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IMPACT OF COVID-19 ON DIGITAL PAYMENT USAGE IN INDIA

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Abstract:

The negative effects are undermining the major sectors of the Indian economy in terms of airfare, airline and hospitality, and you are feeling vulnerable. Digital, online and offline transactions, operated by leading firms are impacted because of the set limits for ending COVID-19 outbreaks before they become uncontrolled. While customer traffic to digital channels is still high, the price of payment has dropped dramatically. If this trend continues to persist for a long time, businesses in the digital payments sector will suffer in the next two or three months as people become increasingly aware of the outages.

The unpredictable times in which we live, when the impact of the Coronavirus outbreak has gone on economically and socially, can have a temporary impact on purchase patterns, among others. It would be a great boost for ecommerce including popular food, entertainment and food. Going back, over the last 4 years, digital payments have grown substantially from 5% to 30%, backed by demonetization and the Government's ongoing drive to further the unwanted Indian economy. Online Travel Aggregators, movies and resorts and the entertainment industry, make up the largest share of the digital payments industry in India, contributing around 40%. Everything else comes from local debt and financial services.

Key Words: COVID-19, Digital Payments, Indian Economy, Finance

1. DEFINITION OF MOBILE WALLET

"Digital Wallet", the mobile wallet was developed in the year 1996 by Sam Pitroda, who was the founder of digital wallet, also filed patents for the same in the United States. He "professed that a digital wallet would consist of a liquid crystal display not much bigger than a regular plastic bank card, preferably a touch-sensitive screen and simple user interface that lets the user flip through the digital wallet in the same manner he/she flips through a leather wallet".

Until now there is no proper definition written by any scholars of "mobile wallet". But as per definition of mobile wallet in the Non Confidential GSMA White paper "a software application on a mobile handset that functions as a digital container for payment cards, tickets, loyalty cards, receipts, vouchers and other items that might be found in a conventional wallet. The mobile wallet enables the user to manage a broad portfolio of mobile NFC [Near Field Communication] services from many different companies". All in one in one's mobile smart phone. It means, you have to download and install the application in your mobile which is created by some companies like Paytm, Google, PayPal and those applications are used directly for the payment of the products which you have purchased (online or offline or both).

The mobile wallet performs following features for the single user:

- Displaying and storing coupons or various offers from businesses, which the mobile wallet user has subscribed to.
- Identifying real time offers and discounts from different locations
- Acting as a tool for payment via credit/debit cards
- Organizing receipts

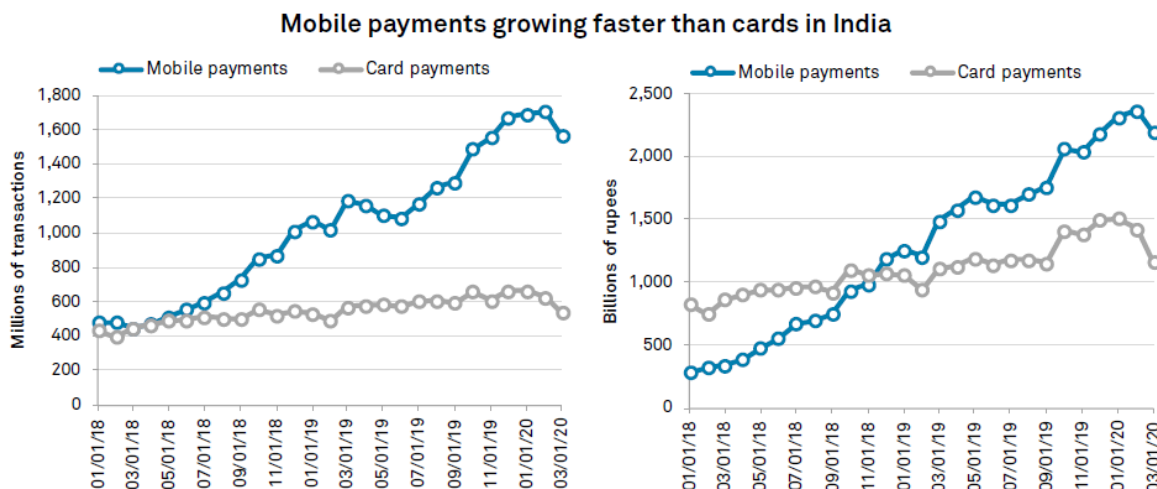
The growth of the COVID-19's in the world is one of the big problems for the economy and financial markets of the world. Various countries like India are in order to reduce the outbreak of coronavirus and

