



IMPACT OF COVID ADOPTION OF CASHLESS METHODS AMONG GENERAL PUBLIC IN INDIA

Harikumar Pallathadka, Laxmi Kirana Pallathadka*

Manipur International University, Imphal, Manipur, India

Correspondence email: *laxmikirana@miu.edu.in

ABSTRACT

The global pandemic of COVID 19 has emerged as one of the significant threats to the Indian economy and the financial markets present in the country. To contain the spread of Severe Acute Respiratory Syndrome Coronavirus 2 (SARSCoV2), our government implemented a variety of measures, including a nationwide lockdown, limiting public transportation, prohibiting large public gatherings, prohibiting religious, cultural, and social assemblages of any kind, advising the general public not to leave their homes for non-essentials or casual business, instituting social distancing as a norm, allowing work from home, and enforcing proper This pandemic has not only harmed local businesses and small vendors but also had its impact big businesses. In such challenging times, digital transactions have proven to be a boon for ordinary people by helping them deal with their important business and service-related transactions safely and securely through the internet. A Sample of 243 respondents was surveyed to know different modes of transaction adapted during the pandemic and the impact of covid on the adoption of cashless methods among the general public in India. Multiple regression was applied to analyze the results. It is found that there is a significant impact of Covid in the adaption of cashless methods among the general public of India.

Keywords: Online Transactions, Digital Payments, Implementation, Adaptation, Accessibility.

INTRODUCTION

Though cashless payments and digital transactions were not new to India, it was not done on a large scale. There was much scrutiny around it, like people usually did not feel safe and could not blindly trust online transactions and digital payments. Card companies, banks, finance tech companies, and the government were already equipped with the necessary tech and fintech to do large sums of transactions for a billion people. So, implementation of tech or availability of fintech was never an issue in India as we had the necessary transactions mechanisms. Debit cards, credit cards, and other contactless cards use NFC (Near Field Communication) technology, which helps exchange data between banks and users or finance tech companies and the user. It does not require any physical contact such as swiping, inserting, and telling the pin. This technology made the cashless transaction a beneficial medium in the pandemic period that people can rely on upon without the need to go out

(Jaiswal *et al.*, 2018).

The main limitation of NFC is that it does not support vast quantities of money; the individual banks immediately rectified this limitation with the assistance of the RBI. The daily/monthly transaction limits and the maximum transaction limits also increased higher than usual. It helped people do deal with most of their transactions sitting at their homes. We have also seen an increased use of scanning QR codes for local transactions like buying groceries in shops or purchasing stationery items in local stationaries; QR scanning for payments is another technology that uses no physical contact with the sellers. This process works when the user scans a QR code through an app that can digitally pay the seller from their bank, this method was highly convenient in purchasing daily necessities and used in masses. In Pre COVID era, this method was in noticeable use in the suburbs and rural areas, and it was only seen in cities. However, post-COVID, QR scanning in digital transactions saw a massive increase in use. Earlier, the Ministry of Information Technology (Government of India) was already promoting a cashless India by launching schemes like "Digital India Programme" "Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)." "NREGA-SOFT. " It is seen that more than 90% of the informal sector runs on cash even when they get interested on payments through card or by digital transactions. This issue mainly comes from the challenges of card acceptance technology in the informal sector and sellers being less aware of the possible methods they can use for transactions. Thus, rural awareness remains a significant problem in implementing schemes like Digital India Programme (Gupta *et al.*, 2021).

In COVID lockdown, small vendors and the informal sector had to bear heavy losses; some even had to face the menace of surviving without any financial backup. All of it could be easily avoided if there was proper implementation and awareness in the rural areas and informal sector about the benefits and uses of digital transactions. Small merchants and vendors have an over-reliance on cash and have minimal exposure to other available transactions modes. It could be solved by a widespread rollout of Point of Sale (POS) devices in the rural and informal sector, enabling and accelerating the use of card acceptance and online transactions. Increasingly we are seeing mobile number linked POS services that can further ease the use of card payments and online transactions (Saha, 2021).

