



Growth of Digital Payments in India: A Trend Analysis

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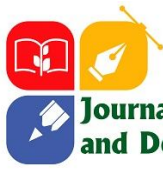
ABSTRACT

Digital payments are electronic money transfers without cash, using debit/credit cards, mobile wallets, UPI, internet banking, and other online systems. They provide speed, convenience, safety, and transparency for individuals, businesses, and governments to move money efficiently. Smartphones, affordable internet, government regulations, and fintech innovations have fuelled India's digital payment surge, with platforms like UPI, BHIM, IMPS, and BBPS enabling simple, secure transactions and financial inclusion for underbanked groups. This study examines trends from 2016–17 to 2024–25 using secondary data and the Least Squares Method to forecast volumes up to 2027–28. Results reveal an initial explosive growth phase shifting to steady, gradual expansion. Digital payments streamline business operations, reduce costs, boost consumer convenience, and enhance transparency. With ongoing tech progress, infrastructure buildup, digital literacy drives, and policy backing, they promise to fuel India's long-term economic growth, inclusion, and efficiency.

Keywords: Digital Payments, India, Trend Analysis, UPI, Financial Inclusion, Transaction Volume, Forecasting, Cashless Economy, Fintech, Digital Literacy, Economic Growth.

INTRODUCTION

Digital payments are financial transactions that are conducted without the use of actual cash using digital devices and online platforms. Debit cards, credit cards, prepaid wallets; internet banking, mobile banking apps, and other electronic payment systems are some of the tools used to make these payments. People, companies, and governments may move money across borders swiftly, safely, and easily thanks to digital payment methods. Digital payments are now a crucial component of contemporary financial institutions all over the world thanks to the development of information and communication technology. They efficiently enable both small- and large-value transactions and permit real-time money transfers. A move away from conventional cash-based systems and toward technology-driven financial transactions is reflected in the growing dependence on electronic payment methods.



In order to improve the effectiveness, ease, and transparency of financial transactions, digital payments are essential. Users save time and effort since digital payments, in contrast to cash transactions, may be made quickly, from anywhere, at any time. They lessen the need to carry actual cash and lower the risks of handling cash, including theft, loss, and damage. Accurate transaction records are another benefit of electronic payment systems, which support people's and businesses' financial accountability. Better financial planning and management are supported, and transparency is increased. Digital payments also lower transaction costs associated with currency storage, transportation, and printing.

The ability of digital payments to enable smooth business operations is another significant benefit. Companies can keep accurate records, get payments more quickly, and rely less on cash transactions. Digital payments give customers access to a variety of online services, convenience, and ease of use.

Reasons for Growth of Digital Payments in India

Over the past decade, digital payments in India have grown rapidly due to technological progress, financial inclusion, and supportive government policies. The widespread use of smartphones and affordable internet has enabled even rural and semi-urban populations to access digital payment platforms. Government initiatives promoting a cashless economy and improved digital infrastructure have further accelerated adoption. Banks and financial institutions have introduced user-friendly apps and innovative payment solutions, making transactions quick and convenient. The expansion of e-commerce and online services has also increased reliance on digital payments for shopping, subscriptions, and bill payments. As a result, businesses benefit from faster transactions, improved cash flow, and reduced costs associated with handling physical cash.

Economic Impact of Digital Payments

Digital payments greatly benefit the economy by improving efficiency, transparency, and financial inclusion. They reduce dependence on cash, lowering the costs of printing, transporting, and storing currency while enabling faster money circulation that supports economic growth. Electronic transactions create digital records, reducing tax evasion, corruption, and unaccounted money, thereby strengthening the formal economy and increasing government revenue. Digital payments also bring unbanked and underbanked populations into the financial system, allowing them to access credit and receive government benefits directly. Small businesses gain from greater customer convenience and wider market reach through electronic payments. Moreover, digital payments encourage fintech innovation and modern financial services. Despite challenges such as cybersecurity risks, digital literacy gaps, and infrastructure issues, ongoing technological progress and regulatory support continue to strengthen the digital payment ecosystem in India.