its effects, various steps are been taken like lockdown in the nation, restriction of travel within the countries as well as foreign travels; We also urge the public not to go into the houses, maintain the social distance and work from home. The upheaval of the economy is high and the temporary decline in employment of businesses is considered large and small. With the much-anticipated economic growth, the financial outlook for digital payment is different and will follow the same trend, at least in the short term. But industrial stability and innovation will play a major role in growing the economy.

2. BUSINESS IMPACT

Various important sectors in the economy of the Indian have been adversely affected due to COVID-19 pandemic. The affected sectors were like automotive, manufacturing, retail, airline and hospitality industry. The effects are also seen on digital payments, one of the fastest growing things that are linked to the above areas. Shutdown of shops, trips and decrease in the spending of the consumer (e.g. spending on the various outdoor food, movies and entertainment, etc.) had brought the negative impact on digital payments. In some categories, a decline in digital pricing is evident in travel, airlines, hotels, hospitality, restaurants, entertainment and e-commerce (non-essential). During the appropriate time the Digital payment has become necessary. With many areas participating in the digital payment revolution, it is still too early to realize the long-term impact of COVID-19 on digital payments.

In 2012, Apple INC launched Apple's Passbook, which was used for boarding passes, tickets, and coupons. Further Apple Pay was launched in the US after 2 years, further it spread quickly to the United Kingdom and China. In the year 2015 Android and Samsung Pay was launched. After that many digital mobile wallets like Paytm, Bharat Pay, Phone Pay, PayPal, Touch n Go, vcash, etc have made mobile wallets quite popular.



Sources: 2020 India Mobile Payments Market Report, [spglobal.com/market intelligence](https://spglobal.com/market-intelligence), Reserve Bank of India; National Payments Corp. of India

3. OBJECTIVES

3.1 To Know the Importance of Digital Payment in COVID-19 Pandemic.

3.2 To understand the perception of consumers with regards to usage of digital payments in COVID-19 pandemic

4. DATA AND METHODS

The data was collected primarily with the help of Google forms which were circulated among the people irrespective of their demographic characteristics. Total 113 responses were obtained. These responses

were tabulated and graphical presentations were used as per requirement. The data was analyzed in descriptive form. Apart from this, the secondary data was obtained from the Government of India portal of digital payments, official reports and other web sources. Both primary and secondary data helped to analyze the findings of the study.

5. REGULATORY FRAMEWORK ON VIRTUAL MONEY IN INDIA

RBI has introduced the regulatory framework on Mobile Wallets in the year 2009. This was provided in the section "Master Direction on Issuance and Operation of Prepaid Payment Instruments" in Section 18 of Payment and Settlement Act, 2007. For the first time ever the non-banking institutions were also allowed to issue the semi-closed instruments required for the usage of mobile wallets. However, since then there were continuous amendments, as per the needs arisen.

In India, after the process of demonetization in the year 2016, several digital wallet players have made their mark. Due to limitations in the cash flow, it was necessary that the transactions could be handled digitally. However, the guidelines of 2009 were further amended to impose restrictions on the market players and other stakeholders who are involved in the action. Further, amendments were made in the year 2019. People were switching themselves from the traditional cash flow platforms to digital stages. This phenomenon was particularly witnessed in the younger sections of the population.

The population using the UPI based application has increased on a large scale. These people were directly dependent on such mobile wallets. Reserve cash at home has also significantly reduced. People have reduced their physical banking and ATM transactions. RBI found it necessary to regulate the operations under the Master Direction on Issuance and Operations of prepaid payment/ transactions. Several operators have found it convenient to redirect the buyers to prepaid pages with the help of modern Artificial Intelligence (AI) technology. This has even made the life of the digital consumers very comfortable. However, as some types of fraud were very common, regulatory aspects were found to be attractive, both from the viewpoint of consumers as well as the marketer.

