

Digital Payment Habits of Indian Consumers': Pre- and Post-COVID-19

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Abstract: During the pandemic, people were afraid of cash transactions, which led to the digital mode of payment. The COVID-19 crisis has changed the behaviour of customers using digital payment modes. This transformation towards digital payments benefits more transparency in transactions, which empowers the country's economy. The study focuses on the impact of the COVID-19 crisis on the habits of Indian consumers regarding digital payments. The study is conducted by 107 samples based on gender, age, occupation, mode of digital payments, purpose of digital payments in pre and post COVID-19. Data has been analysed with the help of descriptive statistics and paired t-tests. The study's findings revealed a significant difference between the pre- and post-COVID-19 respondents.

Keywords: COVID-19, Customers digital payments.

I. INTRODUCTION

In layman's language, India's journey towards a cashless economy is described in two words: Demonetization and COVID-19. Demonetization laid out the fundamental block of digital payments, and COVID-19 became a revolutionary source for building up the digital payment system. In digital payments, no hard cash or currency notes are involved. It is convenient as money is transferred immediately from one account to another. There is no need to travel to banks for deposits and withdrawals. These transfers can be done through various digital modes like debit card, credit card, mobile wallets, internet banking and much more. Until a decade ago, it was considered fantasy to buy anything without cash. India has been cash dependent country as cash was the primary mode for any transaction among buyers and sellers across the country. The Digital India program was launched on 1st July 2015 [1]. This program aimed to empower India digitally by starting a digital revolution. People were not very aware of

digitization. Earlier Techno savvy people having smartphones and computers started to utilize digital payment systems. The COVID-19 crisis has accelerated digitization trends around the country. The COVID-19 pandemic has hit the world economy very badly. This has had a significant impact on the digital payment system in India. The number of users has risen dramatically, and they prefer online transactions as there is no personal touch, and it is very fast to settle. Pandemic has fast recorded digital transformation of the payment's ecosystem in India.

II. REVIEW OF LITERATURE

Siddharaju S. [2] focused on consumer perception of digital payment systems in India, particularly regarding Mysuru District. The primary data was collected through a structured questionnaire. One hundred ten responses were considered for the survey. The study's findings revealed a significant difference between age and consumer perception of digital payment systems. The study also proved that there is no significant difference between gender, educational qualification, and perception of consumers on digital payment systems.

K. M. Simby [3] analyzed customers' perceptions of digital payment methods during the COVID-19 pandemic. The researcher took 107 respondents from the Ernakulam district of Kerala as a sample. After using the parametric ANOVA test, the study's findings revealed no significant variance in consumer perception of digital payment methods, even during COVID-19.

Shinki Pandey [4] conducted an empirical survey of consumer perception of digital payment systems. The study showed that digital payments in India recorded robust growth of 26.2% in volume during 2020-21 compared to the expansion of 44.2% in the previous year. It was observed that after the COVID-19 pandemic, people concerned about their health made them switch to this mode, resulting in a rise in the usage of different modes of digital payment systems. Jimmi Jose and

Sebastian Tharapil Joseph [5] studied the effects of the digital payments system and its impact on individuals' savings during COVID-19. The study was conducted by 200 samples based on gender, age, occupation, qualifications, and annual income to learn about digital payment, the benefits & purpose of using digital payment apps, time savings, and the impact on money-saving during COVID-19. The result revealed that the majority of respondents are using digital payment apps. The use of digital payment systems has grown dramatically.

C. Chaudhri and A. Kumar [6] examined the rise in digital payments in the retail sector. Researchers compared the pre-pandemic financial year 2019-20 to the pandemic-hit financial year 2020-21. A significant increase was seen in the retail sector's volume and value of digital payments. Their findings proved that the surge of digital payment systems could be possible because the Indian Financial System was digitally ready to accommodate a large volume and value transaction.

Sowmya Pravin and Hebbar [7] studied the impact of COVID-19 on the digital payment system. The study was focused on 100 females only living around Mangalore. They found that respondents will continue the digital payment system even after the pandemic. Their study highlighted that problems of the digital payment system and the age of the customers are separate. Their research mainly focuses on determining the benefits and issues faced by retail shops from digital payment systems.

Rajeshwari [8] explained that digital banking has significantly decreased banks' operating costs. This has made it easier for banks to charge lower service fees. Researchers covered the role of digitization in Indian banking factors that affect the scope of digital banking in India. Secondary data were derived from journals and RBI databases. The study showed that the simple use of digital banking would drive the integration of the unbanked economy into the mainstream.

III. OBJECTIVES

- To know the importance of consumers' digital payment habits during COVID-19.
- To make a comparative analysis of digital payment services pre- and post-COVID-19,
- To and the opportunities and challenges for digital payment applications.

Hypothesis: Ho: There is no significant difference between the digital payment habits of consumers pre- and post-COVID-19.

