

DIGITAL PAYMENT SYSTEM IN INDIA – PATHWAY TO DIGITAL INDIA

Raut Nileshkumar Kailashbhai

Research Scholar
Department Of Commerce
Veer Narmad South Gujarat University, Surat
Gujarat, India
Mo No: 7434897160
nileshraut571998@gmail.com

Abstract

Indian economy is becoming a cashless economy even before and after the time of covid-19. Also, various methods and tools for making digital payments have evolved a lot since the establishment of NPCI. Nowadays even small shopkeepers, street vendors are accepting the option of digital payment. Apart from this, overseas markets currently accepting UPI payments include Singapore, Malaysia, UAE, France, Nepal, UK, Mauritius, Sri Lanka. In the present paper, the digital payment system in India has been studied in detail. Major tools and methods of digital payment system, benefits of digital payment system and future challenges are studied. The information for the present study is obtained from secondary data. Mainly the information has been obtained from the website of Digital India, NPCI and research papers done in this area. At the conclusion of the current investigation, it is evident that there are advancements observed in diverse tools and techniques of Digital India.

Keywords: Digital India, Cashless Economy, NPCI, Technology

INTRODUCTION

India has experienced a significant transformation in its financial landscape in recent years, thanks to the widespread adoption of digital payment systems. This shift, driven by advancements in technology and government initiatives, has completely changed the way financial transactions are conducted throughout the country. Digital payment platforms have reached every corner, from urban centers to rural villages, enabling seamless transactions and promoting financial inclusion.

The Digital India initiative is a prominent project of the Indian government aimed at turning India into a digitally empowered society and knowledge economy. It was officially launched on July 1, 2015 by the respected Prime Minister, Shri Narendra Modi. Since the inception of Digital India, NPCI, the traditional payment system, has witnessed substantial changes. This scholarly article delves into the different techniques and instruments used in digital payment systems.

REVIEW OF LITERATURE

Baig Faizan Mujib, Amale Vishal Bhima, Deshmukh Akshada Kailash (2023) The paper "A Study of Digital Payment Tools and Methods in India" explores the positive impact and future potential of digital payment systems in India, analyzing various methods such as UPI, BHIM, and Aadhar enabled payment systems. It shows an increase in digital transactions in India from 2019 to 2022, with a focus on empowering the economy through transparency. Challenges include inefficiencies, low popularity, and adoption issues. The research methodology is based on secondary data and conceptual analysis. Overall, the study emphasizes the evolving landscape of digital payments in India and the need for a strong banking network to support their development.

Malusare Lalita Babula (2019) The full paper explores the digital payment methods in India, focusing on challenges and prospects of transitioning to a cashless economy. It highlights government initiatives like the Digital India Campaign to promote digital payments. Various methods like UPI, mobile wallets, and Aadhar-enabled Payment System are discussed along with the need for enhanced digital literacy. The study also discusses post-demonetization progress and opportunities for growth in the digital payment sector in India. Overall, it provides insights into the evolving landscape of digital payments and strategies for widespread adoption.

Chavda Viral (2017) In this study, the innovation taking place in the banking sector in India was studied. Debit card, credit card, e-banking, ATM, DEMET account, smart watch, Kiosks were studied.

Dr. V. Chandrakala (2019) In A Study on Cashless Economic in India paper, benefits, challenges, modes of cashless economy were studied to know the objective of cashless economy. In conclusion the research stated that cashless economy will lead to transparency of financial transactions and increase in GDP of Indian economy.

OBJECTIVES

1. To study the various tools and methods used for digital payments in India in recent years.
2. To study the advantages and barriers of using digital payments.

RESEARCH METHODOLOGY

The research paper utilizes secondary data for its methodology and focuses on the conceptual aspects of the Digital Payment system.

DIGITAL PAYMENT METHOD IN CURRENT ERA

NPCI, a collective entity overseeing retail payments and settlement systems in India, was established by the Reserve Bank of India (RBI) and the Indian Banks' Association (IBA) in accordance with the Payment and Settlement Systems Act, 2007, with the aim of developing a strong Payment & Settlement Infrastructure in India. NPCI was established in the year 2008. Below is the information about various digital payment tools and methods of NPCI.



