JETIR.ORG

ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue



JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

Are we moving towards a "Cashless" economy?

Priyal Raj and Alka Parikh¹

¹ Priyal Raj is a 4th year B.Tech student at DAIICT, Gandhinagar and Dr. Alka Parikh is a Professor in DAIICT.



Abstract

Demonetization is said to have given a big boost to the digital economy. The idea was to digitize transactions and control the parallel economy. GST was also used to cement the idea. From then on has applications like paytm, google pay and other later developed applications played a part in deciding the annual rotation of the plastic money. The paper shows how digital transactions grew in the economy. But it also shows the contradiction that cash in circulation grew much more rapidly and has hit the highest peaks recently. It is clear that as a proportion, the growth of digital payments has been sluggish. The paper shows, with the help of its survey of the lower strata of the society, that for the majority of the Indian population, cash remains the most important and mostly, the only mode of transactions.

Introduction

Cash has always been the most trusted means for payments. Till date it plays an important role in enabling transactions and hence its presence is significant for the growth in the country's income. Demonetization showed how the entire nation comes to a standstill if cash is withdrawn from the economic system. At the same time, digital money has also started to claim its share in the economy and has consistently shown a growth in its use throughout the country.

The digital currency has caught the fancy of the youth. It has sort of become a fashion in the youth to just carry their smartphones to any of the cafeterias and scan to pay the bill, and definitely not carry those wallets that were to be taken care of at all times. The use of digital payment has made the life of the consumers, the businessmen, the employees and the petty traders (who do not have to struggle all the time to find the change of Rs 5 or 10) easier. It has become far easier to make payments or send across money. The payments are just one tap away, a lot easier.

Interestingly, we find that there is a simultaneous growth in both the digital transactions and cash economy. RBI reports show a magnificent growth through UPI payments, debit cards and credit cards. The digital payment index from the RBI that stood at 100 in the year 2018 has now risen to 270 [3], which marks a growth of about 200%. Many general stores, food courts, vegetable vendors, cafeterias, jewelry shops, and garment shops have now incorporated the concept of digital payments and started to use UPI scanners. Digital transactions keep an automatic record of the transactions that can be easily tracked by the government too. It thus discourages the parallel economy.

¹ Priyal Raj is a 4th year B.Tech student at DAIICT, Gandhinagar and Dr. Alka Parikh is a Professor in DAIICT.

Does this really imply that the use of digital currency has made every citizen's life easier in the country? Is it possible that in this country, with a population of 1.39 billion people, that now most people hold a smartphone, a bank account, and have an ability to master the smart phone operations? Or is it just that our attention is grabbed by what looks dramatically impressive from our "urban educated lenses", and that we are unaware of what actually persists in the majority of the countryside. The question that we try to explore in this paper is, Are we really transforming into a "cashless" society?

Existing Digital Payment Enablers:

1) Smartphones

Business Standard (2022) reports that India had 1.2 billion mobile subscribers in 2021, of which about 750 million are smartphone users [1]. This number is large enough to enable the spread of digital currency. As people get more and more digital literacy, it will trigger the use of digital payment platforms.

2) Internet

Around November 2019, there were 64.2 crore wireless and 1.9 crore wired internet connections registered [1]. This must have helped in raising the use of digital payment platforms.

3) Bank Accounts

Over 217.4 crore bank accounts existed in March 2019. The bank accounts are needed to enable the use of debit and credit cards, net and mobile banking and digital payments. There has been an increase from 211 lakh to 550 lakh in the number of credit cards and the number of debit cards have increased from 5535 lakh to 8000 lakh [1].

Figure 1 shows that there is steady growth in both credit and debit cards. The increase is far more in debit cards because they come automatically with the bank account.



Figure 1:
Increase in Debit
and credit cards
Source:

[https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=19417]

According to the RBI, digital payments have shown a steep shift in usage over the past five years and witnessed an annual growth rate of 61% in volume, for debit and credit cards the growth rate registered is 44% in volume. [1].

4) UPI's emergence

In recent years Unified Payments interface, UPI, has shown tremendous growth and is now the single largest digital retail payment system of the country. The concept of UPI was launched on 11th April 2016, by December 2021, 4.6 billion transactions were carried out that were worth Rupees 8.26 lakh crore through UPI [3]. The main objective of bringing UPI was to replace the low value cash payments. Around 50% of the UPI payments were made for less than Rupees 200 [3]. Fig 2 represents the increased number of banks connected with UPI over the years 2017 to 2021.

