

A Study on Factors Influencing the Adoption of Fintech Startups among College Students

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Abstract – Fintech startups have emerged as transformative agents in the financial services sector by leveraging mobile technology, artificial intelligence, and digital infrastructure to deliver fast, accessible, and user-friendly financial solutions. This study examines the factors influencing the adoption of fintech startups among college students, an important demographic segment characterized by high digital exposure and openness to innovation. Adopting a descriptive and analytical research design, the study collected primary data from 150 college students using a structured questionnaire. Statistical tools including percentage analysis, weighted average score, chi-square test, and ANOVA were applied to analyze awareness levels, usage patterns, perception, challenges, and overall satisfaction. Findings reveal that convenience, ease of use, fast transactions, cashback incentives, and peer influence are the dominant drivers of fintech adoption. However, security concerns, transaction failures, and limited trust in data privacy continue to act as significant barriers. The study also highlights that fintech usage among students is primarily concentrated in payment services, with investment and loan services being substantially underutilized. The paper concludes that addressing trust gaps and improving financial literacy are essential for achieving deeper and more inclusive fintech adoption among college students.

Keywords – Fintech startups, college students, digital payments, technology adoption, TAM, UTAUT, peer influence, security, rupee cost averaging.

I. INTRODUCTION

Financial Technology, commonly known as Fintech, represents the integration of advanced digital tools into financial services to enhance their accessibility, speed, and efficiency. Over the past decade, fintech startups have rapidly disrupted traditional banking by offering mobile payment solutions, digital wallets, peer-to-peer lending platforms, and online investment tools. In India, government-led initiatives such as Digital India, the Unified Payments Interface (UPI), and Aadhaar-based financial services have significantly accelerated this digital revolution, making fintech services available to a broad cross-section of the population.

College students represent a uniquely important segment within this ecosystem. As digital natives, they are highly familiar with smartphone applications and online platforms, making them early adopters of fintech innovations. Their financial needs ranging from bill payments and recharges to online shopping and money transfers align closely with the services offered by leading fintech platforms such as Google Pay, PhonePe, and Paytm. Despite this natural affinity, adoption patterns among students remain inconsistent and are shaped by a complex interplay of convenience, trust, security concerns, peer influence, and financial literacy.

This study systematically investigates the factors that influence fintech adoption among college students. By analyzing both the drivers and barriers of adoption, it aims to provide actionable insights for fintech companies, educational institutions, and policymakers seeking to enhance digital financial participation among the younger generation. The study draws upon primary data collected from 150 respondents and applies multiple statistical tools to derive meaningful and reliable conclusions.

Objectives of the Study

- To analyze the level of awareness of fintech services among college students.
- To identify the key factors influencing the adoption of fintech startups.
- To examine the role of convenience, accessibility, and ease of use in fintech adoption.
- To study the impact of trust, security, and risk perception on usage behaviour.
- To assess the influence of social and economic factors such as peer influence and cashback incentives on adoption decisions.
- To offer recommendations for promoting wider and more effective fintech adoption among college students.

II. STATEMENT OF THE PROBLEM

India's college students a demographic deeply embedded in digital culture aspire to convenience and financial independence, yet face significant barriers in fully embracing fintech services. While platforms like Google Pay, PhonePe, and Paytm have achieved widespread recognition, adoption and usage depth among students remain uneven. A key challenge is the persistent tension between the convenience offered by fintech platforms and the security concerns that discourage deeper engagement. Despite high awareness rates (91% in the present study), many students limit their usage to basic payment transactions, avoiding advanced services such as investments and digital loans. Security concerns, transaction failures, and limited trust in data privacy constitute major barriers. Furthermore, income sensitivity, behavioural biases, and limited financial literacy inhibit the transition from awareness to sustained usage. This gap

between the potential of fintech to democratize financial services and its actual depth of adoption among students forms the central problem this study seeks to address.

Scope of the Study

This study focuses on college students across undergraduate, postgraduate, and professional programmes as the primary user group. The geographic scope is limited to urban and semi-urban institutions where smartphone penetration and internet access are relatively high. The study examines student interactions with SEBI-regulated fintech platforms, particularly those offering digital payment, investment, and lending services. Primary data from 150 respondents provides quantitative insights, supplemented by secondary data from industry and regulatory sources. The study excludes non-student demographics, international fintech comparisons, and unregulated cryptocurrency platforms.

III. RESEARCH METHODOLOGY

1. Research Design

The study adopts a descriptive and analytical research design to examine the factors influencing the adoption of fintech startups among college students. It focuses on understanding user behavior, preferences, and perceptions toward fintech services.

