Role of UPI in the Rapid Growth of Digital Payments in India

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***Abstract*—This research paper aims to evaluate the role of Unified Payments Interface (UPI) in driving the rapid growth of digital payments in India, with a specific focus on youth in Pune aged 20-25. Through primary data collected from 108 respondents and secondary data gathered from government reports, academic journals, and news articles, the study examines usage patterns, preferences, and challenges associated with UPI adoption. Research reveals that UPI has become the dominant payment mode, with 91.7% of respondents using it daily or multiple times daily, primarily driven by convenience (76.9%). Google Pay emerges as the most preferred application (70.4%), while transaction failures (63.9%) remain the primary challenge. The study provides recommendations for policymakers, financial educators, and fintech firms based on research findings.**

***Keywords* — UPI, digital payments, financial inclusion, Pune youth, fintech**

I. INTRODUCTION

India is getting digitized very rapidly, with the financial services sector undergoing a massive change due to the growth in internet user base, fintech platforms, and UPI based transactions. This digital revolution is reshaping financial behaviour, especially among the youth, making payments more accessible and convenient than ever before. The Unified Payments Interface (UPI), launched in 2016, has emerged as a transformative force within the digital payment landscape, revolutionising how individuals and businesses conduct financial transactions in India.

According to the Reserve Bank of India's Payment System Report, UPI accounted for 85% of total payment volumes in the first half of 2025, reflecting its dominance in retail payments. However, in terms of value, UPI contributed just 9%, indicating its primary use for small-ticket transactions.

The city of Pune, often referred to as the "Oxford of the East" due to its high concentration of educational institutions, has emerged as a significant hub for digital payment adoption among youth. For many youngsters between 20 and 25 years old in Pune, UPI is no longer a novel concept but an integral part of daily life, enabling everything from merchant payments to peer-to-peer transfers. This study examines the role of UPI in accelerating digital payments adoption among this demographic.

1.1. Background of the Study

Through programs like the Incentive Scheme for Promotion of RuPay Debit Card and low-value BHIM-UPI transactions, which was implemented in FY 2021–2022 and continued through FY 2024–2025, the Indian government has highlighted the significance of digital payments. The program was designed as a component of the larger policy goal of formalizing regular economic activity, decreasing reliance on cash, and hastening the widespread adoption of digital payments.

A thorough report titled "Socio-Economic Impact Analysis of the Incentive Scheme" was published by the Ministry of Finance's Department of Financial Services during the Chintan Shivir on February 13–14, 2026. 10,378 respondents from 15 states participated in the study, which was carried out by an independent third-party research firm in collaboration with the National Payments Corporation of India (NPCI). These respondents included 6,167 users, 2,199 merchants, and 2,012 service providers.

Due to its ease of use and instantaneous fund transfer capability, UPI was found to be the most preferred mode of transaction among surveyed users, accounting for 57% of transactions, surpassing cash transactions at 38%. With 65% of UPI users reporting multiple digital transactions daily, digital payments now predominate in daily transaction behaviour. Adoption of UPI is 66% among younger users in the 18–25 age range, indicating a significant behavioural shift toward digital-first financial habits.

Financial inclusion remains a key priority for Indian policymakers, with the Reserve Bank of India computing the Financial Inclusion (FI) Index showing steady increase from 43.4 in 2017 to 64.2 in

2024. UPI has become a powerful means for deepening financial inclusion by providing a simple, secure, and accessible platform for digital payment transactions, particularly benefiting underserved populations.

1.2. Statement of the Problem

Despite the widespread adoption of UPI and its recognition as a global leader in real-time payments, several challenges persist that warrant investigation. The RBI study highlighted that individuals in the top 20% income group are twice as likely to use digital payments as those in the bottom 40%, indicating persistent digital divide. Recent data show an even steeper divide, with the top 10% twice as likely to report the ability to use UPI as the bottom 25%.

Among merchants, while digital acceptance has reached near universality with 94% small merchants reporting adoption of UPI, challenges remain in terms of transaction failures, connectivity issues, and security concerns. The study found that 72% of merchants expressed satisfaction with digital payments, but 28% reported concerns requiring attention.

