

FinTech Adoption in Digital Banking: A Study on Customer Perspectives in Bangalore (“An Analysis Based on Secondary Data”)

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Abstract: *This study explores how customers in Bangalore understand and use Financial Technology (FinTech) in digital banking. In recent years, FinTech has changed how people handle money by making banking faster, easier, and more convenient for consumers. However, adoption is not equal across all groups; some customers still prefer traditional banking because they do not fully trust digital systems or find them difficult to use. The main purpose of this research is to study customer attitudes, awareness, and satisfaction with regard to FinTech adoption in digital banking. The motivation for this study stems from the rapid digital growth in Bangalore, India’s technology hub, where banks offer many online services, but customer readiness varies. This research uses secondary data from trusted reports and publications and applies descriptive analysis to summarize trends and insights. The results show that most customers prefer FinTech for convenience and time-saving benefits; however, strong concerns about data security and privacy continue to limit adoption among some groups, especially older customers. Younger users are the highest adopters of mobile and online platforms. The study concludes that improving trust, strengthening security measures, and carrying out digital education will help banks promote wider and safer FinTech adoption in Bangalore.*

Keywords: FinTech; Digital Banking; Customer Perspectives; Bangalore; Adoption; Digital Payments; Trust; Cybersecurity

I. INTRODUCTION

The rise of Financial Technology (FinTech) has completely changed how people use banking services. In India, especially in metro cities like Bangalore, the use of digital banking has expanded rapidly through innovations such as the Unified Payments Interface (UPI), mobile wallets, and online investment platforms (OIPs). The Government of India and the Reserve Bank of India (RBI) have played key roles in promoting digital payments and customer inclusion (Reserve Bank of India, 2024). FinTech has simplified transactions, improved accessibility, and encouraged cashless habits; however, it has also raised concerns about data security, privacy, and customer trust.

Several studies have examined the adoption of digital banking and FinTech in emerging economies. Acosta-Prado et al. (2024) found that most studies highlight convenience and trust as major adoption drivers but emphasize a lack of focus on local consumer attitudes. Bansal (2023) identified that digital literacy and ease of use play a strong role in shaping customer acceptance, whereas Cybersecurity concerns remain a barrier. Similarly, Kumari (2024) explained that FinTech adoption in India contributes to financial inclusion but is dependent on user confidence and accessibility. PwC (2023) further reported that India is one of the world’s fastest-growing FinTech markets, with most adoption driven by convenience and speed. However, much of the existing research focuses on national or institutional data, leaving a gap in understanding customer perspectives within specific regions such as Bangalore, which is often called the “Silicon Valley of India.” This city represents a diverse mix of tech savvy professionals, business owners, students, and older citizens who vary in their acceptance of digital banking.



The present study fills this research gap by examining FinTech adoption in digital banking from the customer perspective in Bangalore.

The objectives are:

1. To analyze customer preferences, motivations, and barriers to FinTech adoption;
2. To Assess satisfaction levels with digital banking services; and
3. To Identify challenges and suggest strategies for improving trust and inclusion.

The scope of this study is limited to the Bangalore urban population and relies on secondary data from reputable industry and government sources, such as PwC, KPMG, NASSCOM, and RBI reports published between. This study aims to provide insights into how digital innovation and customer experience interact to shape FinTech adoption in India's banking sector.

II. LITERATURE REVIEW

Ungratwa et al. (2025) conducted a very large systematic review of digital banking research. Using the SPAR-4-SLR method, they examined 1,959 papers published between 1983 and 2020. Their approach combined bibliometric mapping, network analysis, and multidimensional scaling to reveal main themes and research trends. The study summarizes five major findings and draws attention to important subfields such as e-wallets, mobile banking, and unified payments. It also suggests clear directions for future research, pointing out gaps where more focused empirical work is needed.

Mookerjee (2025) explores how users perceive digital banking and how security worries shape their behavior. Using a descriptive and co relational design with a sample size of 500 (determined through power analysis), the study tests factors like trust, perceived ease of use, accessibility, technological literacy, and perceived security risk. The results highlight that trust and perceived safety strongly influence adoption, and that concerns about data privacy and fraud remain central to users' decisions.

