

A Study on the Digital Payment Gateways and its Future

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ABSTRACT

India, a country where most transactions were done through cash, was moving towards a cashless economy. Post demonetization the usage rate of digital payment system took a linear growth. During the chaos caused after banning high value notes, digital payments worked as a savior. This steady rise was accelerated due to the pandemic in 2020. Cashless payment became a necessity and is now widely used in day to day transactions. This paper studies the usage of digital payments and its current available methods. It also highlights the future growth of this sector and its possibility of replacing the traditional cash payment. The research is conducted in Mumbai with a sample size of 100 respondents. This paper concludes the relationship of awareness, technology, convenience and safety with the usage rate of digital payment gateways.

INTRODUCTION

On 8th November 2016 Prime Minister of India Narendra Modi announced demonetization of high value currency notes, and Rs.500 and Rs.1000 notes were banned effective midnight. This step was taken to make the Indian economy free of black money and corruption. Though the execution of this plan had several hiccups, it indirectly led to a rise in Digital payments. Digital payments include several cashless payment methods like banking cards, mobile wallets, UPI, internet banking, USSD, AEPS, mobile banking, etc. There has been an exponential rise in use of digital payment in India year on year. As of December 2022, India recorded over 23 billion digital payments worth Rs 38.3 lakh crore in the third quarter of the financial year 2022-23. India leads in real time payments with 25.5 billion transactions which is more than the UK and USA combined. This is enough evidence to prove India's positive step towards cashless and digital economy. Such a step has caused certain changes in different avenues of the market such as rise in the ownership of debit and credit cards, growth of online payments and ease in shopping, tracking of money flow and much more.

The digital payment methods available and used in India are:

India has experienced a revolution in digital payments in recent years, and the nation now offers a wide range of digital payment options. Some of the most widely used digital payment options in India are listed below:

1. Unified Payments Interface (UPI): A smartphone app is used to immediately transfer money between bank accounts utilising UPI, a real-time payment system. With more than 3 billion transactions every month, it has emerged as India's most widely used digital payment mechanism.
2. Digital wallets: In India, popular digital wallets include Paytm, PhonePe, and Google Pay. Users of these mobile apps can keep money and utilise it to pay for a range of services, such as bill payments, cell recharges, and online purchases.
3. Banking cards - Banking cards, which include credit, debit, and prepaid cards, are a popular digital payment mechanism. For secure transactions, these cards have an authentication system in place that uses a security pin and a one-time password. They are easily usable in numerous locations with a swipe or press. These cards can also be used to make payments using mobile wallets and other online payment methods. When you enter your credentials, the information is kept and can be accessed later on during checkout. Some of the most reputable and well-known card payment systems include Visa, Rupay, Amex, and Mastercard.

4. Credit/Debit Cards: In India, credit and debit cards are frequently used for online transactions. Most banks provide debit and credit cards that can be used to make purchases at point-of-sale devices and online retailers using Visa, Mastercard, or RuPay.
5. Net Banking: With the help of this payment option, consumers may pay for things online straight from their bank accounts. Large transactions like bill payments or internet purchases generally employ this method.
6. AePS: Aadhaar enabled Payment System, enables customers to conduct transactions using their Aadhaar numbers and biometric authentication. For those without a bank account or smartphone, this strategy is especially helpful.
7. Bharat Bill Payment System (BBPS): BBPS is a bill payment system that enables consumers to pay all of their bills from a single platform, including their water, gas, and electricity bills. Several payment methods, including UPI, online banking, and digital wallets, are integrated into this system.
8. Immediate Payment Service (IMPS): IMPS is an instantaneous interbank electronic funds transfer mechanism. Peer-to-peer (P2P) payments frequently use this approach, which is available 24/7.
9. National Electronic Funds Transfer (NEFT): In India, NEFT is a means for transferring money between bank accounts. This approach is accessible during banking hours and is generally utilised for large transactions.