REVIEW OF LITERATURE

Suman Dash (2023) analysed electronic payment methods in India: a statistical trend analysis. This study examined UPI trends and electronic methods in the face of issues like COVID-19, inequality, and the informal sector. Faster, secure electronic systems have surpassed traditional cash, cheques, drafts, and bank transfers. UPI propels expansion,



establishing India as a rapidly growing global economy. Arun Kumar Mishra (2022), conducted a study on growth of digital payment system in India: a trend analysis. Using a descriptive approach and trend analysis, the study examines NPCI digital products (NACH, UPI, USSD, BHIM, Apes, BBPS, and IMPS) from 2016–17 to 2021–22. The results indicate that most methods have experienced strong growth recently, with the exception of USSD, which saw a fall in value from 2018–19 to 2021–22. Over time, other NPCI payouts showed impressive growth. B. Angamuthu (2020), evaluated growth of digital payments in India. This study focused on growth of digital payments with respect to its volume and value of transactions during the period 2012-2013 to 2018-2019. This study reports positive growth in terms of actual volume (24.11%) and value (15.84%) of overall digital payments in the country over the last 7 years. Further, the country is expected to generate 28,000 lakh transactions exceeding INR 15,20,000 billion in digital transactions in 2020-2021. Shobha B.G (2020), examined digital payments- analysis of its present status in India. This study has analysed present status of different digital payments by using secondary data and found that there is a sharp increase in use of digital modes in the last five years. But still cash play a major role due to lack of proper infrastructure and technical challenges which needs to be addressed immediately. The study is intended to seek the attention of policy makers so that the benefit of digitalization reaches everyone. Rajesh Kumar (2019), investigated digital financial services in India: an analysis of trends in digital payment. The study examined the growing trends in digital transactions that are fuelled by infrastructure like cell phones, NFC, and the internet. Benefits include reduced traditional banking requirements and increased efficiency and accessibility for underrepresented individuals. In order to increase transaction growth, the future course emphasizes cybersecurity, user education, policies, and infrastructure expansion.

STATEMENT OF THE PROBLEM

Digital payments in India are growing very fast. But we need to study if this growth is steady and will continue for a long time. More electronic transactions make us wonder if the growth stays the same or goes up and down. Knowing the long-term pattern helps check if the digital payment system is strong. Predicting future growth helps government, banks, and companies plan better. Hence, this study attempts to examine the trend and forecast the growth of digital payments in India.

SCOPE OF THE STUDY

The current study uses secondary data to analyse the rise of digital payments in India over a given time period. It uses trend analysis to predict future growth for the next three years and looks at the trajectory in digital payment values from 2017–18 to 2024–25. The survey does not distinguish between different payment methods and is restricted to total digital payment transactions. The analysis excludes initial data collection and is based only on publicly available data. As a result, the results only apply to the variables and time period that were chosen.

RESEARCH OBJECTIVES

- To analyse the growth of digital payments in India.
- To identify long-term trends in transaction values.
- To forecast digital payment growth for the next three years.
- To interpret changes in growth rate over time.



RESEARCH METHODOLOGY

The present study is analytical in nature and is based on secondary data. The data relating to digital payment transactions in India were collected from published sources such as official reports, statistical publications, and online databases. The study covers a period of eight years from 2017–18 to 2024–25.

Trend analysis was used as the primary tool to examine the growth pattern of digital payments over time. The Least Squares Method was applied to identify the long-term trend in the data. The trend equation used for the analysis is:

$$Y = a + bX$$

where Y represents the digital payment value and X represents the time variable.

Further, future values for the period 2025–26 to 2027–28 were forecast by extending the trend line obtained from the analysis. Growth percentages were also calculated to examine the rate of change over the years. The results are presented using tables and graphical representations for better understanding and interpretation.

