



A Study on Impact of Covid-19 on Digital Payments in India

M. Srinu Naik¹ and Dr. R. Narayana Gupta²

1 Ph.D. Research Scholar, Department of Business Administration, Annamalai University, Annamalainagar – 608 002.

2 Assistant Professor of Business Administration, Govt. Arts and Science College, Manalmedu, Mayiladurai – 609 202.

ABSTRACT

The pandemic could push the world toward digital payments more quickly. The current situation calls for the use of digital payments, which have many advantages over cash, including ease of use, security, and transparency. The banking sector is crucial to this movement by providing digital instruments like debit cards, mobile banking, mobile wallets, etc. Payment systems have demonstrated their effectiveness and sustainability and continue to enjoy high levels of public trust; however, the lock-down and company closures have resulted in lower average transaction volumes. It is essential that the digital payments ecosystem develop quickly and support the post-COVID age in order to aid in the recovery and help this new standard emerge.

This essay focuses on the value of digital payments during the pandemic, the various digital payment methods available, and the development of digital payments over the previous three years. Additionally, the future of digital payments

Key Words: Digital Payment, Digital Payment Modes in India, Evolution of Digital Payment in India

1. Introduction

In India's journey towards becoming a cashless economy, two words and their impact played a significant role, 'demonetization' and 'COVID-19'. One laid out the foundation of digital payments and another became the main source to build up the digital payments' ecosystem.

As per the recent forecasting done by Accenture and released on November 24, 2020 – about 66.6 billion transactions worth USD 270.7 billion are expected to shift from cash to cards and digital payments by 2023 in India, and further increase to USD 856.6 billion by 2030. According to the report, the payment gateway aggregator market in India is currently estimated to be at Rs 9.5 trillion.

COVID-19 seems like another demonetisation-like catalyst for the industry. Digital payment providers have been quite hands-on in terms of responding to this situation, by offering enhanced support on essentials such as

offering groceries, masks, sanitizers, COVID-19 insurance, offering integration with donations to PM CARES fund and other essential products and services

1.1 Digital Payment

Digital payment is a way of payment which is made through digital modes. In digital payments, payer and payee both use digital modes to send and receive money. It is also called electronic payment. No hard cash (currency notes) is involved in the digital payments. All the transactions in digital payments are completed online.

These transfers could be done through means of cards (debit/credit), mobile wallets, mobile apps, net banking, Electronic Clearing Service (ECS), National Electronic Fund Transfer (NEFT), Immediate Payment Service (IMPS), pre-paid instruments or other similar means.

1.2 Digital Payment Modes in India

Various initiatives to improve digital payment systems in India are as follows:

Banking Cards: Banking cards offer consumers more security, convenience, and control than any other payment method. The wide variety of cards available – including credit, debit and prepaid – offers enormous flexibility, as well. These cards provide 2 factor authentications for secure payments e.g. secure PIN and OTP. RuPay, Visa, MasterCard are some of the example of card payment systems. Payment cards give people the power to purchase items in stores, on the Internet, through mail-order catalogues and over the telephone. They save both customers and merchants' time and money, and thus enable ease of transaction.

USSD: The innovative payment service *99# works on Unstructured Supplementary Service Data (USSD) channel. This service allows mobile banking transactions using basic feature mobile phone. There is no need to have mobile internet data facility for using USSD based mobile banking. It is envisioned to provide financial deepening and inclusion of under banked society in the mainstream banking services.

In India's journey towards becoming a cashless economy, two words and their impact played a significant role, 'demonetization' and 'COVID-19'. One laid out the foundation of digital payments and another became the main source to build up the digital payments ecosystem.

As per the recent forecasting done by Accenture and released on November 24, 2020 – about 66.6 billion transactions worth USD 270.7 billion are expected to shift from cash to cards and digital payments by 2023 in India, and further increase to USD 856.6 billion by 2030. According to the report, the payment gateway aggregator market in India, is currently estimated to be at Rs 9.5 trillion.

COVID-19 seems like another demonetisation-like catalyst for the industry. Digital payment providers have been quite hands-on in terms of responding to this situation, by offering enhanced support on essentials such as offering groceries, masks, sanitizers, COVID-19 insurance, offering integration with donations to PM CARES fund and other essential products and services

2.REVIEW OF LITERATURE:

Sudha. G, Sornaganesh. V, Thangajesu Satish. M, Chellama. A.V, August 2020. This paper discusses the different digital payment mechanisms used in the event of a pandemic based on primary data by gathering data from 220 respondents and the Digital India initiative is an Indian government flagship program whose vision is to turn India into a digital society and an information economy. In this futuristic world, all purchases can be made by contactless cards, smart phone apps and other electronic means. The Reserve Bank of India last year announced that it planned to raise digital transactions to about 15% of gross domestic product by 2021. The government is looking for a billion digital transactions per day as the fastest-growing mobile industry in the world.

A.Martina Franciska and Dr. S. Sahayaselvi May - June 2015. Study focuses on secondary information and resources have been collected from books, articles, journals and relevant pages Review with a view to the review and progress of one of them. This article clarified the different forms of digital payment transfers used by ordinary people in their day-to-day lives. A total of 4018 billion mobile banking transactions were completed in 2015-16, compared to 60 billion in 2012-13. Digital payments to rural regions are now extending the reach of mobile networks, the Internet and electricity. During the time of demonetization, the Government of India compelled the people to do all trade directly or indirectly. India has more than 100 crore active network connections and more than 22 core smartphone users. The cashless change is not only better than the cash exchange, but less time consuming. So, there is no question that the upcoming transaction method is a cashless transaction.

Arpita Pandey, Mr. Arjun Singh Rathore April 6-7 2018. This article focused on how digitalization will aid the growth of the Indian economy and the adoption of the new technologies for globalization and modernization of our region, which contributes to development. All the measures and policies put in place by the Government of India enable the Indian Community to build information and understanding, and also clarified how digital payment is becoming the powerful factor that it provides. Safety, security in day-to-day transaction. Knowledge obtained on the basis of secondary evidence from various research journals, Government records.

Dr Rajeshwari M May-June 2019. This article explaining the operating cost of banks has been significantly decreased by Digital Banking. This has made it easier for banks to charge lower service fees and provide higher interest rates for depositors as well. The decrease in operational costs meant more benefit for the banks. Digital transformation is moving from traditional banking to a digital world. This paper covers the role of digitization in Indian banking, factors that affect the scope of digital banking in India, and trends in digital banking in India. Data were derived from a number of sources, such as journal journals, government publications from India, and various RBI databases. The study also showed that the simple use of digital banking would drive the integration of the unbanked economy into the mainstream.

Jayalakshmi. S and Parvathi. S, July 2019. This article showed that digital payment is an effective means of doing business of all sectors to reach out to prospective clients and to examine the idea of digital banking, digital payment and digital payment methods. Digital payments have many benefits over cash, such as simplicity, security and clarity. Slow internet access and extra costs for digital purchases are a big barrier to the introduction of this digital payment system in India. In the next few years, there will be a whole new way of transferring capital in the Indian economy.

3. RESEARCH METHODOLOGY

The research is based on primary data and secondary data. The secondary data has been extracted from various sources like research article, Authenticated Websites, bulletins of RBI, and Daily's and data collection for primary research has done through the structured questionnaire.

OBJECTIVES

1. To Know the Importance of Digital Payment in Pandemic.
2. To study the modes of online payment.
3. To Compare and Analyse the present with previous year data of Digital payment.
4. To know the usages of digital payments
5. To highlight the issues of digital payment systems

Primary Research

Research Design: Conclusive Study

Sampling Technique: The technique of Non Probability Convenience sampling was used to choose the samples in order to collect required information from them.

