



# DIGITAL TRANSACTION VOLUME RISE SINCE DEMONETIZATION'

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## ABSTRACT

This report examines the growth of digital transactions in India following the demonetization initiative of November 2016. The analysis delves into the immediate effects of demonetization on digital Payments, highlighting a surge in adoption as individuals and businesses sought alternative means of conducting transactions amidst the cash crunch. Subsequently, the report explores the sustained growth trends in digital transactions, driven by factors such as government initiatives, technological advancements, and changing consumer behavior. Moreover, it discusses the transformative impact of digital payments on financial inclusion, emphasizing initiatives such as Jan Dhan Yojana and Direct Benefit Transfer (DBT) in extending access to basic financial services to underserved populations. Furthermore, the report underscores the importance of continued efforts to promote digital financial inclusion and security, advocating for collaboration among policymakers, regulators, and industry stakeholders to address challenges and leverage emerging trends and technologies in driving economic growth and societal development.

## 1. Introduction

In November 2016, India embarked on a landmark economic reform with the announcement of de-Monetization, wherein high-denomination currency notes were invalidated overnight, aiming to curb corruption, black money, and counterfeit currency circulation. This move, while disruptive, also acted as a catalyst for the rapid adoption and growth of digital transactions across the country. Digital transactions, encompassing a variety of electronic payment methods such as mobile wallets, UPI (Unified Payments Interface), internet banking, and debit/credit cards, have emerged as a cornerstone of the modern economy. With the advent of digitalization, transactions that once relied heavily on physical cash have increasingly transitioned to electronic platforms, offering convenience, efficiency, and transparency. The significance of digital transactions in the economy cannot be overstated. Beyond providing convenience to consumers and businesses, digital payments promote financial inclusion by extending access to financial services to underserved populations. Moreover, they enhance transparency, reduce transaction costs, and foster a more robust and formalized financial system. The purpose of this report is to examine the growth trajectory of digital transactions in India following the demonetization drive of 2016. By analyzing the evolution of digital payment infrastructure, government initiatives, and long-term trends, this report aims to provide insights into the transformative

impact of demonetization on the digital economy. Additionally, it will explore the challenges faced, the strides made, and the future prospects of digital transactions in India. Through this analysis, stakeholders can gain a deeper understanding of the dynamics shaping India's digital financial landscape and identify opportunities for further growth and development. In November 2016, the Government of India announced a significant policy move known as Demonetization, wherein high-denomination currency notes of ₹500 and ₹1000 were invalidated as legal tender overnight. The primary objectives behind this unprecedented move were to curb corruption, eliminate black money, tackle counterfeit currency, and promote a shift towards a more transparent and digitized economy. Demonetization caused widespread disruption across the country, with long queues forming at banks and ATMs as people rushed to exchange their old currency notes for new ones or deposit them into their bank accounts. The sudden withdrawal of high-value cash from circulation led

To temporary economic slowdowns in sectors heavily reliant on cash transactions, such as agriculture and informal businesses. Despite the initial challenges and disruptions, demonetization also spurred a rapid acceleration in the adoption of digital transactions and electronic payment methods. As people faced cash shortages and long queues at banks, they turned to digital platforms for their financial transactions, leading to a surge in the usage of mobile wallets, online

banking, and digital Payment apps. Demonetization served as a catalyst for the digitalization of the Indian economy, prompting Increased government focus and investments in digital infrastructure and financial inclusion Initiatives. While the immediate impact of demonetization was met with mixed reactions, its Long-term effects on the digital transformation of India's economy continue to be analyzed and Debated.

## 2. RESEARCH METHODOLOGY

### 2.1 Research Methodology

This research paper employs a mixed-method approach to analyze the rise of digital transaction volume in India since demonetization. The methodology encompasses both quantitative and qualitative Techniques to provide a comprehensive understanding of the subject matter.

