

An Empirical Study of Customer Perspectives on the Impact of Financial Technology on the Banking Sector in Chennai

¹Dr. J. Sankari,²Dr. G. Revathi,³Dr. U. Thiripurasundari,⁴Dr. R. Saranya,⁵Ms. A. Lavanya

¹Head & Assistant Professor, PG Department of Commerce, Anna Adarsh College for Women,
Chennai, Tamilnadu, India.

²Head & Assistant Professor, Department of Corporate Secretaryship, Anna Adarsh College for Women,
Chennai, Tamilnadu, India.

³Assistant Professor, Department of Corporate Secretaryship, Anna Adarsh College for Women,
Chennai, Tamilnadu, India.

⁴Assistant Professor, Department of Economics, Anna Adarsh College for Women,
Chennai, Tamilnadu, India.

⁵Assistant Professor, Department of Corporate Secretaryship, Anna Adarsh College for Women,
Chennai, Tamilnadu, India

Abstract

The traditional banking environment has gone through a significant transformation due to the rapid growth of Financial Technology (FinTech), which has impacted how financial services are provided and received by customers. The purpose of this study is to empirically investigate consumer perceptions of the impact of FinTech in the banking sector in Chennai. It examines key topics, including customer satisfaction, perceived security, ease of use, trust in FinTech-enabled platforms, and the adoption of digital banking services. A structured questionnaire was administered to a diverse group of banking customers across Chennai to collect primary data. The study emphasizes that banks must continuously upgrade their technology, maintain quality customer service, and protect customer data to build trust in banking-based FinTech services.

Keywords: Financial Technology, Digital Banking, Customer & Banking Sector.

Introduction

The financial services sector has undergone a significant shift in recent years, primarily driven by the rapid advancement and adoption of financial technology (FinTech). FinTech refers to modern technologies that enhance and automate the delivery of financial services, significantly transforming traditional banking practices. These developments, which range from digital wallets and mobile banking to blockchain and AI-powered financial guidance, have not only increased operational effectiveness but also significantly altered consumer expectations and behaviour.

Government programs like Digital India and a growing percentage of smartphone and internet

users have helped the FinTech industry in India grow rapidly. It's essential to understand Chennai customers' views on how FinTech has influenced the conventional banking experience as they progressively adopt digital platforms for their banking needs.

Objectives of the Study

1. To evaluate the extent of customer awareness and utilization of fintech services within the banking sector.
2. To study the Customer Perception towards FinTech Services in the Banking Sector.
3. To Analyze Digital Banking Preference and Fintech Trust with Privacy Concerns.

Need for the study

This study aims to investigate how customers perceive the impact of FinTech innovations on the banking sector in Chennai. To provide valuable insights into how technological innovations transform the customer-bank relationship, the research will investigate consumer experiences, satisfaction levels, trust, accessibility, and perceived security of FinTech-based services. The results of this study could help us better understand how FinTech may influence banking in the future.

Review of Literature

Prosenjeet Ghosh, Uttam Golder (2026). According to the findings, banks may face operational difficulties and lose their traditional competitive advantages if they rely too much on FinTech. This emphasizes the need for updated regulations to manage technological risks.

Dr. Uttera Choudhary, Dr. Kanupriya Dang & Dr. Satveer Kaur (2023). The study aims to examine how customers in the banking sector are using Fintech. Most banking customers reported that using Fintech increased their trust in banks. The research findings indicate that Fintech has become an important part of the banking system.

Vineet Chouhan et al. (2023) examine the impact of fintech on the conventional banking industry in India. Using questionnaires and regression analysis, the study shows that fintech has improved banks' service standards.

Wenlong Bian, Shihui Wang, Xuanli Xie (2023) "The study finds that when consumers trust fintech platforms, they are much more likely to adopt them, while a lack of trust often discourages use. The study also shows that trust levels differ across population groups and are influenced by local rules and regulations. Overall, the findings provide useful guidance for policymakers and fintech companies aiming to improve financial inclusion."

Nisha Rajan (2022) notes that Customers play a noteworthy role in the goals of the Fintech industry. When customer confidence rises, it leads to increased use of financial technology.

Limitations of the Study

- Data gathered from respondents in the city of Chennai only.
- The responses are based on the observations of the respondents and may differ from time to time.