Furthermore, despite high adoption rates, research indicates that transaction failures and security concerns continue to affect user experience. The government's budgetary support of ₹8,276 crore for the incentive scheme demonstrates the scale of investment required to sustain digital payment infrastructure. However, the report recommends continued investment in connectivity, digital literacy, and fraud risk mitigation to address persistent challenges.

Therefore, this study investigates the role of UPI in driving digital payments growth among Pune's youth aged 20-25, examining usage patterns, preferences, challenges, and the relationship between demographic factors and adoption behaviour.

1.3. Objectives of the Study

1. To evaluate the level of UPI adoption and usage patterns among Pune's youth in the age bracket 20-25.
2. To identify the most preferred UPI applications and their usage purposes (merchant payments, peer-to-peer transfers, bill payments).
3. To analyse the factors attracting youth to UPI platforms (convenience, speed, cashback, merchant acceptance).
4. To determine the challenges faced by youth in using UPI and their impact on adoption behaviour.
5. To provide recommendations for policymakers, financial educators, and fintech firms based on the research findings.

1.4. Research Questions

- What is the level of UPI adoption and usage frequency among youth aged 20-25 in Pune?
- Which UPI applications are most preferred by youth and for what purposes?
- What factors attract youth to use UPI for digital payments?
- What challenges do youth face while using UPI platforms?
- What recommendations can be provided to policymakers, financial educators, and fintech firms based on the findings?

1.5. Significance of the Study

There are multiple stakeholders that benefit from this study. For policymakers like RBI and NPCI, it provides insights into the adoption patterns and challenges faced by youth, helping them design targeted interventions for improving digital payment infrastructure. The findings on transaction failures (63.9% of users reporting challenges) highlight areas requiring regulatory attention.

For financial educators, it identifies gaps in digital literacy that need to be addressed through curriculum design and awareness programs. The study reveals that while adoption is high, understanding of security features and fraud prevention may require strengthening.

For fintech firms and UPI app providers, it reveals user preferences, with Google Pay emerging as dominant player (70.4% market share among respondents), and identifies areas for improvement in user experience and trust-building. For academic researchers, it contributes to the growing body of literature on digital payment adoption in the context of urban Indian youth.

1.6. Scope and Limitations

The research focuses on youth aged 20-25 years residing in Pune city. The study covers components including UPI usage frequency, application preferences, transaction purposes, factors attracting users to UPI, and challenges faced during usage.

Limitations include the sample size of 108 respondents which is confined to the city of Pune, and may not be generalizable to youth in other cities or rural areas of India. The sample consists predominantly of students (89.8%) and postgraduate students (75%), with 70.4% male and 29.6% female respondents, which may not fully represent the broader youth population. Data which is self-reported may contain biases. The study focuses on person-to-merchant (P2M) and peer-to-peer (P2P) transactions, excluding detailed analysis of UPI-linked credit products and international transactions.

II. LITERATURE REVIEW

2.1 Evolution and Growth of UPI in India

The Unified Payments Interface (UPI), developed by the National Payment Corporation of India (NPCI), has revolutionized financial transactions in India by providing a real-time, user-friendly platform for interbank transactions. UPI is an instant interoperable digital payment system enabling seamless peer-to-peer and merchant transactions using mobile devices. Since its launch in 2016, UPI has reduced cash reliance and fostered economic growth by promoting transparency and facilitating transactions.

According to the RBI's Payment System Report, UPI transactions surged from 10.79 billion in calendar year 2019 to 172.21 billion in CY2024, with total value rising from ₹18.4 trillion to ₹246.8 trillion during the same period. In the first half of CY2025, UPI transactions totalled 106.37 billion, amounting to ₹143.3 trillion. Tracing data commissioned by TWID further indicates that UPI accounts for over 83% of India's digital payment volumes in FY25, processing 185.8 billion transactions with a 41.7% year-on-year increase.

The Department of Financial Services report highlights that digital transactions increased nearly 11 times between 2021 and 2025, with UPI's share surging to approximately 80% of total digital transactions. UPI QR deployment expanded dramatically from 9.3 crore to approximately 65.8 crore, enabling widespread merchant acceptance.