#### 2.1.1 Data Collection

1. Official Statistics Database of NPCI: The study utilizes data obtained from the official Statistics database of the National Payments Corporation of India (NPCI). NPCI is the umbrella organization for operating retail payments and settlement systems in India and provides Valuable insights into the trends and volume of digital transactions.
2. Survey: A survey was conducted to gather primary data on the usage and perceptions of Digital payment methods among the Indian population. The survey targeted a sample size of 500 individuals selected through a stratified random sampling technique. Various parameters Of digital payment methods, including usage frequency, preferred platforms, satisfaction levels, And factors influencing adoption, were assessed through the survey.

#### 2.1.2 Data Analysis

##### 2.1.3

1. Quantitative Analysis: Statistical techniques, including descriptive statistics and regression Analysis, are employed to analyze the data obtained from the NPCI database and the survey. Descriptive statistics help in summarizing the volume and trends of digital transactions over Time, while regression analysis allows for identifying factors influencing the adoption of digital Payment methods.

#### 2.1. RESEARCH METHODOLOGY 3

2. Qualitative Analysis: Qualitative analysis is conducted to interpret the findings of the Survey and provide insights into the underlying factors driving the rise of digital transactions In India. Open-ended survey responses and qualitative data collected through interviews with Industry experts and policymakers are analyzed thematically to identify emerging trends and Challenges in the digital payment landscape.

### 2.1.3 Ethical Considerations

#### 2.1.4

The survey conducted for this research adhered to ethical guidelines, ensuring the privacy and confidentiality of the participants' responses. Informed consent was obtained from all survey respondents And their participation was voluntary. Measures were taken to maintain the anonymity of the participants and protect their personal information.

#### 2.1.5 Limitations

##### 2.1.6

1. Sampling bias: While efforts were made to ensure the representativeness of the survey sample, the possibility of sampling bias cannot be entirely ruled out. The findings may not be Generalizable to the entire population of India.

2. Data Reliability: The accuracy and reliability of the data obtained from the NPCI database And other secondary sources depend on the completeness and consistency of the reporting Mechanisms. Any discrepancies or inaccuracies in the data may affect the validity of the Analysis.

The research methodology employed in this study aims to provide a rigorous and systematic Analysis of the rise of digital transaction volume in India. By combining quantitative data analysis With qualitative insights, the study seeks to offer valuable insights into the dynamics shaping India's

## 3. RESULTS

When analyzing and interpreting the data, the analysis reveals several key findings regarding the Growth of digital transactions in India post-demonetization: UPI (Unified Payments Interface) has seen significant growth in India since its launch in 2016 By National Payments Corporation of India (NPCI). Here are some highlights of the UPI journey In India with YoY (Year-on-Year) growth statistics till Jan 2023:



Figure 3.6: Monthly Growth of BHIM-UPI Transactions for FY 2022-23

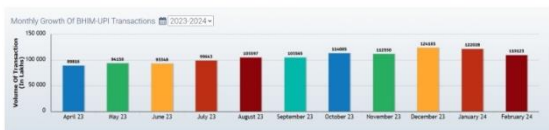


Figure 3.7: Monthly Growth of BHIM-UPI Transactions for FY 2023-24



Figure 3.8: Monthly Growth of BBPS Transactions for FY 2017-18



Figure 3.9: Monthly Growth of BBPS Transactions for FY 2018-19

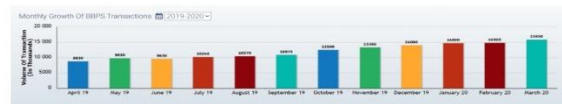


Figure 3.10: Monthly Growth of BBPS Transactions for FY 2019-20



Figure 3.11: Monthly Growth of BBPS Transactions for FY 2020-21



Figure 3.14: Monthly Growth of BBPS Transactions for FY 2023-24

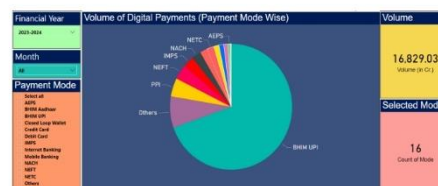


Figure 3.15: Digital Payments Transaction (Per Capita Basis) for the FY 2023-24

- In 2017, UPI recorded a YoY growth of 900%, processing over 100 million transactions worth INR 67 billion.
- In 2018, the YoY growth was 246% with transactions worth over INR 1.5 trillion processed.
- In 2019, the YoY growth was 67% with transactions worth over INR 2.9 trillion processed.
- In 2020, UPI recorded an YoY growth of 63% with transactions worth over INR 4.3 trillion Processed in December 2020.

