
IMPACT OF COVID-19 PANDEMIC ON DIGITAL PAYMENTS IN INDIA: A STUDY

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ABSTRACT

The aim of this research paper is to study factors impacting digital payments in India during the Covid-19 Pandemic. The paper has used Factor Analysis, Confirmatory Factor Analysis (CFA), Multiple linear Regression, Chi Square Test, T-test, ANOVA and descriptive statistics for the purpose of analysis. The paper is analysed on a sample 300 respondents and data was collected through a structured questionnaire. This study proposed the variables affecting the digital payments during the pandemic after thorough analysis. The study found that there was a spike in various digital payments usage for the customers during the pandemic due to various safety concerns and lockdowns imposed by the government. The results show high usage of various digital banking services by the customers during the pandemic.

Keywords: Covid-19, Banks, e-services, Payment

INTRODUCTION

The digital program in India is a flagship program of the Indian government where the main vision is to transform India into a digital society and a knowledge economy. The “faceless, paper less, cash less” is one of the important role digital India professes. As a part of the promoting cashless transactions and converting India to a company with less cash, they are

various digital payment methods available. The process of Demonetization is likely to be described as modification of the country's economy.

In this contemporary world, all payments will be made by the contactless cards, (debit cards, credit cards etc.,) mobile phone applications and other electronic means while notes and coins will stand abolished.

Denmark is reportedly in the leading edge in this regard where, under a new proposal paper money transaction will be disallowed, except for now in places like hospitals (because of emergency). The central bank of the country was focused on planning to stop printing currency, and banks will stop carrying cash. In Sweden, it is common policy already for parents to pay pocket money to their children electronically.

An environment of pandemic where everyone is paralyzed at home, Covid -19 is further increasing the need for E-cash transactions in the day to day transactions of the customers which are Bought via video is currently being introduced in the country. This will help to further increase in the electronic transactions. Digital transactions have been increased exploitation this time.

According to the latest data issued from the Reserve Bank of India, the total value of transactions contracted by 46% in April compared to March, driven by the decline in various payment methods, except for direct transfer payments of government sake when using Andhra platforms, which registered a jump of 138%. Transactions and payments through various banking channels such as (checks, NEFT and RTGS, and ATM withdrawal) fell between 26% and 71% in April as compared to March. The sharpest shrinkage was observed in the value of transactions issued by the issuance of checks, which fell 71 % in April to Rs.1.63 lakh crore in April against Rs 5.65 lakh crore in March.

IMPORTANCE OF DIGITAL PAYMENTS

One of the most importance of Digital payments is the seamless experience they provide to the customers, and it reduces the dependency of the customers on cash. Whereas digital payments are fast transfer speed, and the ease of transacting make digital payments a preferred option. The Cost Savings Digital Payments methods will reduce a huge amount of cost that the governments and companies were used to invest.

Accessibility and Convenience for the customers

Using digital payment modes is very easy and convenient. You can make online payments within a second, at any time and at any place. In case of a contactless transaction, you need to levitate your card over the payment equipment. Many People can use it using any mobile device.

Lower Risk by using digital payments

The Online payment gateway will securely send the important transaction details. There is no specific time for making an online transaction (24 *7) you can do it whenever you want.

Economic Progress of the customer

The customers were transacting more on online when they see the ease, Convenience and security of the online payments. This means that more and more customers feels comfortable buying online, investing digitally, and transferring funds using electronic devices.

It's easy to trace Everything

The most important thing of using the digital payment modes is that the customer can trace and tally their transactions at any time when he /she were needed just by using their mobile phones.

Future of Digital Payment during the Pandemic

After the impact of COVID-19, the online payment industry is flourishing. The Various digital payment companies in the country are doing their hardest to encourage digital payment methods as there is increase in the competition in the digital market by various companies and they were trying to attract the customers by providing heavy discounts etc., There is no doubt that the post pandemic era will be the era of digital payment mode in the country based on the statistic of the digital payments in the country.

