

Virtual Payments: Reality of Future

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Abstract: Demonetization has taught us in a big way the importance of digital payments. We Indians are very much habitual of holding cash, not for the purpose of transacting but our savings as well. Holding cash provides us tremendous security, not only financial but also psychological. So when we were asked to deposit the Rs 1000 and Rs 500 notes with the banks as a measure of demonetization, almost everyone was drained out of currency. We did not have much currency in the shape of small denomination notes and larger ones were out of circulation. This cash crunch forced use towards the use of virtual or digital money. Though, it was not easier, as the big merchants were accepting digital money but the small vendors selling the items of day-to-day use were not in a position to afford virtual transactions. Still, demonetization kicked the graph of virtual transactions during this period as the Indian economy had turned into cashless economy for few days. The common men tasted the flavour of virtual transactions for the first time during demonetization. Everyone was experiencing the stringency of currency. During this period of demonetization, virtual money rescued most of us and we were able to carry on our transactions in order to keep the wheels of the life moving on. Now that there is ample supply of newer currency notes, we are not much dependent on virtual money once again. However, as per the announcements of Reserve Bank of India from time to time, it is a clear verdict that Indian economy will be atleast a less cash economy, if not cashless, in near future. This article discusses the future of virtual payments as reality in Indian economy.

Key words: Virtual money, digital money, cashless economy.

1. INTRODUCTION

Amongst many implications of demonetization, an important one is the increased use of digital money. The cash crunch faced during the cashless period forced us to use other modes of making payments. The most common mode of making payments after cash is plastic money i.e. the use of debit or credit card. Credit card culture is an old hat in western countries. In India, it is relatively new concept that is fast catching on. The present trend indicates that the coming years will witness a burgeoning growth of credit cards which will lead to a cashless economy. [1] The unavailability of plastic money with every citizen or unavailability of swap machines at all Point of Sales (POS) leads to the use of digital money. Number of internet users in India is more than 450 million and around 77% of urban users and 92% rural users use mobile phones to excess internet. Users of smart phones are estimated at 300 million while phablets, tablets and laptops are other major devices to excess internet. India has 31 million credit cards and 880 million debit cards in operation. All

these figures indicate that there is ample scope for transformation of Indian economy into less cash economy. As currency notes are not the part of transaction, how the money is being paid. Let us understand the mechanism of digital money. Buyer is the payer and seller if the receiver of money, which is transferred from and to their respective accounts through payment gateways, via the use of digital payment agents. Fig. 1. explains the process of use of digital money.

2. MODES OF VIRTUAL PAYMENTS

There are quite a number of modes to make payments digitally. It is a myth now that virtual payments can be made through desk tops, personal computers or laptops only. The same can be very conveniently done using a smart phone. However, all the modes require internet as the vehicle. Punch line of virtual payments is "Phone is your wallet". All the banks have their payment apps through which the customers can make payments for utilities and services. All banks' saving account holders are entitled to register for internet banking which is the most convenient way of digital payments, transfer of funds etc. Similarly, option of phone banking can also be exercised. Small payment banks also have the apps for the same purpose. Reserve Bank of India has given "in-principle" licenses to eleven entities to establish payment banks out of which a few like Paytm, Airtel Money, Vodafone M Paisa have already commenced their operations. Paytm has crossed the number of 200 million users. Airtel Money is operating with 7 million accounts.

These figures are growing day by day. With the use of internet increasing day by day, the number of transactions and volume of digital payments is bound to increase in near future. Adding to it, are the offers of various operators being announced from time to time. Like specific operators' cardholders may get additional 10% discount on payment. These types of offers encourage the buyers to make payments digitally, in order to take advantage of additional discount. The ease of transferring money through Third Party Payments (TPP), Electronic Clearance Service (ECS), National Automated Clearing House (NACH), National Electronic Funds Transfer (NEFT), Immediate Payment Service (IMPS), Real Time Gross Settlement (RTGS), Aadhar Enabled Payment System (AEPS) etc. has also motivated the users to utilize these services instead of making payments through physical modes.

3. MECHANISM OF VIRTUAL PAYMENTS

Virtual payments are easy to make. Any two accounts with the same operator can transfer funds using payment gateway. Internet is essentially required as a vehicle of transaction. Fig. 1 describes the mechanism of virtual payments. There is three-layer security in all online transactions. Log in id is required to enter the account with the help of login password. A One Time Password (OTP), Unique Identification Number (UIN), Online Shopping Password (OSP) etc. is then required to permit the transaction to take place with the help of transaction password. This three-layer security ensures the safety of the funds being transferred.