(RBI pushes digital payments in the time of COVID-19, 2020), RBI Governor Shaktikanta Das on Monday urged Indians to use the country's digital payment infrastructure in the country in a bid to end the coronavirus virus epidemic. "The RBI and the government have a strong focus on improving digital payment," Das said, pointing to examples of using NEFT, IMPS and UPI to cut through social networks to create jobs. He also said that banks were given the right advice to improve digital payments. The RBI also said in a separate notice that COVID-19 could be prevented from avoiding network forums and visiting public places. "The public can use these digital payment methods through their home invasion by using online means such as mobile banking, online banking, credit cards etc. and spending money in crowded places while sending money or paying bills." urges the director.

6 COVID-19 AS CATALYST IN THE DEEP ADOPTION OF DIGITAL PAYMENT FRAMEWORKS

(CHAWLA, 2020) found that until 2019, digital payments receivables were slow and varied by country. The reasons included culture, democratization, and technology - many of which were economists at different stages of development. However, the long-term uncertainty of the COVID-19 issue will result in the public being accommodated on digital payment platforms, almost as much as power. With inbound wireless access significantly improved by the 2019 end, with more than 5.1 billion unique users and 3.7 billion unique Internet users, it will help smooth the adoption of digital payment platforms. And with many competitors offering digital payment platforms, the competition should help sharpen the user experience of the app as poor performance will lead users to vote on their (digital) wallets. How COVID-19 Increases Digital Payment Adoption Worldwide

As per analysis of the (Patel, 2020) the rate of acceptance of the digital payment rate is falling in 2019. It was a major change in every category and country. The pandemic of the COVID-19 has raised the use of digital payment. The pandemic has forced the people to buy the goods and services online via Electronic-Commerce and Mobile-commerce. There is also a rise in the use of smart phones, which may increase the use and development of digital payments. There will be a rise in the competition that might give the consumer a chance of choice.

7 COVID-19: WANT TO PAY OFFLINE? GO TO DIGITAL

(Gera, 2020) says that, the government has introduced a 21-day shutdown to stop the spread of virus, only essential services were allowed to operate, but the operation of these services still requires some form of human interaction, which is best avoided at these times. Although not all people can be avoided, people can still not be contacted when other services such as payment and banking are available. Although the government has been pushing digital payments for a long time now, these options are important now to keep the spread of the population. A great way to achieve this is the use of online biller and UPI and wallet apps. By paying off online loans, many banks have incorporated their payment desk into their online banking systems. The system is simple, and users can find that they can even place payment payments on automatic payments. However, if you are uncomfortable with using such services, apps such as PayTM and PhonePe allow payment of fees on their platform. "India is still in the first phase of coral reefs and there are many steps to take to prevent the spread. However, when you consider the current situation, offline payment can be a way forward and payment methods such as UPI, IMPS, RTGS, portable wallets and net banking can be very helpful in reducing human interaction," said MandarAgashe, co-founder and senior chairman, Sarvatra Technologies, a provider of payment solutions.

8 CASHLESS AFTER COVID-19?

Electronic Payments Seem To Be More Attractive As People Fear That Money Can Spread the Coronavirus

(Rooney, 2020) highlights the key points as:

- Seeing money as a coronavirus vehicle can change how consumers choose to pay in person.
- Critics say that the "psychological factor" of people who think money is "dirty" can spur more adoption of things like Apple Pay and Venmo.
- "People default to normal, unless something pushes you away," said Jodie Kelley, manager of the Electronic Transaction Association. "Wireless billing has been considered as something new for consumers who know what they're up to."

