

# A Study of Fintech and Digital Banking: Reshaping Traditional Banking

Ms:B.Kareshmithra, Associate Professor Dr. T. M. Hemalatha

Department of Commerce, Rathinam College of Arts and Science (Autonomous), Coimbatore, Tamilnadu

**Abstract** This study examines the impact of Financial Technology (FinTech) and digital banking on traditional banking systems. With the rapid growth of services such as UPI, mobile wallets, internet banking, and online transactions, banking operations have become more technology-driven and customer-centric. The research aims to understand customer adoption patterns, benefits, and challenges associated with digital banking. A descriptive research design is adopted, and data will be collected through structured questionnaires from bank customers. Secondary data is gathered from journals, reports, and online sources. The study seeks to analyze how FinTech is transforming traditional banking operations and influencing customer behavior. The findings will provide insights for banks to enhance digital services while maintaining security and customer trust.

**Keywords—** FinTech, Digital Banking, Traditional Banking, Customer Adoption, Financial Inclusion, Technology Integration.

## I. INTRODUCTION

The banking sector plays a crucial role in the economic development of a country. Traditionally, banking systems operated through physical branches, manual documentation, and face-to-face customer interactions. While this system ensured reliability and trust, it often lacked speed, flexibility, and accessibility. Customers had to visit bank branches for basic services such as fund transfers, bill payments, and account inquiries.

With technological advancements, the concept of Financial Technology (FinTech) has emerged as a transformative force in the banking industry. FinTech refers to the use of technology to deliver financial services efficiently and conveniently. Digital banking, a key component of FinTech, enables customers to access banking services through online platforms, mobile applications, and digital payment systems.

Services such as UPI, mobile wallets, internet banking, and contactless payments have significantly changed customer expectations. Banking services are now available 24/7, reducing dependency on physical branches. This digital shift has improved operational efficiency for banks while enhancing

customer convenience. However, concerns related to cybersecurity, data privacy, and digital literacy remain significant challenges.

Therefore, it becomes essential to study how FinTech and digital banking are reshaping traditional banking systems and influencing customer behavior.

## II. REVIEW OF LITERATURE

Santos Diaz, R. (2025) studied recent trends in FinTech and digital banking in emerging and developing economies. The research used a descriptive design and examined secondary data from industry reports and financial institutions. The findings showed that digital payment systems, mobile banking, and online financial platforms are quickly changing traditional banking operations. However, challenges like cybersecurity risks and uneven digital access still exist.

Kh3alifa, D. (2024) looked at how FinTech can aid economic development and financial inclusion. This study used a qualitative approach and reviewed policy documents and industry reports. It found that digital infrastructure, regulatory support, and

customer awareness are crucial for the steady growth of digital banking systems.

Wezel, T. (2023) analyzed the role of digital financial services in boosting financial inclusion. The research combined quantitative data analysis with interviews. The study concluded that digital banking enhances access to financial services but faces issues like low digital literacy and trust problems among customers.

Nkechika, C. G. (2022) reviewed the progress of digital financial services and their effects on financial inclusion. The study employed a descriptive design based on institutional reports and banking data. The findings showed that digital platforms significantly increase access to banking services, especially for underserved populations.

Usoro, U. (2021) studied technology's impact on financial services, focusing on mobile banking and digital payments. The research used a quantitative design and analyzed transaction data. The results indicated that adopting technology improves service efficiency and customer satisfaction in banking.

The FinTech Industry Report (2020) examined the growth of FinTech firms and digital banking platforms using survey data from financial institutions. The study found that digital financial services are expanding rapidly but noted regulatory uncertainty and data security as major concerns.

The PalmPay Case Study (2019) explored the growth of mobile wallet services and their competition with cash transactions. A case study method was used to analyze company data and industry trends. The findings showed that ease of use and strategic partnerships increase customer adoption of digital payment platforms.

Ayodeji, D. C. (2018) investigated digital transformation and consumer behavior in financial services. The study used a modeling approach with survey data and financial indicators. The findings revealed that digital banking significantly changes customer expectations and encourages innovation in traditional banking.

Babalola, E. G. (2017) discussed the challenges of launching digital banking platforms. A qualitative design based on case studies was utilized. The study identified regulatory compliance, infrastructure readiness, and customer trust as significant barriers.

