European financial institutions are enhancing customer service and connections, strengthening their brand by putting it in the pocket of their customers, and decreasing operating expenses through the use of mobile banking.

According to a study conducted in the Klang Valley of West Malaysia by Sivanand et al. (2004), 92.7% of the population is comfortable using the internet. Yet, the data also shows that just 9.6% of people are actually utilising mobile Internet banking at the moment. While just 30% are planning on using mobile internet banking services, this number is growing slowly. Another significant (at the 0.05 level) conclusion was that convenience plays a role in people using mobile banking.

Researchers Al-Ashban et al. (2001) found that income and education significantly influence the likelihood of people using telebanking services. The results show that customers' utilisation of telebanking services rises as a function of their prior experience with the service (exposure). Expanded financial services were also of greater interest to younger respondents (either tele-banking, mobile banking etc). There is a strong relationship between socioeconomic status, amount of education, and the value placed on telephone-based services.

# USAGE PATTERN OF MOBILE BANKING SERVICES

As more and more individuals rely on smartphones for daily tasks, mobile banking services have grown in popularity over time. The way that mobile banking services are used differs depending on a number of variables, including geography, age, and banking preferences. Here are some typical usage patterns, though:

- 1. Account balance checks are among the most popular applications for mobile banking services. To check their account balance at any time or location, users can effortlessly log in to their mobile banking app.
- 2. Moving money between accounts is another common application for mobile banking services. With their mobile banking app, users can quickly move money from one account to another.
- 3. Paying bills: Customers who utilise mobile banking services can also do so online. Via their mobile banking app, users can set up bill payments, which will be completed automatically.
- 4. Cheques can also be deposited via mobile banking services, saving users the trip to the bank. With only a quick snap of the cheque using their mobile banking app, users can deposit money into their accounts.
- 5. Locating nearby ATMs: Mobile banking services can give consumers access to information about nearby ATMs. The user's mobile banking app can be used to locate the closest ATM and make cash withdrawals.
- 6. Configuring account alerts: Users of mobile banking services can configure account alerts. Users can sign up to get alerts regarding account activity, such as when a deposit is made or a bill is due.

Many factors, such as the following, affect the uptake of mobile banking services:

1. Convenience: The ease of use of mobile banking services has a big impact on how widely used they are. Compared to traditional banking techniques, mobile banking is more convenient because "it enables customers to access their accounts and conduct transactions at any time, anywhere".

- 2. Security: Another essential issue that influences adoption is the security of mobile banking services. Users must have faith in the security of their financial data and transactions against fraud and cybercrime.
- 3. Cost: The price of mobile banking services affects customers' willingness to use them. Consumers are more likely to use mobile banking if the service is less expensive than more conventional banking options, including going to a bank branch or using an ATM.
- 4. Technological Literacy: The adoption of mobile banking services is also impacted by one's level of technology literacy. People who are more at ease utilising mobile devices and technology are more likely to use mobile banking services than those who are not.
- 5. Trust is crucial for the uptake of mobile banking services as well as the banking institution. Users must have faith in the security and dependability of the mobile banking service as well as the safety and security of their financial data.
- 6. Network Coverage: The adoption of mobile banking services is also impacted by how readily available and reliable the network coverage is. Consumers may be less likely to use mobile banking services in places with inadequate network connectivity.
- 7. User Experience: Another important element in the acceptance of mobile banking services is the user experience. The app or website should be simple to use, intuitive, and straightforward to browse.

## CONCLUSION:

As more people turn to mobile, electronic, and virtual experiences, the growth of mobile devices has altered the corporate landscape and business structures. The use of mobile banking has changed how traditional banking activities are carried out, which has reduced the volume of traditional banking transactions, decongested banking facilities, improved the lives of regular people on the street, and decreased the costs associated with visiting banks and branches constantly for transacting. The researcher in this paper came to the conclusion that more customers are using mobile banking. This gives the bank the chance to increase its revenue from fees and charges associated with these transactions, and the economy will also be helped by taxing all transactions that happen through this channel.

In general, mobile banking has advanced considerably in a short period of time and is likely to continue to do so as technology progresses and consumer expectations shift. Smartphones have transformed the banking sector, enhancing client accessibility, convenience, and security. It will be fascinating to observe how mobile banking will change banking in the future as technology develops more. The frequency with which people use mobile banking services has increased recently, and the frequency with which they are used is greatly influenced by the preferences and demands of each individual. The aforementioned usage patterns, however, represent some of the most typical ways that customers use mobile banking services. Additionally, a number of factors work together to impact the uptake of mobile banking services, and banking institutions must take these into account in order to persuade their consumers to do so.

### SUGGESTIONS TO BANKS AND CUSTOMER

Here are some suggestions for banks on how to utilise mobile banking successfully:

- 1. Provide a user-friendly mobile banking app: The mobile banking software should have a user-friendly layout and be simple to use.
- 2. To win over customers' trust and stop fraud, emphasise security.
- 3. Provide voice-activated assistants and chatbots.
- 4. Provide clients with incentives to use mobile banking.

Here are some suggestions for users on how to efficiently use mobile banking:

- 1. Lock your device with a strong password or biometric authentication, and never reveal your password or login information to anybody.
- 2. Connect over a secure Wi-Fi network.
- 3. Maintain a record of your transactions.
- 4. Activate notifications in your mobile banking app to receive alerts about changes to your account.

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