Table No.1 - 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%
August 2020	3,132.43	16.06%
Sept 2020	3,620.51	15.58%

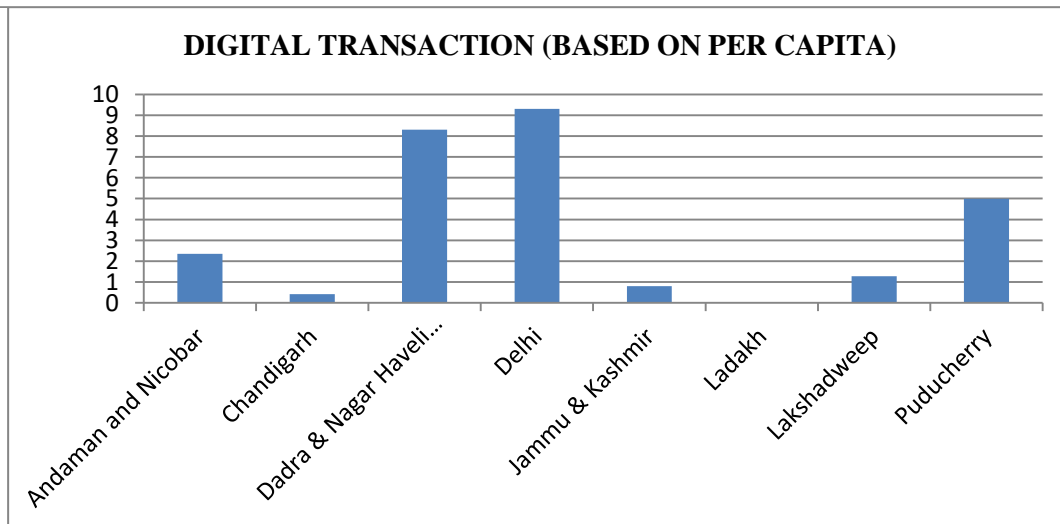
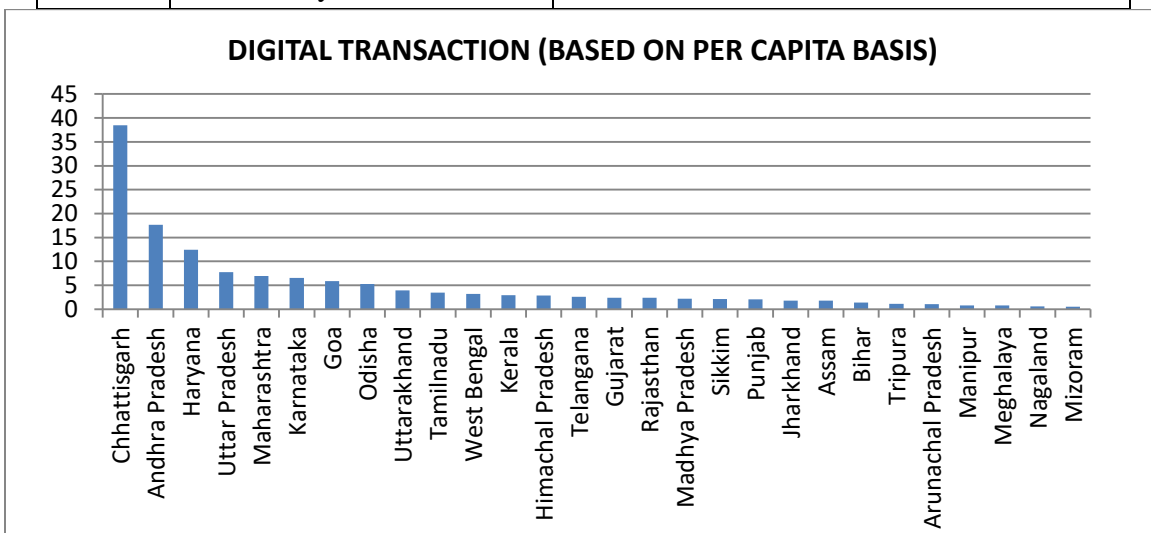
Oct 2020	4,108.29	13.47%
Nov 2020	4,623.25	12.53%
Dec 2020	4,764.28	03.05%

It is been seen that there is been rise in the digital payment transaction from January 2020. From January 2020 to February 2020 it was almost doubled by 94.17% rise i.e. 436.43 crore transaction to 847.44 crore transaction. Further the percentage of rise was diminishing. From February 2020 to March 2020 was 49.05%. It raises percentage decrease to 03.05% from November 2020 to December 2020. In the month of December the number of transaction went to 4764.28 crore.