1. Unified Payment Interface (UPI): Unified Payments Interface (UPI) is a system that consolidates multiple bank accounts into a single mobile application, allowing users to access various banking features, seamlessly transfer funds, and make merchant payments all in one place. Additionally, it facilitates "Peer to Peer" collect requests, which can be scheduled and paid according to individual requirements and convenience. Taking this into consideration, the National Payments Corporation of India (NPCI) conducted a pilot launch with 21 member banks. The pilot launch took place on April 11, 2016, in Mumbai, with Dr. Raghuram G Rajan, the Governor of the Reserve Bank of India (RBI), officiating the event. Starting from August 25, 2016, banks began uploading their UPI-enabled apps on the Google Play store.

Uses: UPI Payment method services used in fulfilling a money request, DTH payment from home Credit card bill payment, Merchant payment using BHIM app, Non-financial transactions.

2. Bharat Interface for Money (BHIM): BHIM is a mobile application designed for seamless and speedy payment transactions through the Unified Payments Interface (UPI). Users can easily transfer money between bank accounts instantly and make payments or receive funds using various identifiers such as Mobile number, Bank account and IFSC code, Aadhaar number, or Virtual Payment Address (VPA). Additionally, BHIM offers the convenience of scanning QR codes for payments. Users can view their transaction history and report any issues with declined transactions by selecting the Report issue option.

3. USSD: *99# is a USSD based mobile banking service of NPCI that was first introduced in November 2012. Initially, the service had limited availability, with only MTNL & BSNL offering it. Recognizing the significance of mobile banking for financial inclusion, various regulatory and trade bodies collaborated to ensure that all TSPs were onboarded on *99# (USSD 1.0). With the expanded ecosystem now including 11 TSPs, *99# was officially launched nationwide by the Hon'ble Prime Minister on 28th August 2014, as part of the Pradhan Mantri Jan Dhan Yojna. A service called *99# has been introduced to provide banking services to individuals all over the nation. Customers can access this service by dialing *99# on their mobile phones and conduct transactions using an interactive menu shown on their mobile screens.

4. National Automated Clearing House (NACH): The National Payments Corporation of India (NPCI) has introduced the "National Automated Clearing House (NACH)" as a web-based solution for Banks, Financial Institutions, Corporates, and Government entities to streamline interbank, high-volume electronic transactions that are recurring and periodic in nature. The NACH System is designed for processing bulk transactions related to the distribution of subsidies, dividends, interest, salary, pension, as well as for collecting payments for services such as telephone, electricity, water, loans, mutual fund investments, and insurance premiums.

5. National Electronic Toll Collection (NETC) FASTag: The National Payments Corporation of India (NPCI) has created the National Electronic Toll Collection (NETC) program to fulfil the electronic tolling needs of the Indian market. This program

provides a nationwide toll payment solution that is interoperable, meaning it allows customers to use their FASTag as a payment method at any toll plaza, regardless of who operates it. The NETC program also includes clearing house services for settlement and dispute management. FASTag is a device that utilizes Radio Frequency Identification (RFID) technology to enable toll payments while the vehicle is in motion. It is affixed to the vehicle's windscreen and allows customers to make cashless payments directly from their linked account. Using FASTag not only offers the convenience of cashless payment, but also provides benefits such as fuel and time savings, as customers no longer need to stop at toll plazas.

6. Immediate Payment Service (IMPS): IMPS offers a reliable and instantaneous fund transfer service that operates 24*7, allowing users to access it through various channels such as Mobile, Internet, Branch, ATM, and SMS. This service enables instant fund transfers between banks in India, ensuring both safety and cost-effectiveness. As of now, there are 856 active members, including banks and PPIs, on the IMPS platform.

7. Aadhar Enabled Payment System (AEPS): AEPS is a banking model that enables online interoperable financial transactions at Point of Sale (PoS) or Micro ATMs through the Business Correspondent or Bank Mitra of any bank, utilizing Aadhar authentication.

8. e-RUPI: National Payments Corporation of India (NPCI) has collaborated with the Department of Financial Services, National Health Authority, Ministry of Health and Family Welfare, and partner banks to introduce an innovative digital solution known as 'e-RUPI'. Beneficiaries can utilize this seamless one-time payment method to redeem the voucher without the need for a card, digital payments app, or internet banking access at merchants that accept e-RUPI. Organizations or the Government will share e-RUPI with beneficiaries for a specific purpose or activity through SMS or QR code. This contactless e-RUPI ensures ease, safety, and security by maintaining the confidentiality of beneficiary details. The transaction process using this voucher is not only faster but also reliable, as the necessary amount is already stored in the voucher.