These are some of the digital payment options that are most often utilised in India. Future developments in payment systems are predicted as a result of the growing use of digital payments.

In recent years, the use of online payment channels has significantly increased in India. This development can be ascribed to a number of things, including the government's efforts to promote a digital economy, the expansion of smartphone and internet access, and the comfort and security that digital payments provide.

The government's efforts to transition India to a cashless society have been one of the key factors in the growth of digital payments. People have been encouraged to utilise digital payment gateways by initiatives like demonetization and the promotion of digital payment systems. To increase public access to digital payments, the government has also introduced a number of programmes, including the Unified Payments Interface (UPI) and the Bharat Interface for Money (BHIM).

The growing accessibility of smartphones and internet connectivity is another element boosting digital payments in India. Many people in India now have access to digital payment gateways thanks to the rise of inexpensive cellphones and the spread of high-speed internet connectivity. Many now find it simpler to use digital payments for regular purchases as a result.

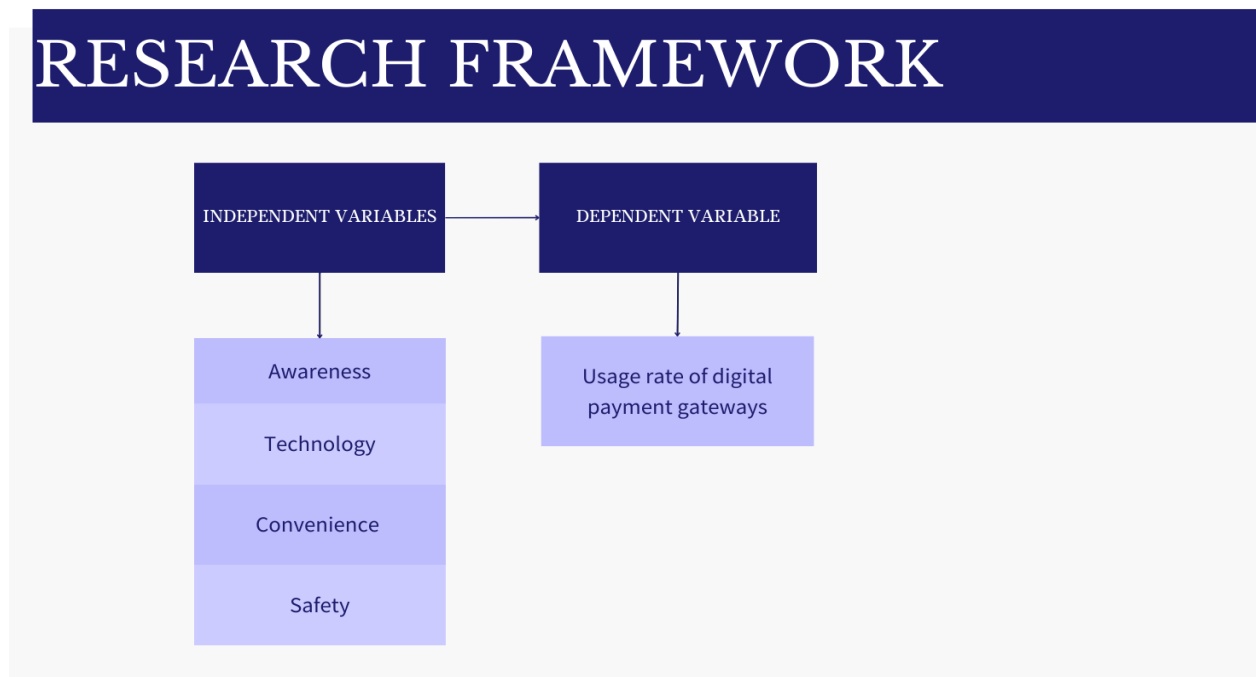
Digital payments are increasingly popular in India due to the ease and security they provide. People no longer need to carry cash or worry about losing it thanks to digital payments. People can easily use their smartphones to make payments, and they'll get notifications right away. Due to multi-factor authentication and encryption, digital payments are also more secure than cash transactions.