Table no 2 - State Wise Distribution of Digital Payment Transaction, Payment Mode of BHIM *99#, Rupay Card on POS only

SR.NO	STATES	DIGITAL TRANSACTION (BASED ON PER CAPITA BASIS)
1	Chhattisgarh	38.481
2	Andhra Pradesh	17.683
3	Haryana	12.42
4	Uttar Pradesh	7.731
5	Maharashtra	6.948
6	Karnataka	6.538
7	Goa	5.886
8	Odisha	5.275
9	Uttarakhand	3.911
10	Tamilnadu	3.437
11	West Bengal	3.162
12	Kerala	2.909
13	Himachal Pradesh	2.834
14	Telangana	2.571
15	Gujarat	2.389
16	Rajasthan	2.377
17	Madhya Pradesh	2.184
18	Sikkim	2.139
19	Punjab	2.041
20	Jharkhand	1.81
21	Assam	1.764
22	Bihar	1.361
23	Tripura	1.114
24	Arunachal Pradesh	1.041
25	Manipur	0.8
26	Meghalaya	0.765
27	Nagaland	0.584
28	Mizoram	0.548
Union Territories		

SR.NO .	UNION TERRITORIES	DIGITAL TRANSACTION (BASED ON PER CAPITA)
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	0
7	Lakshadweep	1.272
8	Puducherry	4.991



Chhattisgarh has the most number of digital transactions i.e. 38.481 per capita basis, followed by Andhrapradesh with 17.68, Haryana 12.42%. Next is at UP 7.73. For Maharashtra it is 6.94. The lowest is Manipur, Meghalaya, Nagaland and Mizoram with 0.8, 0.765, 0.584 and 0.548 digital transactions per capita basis. For Union territory Dadra & Nagar Haveli & Daman and Diu is 8.311 digital transactions followed by 4.991.

Table no 3 - BHIM – UPI Transactions, Monthly Growth (LAKHS)

2018-2019		2019-2020		2020-2021	
April-18	1,899	April-19	7,817	April-20	9,995
May -18	1,893	May -19	7,334	May -20	12,344
June-18	2,462	June-19	7,544	June-20	13,368
July-18	2,355	July-19	8,222	July-20	14,973
August-18	3,119	August-19	9,183	August-20	16,187
September-18	4,057	September-19	9,549	September-20	18,001
October-18	4,822	October-19	11,483	October-20	20,715
November-18	5,248	November-19	12,187	November-20	22,101
December-18	6,200	December-19	13,083	December-20	22,341
January-19	6,726	January-20	13,049	January-21	
February-19	6,741	February-20	13,256	February-21	
March-19	7,994	March-20	12,468	March-21	

9 THE IMPACT OF COVID-19 ON PAYMENTS

(AGARWAL, 2020) The global payment system has shown great resilience in fighting disease. The general public continues to rely on payment systems and providers and there is little reporting of critical infrastructure. But the industry is moving away from the euro barrel. The biggest changes for payment providers are the result of this devastation, the increase in useless debt, the reduction of revenue and the greater need for customer service groups. Payment value has decreased due to depreciation and trade. In the short term, this will force payment providers to make changes to the operating model, which can give them greater flexibility and prioritize new short-term goals. The long-term effects of the epidemic on land payments are very high.

9.1 A powerful impetus for a respected society

In early March, the World Health Organization warned that the coronavirus could spread. WHO recommends using communication payments where possible to help control the virus. COVID-19 continues to raise costs by forcing more retailers to close their doors and sell online orders for sale. For these reasons, the epidemic causes a large number of unpaid payments. This may not end up costing everywhere, but it is enough to push many markets toward a new palladium.

9.2 New need to protect fraud

Sadly, any pool provides opportunities for criminals. With rapid global change, many new approaches are open to hackers. It operates as public health authorities or other government agencies on a standard COVID-19 scale and demands payment to the target. In response, major retailers and financial institutions must make big money to improve fraud prevention and detection. Artificial intelligence and machine learning can make a huge difference in this area.

