

# The Influence of Mobile Banking on Enhancing Digital Financial Inclusion Among Commercial Bank Customers: A Study in Mangaluru City

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## ABSTRACT

This study examines how mobile banking enhances financial inclusion in Mangaluru, where smartphone and internet adoption enable users to manage finances digitally instead of visiting branches. Surveying 100 bank customers, it explores usage frequency, motivations, and impact. Findings reveal high popularity, especially among youth (64% aged 18–25) and women (72%). Most users (90%) find mobile banking easy and beneficial; 78% prefer it over physical branches, and 94% believe it aids the previously unbanked. Key drivers include convenience, time-saving, and branch avoidance. However, challenges persist: over half report poor internet connectivity, while security concerns, app complexity, and distrust hinder adoption. The study concludes that while mobile banking significantly expands access to financial services, broader inclusion requires improved internet infrastructure, enhanced security measures, and targeted support for older and less tech-literate users. With better awareness and user-centric design, mobile banking can further democratize financial access in Mangaluru.

**Keywords:** Mobile banking, financial inclusion, Easy access to banking, Internet connection, User trust

## Introduction

In the contemporary financial landscape, digital transformation has become a cornerstone for promoting financial inclusion, particularly in developing economies like India. Financial inclusion, defined as the effective access to and usage of affordable, timely, and responsible financial services (Demirgüç-Kunt et al., 2018), remains a critical challenge despite significant advancements in banking infrastructure. A considerable segment of the population, especially in semi-urban and rural regions, continues to remain without proper access to banking due to barriers such as geographical inaccessibility, lack of financial literacy, and socio-economic constraints (World Bank, 2022). In this context, mobile banking has emerged as a transformative tool, bridging the gap between traditional banking services and underserved populations by leveraging mobile technology to deliver financial services remotely and efficiently (GSMA, 2020).

Mobile banking, which allows users to conduct financial transactions through mobile devices, has revolutionized the way individuals interact with financial institutions. It offers a cost-effective and convenient alternative to physical banking, enabling users to perform activities such as fund transfers, bill payments, balance inquiries, and account management from virtually anywhere (Sharma & Singh, 2021). The spread of smartphones and affordable internet services in India has significantly accelerated the adoption of mobile banking, particularly among younger and tech-savvy demographics (Reserve Bank of India [RBI], 2023). This shift is further supported by government initiatives such as the Digital India campaign and the Pradhan Mantri Jan Dhan Yojana (PMJDY), which aim to expand banking access and promote digital transactions (Ministry of Electronics and Information Technology [MeitY], 2021). In urban centers like Mangaluru which is one of the fastest growing cities in Karnataka with a mix of traditional and modern economic activities. The adoption of mobile banking presents a unique opportunity to enhance financial inclusion among diverse customer segments. Commercial banks operating in the region have increasingly invested in digital platforms to improve service delivery and customer engagement (Kumar & Sharma, 2022). However, despite these efforts, disparities in digital access, literacy, and trust in technology persist, particularly among older adults, low-income groups, and women (Chauhan & Pillai, 2020). Understanding the extent to which mobile banking contributes to financial inclusion in such a dynamic urban setting is essential for policymakers, financial institutions, and technology providers.

Empirical studies have demonstrated a positive correlation between mobile banking usage and financial inclusion indicators such as account ownership, transaction frequency, and savings behavior (Munyegeera & Matsuka, 2016; Suri & Jack, 2016). In India, research by Ghosh (2021) highlights that mobile banking has significantly increased financial participation among previously excluded groups, especially in tier-2 and tier-3 cities. Similarly, findings by Jain and Khare (2022) indicate that user trust, ease of interface, and network reliability are critical determinants of mobile banking adoption. Nevertheless, challenges such as cybersecurity threats, digital illiteracy, and infrastructural limitations continue to hinder widespread and equitable usage (RBI, 2023; Singh et al., 2020).

In this context this study, seeks to examine the influence of mobile banking on enhancing digital financial inclusion among commercial bank customers in Mangaluru City. By analyzing customer perceptions, usage patterns, and socio-demographic factors, the research aims to provide actionable insights into how mobile banking can be optimized to promote inclusive financial growth. The findings will contribute to the existing body of knowledge and support the development of targeted strategies to overcome barriers to digital financial inclusion in similar urban contexts.