Nevertheless, India's increase in digital payments is a positive development that is anticipated to last for several more years. Digital payment gateway adoption will promote financial inclusion, transparency, and economic efficiency as more people use them in India.

OBJECTIVE OF THE STUDY

1. To learn about the various alternate payment methods available and their consumer usage pattern.
2. To understand the growth and impact of digital transformation of payment on different factors of the society in India.
3. To understand the future of cashless India.

RESEARCH FRAMEWORK



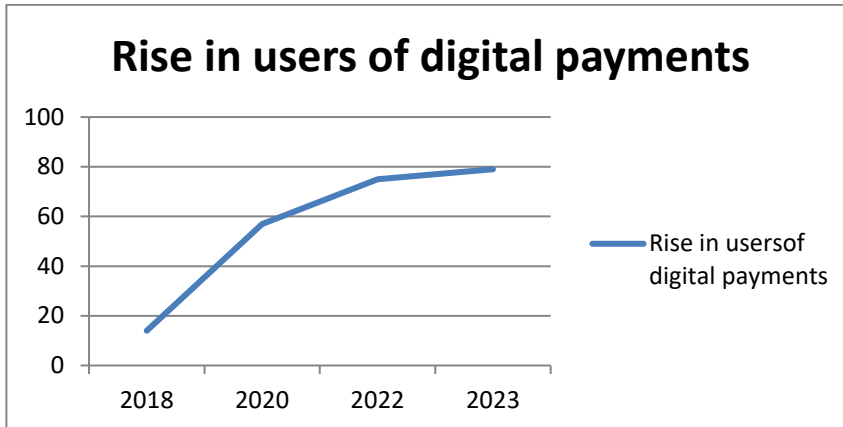
RESEARCH METHODOLOGY

The objective of this study was to learn about the various alternate payment methods available and their consumer usage pattern and understand the growth and impact of digital transformation of payment on different factors of the society in India. The data is collected through secondary data like websites, articles and research papers; and primary data through the questionnaire method. 80 respondents of all age groups from Mumbai were surveyed to understand their digital payment usage. The time period of this study is from 2016 to 2023. The various tools used to analyze the data are pie diagrams, descriptive statistics and graphs.

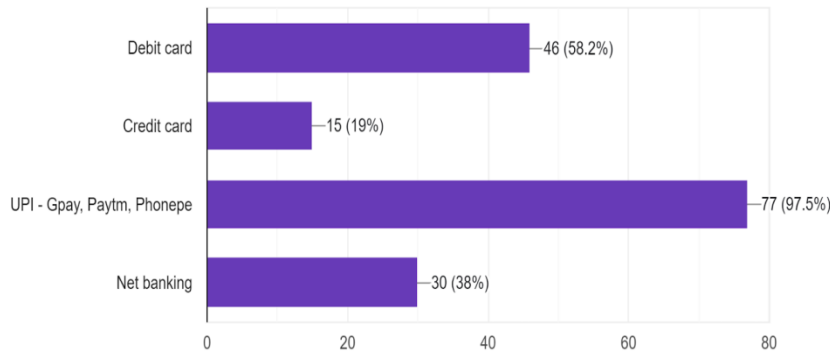
STATISTICAL REVIEW

The following statistics is gathered and represented from the data collected from the respondents.

1. 98.8% of the population has used or have been using digital payment methods, whereas still 1.2% of the population still doesn't use digital payment.
2. 54.5% people have been using e-payments for 3-5 years now, meaning the driving factor for them might have been the pandemic. 17.7% people have been using e-payments for more than 5 years.