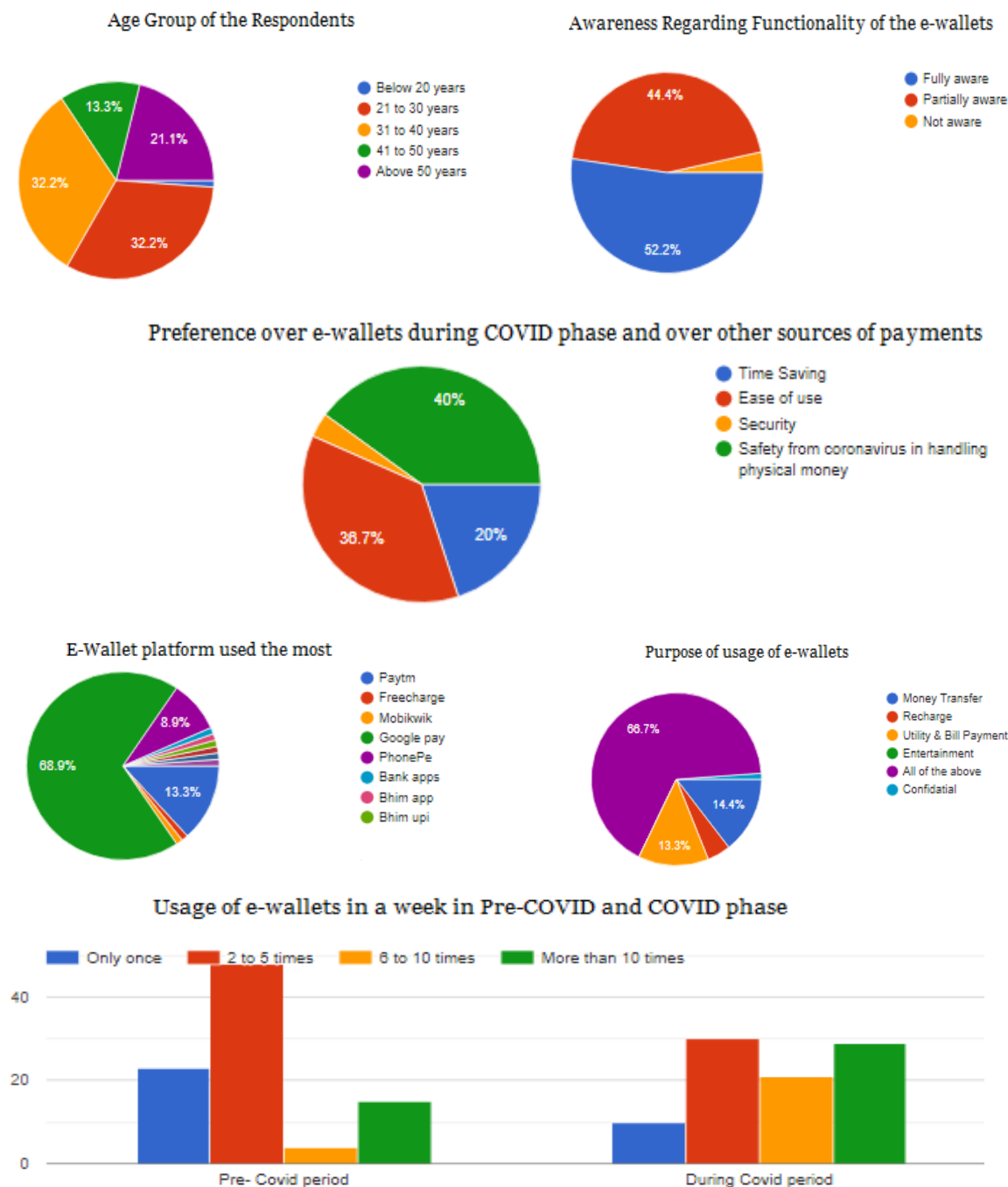
9.3 The dynamic variable equation

An epidemic can change the nature of the returns for two reasons: the first is the rise of more fraud, and the second is the highest level of financial disruption in the world. As businesses and individuals become more powerful, payments are increasingly viewed. The widespread adoption of distributed ledger technology can serve as a lost result. Block chain solutions for tracking freight and payments can be very deceptive, especially for commercial finance.