LITERATURE REVIEW

As per the Reserve Bank of India (RBI), the transaction ecosystem has seen many online and digital payments developments in the last two years, resulting in innovation in the platforms and services relating to online transactions. Firms, corporates, governments, individuals, other economic groups have heavily relied on digital transactions in the COVID era, trying to minimize the impact of COVID on the Indian economy. To comprehend the areas in which assistance is required to progress and to ensure a safe and secure payment system, banks and financial technology companies conducted extensive research and analysis of various data/statistics and surveys published by global financial agencies, including the World Bank, Financial Stability Board (FSB), and Committee on Payments and Infrastructure (CPI). Reserve Bank of India (RBI) also launched its regulations on Payment Aggregators (PAs) and Payment Gateways (PGs). There were guidelines issued that PAs cannot store the card credentials of both store and user in their database. They also cannot store the payment records of the transactions on their servers.

Digital payments are a way of virtually exchanging money through online modes. In this process, both the buyer and seller send or receive money with the help of internet transactions, and it can be for purchasing goods or services or paying salaries to employees. This process is sometimes also known as an electronic transaction. This method has many benefits: faster transactions, saving funds effectively, efficient money handling, monetary regulations, transparency, and easier accessibility (Wu *et al.*, 2016).

There are many advantages of using digital payments. People can make transactions just with the help of their smartphones with an internet connection. There is no involvement of physical contact, which was crucial in COVID times. Not only the obvious, but it is also very convenient to use digital transactions than regular cash-based transfers as there are no problems with down payments, and people do not need to worry about traveling without change. The Unified Theory of Acceptance and Use of Technology (UTAUT) theory has proved that it is much easier and efficient to use online transactions over a cash-based exchange. UTAUT model targets to satisfy and solve the acceptance of new finance-related technology and tracks the acceptance behavior of users with new information technology (Sharma et al., 2020).

One more factor is Performance Expectancy (PEs), which refers to how much the user is expecting with the help of the system, how the user will benefit from it, and how much the system can ease up their work. Previous thesis and research work explain in detail that Performance Expectancy significantly improves and influences the user's belief in digital payments (Raza et al., 2021).

People use the system if it only benefits them in their achievement or work. That further motivates and encourages the user to use the system repeatedly. If the technology does not benefit, the user tends to return to their previous modes of payments. So, having significant value and effectiveness is necessary for digital payments and public interactions (Chayomchai et al., 2021).

In the words of (Chopdar et al., 2018), Effort Expectancy is the level of easiness in using any new information technology in any system. In easier words, this means that Effort Expectancy refers to how simple is the user interface and the new information technology is to understand for the user. The more difficult and complex the technology is for its targeted audience, the higher the Effort Expectancy (Chopdar et al., 2018). Digital payments were invented to ease the load of cash-based transactions and the livelihoods of ordinary people. When a person finds it easy to use online transactions, that person refers it to his/her family, friends, and relatives. In the COVID years, sharing such technology with older generations and people unaware of such means was more than necessary. Moreover, it is seen in different research works that the sharing of such finance technology and online transaction platforms are mostly done among family, friends, and relatives by one user who is extremely satisfied with the long-term use of the system (Sivathanu et al., 2016).

Another factor was the fantasy of using cutting-edge technology, popular among most tech-savvy individuals who work with technology daily; these individuals enjoy testing out new technologies as they become available, and satisfying such minds was critical to attracting a larger audience. Given that these people are dissatisfied with digital payments technology, they will fall under the past user's category. They have used the technology once but later stopped using it because they were not pleased with it. Losing such people is a massive loss as it stops the chain of sharing of new technology. People who are eager and interested to learn new technology are often the mass influencer and convincers who spread the modes of digital payments to his/her circle (Venkatesh et al., 2012). Using new technologies must include proper guidance, accessibility to customer care, and training required to use such technology efficiently. If even one is missing, the user can get impatient in learning or using the new technology. Mobile transaction tools need proper infrastructure and technicalities for proper functioning and usage. Accessibility in various smartphone User Interfaces (UIs), good network connectivity, and availability in different Operating Systems (OS) are essential for success in this field as the competition is generally very high. Research data has found that all this affects users' behavioral intentions to digital payments technology (Mukherjee et al., 2007). Therefore, it was found that facilitating conditions such as guidance, assistance, customer support, and training regarding online transaction methods can increase the use of digital payments (Singh and Srivastava, 2018).