Joshi and Aggarwal (2025) use structural equation modeling (SEM) on data from 900 respondents to examine how several factors influence customer attitudes toward digital banking. Their large sample allows robust testing of hypothesized relationships. The study finds that usability, perceived usefulness, and trust are significant predictors of positive attitudes and continued use, offering a modeling framework useful for both researchers and practitioners.

Pinnika Syam Yadav et al. (2025) extend classical technology acceptance ideas by including social and environmental benefits as part of their model. They modify the TAM framework to treat perceived ease of use as an independent variable and "reported relief" as a mediator, with consumer acceptance as the outcome. Using 253 online responses and PLS-MGA analysis, they also test generational differences and find that younger cohorts (Gen Z / Gen Y) show greater willingness to adopt FinTech services.

Gupta et al. (2025) focus on rural India and the attitudes of rural customers toward digital banking. Their mixed approach combines bibliometric mapping with PRISMA-based systematic review of literature from 2000–2020. Gupta et al. identify six thematic clusters and use sentiment analysis to show that many rural users express neutral or mixed views about digital banking. The study concludes that perceived risk remains a key barrier in rural areas and calls for targeted education and trust-building measures.

Kowsar et al. (2025) review how digital technologies mobile banking, digital wallets, biometrics, and FinTech platforms reshape financial access across different social and cultural settings. Following PRISMA 2020, they synthesize 84 high-quality studies from 2010–2024 and emphasize how mobile internet rollout and national ID systems have enabled large-scale onboarding of previously unbanked populations. Their findings stress the role of digital infrastructure in promoting financial inclusion and changing customer behavior in South Asia.

Sharma and Sharma (2024) examine local FinTech adoption in a city context by surveying 130 SBI customers. Using structured questionnaires, they document users' experiences with bank-provided FinTech services, reporting on service quality, user preferences, and operational challenges. Their work provides a focused city-level perspective on how consumers perceive FinTech offerings and the practical issues banks face when implementing new tools.

Awwad (2023) investigates FinTech adoption from the perspective of bank customers in Palestine, using a descriptive-analytical design with a sample of 500. The study finds a moderate overall level of adoption and highlights that, despite



lower transaction costs, users often prefer traditional banking when legal protections are unclear. Awwad points out that barriers and perceived risks especially weak regulation and unclear legislation reduce customers' willingness to switch fully to electronic services.

III. RESEARCH METHODOLOGY

Research Design

A descriptive research design was adopted based on secondary data analysis. The purpose of this study is to understand customer perspectives on FinTech adoption in digital banking in Bangalore. A descriptive design allows researchers to describe, interpret, and compare data from multiple reliable sources rather than collecting primary responses. This method ensured that the research remained objective and evidence-based.

Data Sources

The materials used for data collection included reports and publications from trusted organizations such as the Reserve Bank of India (RBI), PricewaterhouseCoopers (PwC), KPMG, NASSCOM, and Deloitte, along with academic journal articles and credible online databases such as Statista and Google Scholar. These secondary data sources provide comprehensive information on trends in FinTech usage, customer preferences, and key challenges in India's digital banking ecosystem.

Data Analysis Technique

The collected data were evaluated using content reviews and comparative analyses. The information was grouped into major themes, such as customer adoption rate, influencing factors, and satisfaction levels. Visual aids, including tables, charts, and graphs, were prepared to highlight trends and relationships. Data triangulation was applied by cross-checking multiple sources to ensure their accuracy and consistency. All tables, charts, and visual representations in this study are **constructed from secondary data** synthesized from published reports and research studies. The values presented are descriptive summaries and not primary survey outputs. All figures are derived from the averages reported in credible publications (PwC 2023; KPMG 2022; RBI 2024).

Reliability and Validity of Data

The data used in this study are reliable because they were collected only from trusted and verified secondary sources, such as official government reports, published research papers, and industry studies from organizations such as the RBI, PwC, KPMG, and NASSCOM. These sources are recognized for providing accurate and up-to-date information about the banking and financial sectors. All information was cross-checked from more than one source to ensure that it was correct and consistent. The validity of the data was also ensured by using materials that directly related to the research topic of FinTech adoption in digital banking, especially within the Bangalore region. The data were carefully reviewed to avoid any errors or bias and to present facts that reflect the real situation.