Sample size: 100

Respondents Set: People using digital payment apps

Data Collection Tool: Structured Questionnaire

Secondary Research

Cumulative Payment Transactions in the last 12 months/ table and chart

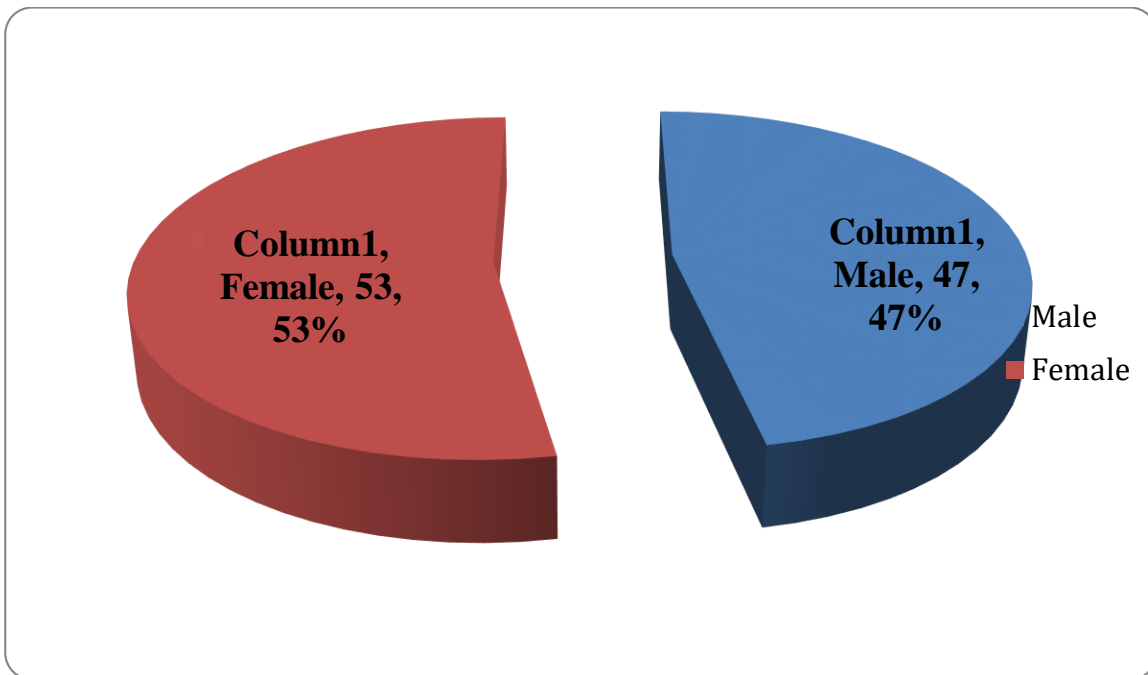
State wise Distribution of Digital Payment Transaction/ table and chart

BHIM – UPI Transactions, Monthly Growth (LAKHS)/ table and chart

4. Data analysis:

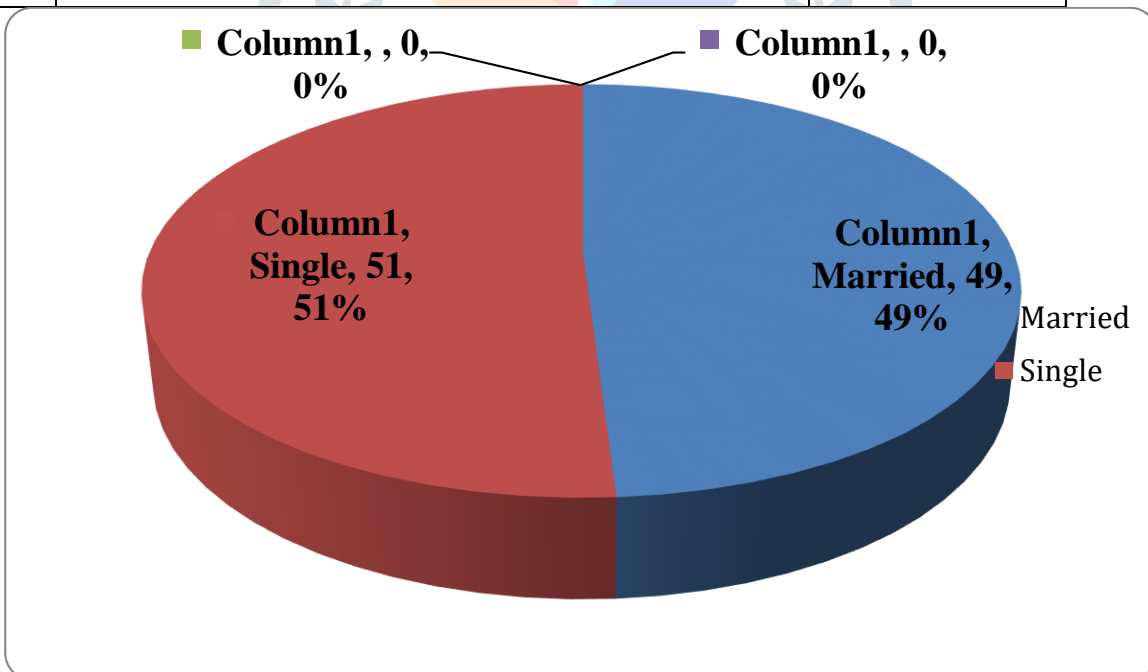
1. Gender (Male: Female)

S.no	Particulars	No of respondent (%)
1	Male	47
2	Female	53



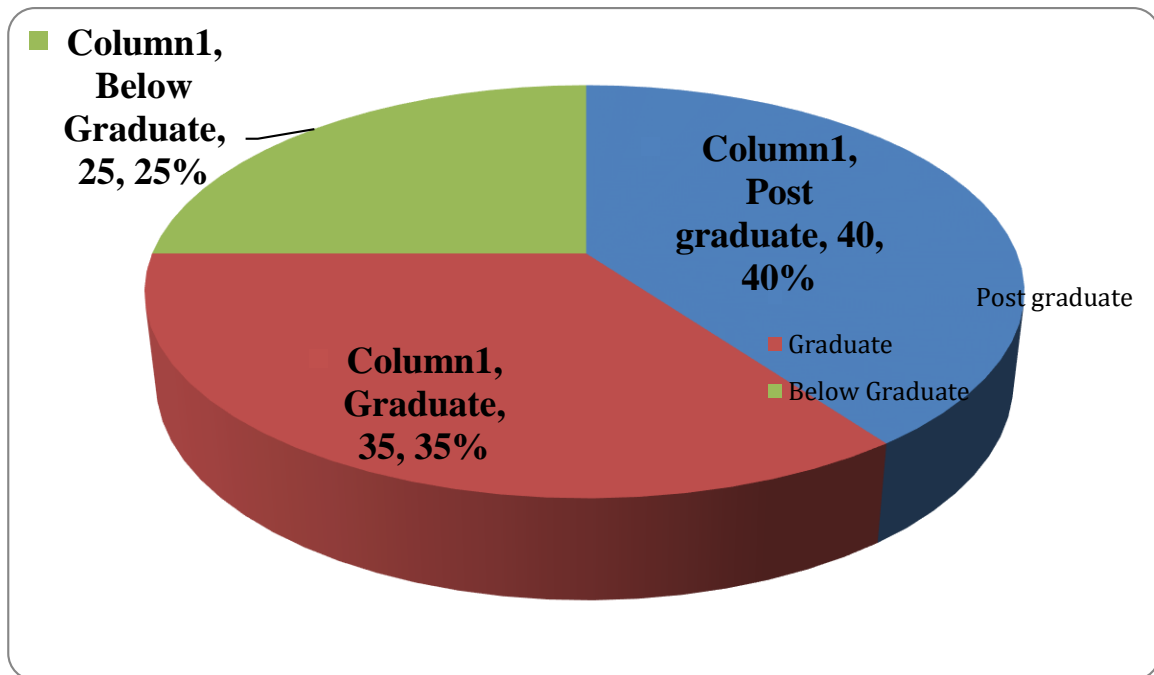
2. Marital status

Sr no	Particulars	No of respondent (%)
1	Married	49
2	Single	51



3. Education

Sr no	Particulars	No of respondent (%)
1	Post graduate	40
2	Graduate	35
	Below Graduate	25

