



# A STUDY ON SERVICE INNOVATION IN FINTECH AND ITS IMPACT ON USER ADOPTION

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## ABSTRACT

Financial Technology (FinTech) has transformed the global financial services industry by integrating advanced digital technologies with traditional financial systems. This study examines how service innovation in FinTech influences user adoption behavior. Innovations such as digital payments, mobile banking, artificial intelligence, automated financial services, and real-time transactions have significantly improved accessibility, convenience, and efficiency in financial services. Primary data for the study was collected from 154 respondents through a structured questionnaire. Statistical tools such as percentage analysis and correlation analysis were used to interpret the data. The findings reveal that young users, particularly students and undergraduates, represent the largest group of FinTech users. Digital payment platforms and UPI-based applications are the most frequently used services. The study also highlights that innovative features such as digital KYC, instant onboarding, and automation positively influence user adoption. However, challenges such as poor internet connectivity, security risks, and fear of financial loss remain barriers to wider adoption. The study concludes that continuous service innovation, improved security mechanisms, and digital literacy initiatives are essential for enhancing user trust and encouraging greater adoption of FinTech services.

**KEYWORDS:** FinTech, Service Innovation, User Adoption, Digital Payments, Financial Technology

## 1. INTRODUCTION

Financial Technology, commonly known as FinTech, refers to the application of modern digital technologies to deliver financial services in a faster, more efficient, and more user-friendly manner. Over the past decade, the financial services sector has experienced rapid transformation due to the emergence of innovative digital platforms such as mobile payment applications, online banking systems, digital wallets, and automated investment platforms.

FinTech companies have introduced several service innovations that significantly improve the quality of financial services. Technologies such as artificial intelligence, big data analytics, blockchain, and cloud computing enable financial institutions to deliver personalized and real-time financial solutions. These innovations enhance customer experience by reducing transaction time, improving transparency, and providing convenient access to financial services through mobile devices.

In developing countries like India, the adoption of FinTech has accelerated due to increasing internet penetration, smartphone usage, and government initiatives promoting digital payments. Platforms such as UPI have revolutionized the way individuals conduct financial transactions. However, despite the growth of digital financial services, several factors influence the adoption behavior of users, including trust, perceived usefulness, ease of use, security concerns, and technological awareness.

Understanding how service innovation influences user adoption is therefore important for FinTech companies, policymakers, and financial institutions. This study aims to analyze the relationship between innovative financial services and user adoption behavior, and to identify the key factors that encourage or hinder the use of FinTech platforms.

## 2. REVIEW OF THE LITERATURE

Previous research highlights the importance of technological innovation in influencing user adoption of digital financial services. Davis (1989) introduced the Technology Acceptance Model (TAM), which explains that perceived usefulness and perceived ease of use play a crucial role in determining whether individuals adopt new technologies.

Lee and Shin (2018) emphasized that FinTech innovation has significantly improved financial accessibility and efficiency by introducing digital payment systems, peer-to-peer lending, and automated financial services. Their study also noted that regulatory uncertainties and security concerns can influence user trust and adoption.



Ryu (2018) analyzed consumer perceptions regarding FinTech services and found that perceived benefits such as convenience and efficiency positively influence adoption, while perceived risks such as privacy concerns and security threats negatively affect user acceptance.

Recent studies also highlight that service innovation such as AI-powered financial services, automated transaction systems, and digital onboarding processes can significantly enhance user experience and encourage continuous usage of FinTech applications.

### 3. RESEARCH METHODOLOGY

The study follows a descriptive research design to examine the impact of service innovation in FinTech on user adoption behavior. Primary data was collected using a structured questionnaire distributed to individuals who use FinTech applications such as digital payment platforms and mobile banking services.