It was confirmed by previous research on the impact of e-commerce on the general public. Suppose

a user experiences some level of innovation in their daily lives. In that case, they are more likely to be intrigued by newer technology and accept it willingly and readily, including their motivation to try and adapt to new technologies that enter the market. Other works also suggest that if a user has higher levels of innovation, then they will lean towards the side of new technologies more than others would ever do. However, this is based on the hypothesis that the security and safety of that person's data are not sacrificed, and their innovativeness has an overall positive experience with the technology (Fang *et al.*, 2019).

OBJECTIVE

1. To find different modes of money transactions adapted during the pandemic.
2. To find the impact of covid on the adoption of cashless methods among the general public in India.

MATERIALS AND METHOD

A sample of 243 people was surveyed with the help of a questionnaire to know different modes of transaction adapted during the pandemic and the impact of covid on adopting cashless methods among the general public in India. The nature of the study is empirical, and the data collection method was random sampling. The statistical tool called multiple regression was applied to reach results.

FINDINGS

Table 1 demonstrates the general profile of the respondents in which 243 respondents were surveyed, and among them, 57.2% are male, and 42.8% are female. 21.8% are from 18-26 yrs, 44.0% belong to the age group 26-36 yrs, and 34.2% are above 36 yrs. 21.0% of the respondents were students, 28.4% were business people, 32.5% were salaried, and 18.1% were in other working sectors.

Table 1 General profile of the respondents

Variable	No. of respondents	Total % age
Gender		
Male	139	57.2
Female	104	42.8
Total	243	100
Age		
18-26 yrs	53	21.8
26-36 yrs	107	44.0
Above 36 yrs	83	34.2
Total	243	100

Occupation		
Students	51	21.0
Businessperson	69	28.4
Salaried	79	32.5
Others	44	18.1
Total	243	100

Table 2 Adoption of cashless methods

Sl. No.	Adoption of cashless methods
1.	Use of E-Wallet and mobile wallets for personal safety
2.	Scanning of QR codes for local cashless transactions
3.	UTAUT model was adopted to satisfy and solve the acceptance of new finance-related technology
4.	Point of Sale (POS) devices in the rural and informal sector for cashless transactions
5.	Use vending machines at hospitals, offices, airport terminals, and other places.
6.	NFC technology was used to exchange data between banks and user or finance tech companies, and the user
7.	The use of Cashless tap cards became prevalent during the pandemic.
8.	Digital payments were adopted to ease the livelihoods of ordinary people.
9.	Fastag modes of cashless payment were popularly used at road tolls.
10.	Gift cards and vouchers became popular instead of gifts
DV	The overall impact of covid on the adoption of cashless methods

Table 3, 4, and 5 shows the relationship between the 10 independent variables and 1 dependent variable, “Overall impact of covid on the adoption of cashless methods.”

Table 3 “Model Summary”

“Model”	“R”	“R Square”	“Adjusted R Square”	“Std. Error of the Estimate”
1	.888 ^a	.788	.779	.37485
a. Predictors: (Constant), NFC technology, was used to exchange data for financial transactions, scanning QR codes, Point of Sale (POS) devices in the rural and informal sector. UTAUT model was adopted to satisfy and solve finance-related issues. Digital payments were adopted to ease livelihoods. Use of E-Wallet, mobile wallets, Cashless tap cards, vending machines at hospitals, offices, airport terminals, and other places. Fastag modes of cashless payment at road tolls. Gift cards and vouchers were given instead of gifts.				

The value of the adjusted R square is 0.779, which means that the model explains around 78% of the variation. Table 4 shows the values of ANOVA, which is significant (sig. value below 0.05), reflecting the significant impact of independent variables on the dependent variable.

