



To cite this article: Mrs. Jyoti Yadav and Dr. Shalini Singh (2026). THE UPI ADOPTION AND FINANCIAL INCLUSION: TRANSFORMING THE DIGITAL ECONOMY IN INDIA, International Journal of Research in Commerce and Management Studies (IJRCMS) 8 (5): 235-249 Article No. 875 Sub Id 1442

THE UPI ADOPTION AND FINANCIAL INCLUSION: TRANSFORMING THE DIGITAL ECONOMY IN INDIA

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DOI: <https://doi.org/10.38193/IJRCMS.2026.8517>

ABSTRACT

Aim: This study looks at the Unified Payments Interface's (UPI) expansion and uptake in India and assesses its impact on financial inclusion and the development of the digital economy.

Methodology: The methodology adopted a descriptive and analytical design based on secondary data. The research entailed the longitudinal analysis of UPI transactions' official data for nine financial years (FY2017-18 to FY2025-26), along with a critical analysis of fourteen journal articles and RBI's survey results on digital payments in the entire country. Analysis of transaction number, transaction value, yearly growth rate, CAGR and average transaction value was done using Microsoft Excel.

Results: The UPI transaction volume went up from 92 crore in FY2017–18 to 24,161.69 crore in FY2025–26, while the value went up from ₹1.10 lakh crore to ₹314.20 lakh crore. For the year FY2025–26, there was an increase of 30.0% in the volume, 20.6% in the value and the UPI transactions made up for almost 86% of the retail-payment transaction volume. The survey by the RBI showed digital payment adoption by 52% of the users and acceptance by 67% of the merchants. The factors which contributed to the adoption were usefulness, ease of use, facilitating conditions and trust. **Conclusion:** The UPI system has been instrumental in laying the basis for payment infrastructure and increasing financial inclusion through better uses of formal banking accounts in transactions. Yet, transaction volumes by themselves are insufficient to achieve full financial inclusion. To do so, autonomy in use, connectivity, consumer protection, remediation and access to savings, credit and insurance products are necessary.

KEYWORDS: Unified Payments Interface; UPI adoption; financial inclusion; digital payments; digital public infrastructure; digital economy; India.

1. INTRODUCTION

Financial inclusion does not refer simply to having a bank account, but rather to the affordable, secure,

and meaningful use of payments, savings, credits, insurance, and other formal financial services (Demirgüç-Kunt et al., 2022). The difference between access and use is particularly salient for India. Bank account opening campaigns have created millions of new accounts, although the problem of distance, documentary proof, cost, irregularity of earnings, lack of trust, and digital literacy still stood in the way of many households and micro-enterprises making regular use of their accounts (Duvendack & Mader, 2020; Duvendack et al., 2023). Payment infrastructure digitization solves some of those problems by rendering the account useful in everyday economic transactions. It also amplifies existing inequalities when the ability to access this infrastructure relies on owning a Smartphone, connection to data networks, literacy, or access to one's own device (Duvendack et al., 2023).

UPI has been a notable institutional innovation in this setting. The Unified Payments Interface is an instant payments system that allows for the transfer of money from one bank to another through participating applications, regulated by the Reserve Bank of India (NPCI, n.d.-a). Individuals can both send and receive payments using methods like virtual payment addresses and can make payments to merchants through interoperable quick response codes. UPI differs from closed-loop wallets in that it connects competing apps and banks by creating a payment rail. The difference between the common payment layer and the competing application layer is key to its success because consumers do not have to be on the same proprietary network as the receiving party (RBI, 2024; NPCI, n.d.-a).

There is an interesting question raised by the fast growth of UPI. Official statistics indicate that UPI transaction volume grew from 92 crore transactions during FY2017–18 to 18,587 crore in FY2024–25, whereas the value grew from ₹1.10 lakh crore to about ₹261 lakh crore (Ministry of Finance, 2025). Is it a case of a simple replacement of cash and cards for already financially included users or a case of deepening of financial inclusion with new individuals and firms using formal financial services? High transaction volume is good evidence of use but cannot alone show who uses it, who is still excluded, whether women have control over their account, whether fraud losses are compensated, or whether payments help save money, get credits and be more resilient (Duvendack et al., 2023).

