

# Impact of Digital transactions on Indian economy: Pre and Post Demonetization

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## Article Info

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## Abstract:

The purpose of this paper is to investigate the various reasons of the lack of penetration of digital transactions in India and what are the feasible attributes that can be altered to bridge that gap. The objective of this study is to get a deeper insight into how the change has been brought in and how far the journey is left to call it a success. The design of the study is such that the reader gets a comprehensive outlook on the various reasons behind the acceptance and non-acceptance of digital modes of payment and how people have indulged in using these in light of steps taken by the government. The paper discusses the trend of using non-cash payment methods such as Electronic transfer, E-wallets and others in light of demonetization. It is evident from the data that demonetization played a primordial role is influencing these trends in terms of growth rates in these payment volumes. Inhibition from the user's end has various underlying reasons. The practical implication of this study shows the challenges faced to implement the "cashless economy" in India and how it can be solved. It also shows the progress of digitalization in the current scenario of Indian economy. The originality of this paper focuses on the penetration of digitalization and digital payments in rural India. The focus is done primarily focusing on the rural side of Indian economy.

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## I. INTRODUCTION

In the era of Digitalization, where everything is getting digitalized, it is very important to know how much rural India has progressed in terms of digital payments. Demonetization has triggered digital mode of payment in our country (Singh & Singh, 2016). To realize the extent of the size of the reach of these online or mobile payment systems, one must have the basic idea of the problems and challenges faced while implementing the idea.

After the "Cashless economy" initiative has been started by the Indian Government. The problem was not the inaccessibility of the banks and ATMs, but

the limit on cash which can be withdrawn (Shah, 2017). Another fact includes that less than 9% of the rural population older than 15 years has a debit card and less than 2% has a credit card (Sheetal & Krishnamurthi, 2017). The digital mode of payment is a new process and many people are not aware of this idea. Even, the internet facility is also poor in rural India and hardly people use smartphones. Amidst this idea, proving India is ahead in a cashless economy is really a challenge. But, amidst that, shopkeepers started paytm and cheque facilities for consumers (Rani, 2016).

Digitalization of rural banking is very helpful in

financial inclusion and helps the economy to grow faster with the development of all other sectors (Nayak, 2018). There are digital wallets that have become more active post demonetization. Paytm, Mobikwik, Airtel money are such examples of digital wallets (Gangawane, 2016).

Digital transaction through online payments and e-wallets have already multiplied several-fold in the past two months after demonetization took place in November 2016 (Shukla & Bose, 2017). Till now Paytm has only reached about 40% of the smartphone users in India mostly being the people living in the cities, demonetization being one of the reasons behind this (Balaji & Balaji, 2017). The users have deposited more than Rs. 100 Crore to their Paytm mobile wallets (Damle et al., 2016). These phone wallets have also started promoting their apps on the widespread mode of public media.

From the data of the past literature review, it will be easy to understand the percentage of rural people who are used to with digital transaction. This some data which gives a clearer view of digital transactions in rural India. This data also shows how India is doing after “Cashless Economy” initiative has been performing. It is a fact that, as per the recent estimates by some economists, nearly 90% of the total cash in circulation has come back into the banking system and hence, the stated purpose of the Demonetization exercise which was to “extinguish” black money and enable the RBI to lower its liabilities thereby providing the government with a huge dividend seems to have been belied (Ganesan & Gajendranayagam, 2017). This amount of money has been re-issued in half of its amount in order to encourage the digitalized mode of payments.

The challenges the govt. has to face in providing digital transaction in the rural area and from the analysis one can have some ideas too to avoid the problems. India is a country with more than 60 lakh villages and connecting these areas with broadband connectivity will have a paradigm shift (Anooja, 2015). For a holistic approach to development and for tapping the resources of the country India needs to focus on the infrastructure of which the

digitization of the banking system is an essential pillar. The purpose of the study is to highlight the causes for the gap between usage of the digital modes of financial transactions in urban and rural India and what are the ways in which this gap can be bridged. The Niti Aayog has been formulating and working for the digital unification as there is lack of substantial infrastructure in the sector. In order to use the untapped human resource of the young population, it is very much evident that there must be financial inclusion at a mass level. As mobile banking and online portals have increased payments life has become easier but this is not yet particularly true for the people living in the rural areas of India. There are several services that are involved directly or accept payment through these payment modes which have been embraced by the citizens living in urban India. To realize the extent of the size of the reach of these online or mobile payment systems, the statistic to be followed is that till now. These phone wallets have also started promoting their apps on the widespread mode of public media.

