

# A STUDY ON THE INFLUENCE OF DIGITAL PAYMENTS IN INDIA

Chesta\*

*Lecturer, Department of Commerce  
SD Mahila Mahavidyalaya, Narwana, Jind, Haryana, India*

*Email ID: chestabansal86@gmail.com*

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## **Abstract**

*Countries all over the world are strengthening their economies by adopting financial technology, in particular the rapid advancement of digital payment systems. This is being done in order to eliminate problems such as counterfeit currencies, black money, and funding for terrorist organisations, as well as to stabilise and formalise economies. India is, without a doubt, in the lead position with its innovations such as the Unified Payment Innovation (UPI) and the Aadhaar Enabled Payment System (AEPS). The usage of debit or credit cards, electronic wallets (also known as e-wallets), and net banking are all examples of digital transactions. Digital transactions are a form of payment that does not involve the exchange of physical currency. With the implementation of demonetization on November 8, 2016, the current administration in India has encouraged the growth of the country's digital economy. Efforts to demonetize the currency contributed to the formalisation of the economy, an increase in tax collection, and a faster rate of economic expansion. The fundamental goal of India's demonetization initiative was to transform the country from a society that does not comply with its tax obligations into one that does so. Black money that had been stored idly in the homes of black-market traders made its way back into the financial system, and as a result, the money is now being invested in the economy and making its way around in circulation. The lack of Point of Sales (POS) terminals, the low penetration of internet networks, the lack of awareness in the unorganised sector and rural areas, the threat of cyber fraud, and the resistance of people due to their lack of confidence in the digital economy with the existing infrastructure were the primary challenges during the demonetization process. This research paper focuses on the current situation of the digital*

*economy in the Indian context and offers recommendations for how policymakers, the financial industry, and consumers may better understand the significance of the digital economy and the issues it faces.*

## Paper Identification



*\*Corresponding Author*

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### 1. Introduction:

Over the past several years, India has established itself as a significant participant in the manufacturing and services sectors, which are the sectors with the highest growth rates. It provides close to sixty percent to the GDP of India and twenty-eight percent of the jobs that are created there. The manufacturing industry has always been an essential one, and it is essential that it be encouraged through a variety of programmes, including the concept of "Make in India." Although the contribution from the agricultural sector was reduced by around 17%, it is still far higher than that of western countries. Exports, favourable demographic considerations, a high level of savings and investment, and the growth of the middle class are all essential to the strength of the Indian economy. According to the blueprint provided by the Economic Surveys, in order for India to have an economy worth US\$5 trillion by 2024-2025, the country will need to maintain a Gross Domestic Product (GDP) growth rate of 8%. Furthermore, the general "International experience of high growth in East Asian economies" indicated that such growth can be acquired by a "virtuous cycle" of savings, investment, and exports, in addition to favourable demographic conditions. Indian government announced the demonetization on 8<sup>th</sup> November 2016 of all Rs500 and Rs1000 bank notes of Mahatma Gandhi series. And issuance of new Rs500 and Rs2000 bank notes were announced in exchange for the demonetized bank notes. The government claimed to restrict the shadow economy and reduce the use counterfeit and illicit cash to fund terrorism and illegal activity. According to year 2018 report from RBI, approximately 99.3% of demonetized currency notes were deposited to the banks. The Indian government did demonetize currencies on two prior occasions – in 1946 and in 1978. Demonetization was a good initiative, but the execution was bit painful for the common people

till the demonetization process was completed. There are mix views of the economists regarding the success of demonetization but research shows that demonetization surfaced the path for digital payment system or digital transactions in Indian economy on a larger scale. Digital transactions refer to using digital form of payments for various expenses for transactions done by an individual. It can be done by usage of plastic money or through Electronic banking, E-wallets etc.

In a country like India where the major population is in rural area, uneducated and dependent on agriculture; It seems an uphill task to incorporate digital economy or digital transactions. The demonetization by the present government was done keeping in mind the following factors:

- I. To control the inflation and money supply in the market.
- II. To curb the counterfeit currency
- III. To reduce the terrorist funding
- IV. To decrease the operating cost of handling paper currency
- V. To make the economy formalised and tax compliant

In the current research, the discussion is focussed on the benefits and challenges of digital payment system and their effect in India.