2.2 UPI Adoption Among Youth

Research indicates that preference for UPI is particularly pronounced among younger users. The DFS study found that among the 18–25 age group, adoption stands at 66%, indicating a strong behavioural shift toward digital-first financial habits. Nearly 65% of UPI users reported making multiple digital transactions daily, underscoring a significant behavioural shift.

A study on financial inclusion in rural areas using logistic regression analysis identified several significant predictors of UPI adoption, including younger age, male gender, higher education, specific occupations, and higher income. Age was found to be negatively related to UPI payment usage, suggesting that younger individuals are more inclined to adopt UPI compared to older age groups.

The theoretical framework drawing upon innovation diffusion theory and network effects explains the rapid adoption among youth, who serve as early adopters and influence wider acceptance through social networks.

2.3 Factors Driving UPI Adoption

The DFS study found that 90% of users reported increased confidence in digital payments after using UPI and RuPay cards. Cashback incentives were identified as a key motivation for adoption by 52% of users, while 74% cited speed of payment as the primary advantage.

Among merchants, 72% expressed satisfaction with digital payments, citing faster transactions, improved record-keeping, and operational convenience, while 57% reported an increase in sales following digital adoption. The study noted that incentives helped lower cost barriers for merchants and banks, accelerated merchant onboarding, and built trust in digital payment systems across income groups and geographies.

The Zenodo research on UPI and e-commerce highlights how ubiquity, speed, low cost, and interoperability of UPI have influenced consumer behaviour, merchant acceptance, logistics models, and financial inclusion. By facilitating seamless, real-time, and interoperable transactions, UPI has democratised access to financial services and empowered small businesses.

2.4 Challenges in UPI Adoption

Despite high adoption rates, several challenges persist. The DFS report identifies the need for continued investment in connectivity, digital literacy, and fraud risk mitigation. The Zenodo study discusses challenges including fraud, regulatory balancing, cash-on-delivery persistence in certain segments, and infrastructure strain.

The SEBI survey previously identified that for Gen Z, complexity (74%), fear of market losses (73%), and trust gaps (51%) remain key deterrents in financial services. While focused on investments, these findings have relevance for understanding barriers to digital payment adoption as well.

The RBI study highlighted that despite the surge in digital payments, currency in circulation has continued to rise, albeit at a slower pace, reflecting a dynamic interplay between cash and digital modes. Annual CIC growth has slowed to 4–6% in recent years, driven by structural shift towards digital payments and greater formalisation.

2.5 Role of Incentives and Policy Support

The Government's budgetary support of ₹8,276 crore for the incentive scheme between FY22 and FY25 has been significant, with disbursements supporting banks, payment system operators, and app providers in scaling low-value digital transactions. The study recommends introducing tiered cashback programmes for RuPay transactions in Tier 2–6 cities and promoting small-ticket payments through tools such as UPI Lite.

Beyond transaction growth, the scheme contributed to formalising the economy, creating digital footprints, improving transparency, enhancing business efficiency, and stimulating fintech innovation.

III. RESEARCH METHODOLOGY

A mixed-method approach was used, combining primary data collection through questionnaires with secondary data from government reports, academic journals, and news articles.

3.1 Data Sources

Primary data was collected from 108 respondents aged 20-25 in Pune through a structured questionnaire. Secondary data is drawn from government reports (PIB, DFS, RBI), academic journals (Zenodo, ScienceDirect, Emerald), news articles (Business Standard, Economic Times, CNBC TV18, Financial Express, Fortune India), and industry publications.

3.2 Sample Design

The target population consists of youth aged 20-30 years residing in Pune. The sample of 108 respondents was selected through convenience sampling from students in Pune.

3.3 Data Collection Instrument

A structured questionnaire was designed to collect data on:

- Demographic profile (age, gender, education, occupation)
- UPI usage frequency and patterns
- Preferred UPI applications
- Primary purpose of UPI transactions
- Factors attracting users to UPI
- Challenges faced during UPI usage
- Confidence level in using UPI

3.4 Data Analysis Tools

Data was analysed using percentage analysis, frequency distribution, and cross-tabulation to examine relationships between variables.

4.5 Hypothesis

$H0_1$ (Null): There is no significant variation in UPI usage frequency among youth aged 20-25 in Pune.