The companies are going to aggressively go after users over the next few years, giving many more options. To achieve growth, mobile wallet companies are going offline by integrating digital services with payment-on-site terminals at grocery shops, fuel stations and even low-cost transport systems such as public buses (Mittal and Kumar, 2018). The market is spreading rapidly but what is important to find out is that whether the people living in rural India accept these payment modes and be a part of the improvement. Pieces of evidence and reasons behind the gap between the scale of use of these E-wallets can be understood from the following excerpts from the research papers.

Now a day it is being seen that too many promotions are being done for e-wallets and digital wallets. Rural India accounts for a major portion of India's economy. So, it would have been better to research how this digital transaction affects and spreads in the rural culture when the rural people are suffering from lack of connectivity and electricity. Government is taking steps to make India cashless.

But is it really possible to make India cashless with technological constraints and other loopholes in the economy?

Digital payments are modes of payment which are done electronically. These transactions are directly done via bank and are under Govt. regulations. There are big companies like Paytm, Mobikwik etc. which are dominating the market share of the digital transaction in India (Pachare, 2016). Though India's major portion is covered by rural areas, the usage of the digital transaction in rural India is not yet fully developed due to various reasons which are described in the following article.

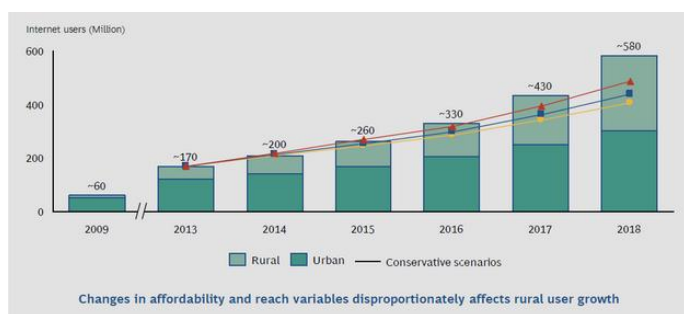
The purpose of the study is to highlight the causes for the gap between usage of the digital modes of financial transactions in urban and rural India and what are the ways in which this gap can be bridged. The NitiAayog has been formulating and working for the digital unification as there is lack of substantial infrastructure in the sector. In order to use the untapped human resource of the young population, it is very much evident that there must be financial inclusion at a mass level (Garg & Panchal, 2017). As mobile banking and online portals have increased payments life has become easier but this is not yet particularly true for the people living in the rural areas of India. There are several services that are involved directly or accept payment through these payment modes which have been embraced by the citizens living in urban India (Naik, 2011).

## II. LITERATURE REVIEW

In this country, the rural population is two-thirds of the country's total population. And among the rural population, the tendency of using the internet is increasing day by day. And in 2020 half of the total internet user will be from the rural area. India is a country where 98 percent of total economic transactions by volume is done through cash (Kumar, 2017). The number of rural internet users is expected to increase from about 120 million in 2015 to above 315 million in 2020. Mainly four types of internet users are there in the rural area- 1.

Ambitious user 2. Late adopter 3. Next wave users 4. Dark on the internet. Ambitious users are the 8% of total rural Indian users, who are mainly the college students and they are connected with urban area, late adopters are the 15% of total rural Indian population who are the conservative users (age 30 to 50), next wave user are the 36% of rural Indian users who are mainly the young female homemaker, dark on the internet user are 25% of total Indian rural user, they are mainly men and women who are over 50 years and not well educated. In India, 93% of rural people are not habituated with any digital transactions so it is a big problem to make them habituated with cashless transaction (Anooja, 2017). As per the findings of Internet and Mobile Association of India (IAMAI), about 23% of the online users prefer internet banking as banking channel in India, second only to ATM which is preferred by 53% (Sikdar and Makkad, 2013). The Government of India envisages rolling out more than 2 lakhs 65,000 rural telecentres (Naik, 2011). In the case of an ambitious user, it can be easy to teach them how digital transaction can take place but the main problem arises with next wave user and dark on internet as they don't have any idea about what the internet is and many of them don't have smartphone also and the digital transaction is available in some featured phone only. So, it is a great challenge to the govt. or digital payment company to make them learn how to use internet and then the procedure of making digital transaction. One more challenge is the internet network that is very poor in rural area where internet connection is the key factor for digital transaction. In relation with its population, significantly low only 19% Indians use the internet but fast-growing internet population of 243 billion in 2014 is an indicator of the sector's huge growth (Gupta & Rajesh, 2018). In case of penetrating digital transaction in rural area our Govt. has to take some serious action. Like the panchayat has to look into this matter, as it is a new option for them and it is a matter of money so it is very natural that they will think twice before taking any step to the school teacher, health officer, and all other educated people

