

Research Article

Digital Payment Adoption during COVID-19 Situation among Urban Smartphone users in Ranchi, Jharkhand, India

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A B S T R A C T

Objective: In this study, the researcher tends to understand the impact of COVID-19 outbreak on the adoption and usage of digital payment system among the active internet users.

Methods: The quantitative methodology has been adopted to conduct this study a questionnaire was shared among the active internet users to collect the data online via WhatsApp. The lockdown prevented the collection of data physically and therefore the users who do not use internet are excluded. As this study aims to evaluate the influence of COVID-19 and the changes in the usage of digital payments, the exclusion did not affect the results which are collected.

Results: The researcher finds that the majority of users are of the age group 25-35, who are employed or salaried have higher education and are aware about the digital payment and transaction system; who feared the cash transaction during COVID-19 situation and therefore opting digital payment system for their convenience.

Conclusion: The findings shows that to minimise the chance of getting infected by the novel coronavirus, consumers are clearly going for contact less options such as, mobile banking/ payments, tap-on-phone and link-based payments on their smartphones.

Keywords: Digital Payments, COVID-19, Cashless Payment, Online Transactions

Introduction

The Coronavirus disease (COVID-19) is the recent pandemic which has affected the whole world badly. It was first identified amid an outbreak of respiratory illness in Wuhan city, Hubei Province of China. On 11th March 2020 the World Health Organisation (WHO) declared it as pandemic where there are more than 118,000 cases in 114 countries and 4291 people have lost their lives (WHO, 2020). Since

then the number of cases are increasing day by day and the number of fatalities are more than 4,105,847 globally (Worldometer, July 19,2021).

India has recently surpassed the second wave of COVID-19 pandemic having an all-time faster spreading of virus and deaths across the country. Last year on June 18th India recorded 11000 cases and in the next 60 days it added 35000 new cases on average every day. This year on

10th February 2021, the second wave hit India with the confirmed cases of 11000 cases and in next 50 days adding up to 22000 new cases daily on average (BBC India). But in the following days it increased sharply and the number of daily average reported each day is 330,745. Though India has administered at least 40,15,16,002 doses of COVID vaccines so far about 29% of country's total population (MoHFW, July 19, 2021). People have becoming more cautious and filled with fear, though a lot of awareness and public safety measures have been taken by the government administration. The second wave of COVID-19 have hit the human race so hard that people are now living in anxiety and so are taking extra precautionary care including their lifestyle and behaviour change.

This research aims to measure the effect of digital payment system during the COVID-19 situation. As the lockdowns have made people stay at home, this has resulted in the more use of online digital payment system for e-services such as online delivery of household essentials, online food delivery and other e-services and utilities. It is expected that it will have a significant impact on users in the coming days. The novel coronavirus outbreak seems to finally accomplish what India's demonetization shock (8th November 2016) has failed to achieve in the last four years. The transactions of digital payments have hit an all-time high since the COVID-19 outbreak as people feared use of banking notes in circulation. Though initially economic activities had almost come to a halt, online digital transfers of funds have rebounded the economy as compared to the initial phase of COVID-19 lockdown. COVID-19 pandemic is giving a much-needed boost to digital payment system as people want to maintain social distancing and avoid any physical contact and personal interactions. With the concerns about the spread of virus through touch, many people- not only in metros but also in small towns have started using their smartphones for online digital payments inducing people to avoid cash transactions. With the outbreak of COVID-19 Reserve Bank of India (RBI) has already encouraged the usage of online channel modes such as mobile banking, internet banking, cards etc., and avoid using cash which may require any physical contact or to be surround by crowded place. RBI in a different notice has said that the spread of COVID-19 can be limited by restricting ourselves from social contacts and visiting public places. As per the National Payment Corporation of India (NPCI) report, digital payments continue to surge and surpass the pre-COVID levels as people prefer contactless payments for safety reasons (NPCI-Price Report,2020).

Furthermore, examining the effect of usage of digital payments during the COVID-19 situation as lockdown resulted in more use of digital platforms for various transactions. It is expected that the digital payments will speed up as the new-way of living will promote a

cashless society in the coming months. This study aims at uncovering the influences of online digital payments in various dimensions during lockdowns. The study aims to answer the research question of 'Are the influence of online digital payment use different from the normal times during COVID-19 situation?'