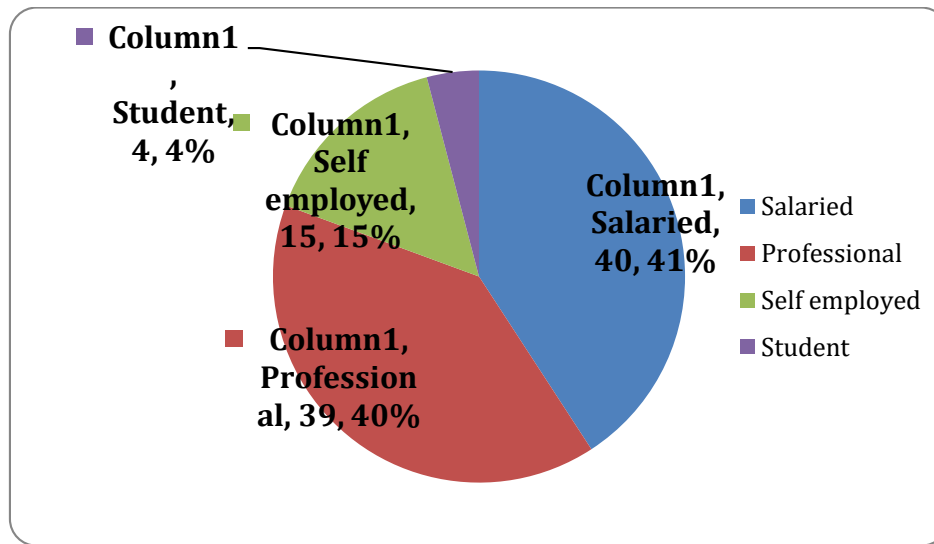


Interpretation:

In this study focused on three community peoples those who are completed Post graduate, Graduation and under graduation. Here 40% of the respondents have completed post graduation, 35% of the respondents have completed graduation and 25% of the respondents have under graduation

4. Occupation

Sr no	Particulars	No of respondent (%)
1	Salaried	40
2	Professional	39
3	Self employed	15
4	Student	4
5	House wife	2

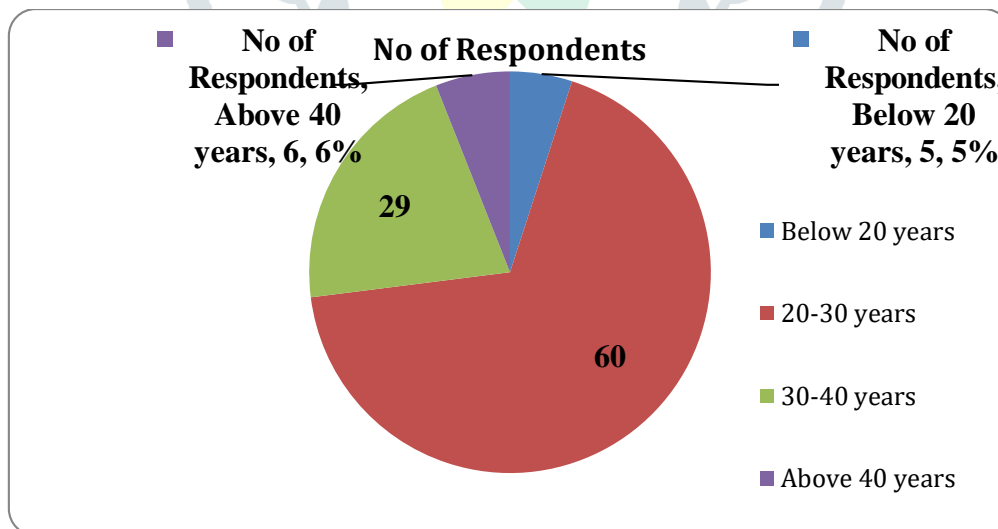


Interpretation:

In this study I have collected data from 40 percent salaried persons responded, 39 percent Professionals responded, 15 percent of self employed responded and 4 percent students responded.

5. Age

Sr no	Particulars	No of respondent (%)
1	Below 20 years	5
2	20-30 years	60
3	30-40 years	29
4	Above 40 years	6

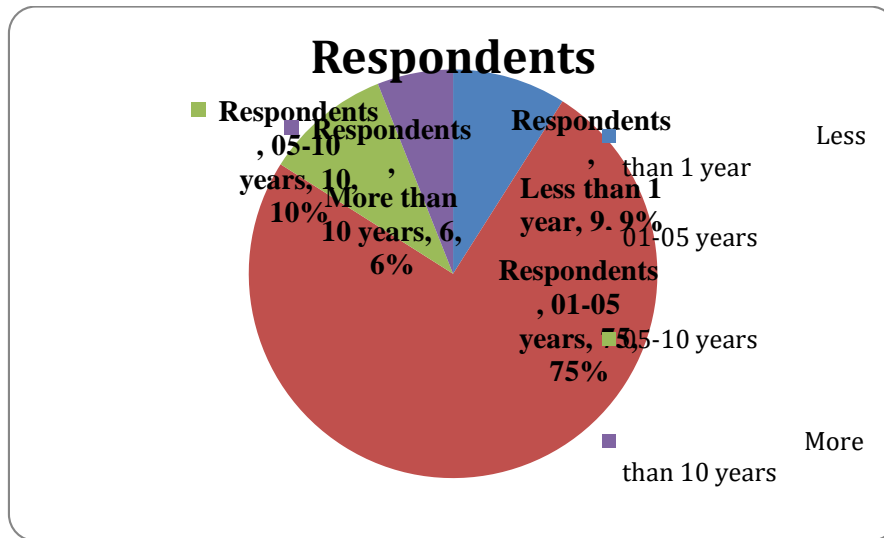


Interpretation:

In this study I have collected data from 20 years below peoples 5 percent, 20 -30 years people 60 percent, 30-40 years peoples 29 percent and above 40 years 6 percent.

6. Duration of using digital payment system

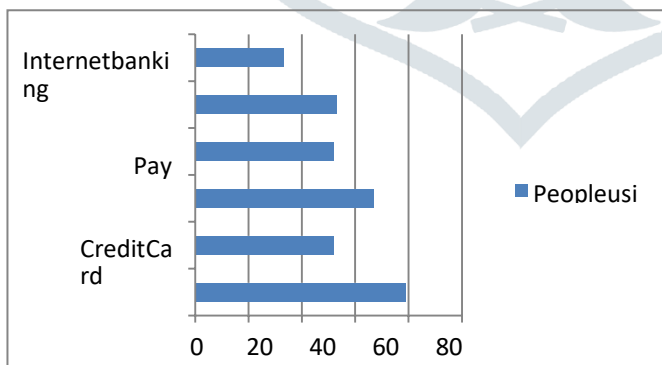
Sr no	Particulars	No of respondent (%)
1	Less than 1 year	9
2	01-05 years	75
3	05-10 years	10
4	More than 10 years	6



Interpretation:

75% of people are using digital payment system for 01-05 years. Where 10% of people are using it for 05-10 years. 6% of people are using digital payment system for more than 10 years and 9% of people are using digital payment system less than one year

