

## Exploring Challenges in Mobile Banking Adoption in India

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### Abstract

Mobile Banking is a new and rapidly-adopting alternative banking system. Mobile banking simply means use your mobile phone or cell device to perform online banking tasks such as Monitoring account balance, transferring funds between accounts, bill payment and locating an ATM. Mobile banking is growing yet there are numbers of issues and threats in mobile banking system and the major problem of mobile banking is its non-adoption by the customers. This research focuses on the barriers in adoption of mobile banking. It further focuses on preferred services by the mobile banking customers and influence of demographic variable on mobile banking service adoption. Findings suggest that customers' security concern is the major barrier in adopting mobile banking services. As far as preferred services are concern balance check tops, as customers prefer information based services rather than financial services provided by the bank

**Keywords:** Mobile banking, Barriers, Preferred services

## **I. INTRODUCTION**

Recent innovations in telecommunications have enabled the launch of new access methods for banking services; one of these is mobile banking; whereby a customer interacts with a bank via mobile phone. In India 617 million mobile subscribers far exceed fixed line subscribers because of better mobile infrastructure. The banks in India are racing to use this latest technology to reduce their operational costs and increase customer base (Peterson, 2009). Mobile Banking refers to provision and availing of banking and financial services with the help of mobile telecommunication devices. The scope of offered services may include facilities to conduct bank transactions, to administer accounts and to access customized information. After the launch of mobile banking in India, mobile banking transactions have seen some growth. What attracts customers to mobile banking is the round the clock availability and ease of transactions. But mobile banking still has a long way to go as majority of customers prefer banking in the traditional ways. Various factors may influence customers' adoption. It is argued that adoption will not take place unless customers perceive the service to be useful. Understanding the symptoms of the problem of why there is a low rate of mobile banking usage along with understanding of preferred mobile banking services, could help banks to come up with a right solution to improve their mobile banking service as well as to increase the rate of Mobile banking usage.

### **Review of Literature**

- Sathye: study focused on the capital cities of Australia where use of internet and population was likely to be high and suggested that security concerns and lack of awareness about Internet banking and its benefits stand out as being the obstacles to the adoption of Internet banking in Australia. Author suggested some of the ways to address these impediments. Further, he suggested that delivery of financial services over the Internet should be a part of overall customer service and distribution strategy. These measures could help in rapid migration of customers to Internet banking, resulting in considerable savings in operating costs for banks.
- Kolodinsky, Hogarth & Hilgert: stated that millions of Americans are currently using a variety of e-banking technologies including Mobile banking. However, millions of others have not or will not. They explored factors that affect the adoption or intention to adopt three e-banking technologies and changes in these factors over time and suggested that relative advantage, complexity/ simplicity, compatibility, observability, risk tolerance, and product involvement are associated with adoption.
- Gan, Clemes, Limsogunchai & Weng: findings stated that in New Zealand the output from the logistic regression indicates that the service quality, perceived risk factors, user input factors, employment, and education were the dominant variables that influence consumers' choice of electronic banking and non-electronic banking channels.

- Comninou et al.: suggested that consumers will only transact electronically (online/mobile banking) if there is convenience and security. Further Sharma and Singh (2009) found that Indian mobile banking users are specially concern with security issues like financial frauds, account misuse and user friendliness issue - difficulty in remembering the different codes for different types of transaction, application software installation & updation due to lack of standardization.

### **Objectives of this Study**

This study focuses on following research objectives:

- To study the barriers in using Mobile banking services.
- To study the perceived utility of various Mobile banking services.
- To study the influence of demographic variables on Mobile banking usage

### **Hypothesis of the Study**

H0: There is no significance relationship between demographical variables of the respondents and Barriers in using Mobile banking services.

H1: There is significance relationship between demographical variables of the respondents and Barriers in using Mobile banking services

### **Research Methodology**

To measure these objectives a cross sectional descriptive study was designed

### **Questionnaire Design**

Based on the research objectives, a structured questionnaire with 30 variables, mainly with 5-point Likert scale was used, in which 1 = strongly disagree and 5 = strongly agree

### **Data Collection**

The primary data was collected from about 120 respondents. Based on the information obtained through the questionnaire cum interview schedule the data were coded and some of the analytical tools like Simple Percentage and Chi-square methods were used to analyze the data. The objectives are attained by collecting the secondary data from various journals, magazine and web sites. The study covered ICICI and IOB bank customers from different places in Tiruchirappalli city. The survey also focused on covering all the demographic factors in the conveyance sample itself. For data collection purposive sampling was adopted. To ensure all questions being answered in a proper way, questionnaires were completed and screened one-by-one.