The ICT and Digital Economy Study (2016) looked at the role of data and FinTech in economic development. A mixed-method approach combined data analysis with stakeholder interviews. The findings highlighted that FinTech enhances economic efficiency and improves service delivery.

The WIRED Money Report (2015) reviewed innovative FinTech start-ups and their impact on transforming financial services. A descriptive approach was taken. The study concluded that technology-driven start-ups speed up innovation in the financial sector.

### **III. STATEMENT OF THE PROBLEM**

The rapid growth of technology has changed how the financial sector operates. FinTech and digital banking have become major disruptors of traditional banking practices. While these innovations offer faster, more efficient, and user-friendly services, they also bring new problems for conventional banks that have depended on face-to-face interactions and branch operations. Many customers still face issues like low digital literacy, worries about data privacy, cyber fraud, and trust in technology-based systems. At the same time, banks struggle to upgrade their old infrastructure, manage regulatory compliance, and compete with nimble FinTech start-ups that quickly adopt new technologies. This situation raises important questions about the banking industry's future. Digital banking offers the promise of financial inclusion, convenience, and cost savings. However, it also brings challenges related to customer trust, operational risks, and fair access. The main issue this study addresses is understanding how FinTech and digital banking affect traditional banks and what opportunities and challenges come from this change. It also looks at how customers see and adjust to these developments.

### Objectives of the Study

- To study the growth and evolution of FinTech and digital banking in India
- To examine how digital banking is reshaping customer expectations compared to traditional banking.
- To evaluate the challenges faced by traditional banks in adopting digital solutions.
- To understand the role of FinTech in promoting financial inclusion, especially in rural areas.
- To suggest measures for improving collaboration between FinTech and traditional banks for sustainable growth.

### Sampling Frame

- SAMPLE: Bank customers using digital banking services
- SAMPLE POPULATION: Customers of commercial banks
- SAMPLE SIZE: Sample size determination is the choosing of observation or replicate to include in statistical sample. For this study a sample size of 300 was selected.
- SAMPLING TECHNIQUE: Convenience sampling method.

### Interpretation Percentage Analysis

Table 1 Awareness of Digital Banking

Awareness	Respondents	Percentage
Yes	264	88%
No	36	12%
Total Respondents	300	100%

**Interpretation** - In Table 1.1, Out of 300 respondents, 264 respondents (88%) are aware of digital banking services, while 36 respondents (12%) are not aware. This clearly indicates that the majority of customers have knowledge about digital banking platforms such as mobile banking, internet banking, UPI, and FinTech applications. The high level of awareness shows that digital banking services have gained significant reach among customers. However, a small percentage still lacks awareness, which indicates the need for further digital education and awareness programs.

Table 2 Familiarity with Digital Banking Services

Familiarity Level	No. of Respondents	Percentage
High Familiar	135	45%
Moderate Familiar	105	35%
Slightly Familiar	45	15%
Not Familiar	15	5%
Total	300	100%

**Interpretation** - Table 1.2 The above table shows that 135 respondents (45%) are highly familiar with digital banking services, while 105 respondents (35%) are moderately familiar. About 45 respondents (15%) are slightly familiar, and 15 respondents (5%) are not familiar at all. This indicates that although awareness is high, the level of familiarity varies among customers. A majority of respondents are comfortable using digital banking services, but a small portion still lacks practical understanding. This suggests that banks should focus not only on awareness but also on improving customer confidence and usability through training and guidance.

### Chi-Square Test

Table 3 Association Between Awareness and Usage

	Use of Digital Banking	Do Not Use
Aware	240	24
Not Aware	15	21
Total	255	45

### Chi-Square Result

Test	Value	df	Sig
Pearson Chi-Square	66.42	1	0.000

### Interpretation

The Chi-Square test result shows a significance value of 0.000, which is less than the standard level of 0.05. Therefore, the null hypothesis is rejected. This means that there is a significant relationship between awareness and usage of digital banking services. Customers who are aware of digital banking are

more likely to use these services. This finding proves that awareness plays a major role in the adoption of digital banking.