7. Different digital payment methods used by the customers.

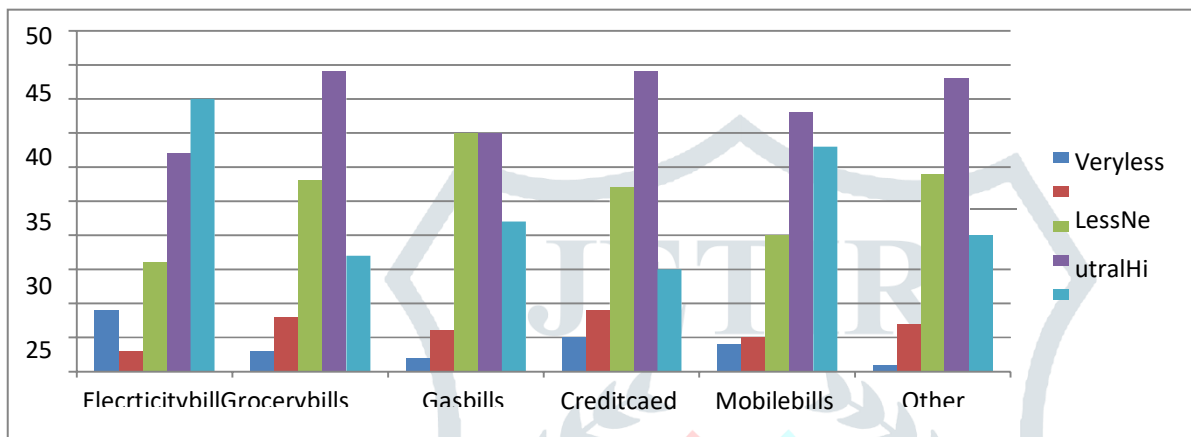


Interpretation:

Maximum People prefer ATM/Debit card for the digital payments method and at second place people prefer google pay. Very few people are using internet banking.

7. After the impact of Covid-19, the usage rate of digital payments for the following transactions.

Sr no	Particulars	Very less	Less	Neutral	High	Very High
1	Electricitybill	9	3	16	32	40
2	Grocery bills	3	8	28	44	17
3	Gas bills	2	6	35	35	22
4	Credit cardbills	5	9	27	44	15
5	Mobile bills	4	5	20	38	33
6	Other	1	7	29	43	20

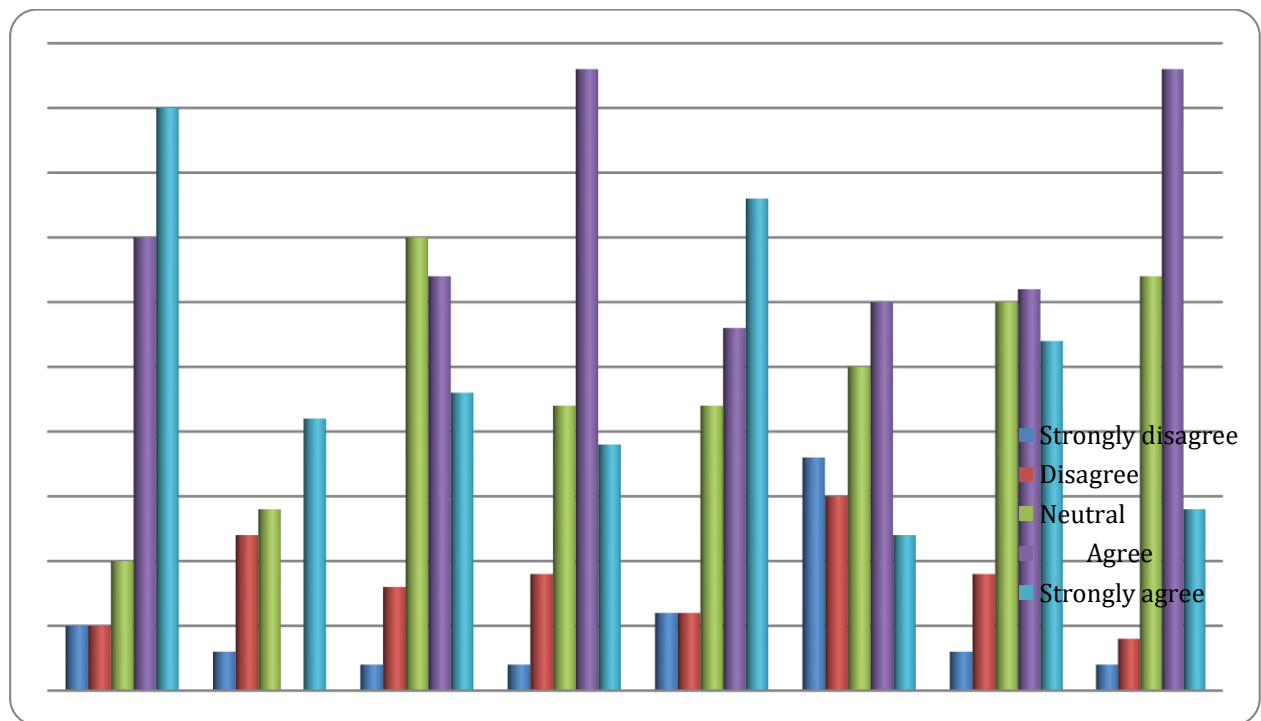


Interpretation:

Maximum number of people using digital payments for the payment of grocery bills and credit card bills.

8. The benefits of using digital payment systems to the customers.

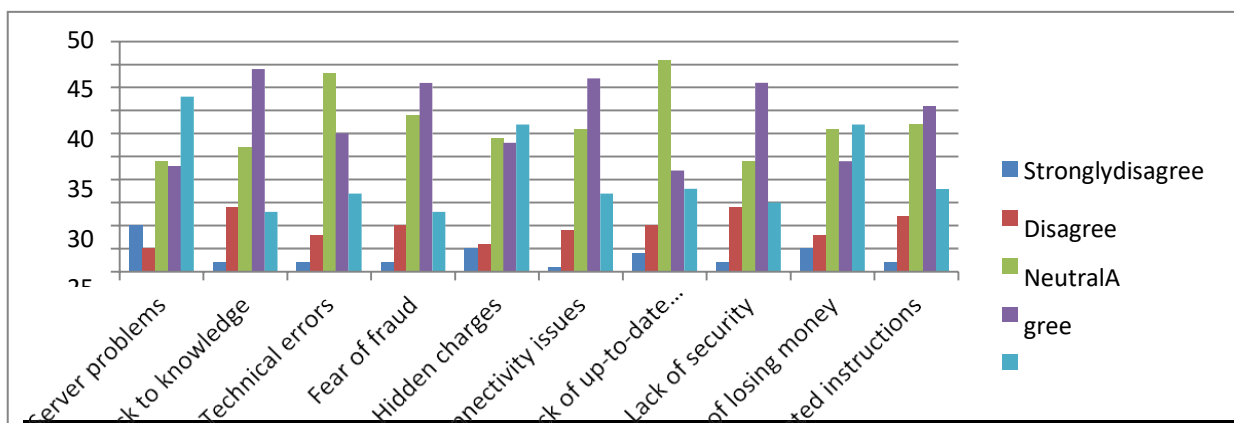
Sr no	Particulars	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	Convenient	5	5	10	35	45
2	Saves time	3	12	14	0	21
3	24*7	2	8	35	32	23
4	Easy to use	2	9	22	48	19
5	Flexibility	6	6	22	28	38
6	Increase prestige	18	15	25	30	12
7	Cashless payments	3	9	30	31	27
8	Non banking hours also can get the benefit	2	4	32	48	14



Interpretation:

The maximum number of people agree with the benefits of using digital payment systems. Only a few people strongly disagree with some of the benefits. The difficulties faced by the customers from digital payment systems.