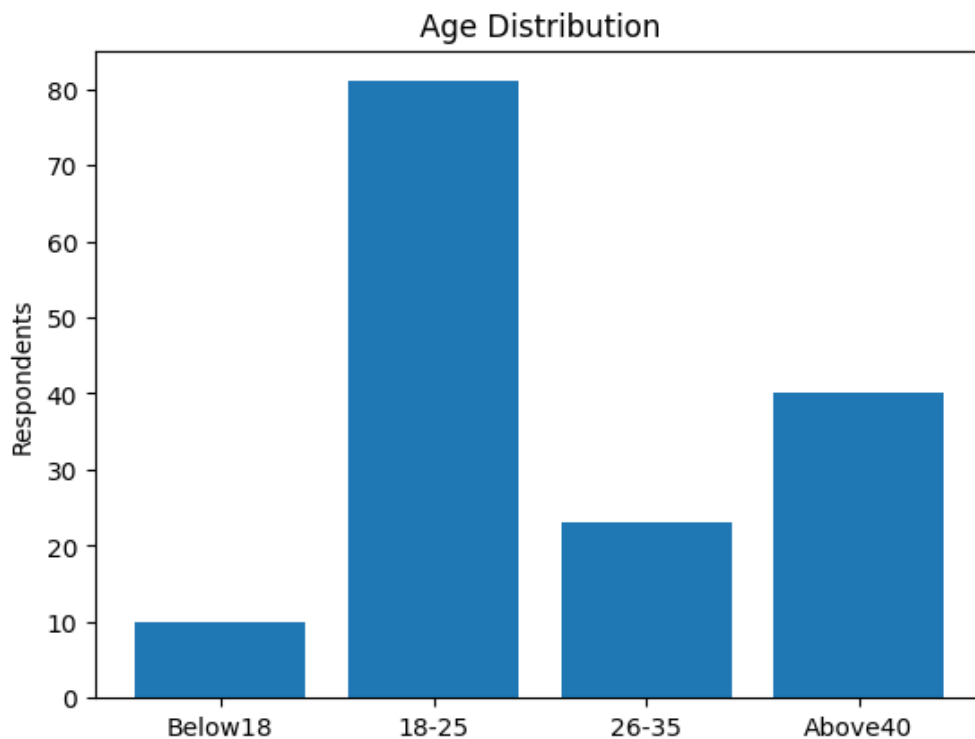
A convenience sampling technique was used to collect responses from 154 participants. The respondents include students, employees, and other individuals who actively use digital financial services. Secondary data was also collected from research journals, academic books, and financial reports to support the theoretical framework of the study.

The collected data was analyzed using statistical tools such as percentage analysis and correlation analysis. These techniques help identify patterns in user behavior and examine the relationship between service innovation and FinTech adoption.

### 4. DATA ANALYSIS AND INTERPRETATION

**TABLE:4.1 Age Distribution of Respondents**

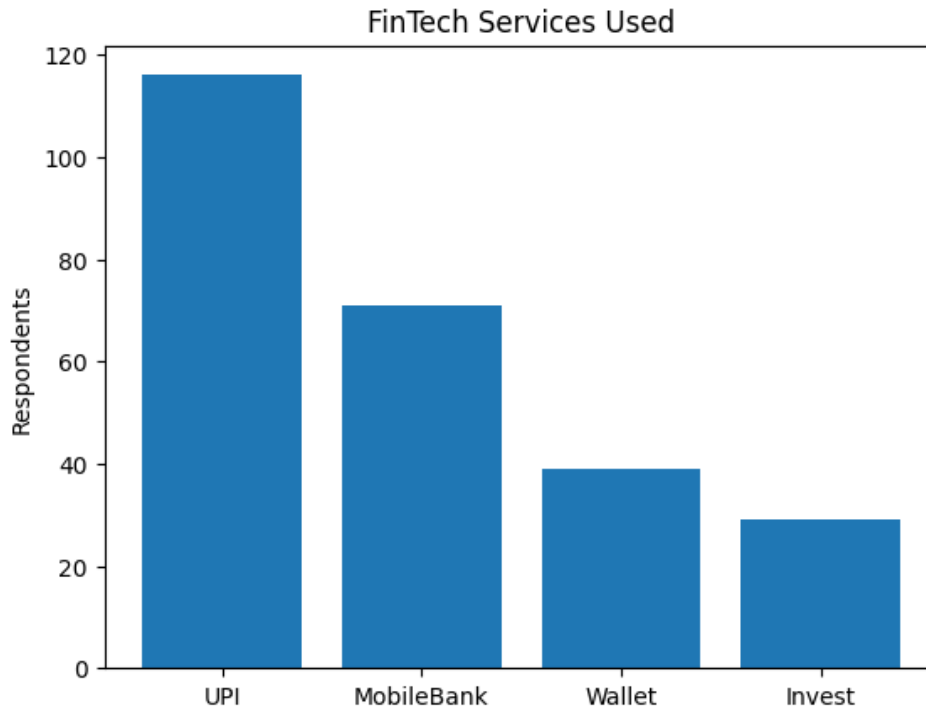
Age Group	Respondents
Below 18	10
18-25	81
26-35	23
Above 40	40