## Review of Literature

Mobile banking has become a common way for people to manage their money using smartphones and other mobile devices. In cities like Mangaluru, more and more bank customers are using mobile apps to do their banking tasks without visiting a bank branch. This change is helping more people, especially those who had little access to banking before, become part of the formal financial system. This section looks at what past studies have found about how mobile banking is helping to include more people in banking services. It brings together findings from five research studies that looked at why people use mobile banking, what stops them, and how it is making banking easier and more accessible, especially in places like India.

A study by Donner, J., & Tellez, C. A. (2008). "Mobile Banking and Financial Inclusion: Linking Adoption, Use and Impact" highlights how mobile banking bridges gaps in financial access, especially in developing economies. It emphasizes that mobile banking reduces transaction costs and increases convenience, thereby encouraging previously unbanked or underbanked populations to engage with formal financial systems. The study underscores the role of usability and network coverage in driving adoption.

A study by Ojo, A., & Mbarika, V. (2015). "Determinants of Mobile Banking Adoption in Emerging Economies: Evidence from Nigeria and Ghana" identifies trust, perceived ease of use, and technological infrastructure as key factors influencing mobile banking adoption. Its findings are transferable to Indian urban centers, where similar socio-technical challenges exist. The study supports the argument that commercial banks enhancing user-friendly mobile platforms can significantly boost financial inclusion.

A study by Goyal, K. A., & Sharma, M. (2017). "Determinants of Mobile Banking Adoption: An Application of Theory of Planned Behavior" applies the Theory of Planned Behavior to analyze customer intentions toward mobile banking. It found that perceived behavioral control and subjective norms significantly influence adoption among urban bank customers. The research confirms that digital literacy and institutional trust are critical, suggesting that banks must invest in customer education and secure platforms.

A study by Asongu, S. A., & Odhiambo, N. M. (2019). "Mobile Banking and Inclusive Development in Developing Countries" Using panel data from multiple developing nations, demonstrates a positive correlation between mobile banking penetration and financial inclusion metrics such as account ownership and transaction frequency. It argues that mobile banking complements traditional banking, especially in bridging last-mile connectivity, which is relevant for commercial banks expanding digital outreach in tier-2 Indian cities.

A study by Raut, R. D., et al. (2021). "Barriers to Mobile Banking Adoption in India: A Customer-Centric Study" identifies security concerns, lack of digital literacy, and poor internet connectivity as major barriers to mobile banking adoption, even in urban areas. It recommends that commercial banks adopt targeted awareness campaigns and simplified interfaces to enhance inclusivity.

Collectively, these studies affirm that mobile banking significantly enhances digital financial inclusion by improving access, convenience, and affordability. However, success depends on addressing infrastructural, educational, and psychological barriers, key considerations for commercial banks aiming to deepen digital inclusion in urbanizing Indian cities like Mangaluru.

## Methodology

### Research Design

This study employs a quantitative research approach to analyse the influence of mobile banking on enhancing digital financial inclusion among commercial bank customers in Mangaluru city. This approach was selected for its efficiency, cost-effectiveness and capacity for rapid data collection.

### Objectives of the Study

- To examine the current level of mobile banking adoption and usage among the urban population in Mangaluru city.
- To investigate the key factors that influence the acceptance and usage of mobile banking services by urban consumers in Mangaluru city.

- To assess the impact of mobile banking on digital financial inclusion, particularly in terms of access to banking services, among the urban unbanked and underbanked population in Mangaluru city.

### Sample for the Study

For the purpose of this study adults aged 18 and above, who hold bank accounts and are currently residing in Mangaluru city, were considered as respondents. A sample of 100 respondents was taken to ensure representation of different demographics.

### Sampling Method

This study was carried out using a Purposive sampling method.

### Data Collection

To fulfil the objectives of the study, primary data was collected from the respondents using a self-administered questionnaire method.

### Data Analysis

**Table 1: Age of the Respondents**

Age group	Percentage of participants
18 – 25 years	64%
26 – 35 years	8%
36 – 45 years	12%
46 – 55 years	14%
56 years and above	2%
Total	100%

The data collected from 100 commercial bank customers in Mangaluru reveals important insights about the age distribution of mobile banking users. Table 1 shows that a major portion of the respondents, 64%, are between the ages of 18 and 25. Only 8% of the users are between 26 and 35 years old, which is surprisingly low compared to the younger group. Another 12% of the respondents fall in the 36–45 age group, indicating that a moderate number of middle-aged individuals are also using mobile banking services. The 46–55 age group makes up 14% of the users, which is slightly higher than the younger working group, suggesting that people approaching retirement are also adapting to digital banking. The smallest group, only 2%, is 56 years and above, showing that older adults are less involved in using mobile banking.