have to educate the rural people about the digital financial transaction, Govt. has to look into the matter of providing good networks in rural area and there should be a customer service centre in a rural area to help them and can make them knowledgeable about the reduction of service tax on digital transaction. The mobile wallet company can take a very important role in penetrating digital transaction in rural area by providing service in their own language other than any specific language. It is very clear that if digital transaction has to succeed, the people and the Govt. must work hard to penetrate such in rural area (Ravi, 2017).



(Source: Medianama.com)

Figure 1 India internet population to reach half a billion by 2018

From the above chart, it can be seen that how fast Internet users and internet availability is growing in India. It has taken a huge leap from 2017 to 2018. The internet users are increasing which in turn improvises the usage of digital wallets in rural sectors. The users increased to 580 million and expected to get double in 2020 (Ravi, 2017).

According to Shengde et al. (2017), an analysis can be done to the current cardholders in rural sectors. This survey may help to find out the number of defaulters and such defaulters can be given easier installment options to settle the claim. This may encourage other people to use more credit and debit cards.

This paper aims to tap the potential market of 600–700 million Indians living in rural areas by using information technology to provide them with much-needed connectivity and ICT-based services

(Kumar, 2004). In the current scenario, there has been a great increase in the market share of the e-wallet giants as many people are investing in these e-wallets. Government has implemented various types of e-wallets and digital account id. In February 2017, digital wallet companies have shown a growth of 271 % for a total value of USD 2.8 billion (Barman, 2018). UPI and BHIM id are the new entrant in the market initiated by Google which allows the customers to do online transaction without any hassle (Ravi, 2017). Previously, before demonetization, people were afraid to use digital wallets as they had lesser knowledge about the procedures. But now, after the demonetization effect, our honourable Prime Minister Shri Narendra Modi have taken huge initiatives to promote these companies and make India cashless. Rural India accounts for major economic improvements in the country. As a result, many big companies like Paytm, Mobikwik etc. are trying to capture the rural market by their operations. Our Hon'ble Prime Minister Shri Narendra Modi is now providing many schemes for the people who are using digital mode of payment. Timed issuance of payment banks, easing the norms of mobile wallet transactions, increasing the bandwidth to rural locations, and government encouraging public with incentive schemes for using the UPI (United Payment Interface), reducing the service tax over digital transactions over government e-services signify that there is huge transformation taking place towards digital payments. In order to encourage digital transaction in the economy, Government has imposed various rules and regulations on cash transactions which are as follows:

1. There have been charges imposed on withdrawal of amount over certain limit fixed by the RBI.
2. Imposing many laws and boundaries for making cash payments to the shopkeepers and vendors.

As per RBI reports, digital transactions have increased drastically to 13.5% in 2017. Maximum transactions were done in March 2017 which was



almost INR 150 trillion. These figures show that India (mainly in rural India) has been advancing in the way of digital transaction.

Vodafone, Airtel, jio are the major telecommunication companies which are also providing much help to the rural as well as urban people for using e-wallets. These companies have come up with their own wallets like M-Pesa, Airtel money, Jio money respectively to ease the procedure of using plastic money.

Table 1 Payment options

Options Used for payment	Frequency	Total	Percentage
Cash	85	100	85
Cheque	52	100	52
Demand Draft	10	100	10
NEFT or RTGS	14	100	14
Debi card/Credit card	42	100	42
e-wallet	8	100	8
Mobile wallet	11	100	11
UPI apps	3	100	3
Gift card	2	100	2
AEPS (Aadhaar enabled payment system)	7	100	7
USSD	1	100	1
Card swipe machine	20	100	20

In the above table, you can see that majority transactions have been done via cash and cheque. Then follows debit and credit card and eventually the rest. It is quite evident that people still now believe in paying via cash than using alternate methods (electronic transfer or e-wallets). It will take time to get habituated in the wallet method of payment.

According to Shah (2017), there are a few challenges which are being faced to implement the digital transaction mode in rural India. The challenges are as follows-

1. The people in the rural sector are yet to give up their habit of using liquid money and implement the habit of using digital transaction mode.