Table 4 “ANOVA”

“Model”	“Sum Squares”	of “df”	“Mean Square”	“F”	“Sig.”
1	Regression	121.360	10	12.136	.86.371
	Residual	32.599	232	.141	
	Total	153.959	242		
DV: Overall impact of covid on the adoption of cashless methods					
b. Predictors: (Constant) NFC technology was used to exchange data for financial transactions, scanning QR codes, and Point of Sale (POS) devices in the rural and informal sectors. UTAUT model was adopted to satisfy and solve finance-related issues. Digital payments were adopted to ease livelihoods. Use of E-Wallet, mobile wallets, Cashless tap cards, vending machines at hospitals, offices, airport terminals, and other places. Fastag modes of cashless payment at road tolls. Gift cards and vouchers were given instead of gifts.					

Table 3 presents the value of ANOVA and F value. The value in the significance column of table 4 is .000, which means that one or more variables are significant on the dependent variable. The impact of independent variables on dependent has been explained in table 5.

Table 5 “Coefficient”

“Model”	“Unstandardized Coefficients”		Standardized Coefficients	“t”	“Sig.”
	“B”	“Std. Error”	“Beta”		
(Constant)	.568	.247		2.298	.022
Use of E-Wallet and mobile wallets	-.076	.027	-.086	-2.803	.005
Scanning of QR codes	.101	.028	.114	3.569	.000
UTAUT model was adopted to satisfy and solve finance-related technology	-.007	.035	-.007	-.194	.846
Point of Sale (POS) devices in the rural and informal sector	-.085	.034	-.091	-2.489	.014
Use of vending machines at hospitals, offices, airport terminals.	-.006	.032	-.006	-.171	.865
NFC technology was used to exchange data for financial transactions	.025	.043	.022	.586	.558
Use of Cashless tap cards	.233	.053	.225	4.375	.000
Digital payments were adopted to ease livelihoods	.548	.054	.538	10.154	.000
Fastag modes of cashless payment at road tolls	.197	.046	.203	4.232	.000
Gift cards and vouchers instead of gifts	-.066	.033	-.063	-2.014	.045
DV: Overall impact of covid on the adoption of cashless methods					

Table 5 shows that out of 10 variables, 7 variables, namely Point of Sale (POS) devices in the rural and informal sector, Digital payments were adopted to ease livelihoods. Use of E-Wallet and mobile wallets, Scanning of QR codes, Use of Cashless tap cards, Fastag modes of cashless payment at road tolls, and Gift cards and vouchers instead of gifts shows the significant impact of covid on the adoption of cashless methods as the value in the significant is below the significant value (0.05). The variables, namely the UTAUT model, were adopted to satisfy and solve finance-related technology,

using vending machines at hospitals, offices, airport terminals. NFC technology was used to exchange data for financial transactions has no significant impact of covid on the adoption of cashless methods as the value in the significant column is above (0.05).

CONCLUSION

The research was done to develop and increase the user base of digital transactions and thereby improve the user experience of online transactions. The research was concluded because of the COVID 19 pandemic and the high need to shift online methods of transactions. There have been changing behavioral patterns in the banking and finance sectors with the ongoing pandemic. It is essential to regulate and monitor user satisfaction and acceptance in using such systems from a technological advancement standpoint. It was important to note how technology can increase productivity and ease up people's livelihoods during the pandemic. The crucial areas that need more improvement and proper regulations will be the service factors like public security, anti-data theft technological implementations, and adaptability of newer technologies among the general public (Bhuvana et al., 2021).

As the COVID 19 pandemic continues, it will be interesting to see and experience the ever-growing demands of online transactions methods. For sure, post-pandemic will be living in much more digital transactions friendly India than it was post-pandemic. Also, to look forward and repair the wounded economy, we will need the methods of digital transactions more than ever. Can we entirely rely on it and create a completely cashless economy like the Prime Minister of India, Narendra Modi, visions and targets to achieve. Anyways, it remains evident that digital transactions will lead us into a better future in the post COVID era and help us shape and evolve the payments ecosystems (Jesuthasan et al., 2021).

The study concludes that various modes of cashless transactions exist, including Point of Sale (POS) devices in the rural and informal sectors, the adoption of digital payments to ease livelihoods, the use of e-wallets and mobile wallets, the scanning of QR codes, the use of cashless tap cards, the use of Fastag modes of cashless payment at road tolls, and the use of gift cards and vouchers instead of gifts during the pandemic. It is also found that there is a significant impact of Covid on the adoption of cashless methods among the general public of India.

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