S no	Particulars	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	Server problems	8	5	22	23	42
2	Lack of knowledge	2	8	21	52	17
3	Technical errors	2	8	43	32	15
4	Fear of fraud	2	18	24	41	15
5	Hidden charges	6	7	27	28	32
6	Connectivity	1	8	31	39	21
7	Lack of up to date information	4	8	48	21	19
8	Lack of security	2	13	26	44	15
9	Fear of losing money	5	8	31	24	32
10	Complicated instructions	3	12	32	36	18

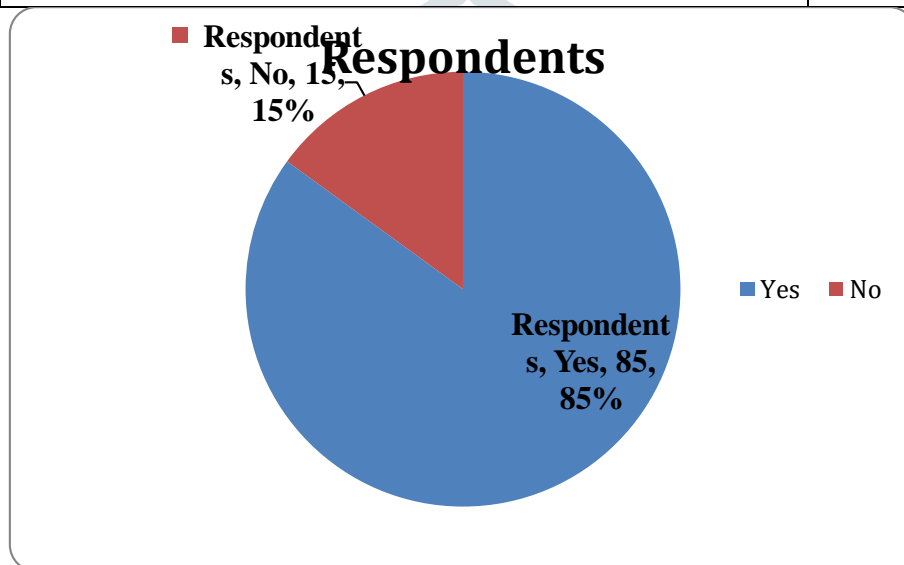


Interpretation:

The maximum number of people is neutral about the difficulties faced by customers with digital payments. Where very few people strongly disagree with the same.

9. Do you want to continue using digital payment systems?

S no	Particulars	No of respondent (%)
1	Yes	85
2	No	15

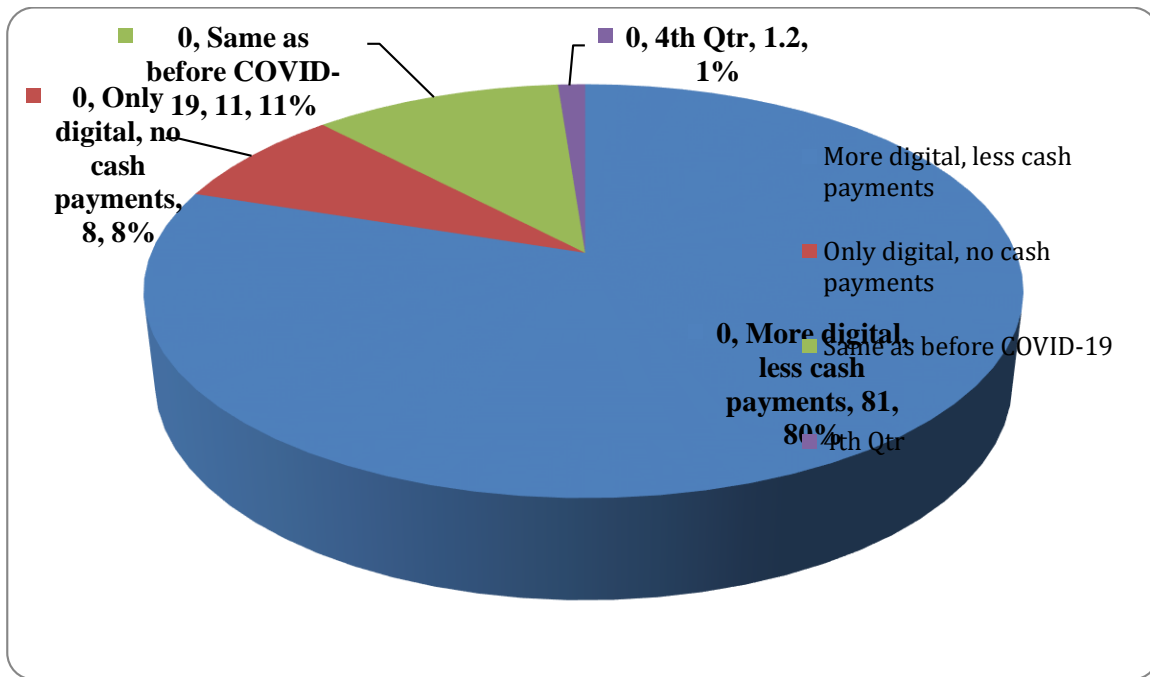
**Interpretation:**

After looking at both benefits and difficulties people still want to use digital payment system.

85% of people want to use digital payment methods where 15% people don't want to use digital payment methods.

11. What is the impact of COVID-19 on usage of digital payment?

S.no	Particulars	No of respondent (%)
1	More cash, less digital payments	0
2	More digital, less cash payments	81
3	Only digital, no cash payments	8
4	Same as before COVID-19	11

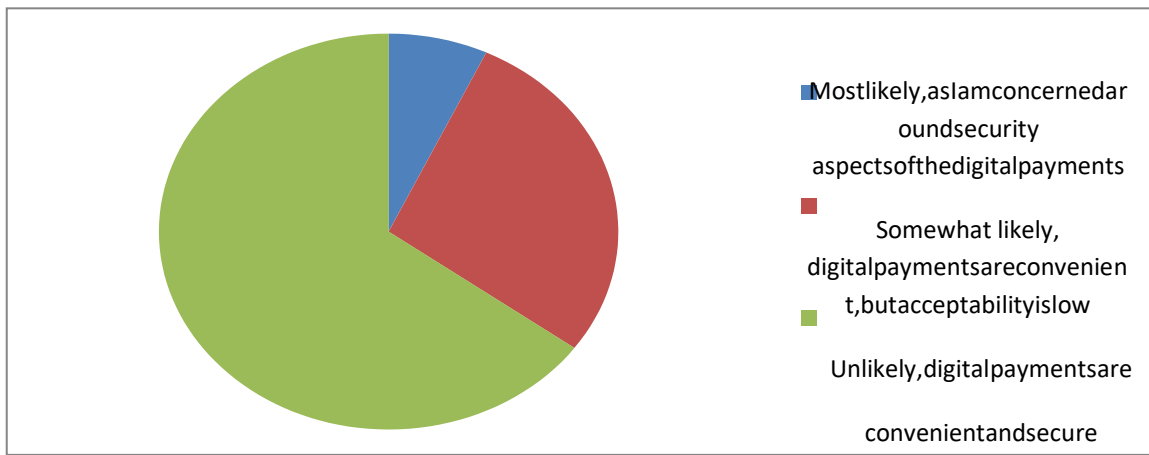


Interpretation:

According to the results of poll survey on the impact of COVID-19 and its resultant lockdowns, a majority of 81 per cent respondents reported higher usage of digital payment methods than cash. The responses indicate a significant apprehension for cash payments, with a simultaneous transition to digital methods, primarily due to aspects of convenience, safety, security, and fear of transmission while allowing the consumers to maintain physical distancing. While, some participants (8 per cent) have responded that they’d be willing to use digital payments exclusively. However, cash is still slated to be utilized possibly for small denomination transactions as well as at small scale vendors where possibly acceptance infrastructure is not present. Around 11 per cent percentage of the participants were of the view that the digital payments usage would be same as pre-COVID-19 levels. The higher inclination towards digital payments during this pandemic suggests that with proper infrastructure in place we could bring more and more population into digital payment ecosystem.