There are several enterprises that have recommended advanced payment terminals as technology progresses. This payment terminal would make it easier and more convenient for all the retailers to take payments via credit card or the debit card or various other cash cards which are provided by the banks to the customers and the Customers would now have the option to make deposits in a comfortable manner at any time dependson their Convenience. As a consequence, for small merchants, the digital payment mode will be a seem as a blessing in disguise.

REVIEW OF LITERATURE

- Dr. V.Sornaganesh and Dr. M. Chelladurai (2016) studied about the situation at the time of demonetization. The researcher attempted to study about the demonetization impact on the economy and use of fin-tech during demonetisation. They also analysed about the payment service sector during the demonetization period. The Fast-Moving Consumer Goods have enlarged their credit cycle to address this liquidity situation some provided credit to the distributors through RTGS. Digital Internet is the largest bet in the mobile internet space from the point of view of technology.
- Dr. Zubin thafti, siddharthgupta and Dhaval ariwala (2019) concluded that there have been concerns over the transmission of the virus through the exchange of physical currency and customers will shift to digital payment modes.
- Vivek belgavi and Mihir Gandhi (2019) suggests that the customers will be encouraged to invest in service quality and to increase infrastructure and capacity owing to the expected enlarge in digital transactions going forward during the pandemic.
- G. Sudha and Dr.Thangajesu Sathish (2020) concluded that with the hike in the cases of Covid 19 in India the retailers will shift to the digital payment methods as the method of payment between them.
- G. Sudha, R.Sermakani and Dr.Thangajesu Sathish (2020) examined the traditional system of cash transactions and suggested that system of cash transactions cannot be completely supplanted by card or e-payment system.

- R. Sermakani and G. Sudha (2020) concluded that the trust is the main factor affecting user's satisfaction directly or indirectly and it impact on many user's intentions to adopt mobile wallets.
- Gunaseelan&Kesavan, (2020) studied the impact of COVID-19 on the business and economic aspect on different domains such as international trade, gold market, industrial progress, stock market, agriculture etc. the authors also recommend various measures to revamp the national, cultural and economic changes from the COVID-19. The study concluded that Indian and global economies are hot by the pandemic and are moving towards economically negative growth.
- (Mehta & Johan, 2020) examined the recollection analysis of macro-economic repercussions of the previous pandemics and forecasted the possible effect of COVID-19 on the India economy. They concluded that the lockdown was a major method along with social distancing and self-isolation to contain the spread of the virus.
- Sanjay dhoshi, kunal pandey and Girish Menon(2021) studied the impact of COVID-19 on the digital economy and found that the digital economy has been compounded and multi-faceted. The increased adoption in the short term is likely to accelerate the encourage shift toward digital payments.

Objectives of the Study

- To study the effect of covid-19 on digital banking services in India
- To analyse the factors affecting the digital banking services during the pandemic in India

Research Methodology

The questionnaire was collected with a sample size of 300 respondents selected by applying simple random sampling method. The study takes into account both the primary data and secondary data for the purpose of analysis. The secondary data has been collected from various sources like newspaper, magazines and websites. The collected data are analysed by applying various statistical tools like t-test, Chi square test and ANOVA test, regression and descriptive statistics.

Limitations of the study

- There were only 300 respondents from whom data was collected.
- The Information provided by the respondents was regarding digital payments usage during the pandemic time hence it cannot be generalised during normal conditions.
- In an effort to collect more information with relevant there were more questions which was tedious task for the respondents so, it was one of the limitations for data collection.

Research Hypothesis

- H0 There is no significant correlation in between selected digital banking services provided by the banks along with covid -19 factor.
- H1 There is a significant correlation in between selected digital banking services provided by the banks along with covid -19 factor.
- H2 It is stated that null hypothesis is rejected and the alternative hypothesis is accepted.
- H3 There is a significant difference in between mean of selected digital banking services on the basis of services provided by them.

