

Study Of UPI Payment Usage Among College Students

Dhruv Upreti¹, Sujit Singh²

¹*Galgotias University*

²*Supervision of Galgotias University*

Abstract—The rapid growth of digital payment technologies has significantly transformed the financial transaction landscape in India. Among various digital payment systems, Unified Payments Interface (UPI) has emerged as one of the most innovative and widely adopted payment platforms, enabling instant, secure, and seamless financial transactions. The increasing penetration of smartphones, internet connectivity, and government initiatives promoting a cashless economy have contributed substantially to the widespread acceptance of UPI among consumers, particularly college students.

The present study aims to examine the usage pattern, adoption factors, preferences, satisfaction levels, and challenges associated with UPI payment services among college students. The research seeks to understand the key factors influencing students' adoption of UPI applications and to analyze their overall experience with digital payment systems.

The study adopts a descriptive and analytical research design. Primary data was collected through a structured questionnaire distributed among college students from different academic backgrounds. Secondary data was obtained from academic journals, research papers, reports published by the Reserve Bank of India (RBI), National Payments Corporation of India (NPCI), government publications, and various digital payment industry reports. Convenience sampling was used for selecting respondents.

The findings indicate that convenience, speed of transaction, ease of use, cashback offers, and security features are the major factors encouraging students to use UPI platforms. The study also reveals that Google Pay, PhonePe, and Paytm are the most preferred UPI applications among college students. Most respondents reported a high level of satisfaction with UPI services due to their user-friendly interface, quick transaction processing, and accessibility.

However, concerns regarding transaction failures, cybersecurity risks, internet dependency, and privacy issues continue to affect user confidence to some extent. Despite these challenges, the study concludes that UPI

has become an integral part of students' daily financial activities and is expected to play a crucial role in the future growth of India's digital economy.

The research provides useful insights for financial institutions, fintech companies, policymakers, and digital payment service providers in understanding the behavior and expectations of young consumers toward digital payment technologies.

Index Terms—Unified Payments Interface (UPI), Digital Payments, College Students, Fintech, Cashless Economy, Consumer Behaviour, Digital Transactions, Payment Applications.x

I. INTRODUCTION

India has witnessed a remarkable transformation in its financial ecosystem over the last decade due to the rapid growth of digital technologies and smartphone penetration. Introduced in 2016 by the National Payments Corporation of India (NPCI), the Unified Payments Interface (UPI) has simplified digital transactions by providing a secure, fast, and convenient real-time platform for fund transfers directly between bank accounts.

College students represent one of the most active user groups of digital payment systems. Their increasing dependence on online shopping, food delivery services, and peer-to-peer transactions has significantly contributed to the widespread adoption of UPI.

1.1 Statement of the Problem

Although UPI offers numerous benefits, issues such as transaction failures, cybersecurity concerns, fraud risks, and technical glitches often create barriers to its effective usage. Limited research has been conducted specifically to understand the payment behavior and concerns of young adults, which this study aims to explore.

1.2 Objectives of the Study

1. To examine the usage pattern and identify the most preferred UPI applications used by students.
2. To analyze the factors influencing the adoption and evaluate the satisfaction levels of students.
3. To identify the challenges faced by students while using UPI.

II. LITERATURE REVIEW

The acceptance process of digital payments is influenced by various technological, psychological, economic, and social factors.

- Technology Acceptance Model (Davis, 1989): Explains that users adopt new technologies based on Perceived Usefulness and Perceived Ease of Use. College students use UPI because they find it highly efficient.
- Theory of Planned Behaviour (Ajzen, 1991): Suggests that social influence and peer habits significantly affect technology adoption.
- Sharma and Gupta (2019): Found that convenience, transaction speed, and ease of access were the primary drivers shifting younger consumers from cash to digital modes.
- Singh and Verma (2020): Highlighted that instant transaction capability and zero charges improve satisfaction, but transaction failure remains a major challenge.

III. RESEARCH METHODOLOGY

This study adopts a descriptive and analytical research design.

- Data Sources: Primary data was collected via a structured questionnaire shared digitally through Google Forms. Secondary data was gathered from RBI, NPCI reports, and academic journals.
- Sampling: A sample size of 120 respondents was selected using the Convenience Sampling Method from higher educational institutions.
- Data Analysis Tools: Data processing, percentage analysis, and graphical formatting were performed using Microsoft Excel.

IV. DATA ANALYSIS AND INTERPRETATION

Table 1: Demographic Distribution of Respondents

Demographic Variable	Category	Frequency	Percentage (%)
Age	18–20 Years	38	31.7%
	21–23 Years	52	43.3%
	24 Years & above	30	25.0%
Gender	Male	68	56.7%
	Female	50	41.7%
	Prefer not to say	2	1.6%

Interpretation: The data shows that the majority of UPI users are between 21–23 years of age (43.3%), followed by 18–20 years (31.7%). In terms of gender, males represent 56.7% and females represent 41.7% of the total sample size of 120 students.

Table 2: Frequency of UPI Usage per Day

Usage Frequency	Respondents	Percentage (%)
Multiple times a day	58	48.3%
Once a day	32	26.7%
Few times a week	22	18.3%
Rarely / Never	8	6.7%

Interpretation: Out of 120 students, 48.3% use UPI services multiple times a day. This indicates that digital transactions have completely integrated into the daily lifestyle of the college student community.

Table 3: Most Preferred UPI Application

UPI Application	Respondents	Percentage (%)
Google Pay (GPay)	42	35.0%
PhonePe	38	31.7%
Paytm	20	16.7%
Amazon Pay / BHIM / Others	20	16.7%

Interpretation: Google Pay is the most preferred application with 35.0% market share among students, closely followed by PhonePe at 31.7%. Paytm holds 16.7% of user preference.

Table 4: Major Problems Faced During Transactions

Issues / Challenges	Respondents	Percentage (%)
Technical Glitches / Server Down	42	35.0%
Network / Internet	30	25.0%

Failure		
Security Concerns / Fraud Risks	18	15.0%
Delayed Refunds for Failed Transactions	16	13.4%
Poor Customer Support	14	11.6%

Interpretation: The biggest technical hurdle for UPI adoption is Server Down/Technical Glitches (35.0%), followed by personal network issues (25.0%). Refund delays also cause minor user dissatisfaction.

V. FINDINGS AND CONCLUSION

5.1 Major Findings

1. Young adults in the age group of 21-23 years are the heaviest drivers of UPI transactions.
2. Google Pay and PhonePe dominate the overall market share among college-going students.
3. Over 48% of students rely completely on UPI multiple times a day for daily expenses.
4. Technical server failures and network timeouts remain the primary pain points for active users.

5.2 Conclusion

The study concludes that UPI has successfully revolutionized the payment behavior of college students, integrating seamlessly into their daily lifestyles. A high adoption rate reflects substantial trust in India's digital financial infrastructure. However, resolving backend technical failures and improving refund turnaround times are crucial to sustaining long-term consumer confidence and moving toward a completely cashless economy.

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