12. How likely are you to move back to cash payments post COVID-19?

S no	Particulars	No of respondent (%)
1	Most likely, as I am concerned around security aspects of the digital payments	7
2	Somewhat likely, digital payments are convenient, but acceptability is low	28
3	Unlikely, digital payments are convenient and secure	65

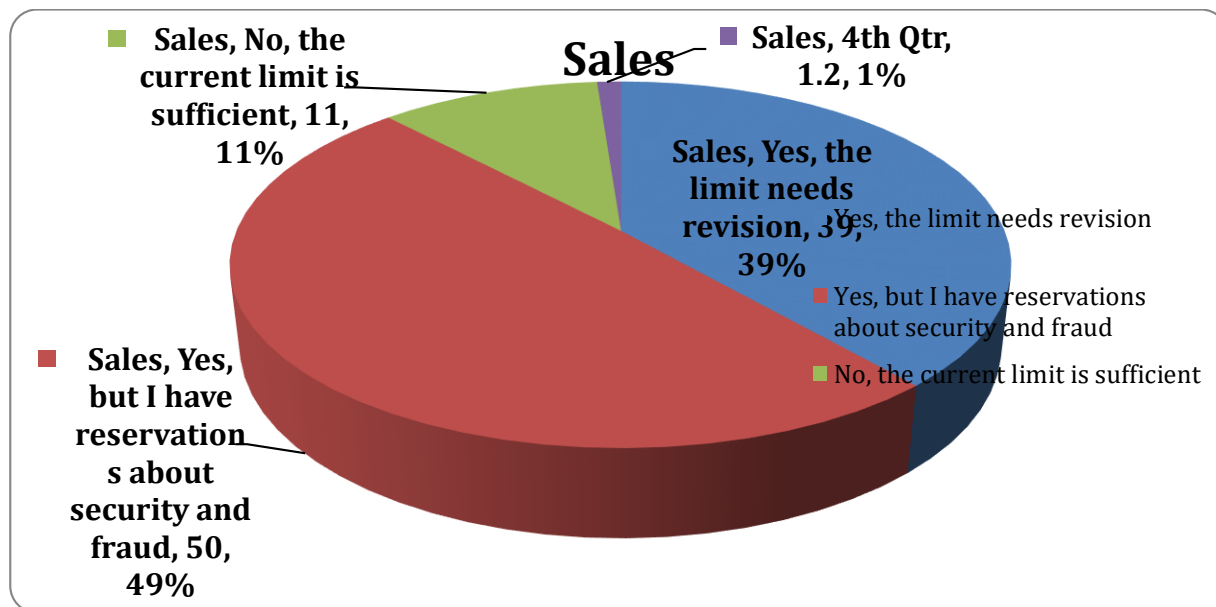


Interpretation:

The majority of participants (65 percent) were of the view that they would not move back to cash payments as they find digital payments safe and secure. However, nearly one-third of the participants have signaled that they might consider moving back to cash payments, primarily citing low acceptability as a reason. 7 percent of participants cited security concerns as a reason to consider reverting to cash, which indicates a need to focus on fortifying existing infrastructure as well as awareness of available dispute and fraud-redressed avenues for consumers. The participant's views tend to denote that crossing the threshold of initial entry barriers in acceptance and use of digital payments is crucial to adding a consistent end-customer base.

13. Do you think increasing limit on contactless card payment from INR2,000 will help in increasing usage of contactless payments?

Sr no	Particulars	No of respondent (%)
1	Yes, the limit needs revision	39
2	Yes, but I have reservations about security and fraud	50
3	No, the current limit is sufficient	11



Interpretation:

The majority of participants said they would welcome an increase in the upper limit on contactless cards, but they also voiced concern about security and fraud, which are issues with contactless payments already in use. According to 39% of the respondents, they are happy with the increase in the limit. This suggests that they are eager to expand the use of these cards and are at least somewhat confident in them, despite the risks associated. However, 11% of the respondents wanted to keep the cap at the current INR2000, presumably because they were worried about fraud and disagreements. Because contactless cards are more vulnerable to these concerns than one-time password (OTP) based transactions, this indicates that consumers tend to value security over convenience, insofar as they appreciate ease of access and use but are also equally vigilant about protection of funds and restriction of loss by potential fraud.

Secondary Research

However, digital payments are on the rise in India. As in most other areas of the world, digital purchases have hit a record high this year in the country with nearly 1.5 billion people. As stated for the first time by the local outlet, all channels from the unified payment interface (UPI) to the Aadhar- Enabled Payment System (AEPS) registered dramatic growth.

In comparison to the gloom created by the Covid-19 pandemic and the lockdown across the economy, digital payments and fintech were one industry that saw record highs in 2020 when a vast number of people opted to stay at home and retain social distances. With fears over catching new coronavirus infections from visiting bank branches and using currency notes, many people—not only in metros but even in smaller towns—began to use their smartphones to make purchases and even take loans for smooth banking services.

As the COVID-19 lockdown and ensuing constraints pushed more and more people to opt for digital transactions, Uttar Pradesh reported a huge 126 percent leap in digital transactions in 2020 compared to the previous year.

In September, the Card spends between 60-70 percent of the January average at the point of sale of terminals in shops. This means that people use digital payments in physical modes like shopping.

The value of transactions on the Unified Payment Interface, a portal built by India's Largest Banks in 2016, hit an all-time high last month as people worried, they would treat bank notes in the midst of the pandemic.

Transfers of electric funds from banks, which had declined in April as economic growth slowed by almost half, have also recovered.

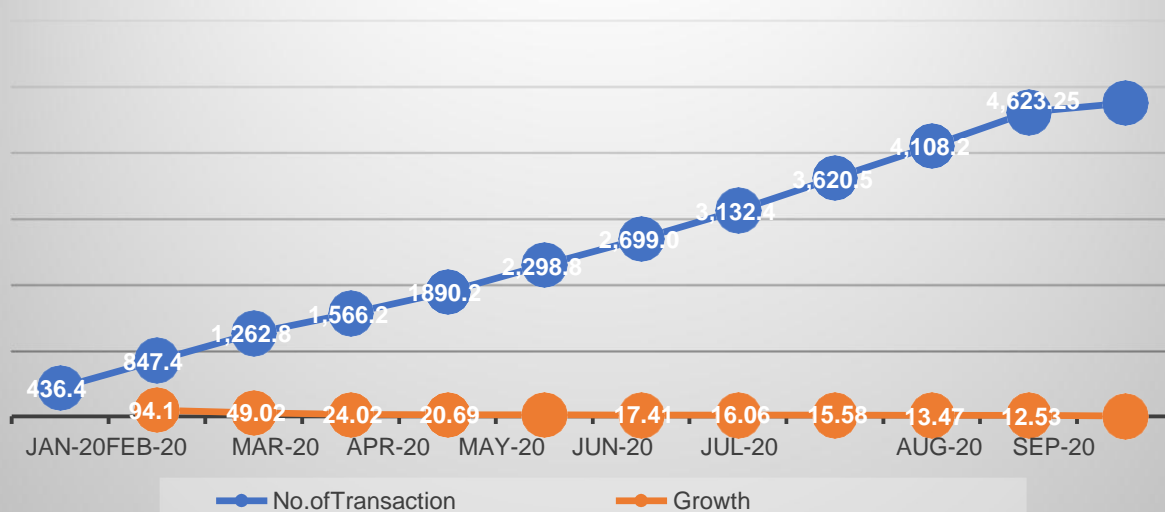
Digital payments reached a record high in 2020 with all platforms from the Unified Payments App to the Aadhar-enabled Payment System (AePS) recording stellar progress.