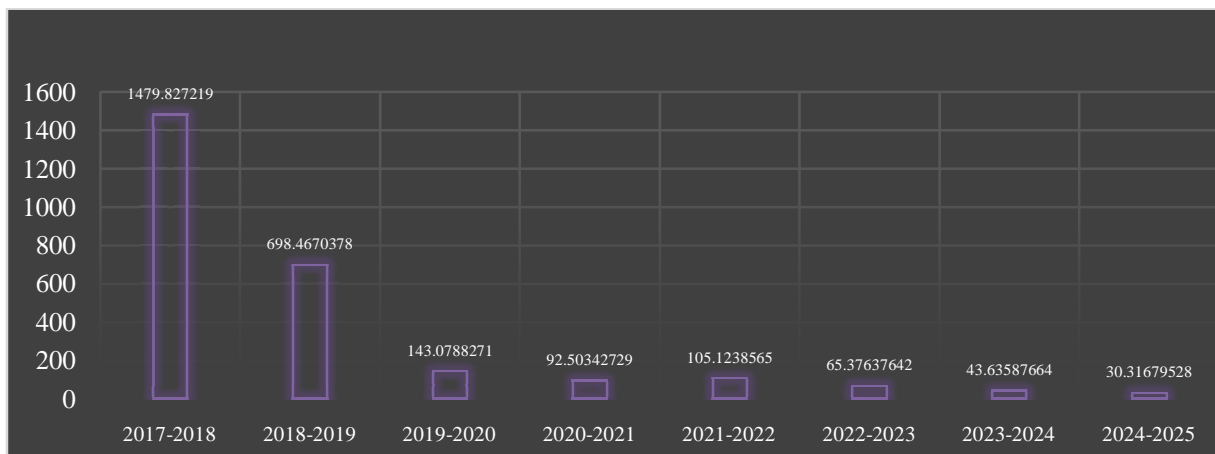
ANALYSIS AND INTERPRETATION

1. To analyse the growth of digital payments in India.

Year-wise Growth of Digital Payment Transactions in India During 2016-2017 to 2024-2025

YEAR	TRANSACTION	GROWTH%
2016-2017	6952.14	-
2017-2018	109831.8	1479.8272
2018-2019	876970.72	698.46704
2019-2020	2131730.14	143.07883
2020-2021	4103653.58	92.503427
2021-2022	8417572.48	105.12386
2022-2023	13920676.35	65.376376
2023-2024	19995085.51	43.635877
2024-2025	26056954.65	30.316795

Source: Secondary Data



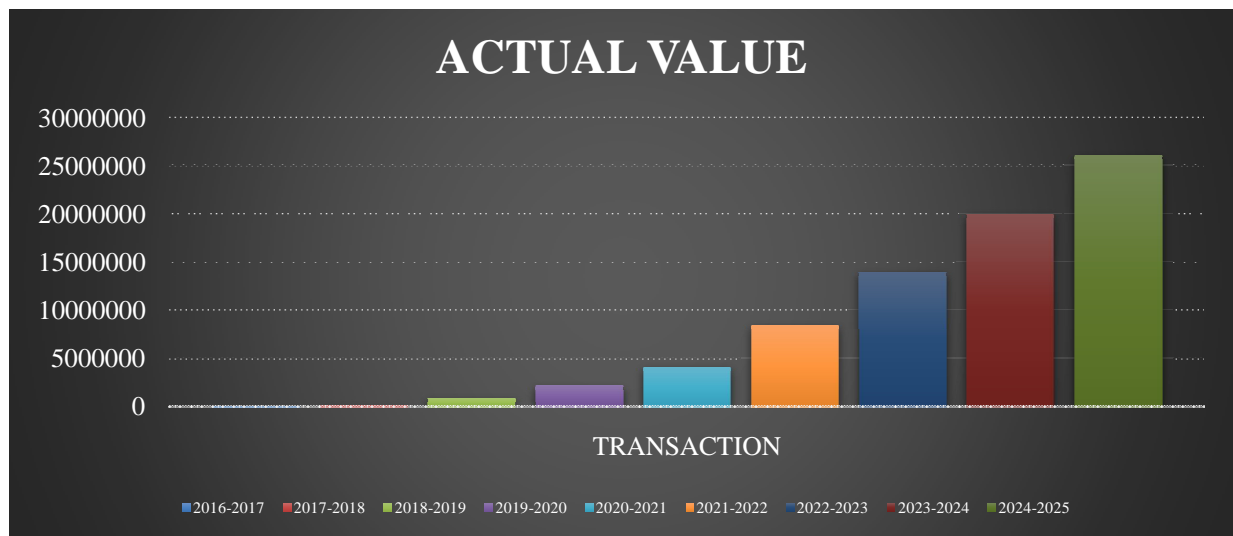
The table and chart show that the digital payments in India exploded from 6,952 crore in 2016-17 to over 2.6 crore by 2024-25. Growth was wild at first 1,480% in 2017-18 and 700% in 2018-19 as people quickly switched to digital methods. From 2019-20 on, it slowed to 30-143% yearly, showing the market is growing steadily but maturing. The base keeps expanding fast, but the growth rate is settling down, signalling strong adoption and a stabilizing ecosystem.