This paper examines UPI from two perspectives—technology adoption and institution for inclusion. This analysis combines the Unified Theory of Acceptance and Use of Technology (UTAUT) with an access-usage-quality-outcome framework of financial inclusion (Venkatesh et al., 2003; Demirgüç-Kunt et al., 2022). The theory here is that adoption happens when users find UPI useful and easy to use, witness social acceptance, have resources that allow adoption and trust the overall ecosystem. Inclusion only happens if the adoption leads to repeated, independent and positive use of the technology. This framework avoids a purely technological approach—UPI has the potential to remove payment frictions, generate transaction records and help merchants go formal, but whether that becomes welfare depends on complementary policy.

In that vein, the purpose of this study is to study the development and implementation of UPI in India and to measure its impact on financial inclusion and digital economy transformation. More precisely, the goal of the study is to investigate the technological, behavioral, and institutional determinants of UPI adoption; to analyze trends in UPI transaction volumes and values; to analyze how UPI might help increase access to and use of financial services; to determine the inequities, risks, and infrastructure obstacles that limit inclusive use of UPI; and to make policy recommendations on how to leverage the transaction volumes of UPI for inclusive financial results.

2. REVIEW OF LITERATURE

2.1 UPI and India's Digital Financial Architecture

The digital payment ecosystem in India evolved as a result of growth in digital identity, savings bank account, connectivity to the phone network, and payment systems infrastructure. In this ecosystem, UPI is a fast bank-to-bank payment rail that enables individuals to conduct person-to-person and person-to-merchant payments using any of the participating applications and identifiers like virtual payment addresses and QR codes (NPCI, n.d.-a). Interoperability is what makes it distinct from closed-loop wallets, thus making it less dependent on traditional card acceptance systems (RBI, 2024).

UPI has increasingly adopted recurring mandates, small value payments, feature phone capabilities, and border crossings. All these additions make the scope of usage larger than just using smartphones with reliable internet connectivity since digital literacy, ownership, connectivity, and consumer safety still have an impact on participation (RBI, 2022; Demirgüç-Kunt et al., 2022). According to official figures, the scope of UPI transactions increased from 92 crore transactions in FY2017-18 to 18,587 crore in FY2024-25, showing swift integration into payments (Ministry of Finance, 2025; NPCI, n.d.-b).

In India, digital payment is considered part of financial inclusion and not as an end result by itself. The National Strategy for Financial Inclusion 2019-2024 has stressed connectivity, last mile delivery and digital payment acceptance, whereas the 2025-2030 strategy makes the link between digital public infrastructure and financial capability, responsible access and consumer protection (RBI, 2020, 2026). Therefore, it becomes imperative to assess the transaction volume of UPI in light of its cost, safety, frequency and autonomy.

2.2 Empirical Evidence on Adoption and Inclusion

The acceptance of digital payments has been explained with reference to the technology acceptance model as well as the unified theory of acceptance and use of technology. The constructs of perceived usefulness and ease of use have been important elements of technology acceptance (Davis, 1989),

whereas the UTAUT framework suggests that performance expectancy, effort expectancy, social influence and facilitating conditions are important determinants of the intention and use of technology (Venkatesh et al., 2003). The UTAUT2 framework even includes consumer related factors such as habit and price value (Venkatesh et al., 2012).

Usefulness, ease of use, trust and security were some of the factors that have been repeatedly shown to influence mobile payments acceptance in India. For example, Madan and Yadav (2016) revealed that perceived usefulness and innovation attributes had impact on consumers' adoption intention of mobile wallets. In another study, Chawla and Joshi (2019) indicated that ease of use, usefulness, trust and security determined users' attitude and intention towards the product while Kumar et al. (2018) discovered that perceived security and grievance redressal influenced continuance intention.

