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THE GROWTH OF DIGITAL PAYMENTS IN INDIA:TRENDS AND STRUCTURAL CHANGES IN RETAIL TRANSACTIONS

KEY WORDS: Digital Payments, Upi, Retail Transactions, Payment Infrastructure, Financial Inclusion

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ABSTRACT

This paper examines the growth of digital payments in India and related changes in the retail payment system. It uses secondary data from government publications, Reserve Bank of India (RBI) reports, National Payments Corporation of India (NPCI) statistics and published research. Retail digital payment volume rose from 7,176.90 crore transactions in FY 2021–22 to 22,167.90 crore in FY 2024–25; value increased from 457.44 lakh crore to 849.12 lakh crore. UPI accounted for 81% of retail digital payment volume in FY 2024–25. The paper discusses trends, system-level changes and continuing challenges. It does not use surveys or interviews, and therefore does not claim to measure individual consumer or merchant experiences.

INTRODUCTION

Retail payments in India increasingly involve mobile applications, cards, internet banking and QR codes alongside cash. A major development is the Unified Payments Interface (UPI), which enables instant transfers between participating bank accounts through mobile applications. QR codes allow payments without a conventional card terminal, making digital payment acceptance possible in many everyday settings. These developments are supported by banking infrastructure, payment providers and public policy.

Official figures indicate the scale of change. The Ministry of Finance, Government of India (2026), reports that retail digital payment volume increased from 7,176.90 crore transactions in FY 2021–22 to 22,167.90 crore in FY 2024–25. Transaction value rose from 457.44 lakh crore to 849.12 lakh crore. These totals show expansion in the use of digital channels, but they do not explain differences by region, income, and age or business size. The paper therefore interprets national data alongside published research rather than making claims about particular users.

OBJECTIVES OF THE STUDY

- (i) To examine the growth of retail digital payments in India using official secondary data;
- (ii) To review selected literature and policy publications on UPI and payment infrastructure;
- (iii) To analyse trends and structural changes in the retail payment system as reflected in published statistics and reports; and
- (iv) To identify challenges to reliable and inclusive development of digital payments.

LITERATURE REVIEW

Sahoo, Patnaik, and Satpathy (2024) review studies on UPI adoption and identify convenience, ease of use and interoperability as important factors associated with its spread. Their review also considers links between digital payments, financial inclusion and cash use. It helps explain why an interoperable system that works across participating banks and applications can be useful, although the review does not itself measure recent national transaction totals.

The RBI's Report on Currency and Finance 2023–24 discusses India's payment transformation in the context of digital infrastructure, financial innovation and policy support (RBI, 2024). Digitalisation can make payment services more accessible and efficient, but it also raises concerns about safety, data protection and unequal access. Official statistics from the Ministry of Finance complement this policy discussion by showing the scale of growth.

Together, these sources highlight adoption, infrastructure and safety as connected themes. This paper combines them with

recent national data to discuss system-level developments, including QR-based acceptance, electronic records and the coexistence of digital payments with cash. These are interpretations of published evidence, not findings from direct observation of consumers or merchants.

RESEARCH GAP

The literature reviewed explains factors associated with UPI adoption and discusses the policy and infrastructure supporting digital payments. There is scope to bring recent national figures on transaction volume and value together with a focused discussion of structural changes in retail payments. This paper offers that synthesis using official statistics, RBI analysis and published research. It does not claim that the subject has not been studied before; it identifies a limited focus for this paper. Region-specific primary research could later examine how these national changes are experienced by different groups.

RESEARCH METHODOLOGY

The study uses a descriptive and analytical design based on secondary data from the Ministry of Finance, RBI, NPCI and published research. Figures for FY 2021–22 to FY 2024–25 are compared to identify changes in transaction volume, value and annual growth. No survey or interview was conducted; the analysis describes reported trends and possible system-level implications but cannot establish causation or represent every user or business.

GROWTH AND TRENDS IN DIGITAL PAYMENTS

Retail digital payment volume rose in each year covered, from 7,176.90 crore transactions in FY 2021–22 to 22,167.90 crore in FY 2024–25. The final figure is more than three times the initial volume, an increase of about 208.9%. Value increased from 457.44 lakh crore to 849.12 lakh crore, or approximately 85.6%. Volume grew faster than value over the full period, suggesting that the increase in transaction counts was proportionately greater than the increase in total value. The aggregate figures do not reveal the size or purpose of individual transactions.