Cumulative Payment Transactions in the last 12 months

	No. of Transaction (in Crore)	Growth in % (month on month)
Jan 2020	436.43	
Feb 2020	847.44	94.17
March 2020	1,262.84	49.02
April 2020	1,566.22	24.02
May 2020	1890.23	20.69
June 2020	2,298.85	21.62
July 2020	2,699.06	17.41
Aug2020	3,132.43	16.06
Sept 2020	3,620.51	15.58
Oct 2020	4,108.29	13.47
Nov 2020	4,623.25	12.53
Dec 2020	4,764.28	03.05

(Sources: digipay.gov.in)

Cumulative Payment Transactions in the last 12 months



Since contactless cards are more susceptible to fraud and disagreements than one-time password (OTP) based transactions, 11% of respondents wanted to keep the cap at the current INR2000. This suggests that consumers prioritize security over convenience, at least insofar as they value ease of use and protection of funds, but they are also equally vigilant about potential fraud and its potential to cause loss. The government spokesperson said that the state has registered the highest digital payment this year relative to all other States in the country. It is because of the continuous and intensive focus of Chief Minister Yogi Adityanath on the assimilation of technology to the economy that people in the state have made such large- scale digital transactions. UP, with a population of about 24crore, has seen an online sale.

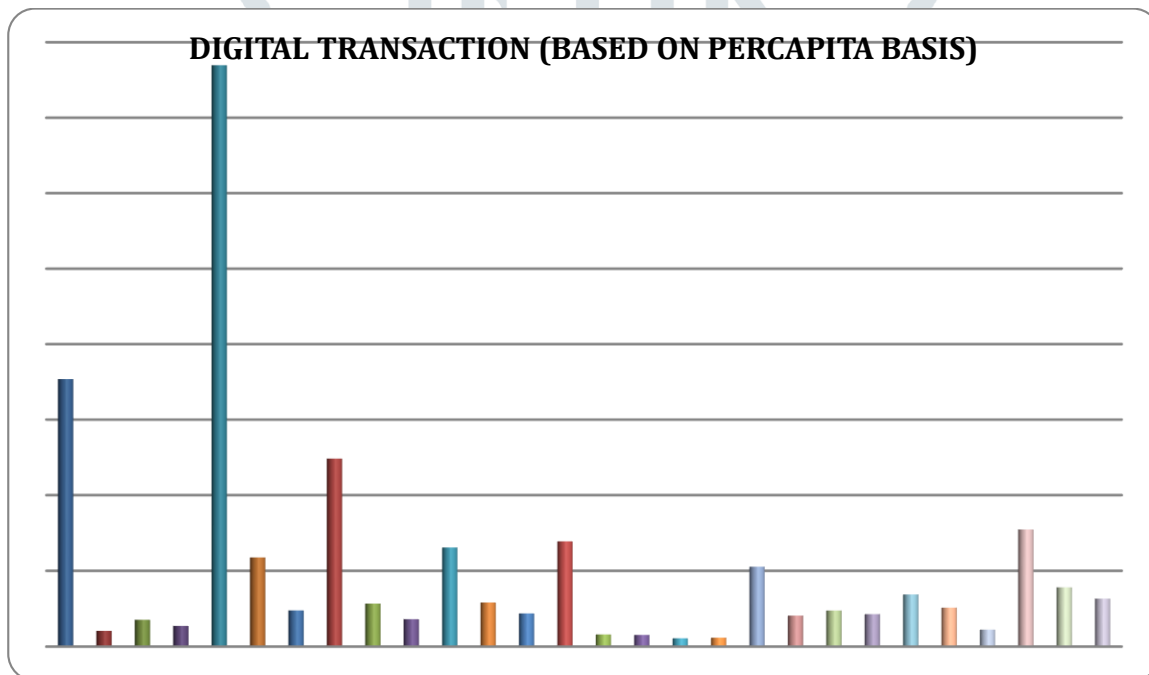
Digital payments reached a record high in 2020 with all platforms from the Unified Payment Interface [UPI] to the Aadhar enable Payment System (AePS) recording Stellar growth.

Since exceeding the 200 Crore mark (approx. 27,1563 million) in October 2020. UPI transaction set another record high at 221 Crore transactions (30 Million+) valued at Rs.3.9 lakh crore (approx. \$53 Billion) in November 2020. Approximately \$63 billion worth of digital payments is projected to be accepted (or expected) between 2020-21.

State wise Distribution of Digital Payment Transaction
Payment Mode of BHIM *99#, Rupay Card on POS only

SL.NO.	STATES	DIGITAL TRANSACTION (BASED ON PERCAPITA BASIS)
1	Andhra Pradesh	17.683
2	Arunachal Pradesh	1.041
3	Assam	1.764
4	Bihar	1.361
5	Chattisgarh	38.481
6	Goa	5.886
7	Gujarat	2.389
8	Haryana	12.42
9	Himachal Pradesh	2.834
10	Jarkhand	1.81
11	Karnataka	6.538
12	Kerala	2.909
13	Madhya Pradesh	2.184
14	Maharashtra	6.948
15	Manipur	0.8
16	Meghalaya	0.765

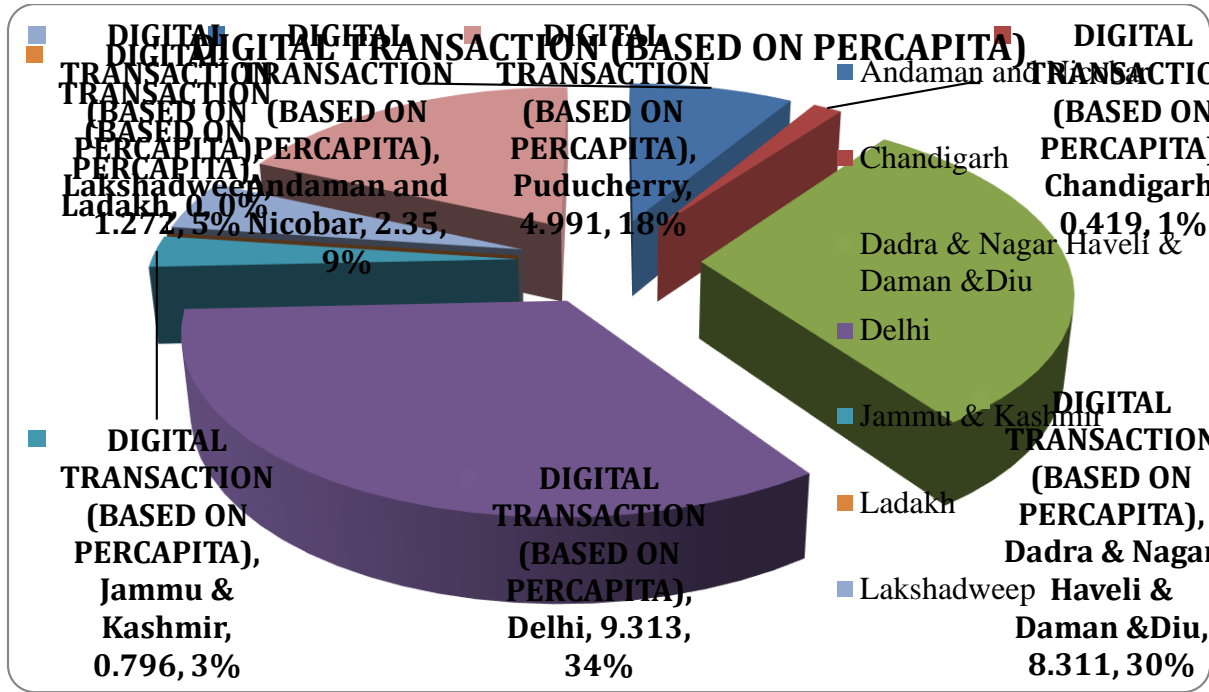
17	Mizoram	0.548
18	Nagaland	0.584
19	Odisha	5.275
20	Punjab	2.041
21	Rajasthan	2.377
22	Sikkim	2.139
23	Tamilnadu	3.437
24	Telangana	2.571
25	Tripura	1.114
26	Uttar Pradesh	7.731
27	Uttarakhand	3.911
28	West Bengal	3.162