UPI-based literature studies have confirmed all the conclusions made above. Shahid (2022) mentioned relative advantage, compatibility and complexity as important determinants of the adoption of UPI. Based on the analysis of responses provided by 894 urban participants, Razi-ur-Rahim et al. (2024) concluded that performance expectancy had an effect on usage, attitude was related to behavioral intentions, and trust had an impact on attitude. Among 351 poor consumers, Jacob et al. (2024) observed the positive influence of performance expectancy, effort expectancy and facilitating conditions, and negative impact of perceived risk on adoption intentions.

Merchant involvement is just as crucial considering the fact that UPI works in a two-sided payments platform. Ligon et al. (2019) discovered that small merchants in Jaipur were reluctant to embrace digital payments because of their customers' demands, cost considerations, issues of trust, and others. Though the interoperability of QR codes minimizes acceptance costs, settlement concerns, among others, might have an impact on merchant usage (Ligon et al., 2019; RBI, 2024).

Interpretations of evidence on financial inclusion demand careful consideration. Data from Global Findex indicate significant strides in account penetration and digital payments but persistent disparities by gender, income level, and labor force participation (Demirguc-Kunt et al., 2022). In a systematic review, Duvendack and Mader (2020) observed that there is heterogeneity in the impact of financial inclusion interventions across institutions. At the macro-level in India, the advances made in digital finance do not necessarily translate to gender parity in the control of devices, credentials, and financial decisions (Duvendack et al., 2023). While UPI can help cut payment costs, facilitate transfer services, and improve merchant acceptance, it does not by itself equate to welfare gains (Rastogi et al., 2021; Duvendack et al., 2023).

3. RESEARCH METHODOLOGY

3.1 Research Design

The research was conducted using a descriptive and an analytical research approach which relied on secondary data. The descriptive research focused on the growth and development of UPI transactions in India while the analytical research focused on the consequences of this growth to the use of digital payment systems.

This study was conducted within the framework of India's retail payments system, which is made up of NPCI, RBI, commercial banks, payment application services, consumers, and merchants. The span of the study included nine fiscal years, from FY2017–18 to FY2025–26. These years were chosen to observe the growth of UPI from its status as an emerging digital payments solution to that of being a major part of India's retail payment system.

3.2 Data Collection Method

The data was gathered through an organized documentary study and structured extraction of data from credible secondary sources. Data on transaction volume and transaction value in terms of annual data for UPI was mainly sourced from the product statistics provided by the NPCI. This data was further verified from relevant reports published by the RBI.

Further evidence of context and empiricism was gained through the use of government documents, RBI documents, World Bank documents, and academic papers. Appropriate academic material was found through the combination of the following search terms: "UPI," "digital payments," "mobile payments," "technology adoption," "merchant acceptance," and "financial inclusion in India."

The following criteria were considered to include studies or reports in the analysis: they had an explicit methodology, they directly discussed India or UPI, and they had relevant evidence about digital payment adoption, usage behavior, merchant involvement, financial inclusion, or obstacles to sustained use. Replicated studies, marketing material, opinion pieces, or studies lacking in methodological details were not included in the analysis.

3.3 Data Collection Procedure

The process of collecting data involved four steps in an organized manner. First, transaction-volume and transaction-value data from the annual UPI were gathered and placed in an organized Microsoft Excel file. Consistent units of measurement and financial year categorization were used for the entire dataset.

During the second phase, the data obtained was compared against those of NPCI, RBI, and related governmental publications. In case there was any discrepancy in terms of differences in reporting periods, measuring units, or data presentation, then it was reconciled before the analysis could be conducted.

In the third phase, the literature review was done based on the chosen academic sources and institutional documents, where findings related to the aims of this research were collected. Attention was paid to such factors as determinants of UPI use, further usage of UPI, merchants' acceptance, perceived risk, trust, digital ability, and financial inclusion.