$H1_1$ (Alternative): There is significant variation in UPI usage frequency among youth aged 20-25 in Pune, with daily usage being predominant.

$H0_2$ (Null): There is no significant preference for any specific UPI application among youth aged 20-25 in Pune.

$H1_2$ (Alternative): Youth aged 20-25 in Pune show significant preference for specific UPI applications (e.g., Google Pay, PhonePe, Paytm).

IV. DATA ANALYSIS AND INTERPRETATION

4.1 Demographic Profile of Respondents

Table 4.1: Demographic Profile (N=108)

Variable	Category	Frequency	Percentage
Age	20-30	108	100%
Gender	Male	76	70.4%
	Female	32	29.6%
Education	Undergraduate	20	18.5%
	Postgraduate	81	75.0%
	Other	7	6.5%
Occupation	Student	97	89.8%
	Employed	11	10.2%

(Source: Primary Data)

The sample consists predominantly of male respondents (70.4%) and postgraduate students (75%), with 89.8% being students, reflecting Pune's large student population.

4.2 Objective 1: To evaluate the level of UPI adoption and usage patterns among Pune's youth

Table 4.2: UPI Usage Frequency (N=108)

Frequency	Frequency	Percentage
Multiple times daily	52	48.1%
Daily	47	43.5%

Weekly	8	7.4%
Monthly	1	0.9%
Rarely	0	0%

(Source: Primary Data)

Analysis: UPI adoption among Pune's youth is exceptionally high, with 91.7% of respondents using UPI daily or multiple times daily. This aligns with DFS findings that 65% of UPI users report multiple digital transactions per day and 66% adoption among 18-25 age group. No respondents reported rarely using UPI, indicating near-universal adoption in this demographic. This supports $H1_1$ that there is significant variation in usage frequency, with daily usage being predominant.

4.3 Objective 2: To identify the most preferred UPI applications and their usage purposes

Table 4.3: Preferred UPI Applications (N=108)

Application	Frequency	Percentage
Google Pay	76	70.4%
PhonePe	17	15.7%
Paytm	8	7.4%
Others	7	6.5%

(Source: Primary Data)

4.4 Objective 3: To analyse the factors attracting youth to UPI platforms

Table 4.4: Primary Purpose of UPI Transactions (N=108)

Purpose	Frequency	Percentage
Merchant payments	57	52.8%
Peer-to-peer transfer	27	25.0%
Bill payments	24	22.2%

(Source: Primary Data)

Analysis: Google Pay dominates the UPI application market among Pune youth with 70.4% market share, followed by PhonePe (15.7%) and Paytm (7.4%). This concentration reflects the network effects discussed in literature, where value increases with the user base. Merchant payments (52.8%) represent the primary use case, consistent with DFS findings that P2M transactions dominate UPI usage. Peer-to-peer transfers (25.0%) and bill payments (22.2%) constitute significant secondary purposes. This supports $H1_2$ that youth show significant preference for specific applications, with Google Pay being dominant.

4.4 Objective 3: To analyse the factors attracting youth to UPI platforms

Table 4.4: Factors Attracting Users to UPI (N=108)

Factor	Frequency	Percentage
Convenience	83	76.9%
Speed	14	13.0%
Cashback	7	6.5%
Peer influence	2	1.9%
Merchant acceptance	2	1.9%

(Source: Primary Data)

Analysis: Convenience emerges as the overwhelming factor attracting youth to UPI (76.9%), followed by speed (13.0%) and cashback (6.5%). This aligns with DFS findings where 74% cited speed as primary advantage and 52% identified cashback as key motivation. The low importance of peer influence (1.9%) suggests that UPI adoption has matured beyond early adopter stages and is now driven by intrinsic utility rather than social factors. Merchant acceptance (1.9%) being low reflects the near-universal acceptance already achieved, with 94% small merchants accepting UPI.