IV. RESEARCH METHODOLOGY

Research Design

The research is both analytical and descriptive in nature. The research is based on primary data. It has not been easy to conduct a study on the entire population of Gujarat, so a sample

was drawn for the study from Ahmedabad city only. In order to full fill the objectives' structured questionnaires have been used in Google Forms. The major purpose of the study is to compare the habits of Indian consumers regarding digital payment in pre- and post-COVID-19.

There are no sources in the current document.

V. SAMPLING TECHNIQUE

Nonprobability convenient sampling was used for the study. The survey was conducted based on a prepared scheduled questionnaire, which covered different aspects of digital payments. The collected data has been tabulated and analyzed through paired t-tests.

Sample Size

The data has been collected from 107 respondents.

Respondent Set Consumers who have used digital payment services.

VI. RESULTS AND DISCUSSION

TABLE I: SOCIO-DEMOGRAPHIC PROLE OF RESPONDENTS

Demographic Variables		Frequency	Percentage
Gender	Male	81	75.7
	Female	26	24.3
Age Group	Below 18	0	0
	18-25	5	4.7
	25-35	14	13.1
	35-45	21	19.6
	45-60	47	43.9
	Above 60	20	18.7
Educational Qualification	Primary	0	0
	Secondary	0	0
	Higher Secondary	1	1
	Graduate	30	28
	Post Graduate & Above	76	71
Occupation	Student	6	5.7
	Self Employed/Professional/Business Owner	28	26.4
	Home Maker	7	6.6
	Govt./Pvt. Employee	66	61.3
Annual Income (in Rs.)	Up to 1 lakh	7	6.9
	1 to 5 lakhs	25	23.5
	Above 5 lakhs	74	69.6

Source: Primary Data.

Table I depicts the demographic profile of the respondents using digital payment. The table shows that the number of male respondents (75.7%) is more than the number of female respondents (24.3%). The educational background was depicted as 71% of respondents were postgraduates, and the annual income of 69.6% of respondents ranged above five lakhs. This proved that education plays a vital role in the adoption of technology. Evident from the above table that the majority of respondents belonged to the age group 45-60 years, it concludes that a major chunk of respondents is middle age (43.9%) having government or private jobs (61.3%) in which the majority are male (75%). Most of the respondents have a family income of more than five Lakhs, which proves that the majority of respondents are working and know the importance of a cashless economy.

TABLE II: MODES OF AWARENESS OF DIGITAL PAYMENT SYSTEM BY THE RESPONDENTS

	Respondents	%
Banks	54	51
Non-Banking	12	11
Friends/Relatives	52	49
News	45	42
Others	15	14

Source: Primary Data.

The above Table II shows that 54% of the respondents come to know about digital apps by banks as various initiatives have been taken by the banks for their customers. 49% of respondents were aware through their family and friends regarding payment trends. Just 11% of respondents came to know through non-banking entities which are adopted new innovative payment solutions for enhancing customer experience.

TABLE III: AWARENESS OF DIFFERENT MODES OF DIGITAL PAYMENT SYSTEMS BY THE RESPONDENTS

Digital Payment Modes	Respondents	%
Debit/Credit cards	92	86
E-Wallets/Mobile Wallets	76	71
Net Banking/Mobile Banking	97	91
BHIM UPI	84	79
NEFT/RTGS	89	83
Others	16	15

Source: Primary Data.

The above Table III shows that net banking/mobile banking (91%), Debit/Credit card (86%), and NEFT/RTGS (83%) were three modes of which respondents were completely aware. It is also delivering that E-Wallets/Mobile Wallets (71%), BHIM UPI (79%), and Others (15%) stood in the next place

of respondents' preference as their applications have not been much popularized among respondents.

TABLE IV: USAGE OF DIGITAL PAYMENTS BY THE RESPONDENTS

	Respondents	%
Less than 1 year	8	7.6
Less than 3 years	23	22
More than 3 years	75	71

Source: Primary Data.

The above table shows that 75% of respondents have been using digital apps for more than 3 years, which shows that they used an app to make payments to avoid COVID-19 risks. A very tiny percentage (7.6%) of respondents stated payment digitally in less than 1 year.

TABLE V: FACTORS FOR USING MODE OF DIGITAL PAYMENTS BY THE RESPONDENTS

Factors	Respondents	%
Safety and Protection	51	48.1
Convenience and Speed	91	84.9
Offers and Discounts	25	23.6
Others	7	6.6

Source: Primary Data.

According to the data, convenience, and speed were the main stimuli for the respondents to use digital payments throughout COVID-19. The above table shows that 84.9% of respondents were using digital payment apps due to convenience and speed. The digital platform provides extra security to keep their money secure from unauthorized access, as seen by 48.1% of respondents. Just 23.6% of respondents chose offers and discounts as important aspects, and only 6.6% of respondents chose other aspects, making them the least significant component.