The data highlights that mobile banking is most popular among younger people in Mangaluru. This could be due to their comfort with smartphones and the internet. Older age groups appear to be left behind, possibly due to lack of awareness, confidence, or access.

**Table 2: Sex of the Respondents**

Gender	Percentage of participants
Female	72%
Male	28%
Total	100%

The data of table 2 shows that most of the people who took part in the study were women. Out of 100 respondents, 72% were women and 28% were men. In the study women were more involved than men.

**Table 3: Place of Residence**

Place of residence	Percentage of participants
Urban	70%
Semi-urban	20%
Rural	10%
Total	100%

The data of table 3 shows that out of all the people who took part in the study, 70% live in urban areas. This high percentage suggests that people living in cities are more involved in using mobile banking, possibly because they have the resources and opportunities to do so.

Another 20% of the participants live in semi-urban areas showing that digital banking is also reaching these communities to some extent.

Only 10% of the participants are from rural areas, The small percentage of rural participants indicates that mobile banking has not yet reached these communities as widely as it has in urban areas.

**Table 4: Level of the Education**

Highest level of education	Percentage of participants
High school	2%
PUC	36%
Diploma	2%
Graduate	50%
Postgraduate	10%
Total	100%

The data presented in Table 4 shows the educational background of the respondents Out of all the participants, half (50%) had completed their graduation, this suggests that a major portion of the respondents have a college degree, which may influence their ability to use mobile banking services, as higher education often brings greater comfort with technology.

The second largest group includes 36% of respondents who had completed PUC (Pre-University Course), indicating that many participants have at least some level of post-secondary education. Only a small number of respondents had lower levels of education 2% had completed only high school and another 2% held a diploma. Just 10% of the participants were postgraduates.

Overall, the data shows that most respondents have at least a basic level of formal education, with the majority being graduates or having completed PUC. This educational profile may support the effective use of mobile banking, as educated individuals are generally more likely to understand and adopt digital financial tools.

**Table 5: Bank Account Details**

Account Detail	Percentage of participants
Public bank	30%
Private bank	70%
Total	100

The data from table 5 shows that a majority of the participants use private banks for their banking needs. Out of every 100 participants, 70% have accounts in private banks, while only 30% have accounts in public banks. This means that private banks are more popular among the people in this area when it comes to holding bank accounts.

**Table 6: Importance of Mobile banking services in bank selection**

Importance of mobile banking services in bank selection	Percentage of participants
Very important	78%
Moderately important	20%
Not important at all	2%
Total	100

The use of mobile banking has become a key factor in how people choose their bank. The data of table 6 shows that most customers now give a lot of importance to mobile banking services when deciding which bank to use. Out of all the respondents, 78% said that having good and easy-to-use mobile banking is very important. This means that a large majority of customers prefer banks that allow them to do their banking tasks like checking balances, transferring money, or paying bills right from their phones, anytime and from anywhere. This shows that people value convenience and time-saving options in their daily lives. Mobile banking reduces the need to visit a bank branch, stand in long queues, or wait for working hours. With just a few taps on a smartphone, users can complete their transactions quickly and safely. This ease of use is clearly a major reason why so many people now consider mobile banking services a must-have feature when choosing a bank.

Another 20% of the participants said mobile banking is moderately important. These people may still like using mobile banking, but they might also care about other things such as low fees, helpful staff, or nearby branch locations. They are open to digital services but do not depend on them as much.

Only 2% of the respondents said mobile banking is not important at all. This small group likely prefers traditional ways of banking, such as visiting the branch in person. They may be less comfortable with technology or may trust face-to-face interactions more than digital ones.

The findings show that digital banking, especially through mobile apps, is no longer just an added benefit it has become a main reason why people choose a bank. Banks that offer simple, reliable, and secure mobile services are more likely to attract and keep customers.

**Table 7: Impact of mobile banking on access to banking services**

Impact of mobile banking on access to banking services	Percentage of participants
Significantly improved	90%
No change	10%
Decreased access	0%
Total	100%

Mobile banking has made a positive difference in how people access banking services. According to the data in table 7, 90% of the participants said that mobile banking has significantly improved their access to banking. It means that most people now find it easier to use bank services from their phones, without having to visit a bank branch. They can check their balance, transfer money, pay bills, and do other banking tasks anytime and from any place. This is especially helpful for those who live far from banks or have busy schedules.