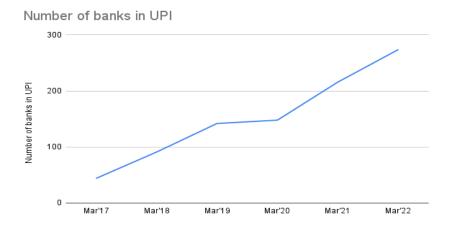


Figure 2: Number of banks connected with UPI Source:[https://www.indiabudget.gov.in/economicsurvey/doc/eschapter/echap04.pdf]

5) COVID-19 and pandemic made a way for Digital payments to flourish.

Digital payments enabled social distancing, online shopping, and no-contact payments. All of these were very useful during the pandemic period. Figure 3 shows a steep increase in digital transactions represented by Digital Payment Index (DPI) [5].

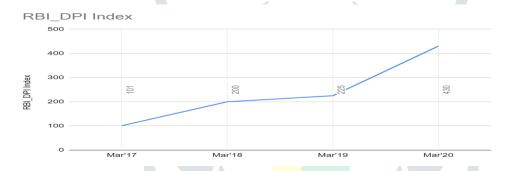


Figure 3: RBI_DPI Index given by TimesOfIndia.

Source: [https://timesofindia.indiatimes.com/]

Reality Check: Are we moving towards being a Digital Society?

We have taken some newspaper reports to show the ground level reality of a digital economy.

1. From the Wire: Five Years After Demonetisation, Cash With Public is Still High. What Lessons Can be Learned? [4]

The article clearly states that the decision made by the government had caused severe damage to the economy that has still not been documented by the current government. It was a predetermined conclusion by the government in 2016 that demonetization would cure the wound of black economy. That failed as almost the whole currency in Rs 500 denomination was returned to the banks. Then the argument was floated that the idea of demonetization was to lead to a digital economy so that the parallel economy cannot exist. The concept of completely eradicating cash and digitizing everything was a little out of sense and still India continues to experience a setback when it comes to trust in the Indian currency system.

Even if the GDP recovers, the cash with the public won't go down to a remarkable extent as the culture of cash for transactions would still prevail as the main mode of payment in the informal sector. [4].

2. From The Indian Express: Explained: Currency with public jumps to Rs 28.39 lakh crore; why is it rising? [6] Pandemic did let the digital market grow but it is also a fact that in the pandemic period, the currency with the public rose to Rs.28.39 lakh crore which is the highest hit of all time till now [6]. COVID-19 brought in lockdowns that did

lead to online dependence but the government forgot to record that it was the small general stores that had become a savior to the public during that period. Cash was needed for transactions with all the small food vendors. They obviously did not have the facility of any digital transactions. Hence the public started withdrawing more cash from the banks as there was no guarantee when an emergency would arise. The uncertainty in the announcements of new rules and regulations every new day, threatened the mentality of the public whether they would be allowed to withdraw money on a regular basis or not. This compelled them to store as much money as possible to meet any emergency.

In short, the article says that the demand for cash was far higher during the pandemic period. Digital payments were not as widespread as the use of cash.

3. From The Times Of India: Why cash circulation in the economy hit all-time high in March 2022 despite surge in digital payments? [5]

With a rise of 9.2% in the economy, cash in circulation rose to 31 lakh crores when recorded in March 2022 [5]. There are a few reasons listed why cash with public is increasing at such a speedy rate, which are:

- Increased number of ATM machines especially in rural India, as the Jan Dhan accounts beneficiary schemes are introduced.
- Ease in the movement after pandemic.
- E-commerce companies and merchants also allow cash based deals.
- Heightened travel movement and festivities
- Cash continues to perform as the most important mode of transactions.

Year Cash in circulation
Mar 2022 Rs. 3,092,827
Mar 2021 Rs. 2,853,763
Rs. 3,080,356.

As can be seen from the above figures, cash in hand hit an all time record high of Rs 3,092,827 in March 2022 [5].

Unambiguous Truth: cash reigns supreme!

The researchers carried out a survey of 52 individuals to assess their transaction behavior. Individual interviews were conducted. The sample was divided into 3 classes: The rurban class (26 individuals) from a village named Nimeta, Vadodara, Gujarat, the salaried labor class (15 individuals), and the casual workers (11 individuals) both the classes from Vadodara, Gujarat. What are the usual habits of these people while buying goods and services?