3. Percentage of usage of different e-payment methods:



There has been a substantial rise in UPI payments among all other digital payment options. The reason behind it is mostly due to the convenience of paying anytime, anywhere it provides. Also it is a faster payment method compared to other options. Over all digital payment gateways are on a rise also because it keeps a ledger and the payments are easy to track.

- 72% of the population believes that e-payments are the need of the hour, whereas 19% are not sure about it. Digital payment gateways have provided people ease of quick and contact-less payment but there is still part of the population that are not yet sold of the idea of using cashless payment methods.

LITERATURE REVIEW

(Pandey, 2022), conducted a study on the evolution of digital payment systems and its impact post COVID – 19. In this study the primary data was collected from 200 respondents from different parts of India and the secondary data was collected from various articles, research papers and RBI's website. This analysis found that, in addition to the rise of 44.2% in the prior year, digital payments in India experienced a strong growth of 26.2% in terms of volume throughout the years 2020–21. It also mentioned that after COVID-19 pandemic, more people were unwilling to do cash transactions as it could be a mode of transfer for pathogens. E-payments have both a positive and negative effect. People in India are willing to reduce their online fraud experience as digital payments provide greater convenience.

(Bhagat, 2020), investigated the subject of the digital payments system in India and its scope in the Post-Pandemic era. Their paper suggests that there has been an exponential rise in digital payments in India due to Pandemic. It is a much more convenient method of monetary transaction but this convenience has caused over-spending. But even with all the security issues, people prefer e-payments because of its hassle free use and safety from germs carrying cash notes.

(Vally & Divya, 2018), studied how digitalization of payment systems created a positive impact. Their paper focused on analyzing level of adoption for digital payments by the customers. This study was conducted in Hyderabad and data was collected from 183 respondents. The results of this data collection concluded that there has been an improvement in the performance level of the banking sector and those banks achieved their motive of cashless country.

(Singhal, 2021), conducted a study to understand the consequences of digital payments in India and whether going cashless had a positive impact on the economy, and helped the citizens. The findings of this study showed that the installment framework activities taken by the Government of India and RBI have brought noteworthy acknowledgment and more profound entrance of cashless installment modes. It also mentioned how shoppers' impression had an important and positive impact on the acceptance of digital payment methods.

(Babulal, 2019), studied the problems of adapting digital payment system and its impact on the citizens and the economy overall. It also studied the future scope of digital payment system in India. The paper concludes that digital payment systems are user-friendly but due to low literacy rate in India, its growth is rather slow. There is also a social and infrastructure barrier that leads to create a bump in the road towards cashless economy. With adequate technology knowledge, the users would surely increase.

(Francisk & Sahayaselvi, 2017), conducted a research to know about the various types of Digital payment methods, used by the people in their daily lives. This study is mainly based on secondary data to understand consumer's usage rate and pattern in a country. The study result indicates that the digital transformation has made the cash less transaction an easy one. In future the digital payments are going to be the need of the hour and hence it is going to be important to switch our habit of cash payments to digital options. The cashless method is safe and time saving and serves as a ledger to record all your transactions. As the number of smart phone users increase and there is an improved internet connectivity, digital payments would be on a rise as well.

(Divyapriya & Velanganni, 2020) researched on Chennai's adoption of digital payments. The information was gathered using a practical random technique from 100 customers of online banking. According to this report, debit cards are the most popular method of payment for online shoppers. The most important key in ensuring the success of digital payments is the advancement and technological banking factor, which includes features like retrieving payment profiles and setting up billing arrangements under bank regulations. The average man needs to embrace digitalization since the use of digital banking is expanding quickly.

CHALLENGES IN ADAPTING CASHLESS ECONOMY

The use of digital payment systems has increased significantly in India over the past few years, but there are still some barriers that must be removed before more people there begin using cashless transactions.

The following are some of the main issues that need to be resolved:

Digital illiteracy: Lack of digital literacy among a sizeable percentage of the population is one of the main obstacles to India's transition to a cashless economy. Many Indians feel uncomfortable with technology, and it's possible that they lack access to the tools or infrastructure required for digital payments.