Table 1. Retail digital payments in India

Financial year	Volume (crore transactions)	Value (lakh crore)
2021–22	7,176.90	457.44
2022–23	11,369.56	587.39
2023–24	16,416.02	719.37
2024–25	22,167.90	849.12

Source: Ministry of Finance, Government of India (2026). Annual growth rates are reproduced from the same official release.

The annual growth rates add detail to the overall trend. Ministry of Finance figures show that transaction volume grew

by 58.42% in FY 2022–23, 44.39% in FY 2023–24 and 35.04% in FY 2024–25. Transaction value grew by 28.41%, 22.47% and 18.04%, respectively. Growth therefore remained positive, but the annual percentage rate moderated. This does not mean digital payments declined; the number and value of transactions continued to increase, but at a slower percentage rate than in the preceding year. UPI represented 81% of retail digital payment volume in FY 2024–25, indicating its leading position. Cards, wallets and other channels nevertheless remain part of the wider payment mix, and cash has not disappeared.

STRUCTURAL CHANGES IN RETAIL TRANSACTIONS

QR-based payments change the checkout process by allowing customers to scan a code and authorise a transfer through an application. This can reduce the need for cash or change and may allow acceptance without a conventional point-of-sale terminal. The process still relies on a working device, connectivity, authentication and successful processing.

Digital transactions create records of the amount, date and recipient. These can help users check payments and provide evidence in a dispute. Compared with cash, an electronic trail may make some transactions easier to trace, but it does not guarantee accurate accounts or better money management. Users must verify details and protect account access.

For retail businesses, payment histories may assist reconciliation by allowing receipts to be compared with sales records and bank statements. QR acceptance may also reduce the need for some retailers to purchase card terminals. These benefits depend on proper record-keeping: businesses still need to account for cash sales, refunds, charges and unmatched receipts. A digital payment record alone does not guarantee accounting accuracy, tax compliance or access to formal credit.

UPI and QR codes now feature alongside cards, wallets, internet banking and cash. Different methods serve different situations, so digital growth does not prove that cash has disappeared. Access remains uneven: bank accounts, devices, networks, accessible interfaces and digital skills affect whether people can use digital services. National totals cannot show these differences without detailed data.

FINDINGS OF THE STUDY

The study has four main findings. First, retail digital payment volume rose from 7,176.90 crore transactions in FY 2021–22 to 22,167.90 crore in FY 2024–25, while value increased from 457.44 lakh crore to 849.12 lakh crore. Second, annual growth remained positive, although growth rates moderated in the later years. Third, UPI accounted for 81% of retail digital payment volume in FY 2024–25.

Fourth, QR acceptance and electronic records are features of the changing payment system, while safety, reliable infrastructure and inclusion remain important concerns. These findings describe aggregate trends and published system features; they do not establish how every consumer or merchant behaves.

CHALLENGES AND SUGGESTIONS

Fraud is a continuing concern, including phishing, impersonation, fake customer-care contacts and social-engineering attempts that persuade users to reveal credentials or approve transfers. Mistaken, delayed or failed payments can also cause difficulty, particularly when users do not know how to report a problem or track its resolution. Clear complaint procedures and timely support are therefore important parts of a reliable payment system.

Digital payments depend on devices, electricity, networks and functioning infrastructure. Weak connectivity or service

interruptions can make them unreliable. Users need to check recipient details, protect PINs and passwords, recognise suspicious requests and confirm payment status. Awareness material should explain what to do when payments fail or fraud is suspected.

Rapid national growth does not mean that access is equal everywhere. People with limited digital skills, older users, persons with disabilities and residents of areas with weaker connectivity may face additional barriers. Cash remains useful when devices or networks fail and for people unable to use digital channels easily. Inclusion should therefore mean dependable choice, not simply an increase in transaction counts.

Public agencies, banks and payment providers should strengthen fraud awareness, improve system reliability and make grievance procedures easier to find and use. Digital-literacy programmes should explain how to verify requests and protect credentials. Interfaces and support services should be accessible to users with different needs. Businesses can check digital receipts against sales and bank records, while maintaining a practical alternative when payment systems are unavailable. These steps can help ensure that growth is accompanied by trust and resilience.

CONCLUSION

Digital payments have become an important part of India's retail payment system. Between FY 2021–22 and FY 2024–25, official figures show substantial increases in transaction volume and value, with UPI accounting for 81% of retail digital payment volume in the final year. QR-based acceptance and electronic records are important features of this change, but digital channels continue to coexist with cash and other payment methods. Future progress should be assessed not only by transaction growth but also by reliability, safety, accessibility and complaint resolution. Since this study uses secondary data, further region-specific primary research would be needed to understand individual experiences.

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