2. The second biggest challenge the Govt. is facing is the lack of bandwidth and technology in the rural area. The urban areas of India are quite developed in terms of technology and availability of internet. But the rural Indian places are yet to receive proper internet connection and technological advancements. Though Jio is trying to improve the situation, it will take more time to improvise in this sector.

3. Another challenge which is being noticed is in the case of using digital wallets while making any payments, the customers have to pay some minimal amount extra which otherwise in cash payments you need not have to pay.

Beside all these technical challenges, there are also challenges that the Government receives from the customers. The main one of that is the trust issue. Trust issue creates hindrance in the proper usage of the digital transaction in India. Due to several fraud cases like the Rose Valley and the Sarada case, people have now become more conscious and are afraid to try some new mode.

There are various aspects and segments, focusing on the areas of Information, Communication and Technology (ICT) the paper has visited and emphasized on some areas by which ICT has reached and interacted with the masses, in which the status of the Digital infrastructure can be assessed and the gap between the Rural and Urban India can be abolished.

The technology is the prime foundation for the banks in terms of digitization of the banking system and financial inclusion the people living in the rural areas. In the rural sector, around 1% to 4% for transactions to bank accounts, consumers are wary of using mobile wallets for the business transaction (Shakir et al., 2017). SatyaNadella, Microsoft CEO has shown interest in becoming a part of Indian digitalization and he gave a proposal to provide broadband technology services in over 5 lakhs villages (Vashishta et al., 2017).

The basic step needed for the digital usage in rural India is to focus on the Information, Communication and Telephony (ICT) and the important thing that is to be kept in mind is that the way the emerging economies will use technology cannot be the same as the way the developed nations will use it.

Although the social network data has indicated a positive vibe in terms of usage of digital payments there is huge effort needed for the example of rural India to shift to digital modes of payment.

There are opportunities and obstacles in unifying the rural population with the urban population. Working on the problems faced what it can be concluded that the enhanced solutions for the Aadhaar based payments system or the UPI wallets can be the major contributors responsible for this gap abolition.

Indian micro, small and medium enterprise sector contributes considerable share in India's GDP (Mali, 2016). All these enterprises are affected due to this cashless initiative. UPI, e-wallets created an uprising trend in capturing the market since demonetization has been announced. These enterprises are rural based mostly and had a huge impact on Indian economy.

Financial Inclusion is where individuals and businesses have access to useful and affordable financial products and services to meet their needs that are delivered in a more sustainable way. The target for National Rural Financial Inclusion Plan is to provide access to comprehensive financial services to at least 30% (22.87 million) of the excluded rural cultivator across different bank branches all over the country by 2020 (Roberts et al.,

2017).

Bayero (2015), has worked on the structure in developing countries. Although little research has been conducted since the introduction of the Cashless economy policy, this is relevant to the situation in India as rural India is far from the growth metrics that is needed. The previous review of the research papers has indicated that there is not much research on the correlation between the mode of digital payments and the financial inclusion of the mass of the population. In order to understand the present scenario and realize the matter of this paper one must have the delicate intricacies involved in mind.

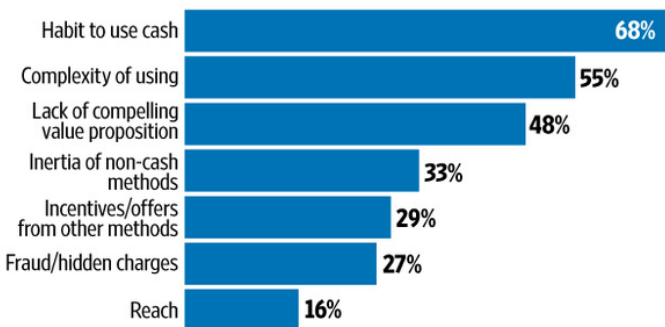
### III. METHODOLOGY

This research paper shows the condition of the digital transaction in rural India and its growth in various sectors. It also portrays the challenges faced while implementing it. This also talks about the role played by government in digitalizing rural India. Secondary data has been used for the research. Data source for this research was taken from the journals Digital payments system and rural, The road to digitalization: the case of Kerala, A study on channel Preferences among urban and rural banking customers, Cashless rural economy- A dream or reality?, Digital payments for rural India- challenges and opportunities, Internet banking in India- a perspective of benefits and challenges involved, Digital banking new horizons in a cash-light India, The impact of internet banking on bank performance and risk: the Indian experience, Exploring the factors affecting the adoption of mobile financial services among the rural underbanked, A review of the rural-digital policy agenda from a community resilience perspective, Designing a sustainable business model for e-governance embedded rural telecentres (EGERT) in India, Echoupals: A study on the financial sustainability of village internet centres in rural Madhya Pradesh, Digital India with e-commerce revolution in rural India: transform India digitally and economically. Fourteen journals have been randomly collected as a source of this data.

