

# An Efficacy of the Digital Payment Systems in India

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## Abstract

India's financial and business environment saw a dramatic change with the introduction of online payment methods. It started in the early 2000s as the internet and mobile technology developed, but after 2010, it really took off because of the emergence of smartphones, e-commerce, and government-sponsored digital projects.

**Examining the Literature:** A literature review is a methodical examination of past research, aiming to identify relevant studies that align with on-going theoretical and conceptual research articles.

**Tests of the Aims :** To examine India's digital payments in outline, To determine the strengths and drawbacks of digital payments in India

**Methods and Materials:** To examine digital payment options in India, secondary web-based resources were examined, such as official websites and IT media outlets.

**Results and Discussion:** India's digital transactions have seen a steady increase in FY 2021-2023, reaching 2,221.9 crore transactions, indicating a robust rise in digital usage year over year. The value of digital transactions grew by 17%, with UPI becoming the most popular payment method. The country is expected to handle around 17,221 crore transactions in FY 2024-2025, making up more than 80% of the volume of digital payments. Government initiatives have significantly accelerated the adoption of UPI, transforming India into a global leader in digital transactions.

**Discussion of the Future Work:** India is focusing on future initiatives to enhance its digital infrastructure and improve efficiency, security, and inclusivity. Strengthening cyber security infrastructure and enhancing internet connectivity in rural areas are crucial for universal access. Including regional languages and user-friendly platforms for older and less literate customers, along with integrating digital technologies like the Digital Rupee, can solidify India's position as a global leader in digital finance.

## INTRODUCTION

In India, the term "online payment" describes the practice of transferring funds or conducting business without the use of actual currency by utilizing digital platforms and internet-based methods. Internet banking and card payments helped it gain popularity in the early 2000s, but after 2016, the government's Digital India campaign and the widespread use of smartphones caused it to develop quickly. A major event was the National Payments Corporation of India's (NPCI) launch of the Unified Payments Interface (UPI), which made it possible to send money securely and in real time using mobile applications. From street sellers to major stores, systems like Paytm, PhonePe, Google Pay, and BHIM are becoming a necessary component of daily transactions. This change has helped India become a global leader in digital payments by fostering financial inclusion and improving ease.

## EXAMINING THE LITERATURE

**Ministry of Finance (2025)** Digital Payment Transactions Surge with Over 18,000 Crore Transactions in 2024-25, RBI, NPCI Launch Awareness Campaigns and AI-Based Solutions to Prevent Financial Cybercrimes Digital payment transactions, including those through the Unified Payment Interface (UPI), have consistently increased over the last five financial years. The Reserve Bank of India (RBI) and National Payments Corporation of India (NPCI) have launched various initiatives to prevent payment-related frauds, including device binding, two-factor authentication, daily transaction limits, and use case curbs. NPCI provides a fraud monitoring solution for banks, while RBI and banks are implementing awareness campaigns. The Ministry of Home Affairs has launched a National Cybercrime Reporting Portal and a National Cybercrime Helpline Number.

**Meghana M S (2024)** A systematic review of literature of digital payment in India, The study aims to understand the conceptual framework of digital payments in India and analyze its impact through literature review. The research methodology involves collecting data from secondary sources. Digital payments have transformed the financial landscape, offering convenience, increased transaction speed, and improved security features. However, challenges like cybersecurity threats, privacy concerns, and the digital divide need to be addressed. Technology providers must collaborate to create robust regulatory frameworks and innovative solutions to promote widespread adoption of digital payments.

**Jayaseelan and Gokulnath (2023)**, A Summary of a Dissertation on Digital Payment Systems To comprehend the different online payment methods and their advantages and disadvantages, this study analyzed all of the secondary data available. The results of the analysis show that while consumers have access to a number of digital payment methods, relatively little is understood about them or how to use them. More efforts to teach and train individuals about digitization will lead to a rise in the use of digital payment methods in the upcoming years.

**Agrawal, and Others( 2021)** “Moving from Cash to Cashless economy: towards Digital India”, Descriptive statistics and the ANOVA approach are used to assess the results of the study, which looks at the different opportunities created in the payment space as a result of technological innovation. The primary goal is to transition to a cashless economy and gauge its progress. There are no notable differences depending on age, gender, profession, income, or education, and the current administration supports cashless systems and wants to lessen corruption. Everyone in the nation has started to accept digital payments, but successful implementation is only feasible if people are properly educated before it is implemented.