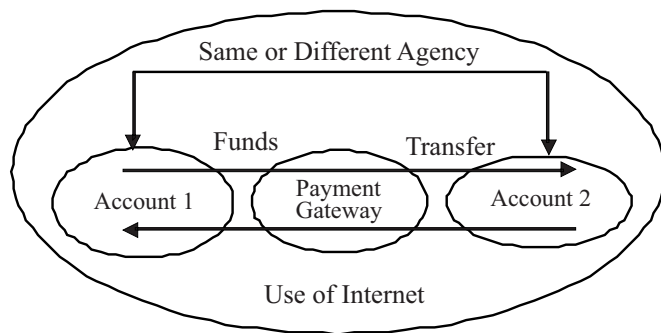


Fig 1: Digital Payment Mechanism

4. ADVANTAGES OF VIRTUAL PAYMENTS

It's astonishing to note various advantages of virtual payments as against physical payments. No doubt, virtual ones are really convenient to make, in comparison to physical ones. Specific advantages are as follows:

From anywhere payments

The biggest advantage of virtual payments is that these can be carried out from anywhere on earth. There is no to go to any place pre-decided for the financial transactions like bank etc.

Anytime payments

There is no limitation of transaction hours, as these payments are digital. There is no requirement of manpower to handle virtual transactions and thus there is no limitation on transaction hours. No physical movement required

As one does not have to go to any place for transactions, there is not much physical movement involved in virtual transactions. This saves on time and energy of the individuals carrying on the transactions, specially, of payers.

Paperless

Probably, the biggest advantage of virtual transactions is their digital nature which makes them paperless. These are thus, environment friendly as well. We save many papers, considering the volume of transactions made throughout the country. We save not only the paper used in printing of currency notes but also

the paper used in printing of cheque books, pass books, pay-in slips etc. looking at the national level, this is huge saving.

Cost effective

As these transactions do not require physical infrastructure, manpower etc. these are really cost effective, in comparison to physical transactions. Once the mechanism is installed, it works for years without manual interference. Least involvement of manpower ensures reduction in per transaction cost over the period of time.

Total bill amount is charged

While making payment through cash, sometimes the payer gets discount in the absence of non availability of change etc. For example, for the bill amount of Rs 1,905, the receiver may give discount of Rs 5, but while making virtual payment, Rs 1,905 are paid. These small discounts discourage virtual payments.

Saves time

As virtual transactions are through electronic media, the time taken to complete the transactions is very less. This also gives way to larger number of transactions as compared to manual methods of making payments. Time is also saved on commuting to make payments, either going to parties to pay or to go to banks etc.

Faster than Physical payments

As the processing of these transactions is electronic, these are very fast. The funds are transferred immediately from one account to another account.

Safer, as it is digital

All virtual transactions cross triple layer security. This feature makes all virtual transactions safer in comparison to physical transactions. There is no carriage of currency which reduces the chances of theft, robbery, snatching, dropping or other types of losses of money.

Currency is not required

On November 4, 2016, currency with public was Rs 17.97 trillion. It dropped to Rs 12.45 trillion on March 10, 2017. [2] There is no requirement of currency notes in virtual transactions, which contributes in saving the cost of printing and minting of the currency, transferring the currency, circulating the currency, replacement of currency etc. actually, much of the financial resources of banking system are saved as there is least requirement of cash counters etc.

Control on black money

As there is no involvement of cash, there is control over black money. All money in any account is digitally visible, as it is not possible to hold money in physical form. Currency notes are not used while making virtual transactions and hence, menace of black money is curbed to great extent.

Distance does not matter

Virtual transactions can take place over any distance, shorter or

longer within few seconds. The distance between payer and receiver is immaterial in virtual transactions.

Least manpower requirement

The manpower engaged in banking and clearing system is relieved once we use virtual transactions. This manpower may be utilized for other purposes. The time required in clearance is very much reduced and the number of transactions increases in real time.

Limitations of Virtual Payments

It is not that virtual payments have advantages only; it has some limitations as well. Looking at the Indian population structure and the penetration of financial services in our country, virtual payments are not that easy to be pursued by majority of Indian population. Non-availability of electricity, internet or instruments and even lack of awareness about virtual payments persist in many villages. India has world's largest energy access deficit in terms of electricity i. e. equal to around 240 million people are deprived of electricity. [3] Similarly, remote areas lack in other technological and communicational facilities. It is not possible for all of them to make virtual payments. Even satellite connectivity in many geographical areas is not very efficient. Following are some of the limitations of virtual payments:

Dependency on internet and electricity as vehicle

The first and foremost limitation of virtual payments is the dependency of these transactions on internet. It is not possible to carry out financial transactions in the absence of internet. Electric supply or charge through battery is another essential requirement for carrying the financial transactions digitally.

Poor technological base

It is not that 100% of Indian population is possessing computers, laptops, phablets, tablets, smart phones etc. Internet connectivity in these instruments is another issue. The poor technological base in our country poses hindrances in the use of digital money.