Content analysis was used to evaluate the collected data. This analysis method was required to understand the current situation of the digital transaction of rural area as different graph and charts were taken to describe the situation. Observation tools have been used for analysis technique means the Continuous gathering of assessment and using multiple methods of meaningful, authentic tasks in real reading situations tracks over time and is essential in developing a comprehensive picture of a situation.

#### IV. RESULTS

This data has been collected from different sources to analyze the current situation of digital payment in rural India. The purpose of collecting this data was to interpret the coverage of digital payments system. The below figures are interpreted to highlight the outcome of this system.



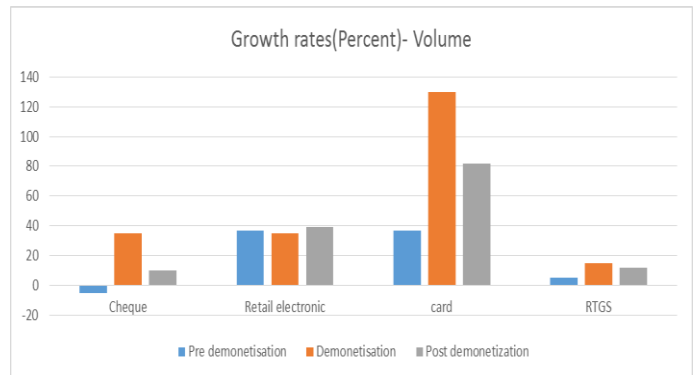
(Source: State Bank of India website)

Figure 2 Key barriers to digital payment

Figure 3 shows the key barriers to digital payment in India where the main key factors are a habit to use cash, the complexity of using, lack of compelling value proposition, the inertia of non-cash method, incentives offer from other methods, fraud/ hidden charges, reach.

In India, 68% people are habituated in using cash so it is quite difficult for them to adopt new technology like digital payment. 55 percent of people in India think that the method of digital payment is more complex than using cash. Lack of a compelling value proposition is another reason that 48% of the Indian population don't want to use digital payment. The inertia of non-cash method is another barrier to digital payment and attractive

incentives from another method that is more attractive than digital payment so 29% of total Indian population don't use this payment system. The hidden charge is another reason that 27% of people afraid of using this method. Only 16 people out of 100 people are using digital payment in India.



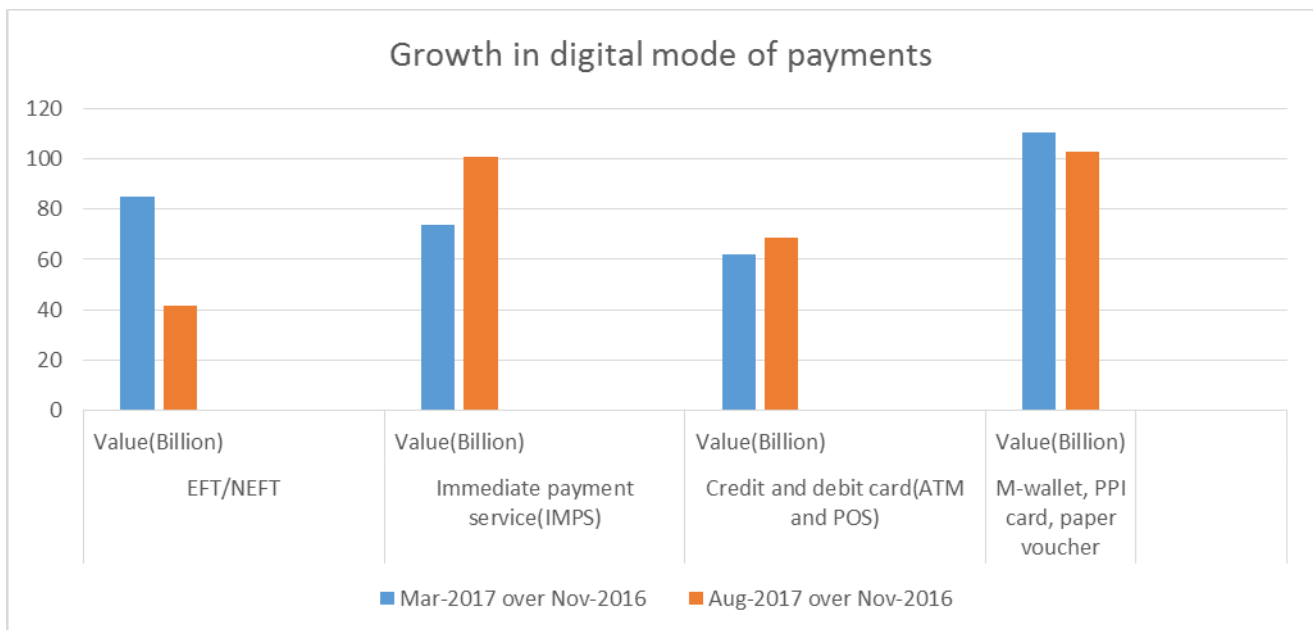
(Source: RBI)

