International Conference on Role Of Digital Transformation in Commerce: Leveraging Technology for Sustainable Growth, 4 Sep, 2025

International Journal of Science, Engineering and Technology
ISSN: 2348-4098, P-ISSN: 2395-4752

Rural Adoption of Digital Payments – Opportunities and Challenges

Dr.R.Latha, Head and Assistant Professor, Department of Commerce CA (UG), Sri Vasavi College (Self Finance Wing), Erode - 638316.

Abstract- A Digital payment system in India aims to produce a cashless frugality by reducing cash use. Espousing electronic deals improves effectiveness and translucency, while also fostering faster profitable growth. This study evaluates the electronic sale system in India, covering styles of digital payments, recent trends in digital deals, and the challenges of getting a cashless frugality. The study relies on secondary data sources. It shows that India still lags in electronic deals. Still, after demonetization in 2016, there has been a positive shift toward increased use of digital deals. The study recommends that the government promote and encourage both agencies and private sector service providers to ameliorate fiscal knowledge significantly

Keywords-Digital payment system, Cashless economy, Electronic transactions, Efficiency and transparency, Economic growth.

I. INTRODUCTION

Payment systems are vital for the profitable and social development of the country. In recent times, especially after demonetization, there has been tremendous growth in internet and mobile phone operation in India. The adding use of the internet, mobile penetration, and government enterprise like Digital India are driving significant growth in digital payment operation. India is still largely a cash-grounded frugality, with cash making up over 78 of all retail payments. Moving towards a cashless frugality requires digitalizing deals. We can achieve this by promoting electronic plutocrat instruments, developing fiscal structure, and encouraging digital sale habits among people. Digitalizing deals will profit the poor, the middle class, businesses, and the nation as a whole. India lags behind its peers in digital deals, and adding digitalization will lead to bettered capital and resource allocation through lesser translucency, better shadowing of deals, and increased duty compliance. This will enhance state coffers for social weal.

II. OBJECTIVES OF THE STUDY

To examine the different digital payment styles in India. 2. To study the utility of digital deals. 3. To look into the challenges that lie ahead for achieving a digital payment system. Research Methodology This study uses secondary data. The demanded information comes from colorful sources, similar as exploration journals, diurnals, government publications, magazines, review papers, and other dependable accoutrements for effective analysis. This study aims to explore digital payments in India. Results and Discussion This section discusses the description and types of digital payments, the growth of fiscal structure, some recent trends in digital payments in India, and the advantages and challenges of reaching 100 percent digital deals.

International Journal of Science, Engineering and Technology
ISSN: 2348-4098, P-ISSN: 2395-4752

III. DEFINITION OF DIGITAL PAYMENT

The Payment and Settlement Act of 2007 defined what digital payments were at that time. It described electronic fund transfers as situations where someone tells their bank to move plutocrat using technology rather of physical styles. This includes conditioning like swiping cards at stores, using ATMs, getting hires deposited automatically, or making deals through phones or the internet. In substance, digital payments involve both the payer and the payee using digital tools to complete the sale from beginning to end. There is no use of paper checks or cash; only instructions transferred through electronic systems are involved. They appertained to these as electronic payments because everything takes place through computers or networks, not in- person exchanges

IV. MODES OF PAYMENT SYSTEM IN INDIA

The Digital India program is one of India's major government initiatives aimed at transforming society through digital access and economic growth linked to technology use. A key aspect of this initiative is promoting faceless, paperless, and cashless transaction systems nationwide. This change seeks to cut down on the use of physical currency and improve financial inclusion in urban and rural areas. Currently, there are various digital payment options available. Plastic money includes debit and credit cards that people carry around. Net banking allows users to transfer money directly between accounts online, saving them a trip to the bank. E-wallets like Paytm enable users to store money digitally on their phones for quick payments at stores or for sending cash instantly. UPI apps make transactions easier by using a unified interface that connects different banks on one platform, making peer-to-peer transfers smoother than older methods. USSD services allow for basic banking on non-smartphones by dialing codes, even without mobile data access, which helps reach populations without advanced technology

V. PLASTIC MONEY

Plastic money refers to debit and credit cards used at ATMs for cash withdrawal and at POS machines while shopping. Having a debit or credit card frees you from carrying cash. The risk of theft is nearly eliminated since transactions require a PIN. You don't need to carry large amounts of cash with you. Just swipe and go. Debit card payments come directly from your bank account. When you use a debit card, your bank account is charged. In contrast, with a credit card, you pay a monthly bill afterward.