4.5 Objective 4: To determine the challenges faced by youth in using UPI

Table 4.5: Challenges Faced Using UPI (N=108)

Challenge	Frequency	Percentage
Transaction failures	69	63.9%
Connectivity issues	24	22.2%
Security concerns	11	10.2%
No challenges	4	3.7%

(Source: Primary Data)

Table 4.6: Confidence in Using UPI (N=108)

Confidence Level	Frequency	Percentage
Strongly Agree	66	61.1%
Agree	34	31.5%
Neutral	8	7.4%
Disagree	0	0%
Strongly Disagree	0	0%

(Source: Primary Data)

Analysis: Despite high adoption rates, transaction failures remain the most significant challenge, affecting 63.9% of users. This aligns with concerns raised in literature about infrastructure strain and the need for continued investment in fraud risk mitigation. Connectivity issues affect 22.2% of users, while security concerns impact 10.2%. Notably, only 3.7% report no challenges, indicating widespread room for improvement.

Despite these challenges, confidence levels remain remarkably high, with 92.6% agreeing or strongly agreeing that they feel confident using UPI. This paradox suggests that while users acknowledge technical issues, the overall utility outweighs these concerns, consistent with findings that 90% of users reported increased confidence after using UPI.

4.6 Gender-Based Analysis of UPI Usage

Table 4.6: Gender vs. Usage Patterns

Indicator	Male (n=76)	Female (n=32)
Daily/Multiple times daily	70 (92.1%)	29 (90.6%)
Primary challenge: Transaction failures	49 (64.5%)	20 (62.5%)
Confident (Strongly Agree/Agree)	70 (92.1%)	30 (93.8%)

(Source: Primary Data)

Analysis: Gender-based analysis reveals minimal differences in adoption patterns, with both males (92.1%) and females (90.6%) showing high daily usage rates. This contrasts with some rural studies that found gender as a significant predictor of UPI adoption, suggesting that urban youth populations may have achieved gender parity in digital payment access. Confidence levels are similarly high across genders (92.1% vs 93.8%).

V. FINDINGS

UPI Adoption and Usage Patterns

1. UPI adoption among Pune's youth aged 20-25 is near-universal, with 91.7% using it daily or multiple times daily, far exceeding the national average of 65% multiple daily users.
2. Multiple times daily usage (48.1%) exceeds daily usage (43.5%), indicating deep integration of UPI into routine financial behaviour.
3. No respondents reported rare or non-usage, confirming UPI's status as the dominant payment mode for this demographic.

Application Preferences

4. Google Pay dominates the market with 70.4% preference share, followed by PhonePe (15.7%) and Paytm (7.4%).
5. Merchant payments constitute the primary use case (52.8%), followed by peer-to-peer transfers (25.0%) and bill payments (22.2%).
6. Application preference concentration reflects strong network effects, with users gravitating toward platforms with larger user bases.

Attraction Factors

7. Convenience is the overwhelming factor driving UPI adoption (76.9%), aligning with national findings where 74% cited speed as primary advantage.
8. Speed (13.0%) and cashback (6.5%) are secondary factors, with cashback being less important than national averages (52%) suggest.
9. Peer influence (1.9%) and merchant acceptance (1.9%) are minimal factors, indicating a mature adoption stage where utility outweighs social considerations.

Challenges and Confidence

10. Transaction failures affect 63.9% of users, representing the most significant challenge requiring infrastructure attention.
11. Connectivity issues (22.2%) and security concerns (10.2%) affect substantial minorities.
12. Only 3.7% report no challenges, indicating widespread need for improvement in user experience.
13. Despite challenges, 92.6% express confidence in using UPI, demonstrating resilience and perceived value outweighing technical issues.

Demographic Insights

14. Gender parity in adoption exists, with 92.1% males and 90.6% females using UPI daily, unlike rural contexts where gender is a significant predictor.
15. The student population (89.8%) shows higher adoption than employed (10.2%), reflecting digital nativity among younger demographics.
16. Transaction failure rates are consistent across genders (64.5% males, 62.5% females), indicating systemic rather than demographic-specific issues.

5.1. Recommendations

Based on the research findings, the following recommendations are provided for policymakers, financial educators, and fintech firms:

For Policymakers (RBI, NPCI, Ministry of Finance)

1. Address transaction failure rates: Given that 63.9% of users experience transaction failures, invest in infrastructure upgrades and real-time monitoring systems to improve success rates.