Figure 3 Growth of electronic payments in pre-demonetization, demonetization and post demonetization era

Figure 3 portrays the growth of usage of the cheque, retail electronic, card and RTGS modes during pre-demonetization, demonetization and post demonetization era. Demonetization happened in India on November 8, 2016. Since then, cash flow has reduced and people struggled in getting raw cash in hand (as per reports). The government has encouraged usage of digital mode of payment since then. The above figure shows the growth and fall of digital mode of payments and also portrays the use of cheque facilities. From the figure, it can be derived that cheque facility was hardly used in the pre-demonetization period with the negative percent of volume. But, due to unavailability of cash during demonetization era, cheques were used at a greater volume. Again, after demonetization had taken place, cheque usage dropped down. In the case of retail electronic, the usage did not change much regardless of the period. There is a huge change in card payments (online or in retails). The usage increased from 38% to more than 120% during demonetization. This is simply because the cash was not available in hands at that time and people were forced to use cards and digital wallets to make transactions. But, after the demonetization period was over, the card usage dropped to a reasonable limit. Though it was more than what was used in the pre-demonetization era. RTGS modes were used

during large payments. It was very rarely used in the pre-demonetization era with usage volume of 3-5%. It increased during the demonetization era with 15%

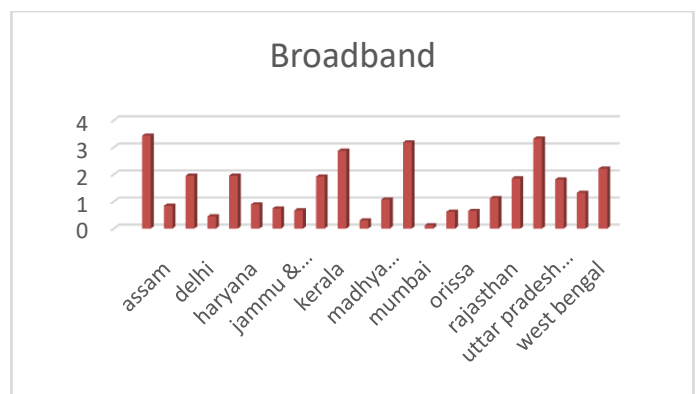
usage but again dropped to 10% in the post demonetization period.



(Source: RBI)

Figure 4 Comparison of the growth of digital payments in 2017 over 2016

Figure 4 depicts how the performance of EFT/NEFT, Immediate Payment Service (IMPS), Cards (Credit and debit) and M-wallets have improved since 2016. The above figure shows that EFT/NEFT usage in March 2017 increased at a rapid pace with 80 billion USD more than in November 2016. But compared to such growth, the amount dropped down to 40 billion USD in the fall of 2017. In the case of IMPS, the amount of increase was 70 billion USD in March 2017 over November 2016. And surprisingly, the transaction amount further increased to 100 billion USD in August 2017 over November 2016. The card payment transactions too increased to over 60 billion USD in March 2017 over the fall of 2016. This happened due to the encouragement of usage of digital mode of payments by the Govt. The usage remained static since then. The huge increase can be seen in M-wallets. People are more encouraged by using M-wallets with apps like PayTM, Mobikwik etc. People in India have become more encouraged in using digital mode of payment than carrying raw cash.