- In 2021, the YoY growth was 72% with over 1.49 billion transactions worth INR 5.6 trillion Processed in June 2021.
- At the end of the calendar year 2022, UPI's total transaction value stood at INR 125.95 trillion, up 1.75 X year-on-year (YoY), as per the NPCI. Interestingly, the total UPI transaction value accounted For nearly 86% of India's GDP in FY22.
- At the end of the calendar year 2023, UPI's total transaction volume stands on 83.75 billion.

**Long-Term Growth Trends**

Analysis of digital transaction data spanning from 2016 to 2023 reveals sustained growth trends, With total transaction volumes more than doubling over the period. Mobile payments, particularly Those facilitated through UPI-based apps and mobile wallets, emerged as the dominant mode of Digital transactions, surpassing traditional payment methods like debit/credit cards and internet Banking.

**3.0.2 Impact on Financial Inclusion**

Data from government schemes such as Jan Dhan Yojana and Direct Benefit Transfer (DBT) highlight the transformative impact of digital payments on financial inclusion. Millions of previously Unbanked individuals gained access to basic financial services through mobile banking, UPI, and

Microfinance, empowering them to participate in the formal economy and improve their economic Prospects. Survey data on public perception and trust in digital payment platforms reveal a mixed picture. While a majority of respondents express confidence in the security measures implemented by digital payment providers, concerns about data and cybersecurity incidents persist. Trust in Established banks and financial institutions remains high, indicating the importance of reputation And credibility in fostering consumer trust.

**3.0.3 Comparative Analysis**



Financial activities. India's digital payment landscape has experienced a remarkable expansion post-demonetization. New payment technologies, enhanced interoperability, and the emergence of fintech startups have Diversified options, fostering innovation and competition while making digital

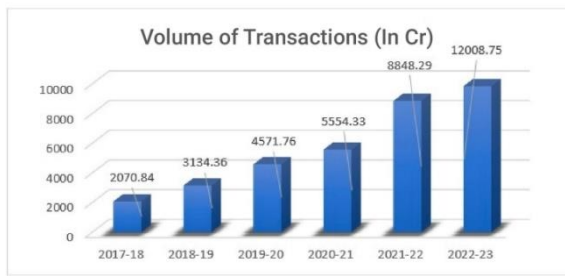


Figure 3.21: Volume of Transactions (In Crores)



Figure 3.10: Monthly Growth of BBPS Transactions for FY 2019-20



Figure 3.11: Monthly Growth of BBPS Transactions for FY 2020-21

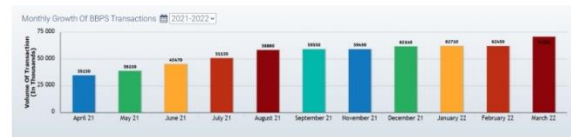


Figure 3.12: Monthly Growth of BBPS Transactions for FY 2021-22

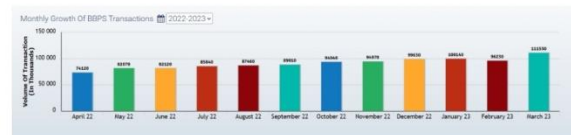


Figure 3.13: Monthly Growth of BBPS Transactions for FY 2022-23

Figure 3.18: Point of Sale (PoS) Statistics

Comparative analysis with other countries' experiences with demonetization and digitalization offers Valuable insights and lessons learned. Countries like Sweden, Kenya, and China have successfully Promoted financial inclusion and embraced emerging technologies to drive digital payments adoption. Key success factors include regulatory support for innovation, investment in digital infrastructure, And public-private collaboration.