Finally, at the fourth stage, the gathered data was sorted into four general themes, which included adoption and usage, merchants' acceptance, ways of financial inclusion, and remaining obstacles for the inclusion of digital payments in an inclusive manner. Through this approach, a well-traced link between the source of data, the computations performed, and findings obtained from the research has been made evident.

3.4 Ethical Considerations

There was no direct interaction with human subjects, no gathering of personal information, and no intervention because the study relied on publicly available aggregate statistics and published studies.

3.5 Data Analysis

The quantitative data was analysed with the use of MS Excel. The UPI transaction volume (billions) and value (₹ trillion) was standardised, and the descriptive statistics was performed in order to study the trends and growth. The year-on-year growth and CAGR (compound annual growth rate) calculation was done using financial formulae in Excel, and the average transaction value was calculated as Total Value / Total Volume. The CAGR is the average annual growth rate of the variable during the given time period, assuming consistent growth each year. All tables and figures have been made using MS Excel. The qualitative data was analysed by doing a thematic analysis, where themes include adoption, acceptance, trust, digitalisation, and financial inclusion.

4 RESULTS

4.1. Scale and Maturity of UPI

4.1.1 Transaction Volume and Growth

Transaction volume measures the intensity with which the UPI rail is used. Table 1 reports the annual number of transactions and the corresponding year-on-year growth rate from FY2017–18 to FY2025–26.

Table 1
Annual UPI Transaction Volume and Growth

Financial year	Volume (crore transactions)	YoY growth
FY2017–18	92.00	—
FY2018–19	535.00	481.5%
FY2019–20	1,252.00	134.0%
FY2020–21	2,233.00	78.4%
FY2021–22	4,596.00	105.8%
FY2022–23	8,371.44	82.1%
FY2023–24	13,112.95	56.6%
FY2024–25	18,586.60	41.7%
FY2025–26	24,161.69	30.0%

UPI transactions went up from 92 crore in FY2017-18 to 24,161.69 crore in FY2025-26, constituting a 262.6 increase in the transactions and an eight-period CAGR of 100.6%. The period when the growth was highest was at the early stage of diffusion, which was 481.5% in FY2018-19, while in FY2025-26, the growth was 30.0%, with the reason being that the comparison base got bigger over time. The growth does not mean a contraction, as the absolute increase of 5,575.09 crore transactions in FY2025-26 was higher than the total number of transactions in FY2021-22. In light of such numbers, RBI said that UPI comprised around 86% of India's retail-payment transactions in FY2025-26.