Certain amount of literacy is must

While making payments, certain amount of literacy is expected from the payers and receivers. It is not like going to a bank's branch and asking another person to fill the information required in cheques or slips. In digital transactions, generation of login id, transaction id, OTP, verification etc. requires legitimate literacy. Around 287 million Indians are still illiterate which poses problems for making digital payments. [4]

Financial literacy

Rate of financial literacy in India is moderate. Financial literacy rate in India is 63% and 76% of the adult population does not understand basic financial concepts. [5] In the absence of financial literacy, it is not possible to adapt to digital financial transactions. Knowledge of basic digital financial terminology is essential for the purpose. Terms like Third party Transfer (TPT), Electronic Clearance Service (ECS), National Automated Clearing House (NACH), National Electronic Funds Transfer

(NEFT), Immediate Payment Service (IMPS), Real Time Gross Settlement (RTGS), One Time Password (OTP), Online Shopping Password (OSP), Unique Identification Number (UIN), Aadhar Enabled Payment System (AEPS) etc. must be understood by the users.

Acquaintance with the use of computers and internet

Use of virtual mode of payments requires legitimate knowledge of computers or smart phones and internet. Not that one has to be highly tech savvy for it, but an optimal level of operational knowledge of the devices through which virtual payments need to made, is necessary.

No replacement of payer is possible

In conventional payment procedures, payers or receivers can be replaced. It is not advisable to replace payer while making digital payments. The procedural requirements of virtual payments must be completed only by the payer himself or herself. This also eliminates the risk of fraud.

Charges of purchasing swap machines and swap charges

From the view point of receiver of payments, cost of transactions, cost of swap machines and other related cost are not really motivating to proceed for virtual payments. Funds transfers between two individuals are not attracting cost but payments for various purchases are eating into the margin of the receiver, which does not encourage digital payments.

Probability of cyber fraud increases

During physical mode of transaction, negligence may lead to losses but during digital transactions, probability of cyber fraud also increases. Cloning of cards, hacking of passwords etc. are the normal threats during virtual transactions.

Lack of faith and unawareness

Since time immemorial, Indians have believed in carrying cash and making payments through traditional modes. Individuals, especially in rural areas are still not aware of various useful aspects of virtual transactions and hence, do not have faith on newer modes of payments. This is also due to lack of technological unawareness.

5. CONCLUSION

A cashless society describes an economic state whereby financial transactions are not conducted with money in the form of physical banknotes or coins, but rather through the transfer of digital information (usually an electronic representation of money) between the transacting parties. [6] The vision of present government is to turn Indian economy into cashless economy in years to come. Demonetization has also pushed the economy into this direction. Government has also initiated steps towards achievement of the objectives of cashless economy. Launch of Unified Payment Interface (UPI) and Bharat Interface for Money (BHIM) are revolutionary decisions in this direction. UPI transactions made a leapfrog from just 1,03,060 transactions in October 2016 to 91,67,277 transactions in May 2017, recording a astonishing 89 times growth. Value wise, UPI

recorded growth from Rs 0.49 billion to Rs 27.65 billion, more than 56 times during this period. BHIM too recorded growth from 17,17,696 transactions in January 2017 to 39,75,750 and value wise from Rs 3.56 billion to Rs 13.07 billion during this period. BHIM crossed 14.94 million downloads as of May 2017 as communicated by National Payments Corporation of India (NPCI). [7] Unstructured Supplementary Services Data (USSD) is currently the best available communication technology to deliver mobile financial services to larger number of smart phone users. E- wallet transactions have increased from 17 lakhs per day to 63 lakhs per day and from Rs 52 crores to Rs 191 crores in terms of value. RuPay card transactions showed growth from 3.85 lakhs per day to 16 lakhs per day and value from 39.17 crores to 236 crores. Government has launched a channel "Digishala" to educate people about digital transactions. Transactions through Point of Sale (POS) machines have increased from 15.2 lakhs per day to 98.1 crores and in value terms, from Rs 112 crores to Rs 1,751 crores. Transactions through USSD platform have increased from 97 per day to 1,263 and in value terms, from Rs 1 lakh to Rs 14 lakhs. [8] As much as we leapfrogged the telecom revolution by taking on to cell phones, we have it in us to move from physical cash to digital cash. Actually, knowingly or not, most of time we transact, we are using digital cash. [9] Significant individuals like Mr. Amitabh Bachchan are also advertising for the use of virtual

transactions in popular programme KBC through the use of Axis Bank App. Paytm has increased its presence amongst common men. Government of India has also floated a website cashlessindia.gov.in, to generate awareness among the people and to literate them financially. All these developments indicate that the day is not far when Indian economy will become cashless, to the extent possible. Going cashless saves tremendous amount spent on issuance and replacement of currency notes.

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