Data Analysis and Results

Table - IDemographic profile of the respondents

Demographic factors	Options	Frequency	Percentage
Age	Below 20 years	27	8.9
	21 – 30 years	187	62.6
	31 - 40 years	52	16.7
	41 – 50 years	21	7.2
	Above 51 years	13	4.6
Gender	Male	138	47.2
	Female	162	53.6
Marital status	Married	84	28.2
	Unmarried	216	71.8
Education qualification	SSC	4	1.3
	Intermediate	41	13.4
	Graduation	114	38
	Post graduation	123	41
	Others	18	6.3
Occupation	Student	89	29.2
	Employed	101	33.1
	Unemployed	46	15.7
	Business	36	11.8
	Others	28	10.2
Income level (monthly)	Below 10000	41	13.4
	10000 - 20000	103	33.8
	20000 - 30000	87	29.8
	30000 - 40000	43	14.4
	40000 - 50000	26	8.5

Interpretation :

the above table shows the demographic profile of the respondents .It is clearly observed that the majority of the respondents (62.6 %) belongs to the age group of 21-30 years. Majority of respondents are female (53.6 %). Majority of the respondents are unmarried (71.8 %)

and majority of the respondents have qualification of graduation and post graduation. (38 & 41 %) and majority of the respondents are employees (33.1 %) and having an income level of 10000-20000(33.8 %)

Table - II -Descriptive statistics

	N	MINIMUM	MAXIMUM	MEAN	STANDARD DEVIATION
Do you agree that ease of access is an important factor for using digital payments pre and during the pandemic	300	1	5	3.13	1.145
Do you think digital payments mode are secure	300	1	5	3.27	1.241
Do you agree that its risky to use cash for payments during the covid 19 pandemic due to the health reasons	300	1	5	3.54	1.127
Use of digital payments is more convenient than cash during the pandemic	300	1	5	3.64	1.097
Digital payments are widely accepted by the merchants	300	1	5	3.49	1.126
do you agree that Government has adopted appropriate mechanism to promote digital payments in India	300	1	5	3.67	1.174
Digital payments options are reliable for payment	300	1	5	3.50	1.167
Do you get enough digital payment options for online payment on various websites	300	1	5	3.37	1.107
The monthly spending has increased during the pandemic due to the usage of digital payments	300	1	5	3.57	1.083

Limit on cash payments by the Indian Government is one of the reason for the increased usage of digital payments.	300	1	5	3.57	1.144
Enough security checks are put in by various apps used for digital payments.	300	1	5	3.43	0.977
Local merchants prefer digital payments over cash payments during the pandemic	300	1	5	3.66	1.149
Do you agree that increase in digital payments during the pandemic is due to health and safety reasons.	300	1	5	3.89	1.000
Do you agree that dispute resolutions on various digital payments apps is quick and satisfactory.	300	1	5	3.64	1.124
The economic consequences of covid 19 is likely to be larger and grimmer portion than demonetization	300	1	5	3.59	1.097
The advancement in digital payment technology and its adoption post demonetization makes easier for the people during the country wise lockdown imposed to contain the spread of virus.	300	1	5	3.27	1.149
The standardized and the digital KYC procedures for easy access to digital payments to customers	300	1	5	3.62	1.124
The growing number of payment service providers has an impact on the scope	300	1	5	3.89	1.132

of consumer using more digital payment during the pandemic rather than using the cash.					
The transparent rules for the duty of care shall facilitate the consumers use of digital payments.	300	1	5	3.78	1.144
The widely used non cash payment method should be assigned the status of the legal tender.	300	1	5	3.149	1.131
Do you agree that the banks shall be able to develop wide partnership for efficient cash disbursement to the customers.	300	1	5	3.71	1.126
Do you agree that concerns over the transmission of the virus through the exchange of physical currency will boost digital transactions.	300	1	5	3.68	1.144