9. Mobile Wallet: A mobile wallet serves as a digital alternative to carrying physical cash. By connecting your credit or debit card details to a mobile wallet application, or by transferring funds online, you can make payments using your smartphone, tablet, or smartwatch instead of relying on a physical card. To load money into the digital wallet, it is necessary to link an individual's account to it. Many banks offer their own e-wallets, as do some private companies such as Paytm, Freecharge, Mobikwik, Oxigen, mRuppee, Airtel Money, Jio Money, SBI Buddy, itz Cash, Citrus Pay, Vodafone M-Pesa, Axis Bank Lime, ICICI Pockets, and SpeedPay, among others.

10. Other Methods: Apart from the digital payment methods given above, some other methods have also evolved viz RuPay card, CTS, BHIM Aadhar, Autopay, UPI 123PAY, UPI LITE, Credit Card on UPI, UPI-ATM, Hello! UPI.

ADVANTAGES OF DIGITAL PAYMENT SYSTEMS

1. Digital payment systems provide a convenient way to make transactions without the need for physical cash. With an internet connection, users can make payments anytime and anywhere.

2. Unlike traditional payment methods that involve waiting for checks to clear or cash to be counted, digital payments are processed instantly or within seconds, ensuring speedy transactions.

3. Digital payment systems prioritize security by incorporating advanced encryption and security protocols. This reduces the risk of theft or fraud, especially when compared to carrying large amounts of cash.

4. Individuals who do not have access to traditional banking services can still participate in the economy through digital payment systems. These systems can be accessed through various devices such as smartphones, tablets, and computers.

5. Digital transactions generate electronic records that are easily trackable and manageable. This simplifies accounting and budgeting for both individuals and businesses.

6. Many digital payment systems can be integrated with other financial tools and services, providing users with additional benefits and functionalities. This includes budgeting apps, loyalty programs, and invoicing software.

7. Digital payment systems enable transactions to be conducted across borders, facilitating international trade and commerce. This opens up new opportunities for businesses and consumers alike.

BARRIERS OF USED DIGITAL PAYMENT SYSTEMS

1. Developing a digital payment system is also a daunting task in rural areas where even traditional banking has not yet reached due to underdevelopment, lack of infrastructure.

2. Today's digital payment users do not feel safe in such transactions due to increasing cyber-attacks, cyber frauds day by day. Which hinders the development of digital payment system.

3. Even in a country like India where financial literacy is still low, digital payment systems are not developing.

4. The utilization of electronic devices like mobile phones, tablets, and computers forms the foundation for the majority of digital payment methods. However, it is crucial to note that the availability of internet connectivity is an indispensable prerequisite for accessing these services. Consequently, in the absence of internet access, these convenient payment options cannot be utilized.

CONCLUSION

The Indian banking industry has also embraced technological changes over the years to realize the objective of Digital India, Cashless India. As a result of which India's own UPI has become accepted abroad as well. Along with this beautiful scene, there is an unbalanced scene in the rural areas of India where there is not a single traditional bank. Hence NPCI, Government of India, Public Sector Banks should make joint efforts.

REFERENCES

- [1] Chavda Viral, (2017, October). A Study on Innovation in Banking Sector in India, Abhinav National Monthly Refereed Journal of Research, 6(10), 88-92.
- [2] Baig Faizan Mujib, Amale Vishal Bhima, Deshmukh Akshada Kailash, (2023, May). A Study of Digital Payments Tools and Methods in India, IJRPR, 4(5), 767-772.
- [3] Malusare Lalita Babula, (2019, August). Digital Payments Methods in India: A study of Problems and Prospects, IJSREM, 3(8)
- [4] Dr. V. Chandrakala, (2019, January). A Study on Cashless Economy in India, JETIR, 6(1), 110-118.

WEB REFERENCES

- [1] <https://csc.gov.in/digitalIndia>
- [2] <https://www.npci.org.in/>
- [3] https://m.rbi.org.in/scripts/BS_ViewBulletin.aspx?Id=13554
- [4] http://cashlessindia.gov.in/mobile_wallets.html