### **Period of Study**

This research period covers from November 2024 to December 2024

**Table 1**

<b>Demographic Variables</b>	<b>Percentage distribution</b>
Gender	85% Males, 15% Females
Age	30% Less than 30, 57% 30-39, 13% Above 39
Education	57% Graduates, 43% Post Graduates
Income	43% 10000 or less monthly in INR, 57% More than 10000 monthly in INR

### **Perception towards Mobile Banking**

Vast majority (77%) of Mobile Banking users agrees that the service is more convenient than traditional banking; transactions can be done faster and allows easier maintenance of transaction activities. Overall, most users (61%) agree that Mobile Banking is better than traditional banking, however, on average the users were uncertain whether Mobile Banking is more reliable or safer and secure (59% were indifferent). It may be said that current Mobile Banking users are overall satisfied with the service which shows an opportunity to increase the customer base in future and in turn helps in financial inclusion i.e. providing banking facility to the one who is not having access to traditional financial system and through this research it is clear that by creating the awareness about Mobile Banking security of users that whether it is safe or not will also eradicate.

### **Barriers in Using Mobile Banking**

The first research objective meant to explore barriers in using Mobile banking. Table 2 shows that the summery of mobile banking barriers viz. security concern, network problem, insufficient operating guidance, cost per transaction and handling mobile phones

Table 2

	Security concern	Network problem	Difficulty in handling mobile phone	Insufficient operating guidance	Cost per transaction
N	120	120	120	120	120
Mean	4.15	3.99	1.19	3.87	2.51

### Perceived Utility of Mobile Banking Services

The second objective of the research referred to the customer's perceives utility of various Mobile banking services. Respondents were provided with a list of 17 Mobile Banking services and in relation to these services respondents were asked to indicate the degree of perceived utility they attach to particular the service.

Rank Mobile Banking Service (cumulative %)

1. Review accounts balances (86%)
2. Recent transactions / Mini-statements (60%)
3. Review credit cards balances (55%)
4. Status on cheque, stop payment on cheque (43%)
5. Alerts on account activity (37%)
6. Change of PIN (9%)
7. Ordering check books (7%)
8. Bill payment processing (7%)
9. Access to loan statements (7%)
10. Domestic fund transfers (6%)
11. Credit card payment due date (6%)
12. Mobile recharging (4%)
13. Branch location (3%)
14. Managing loan account (1%)
15. ATM Location (0%)
16. Withdrawal at banking agent (0%)
17. Deposit at banking agent (0%)
18. Mutual funds /equity statements (0%)

The Mobile banking services perceived to have high utility were Review (checking) accounts balances (86%), Recent transactions / Mini-statements (60%), Review credit cards balances (55%), Status on cheque/ stop payment on cheque (43%) and Alerts on account activity (37%). This suggests that overall most of the customers prefer information based services rather than financial services provided by the bank. It is

clear that major mobile banking users are interested in having the information of various types like checking balance, review mini statement, review credit card balances rather transaction based services is not preferred by the customer reason may security, network problem or insufficient operating guidance as founded in this research as a major barrier.

### **Influence of Demographic Variables**

**Table 3 Demographic Variables & Mobile Banking Usage**

Demographic variables	Correlation coefficient
Gender Age	.233
Education Income	.611
Profession	.521
	.198

At last the usage of the Mobile banking was tested to see whether it is associated with demographic variables viz. gender, age, education, income and profession using Product moment correlation. It may be said that the Mobile banking usage is not associated with demographic variables except age and education as their estimated correlation coefficients were .611 and .521 respectively; significant at .05 level

### **Suggestions**

The major concern among customers was the safety concern regarding mobile banking services which forms a real obstacle to use the service, followed by network problem and insufficient operating guidance. The research also found that even most of those who frequently use the Mobile Banking services, usually do not conduct much of financial transactions, but find the service very useful for information based transactions mainly checking account status. This means that the Mobile banking services is not solving the purpose it was originally made for, which is to provide customer convenience and reduce customer visits to the banks. Based on the findings, it is strongly believed that ensuring the security of Mobile banking and familiarizing customers with how to use the service will definitely increase the rate of using Mobile banking services

## **II. CONCLUSION**

In line with the global industries' move in acquiring the latest advanced technology to stay ahead of competitors, banks throughout the world and India have notably been moving in the same direction. Evidently, Mobile banking is considered a new era in banking, in which banks are spending considerable amount of money to have it available to their customers and to cut their operations costs. Unfortunately, evidences have shown that a large number of customers do not use Mobile banking for various reasons, despite its benefits.

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