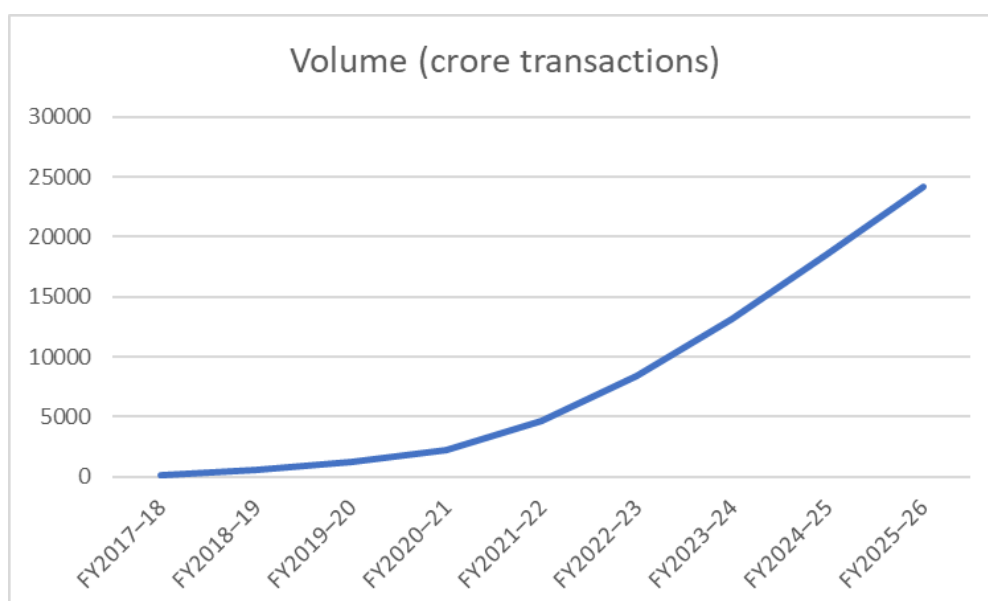


Figure 1. UPI Annual Transaction Volume, FY2017–18 to FY2025–26

The trajectory shown in Figure 1 shows a steady increase, with an apparent acceleration post FY2020-21. The form of the time series indicates movement from the adoption stage to frequent use. Nonetheless, while transactions indicate usage frequency, they do not represent the number of unique users. Hence, although the figure shows the level of intensity of use, it does not indicate if the distribution was equitable among different socioeconomic and geographical groups.

4.1.2 Transaction Value and Average Ticket Size

Transaction value indicates the monetary depth of UPI use. Table 2 reports annual transaction value and year-on-year growth over the same nine-year period, permitting comparison between the expansion of payment frequency and the expansion of value.

Table 2 *Annual UPI Transaction Value and Growth*

Financial year	Value (₹ lakh crore)	YoY growth
FY2017–18	1.10	—
FY2018–19	8.77	697.3%
FY2019–20	21.32	143.1%
FY2020–21	41.04	92.5%
FY2021–22	84.16	105.1%
FY2022–23	139.10	65.3%
FY2023–24	200.00	43.8%
FY2024–25	260.60	30.3%
FY2025–26	314.20	20.6%

Note. FY2017–18 to FY2024–25 figures are compiled from NPCI product statistics; FY2025–26 is reconciled to RBI (2026a).

The value of annual UPI transactions increased by 285.6 times, with an eight-interval CAGR of 102.8%, from ₹1.10 lakh crore in FY2017–18 to ₹314.20 lakh crore in FY2025–26. In just FY2025–2026, the platform increased its worth by ₹53.60 lakh crore. While transaction volume increased by 30.0%, year-over-year value growth decreased from 30.3% in FY2024–25 to 20.6% in FY2025–26. As a result, the predicted average value per transaction fell by 7.3%, from around ₹1,402 to ₹1,300, and was 29.2% below the series peak of about ₹1,838 in FY2020–21. An important maturity sign is the growing discrepancy between volume growth and value growth: recent expansion was primarily driven by big person-to-person transfers, but also by more frequent, lower-value payments.