## AIMS OF THE EXPLORATION

- To examine India's digital payments in outline
- To determine the strengths and drawbacks of digital payments in India

## METHODS AND MATERIALS

The study of secondary web-based materials forms the basis of the analytical exploratory effort that is being presented. in order to get knowledge about different digital payment options. By examining Digital Transactions in India and the growth of the Ministry of Electronics and IT media outlets, newspapers, magazines, and annual financial statements from various Digital Transactions in India carriers that are accessible via their official websites on the internet, the necessary data has been gathered to determine the advantages and disadvantages of the digital payment approach.

## DIGITAL PAYMENTS IN INDIA AT A GLANCE

India is becoming a worldwide leader in digital payments because to government programs, cutting-edge technologies, and high smartphone penetration. An overview of the state of online payments in 2025 may be viewed here.

S. No	Fiscal Year	Total Transactions(crore/ billion)	Digital Transaction Value(₹ lakh crore)	Notable: UPI Volume & Value
1	2021-22	1,644 crore (16.44 billion)	₹2,428 lakh crore	UPI ~83.76 billion; ₹1,39 lakh cr
2	2022-23	-	-	UPI ~45.97 billion; ₹84 lakh cr
3	2023-24	1,644 billion → 2,221.9 billion (+35%)	₹2,428 → ₹2,862 lakh crore (+17%)	UPI ~131 billion; ₹199.9 lakh cr
4	2024-25	2,221.9 crore → 2,862 billion? via Fiscal Year 25	₹2,428 → ₹2,862 lakh crore	UPI ~17,221 crore (volume 2024); ₹246.83 lakh cr (value)

