



# The Future of Digital Payments in India: Growth Trends, Challenges, And Post- Pandemic Prospects

**Dr.P.Venkataraman**, Assistant Professor and Head, Department of Commerce, Gandhi Arts & Science College, Sathyamangalam – 638402.

**Abstract-** India's digital payment system has transformed rapidly in the last decade due to technological innovations, supportive regulations, and changes in consumer habits. Among various modes, the Unified Payments Interface (UPI) has been the primary driver, representing more than four-fifths of retail digital payments in FY 2023–24 and projected to cross nine-tenths by FY 2028–29. Credit card penetration has expanded considerably, whereas debit card usage has shown a downward trend, reflecting a shift in consumer preference. Merchant acceptance networks, supported by QR codes and innovative payment solutions, are spreading to semi-urban and rural regions. The COVID-19 crisis pushed consumers towards contactless transactions, though gaps in infrastructure, security risks, and limited awareness remain barriers. This study examines the growth trajectory of India's digital payments, explores consumer behaviour during and after the pandemic, and evaluates new opportunities such as cross-border payments and fintech partnerships. The overall assessment suggests that while some challenges persist, the long-term outlook for digital payments in India remains robust, contributing to financial inclusion and the move toward a less-cash economy.

**Keywords:** Customer behavior, Mobile apps, Online shopping, M-commerce, Consumer perception

## I. INTRODUCTION

Over the past decade, India's digital payments sector has expanded at an unprecedented pace, supported by innovations in financial technology, government policy initiatives, and higher levels of consumer trust in digital systems (RBI, 2024).

The UPI has been at the centre of this transformation. Transaction volumes recorded a compound annual growth of more than 50%, with over 131 billion transactions in FY 2023–24. Forecasts suggest that UPI usage may exceed 430 billion transactions by FY 2028–29. Presently, UPI processes over 80% of retail digital transactions, and this dominance is expected to rise to above 90% in the coming five years (NPCI, 2024).

Credit card usage has also gained momentum. More than 16 million new cards were issued during FY 2023–24, pushing the active card base beyond 100 million. Transaction volume expanded by over 20% and transaction value by nearly 30%, while debit card transactions showed contraction, indicating a consumer tilt towards credit-based instruments. Projections indicate that the number of credit cards may double by 2028–29 with the help of targeted product offerings (RBI, 2024).

On the merchant side, acceptance infrastructure has deepened substantially. QR-based payments registered double-digit growth in both value and volume. Penetration is now visible in smaller towns



and rural areas, supported by tools such as payment sound boxes, merchant financing, and initiatives like the Payments Infrastructure Development Fund (NPCI, 2024).

Additionally, digital payments are extending to business domains such as international remittances and B2B transactions. Start-ups and fintechs, in partnership with established financial institutions, are set to influence the next phase of the payments ecosystem (PwC India, 2024).

### Objectives

- To study the expansion and growth trends of digital payments in India.
- To assess the role of UPI and similar innovations in accelerating adoption.
- To analyse the pandemic's influence on consumer behaviour regarding payments.
- To identify persistent challenges and barriers to adoption.
- To explore the prospects and regulatory implications for the future of digital payments in India.

## II. METHODOLOGY

The research employs a descriptive and analytical design using secondary data. Sources include RBI reports, NPCI publications, PwC India industry studies, and other scholarly articles. The analysis covers time-series data for the period FY 2015–16 to FY 2023–24.

## III. REVIEW OF LITERATURE

- Angamuthu (2020) tracked the rise of digital payments between 2012 and 2019, emphasizing the global tendency towards contactless methods.
- Cornelli, Frost, Gambacorta, Sinha, and Townsend (2024) examined UPI's structural role in India's payment ecosystem, praising its financial inclusion benefits while pointing out hurdles like interoperability and technical glitches.
- Panwar, Vashistha, and Choudhary (2020) studied COVID-19's impact, observing that while the pandemic caused short-term disruptions, digital payments demonstrated resilience and strong recovery potential.

## IV. FINDINGS

- **UPI's prominence:** From less than half a billion transactions in FY 2016–17, UPI now handles close to 140 billion, becoming the backbone of India's payment system.
- **Consumer preferences shifting:** Use of credit cards has grown steadily, while debit card transactions are declining, highlighting changing behaviour.
- **Merchant infrastructure growth:** QR codes, sound devices, and government schemes have accelerated payment penetration in smaller towns and rural markets.
- **COVID-19 effect:** The pandemic pushed consumers towards contactless systems, but also highlighted weaknesses such as inadequate infrastructure and security risks.
- **Future outlook:** International remittances, fintech collaborations, and supportive regulations are expected to drive the next phase of digital payments growth.



## V. CONCLUSION

The future of India's digital payments ecosystem looks promising, with UPI and fintech innovations driving momentum. Expansion in merchant acceptance, growth of credit cards, and the emergence of cross-border transactions further strengthen the outlook.

### **To make adoption more inclusive and secure, policymakers must:**

- Improve digital literacy and financial awareness.
- Build robust cyber security frameworks.
- Foster public-private partnerships for infrastructure growth.
- Encourage global payment linkages to facilitate remittances and trade.
- Strike a balance between regulation and innovation to safeguard consumers while promoting growth.

If these steps are pursued, India will move closer to its vision of a less-cash economy while advancing financial inclusion.

## REFERENCES

1. Angamuthu, M. (2020). Growth of digital payments in India. *Journal of Emerging Technologies and Innovative Research*, 7(6), 125–132.
2. Cornelli, G., Frost, J., Gambacorta, L., Sinha, S., & Townsend, B. (2024). The organisation of digital payments in India: Lessons from the Unified Payments Interface (UPI). *Bank for International Settlements Papers*, 135, 45–68. <https://www.bis.org>
3. National Payments Corporation of India. (2024). UPI and digital payments statistics: Annual report 2023–24. <https://www.npci.org.in>
4. Panwar, N., Vashistha, A., & Choudhary, R. (2020). Impact of COVID-19 pandemic on digital payments. *International Journal of Creative Research Thoughts*, 8(5), 1050–1060.
5. PwC India. (2024). Future of payments in India: Innovations and regulatory landscape. PricewaterhouseCoopers. <https://www.pwc.in>
6. Reserve Bank of India. (2024). Report on digital transactions in India: 2023–24. RBI Publications. <https://www.rbi.org.in>