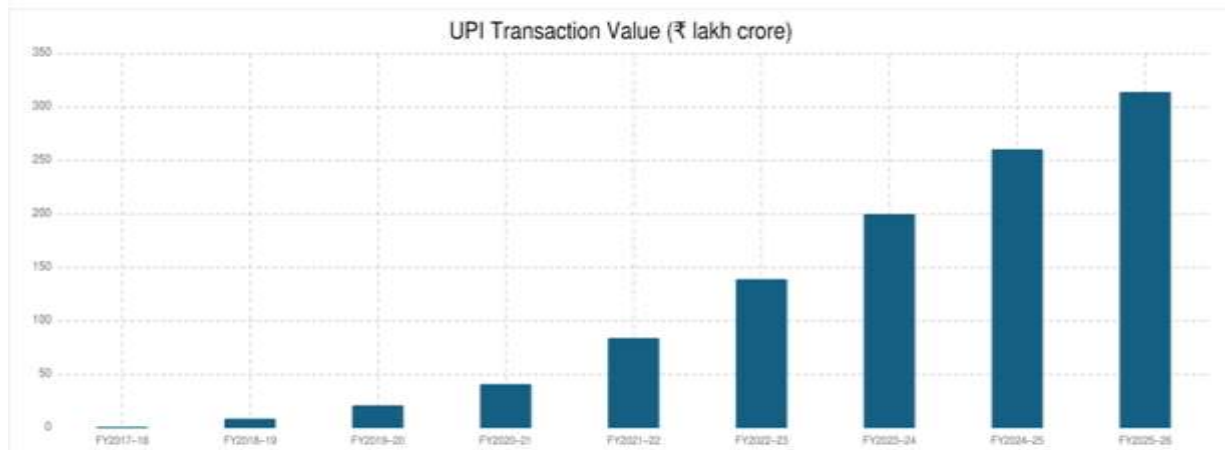


Figure 2. UPI Annual Transaction Value, FY2017–18 to FY2025–26

Figure 2 clearly shows the consistent growth in monetary value being handled by the UPI system. The rise from ₹84.16 lakh crore in fiscal year 2021-22 to ₹314.20 lakh crore in fiscal year 2025-26 proves that apart from being widely used, UPI was also gaining a lot of economic depth. But in comparison with Figure 1, one can also understand that the growth in monetary value is now slower than the growth in transaction volume, which indicates higher penetration of retail transactions.

4.2. Adoption Reach and the Acceptance–Use Gap

Aggregate turnover does not reveal how widely digital-payment use is distributed. To address this limitation, adoption and acceptance were examined using RBI’s nationwide Survey on Usage of Digital Payments, which covered more than 30,000 users and 10,000 merchants across India (RBI, 2026a).

Table 3 *Selected RBI Digital-Payment Adoption Indicators, FY2025–26*

Indicator	Reported result
Users adopting digital payments	52%
Merchants accepting digital payments	67%
UPI share of retail-payment volume	Nearly 86%

Note. Source: RBI Annual Report 2025–26, paragraphs IX.7 and IX.10 (RBI, 2026a).

However, the survey data brings certain limitations to the results on system-level growth. It is stated that digital payments were used by 52% of surveyed users, while acceptance rate stood at 67%. The difference in percentages demonstrates that development of the acceptance infrastructure outpaces adoption of the solution by all consumers. According to RBI, speed and convenience were the key motivators for adoption. In addition, adoption varies depending on the age, income level, gender, and

geographic location of individuals (RBI, 2026a). Therefore, despite leading position of UPI in payment transactions, usage of the system is heterogeneous.

4.3.Determinants of Adoption and Continued Use

4.3.1.Functional and Enabling Factors

Performance expectancy, effort expectancy, facilitating conditions and trust have been consistently identified as the key determinants in the discussed studies. Performance expectancy affected actual usage, attitude impacted behavioral intention, and trust reinforced attitude in a study conducted by Razi-ur-Rahim et al. (2024) among 894 urban users. Performance expectancy, effort expectancy, and facilitating conditions had a positive impact on adoption intentions; however, perceived risk negatively impacted adoption intentions of 351 poor consumers according to Jacob et al. (2024). Such converging results demonstrate that the adoption of UPI is driven by both perception of usefulness and capability to make transactions.

4.3.2.Trust, Risk and Continuance

Continuation of usage relied more heavily on security considerations and institutional support rather than initial convenience. The impact of security and grievance redress was identified by Kumar et al. (2018), and perceived risk was recognized as a negative predictor of adoption intention by Jacob et al. (2024). Altogether, the research points to a logical sequence whereby speed and ease facilitate trial usage, whereas safety, reliability and credible grievance handling determine whether usage is continued.