The rurban class's perception

We interviewed people from a village having a population of more than 5000-6000 persons. The respondents were farmers, merchants and cattlemen. They owned a bricked tenement or a single floored house, with an average income ranging from Rs 10,000 to Rs 15,000 per month. They had some basic knowledge of digital application usage. Majority were the men of the house through whose income the household was running. The women were not at all aware about what digital transactions are, which applications are used for this purpose. The digital literacy percentage of these women could be considered negligible. They belonged to a culture where finance was a male forte.

When spoken about the bank accounts, 80% of the sample men held a bank account and around 68% of them had ATM cards out of which only 42.3% were using them for digital payments.

Figure 4 shows that 68% of the rurban class people preferred to use cash for any transactions. People from the village were disappointed by the functioning of the banks and the unviable promises made by the banks (mainly regarding jan dhan accounts that they would be given a rupay card, an overdraft facility, an accident insurance, etc. They quickly found that a

minimum balance is required for these and you have been undertaking some minimum number of transactions. Thus for them these turned out to be false promises). A man was also cheated in a loan procedure of his vehicle. A family with an extraordinary landscape didn't prefer to hold a bank account in the bank because of the threat of theft or shutdown of a bank at any point of time (They referred to the reports of some co-operative banks and Punjab National Bank going defunct).

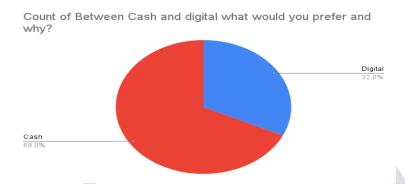


Figure 4: What is the preferred mode of payment: Cash or Digital?

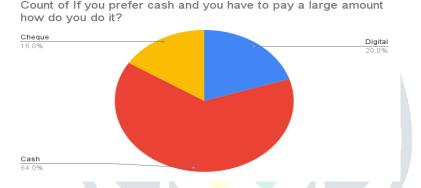


Figure 5: Payment mode for large amounts

Figure 5 shows that 64% of the rurban class people used cash for making even large payments. This can be inconvenient but still seems to be a preferred mode of payment. This means that there is no habit of depositing or withdrawing money from banks. The earned income is kept at home in the form of cash and is used for all purposes.

Figure 6 shows that even for making payments of very small amounts where change can become an issue, 72% of the respondents still use cash only.

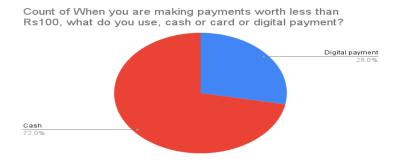


Figure 6: mode of payment for petty transactions

Figure 7 depicts the mode of payments for daily transactions. It clearly shows that **it is rare** that people opt to use digital payments mode. Thus it can be concluded that the rurban people prefer cash as the most important mode of transaction.

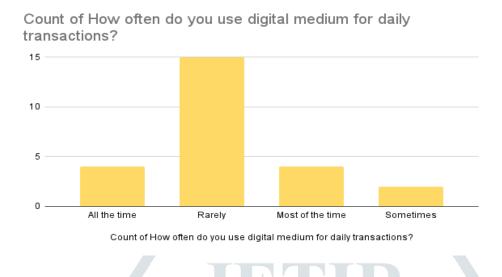


Figure 7: Ultimate outcome of choice

A boy from the village had brought out an excellent point while discussing the question, "What if everything turned digital?" He answered that this would create a terrible situation: what if all the servers are down or there is low connectivity? Not all villages have internet facilities, nor could every villager afford a smartphone, therefore we need the option of cash always open, no matter what.

Opinion of the salaried labor class:

Here we interviewed women working as maids, vegetable vendors, peons, and sweepers in the college hostel. They earn barely enough to meet their daily needs. They had phones with basic facilities of calling and messaging.

When they were questioned if they held a bank account, we learnt that the ones who had an account, had opened it just to receive their salary. Some of them even gave their husband's bank account number to receive the salary. Figure 8 shows that 73.3% of the women had bank accounts, the rest did not.

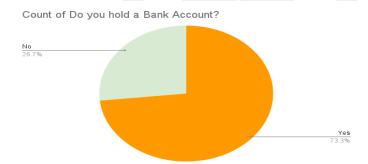


Figure 8: salaried labor women owning a bank account.

Maids are paid in cash, they do not use digital transactions. "We are illiterate, we do not know how to use them and no one teaches us to operate these facilities" they say. They also say that they have accepted this the way it is.