## **2. Literature Review:**

Kulkarni, S. and Varma, A.J. (2021). Study specified that customers' perception for online mode payments and security of such transactions. It highlighted importance of customers' perception towards digital payment system for marketers. It indicated sharp rise in adoption of digital payment system on yearly records. Also highlighted challenges faced by consumers while adopting digital payment system.

Setor, T. K., Senyo, P. K., & Addo, A. (2021). Study highlighted evident effect results of digitization to attribute anti-corruption. It highlighted particularly for developing countries the importance of timely linking digital payment to eradicate corruption with a global dataset of digital ecosystem and Transparency International's Corruption Perception Index (CPI).

Salunkhe, H.A., Nandurkar, P. and Hinge, P. (2019). This study indicated benefits of digital payment system that increased its adoption. It highlighted key features of digital payment system such as easy to use, economical & secure mode of financial transactions are reasons behind higher adoption. The policies of Government of India have performed vital role for advancing digital transactions. Study highlighted that the UPI's succeeded by its features like convenience



and free usage. The largest share of recent growth came from payment banks and wallets, which uses the offering promotional cash, UPI payment and discounts to customers.

Joshi, Mrunal & Desai, Jayesh. (2017). Study reveals that actual effect on digital payment reflected after demonetisation. Demonetisation created necessity to switch to digital payment system as an alternate to cash and after demonetisation digital payment had rapidly enhanced and widely adopted. It also specified that under NPCI all individual mode of digital payment system methods' transaction volume was significantly higher in terms of amount in rupees after demonetisation. It concluded that demonetisation has given boost to digital payment system in India.

Mishra (2017) analysed, in her paper, the choice made by the government to set digital adoption goals for financial institutions including banks and payment companies. The study goes on to expand and further detail the comprehensive approach the government is taking to the digital payment system. The study incorporated a variety of activities that the Indian government intends to implement in the future to educate people about digital payment systems. The analysis revealed that there had been inadequate planning done for the process of demonetization. And the actual planning for deploying digital payment systems didn't start until after the currency was demonetized.

According to Bhakta and Variyar (2017), the recommendations made by The Ratan Watal committee for promoting digital payment systems in India may result in lucrative for digital transactions and broad changes to the regulation for payment systems. However, there was a view that it was excessively futuristic and bordered on wishful fantasy, especially considering that several of the proposals were going to have trouble being implemented.

According to Agarwal and Variyar (2017), in their article they reported that the budget that was presented by Arun Jaitley encouraged digital payment systems and announced a target for at least 2,500 crore cashless transactions in 2017-18 through various digital payment systems such as Unified Payments Interface (UPI) and Aadhaar Pay. This target was announced in the budget that Jaitley presented. Additionally, it was planned that the biometrics-based payments system would be introduced in the near future. In preparation for this, it was proposed that banks would roll out 2 million Aadhaar-linked payments terminals by September. Additionally, he advocated that all government receipts be required to be submitted digitally above a certain limit, which is also something that is being taken into consideration.

According to Goriparthi and Tiwari (2017), the demonetization of India's currency was a step in the right direction toward digitalization. A policy by the government that underlines the great

development opportunity for the digital payment system that is just starting to establish itself was also highlighted by them. They emphasised that demonetization also in a way eliminates some traditional barriers for Indians from using digital payment systems such as the cash in hand, complexity of digital payment systems, network availability, and insecurity over fraud. These traditional barriers include cash in hand, complexity of digital payment systems, network availability, and insecurity over fraud.

According to Ravi's (2017) research, the digital payment system has greater potential in rural India because it is both more affordable and more expedient. He also discussed how digital payment systems, which are designed to function on any phone independent of the need for the internet and can even function without phones, are assisting rural areas in India. He emphasised the benefits of using a digital payment system, including cheap transaction costs, an improved information technology act, the potential for ICT development in India, and simplicity of settlement for merchants and small retailers within 24 hours.