Only 10% of the respondents felt that mobile banking did not change their access to banking services. These people may still prefer visiting the bank in person or may face difficulties in using mobile apps due to lack of digital skills or poor internet connection. However, no one reported that mobile banking made access worse, which shows that the overall impact is positive.

The results suggest that mobile banking is helping more people stay connected to the financial system. It is breaking down old barriers like distance and time, and making banking more convenient for everyone.

**Table 8: Mobile banking has made banking services more accessible for the unbanked and underbanked**

Mobile banking has made banking services more accessible for the unbanked and underbanked	Percentage of participants
Yes, there is increased accessibility	94%
There is no change in accessibility	6%
No, it has decreased accessibility	0%
Total	100%

Mobile banking has played a big role in making financial services more accessible to people who did not have access to banks before. The data from table 8 shows that 94% of the participants believe mobile banking has made it easier for unbanked and underbanked people to use banking services. This means that many people who once found it difficult to visit a bank or open an account can now manage their money using a mobile phone.

Only 6% of the respondents said there has been no change in accessibility, and no one reported that mobile banking has made access worse. This is a positive sign, as it shows that mobile banking is not creating new barriers. Instead, it is helping to close the gap for people who are new to the banking system, including those with low income or limited education.

The mobile banking is proving to be a helpful tool in bringing more people into the financial system. It shows how technology can be used to support inclusion and give everyone a fair chance to manage their money and plan for the future.

**Table 9: Overall level of satisfaction with mobile banking services**

Overall level of satisfaction with mobile banking services	Percentage of participants
Extremely satisfied	34%
Satisfied	60%

Neutral	4%
Dissatisfied	2%
Total	100%

The data from the table 9 shows that mobile banking services in Mangaluru are well accepted and appreciated by most bank customers. Out of all the people respondents, a large majority expressed satisfaction with the services. Specifically, 34% of the participants said they were “extremely satisfied,” while 60% said they were “satisfied.” This means that 94% of the users had a positive experience using mobile banking, which is a strong indicator of user approval.

Only a small number of people were not happy with the services. Four percent of respondents said they were neutral, meaning they neither liked nor disliked the services, while just 2% said they were dissatisfied. This suggests that very few people had negative experiences.

Overall, the results show that mobile banking is meeting the needs of most customers in Mangaluru. The high level of satisfaction indicates that people find these digital services convenient and useful. However, the small number of neutral or dissatisfied users points to a need for improvement, especially in making the apps easier to use for everyone.

**Table 10: Impact of internet connectivity on use of mobile banking services**

Impact of internet connectivity on use of mobile banking services	Percentage of participants
Significant impact	62%
Slight impact	36%
No impact at all	2%
Total	100%

The data of table 10 shows that internet connectivity plays a major role in how people use mobile banking services. Out of all the participants, 62% said that internet connection has a significant impact on their use of mobile banking. This means that when the internet is slow or not available, many users face problems like failed transactions, difficulty logging into their accounts, or trouble using important banking features. These issues can lead to frustration and may even stop some people from using mobile banking regularly.

Another 36% of participants felt that internet connectivity has only a slight impact on their usage. This could be because they have access to stable internet through Wi-Fi or they mostly use basic banking functions that don’t need a strong connection. It’s also possible that these users are not heavily dependent on mobile banking and may switch to other methods when needed.

Only 2% said that internet connectivity has no impact at all. These individuals may not use mobile banking much and might prefer visiting bank branches or using other traditional ways to manage their money.

The findings suggest that good internet service is very important for the smooth use of mobile banking. To help more people benefit from digital banking, especially in areas with weak internet, efforts should be made to improve network quality and provide alternative solutions for users during connectivity issues.

**Table 11: Primary reason for using mobile banking**

Primary reason for using mobile banking	Percentage of participants
Convenience	52%
24/7 accessibility	16%
Time-saving	10%
Faster transactions	10%
Avoid visiting bank branches	12%
Total	100%

Mobile banking has become a key way for people to manage their money. The data on table 11 show that more than half of the participants 52% said they use mobile banking because it is easy and convenient. This means that instead of going to a bank, standing in line, or waiting for office hours, people can do their banking anytime from their phones. Another important reason is that mobile banking is available 24 hours a day, seven days a week.