**One-way ANNOVA**

Table 4 Customer Satisfaction Across Usage Frequency

Time Balancing	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15.963	3	5.321	4.215	0.006
Within Groups	373.020	296	1.260		
Total	388.983	299			

**Interpretation (Satisfaction and Usage Frequency)**

The ANOVA test shows a significance value of 0.006, which is less than 0.05. Hence, the null hypothesis is rejected. This indicates that there is a significant difference in satisfaction levels among customers based on how frequently they use digital banking services. Regular users tend to show higher satisfaction compared to occasional or rare users. This suggests that increased usage improves familiarity and confidence in digital banking platforms.

services. However, a small group still has concerns, possibly due to security risks or technical issues.

**IV. CONCLUSION**

The study highlights that FinTech and digital banking are significantly transforming traditional banking systems. Digital platforms provide faster transactions, improved convenience, and greater accessibility to customers. While digital banking enhances service efficiency and financial inclusion, challenges such as cybersecurity risks and digital awareness remain. Traditional banks must adopt technological innovations while ensuring security and customer trust. Overall, digital banking is reshaping the future of the banking industry by creating a more efficient and customer-focused financial system.

**Ranking Method**

Table 5 Opinion on how moonlighting affects the quality of education

Impact	Number of Respondents	Rank
Positive	195	1
Netural	60	2
Negatively	45	3
Total	300	

**Interpretation**

Out of 300 respondents, 195 respondents believe digital banking has a positive impact, 60 respondents feel it has a neutral impact, and 45 respondents believe it has a negative impact. This clearly shows that the majority of customers view digital banking as beneficial. Customers appreciate the convenience, speed, and accessibility provided by digital banking

**REFERENCES**

**Journals and Articles**

1. Philippon, T. (2016). The FinTech opportunity. *Journal of Economic Perspectives*, 30(2), 185–210.
2. Thakor, A. V. (2020). FinTech and banking: What do we know? *Journal of Financial Intermediation*, 41, 100833.
3. Frost, J. (2020). The economic forces driving FinTech adoption. *Bank for International*

- Settlements Quarterly Review, March Issue, 1–13.
4. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478.
  5. Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of IT (UTAUT2). *MIS Quarterly*, 36(1), 157–178.
  6. Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping. *MIS Quarterly*, 27(1), 51–90.
  7. Shaikh, A. A., & Karjaluoto, H. (2015). Mobile banking adoption: A literature review. *Telematics and Informatics*, 32(1), 129–142.
  8. Alalwan, A. A., Dwivedi, Y. K., Rana, N. P., & Williams, M. D. (2016). Consumer adoption of mobile banking in Jordan. *Journal of Enterprise Information Management*, 29(1), 118–139.
  9. Donner, J., & Tellez, C. A. (2008). Mobile banking and economic development. *Information Technologies & International Development*, 4(1), 27–47
  10. Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2022). Financial inclusion and digital payments. *World Bank Economic Review*, 36(1), 1–28.
  11. Suri, T., & Jack, W. (2016). The long-run poverty and gender impacts of mobile money. *Science*, 354(6317), 1288–1292.
  12. Beck, T., Demirgüç-Kunt, A., & Levine, R. (2007). Finance, inequality and poverty. *Journal of Economic Growth*, 12(1), 27–49.
  13. Kshetri, N. (2016). Cybercrime and cybersecurity in FinTech. *Computer*, 49(2), 15–23.
  14. Böhme, R., & Moore, T. (2012). The economics of cybersecurity. *Journal of Economic Perspectives*, 26(2), 3–26.
  15. Herath, T., & Rao, H. R. (2009). Protection motivation and deterrence. *European Journal of Information Systems*, 18(2), 106–125.
  16. Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2018). *Services marketing* (7th ed.). McGraw-Hill. (Book)
  17. Jun, M., & Cai, S. (2001). The key determinants of internet banking service quality. *International Journal of Bank Marketing*, 19(7), 276–291.
  18. Santos, J. (2003). E-service quality model. *Managing Service Quality*, 13(3), 233–246.
  19. Brynjolfsson, E., & McAfee, A. (2017). *The business of artificial intelligence*. Harvard Business Review, July Issue.
  20. Verhoef, P. C., Broekhuizen, T., Bart, Y., et al. (2021). Digital transformation. *Journal of Business Research*, 122, 889–901.
  21. Yoo, Y., Henfridsson, O., & Lyytinen, K. (2010). The new organizing logic of digital innovation. *Information Systems Research*, 21(4), 724–735.