Data Analysis and Interpretation

Demographic

S.No	Particulars	PERCENTAGE	
1.	Gender-wise classification	Male	53.30%
		Female	46.70%
2.	Age-wise Classification	18-24	28.3%
		25-34	38.3%
		35-44	22.5%
		45-54	7.5%
		Above 55	3.4%
3.	Occupation	Student	17.50%
		Employed	54.20%
		Business	25%
		Retired	3.30%
4.	Income	20,000-40,000	40.80%
		40,000-60,000	30.80%
		60,000-80,000	15.80%
		80,000-100,000	6.80%
		Above 100,000	5.80%

(Source: Primary Data)

Interpretation

The above table shows that more than 50% are male, and most of the respondents are between 25 and 34 years old. A significant number of participants are employed (54.2%). This indicates that working professionals form the primary group

using banking and FinTech services. Furthermore, 40.8% of respondents have an income between ₹20,000 and ₹40,000, and 30.8% have an income between ₹40,000 and ₹60,000.

Customer awareness and utilization of fintech services

S.No	Particulars		PERCENTAGE
1.	Customer Awareness about Fintech	Yes	90.0%
		No	10.0%
2.	Usage of Fintech Services	Daily	72.5%
		Weekly	10.0%
		Monthly	5.0%
		Rarely	8.3%
		Never	4.2%
3.	Awareness of Fintech-Based Banking Services	UPI (e.g., Google Pay, PhonePe)	81.5%
		Digital wallets (e.g., Paytm, Amazon Pay)	33.3%
		Chatbots or AI-based banking assistants	25.9%
		Mobile banking apps	66.7%
4.	Factors Influencing FinTech Usage	Convenience	28.3%
		Faster transactions	64.2%
		Better customer experience	7.5%

(Source: Primary Data)

Interpretation

The survey shows that most respondents (90%) are familiar with FinTech. About 72.5% use these services every day, which shows strong adoption

and reliance. Regarding specific services, awareness of UPI platforms like Google Pay and PhonePe is highest at 81.5%, followed by mobile banking apps at 66.7%. In contrast, fewer people recognize digital wallets (33.3%) and AI-based chatbots (25.9%). The main reasons for using FinTech are faster transactions (64.2%) and convenience (28.3%). Only a small percentage (7.5%) notes that a better customer experience influences their usage. Overall, the results show strong engagement with FinTech, but knowledge of advanced tools remains limited.

Customer Perception towards FinTech Services in the Banking Sector

S.No	Statement	N	Mean	Median	Std. Deviation
1.	Prefer using FinTech services	120	3.79	4.00	1.068
2.	Trust FinTech companies to handle financial data securely	120	3.21	3.00	0.839
3.	Concerned about the privacy and security risks	120	3.21	3.00	0.732
4.	FinTech services provide better convenience compared to traditional banking	120	3.31	3.00	0.807

(Source: Primary Data)

Interpretation

The table above shows that most customers prefer using FinTech services, with many agreeing that these platforms are convenient and attractive, especially when rewards, cashback, and discounts are offered. However, there is only moderate trust in how securely FinTech companies handle financial data, and customers also express some concern about privacy and security risks.

Correlation Analysis of Digital Banking Preference and Fintech Trust with Privacy Concerns

	Prefer using Fintech services.	Trust fintech companies to handle financial data securely	Concerned about the privacy and security risks
Pearson correlation	1	.602	.378
Sig.(2-tailed)		.000	.000
N	120	120	120
Pearson correlation	.602	1	.435
Sig.(2-tailed)	.000		.000
N	120	120	120
Pearson correlation	.378	.435	1
Sig (2-tailed)	.000	.000	
N	120	120	120

Interpretation

The levels of correlation are as follows:

- **Strong positive correlation** between preference for using fintech services and trust in fintech companies ($r = .602$).

- **Moderate positive correlation** between preference for using fintech services and concern about privacy and security risks ($r = .378$).
- **Moderate positive correlation** between trust in fintech companies and concern about privacy and security risks ($r = .435$).

Findings of the Study

- A majority of respondents are aware of FinTech services offered by banks. Awareness of advanced FinTech tools such as digital wallets and AI-based chatbots is relatively low.
- Speed of transactions and convenience are the primary factors influencing FinTech adoption.
- Young adults and working professionals constitute the major user group of FinTech services.
- Customers show a positive preference toward using FinTech-enabled banking services.
- Customers continue to express concerns about privacy and security risks.
- A strong positive relationship exists between FinTech usage preference and trust levels.
- Despite high usage, security and privacy concerns persist among customers.

Conclusion

The study reveals that customers are well aware of and regularly utilize FinTech services, with UPI and mobile banking apps being the most widely recognized. Convenience and speed are the primary reasons customers prefer FinTech over traditional banking. However, there are significant concerns about the security and privacy of financial data. To maintain and increase FinTech adoption, companies need to focus on user-friendly features and also improve customer confidence in their security and privacy practices. Overall, FinTech has enhanced banking efficiency, but strengthening customer trust remains essential.

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