Interpretation:

From the above descriptive statistic table, it is observed that

- ✓ Number of statistic is 300
- ✓ The minimum and maximum of data collected is 1 to 5
- ✓ The mean of all the variables has been set accordingly as average of the data collected from 1 to 5 between 3.00 to 3.99 which remains positive.
- ✓ The standard deviation of the data remains for every variable.
- ✓ All the standard deviation value in between 0.977 to 1.149

Table - III Chi square test for demographic factors and Promptness and reliability of payments

Pearson's Chi – square	Value	Df	Asymptotic significance (2 – sided)
Age	53.274	15	.000
Gender	12.699	5	.012
Marital status	11.797	5	.038
Education qualification	26.652	20	.145

Occupation	56.545	25	.035
Monthly income	21.444	15	.000

Interpretation:

Table-3 shows that the relationships between the demographic factors and Promptness and reliability of payments for the study. It shows that the age, the calculated Value (0.000) which is lesser than the significant value of 0.05 and the monthly income of the respondents is less than the significant value as a result null hypothesis is rejected and the alternative hypothesis is accepted.

Table – IV - Chi square test for demographic factors and barriers towards the digital transactions by the respondents

Pearson Chi – Square	Value	df	Asymptotic significance (2 – sided)
Age	23.442	18	.000
Gender	6.619	6	.358
Marital status	3.933	6	.686
Education qualification	34.050	24	.084
Occupation	58.682	30	.001
Monthly income	19.917	18	.338

Interpretation:

Table IV depicts the chi square relationship between the demographic factors and barriers towards the digital transactions by the respondents. It may be observed that for age the calculated value (0.000) is lesser than the significance level at 0.05.

Table –V Multiple Linear **Regression**

Model Summary

Model	R	R square	Adjusted R square	Std. Error of the Estimate
1	.617a	.380	.364	.54427

Interpretation:

Table V shows the regression calculations where the value of R i.e regression coefficient ‘R’ = .617a or 61.7% of relationship exists between the independent variables and dependent variable. The coefficient of determination ‘R²’= .380 which shows that 38% of spread of the virus can be controlled by using the online payments by the customer.

Table – VIANOVA

Model	Sum of squares	Do	Mean square	F	Sig.
Regression	53.662	8	6.708	22.644	.000b
Residual	87.387	295	.296		
Total	141.048	303			

Interpretation:

Table VI shows F value is 22.644 and is significant because the significance level is =0.000 which is less than $P < 0.05$. It means that the overall regression model is statistically significant, valid and fit. The regression model shows that all independent variables are explaining that is a positive and significant relationship with dependent variable.

Conclusion

This paper concludes that there is a positive and significant impact of Covid-19 on digital payment system in India. With the advancement of technology there are abundant digital payment modes in India but majority of the customers prefer selected modes of the digital payment, which might be due to lack of information on digital payment systems in India. Hence the banks should educate and create awareness among the consumers regarding various digital payment facilities available to the customers.

The Government is focused on moving the customers to accept digital payments at present, if it has been made compulsory before, with social distancing in between one person to another and the COVID-19 crises. The offline-to-online transition in payments have been around for a long time, but there has been an increased in the change of customer behaviour in the latest lock-down scenario attributed to COVID-19. NPCI encouraged and urged all the customers and all service providers of condemnatory services to move to digital payment systems in order to remain secure among the fast moving digital world. We are starting to see solutions coming up, and Merchants are heading further into the 'physical world.' And they don't have to go online entirely. People will be able to call any messaging mechanism in our use to position orders or communicate by exchanging images, telling them what they want to purchase and eventually digitally the payment will happen. Everyone goes out and picks up the items or delivers them. After the lockdown, it's going to be a phase where we'll still have to be careful and take extra precautions to stay safe until the world has really got rid of this situation. This period is all about creating these solutions and innovating to meet these needs for the public, retailers and businesses.

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