2. To identify long-term trends in transaction values.

Year-wise Digital Payment Transactions in India During 2016–2017 to 2024–2025

YEAR	TRANSACTION
2016-2017	6952.14
2017-2018	109831.8
2018-2019	876970.72
2019-2020	2131730.14
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2023-2024	19995085.51
2024-2025	26056954.65

Source: Secondary Data



The table shows a consistent and substantial rise in digital payment transactions in India from 6,952 lakh in 2016–17 to 26,05,695 lakh in 2024–25. The early years (2016–2019) witnessed explosive growth, largely due to policy measures like demonetization and the launch of UPI, which significantly accelerated adoption. From 2019 onwards, although the rate of percentage growth moderated, the total transaction volume continued to rise sharply, indicating that digital payments have transitioned from a period of rapid adoption to becoming a mainstream mode of financial transactions, reflecting deep integration into everyday economic activity.

3. To forecast digital payment growth for the next three years.

Forecasted Digital Payment Transactions and Growth in India 2025–2026 to 2027–2028

YEAR	TRANSACTION	GROWTH%
2025-2026	26428408.94	1.43
2026-2027	30201042.18	14.27
2027-2028	33973675.41	12.49

Source: Secondary Data

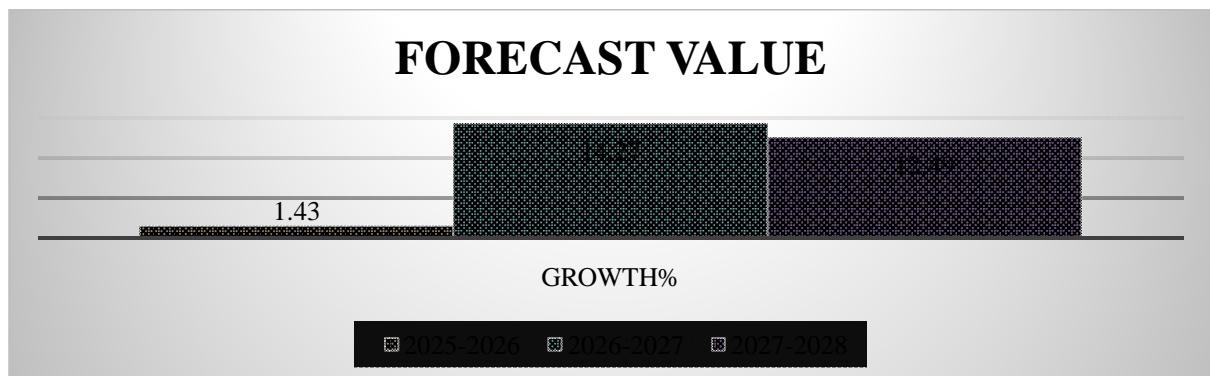


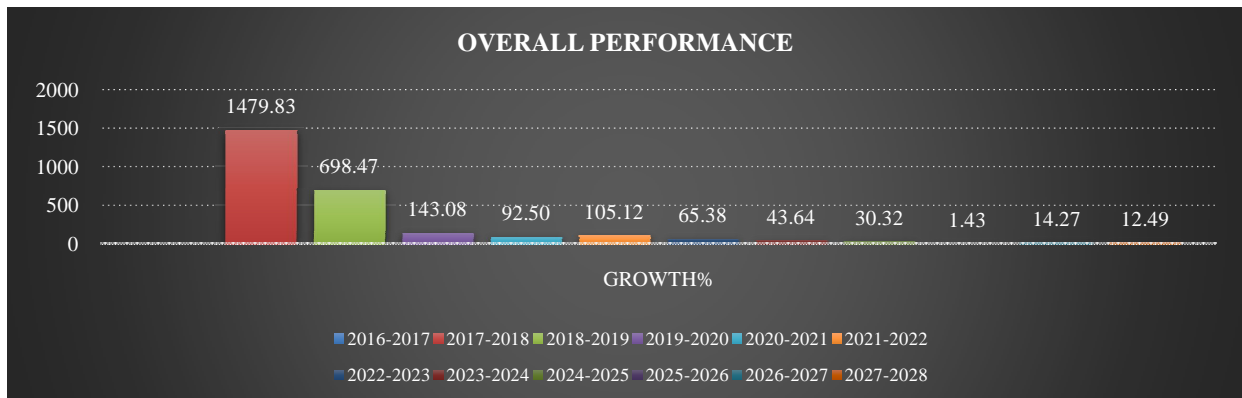
Table and graph indicate continued growth, with volumes increasing from 26,42,408 lakh in 2025–26 to 33,97,675 lakh in 2027–28. The growth rate shows some fluctuations, starting at a modest 1.43% in 2025–26, likely reflecting short-term stabilization after previous rapid expansion, before picking up to 14.27% in 2026–27 and moderating slightly to 12.49% in 2027–28. This pattern suggests that while the pace of growth may vary year to year, the overall trend remains strongly upward, confirming that digital payments will continue to expand and further embed themselves as a standard component of India's financial ecosystem.