2. Nature of Study

This research is quantitative in nature, as it involves the collection and analysis of numerical data to identify patterns and relationships between variables such as trust, security, peer influence, and ease of use.

3. Data Collection Methods

- **Primary Data:** Collected through a structured questionnaire distributed among college students. The questionnaire includes both multiple-choice and Likert scale questions.
- **Secondary Data:** Collected from journals, research articles, reports, and reliable online sources related to fintech adoption.

4. Sampling Technique

The study uses convenience sampling, as respondents are selected based on accessibility and willingness to participate.

5. Sample Size

A total of 150 respondents (college students) are considered for the study.

6. Tools for Data Analysis

The collected data is analyzed using the following statistical tools:

- Percentage Analysis
- Weighted Average Method
- Chi-square Test
- ANOVA (Analysis of Variance)

These tools help in identifying relationships between variables and understanding user behavior patterns.

IV. REVIEW OF LITERATURE

Kim et al. (2010) found that concerns regarding data privacy, fraud, and system security significantly affect users' willingness to adopt mobile banking services.

Miguel Oliveira et al. (2014) highlighted that convenience and accessibility, especially 24/7 availability, are key motivators driving the adoption of digital payment systems.

Gupta and Arora (2017) emphasized the importance of awareness and digital literacy in influencing fintech adoption. Their study suggests that individuals with higher levels of digital knowledge are more likely to use fintech services effectively.

Sharma (2019) and Kumar and Singh (2020) identified security concerns and peer influence through social media as significant factors affecting adoption, particularly among younger users.

Ryu (2018), who suggested that users evaluate both perceived benefits and risks before adopting fintech services. Adoption is more likely when the perceived advantages outweigh potential risks.

Nair (2022) observed that digital payment platforms are the most commonly used fintech services among college students in India, primarily for routine financial transactions.

V. DATA ANALYSIS AND INTERPRETATION

Table 1 - Source of Awareness about Fintech Services
 Source of Awareness Respondents (out of 150)
 Percentage (%)

Source of Awareness	Respondents (out of 150)	Percentage (%)
Friends / Peers	63	42%
Social Media	51	34%
Advertisements	21	14%
Family	15	10%
Total	150	100%

Interpretation: Friends and peers are the primary source of fintech awareness (42%), followed by social media (34%), highlighting the strong role of social influence in student adoption. Traditional advertising and family play a lesser role, indicating trust is built mainly through peer networks

Table 2 - Frequency of Fintech Usage

Frequency	Respondents (out of 150)	Percentage (%)
Daily	66	44%
Weekly	45	30%
Monthly	24	16%
Rarely	15	10%
Total	150	100%

Interpretation: A majority of students (74%) use fintech services at least weekly, with 44% using them daily, indicating strong habitual adoption driven mainly by UPI platforms like Google Pay and PhonePe. This frequent usage is largely due to convenience and time efficiency in everyday transactions. However, usage remains limited to basic payment services rather than advanced financial tools.

Findings of the Study

The study reveals that fintech adoption among college students is significantly influenced by peer networks, social media exposure, and perceived convenience. A majority of respondents use fintech services frequently, primarily for basic transactions such as payments and recharges. Trust and security concerns remain key factors affecting user confidence, while digital literacy enhances adoption levels. UPI-based platforms dominate usage patterns due to ease of use and cost-effectiveness. However, awareness and usage of advanced fintech services such as investments and financial planning tools remain relatively low. Overall, social influence and usability emerge as the strongest determinants of fintech adoption among students.

Suggestions

Fintech companies should focus on strengthening trust and security measures to enhance user confidence among students. Awareness campaigns and financial literacy programs can help increase understanding and usage of advanced fintech services beyond basic payments. Companies should leverage peer influence through referral programs, campus ambassadors, and social media marketing strategies. Simplifying user interfaces and offering personalized features can further improve user experience. Educational institutions can also collaborate with fintech firms to conduct workshops and training sessions. Additionally, transparent communication regarding data privacy and fraud prevention will play a crucial role in increasing adoption rates.

VI. CONCLUSION

The study concludes that fintech startups have gained substantial acceptance among college students, driven by convenience, peer influence, and accessibility. While adoption is high for routine financial activities, there is limited engagement with more sophisticated financial services. Trust, security, and awareness continue to shape user decisions, highlighting the need for targeted strategies

to improve confidence and knowledge. The findings emphasize that fintech growth among students depends not only on technological efficiency but also on social and behavioral factors. Future efforts should focus on bridging the gap between basic usage and comprehensive financial engagement to ensure sustainable fintech adoption.

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