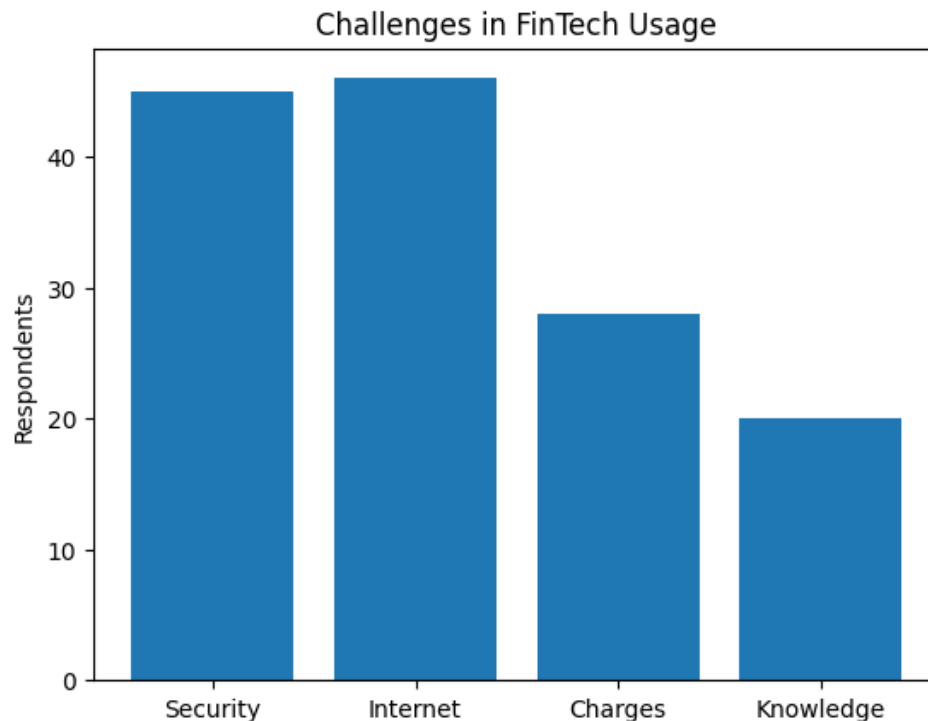
**TABLE 4.2 FinTech Services Used**

Service	Users
UPI Apps	116
Mobile Banking	71
Digital Wallets	39
Investment Apps	29



**TABLE 4.3 Challenges Faced by Users**

Challenge	Respondents
Security and Fraud Risk	45
Poor Internet Connectivity	46
Hidden Charges	28
Lack of Technical Knowledge	20



## 5. DISCUSSION AND FINDINGS

The analysis of demographic data indicates that the majority of respondents belong to the 18–25 age group, suggesting that young individuals are more likely to adopt digital financial services. Female respondents slightly outnumber male respondents, indicating balance gender participation in FinTech adoption.

UPI-based payment applications are the most widely used FinTech services among respondents. Many participants reported using FinTech services on a daily basis for activities such as online payments, fund transfers, and mobile recharges.

The study also highlights that innovative features such as digital KYC, instant account activation, and automated services significantly influence user adoption. However, users also reported several challenges, including poor internet connectivity, security concerns, and fear of financial loss. These factors can discourage individuals from trying new FinTech services despite the benefits they offer.

## 6. CONCLUSION

The study concludes that service innovation plays a vital role in promoting the adoption of FinTech services. Digital financial platforms that provide secure, convenient, and user-friendly services are more likely to attract and retain customers.

To enhance user adoption, FinTech companies should focus on improving cybersecurity measures, simplifying application interfaces, and increasing awareness about digital financial services. Educational initiatives and digital literacy programs can also help users understand the benefits and safety features of FinTech platforms.

Overall, continuous innovation combined with strong security mechanisms and customer-centric strategies will contribute to the sustainable growth of FinTech services and support the development of a digital financial ecosystem.