According to Kumari and Khanna (2017), the digital economy initiative will be important to developing economies like India; as a result, the digital payment system will be beneficial in the fight against corruption and money laundering. It also highlighted the substantial contribution that the digital economy has made to lowering the risks that are associated with having cash on hand, such as the chance of losing it, having it stolen, or being robbed. It also cast a favourable light on the connection between the digital payment system and the expansion of the economy.

According to Nayak (2017), the research department of the State Bank of India emphasised how the nation was able to leapfrog three years farther in digitalisation as a result of demonetisation, and how this trend also predicted a reduced inflation rate. Researchers from SBI found a considerable increase in the number of debit and credit card transactions completed at Point of Sale (PoS) terminals as well as transactions completed using other payment methods.

According to the findings of Joshi (2017), the present government in India has been taking attempts to build a digital payment system. Over the past few years, it has significantly contributed to the expansion of digital payment methods. Also watched people adopting digital payment methods in a proactive manner, and noticed a shift toward using newer digital payment methods rather than older ones.

**3. Objective:** The primary purpose of this research is to investigate the myriad of approaches we may take to take advantage of the benefits offered by digital payment systems and the variables that are to blame for the lack of widespread acceptance of digital payment systems in rural areas.

**3. Research Methodology:** For this research the methodology is based upon the secondary data gathered from the journals, government notifications, research publications and relevant information available on various websites, and fundamental analysis.

**4. Digital Modes of Transaction:** Review of research material shows following major modes of digital payments in Indian financial market:

4.1 Cheque: It is one of the oldest methods of digital payments. The transaction done through cheque gets recorded along with the proof of the payment. Reserve Bank of India (RBI) speeded up this method with implementation of pan-India Cheque Truncation System (CTS) from September 2020 thus result in speedy cheque clearance cycle through CTS.

4.2 Demand Draft: Demand draft is the safest option to receive payment from anyone. It never gets defaulted as it is paid in advance and signed & issued by the banking institution.

4.3 Internet Banking: There are a few different names for this service: online banking, electronic banking, and virtual banking. It is a form of electronic payment that enables customers of banks and other financial institutions to conduct business through the websites of those organisations. It incorporates Real Time Gross Settlement (RTGS), Immediate Payment Service (IMPS), National Electronic Fund Transfer (NEFT), and Electronic Clearing System (ECS) (IMPS). To make use of this service, one must first have an internet banking or transaction facility that is operational, in addition to an active mobile internet data facility. In comparison to a check or a demand draught, it is significantly quicker.

4.4 Plastic money: Customers have greater peace of mind, convenience, and agency while making purchases with plastic money than with any other payment method. The extensive selection of cards, which includes credit, debit, and prepaid options, offers a great deal of versatility as well. These cards offer dual factor authentication for safe transactions, such as a secure personal identification number (PIN) and a one-time password (OTP). Plastic money has many forms, and some examples include RuPay, Visa, and MasterCard. Using a payment card enables consumers to make purchases in-store, online, via mail-order catalogues, and over the phone without physically carrying cash. Because of this, not only do customers but also merchants save time and money, but also the process of conducting business is simplified. The accessibility of an internet data connection and the presence of a swipe card facility (POS) at the merchant end of stores are both factors that limit the usefulness of this technology.

4.5 Electronic wallet (E-Wallet): In order to use E-wallet customer and merchant both require an active internet connection along with smartphone or compatible devices. The E-wallet make use of phone number or the QR code and the transaction is done in matter of seconds.



4.6 Mobile-Wallet: One do not need a debit card, credit card or internet banking password for making payment using a mobile wallet. Instead of physical plastic card to make purchases, you can pay with your smartphone or smart devices with active internet connection. Just load money in your wallet via Immediate Payment Service (IMPS) and use it on the move examples: e.g. Paytm, Freecharge, Mobikwik, Airtel Money, Jio Money, Citrus Pay, Vodafone M-Pesa etc.

4.7 Unified Payments Interface (UPI): UPI is a payment system that enable multiple bank accounts and wallets into a single payment method application (of participating banks), merging banking fund routing & merchant payments into one payment network. This also enable to the “Peer to Peer” collection which can be scheduled and paid as per requirement. Each Bank provides its own UPI ID for send or receive money using virtual payment address without entering bank information. Merchant can enroll with banks to accept payment using UPI.