There were 16% of users who said round-the-clock access of mobile banking is the reason why they use it. This is especially helpful for people who work during the day or live far from a bank. They can check their balance, send money, or pay bills at any time that suits them.

Saving time is also a big factor. Ten percent of users said they use mobile banking because it saves time. Another 10% said they like it because transactions are faster compared to traditional banking. Whether it's transferring money or paying a bill, mobile banking makes it quick and simple. 12% of users said they use mobile banking mainly to avoid visiting bank branches. For many, traveling to a bank takes time and effort, especially with traffic or bad weather. Mobile banking removes that need and makes financial services more accessible.

The study shows that mobile banking helps more people take part in the financial system by making services easier to use. Its convenience, time-saving features, and constant availability are the main reasons people choose it.

**Table 12: Mobile banking usage patterns**

Mobile banking usage patterns	Percentage of participants
Daily	46%
Weekly	32%
Monthly	6%
Rarely	12%
Never	4%
Total	100%

The data from table 12 shows how often people use mobile banking services. Out of all the participants, 46% said they use mobile banking every day. This is the largest group, which means that almost half of the people rely on mobile banking regularly to manage their money. Another 32% use it once a week, showing that a significant number of people are comfortable using these services on a weekly basis.

A smaller group, only 6%, use mobile banking once a month. Meanwhile, 12% said they use it rarely, which could mean they only log in when necessary. Only 4% of the participants reported never using mobile banking, which is a very small portion of the group.

The results show that most people in the study use mobile banking quite often—either daily or weekly. This suggests that mobile banking has become a common and useful tool for many bank customers in Mangaluru. It also indicates that digital banking services are helping more people access financial services easily, especially through their mobile phones.

**Table 13: Mobile banking services frequently utilized by the respondents**

Mobile banking services frequently utilized	Percentage of participants
Fund transfers	34%
Balance inquiries	30%
Bill payments	26%
Account management	10%
Mobile check deposits	0%
Total	100%

The data from table 13 shows how people use mobile banking services in their daily lives. Out of all the services available, fund transfers are the most popular, with 34% of the respondents using them frequently. This means that many people prefer using their mobile phones to send money to others, whether it's for personal or official purposes. It is quick, easy, and saves time compared to visiting a bank.

The second most used service is checking account balance, used by 30% of the participants. This shows that people value being able to know how much money they have at any given time without having to go to a bank or ATM. It gives them better control over their finances and helps in daily budgeting.

Paying bills through mobile banking is the third most common activity, chosen by 26% of users. This includes paying for electricity, mobile recharge, or other regular expenses. Doing this through a phone reduces the need to stand in long queues or remember due dates, making life more convenient.

Managing bank accounts, such as updating personal details or requesting statements, is used by only 10% of the respondents. This lower number may mean that not many people are aware of these features or do not feel the need to use them often.

Interestingly, none of the respondents reported using mobile check deposits. This could be because they are not aware that this option exists, or perhaps they rarely use checks. It could also mean that people still feel more comfortable depositing checks in person at a bank branch.

The results show that mobile banking is mainly used for simple, everyday tasks that save time and effort. Services like transferring money, checking balance, and paying bills are in high demand. However, less common features like mobile check deposits are not being used, possibly due to lack of awareness or need.

**Table 14: Impact of COVID-19 pandemic on use of mobile banking services**

COVID-19 pandemic's impact on use of mobile banking services	Percentage of participants
Increased	70%
No change	30%
Decreased	0%
Total	100%

The data from table 14 shows that the COVID-19 pandemic had a positive impact on the use of mobile banking services. Out of all the participants, 70% said they used mobile banking more during the pandemic, while 30% said their usage stayed the same. No one reported using it less.

This increase can be linked to the lockdowns and safety measures that were put in place. With banks closing or having limited access, people had to find other ways to manage their money. Mobile banking became a safe and easy option for tasks like checking balances, transferring money, or paying bills without visiting a bank.

The findings suggest that mobile banking became an important tool during the pandemic. It not only helped people continue their financial activities safely but also introduced many to digital services for the first time.

**Table 15: Respondents Preference for mobile banking over traditional branch-based banking**

Preference for mobile banking over traditional branch based banking	Percentage of participants
Yes, I prefer mobile banking	78%
No, I prefer traditional banking	6%
I use both equally	16%
Total	100%

The data from table 15 shows that mobile banking is becoming increasingly popular among commercial bank customers. When asked about their preference between mobile banking and traditional branch-based banking, 78% of the respondents said they prefer mobile banking. This high percentage indicates that most people find it easier and more convenient to use their mobile phones for banking tasks such as checking balances, transferring money, or paying bills.