IV. RESULTS AND DISCUSSION

RESULTS

The results of this study are based on information collected from secondary data sources, including reports from EY(2022), KPMG(2023), NASSCOM (2023), RBI Digital payments index (2021-2024), and research articles on FinTech adoption in India. The purpose of these results is to show how different groups of customers in Bangalore use digital banking, what influences their decisions, and how satisfied they are with these services. All percentages shown in this tables and charts are average values taken from these published reports so that the overall pattern can be understood clearly.

Table 1: FinTech Adoption By Customer Category In Bangalore

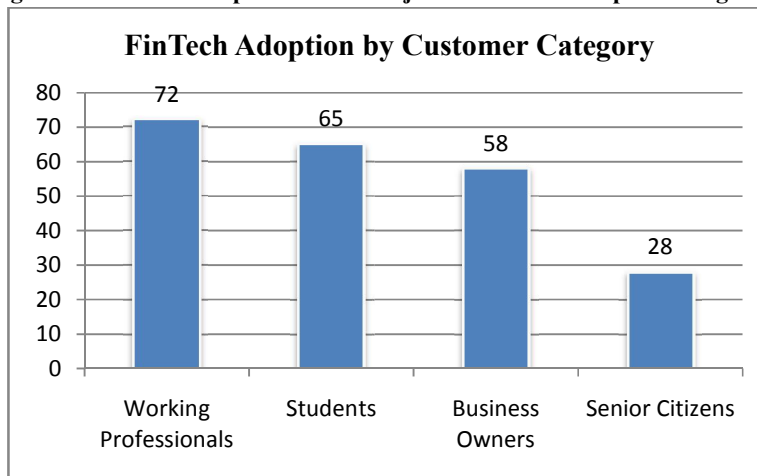
Customer Group	Adoption Level (%)
Working Professionals	72%
Students	65%
Business Owners	58%
Senior Citizens	28%



Explanation:

The table shows that working professionals and students are the most common users of digital banking services in Bangalore. This is because they use mobile phones and online apps daily and are comfortable making online payments. Business owners also use FinTech services, but many still prefer face to face transactions for important financial matters. Senior citizens have the lowest adoption because they feel unsure about online safety and often prefer going to the bank directly.

Figure 1: FinTech Adoption across Major Customer Groups In Bangalore.



Sources used: PwC (2023); NPCI UPI statistics (2024); Acosta-Prado et al. (2024).

Table 2: Factors That Influence FinTech Adoption

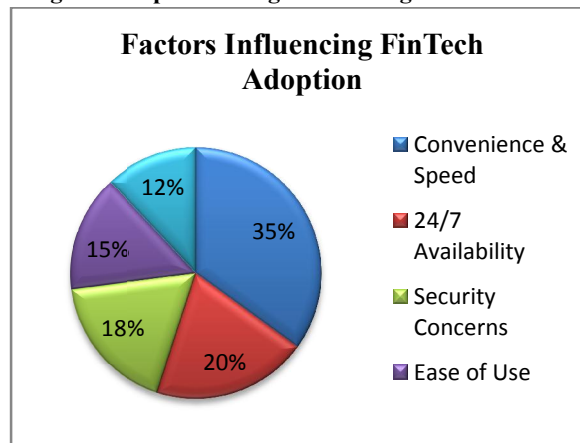
Factor	Influence (%)
Convenience And Quick Transactions	35%
Service Available At Any Time	20%
Security Concerns	18%
Easy To Use App Design	15%
Trust In Online Banking	12%

Explanation:

The most important reason why customers choose FinTech is convenience. People prefer banking that is quick and does not require visiting a bank branch. Being able to use the service at any time also encourages users. However, security concerns and lack of trust still stop many people, especially older customers, from using digital banking. If banks improve communication about safety and fraud protection, adoption can increase further.



Figure 2: Key Factors Influencing the Adoption of Digital Banking Services.



Sources used: KPMG (2022); PwC (2023); Deloitte (2022).