A study done by Sudha et al., (Sudha. G, Sornaganesh.V, Thangajesu Sathish. M, 2020) on Impact of COVID-19 outbreak in digital payments before and during the lockdown period, there is a slight difference in terms of mode of payment. It is too early to state that what changes might look like in different cultural, demographical and institutional context but it can be said in affirmative that the COVID-19 outbreak is already reinforcing the existing trend towards the increase in digital payments. As people are staying home, they are switching to the online modes of transactions for safety purpose, in the meantime financial institutions are experiencing an explosion in the digital payments (TCS: Banking & Financial Services). The Founder and CEO of Mswipe Mr. Manish Patel says that this global pandemic has fuelled tremendous and large scale adoption digital payments in India across metros and small towns. It has been reported that at Mswipe the total transaction of cashless payment has risen from 13 percent in January to 30 percent growth in total transactions in December 2020 (Surabhi, 2020).

Recent surveys suggest that the forecast to quintuple India's digital payment market to \$1 trillion by 2023 by global tech giants seems to come true (Bloomberg, July 30, 2020). As per the Capgemini Research Institute, three quarters of the Indian consumers reported greater use of digital payments since COVID-19 outbreak and 78% consumers expect to continue increasing their use of digital payments in the next six months. However, COVID-19 outbreak is just a one of its kind. The rise in the digital payments for everything is due to various social, economic and demographical reasons as the case may be.

Methodology

This study was conducted online in Ranchi, Jharkhand where the government has imposed partial lockdown due to COVID-19 outbreak. The respondents were staying home in order to prevent the spread of second wave of coronavirus. As the participants were made to isolate themselves at home, responses represent a period where there is extensive usage of digital media. Only the active internet users are being included in this study who own smartphones. The lockdown prevented the collection of data physically and therefore the users who do not use internet are excluded. As this study aims to evaluate the influence of COVID-19 and the changes in the usage of digital payments, the exclusion did not affect the results which are collected. The study aims to grasp the changes

of digital payments via smartphone within the respondents during the pandemic situation.

The quantitative methodology has been used for this study and a questionnaire is used to collect the primary data. The researcher prepared the questionnaire based on the systematic literature review. The online questionnaire was circulated via WhatsApp and the participants were asked to take part voluntarily between 10th June 2021 to 16th June 2021. Further, descriptive analysis has been adopted for this study.

68.3% (n=71) respondents were male whereas 31.7% (n=33) were female. The respondents were from a diverse age group ranging from under 18 to 40 and above. The 25- 35 age group was the dominant age group which compromised 76% (n=79). The demographic details of the respondents are shown in the Table 1.

Table 1. Demographic Information of the Respondents

Parameters	Frequency/ Percentage
Gender	
Female	33 (31.7%)
Male	71 (68.3%)
Age	
Below 15	--
15-25	17 (16.3%)
25-35	79 (76%)
35-40	6 (5.8%)
40 and above	2 (1.9%)
Education	
Secondary School	--
High School	1 (1%)
Bachelors	30 (28.8%)
Post Graduate	66 (63.5%)
Vocational	4 (3.8%)
Others	3 (2.9%)
Monthly Income (in Rs.) Indian Currency	
Upto 10000	14 (14.6%)
10000-15000	5 (5.2%)
15000-20000	7 (7.3%)
20000-25000	8 (8.3%)
25000-30000	13 (13.5%)
30000-35000	17 (17.7%)
35000-40000	8 (8.3%)
40000 and above	24 (25%)

Findings and Discussions

One hundred and four users participated in the questionnaire, where Table 1, summarizes the participants' demographic details. Table 1, indicates that the respondents are from diverse age group, academic and income backgrounds; majority of the respondents are working or salaried (25%) whose income are more than Rs. 40,000 per month. 55.8% (n=58) respondents said that it was COVID-19 outbreak that led them to adopt digital payment system as they fear the cash transaction due to virus's spread and contamination. The debit cards (59%) and mobile banking/ e-wallets (47%) are most preferred mode of payment since COVID-19 outbreak. Google-Pay is the most used mobile application which is used for digital payment (31.2%), followed by Paytm (30.2%) and PhonePe (17.7%). Most respondents (68.3%) indicated that they use digital platforms and mobile applications for paying bills and payment utilities followed by online shopping (55.8%) and recharge (49%) as can be seen in Table below Tables 2 and 3. Majority of respondent (54.9%) also showed concerns towards online security issues and poor network connectivity issues (36.3%) which is important for online payment system which is shown in Table 4.