### 3.0.4 Future Outlook

Growth projections for digital transactions in India remain optimistic, driven by continued government initiatives, technological advancements, and changing consumer behavior. Mobile payments, Contactless payments, and emerging technologies such as biometrics and block chain are expected to Shape the future of digital payments. Policy recommendations emphasize the need for investment In digital infrastructure, regulatory support for innovation, and promotion of financial inclusion and Security to realize the full potential of digital transactions in driving economic growth and societal Development.

## 4. DISCUSSION

The sustained surge in digital transactions following demonetization signals a profound shift in India's financial paradigm. Post-demonetization, digital payment volumes have steadily ascended, Indicating a persistent preference for electronic transactions. This enduring trend reflects a fundamental change in consumer behavior, with digital payments seamlessly integrated into everyday

payments more accessible and dynamic.

Beyond mobile wallets and UPI, the post-demonetization era witnessed a proliferation of payment Methods. Internet banking, debit/credit cards, and electronic fund transfers have gained traction, Catering to diverse user preferences and needs, underscoring the importance of a comprehensive Payment ecosystem.

Demonetization spurred greater merchant acceptance of digital payments, buoyed by improved Infrastructure and government initiatives. Initiatives like POS terminals and QR code-based payments have facilitated seamless integration, enhancing convenience for consumers and fostering a Cashless economy. Government support, technological advancements, changing consumer behavior, and financial Inclusion efforts have fueled the sustained growth of digital transactions. These factors have created An enabling environment, laying the groundwork for India's transition towards a digital-first economy. Comparing post-demonetization growth with pre-demonetization trends reveals significant acceleration and diversification in adoption, methods, infrastructure, and consumer behavior. The Unprecedented pace and scale of adoption post-demonetization, coupled with investments in infrastructure, underscore India's resilience and adaptability in embracing digital transformation. In conclusion, the sustained growth of digital transactions post-demonetization underscores India's readiness to embrace digitalization. While challenges persist, the transformative impact of Demonetization has positioned India on a trajectory towards a digitally empowered economy, ripe With opportunities for continued growth and innovation.

## 5. CONCLUSION

The analysis reveals several key findings regarding the growth of digital transactions in India post-Demonetization. The demonetization in November 2016 acted as a catalyst for the rapid growth of Digital transactions in India. The sudden withdrawal of high-denomination currency notes prompted A surge in digital payments as people sought alternative means to conduct transactions amidst the Cash crunch. The growth of digital transactions has been sustained over the long term, driven by factors such As government initiatives, technological advancements, and changing consumer behavior. Digital Payment methods such as mobile wallets, UPI, and contactless payments have become increasingly Popular, offering convenience, security, and accessibility to users across urban and rural areas.

Digital transactions have played a crucial role in promoting financial inclusion by providing under Served populations with access to basic financial services, enabling them to participate in the formal Economy and improve their economic prospects. Initiatives such as Jan Dhan Yojana, Aadhaar-Enabled payments, and Direct Benefit Transfer (DBT) have leveraged digital payment platforms to Deliver government benefits and subsidies directly to beneficiaries' bank accounts, fostering financial Empowerment and inclusion.

While demonetization jumpstarted the digital payments revolution in India, continued efforts Are essential to promote digital financial inclusion and security. Policymakers, regulators, and industry stakeholders must collaborate to address challenges such as cybersecurity threats, regulatory While demonetization jumpstarted the digital Payments revolution in India, continued efforts are essential to promote digital financial Inclusion and security. Policymakers, regulators, and industry stakeholders must

Collaborate to address challenges such as cybersecurity threats, regulatory compliance, And infrastructure gaps. Embracing emerging trends and technologies, enhancing user Education and awareness, and fostering a conducive regulatory environment are critical

For realizing the full potential of digital transactions in driving economic growth, Financial inclusion, and societal development in India.

Compliance, and infrastructure gaps. Embracing emerging trends and technologies, enhancing user Education and awareness, and fostering a conducive regulatory environment are critical for realizing The full potential of digital transactions in driving economic growth, financial inclusion, and societal Development in India.

## 6. ACKNOWLEDGEMENT

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## 7. IMPORTANT LINKS

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