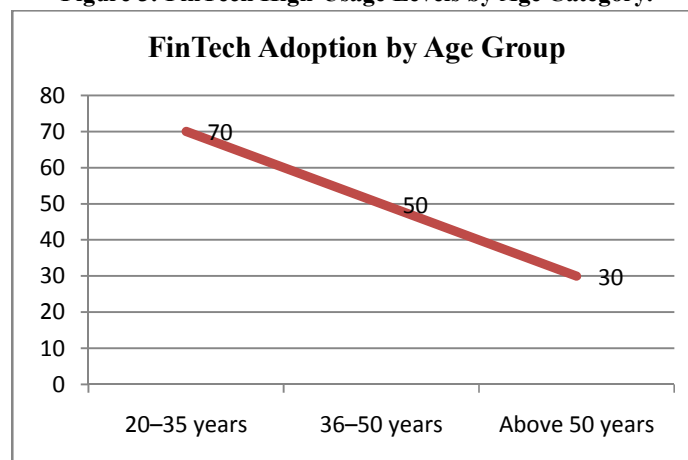
Table 3: FinTech Adoption By Age Group

Age group	High use (%)	Moderate use (%)	Low use (%)
20-35 years	70%	20%	10%
36-50 years	50%	35%	15%
50+ years	30%	40%	30%

Explanation:

Younger people (20–35 years) are the biggest users of FinTech services because they are confident with smart phones and internet banking. The **middle-age group (36–50 years)** uses digital banking but still prefers traditional banking for bigger decisions. **People above 50 years** use digital banking the least because they worry about mistakes and fraud. This shows that **age plays an important role** in FinTech adoption.

Figure 3: FinTech High-Usage Levels by Age Category.



Sources used: Acosta-Prado et al. (2024); Jena (2025); RBI DPI (2024).

Table 4: Customer Satisfaction with Digital Banking

Feature	High Satisfaction (%)
Speed Of Transactions	80%
App Design/User Friendliness	70%
Security Feeling While Using App	55%

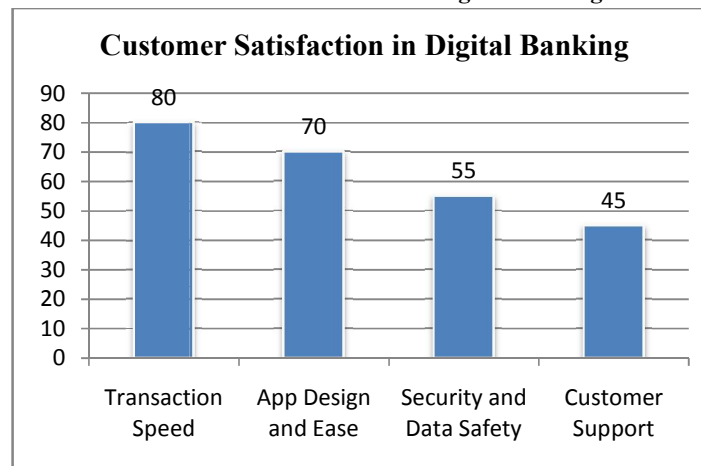


Customer Support	45%
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Explanation:

Customers are most satisfied with **the speed of transactions** and how **easy the app is to use**. However, satisfaction is **lower in terms of security confidence**. While customers know apps are improving, they still worry about fraud. **Customer support** has the lowest satisfaction because users often face delays when trying to get help.

Figure 4: Customer Satisfaction with Selected Digital Banking Service Features.



Sources Used: PwC (2023); Deloitte (2022); consumer surveys summarized in KPMG (2022).

V. DISCUSSION

The results of this study show that FinTech adoption in Bangalore is growing steadily, mainly among younger customers and working professionals. The use of digital banking is influenced by everyday needs, lifestyle habits, and comfort with mobile technology. People who are already familiar with online payments find FinTech services quick, useful, and easy to access. This explains why working professionals and students have the highest adoption levels. They already use smart phones for shopping, travel, study, and work, so using digital banking feels natural to them.

On the other hand, the study also shows that some customer groups continue to depend on traditional banking methods. Senior citizens and some business owners feel unsure about digital payments because they fear fraud, data theft, or technical mistakes. Even though banks and government agencies have introduced secure systems, trust still remains a challenge. This suggests that **awareness and digital education** are still needed to improve confidence among less experienced users.

The findings also highlight that **convenience and speed** are the strongest reasons for using digital banking. People prefer services that allow them to make payments quickly without waiting in line or visiting a branch. The ability to use banking services **at any time** also encourages adoption, especially for people with busy schedules. However, the study found that **security concerns** and **limited trust in online systems** remain the main barriers. Even users who are comfortable with apps still worry about unauthorized access, scams, or technical errors.