(Source digipay.gov.in)

SL.NO.	UNION TERRITORIES	DIGITAL TRANSACTION (BASED ON PERCAPITA)
1	Andaman and Nicobar	2.35
2	Chandigarh	0.419
3	Dadra & Nagar Haveli & Daman & Diu	8.311
4	Delhi	9.313
5	Jammu & Kashmir	0.796
6	Ladakh	-
7	Lakshadweep	1.272

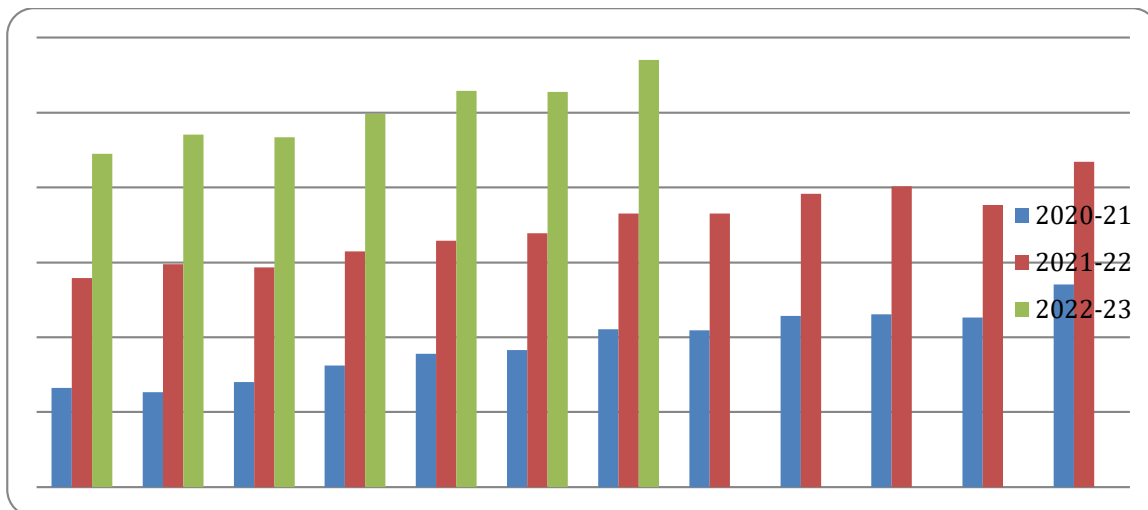
8	Puducherry	4.991
---	------------	-------



BHIM – UPI Transactions, Monthly Growth (LAKHS)

2020-2021		2021-22		2022-23	
April-21	2,641.06	April-22	5,583.05	April-23	8,898.14
May -21	2,539.57	May -22	5,955.20	May -23	9,415.19
June-21	2,807.51	June-22	5,862.75	June-23	9,335.06
July-21	3,247.82	July-22	6,288.40	July-23	9,964.61
August-21	3,555.55	August-22	6,579.63	August-23	10,586.02
September-21	3,654.30	September-22	6,780.80	September-23	10,555.69
October-21	4,218.65	October-22	7,305.42	October-23	11,408.79
November-21	4,186.48	November-22	7,309.45		
December-21	4,566.30	December-22	7,829.49		
January-22	4,617.15	January-23	8,036.89		
February-22	4,527.49	February-23	7,534.76		
March-22	5,405.65	March-23	8,685.30		

BHIM – UPI Transactions, Monthly Growth



As digital payments across India grew at a compound annual growth rate (CAGR) of 55.1 percent over the past five years between the financial year (FY) 2015-16 and 2019-20, the government's move toward a cashless economy bore fruit. The RBI disclosed the details. Its value has risen from INR-920.38 lakh Cr to INR 1623.05 lakh Cr during this time. Clipping at a 15.2 percent compounded annual rate.

Digital payments have risen at a compounded annual growth rate of 55.1 percent between 2015-16 and 2019-20 from 593.61 Cr in the year to March 2016 to 3,434.56 Cr in the year to March 2020 FY (2020) saw a huge rise in volumes to 3,434.56 Cr over the previous year but in value slipped down to INR 1,623.05 lakh Cr.

In 2016-17, digital payments rose to INR 969.12 Cr from INR 593.61 Cr in the previous year, compared to INR 1,120.99 Cr in the previous year. The volume increased to 1459,01 Cr in 2017-18 and the value jumped to INR 1,369,86 lakh Cr. While the numbers climbed at a faster pace in 2018- 19, with volume jumping to 2,343.40 Cr.

Conclusion:

People are still drawn to the digital payment system despite certain challenges. They do so because it is simple to use, saves time, eliminates the need for cash, and allows them to be free from banking hours and time constraints. The digital payment system usage increased at the highest rate due to COVID-19 because it was socially distancing and did not require touch services; people also used it more and more as a safety precaution. Following COVID-19, every single shop adopted the digital payment system for accepting and sending payments.

The government is purposefully encouraging people to accept digital payments these days, even though it used to be required due to social alienation and the COVID-19 pandemic. Although the shift from offline to online payment methods has always existed, the most recent lock-down scenario linked to COVID-19 has resulted in a greater shift in consumer behavior. To stay safe, NPCI pushed clients and other service providers of essential services to switch to digital payment methods.

Solutions are beginning to emerge, and merchants are venturing further into the "phygital world." Plus, they don't have to use the internet at all. Consumers will be able to place orders, exchange photos, and specify what they wish to buy using any messaging app we use. Eventually, payments will be made digitally. Everyone leaves the house to deliver or retrieve the goods. There will be a period following the lockout during which we will need to exercise more vigilance and safety measures to ensure our safety until this crisis has been resolved. These days, it's all about coming up with new ideas and solutions to satisfy the demands of consumers, merchants, and companies.

Limitation:

Study is limited to knowledge of respondent and it is purely subjective. Study intended to know the people preference towards the digital payment system in the year 2020-21.

References

- Dr.V.Sornaganesh and Dr.M.Chelladurai (2016) "Demonetization of Indian currency and its impact on business environment" International Journal of Informative and Futuristic Research Vol-4, Issue-3 November2016, PP5654-5662
- Aravind Kumar (2017) "Demonetisation and cashless banking transactions in India" International Journal of new innovations in Engineering and Technology ISSN: 2321-6319, Vol. No. 7, Issue No. 3, April 2017, Pp30- 36
- Anthony Rahul Golden S (2017) "An Overview of Digitalization in Indian Banking Sector", Indo - Iranian Journal of Scientific Research (IIJSR), October -December, 2017. [6].
- <https://www.crowdfundinsider.com>
- <https://www.moneycontrol.com>
- <https://www.thehindubusinesslin.com>
- <https://www.researchdive.com>
- <https://www.timesofindia.indiatimes.com>
- <https://www.indiaexpress.com>
- <https://www.expresscomputer.in>
- <https://www.outlookindia.com>
- <https://www.globaltrademay.com>
- <https://www.digipay.gov.com>