Table 2. Mode of Payment Since COVID-19 Outbreak

Mode of Payment	Frequency/ Percentage
Cash	31 (29.8%)
Debit/ Credit cards	59 (56.7%)
Net Banking	32 (30.8%)
Mobile Banking/ e-Wallets	47 (45.2%)
Cheque	3 (2.9%)

Table 3. Purpose of using Digital Payment

Purpose	Frequency/ Percentage
Online shopping	58 (55.8%)
Banking facilities	42 (40.4%)
Recharge	51 (49%)
Pay bills, payment utilities	71 (68.3%)
Online bookings	50 (48.1%)
Money transfers	2 (1.9%)
Form filling	1 (1%)
Systematic Investment Plans	1 (1%)
Every possible POS online transaction	1 (1%)
All of the above	2 (1.9%)

The cash circulation during the COVID-19 situation brought a serious concern of virus spread and therefore people feared the use of cash transactions. Though Indian economy

is cash centric COVID-19 has surged for digital transactions wherever possible. From the Table 2, it can be seen that debit cards, mobile banking and e-wallets are in demand possession followed by cash.

Table 4. Problems in Digital Payment System

Reason	Frequency/ Percentage
No barriers	22 (21.6%)
Security Issues (Online theft & Identity threat)	56 (54.9%)
Online sharing of personal data	22 (21.6%)
Finding technology difficulty	12 (11.8%)
Poor network connectivity	37 (36.3%)
Breakdown of services	1 (1%)

Benefits: All the respondent agreed that internet have made things easier in terms of availing various services such as shopping and banking facilities in hand. In general internet is a safe and secure roadway for various online business platforms and online service delivery system in the time of pandemic. In addition, 45% respondent said it was because of COVID-19 that they adopted online payment system. 55% respondent witnessed that it was way safer than the cash transaction as cash circulation during the COVID-19 is not safe and unhygienic and is a concern of safety issues.

Preferred Mode of Payment since COVID-19 Outbreak: 59 respondent use debit/credit cards for making their payments and 47 respondent preferred mobile wallets over internet banking for online payment and online financial transactions. All the respondent agreed that cash transaction has become risky and if using cash, they need to be more careful in personal hygiene and safety. Each time using cash sanitizing hands is important.

Main Purpose of Digital Payment during COVID-19: 71% respondent use the online payment mode for bill and payment utilities towards grocery shopping, online shopping and banking facilities. In the times of pandemic online mode of shopping and payment facility has made the respondent feel safe as they don't have to step out for any kind of purchase, every necessity can be avail at doorstep. Also the apps help in tracking the order placed and there is no need of cash transactions.

Mobile App Penetration: Most of the respondents preferred G-Pay, Paytm and PhonePe for their regular transactions. The respondent felt that it was easy and tech savvy (not so complicated) means of doing transactions. It does not require lengthy process of entering details and within a minute the work is done in a click. Mobile apps have helped a lot in accessing to different services for which people doesn't have to worry about. For every service you want

there is an app which will get you what you want such as if you want food items delivery there is app for the same, so for every need there is already an application installed in one's smartphone. This according to the respondent is a great achievement in the internet era and in the time of lockdown where they can't go outside, they can order via a just click away.

Perceived Issues: Though the online mode of transactions seemed to be very useful but at the same time data security is a big concern for the respondents and they expressed their concerns regarding poor network connectivity. For any transactions to be made online internet speed matters and if connection is poor it leads to transaction failure and sometimes deduction of money from account and refund takes a lot of process.

Conclusion

Overall, the researcher observed a positive impact of COVID-19 outbreak on digital payments. The ones who have never used the digital payments have started to opt for digital payments. The researcher also observed that the smartphone has found a utility other than its primary function of getting connected, with internet smartphones are now a new and trending way of doing transactions online. To minimise the chance of getting infected by the novel coronavirus, consumers are clearly going for contact less options such as, mobile banking/ payments, tap-on-phone and link-based payments on their smartphones. But with the rise in the digital payment environment, there arises the concern for cyber security and data safety issues and in many parts network connectivity issues for successful payment interface. Unlike, the other southeast Asian countries like Malaysia, Vietnam, Thailand, Indonesia and Singapore; India being the second largest database of smartphone users after China the financial services are underdeveloped and riddled with friction.

There is no doubt that in coming future India will see a boon in digitalization of payments but there is a need of proper network connectivity and cyber regulatory policy for proper functioning of the digital payment system. The financial institutions need to come forward with high level of security and creditworthiness. The government should look after the cyber laws and cyber security issues in a more advance manner in order to build a safe environment for safe and secure digital payment in Indian context.

Limitations and Future Works

The study was done during the lockdown imposed by the government and has its limitation and suffers a small sample size. The survey was conducted only in Ranchi, Jharkhand among the researcher's associates and so it limits the generalisation of this study. In future the researcher intends to conduct the study in large scale field experiment and with substantial in sample size. In addition, the researcher

will focus the attention on different groups and sections of the society using digital payment method and the varying economic and demographic constraints that prevails in the payment methods.

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