On the other hand, only 6% of the respondents said they prefer traditional banking, which involves visiting a bank branch in person. This small number suggests that very few people now rely solely on physical branches for their banking needs. While some may still like the face-to-face interaction, the need to travel and wait in lines makes this method less attractive to most users.

Interestingly, 16% of the respondents said they use both mobile and traditional banking equally. These users seem to enjoy the best of both worlds—they use mobile banking for every day, simple tasks but visit bank branches when they need help with more serious matters like applying for loans or getting financial advice. This shows that while digital banking is highly valued, there is still some trust and comfort in personal contact for more complex decisions.

The results clearly show that mobile banking is the preferred choice for the majority of customers in Mangaluru. It reflects a shift in behavior towards digital tools that offer speed, convenience, and flexibility. However, traditional banking still plays a supportive role for certain needs.



**Table 16: Respondents opinion on Transaction costs savings with mobile banking compared to traditional banking**

Transaction costs savings with mobile banking compared to traditional banking	Percentage of participants
Yes, it has helped me save on costs	40%
There is no difference	48%
No, it has increased my costs	12%
Total	100%

The data from table 16 shows how people feel about saving money on transaction costs when using mobile banking compared to traditional banking. Out of all the respondents, 40% said that mobile banking has helped them save on costs. This means that for a significant number of people, using mobile banking is cheaper than going to a bank branch. They likely save money because they don't have to travel, and some transactions through mobile apps may have lower or no fees.

However, 48% of the respondents felt there was no difference in cost between mobile and traditional banking. This is the largest group, and it suggests that many customers see both methods as equally expensive. One reason could be that banks charge similar fees for services regardless of whether they are done online or in person. So, even though mobile banking is convenient, it may not always be cheaper.

Surprisingly, 12% of users said mobile banking has actually increased their costs. This small group might be facing extra charges for certain mobile services, or they may be incurring internet or smartphone-related expenses that add up. Some may also face hidden fees or technical issues that lead to additional costs.

While mobile banking offers convenience and time savings, its financial advantage in terms of lower transaction costs is not clearly felt by most users. Nearly half of the respondents do not see any cost benefit, and a few even experience higher costs. Still, many continue to use mobile banking because the ease and speed of services make up for the cost. This shows that while digital banking helps include more people in the financial system, reducing actual costs could make it even more attractive and beneficial for users.

**Table 17: Increase in respondents' confidence to manage finances**

Increase in confidence to manage finances	Percentage of participants
Yes	68%
No	18%
Maybe	14%
Total	100%

The data from table 17 shows that mobile banking has had a positive impact on how people feel about managing their money. Out of all the people surveyed, 68% said they feel more confident in handling their finances because of mobile banking. This suggests that having access to banking services on a mobile phone helps users feel more in control of their money. Features like checking balances, transferring funds, and tracking expenses anytime and from anywhere make it easier for people to stay on top of their financial activities.

However, not everyone feels this way. About 18% of the respondents said they did not gain more confidence in managing their finances through mobile banking. Another 14% were unsure. This indicates that while many benefit from mobile banking, some still struggle to make the most of it. One possible reason is that these individuals may not have enough knowledge about basic financial concepts or may find the technology difficult to use.

This gap highlights an important challenge in achieving full financial inclusion. Mobile banking alone is not enough if people do not feel confident or capable of using it. To truly include everyone, there is a need for better financial education and simpler ways to learn how to use digital banking tools.

**Table 18: Respondents opinion on overall user-friendliness of the mobile banking app**

Rating of overall user-friendliness of the mobile banking app	Percentage of participants
Excellent	32%
Good	62%

Average	6%
Poor	0%
Total	100%

The data from table 18 shows that mobile banking apps are generally seen as easy and convenient to use. When asked about the overall user-friendliness of the mobile banking app, a large majority of respondents gave positive feedback. Specifically, 32% of the users rated the app as “Excellent,” while 62% rated it as “Good.” This means that 94% of the users found the app either excellent or good in terms of ease of use. Only a small number of respondents, 6%, felt the app was just average, and no one rated it as poor.