(Source: medianama.com)

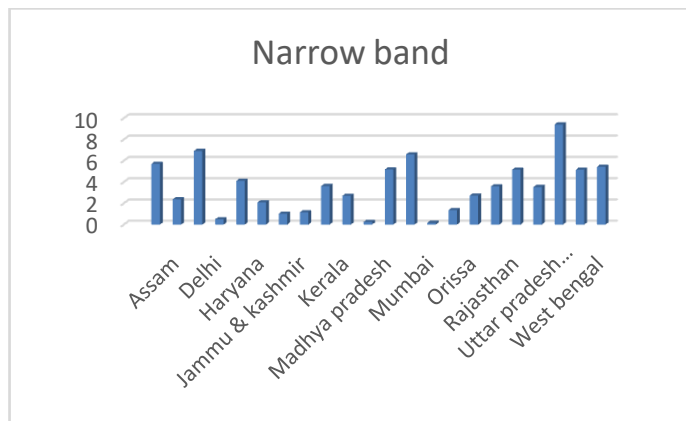
Figure 5 Broadband usage

Figure 5 states that what we use a wired connection in our home. Broadband refers to telecommunication in which a wide band of frequencies is available to transmit information. Because a wide band of frequencies is available, information can be multiplexed and sent on many different frequencies or channels within the band concurrently, allowing more information to be transmitted in a given amount of time. The increasing number of broadband indicates that the infrastructure is accepted well.

In western Uttar Pradesh, the total subscribers increased from 10.98 to 11.21, which is an increase



of 0.41%. In rural West Bengal, the subscribers were 7.36 in 2015 and 7.64 in 2016, which is an increase of 0.28%. The highest percentage of usage of broadband in India in Andhra Pradesh which is 3.43 and the lowest usages of broadband in India in Mumbai which is 0.12 in 2016.



(Source: medianama.com)

Figure 6 Narrowband usage

Figure 6 states that what we use in smartphones. Narrowband refers to data communication and telecommunication tools, technologies and services that utilize a narrower set or band of frequencies in the communication channel. These utilize the channel frequency that is considered flat or which will use a lesser number of frequency sets. Narrowband is also used in sending audio spectrums that consume a restricted range of frequencies. The increasing number of narrowband indicates that the infrastructure is accepted well. The highest percentage of usage of narrowband in India in Uttar Pradesh which is 9.4 and the lowest usages of narrowband in India in Mumbai which is 0.16 in 2016.

## V. DISCUSSION

In the era of digitalization in the modern world, India has also stepped up in this purpose. There have been several initiatives for making India digital. This paper emphasizes on the penetration of digital payments in rural side of India. But, before only concentrating on the rural side, the whole of India has to be considered because rural India is a part of India. The call for demonetization paved the way for digitalization. Demonetization created a cash crisis in the country and as a result, people were forced to use the digital mode of payment. Despite problems

in people in rural side, the process kept on going. Some people complained about the shops not accepting m-wallets, others complained about people not aware of such methods. There were ups and downs during the process but somehow it continued. The main objective of the paper was to show how successful is digital payment penetration in the rural Indian market. The facts and figures show that before 2016, the majority part of India used raw cash method to settle transactions. Many shops did not even use EDC machine or card swipe machine. People were more habituated in using raw cash than transacting through bank directly. The scenario changed during the end of 2016 when demonetization decision was implemented by Govt. of India and the supply of raw cash stopped. Then, people were forced to use cards, m-wallets, RTGS methods etc. Initially, people were not too much habituated with the process since, in rural India, very handful of people knew the use of cards. It took time but, after the demonetization period, the uses of these electronic mediums increased to a greater extent. People faced problems but overcame with the problem soon enough. Gradually people started using smartphones, being the prices of smartphones getting lower, and started using M-wallets. In many villages and rural side, it is found that previously there was no EDC machine or no process of accepting payments via M-wallets. But, since the demonetization period in 2016, card swiping machines are visible in many shops. People became more sensitive and careful with the issue of storing raw cash in hand. Hence, they indulged more in the practice of using digital mode. In many rural-based businesses, people are using RTGS and NEFT modes rather than giving bulk cash to the suppliers. So, from the analysis, the first objective of the paper got a huge thumbs up as rural India is progressing towards becoming digital.