4.8 Aadhaar Enabled Payment System (AEPS): It is one of the best digital payment methods. It is like a micro- Automated Teller Machine (ATM) which uses smartphone and a finger-print scanner for the transaction. In order to use this facility, it is mandatory to link your Aadhaar number with your bank account.

4.9: Unstructured supplementary service data (USSD): One can use USSD digital option if you do not have smartphone or internet connection. It is a mobile banking service. From any mobile phone, one can dial \*99# and use this service. This service allows transaction on mobile banking using basic feature mobile phone, mobile internet data facility not required for using this USSD based mobile banking. It is envisioned specifically to reduce dependency of mobile internet data facility in the mainstream banking services and to provide financial inclusion of rural and underbanked society.

**5. Benefits of Digital Transactions for Indian Economy:** There are many tangible and intangible benefits of digital transactions. Review of available research material shows following major benefits for Indian economy

- i. Cost -Effective: Cost of managing ATM’s and transporting currency will reduce, The printing cost of currency will come down by and large
- ii. Convenient: Transactions can be done at any time and at any where within fraction of time
- iii. Safe and secure – OTP for Card Not Present (CNP) transactions: Physical thefts and robberies get reduced
- iv. Increase in taxation compliant
- v. Curtails use of black money and counterfeit currency

**6. Challenges in Making India a Digital -Economy:** The challenges involved in making India a state of digital economy are as follows

- i. The day-to-day transactions in India are mainly done in cash. Even the debit cards and ATMs are mainly used for cash withdrawal over here. It is very tough to change the mindset of the people.
- ii. The availability of the point-of-sale terminals (POS) is very limited, especially in rural areas.
- iii. In the rural areas mobile and internet connectivity is very less. Even where there is internal connection the speed is very less. The internet penetration rate is just 27% which is very low, it has to be at least 67% which is global median.
- iv. Each and every one is not having the bank account in India. Forget about rural India even the worker residing in metro cities like Delhi are not having the bank accounts.

**7. Opportunities for Digital Economy:** With the second largest market for smartphones there is a great scope for digital payments in India.

Various schemes have been launched by RBI and government of India for development of digital economy;

- (i) Aadhaar pay which ensures financial transaction by just using fingerprint
- (ii) The national payment corporation of India together with the RBI, has launched UPI
- (iii) Several discounts and waiver are launched by government on digital transactions

**8. Major Steps to be Taken for Digital Economy:**

- To educate the farmers and rural population through live demonstrations such as Indian Farmers Fertilizer Cooperative Limited (IFFCO) is doing
- Proper internet connectivity in rural areas.
- Cash-backs, discounts, offers should be given for digital transactions
- Number of active rural branches should be increased and zero balance accounts should be opened
- POS terminals should be increased in rural area.

**9 Finding and Suggestions:** The major finding of the study are that. There is no hurdle in incorporating digital transaction or payment in Metro's and big cities and at the top level & mid level income group. But the real problem lies in the smaller cities and rural areas and lower income groups, daily workers etc. Hence the application of digital economy should be done from top level to middle level and bottom level should be given some time to the norms of the economy. More awareness work should be done in rural areas.



The transaction which are related to luxurious products such as jewellery, auto-mobiles, high end electronics gadgets etc should be made mandatory by the government to be purchased via digital transactions. The fee of the private school and colleges should be done entirely by digital transactions. Air and railway tickets should be done via digital transaction. By taking above measures Indian economy can move forward on the way of digital or less cash economy.

**10. Conclusions:** When there is economic reform whether it was industrialization, Liberalization Privatization Globalization Era (LPG Era), or demonetization, analysts always have positive as well as negative views. But at the end of the day society moves towards technological advancements irrespective of their economic standards. Hence, we can say that slowly and gradually with the effort of the government Indian economy can transit from cash bound economy to less cash economy and then to digital economy. But the transformation will take its own time. Collaborative approach between government, Industry, NGO's and changed mindset of general public can help to leapfrog the process.

“If everyone is moving forward together, then success takes care of itself.”

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