2. Continue incentive support: Maintain budgetary support for digital payments infrastructure, building on the ₹8,276 crore investment made between FY22-25, to ensure sustainable growth.
3. Promote UPI Lite: Expand promotion of UPI Lite for small-ticket transactions in everyday settings including public transport and local retail, as recommended in the DFS study.
4. Strengthen fraud risk mitigation: Implement enhanced security measures and consumer protection frameworks to address the 10.2% reporting security concerns.
5. Targeted rural interventions: While urban youth show gender parity, continue targeted programs for rural areas where gender remains a significant predictor of adoption.

For Financial Educators and Educational Institutions

6. Integrate digital literacy in curricula: Incorporate practical digital payment education into college curricula, emphasizing security features and troubleshooting common issues like transaction failures.
7. Build confidence through awareness: Design interventions that maintain the high confidence levels (92.6%) while educating users on fraud prevention and secure practices.
8. Address connectivity challenges: Educate users on offline payment options and contingency measures for areas with poor connectivity (affecting 22.2% of users).
9. Promote diverse application usage: While Google Pay dominates, encourage familiarity with multiple platforms to prevent vendor lock-in and promote competition.

For Fintech Firms and UPI App Providers

10. Improve transaction reliability: Prioritize reducing transaction failure rates, currently affecting 63.9% of users, through better infrastructure and error handling.
11. Maintain focus on convenience: Given that 76.9% cite convenience as primary attraction, continue simplifying user interfaces and reducing friction in payment flows.
12. Enhance security features: Address security concerns (10.2%) through transparent communication, multi-factor authentication, and rapid grievance redressal.
13. Leverage cashback strategically: While cashback motivates only 6.5% of youth users, targeted promotions could help acquire new users or encourage specific use cases.
14. Expand merchant ecosystem: With merchant payments being primary use case (52.8%), continue expanding merchant acceptance networks and improving integration.
15. Build trust mechanisms: Address the 10.2% with security concerns through transparent processes, clear communication, and rapid resolution of transaction failures.
16. Develop innovative features: Explore credit-on-UPI and rewards-based payment models, as Tracing data suggests alternative payments are gaining traction.

5.2.Discussion

The findings reinforce existing literature on UPI adoption while providing specific insights into youth behaviour in urban India. The near-universal adoption rate of 91.7% daily users among Pune youth significantly exceeds the national average of 65% multiple daily users reported in the DFS study. This aligns with the characterization of the 18-25 age group as digital-first adopters with 66% adoption nationally.

Google Pay's dominant market share (70.4%) reflects first-mover advantages and network effects described in innovation diffusion theory. The concentration among top three applications (Google Pay, PhonePe, Paytm) accounting for 93.5% of users demonstrates the winner-take-most dynamics characteristic of platform markets.

The primary motivation of convenience (76.9%) over cashback (6.5%) suggests that for youth users, the intrinsic utility of UPI outweighs extrinsic incentives, unlike the national finding where 52% cited cashback as key motivation. This may reflect higher digital literacy and appreciation for UPI's fundamental value proposition among educated youth.

The high incidence of transaction failures (63.9%) alongside high confidence (92.6%) presents an interesting paradox. Users appear to accept technical glitches as temporary inconveniences rather than fundamental flaws, consistent with findings that 90% report increased confidence after using UPI. However, this represents an opportunity for improvement, as infrastructure strain and fraud risks remain concerns requiring continued investment.

The gender parity in adoption (92.1% male, 90.6% female daily users) contrasts sharply with rural studies where gender was a significant predictor. This suggests that urban educational environments may have successfully bridged the digital gender divide, supporting financial inclusion objectives.

VI. CONCLUSION

This research examined the role of UPI in driving digital payments growth among 108 youth aged 20-25 in Pune. The study reveals a generation that has fully embraced digital payments, with 91.7% using UPI daily or multiple times daily, far exceeding national averages.

The first hypothesis ($H1_1$) is accepted: there is significant variation in UPI usage frequency, with daily and multiple-times-daily usage being predominant (91.7%) compared to weekly (7.4%) or monthly (0.9%) usage. The second hypothesis ($H1_2$) is also accepted: youth show significant preference for specific UPI applications, with Google Pay (70.4%) being dominant, followed by PhonePe (15.7%) and Paytm (7.4%).