4.3.3.Financial-Inclusion Pathways and Boundary Conditions

The evidence reviewed revealed that there are three main routes through which UPI can be used to promote financial inclusion: enabling customers to convert their bank accounts to payment accounts, reducing the cost and time spent on small payments, and low-cost merchant acceptance of micro-merchants (Rastogi et al., 2021; Demirgüç-Kunt et al., 2022). However, these routes are conditional as opposed to being automatic. Studies among merchants in Jaipur indicate that customers' demand, trust, cost considerations and operational factors continue to influence their adoption of payments even after availability of payments technology (Ligon et al., 2019). In addition, gender-based studies have shown that simply owning a bank account does not necessarily mean one is able to control the mobile phone, identity, transactions or finances (Duvendack et al., 2023). In this regard, the evidence shows that it is important to differentiate between payment inclusion and financial inclusion.

5 DISCUSSION

The present study discusses the role of Unified Payments Interface (UPI) adoption in strengthening financial inclusion and transforming India's digital economy. The findings highlight the substantial growth of UPI in terms of transaction volume, value, merchant acceptance, and everyday consumer usage.

5.1 From Payment Innovation to Public Digital Infrastructure

According to the current research, UPI evolved from being a nascent payment solution to become a mature national payment infrastructure. Total annual transaction volume was 24,161.69 crore transactions for FY2025-26, while UPI constituted almost 86% of retail-payment volume (RBI, 2026a). This finding is similar to the one provided by Rastogi et al. (2021), where digital payment infrastructure is considered one of the critical factors for transforming account ownership into usage. This finding is consistent with the findings of Demirgüç-Kunt et al. (2022), where Global Findex data reveal how digital payments can make account ownership linked to active financial system involvement. Similarities are accounted for by interoperability and network effects of UPI, whereby greater acceptance by merchants is beneficial to consumers, and vice versa. The study also showed that volume increased faster than value in FY2025–26, bringing down the average transaction value estimate from about ₹1,402 to ₹1,300. This follows in line with the point made by Demirgüç-Kunt et al. (2022) that regular digital transactions may make an account valuable. But the current study only provides information at an aggregate level and hence does not provide any detail regarding the specific individuals and welfare gains. It would hence be reasonable to infer that the UPI has become a transaction layer and is increasingly being used for regular transactions.

5.2 Mechanisms of Adoption and Continuance

From the current study, it can be seen that the key factors behind UPI adoption include usefulness, ease of use, facilitating conditions and trust. The above finding corroborates Razi-ur-Rahim et al. (2024), who discovered that performance expectancy affected usage while trust enhanced users' attitudes in a sample of 894 urban residents. It is also in line with Jacob et al. (2024), whose analysis of 351 poor consumers revealed a positive influence of performance expectancy, effort expectancy and facilitating conditions on the intention to adopt UPI. Thus, in light of agreement between different types of users, adoption is dependent not only on perceived usefulness but also on ability to perform transactions. The above results coincide with TAM and UTAUT frameworks, where usefulness, effort expectancy and enablers affect behavioral intention and actual use (Davis, 1989; Venkatesh et al., 2003). In the current study, it was also observed that risk perception and ineffective redressal of grievances impede further usage. Security and grievances were found to be among the factors affecting continuance intention by Kumar et al. (2018), and Jacob et al. (2024) observed that risk perceptions dampen adoption intention. The identification of speed and convenience as important

adoption determinants by RBI (2026a) clarifies why individuals begin to use UPI services, while the research conducted about security and grievances determines the conditions for sustaining use. It can be deduced that convenience leads to adoption, while reliability, security and problem resolution lead to continuance.

5.3 Contribution to—and Limits of—Financial Inclusion

It has been found from the present study that UPI makes most direct contributions to payment inclusion by providing easy transfers and low-cost transactions through formal bank accounts. This observation finds validation in the findings of Rastogi et al. (2021) linking payments to the functional use of the bank account and Demirgüç-Kunt et al. (2022) that people who receive payment into their bank accounts tend to make use of other financial services. The reason for this agreement is the lesser transaction friction involved because if wages, transfer, benefits, or even receipts received for businesses are paid into the bank account and that too one which can be conveniently used, then the bank account itself is made more active. However, it has been found that payment activity does not mean total financial inclusion. It also aligns with the Global Findex division between account ownership and the effective use of savings, credit, and other financial services (Demirgüç-Kunt et al., 2022). The person might own an account or payment app, but not control the device or the financial decisions. It can thus be deduced that UPI is inclusive technology and could be a means for accessing formal financial services, but what is more needed is autonomy, appropriate financial products, and improved financial well-being.