**Source: Breaking financial year data for FY 2024-25 reported by RBI indicates continued sharp growth.**

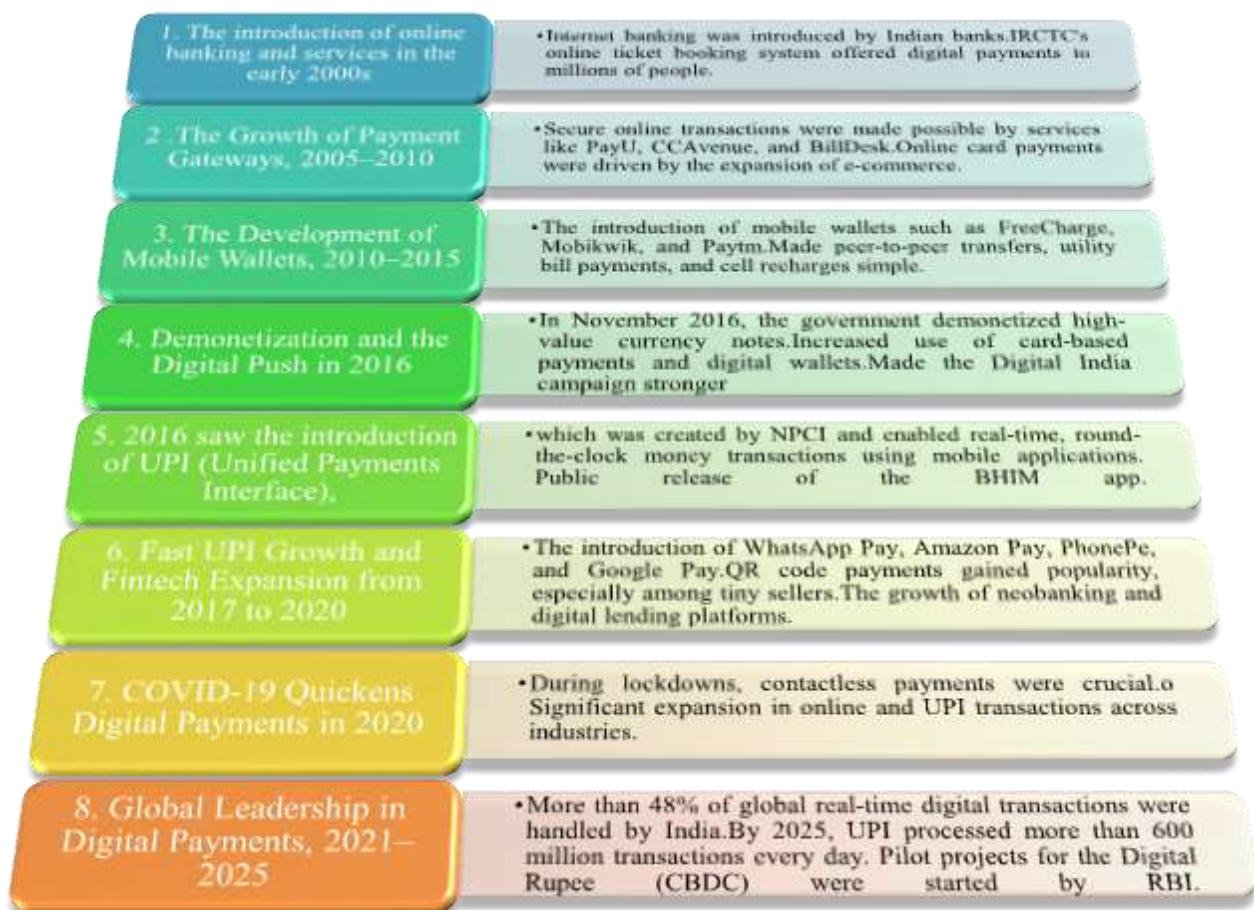
### Outline of the Info Table

India has one of the world's most inclusive and rapidly expanding internet payment ecosystems. Even small sellers, rural consumers, and first-time digital adopters now take part in a cashless economy because of UPI's foundation. India's transactions are being redefined by the convergence of technological innovation, legislative support, and user trust. Steady Increase in Online Transactions India reported 1,644 crore digital transactions of ₹2,428 lakh crore in FY 2021–2022. This number increased by 35% to reach 2,221.9 crore transactions by FY 2023–2024, indicating a robust rise in digital usage year over year. Consistent Growth in the Total Transaction Value: From ₹2,428 lakh crore in 2021–2022 to ₹2,862 lakh crore in 2023–2024, the value of digital transactions grew by 17%, showing both an increase in users and higher-value transactions. UPI's Rapid Development From 83.76 billion transactions (₹139 lakh crore) in 2021–2022 to about 131 billion (₹199.9 lakh crore) in 2023–2024, UPI has become the most popular payment method.

It is anticipated that UPI will handle around 17,221 crore transactions (₹246.83 lakh crore) in FY 2024–2025, making up more than 80% of the volume of digital payments. Gaps in Data for FY 2022–2023 The UPI data alone (~45.97 billion transactions worth ₹84 lakh crore) shows a consistent pace for FY 2022–2023, even if the table does not include the overall volume or value of digital transactions for that year. Government initiatives in India have significantly accelerated the adoption of UPI, transforming the country into a global leader in digital transactions.

## THE MAJOR SIGNIFICANT MOMENTS IN INDIA'S ONLINE PAYMENT EVOLUTION

India's transition to online payments represents a major change in the way the nation conducts business, bridging the divide between digital innovation and traditional banking. Thanks to encouraging government regulations, growing internet and smartphone usage, and technological improvements, India has quickly adopted digital payment systems during the last 20 years. What started off as card payments and online banking has evolved into a vibrant ecosystem driven by real-time payment systems, mobile wallets, and UPI (Unified Payments Interface). India is now among the most developed digital payment economies in the world as a result of this transition.