This high level of satisfaction suggests that mobile banking apps are designed in a way that most customers can navigate without difficulty. The simple design and easy access likely help people from different backgrounds use banking services on their phones, even if they are not very tech-savvy. Since no user reported a poor experience, it also indicates that the apps are meeting basic usability expectations.

The findings show that mobile banking apps are user-friendly, which plays a big role in helping more people take part in digital financial services. As more customers find these apps easy to use, they are more likely to adopt digital banking, which supports greater financial inclusion in the city.

**Table 19: Main challenges faced by respondents while using mobile banking**

Main challenges faced while using mobile banking	Percentage of participants
Internet connectivity issues	52%
Security concerns	32%
Complicated interface	10%
Lack of trust in digital banking	6%
Total	100%

The findings of table 19 show that internet connectivity issues are the biggest problem, affecting 48% of the respondents. Many users find it difficult to access their accounts or complete transactions due to poor or unstable internet connections. This is especially true in rural or less developed areas where network coverage is weak. When people cannot use the service smoothly, they may get frustrated and stop using mobile banking altogether.

Security concerns are the second most common challenge, reported by 32% of the users. Many people worry about their personal and financial information being stolen or misused online. They fear fraud, hacking, or data breaches, which makes them hesitant to use mobile banking apps. For digital banking to grow, users must feel safe and trust that their money and data are protected.

About 10% of the users find the mobile banking apps difficult to use because of a complicated design. A simpler and more user-friendly design can help more people use these services with confidence. Another 6% of the respondents said they generally do not trust digital banking. Even if the system is secure, their lack of confidence in online services stops them from using it. Banks need to build trust by being clear about how they protect customer data and by providing reliable services.

While mobile banking has the potential to bring more people into the financial system, several barriers remain. Improving internet access, making apps safer and easier to use and building trust are important steps that can help more people use mobile banking with confidence.

**Table 20: Factors that would encourage greater mobile banking usage**

Factors that would encourage greater mobile banking usage	Percentage of participants
Improved security features and app functionality	26%
Enhanced Internet Connectivity	26%
Better customer support	22%
Attractive rewards/incentives	16%
Recommendations from family/friends	10%
Total	100%

The data from table 20 highlights the key factors that can encourage more people to use mobile banking services. When asked what would make them use mobile banking more, the participants gave several reasons, which were grouped into five main areas.

The most common responses were improved security features and better app performance, and enhanced internet connectivity each chosen by 26% of the participants. This shows that people want mobile banking apps that are safe from fraud and work smoothly without technical problems. At the same time, they also depend on good internet service to access these apps easily, which suggests that poor network quality is still a barrier for many.

Another important factor is customer support. About 22% of the respondents said they would use mobile banking more if banks provided better help when they face problems. This means having quick and clear support through phone, chat, or in-app services can build trust and confidence among users.

Rewards and incentives were mentioned by 16% of the participants. This indicates that people are more likely to adopt mobile banking if they get benefits like cashback, discounts, or bonus points for using digital services.

Lastly, personal recommendations from family and friends were important for 10% of the users. Word-of-mouth still plays a role, especially among those who are less familiar with technology or are hesitant to try new digital tools.

To increase mobile banking usage, banks should focus on making their apps more secure and user-friendly, ensure they work well even with limited internet, offer better customer service, provide attractive rewards, and encourage satisfied users to share their positive experiences. These steps can help more people, especially those who are not regular users, feel confident and motivated to adopt mobile banking.

**Table 21: Likelihood of respondents recommending mobile banking apps to others**

Likelihood of recommending mobile banking apps to others	Percentage of participation
Very likely	48%
Somewhat likely	46%
Not very likely	6%
Total	100%

When asked how likely they are to recommend mobile banking apps to others, the majority of respondents gave positive answers. As shown in Table 21, 48% of respondents said they are “very likely” to recommend these apps, while another 46% said they are “somewhat likely” to do so. Together, this means that 94% of users have a favorable view of mobile banking and would suggest it to others. Only a small portion, 6%, said they are “not very likely” to recommend the apps.

This high level of willingness to recommend shows that most customers find mobile banking helpful, easy to use, and trustworthy. When people are happy with a service, they tend to share their positive experience with friends and family. The fact that nearly 9 out of 10 respondents are likely to recommend mobile banking apps suggests that these apps are playing a meaningful role in making banking easier and more accessible.