Vegetable vendors had a basic knowledge of digital payment applications. They knew that it was something that the customers could scan and pay. Once the women see the green tick mark by the amount to be paid, they trust that the payment is done. The vegetable vendors told us that the main reason to include digital payment platforms was because the middle class and the rich of the age group 18 to 40 demand to make payment through digital payment platforms. They often have some understanding with the shopkeepers to enable such transactions. The customers pay to the paytm of the shopkeepers

and he in turn pays them in cash at the end of the day. But they said that the majority of the public pays in cash to the vendors. So it is not that they need the digital platforms that much.

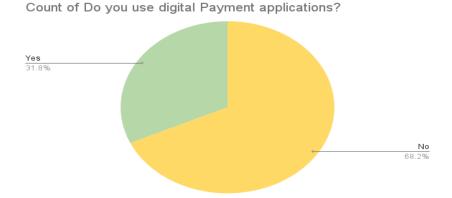


Figure 9: Use of digital payments by vegetable vendors

What do the casual laborers say about digital transactions?

We interviewed some casual workers or daily wagers. They come to the labor markets to sell their services to the contractors who come to pick them up. They did not own a smartphone, nor did they have the knowledge to operate the digital application, only one amongst the 10 held a bank account. These include both men and women. As figure 10 shows, no one reported using digital payments.

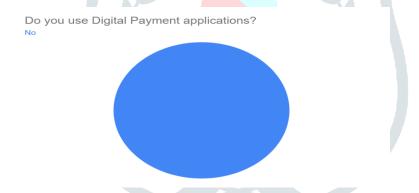


Figure 10: Digital payment Usage by the casual workers



Figure 11: Mode of payments to the casual workers

All the interviewed casual workers said that they carry out all their transactions by cash and that they receive their income also in cash (figure 11). They do not use any digital payment mode at all.

When we sum up all the three classes, we find that just 21% of our sample use digital transactions and 79% completely rely on cash (figure 12).

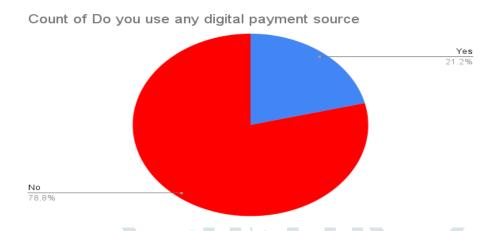


Figure 12: Digital usage by the entire sample

What explains the preference for digital transactions:

We ran a multivariate regression equation to find out which factors significantly determine the preference for digital transactions. The Y is a binary number: if you use any mode of digital payment, the answer is 1. If you do not use any at all, the answer is 2. The explanatory variables are gender, age and income. As the table shows, the R² is not robust - it is 0.32. This must be because most sample persons, in spite of their differences in age, gender and income, overwhelmingly used cash. Thus the fluctuations in Y are explained only upto about 32%. Still, we found it worth showing what prompts the rest to use the digital platforms.

Table: Result of Regression Equation

R square	0.327	
	Coefficient	T-statistics
Gender	0.366	3.481
Age	0.099	3.088
Income	-4.2E-06	-0.208

Age and gender turn out to be statistically significant, with t statistics more than 2 for both. Income Is not a significant variable statistically. Thus the lower middle class and poor people's choice to use digital payment seems to be getting defined more by their age and gender rather than by their income status. Men and the younger generation seem to be using the digital platform more among the lower strata of the society.

Conclusion

The idea of completely digitizing the economy was a miscalculation made by the government. The government tries to portray that its decision was a success: the data and graphs are updated regularly to show the growth of digital transactions. But these figures fail to show that cash in hand is increasing much more rapidly than the digital market. Actually preference for cash has increased much more in recent years, due to many factors like pandemic and lesser trust in government's regulations regarding monetary policies. And as far as the lower strata of the society is concerned, our survey shows that they are rare users of digital transactions.

Reference

- 1. https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=19417
- 2. https://m.rbi.org.in/Scripts/AnnualReportPublications.aspx?Id=1322
- 3. https://www.indiabudget.gov.in/economicsurvey/doc/eschapter/echap04.pdf
- 4. https://thewire.in/economy/five-years-after-demonetisation-cash-withpublic-is-still-high-what-lessons-can-be-learned.
- 5. https://timesofindia.indiatimes.com/business/india-business/why-cashcirculation-in-economy-hit-all-time-high-in-march-2022-despite-surgein-digital-payments/articleshow/90562209.cms
- 6. https://indianexpress.com/article/explained/currency-with-public-jumpsto-rs-28-39-lakh-crore-heres-why-it-is-rising-7324703/
- 7. https://datacommons.org/place/country/IND?utm_medium=explore&mprop=count&popt=Person&hl=en
- 8. https://udel.edu/~cmarks/What%20is%20social%20class.htm