VI.NET BANKING

Net banking is another way to make transactions electronically. All you need is a bank account with e-banking enabled. You can transfer funds to other accounts from the comfort of your home. There is no need to go to your bank to complete transfers. You can handle all payments and transfers yourself. This is a very convenient way to go cashless in India as well. E-Wallets: An e-wallet, or electronic wallet, is a type of electronic card used for online transactions through a computer or smart phone. The function of an e-wallet is the same as that of a credit or debit card. An e-wallet must be linked to the individual's bank account to make payments. The main goal of an e-wallet is to make paperless money transactions easier.

VII. UPI

The Unified Payments Interface is a payment system launched by the National Payments Corporation of India. It is regulated by the Reserve Bank of India and allows people to transfer funds between bank accounts instantly using mobile devices. This system acts as an electronic funds transfer tool. Bank

International Journal of Science, Engineering and Technology
ISSN: 2348-4098, P-ISSN: 2395-4752

account holders can send or receive money through their smart phones without needing to enter account numbers or net banking passwords.

VIII. AEPS

AEPS is a bank-led model that allows online financial transactions at POS (Micro ATM) through business correspondents of any bank using Aadhaar authentication. It enables six types of transactions. A customer needs three inputs to complete a transaction: - IIN (Identifying the bank to which the customer is associated), Aadhaar number, and fingerprint captured during enrollment.

IX. ADVANTAGES OF DIGITAL TRANSACTIONS

People often discuss how digital transactions benefit both governments and individuals. There is a lower overall risk when strong cyber security is in place for online payments, compared to handling physical cash which comes with safety concerns about theft or loss. Real money requires constant protection. Printing physical currency costs governments, a lot of money. They have to design bills, manufacture them, store stacks, and move armored trucks around. By switching to digital money, India saved around 27 billion rupees in 2015 just by not printing new notes, and those savings add up quickly. Convenience is a major advantage. Customers no longer have to carry large amounts of cash or search for ATMs. They don't even need to be in the same city as the person they are paying. With just a tap of their phone, they can make payments from almost anywhere. India also struggles with counterfeit money; approximately one in seven bills is not legitimate, which impacts economic stability. Tracking digital transactions makes it easier to monitor real money moving through systems and helps stop counterfeit transactions. Governments support cashless systems because every transaction leaves a record. Avoiding taxes becomes much harder when there are detailed records, meaning more tax revenue gets collected without all the loopholes.

X. CHALLENGES AHEAD

Everyone agrees that going digital is necessary for both individuals and governments. However, implementing this without physical infrastructure poses difficulties. Rural areas face more significant challenges. ATMs and card machines are still rare in these regions. E-wallets and mobile payments require smart phones and internet access, but fewer than 25% of the population owns a smart phone. Reliable internet connections can be expensive and difficult to find. Public Wi-Fi spots and phone charging stations are uncommon in these areas. Cyber security risks add another layer of concern. Other key issues continue to arise as well, including access to affordable devices, reliable power supplies for charging, and digital literacy training for users. The transition requires more than just good intentions; actual solutions on the ground are essential.

XI. FINDINGS AND SUGGESTIONS

The payment system initiatives taken by the Government and RBI have led to greater acceptance and deeper use of non-cash payment methods. India still lags behind other similar countries in using digital payment methods. The study recommends that the government should promote and encourage its agencies and private sector service providers to expand financial literacy significantly. The government should require everyone to pay their water bills, electricity bills, etc., only through digital payment methods. Additionally, the government should offer extra benefits to individuals who use electronic methods for various payments and transactions.

International Journal of Science, Engineering and Technology
ISSN: 2348-4098, P-ISSN: 2395-4752

XII. CONCLUSION

Achieving a fully cashless economy through electronic transactions alone will never be possible. However, we can aim for a society with less cash. The shift from traditional payment systems to digital payment systems depends on how effectively we address issues like cyber security, online fraud, fake accounts, awareness campaigns, and the establishment of proper remedial systems.

REFERENCES

1. NITI Aayog. (2017) Digital Payments: Trends, Issues and Challenges
2. NITI Aayog. (2017) Interim Report of The Committee of Chief Ministers on Digital Payments
3. Deepamkar Roy & Amarendra Sahoo (2016) Payment System in India: Opportunities and Challenges JIBC 21 (2)
4. https://dbie.rbi.org.in/DBIE/dbie.rbi?site=home
5. www.meity.gov.in
6. https://cashlessindia.gov.in/digital_payment_methods.html.