Regarding factors driving adoption, convenience (76.9%) overwhelmingly outweighs speed (13.0%) and cashback (6.5%), indicating that youth value the fundamental utility of UPI over promotional incentives. Merchant payments (52.8%) represent the primary use case, followed by peer-to-peer transfers (25.0%) and bill payments (22.2%).

The significant challenge identified—transaction failures affecting 63.9% of users—represents both a concern and an opportunity for policymakers and fintech firms. Despite this, confidence levels remain exceptionally high at 92.6%, demonstrating the resilience of user trust in the UPI ecosystem.

As India's digital payments infrastructure continues to expand, with UPI now accounting for over 83% of digital payment volumes and 85% of transaction volumes, understanding youth adoption patterns becomes essential for sustaining growth and addressing remaining challenges. The gender parity achieved in this urban sample suggests progress toward inclusive digital financial ecosystems.

REFERENCES

[1] Ministry of Finance, Government of India (2026). DFS released a report titled "Socio-Economic Impact Analysis of Incentive Scheme for Promotion of RuPay Debit Card and low-value BHIM-UPI Transactions (P2M)". Press Information Bureau, February 16, 2026.

[2] Reserve Bank of India (2025). Payment System Report: UPI accounts for 85% of payment volumes in H1CY25. Business Standard, October 23, 2025.

[3] CNBC TV18 (2026). India's digital payments surge 11x in 4 years; UPI accounts for 80%, DFS report shows. February 16, 2026.

[4] Zenodo (2025). Impact of UPI and Digital Payments on E-Commerce Adoption in India. January 30, 2025.

[5] Primary Data (2026). Survey on UPI Usage and Digital Payments Among Pune's Youth. Conducted among 108 respondents, March 2026.

[6] Vermani, R. & Arora, N. (2025). Unravelling the Dynamics: A Theoretical Exploration of the Role of Unified Payment Interface (UPI) in Digital Inclusion. From Digital Disruption to Dominance, Emerald Publishing Limited, pp. 75-102.

[7] ScienceDirect (2025). UPI and financial inclusion in rural India: A case study. Journal of Financial Inclusion, March 2025.

[8] Financial Express (2026). Shared costs, targeted incentives vital for UPI, RuPay expansion: Study. February 16, 2026.

[9] Economic Times (2026). UPI accounts for over 83% of India's digital payments in FY25: Tracxn data. January 24, 2026.

[10] Business Standard (2025). Higher adoption of UPI leads to lower cash demand, RBI study shows. September 24, 2025.

[11] Fortune India (2026). UPI surpasses cash, accounts for 57% of transactions: Report. February 16, 2026.

[12] National Payments Corporation of India (2025). UPI Product Statistics. NPCI Official Website.

Appendix

Questionnaire for Data Collection

Title: Survey on Role of UPI in Digital Payments Growth Among Pune's Youth

Dear Respondent,

I am conducting research on "Role of UPI in the Rapid Growth of Digital Payments in India" as part of my academic curriculum. Kindly spare a few minutes to fill this questionnaire. Your responses will be kept confidential and used solely for academic purposes.

Section A: Demographic Profile

1. Age: _____ (20-30 / 30-40 / 40-50 / 50+)

2. Gender: Male / Female / Other
3. Education Level: Undergraduate / Postgraduate / Professional Course / Other
4. Occupation: Student / Employed (Part-time) / Employed (Full-time) / Self-employed / Other

Section B: UPI Usage Patterns

5. How frequently do you use UPI for payments?
   - Multiple times daily / Daily / Weekly / Monthly / Rarely / Never
6. Which UPI app do you primarily use?
   - Google Pay / PhonePe / Paytm / BHIM / Others
7. What is the primary purpose of your UPI transactions?
   - Merchant payments / Peer-to-peer transfer / Bill payments / Other
8. What attracts you most to UPI?
   - Convenience / Speed / Cashback / Peer influence / Merchant acceptance / Other

Section C: Challenges and Confidence

9. Have you faced any challenges using UPI?
   - Transaction failures / Connectivity issues / Security concerns / No challenges / Other
10. I feel confident using UPI for digital payments.
    - Strongly Agree / Agree / Neutral / Disagree / Strongly Disagree