5.4 Boundary Conditions: Capability, Autonomy and Protection

In this study, high usage levels of aggregate UPI have been observed along with the problem of unequal adoption. According to RBI, digital payment adoption has been observed among 52% of users surveyed and merchant adoption among 67%, and varies by age, income level, gender and location (RBI, 2026a). This result is similar to the findings of Ligon et al. (2019), where the authors, through their study of merchants in Jaipur, found that adoption was affected by demand from customers, trust, costs, and operations despite the availability of payment technology. It also resonates with the work of Duvendack et al. (2023), where it has been shown that access to formal payment systems does not always lead to autonomous use, especially for women. Thus, availability is just the first step towards inclusion, and independent usage of UPI depends on device ownership, connectivity, literacy, confidence, and control. Similarly, Kumar et al. (2018) have related security and grievance management to continuance intention, and Jacob et al. (2024) have established a negative correlation between risk perception and adoption intention. This helps explain the reasons why a technically sound system may fail to create lasting trust in terms of fraud, erroneous transactions and delays in reversal of transactions which affect poor individuals disproportionately. It may thus be concluded that the gap in adoption persists systematically and that the factors of

consumer protection, digital literacy and consumer autonomy are essential conditions for UPI usage.

5.5 Policy and Measurement Implications

In the current study, the transaction volume has been shown to be an inadequate metric for assessing the inclusivity of digital payment technology development. This is because according to Duvendack et al. (2023), aggregate development is possible alongside gender barriers, and according to Ligon et al. (2019), merchant adoption is not just about availability, but also about trust and practice. These comparisons explain why transaction numbers and QR adoption can lead to overstating inclusiveness: neither takes into consideration independent usage, service failure, fraud vulnerability, or complaints outcome. It is therefore recommended that RBI and NPCI include measures of adoption gaps, failures, and grievances that do not reveal users' private information. In line with Kumar et al. (2018) and Jacob et al. (2024), policy recommendations also need to focus on literacy, accessibility, and grievance process. It can finally be concluded that UPI policy should give priority to usage quality and safety.

6 CONCLUSION

According to the study's findings, UPI has revolutionized India's digital economy by developing into a high-frequency, extensively used, and interoperable retail payment system. Annual transaction volume rose from 92 crore to 24,161.69 crore and value from ₹1.10 lakh crore to ₹314.20 lakh crore during FY2017–18 and FY2025–26. Volume increased by 30.0% and value by 20.6% in FY2025–2026, with UPI accounting for about 86% of retail payment volume (RBI, 2026a). However, RBI's survey estimates—52% user adoption versus 67% merchant acceptance—indicate that universal involvement and system domination are not synonymous.

The evidence gives a partial solution to the research question. The most direct way that UPI helps with financial inclusion is through the ability to make bank accounts work for transactions on a regular basis, thus reducing transaction friction and increasing acceptance of low-cost merchants. Usefulness, ease of use, facilitating conditions, and trust contribute to adoption and continuation, while risk perception and inadequate redress are barriers to continuing use. Transaction growth, nonetheless, is insufficient to ensure financial inclusion since differences in device ownership, income, geography, literacy, and safety can prevent the access from becoming beneficial use.

UPI must thus be considered to be inclusion infrastructure as opposed to an inclusion outcome. In assessing the policy, the analysis must go beyond mere transactions and focus on things like customer autonomy, availability of services, resolution of complaints, merchant abilities and usage of savings, insurance, and appropriate credit facilities. Further studies must make use of disaggregated data that is either longitudinal or panel in nature in order to determine if UPI usage leads to any benefits for

excluded groups.

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