4. To interpret changes in growth rate over time.

Trends and Growth Rate of Digital Payment Transactions in India 2016–2017 to 2027-2028

YEAR	TRANSACTION	GROWTH%
2016-2017	6952.14	-
2017-2018	109831.8	1479.83
2018-2019	876970.72	698.47
2019-2020	2131730.14	143.08
2020-2021	4103653.58	92.50
2021-2022	8417572.48	105.12
2022-2023	13920676.35	65.38
2023-2024	19995085.51	43.64
2024-2025	26056954.65	30.32
2025-2026	26428408.94	1.43
2026-2027	30201042.18	14.27
2027-2028	33973675.41	12.49

Source: Secondary Data



The changes in the growth rate of digital payment transactions in India reflect the natural progression of a technology adoption curve combined with macroeconomic and policy factors. The extremely high growth in the early years (1,479% in 2017–18 and 698% in 2018–19) was driven by demonetization in 2016, which forced cash-dependent consumers and businesses to shift to digital modes, and the simultaneous launch of UPI, which made instant digital payments easy, accessible, and interoperable across banks. As adoption spread rapidly, a large portion of the population moved online, causing the growth rate to moderate after 2019–20, from 143% down to 30% by 2024–25; this reflects the base effect, where a larger transaction volume makes high percentage growth mathematically difficult.

The forecasted years show short-term fluctuations 1.43% in 2025–26, then 14.27% and 12.49% which can be attributed to market consolidation, saturation in urban areas, and the gradual adoption in rural regions. Additionally, seasonal effects, digital infrastructure improvements, and policy nudges like incentives for digital transactions or new fintech innovations can create temporary spikes in growth. Overall, the trend illustrates a classic diffusion pattern of innovation: explosive initial adoption due to favourable policy and technology push, followed by slower, steadier growth as the market matures, but with continuous expansion in absolute transaction volume, indicating that digital payments are now a mainstream, integral part of India’s financial ecosystem.

SUGGESTIONS

- Despite strong historical growth, policymakers should encourage further digital literacy programs to sustain adoption in rural areas.
- Banks and fintech must enhance UPI and wallet infrastructure to handle increasing transaction volumes efficiently.
- Monitoring trends and forecasting growth regularly will help stakeholders plan resources and promotional campaigns effectively.
- Encouraging interoperability between digital platforms can reduce transaction bottlenecks and improve user convenience.
- Continuous improvement in cybersecurity and fraud prevention mechanisms is essential to maintain trust in digital payments.
- Detailed analysis of growth fluctuations should guide targeted policy incentives and fintech innovations.
- Regular evaluation of transaction patterns and growth rates will support strategic decisions and ensure long-term sustainability.



CONCLUSION

The study demonstrates the phenomenal growth of digital payments in India over the past decade, transforming the way financial transactions are conducted. The initial surge in adoption, fuelled by policy measures such as demonetization and the launch of UPI, created a strong foundation for a cashless economy. Over time, although the growth rate has moderated, the absolute volume of transactions continues to rise, indicating steady market maturation. Forecasts for the next three years show sustained expansion, reflecting both urban consolidation and the gradual penetration of digital payment solutions in rural areas. The findings emphasize the critical role of technological infrastructure, fintech innovations, and government initiatives in supporting this growth. Continuous improvement in cybersecurity, digital literacy, and platform interoperability will be essential to maintain user trust and convenience. Furthermore, digital payments enhance financial inclusion, enable real-time transactions, and contribute to economic efficiency and transparency. Businesses benefit from faster payments, reduced transaction costs, and broader market reach, while consumers gain convenience and safety. Overall, digital payments have become an integral component of India's financial ecosystem, and with strategic planning, supportive policies, and continued innovation, they are poised to drive long-term economic growth and inclusion across the country.

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