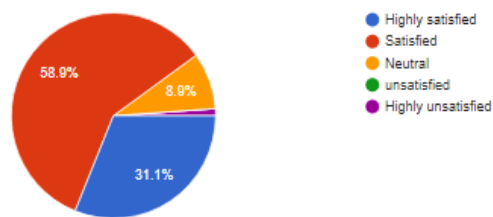
9.4 A strong practice for paid fintech's

Reducing the number of foreign payments means a reduction in the payment solution providers' fees. This affects all aspects of the payment industry, but fintech's tend to feel more depressed as their investments look for low-risk areas. FinTech's should prepare a friendly funding environment. Some may enter for profit, while others may want to do research in conjunction with an established financial services company

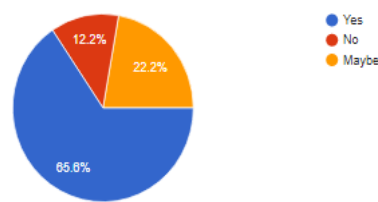
10 DATA ANALYSIS AND INTERPRETATION.



Rating of e-wallet services by the respondents



Increase in the dependency over e-wallets during COVID-19 period



From the survey conducted by using the online way. The majority of samples are of age groups of 31 to 40 age and 21 to 30 years of 32.2% of each category, followed by 21.1% of more than 50 age groups, 13.3% of 41 to 50 years age groups and only 1.2% of below 20 years.

When asked about whether they are aware of the E-wallets 52.2% were fully aware, while 44.4% were partially aware and balance was not aware. This shows that only a few percent were not aware about E-wallets. Further we have seen rise in use of E-wallets in the Covid-19 phase, there are various reasons behind this such as E-wallets saves the time, it is Easy to use, it is safe and secure then handling the cash and it is safety during covid-19 period for the contactless payment rather than physical handling the cash. 40% responded that the last reason for safety from the coronavirus was in making contactless payment. 36.7% said it is easy to use, while 20% said it saves time.

With the passing of time various E-wallets apps have been developed such as Paytm, BHIM UPI, Mobikwik, Google Pay, Phonepe, Free Charge, Banks apps, etc. Majorities are using Bhim UPI i.e. 68.9% next is Paytm with 13.3% and phonepe with 8.9% and balance percentage is of other apps.

The mobile Wallet is used for various purposes such as transferring the money recharge, bill and utility payments, entertainment. Majority said they don't use the app only for single purpose, they use it for multipurpose, i.e. 66.7% said it.

When the respondent asked about how many times in a week uses the E-wallets. They were asked about usage before Covid-19 period as well as during covid-19 period. In Pre-Covid period 22 respondents said they were using it only once in a week, while 45 people said they use it for 2 to 5 times in a week and very few used it for 6 to 10 times or more than 10 times. But during covid-19 period more than 25 respondents said they use the E-wallets more than 10 times in a week, 20 responded said they use it 6 to 10 times in a week. The number of people using only once in a week declined in covid-19 period. Hence it clearly indicates that there is a rise in usage of E-wallets apps in covid-19 period.

We asked the people to rate the E-wallets 31.1% said they are highly satisfied, 58.9% said they are satisfied, 8.9% were neutral and balances were not satisfied. More than 60% said they are dependent now on the E-wallets.

When people were asked about the experience of the E-wallet during Covid-19 period. They said it is convenient to use and safe and easy to handle. There is no need to keep physical cash in hands. One of the respondents said for using the E-wallets, internet is necessary but at some places for customers convenient they provide wifi for the payment purpose. Various people said it saves time as it is an instant way of payment. Various people sitting at home are able to make payments.

11 CONCLUSION

During the COVID-19 outbreak where people were encouraged to keep up with the public sphere, there has been an increase in orders placed on ecommerce websites and apps for food, entertainment and food. Someone who performs any such services on ecommerce platforms can pay through the payment gateway. It ensures sensitive information, such as credit card numbers, hosted on an interface or on an ecommerce website, is transmitted securely through various channels, thus making the digital payment option safer and safer. The Near Field Communication (NFC) feature in the PoS portal allows one to

easily pay retail sales to their shop. The customer can choose to pay using their credit / contact cards or with the Tap & Pay feature in the mobile app by tapping their smartphones at the PoS terminal. In conclusion, let us choose safe and easy digital payment methods and ensure that we follow preventive measures to combat the epidemic collectively.

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