Another objective of the paper was to find out the future trend of the digital transaction in rural India. After the demonetization drive by Govt. of India in 2016, m-wallet giants like PayTM, Mobikwik have focused their operation in India. But, MoneyOnMobile, a new made in India venture have come up to focus mainly on the untapped potential of rural India. The facts above show that rural India has been progressing towards becoming cashless. It will be a challenge to intervene in the rural market since there are challenges including uneducated

people, lack of internet in rural sectors, low per capita income. Many people in rural sectors hardly use smartphones. This is not because they cannot afford but they lack knowledge in digital payment mode. According to the facts, digitalization in rural India has been advancing despite the challenges. Govt. has been initiating several programs to promote the cashless basis in whole India and rural India is no exception. The future is very prospective in terms of digitalization in rural India and it may have to overcome few barriers and challenges.

Finally, it can be inferred that in the recent years, digitalization has improved if seen from the whole of India's perspective. India is a developing nation and it has a huge scope for improvement. Government's initiative of making India cashless has progressed well since 2016. The future also looks promising and hope it may reach a better position in 2020.

## VI. CONCLUSION

The paper is titled penetration of digital transaction in rural India. The title gives an idea of the present study and what are the implications and what can be realized from the study. The paper looks into the data regarding the various entities and attributes that are involved in the study of the digital transactions in India.

The primary finding of the study is that the major reasons behind the lack of penetration of digital transactions in figure 1 is the inertia that inhibits people from shifting to various payment modes other than cash, to which they are familiar with since a very long time. More than two-thirds of the population are not users of digital payments due to habit.

The data from figure 2 suggests that during demonetization the growth rate in card payment more than doubled with a growth rate of more than 120%. There was no dearth of adequate technical support, infrastructure or support from the financial institution's end throughout the periods of time before, during and after demonetization. The growth rate specifically doubled during demonetization as there no other option available for payment. This implies that the users are reluctant to use payment methods other than cash.

The data from figure 5 shows that the broadband usage is increasing in many rural sectors of various states in India. But, there are still some states which are lagging behind. Mumbai needs to get up and work more on rural digitalization advancement as developing one nation brings India close to being developed. The cashless initiative will only become successful when all the states of India are developed and currently the states are going on the success path.

The change in the usage pattern also proves the fact it is more of a need-based action. After the demonetization, the usage again declined to the pre-demonetization levels. The complexity of using and lack of adequate value proposition is also major reasons for the lack of penetration of digital transactions.

Around 50% of the people do not opt for digital payment due to the complexity of using and lack of value proposition. Another contributing factor is the incentive from the cash transactions for instance often it is observed that there are discounts in terms of cash or kind when the customer pays in cash at a small-scale retail outlet. These added on incentives often deter the customer's will to pay by digital means. These incentives should be eradicated from the system. Instead of these incentives can be offered if the customer is willing to pay by digital means then it would boost the use of digital transactions. These benefits can be discount on the customer's end and tax rebate or tax refund at the end of the accounting period for the retail dealer. These discounts have dependability on various other factors as well.

The increase in the volume of the transactions will lead to lower cost per transaction as the establishment of large-scale and strong infrastructure needs larger funds. The incentives need to be more lucrative on the dealers' end as it is observed from this study that during demonetization many retailers were not willing to accept payment modes other than cash. The reason behind it may be that even the large-scale dealers who supply the products to the retailers are not willing to accept payments in modes

other than cash. In order to maintain operating capital, small-scale retailers are compelled to take cash from the customers.

The limitation of this study is that the data and the survey could have been more refined and specific without the time constraints. Visiting banks and interacting with the customers, getting to know the loopholes and diminishing factors that inhibit the customers from choosing digital payment as a mode of payment in both personal and commercial transactions. In a country like India, with a population of more than 1.3 Billion, the survey is a gargantuan task which involves huge cost and time.

The scope of future research would be designating the appropriate sample for conducting the survey. With the demographics in India changing and India having the young population, the use of smartphones will increase hugely. The data that can be collected from the social media in the future will be huge. Methods of the survey can change from physical to online. The better understanding of the preferences and the inhibition forces of the users will help in increasing the usage of digital transactions and filling up the loopholes in the system.

The banking system should promote the use of non-cash transaction by providing incentives. The small-scale business constitutes the major part of the transactions. Focusing on these business entities to use non-cash transactions will influence their customers to use digital modes of payment. What can be concluded from this study is that the major reason for lack of penetration of digital transactions is the inertia of the users, and lack of incentives or value proposition in terms of motivation for the users, both the retail customers as well as the small-scale business entities.

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