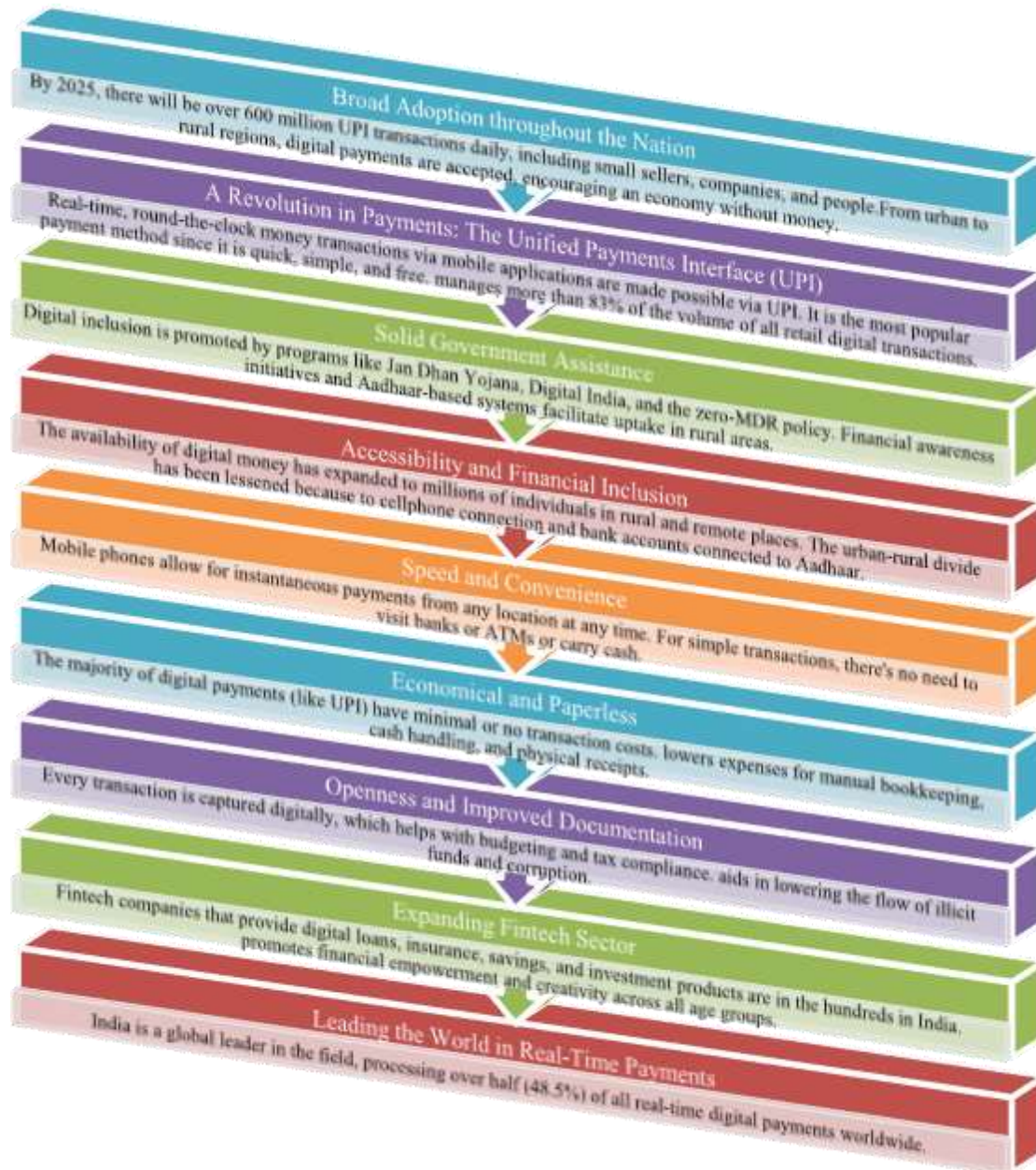


### Outline of the Info Table

The history of online payments in India is one of creativity, inclusivity, and change. The nation has revolutionized the way money travels, from the early days of internet banking to its position as a worldwide leader in real-time payments, making transactions quicker, safer, and more accessible for everyone.

## STRENGTHS OF DIGITAL PAYMENTS IN INDIA

India now has one of the most sophisticated and extensive digital payment systems globally. Strong infrastructure, government assistance, and user-friendly technology are the main drivers of the rise. The main advantages are listed below:

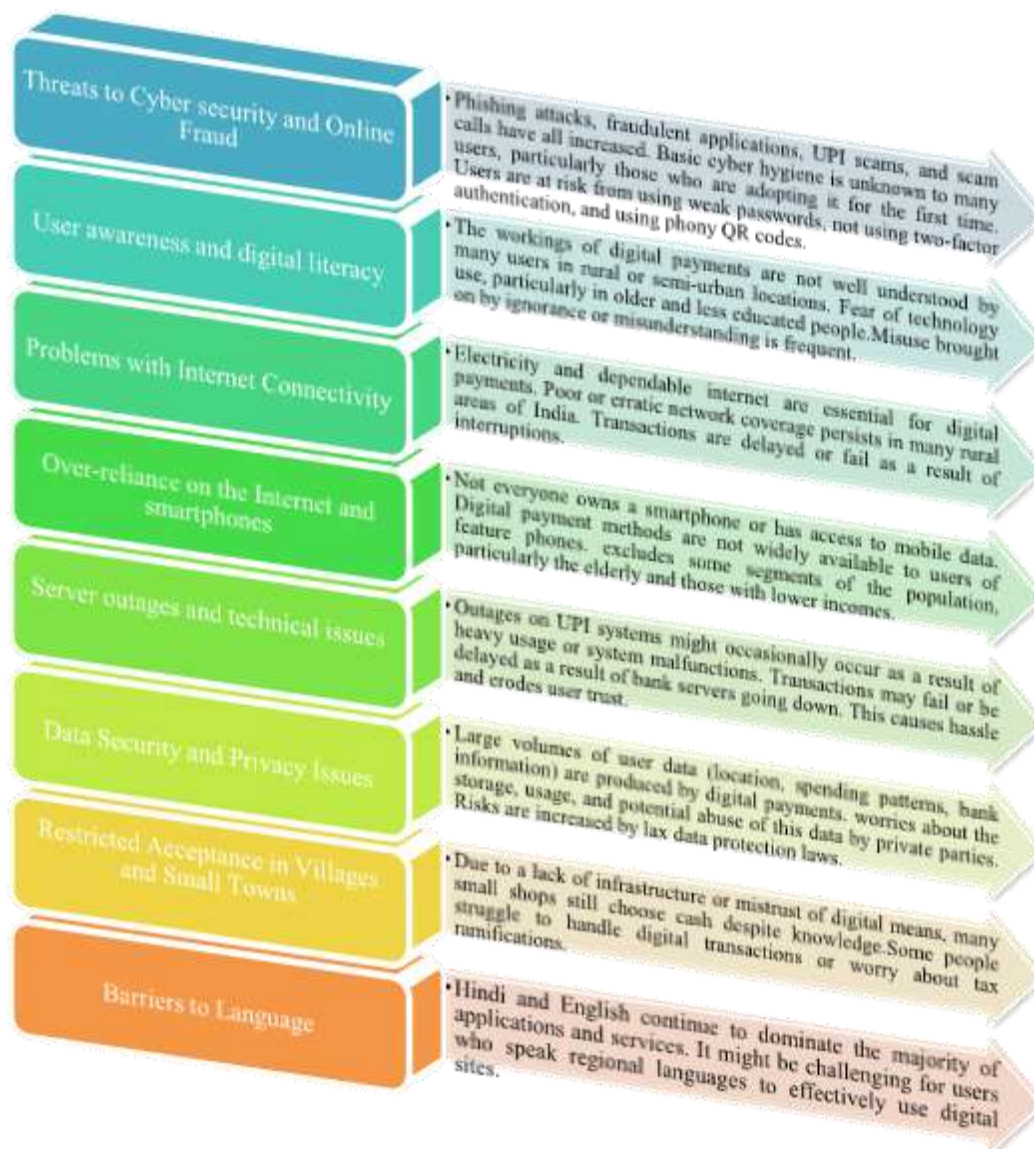


## Outline of the info Table

In India, digital payments have completely changed the way individuals manage their finances by making it quicker, safer, and more accessible. The success of the nation is attributed to a robust technology base, regulatory backing, and an enormous user base that keeps expanding every year.

## WEAKNESSES OF DIGITAL PAYMENTS IN INDIA

Not with standing notable advancements, digital payments in India still confront a number of issues that must be resolved for long-term inclusivity and sustainability. These are the main flaws:



## Outline of the Info Table

Even while digital payments are expanding quickly in India, these flaws show how much more solid infrastructure, user education, security, and inclusive design are needed. To guarantee that digital payments are dependable, safe, and available to all societal segments, these issues must be resolved.

## POTENTIAL INITIATIVES IN INDIAN DIGITAL PAYMENTS

Future initiatives must concentrate on improving the system's efficiency, security, and inclusivity as digital payments continue to expand quickly in India. In order to shield people from the growing number of online frauds and scams, cyber security infrastructure must be strengthened. To guarantee universal access, it is also necessary to enhance digital infrastructure and internet connectivity in rural and isolated locations. Adoption will be further increased by adding regional languages to digital payment systems and creating user-friendly platforms for older and less literate customers. Fintech companies and government bodies may work together to provide more creative financial products, such as insurance, digital savings, and microcredit, that are suited for small enterprises and rural communities. Furthermore, the Digital Rupee (CBDC), block chain, and artificial intelligence (AI) may all be

integrated to improve system speed, transparency, and confidence. India has the potential to solidify its position as a worldwide leader in digital finance by making consistent efforts in these areas.

## **DISCUSSION**

The rise of digital payments and the way individuals handle their money have both been greatly aided by India's UPI. The worth of these transactions has significantly increased in India this year due to government initiatives, smartphone adoption, and user-friendly apps. Nonetheless, further security, user education, infrastructure, and inclusive design are required.

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