Infrastructure: In order to enable a cashless economy, India's digital infrastructure still needs to be strengthened. This includes making sure that internet access is dependable and affordable, enhancing mobile network coverage, and modernising merchant-level payment infrastructure.

Security: Fraud and cyberattacks are risks associated with digital payments. Building user confidence depends on the security of digital payment systems.

Financial inclusion: Despite efforts to transition to a cashless society, many Indians still lack access to fundamental financial services like bank accounts. A cashless economy must be successful in order to ensure that everyone has access to financial services.

Cultural barriers: Currency has long been a staple of Indian society, and many individuals still prefer to conduct business in cash. This cultural mindset will require time and effort to change.

Interoperability: India has a wide variety of digital payment methods, however they are not always compatible with one another. The ease and comfort of digital payments depends on the interoperability of various payment systems.

Overall, creating a cashless economy in India faces many obstacles, but there are also enormous potential rewards. To overcome these obstacles and make sure that digital payments are available, safe, and simple to use for everyone, businesses, the government, and civil society must work together.

FUTURE OF DIGITAL PAYMENT GATEWAYS

Increasing acceptance: As more people grow accustomed to making digital transactions, the usage of digital payment gateways in India is projected to rise in the upcoming years. In order to minimize touch with cash because of COVID – 19, more people are choosing digital payments.

Mobile payments: Given the extensive availability of smartphones and the expanding penetration of mobile networks, mobile payments are projected to grow in popularity in India. The popularity of mobile wallets and other mobile payment apps is likely to be the driving force behind this growth.

Blockchain-based payments: Given that the Indian government is looking into using blockchain technology to promote digital payments, blockchain-based payments are anticipated to become increasingly widespread in India. The rising acceptance of cryptocurrencies and the potential security and transparency advantages of blockchain are anticipated to be the driving forces behind this development.

In India, the use of digital payment gateways has a promising future and has the potential to revolutionise how people access and conduct business. Digital payments will promote financial inclusion, transparency, and economic efficiency as more individuals use them.

LIMITATIONS

- The sample size of this study is only 80 respondents and the area of study is only Mumbai.
- The majority of the respondents were between the age of 18-30, so the research might be more biased towards them.

SUGGESTIONS

E-payment adoption is primarily influenced by awareness, convenience, technology, and safety. A certain age group that is over 55 years old still has digital illiteracy in India. To raise this literacy rate, initiatives and activities might be launched. Also, these initiatives would spread knowledge of cashless payment options. The government can invest in enhancing digital infrastructure, such as expanding the reach of mobile networks, raising internet usage, and strengthening payment infrastructure at the merchant level. Lastly, India's digital infrastructure is still evolving at a quicker rate. People would be able to access and use digital payment systems more easily as a result. In terms of security, the government may guarantee the safety of digital payment systems by tightening legislation to thwart fraud and cyberattacks and enhancing cyber security measures. Users' trust would increase as a result, and more people would start using digital payments.

CONCLUSION

The study on digital payments in India concludes by highlighting the substantial advancements made by the nation in its transition to a cashless economy. India has become a major market for digital payment gateways thanks to reasons like government regulations, technology improvements, and shifting consumer habits. The article also discusses the difficulties India would encounter in properly implementing the advantages of a cashless economy, including the digital divide, security issues, and regulatory issues. The public and business sectors, however, are aggressively tackling these issues through programmes including those for digital literacy, cyber security measures, and standardisation of payment systems. With trends like smartphone payments, contactless payments, and blockchain-based payments set to gain popularity, the future of digital payments in India appears bright. A more efficient economy, more financial inclusion, and increased transparency are anticipated outcomes of the introduction of digital payments.

Finally, the report emphasises how important it is for all stakeholders to keep up their efforts in order to fulfil the revolutionary potential of digital payments in India.

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