The results indicate that mobile banking is not only popular but also seen as a valuable tool by customers in Mangaluru. This supports the idea that mobile banking is helping more people take part in the digital economy, especially those who may have found traditional banking difficult or time-consuming. As more people use these apps and recommend them to others, digital financial inclusion is likely to grow further in the region.

## Major Findings of the Study

This study looked at how mobile banking is helping more people in Mangaluru city access banking services. The researchers talked to 100 bank customers to understand how they use mobile banking, what they like about it, and what problems they face. One of the biggest findings is that mobile banking is very popular among young people. About 64% of the people surveyed were between 18 and 25 years old. This shows that younger customers are more comfortable using smartphones for banking. On the other hand, very few older adults (only 2%) use mobile banking, which suggests that many seniors still find it difficult or are not aware of how to use it.

Interestingly, 72% of the participants were women. This means women in the study were more likely to use mobile banking than men. Most users (70%) lived in urban areas, showing that city residents have better access to digital banking than those in rural areas. When it comes to education, half of the users were college graduates and another 36% had completed pre-university education. This suggests that having a basic level of education helps people feel more confident using mobile banking apps.

Most people (70%) use private bank accounts, and a large majority (78%) said that good mobile banking services are very important when choosing a bank. This shows that digital features now play a big role in customer decisions. The good news is that 90% of users said mobile banking has made it much easier for them to access banking services. They can check balances, transfer money, pay bills, and manage accounts anytime and from anywhere. This is especially helpful for busy people or those who live far from banks.

Mobile banking is also seen as a tool that helps include more people in the financial system. About 94% of respondents believe it has made banking more accessible to people who didn't have bank accounts before or had limited access. No one said it made access worse, which is a strong sign of its positive impact. Most users are happy with mobile banking. In fact, 94% said they are either satisfied or extremely satisfied. They find the apps easy to use — 94% rated the user-friendliness as good or excellent. This ease of use is one reason why 78% of users now prefer mobile banking over visiting a bank branch. The main reasons people use mobile banking are convenience (52%), saving time (10%), and not having to go to the bank (12%). Almost half (46%) use it every day, and 32% use it weekly, which shows it has become a regular part of life for many. The pandemic also played a role. About 70% of users said they started using mobile banking more during the COVID-19 lockdowns, when bank branches were closed or hard to access.

However, there are still some challenges. The biggest problem is poor internet connection, which affects 52% of users. Many also worry about security (32%) — they fear their money or personal information might not be safe online. A few find the app interface confusing (10%) or simply don't trust digital banking (6%). Even though mobile banking saves time, not everyone feels it saves money. While 40% said it reduced their costs, nearly half (48%) saw no difference in cost, and 12% even felt it cost them more possibly due to internet or smartphone expenses. Despite these issues, 68% of users said they now feel more confident managing their money because of mobile banking. And most are willing to recommend it 94% said they are likely to suggest mobile banking apps to others.

## Conclusion

Mobile banking has become a powerful force in bringing more people into the financial system, especially in urban areas like Mangaluru. It offers a simple, fast, and flexible way for individuals to manage their money without needing to visit a bank. This shift has been particularly beneficial for younger people and women, who are embracing digital tools to take greater control of their finances. The convenience of conducting transactions anytime and from any location has made mobile banking a preferred choice for many, reshaping how people interact with banks.

One of the most significant impacts of mobile banking is its role in promoting financial inclusion. It has opened doors for individuals who previously had limited or no access to banking services, allowing them to save, transfer money, pay bills, and stay financially active with greater ease. The rise in digital adoption has also been supported by real-world events, such as the pandemic, which pushed more people to explore and rely on digital alternatives for their banking needs.

Despite its many advantages, mobile banking still faces challenges that prevent it from reaching everyone equally. Issues like unstable internet connections, concerns about online security, and difficulties in navigating digital platforms continue to affect user experience. Some individuals, especially older adults or those less familiar with technology, may feel left out or hesitant to adopt these services due to lack of trust or confidence.

However, the overall response from users is positive. Most find mobile banking easy to use and appreciate the independence it gives them in managing their money. The willingness of users to recommend these services to others reflects a growing trust in digital banking. To build on this progress, efforts should focus on strengthening internet access, improving app security, offering better customer support, and increasing awareness through education and peer guidance.

Mobile banking is more than just a technological upgrade; it is a tool for empowerment. With continued improvements and inclusive strategies, it has the potential to connect even more people to the financial world, making banking not just a privilege for a few, but a simple reality for many.

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