TABLE VI: PREFERENCE OF RESPONDENTS FOR DIGITAL PAYMENT

Service	Respondents	%
Debit/Credit cards	83	77
Mobile wallet	42	40
Mobile banking	77	72

Source: Primary Data.

The above Table VI shows that the majority of respondents (77%) used debit/credit cards for their routine payments. Their next preference is to do cashless transactions through mobile banking (72%). Mobile banking and other modes were not much used by the customer due to their popularity and not much awareness. Only 40% of respondents chose a mobile wallet as their payment option, having only primary knowledge of it.

TABLE VII: PAYMENTS DONE BY RESPONDENTS DURING COVID-19

Payments	Respondents	%
Bill Payments	94	88
Payments for Food Ordering	59	55
Groceries	70	65
Online Shopping	78	73
Mobile/TV Recharge	83	77
Investments	33	31

Source: Primary Data.

The above Table VII supports that there has been 88% of respondent used digital payment for paying their bills as they don't need to stand in queues in the banks or pay utility bills. It also supports that there is an increase in online grocery shopping behaviour as the pandemic has forced them to change their old habits. 73% of respondents have a strong attitude towards online shopping.

TABLE VIII: USAGE OF DIGITAL PAYMENT BEFORE COVID-19

Usage Rate	Respondents	%
More frequently	31	29
Frequently	38	36
Occasionally	25	24
Rarely	7	7
Never	5	5

Source: Primary Data.

The above Table VIII supports that the seed of Digital India was planted earlier. Access to smartphones, debit cards/credit cards, mobile banking apps, and digital literacy boosted digital payments before COVID-19. If we look at the usage rate of digital payments before COVID-19, it is clear that 36% of respondents frequently used various modes of digital payments before COVID-19. 5% of respondents had never used online payment mode due to a lack of financial literacy, technological issues, network issues, or more.

TABLE IX: USAGE OF CASH PAYMENTS AFTER COVID-19

Usage Rate	Respondents	%
More frequently	32	30
Frequently	22	21
Occasionally	33	31
Rarely	11	10
Never	9	8

The above Table IX interprets the usage of digital payment for financial transactions, which determines how many times the respondents use online payment. The interpretation of the data from the survey shows that the majority of respondents (31%) use digital payments in post-COVID-19. On the other

hand, 30% of respondents are scared of security issues, so they switch to cash mode for their daily life. 10% of respondents rarely utilized cash payments.

TABLE X: CHALLENGES FACED BY RESPONDENTS

	Respondents	%
Security Issue	78	73
Hacking	66	61
High Service Charge	27	25
Network Issues	45	43
Lack of Technology	11	10

Source: Primary Data.

According to data, most of the respondents (73%) are facing security issues while using digital payments, as we have witnessed numerous news and articles on how various data of cardholders or how some applications are prone to cyber-attacks. 43% of respondents noted concern with infrastructure, such as network issues, while 10% of respondents mentioned issues with technology, such as compatibility with mobile devices. We can also say that some banks are still running on legacy technology. Respondents believe that technology issues frequently arise in the system, and there may be many hours of outage due to technological problems.

TABLE XI: HYPOTHESIS TESTING

	Using Digital Payment Pre-COVID-19	Using Digital Payment Post-COVID-19
	Respondents	Respondents
More frequently	31	32
Frequently	38	22
Occasionally	25	33
Rarely	7	11
Never	5	9
Pair t-Test Statistics		0.48678
	< 0.5 HO may be not accepted at 5% Level of significant	

Source: Primary Data.

T test has been used to and out the difference between using digital payment pre- and post-COVID-19. From the above table, we can state that there is a significant difference in the usage of digital payments pre- and post-COVID-19. The analysis shows that there is an increase in the usage of digital payments in post-COVID-19.

VII. FINDINGS AND CONCLUSION

Our result indicates that after COVID-19, the situation is still unclear, and some respondents adopt digital payment as the new

normal. After COVID-19, every organized and unorganized single has adopted the digital payment system for receiving and paying money. The majority of the respondents were influenced by their family members, friends, and colleagues to use the digital payment system. The study found that most of the respondents are satisfied with digital payment services. The COVID-19 pandemic has definitely had a positive impact on digital payments. The responses hereby have been gathered solely from the residents of Ahmedabad City. Considering the rise of digital payment habits in other cities and mainly in rural areas would also prove fruitful. The biggest advantage of using an online payment system is indeed the ease and convenience of using it. But on the other hand, they are facing certain difficulties like security problems like delays in transactions. If these are overcome, more and more people will be attracted to a cashless economy. In India, the expansion of digital payments will be a long-term process that will open new opportunities. Though there are certain difficulties while using a digital payment system, people are attracted to its due time saving, cash 24x7 hours services, and ease of use. As part of the safety measures, people are using it more and more. NPCI encouraged customers and all service providers of critical services to move towards a digital payment system in order to remain secure.

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