

# How Mobile Banking Changing the Financial Sector

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***Abstract- In the digital age, mobile banking has emerged as a key innovation in the financial services sector, particularly within developing countries like India. This review synthesizes research findings from a master's thesis by Shreya Sharma (2025), which involved a survey of 90 mobile banking users. The study assesses how mobile banking is transforming traditional banking models by enhancing accessibility, improving efficiency, promoting financial inclusion, and redefining customer experience. Despite clear benefits, technical limitations, cybersecurity concerns, and limited digital literacy remain major obstacles. The paper offers evidence-based recommendations for financial institutions and developers to improve mobile banking platforms and suggests future areas of research.***

## I. INTRODUCTION

Mobile banking refers to financial transactions and services conducted through mobile devices such as smartphones and tablets. Services include money transfers, balance inquiries, bill payments, and investment management. In India, mobile banking has gained momentum due to growing smartphone penetration, government initiatives like Digital India, and rising consumer demand for convenience.

This paper reviews the findings of a thesis that investigated mobile banking's impact on users and financial institutions in India, with an emphasis on

User satisfaction, technological challenges, and operational benefits.

## II. OBJECTIVES OF THE STUDY

The review is based on four main objectives:

- **Accessibility:** Evaluate how mobile banking improves access to financial services, especially in rural and underserved areas.

- **Technical Challenges:** Identify common user issues like app crashes, server failures, and connectivity.
- **User Experience and Trust:** Understand how app design, speed, and features influence customer satisfaction.
- **Operational Efficiency:** Explore how mobile banking helps banks reduce operational costs and streamline services.

## III. RESEARCH METHODOLOGY

### 3.1 Research Design

A descriptive and exploratory research design was adopted:

- **Descriptive research** measured usage frequency, satisfaction levels, and app reliability.
- **Exploratory methods** captured user suggestions and pain points via open-ended survey questions.

### 3.2 Data Collection

- **Medium:** Google Forms
- **Questionnaire:** Comprised closed-ended (Likert scale, yes/no) and open-ended questions
- **Sections:** Demographics, usage habits, user experience, suggestions
- **Sample:** 90 Indian mobile banking users
- **Sampling Method:** Non-probability purposive sampling
- **Pretesting:** Conducted with 10 users to refine questions

### 3.3 Data Analysis

- **Quantitative:** Frequency analysis, cross-tabulation
- **Qualitative:** Thematic analysis of open responses
- **Tools:** Excel for coding, charts, and tabulation.

#### IV. SPECIFIC RESEARCH QUESTIONS AND HYPOTHESES

RQ	Hypothesis	Explanation
RQ1	H1	Mobile banking increases access to financial services in rural/underserved areas.
RQ2	H2	Users face technical issues like failed transactions and server errors.
RQ3	H3	Good app quality (speed, features) improves trust and satisfaction.
RQ4	H4	Mobile banking reduces bank costs and improves service efficiency.

#### V. KEY FINDINGS AND INSIGHTS

##### 5.1 Accessibility and Financial Inclusion

- Over 80% of respondents used mobile banking frequently.
- Majority believed it provided better access than physical branches.
- Users from rural and semi-urban regions appreciated the time saved and availability of services.

Conclusion: Mobile banking bridges geographic and infrastructure gaps, contributing to financial inclusion.

##### 5.2 Efficiency and Operational Benefits

- Transactions like transfers and bill payments were completed in seconds.
- Banks save on overhead costs (staff, rent, utilities) due to reduced branch visits.
- However, server errors and app slowdowns occasionally disrupted user activities.

Conclusion: Mobile banking boosts operational efficiency, but stability needs improvement.

##### 5.3 User Experience and Design

Positive aspects mentioned:

- Clean UI

- Easy navigation
- 24/7 availability
- Negative aspects included:
- App crashes
- Failed logins
- Lack of real-time customer support

Cross-tabulation showed that daily users were 70% more likely to report a positive experience than occasional users.

Conclusion: Good design and performance correlate strongly with satisfaction and trust.

##### 5.4 Common Issues Reported

Issue	Frequency
Server Issues	45
App Crashes	15
Connectivity Issues	10
Payment Failures	10
Security Concerns	2
No Issues	16

##### 5.5 Security and Fraud Concerns

- Fewer users reported actual security incidents.
- However, many expressed fear of hacking, phishing, and data theft.
- The demand for biometric logins and fraud alerts was common.

#### VI. DISCUSSION

Mobile banking has clearly reshaped how financial services were delivered. It reduces the need for physical infrastructure, enables real-time transactions, and empowers users to manage their finances from anywhere.

However, the success of mobile banking depends on:

- Stable infrastructure
- Inclusive design
- Customer education
- Strong digital security

#### VII. RECOMMENDATIONS

Based on user feedback and research analysis, the following steps are recommended:

*A. Technical Improvements*

- Invest in scalable server infrastructure.
- Ensure high performance in low-network zones.

*B. Enhanced Security*

- Use biometric authentication (fingerprint, face ID).
- Add two-factor verification and real-time fraud alerts.

*C. Better Support Services*

- Introduce 24/7 in-app customer support via chatbots or live agents.
- Track and resolve failed transactions quickly.

*D. User-Centric Design*

- Offer regional languages and audio/video tutorials.
- Design intuitive UIs for elderly and non-tech-savvy users.

*E. Financial Management Features*

- Budget trackers
- Spending alerts
- Goal-based saving tools

*F. Awareness Campaigns*

- Conduct workshops in rural areas.
- Use radio/TV to teach mobile banking safety.

## VIII. LIMITATIONS OF THE STUDY

- Sample size: Only 90 users, limiting generalizability.
- Bias: Mostly tech-savvy respondents participated.
- Self-reporting: Some answers may be socially biased or vague.

## CONCLUSION

Mobile banking is a powerful tool reshaping the financial landscape in India. Its capacity to increase access, reduce costs, and offer real-time services makes it a valuable innovation. However, widespread adoption will depend on how effectively banks and fintechs address technical, security, and usability concerns. With continuous improvement and inclusive design, mobile banking can truly democratize financial access and bridge the urban-rural divide.. Mobile banking has emerged as a game-changer in

India's financial landscape. It facilitates financial inclusion, reduces operational burdens, and transforms customer experiences. However, technical and security challenges must be addressed. If financial institutions invest in robust technology, user education, and thoughtful design, mobile banking will not only sustain but expand its revolutionary impact.

## FUTURE RESEARCH SUGGESTIONS

Further studies could:

- Expand the sample size and geographic coverage.
- Conduct comparative studies between urban and rural regions.
- Explore mobile banking adoption among senior citizens and low-income users.
- Analyze the role of AI and machine learning in future mobile banking features.

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