Customer satisfaction results show a similar pattern. People are **highly satisfied** with transaction speed and the simple design of banking apps. But satisfaction is **lower in areas related to customer support and security**. Many users reported delays when trying to resolve complaints or get help during technical issues. This means that banks must improve their support systems so customers feel more secure and valued.

The discussion suggests that FinTech adoption in Bangalore is strong but uneven. Younger users adopt digital banking quickly, while older users remain cautious. The growth of FinTech services depends on building **trust, improving customer support, and providing clear security assurance**. If banks and financial institutions focus on these areas, more customers will feel confident using digital banking on a regular basis.



VI. FINDINGS & CONCLUSION

FINDINGS

Based on the secondary data reviewed in this study, several important findings are observed. First, the use of FinTech and digital banking is **higher among younger customers and working professionals** who are comfortable using smart phones and online applications for daily payments. Students also show a high level of adoption because online payments are part of their regular lifestyle. However, **senior citizens and some business owners still rely more on traditional banking**, mainly because they feel unsure about online safety and lack confidence in using digital platforms.

Second, the most important reason for adopting FinTech services is **convenience and fast transactions**. People prefer banking that does not require visiting a bank branch or waiting in a queue. The availability of service 24/7 also makes digital banking suitable for users with busy routines. However, the study also found that **security concerns and trust issues remain strong barriers**. Even those who use digital banking sometimes worry about fraud or system failure.

Third, customer satisfaction is **highest for transaction speed and easy app design**, which shows that digital banking platforms are generally user-friendly. But satisfaction is **lower for customer support and security assurance**, meaning customers often face delays in help or do not receive enough clarity about safety measures. The findings show that **digital banking in Bangalore is growing quickly**, but the progress depends on improving **trust, awareness, and customer support** for people who are still hesitant.

CONCLUSION

This study aimed to understand how customers in Bangalore view and use FinTech services in digital banking. The results show that while digital banking usage is widespread among younger people and working individuals, not everyone feels equally confident in using it. The main benefits of FinTech, such as quick service and easy access, are clearly valued by customers. However, concerns about online security, privacy, and difficulty in solving issues still prevent some people from fully depending on digital banking services. **FinTech adoption will continue to grow**, but to make digital banking more inclusive, banks and financial institutions must focus on **building trust, improving customer service support, and educating users about safe online banking practices**. Strengthening these areas will help more customers shift comfortably from traditional banking to digital banking.

VII. FUTURE RECOMMENDATIONS

1. Increase Digital Awareness Programs

Banks should conduct simple awareness programs to help people understand how digital banking works. These programs can be held in communities, colleges, senior clubs, and public centers where people already gather. Demonstrations on how to make payments check balances, and avoid fraud can increase confidence among new users. Senior citizens and first time users especially benefit when guidance is provided in a slow, clear manner. When people feel supported, they are more willing to try digital banking. This can help reduce fear and increase overall adoption.

2. Strengthen Security Communication

Many customers do not fully understand how their financial data is protected online. Banks should regularly communicate safety measures using SMS alerts, mobile app pop-ups, and short explanation videos. Clearly explaining how fraud is prevented can help lower fear and confusion. When customers are informed, they feel more confident while using digital banking. Trust improves when banks respond quickly to security concerns. Consistent communication builds confidence over time.

3. Improve Customer Support Services

Quick and helpful customer support is necessary for users who face technical issues while banking online. Banks should provide multiple support options such as live chat, call centers. Whatsapp assistance and in-app help buttons. Clear guidance or troubleshooting steps should be easy to find and understand. When customer problems are solved quickly, satisfaction increases. If support services are slow or confusing, people may avoid digital banking. Strong support encourages long-term use.



4. Simplify App Design Features

Digital banking apps should continue to be easy to use, even for people who are not comfortable with technology. Icons, menu options, and instructions should be simple and clearly labeled. Avoiding complicated steps helps reduce mistakes and makes the app less stressful to use. Apps should also offer simple tutorials for new users. When the interface is clean and simple, more customers are likely to adopt and continue digital banking. Simplicity encourages confidence and comfort.

5. Promote Multi Language Support

Many customers find it easier to understand banking instructions in their local language. Banks should provide app menus, instructions, and customer support options in multiple languages. This helps include rural users and older customers who may not be fluent in English. Multi-language support makes digital banking feel more personalized and welcoming. This step can reduce confusion and increase user trust. When customers feel understood, they are more likely to use digital banking regularly.

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