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Digital Payments during the Covid-19 Pandemic in India: With special reference to 'BHIM'

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Abstract

BHIM app helps to make speedy, relaxed and simple payment transactions using UPI. It offers some important features such as sending money, requesting money, scan and pay, transactions history, switch between multiple banks accounts, availability in almost all regional languages and much more. Its usage has been increasing day by day especially after the Covid 19 Pandemic broke out in India. Hence, the present study has been carried out with the objective to study usage of BHIM during Covid 19 and its impact on Number of Banks Live on BHIM, Number of BHIM transactions and Value of BHIM transactions before and during Covid 19 pandemic. The period of the study covers 50-months i.e. 25 months after Covid -19 pandemic broke out covering the three waves of the pandemic and 25 months before the pandemic. The study found that with the increase in banks live on BHIM has increased during the study period, there has been increase in Volume of BHIM transactions. With the increase in Volume of BHIM transaction, there has been increase in Value of BHIM transactions. As the means of number of banks live on BHIM App, Volume of BHIM transactions and Value of BHIM transactions have increased significantly during the three waves of the pandemic in India, it can be concluded that BHIM App has been becoming popular in making digital payments in India as compared to other Apps.

Key words: BHIM App, Digital Payment, Covid 19 Pandemic

Digital Payments during the Covid-19 Pandemic in India: With special reference to 'BHIM'

Introduction

“India has been a leading market for digital payments since 2019. According to March 2021 report by ACI Worldwide, India led the real-time payments market with 2550 crore payments, followed by China (1570 crore) and South Korea. (600 crores). The US with 120 crore transactions is ranked 9th. The number of digital payments in India has increased by 33% per annum (YoY) during the financial year (FY) 2021-2022. A total of 7,422 crore digital transactions were recorded during this period, up from 5,554 crore transactions identified in FY 2020-2021. (Source: <https://www.livemint.com/technology/tech-news/india-made-7-422-cr-digital-payments-in-fy22-at-33-growth-rate-meity-11648038672792.html>). Digital India was launched by Indian Prime Minister Narendra Modi on 1 July 2015, with the aim of connecting rural areas to high-speed internet networks and improving digital literacy. (Source: https://en.wikipedia.org/wiki/Digital_India). The Digital India Program is a key program of the Government of India with a vision to transform India into a digital empowered society and knowledge economy. "Faceless, Paperless, Cashless" is one of the roles they call Digital India. As part of a cashless promotional campaign and transform India into a low-income society, various forms of digital payment are available. These forms are; Banking Cards, USSD (Unstructured Supplementary Service Data), AePS (Aadhaar Enabled Payment System) UPI (Unified Payments Interface), Mobile Wallets, Banks pre-paid cards, Point of Sale, Internet Banking, Mobile Banking, Micro ATMs. The forms of digital payment method are briefly defined as under:

Banking Cards: Indians mostly use bank cards, or debit / credit cards, or prepaid cards, as another form of cash payment. Andhra Bank introduced the first credit card in India in 1981. Cards are chosen for a variety of reasons, including, but not limited to, convenience, safety, and security. This is the only digital payment method that is popular in online trading and physical trading alike. Nowadays, many apps are introduced for the sole purpose of managing card transactions such as Cred, Square, etc.

Unstructured Supplementary Service Data (USSD): USSD introduced those parts of the Indian population that could not access the relevant banks and internet services. Under USSD, payment by mobile banking is possible without an internet connection by simply dialing *99 # on any key feature phone. This number applies to all Telecom Service Providers (TSPs) and allows customers to use services that include an interbank account for account transfers, balance checks, and small statements available. About 51 leading banks offer USSD service in different regional languages, including Hindi and English.

Aadhaar-enabled Payment System (AePS): AePS is a digital led banking model set up to improve the presence and accessibility of Aadhaar. Under this program, customers can use their Aadhaar affiliate accounts to transfer money between two Aadhaar bank accounts. As of February 2020, AePS had fallen more than 205 million according to NPCI data. AEPS does not require any physical activity such as visiting a branch, using debit or credit cards or making a signature on a document. This bank-led model allows digital payments at PoS (Point of Sale

/Small ATM) by Business News Reporter (also known as Bank Mitra) using Aadhaar authentication.

Unified Payments Interface (UPI): UPI is a payment system that culminates in multiple bank accounts into a single application, allowing easy transfer between two parties. Compared to NEFT, RTGS, and IMPS, the UPI is very well defined and standardized across all banks. One can use UPI to initiate bank transfers anywhere with just a few clicks. The advantage of using a UPI is that it allows you to pay directly through your bank account, without the need to type a card or bank details. This method has become one of the most popular digital payment methods by 2020, with October witnessing more than two billion transactions.

Mobile Wallets: Mobile Wallets, as the name suggests, are not the kind of wallet one can carry in cash but in a digital format. Customers often link their bank accounts or wallets to a wallet to facilitate secure digital transactions. Another way to use wallets is to add money to Mobile Wallet and use the stated balance to transfer money. Today, many banks have released their wallets. In addition, notable companies have established their presence in the Mobile Wallet area. Other widely used include Paytm, Freecharge, Mobikwik, mRuppee, Vodafone M-Pesa, Airtel Money, Jio Money, SBI Buddy, Vodafone M-Pesa, Axis Bank Lime, ICICI Pockets, etc.

Bank Prepaid Cards: Bank prepaid debit card is a prepaid debit card issued by the bank, usually used once or reloaded for frequent use. It is different from a standard bank card because the latter is always linked to your bank account and can be used multiple times. This may or may not work on a prepaid bank card. A prepaid card can be created by any customer with a KYC compliant account by visiting the bank's website. Company gifts, reward cards, or use cards and for gift purposes are the most commonly uses of these cards.

PoS Terminals: PoS (Point of Sale) is known as the place or part where a sale takes place. For a long time, PoS terminals were considered payment points in supermarkets and shopping malls. The most common type of PoS machine is debit and credit cards, where customers can simply make a payment by simply swiping a card and entering a PIN. With the advent of digital and the growing popularity of other online payment methods, new PoS methods have come to the fore. First is an unaffected PoS machine reader, which can withdraw any amount up to Rs. 2000 by authenticating it automatically, without the need for a Card PIN.

Internet Banking: Internet Banking, also known as e-banking or online banking, allows customers of a particular bank to perform other financial transactions using the bank's website. E-banking requires a consistent internet connection to make or receive payments and access a banking website, called Internet Banking. Today, many Indian banks have launched their online banking services. It has become one of the most popular forms of online trading. Every payment gateway in India has a virtual banking option available. NEFT, RTGS, or IMPS are some of the top ways to do online banking.

Mobile Banking: Mobile banking refers to the act of performing tasks and other banking activities using mobile devices, usually through a mobile banking app. Today, many banks have their own mobile banking systems that can be used on mobile devices such as cell phones and tablets and sometimes on computers. Mobile banking is known as the banking future, thanks to its convenience, convenience, and speed. Digital payment methods, such as IMPS, NEFT, RTGS, IMPS, investments, bank statements, credit card payments, etc., are available at

one of the mobile banking applications. Banks themselves encourage customers to go digital as it makes processes easier for them as well.

Micro ATMs: Micro ATMs is a Business correspondents (BC) device for delivering essential banking services to customers. These Journalists, who may be the owners of a local store, will operate as a 'Micro ATM' to make quick transactions. They will use a device that will allow one to transfer money through one's Aadhaar bank account by simply confirming one's fingerprints. In fact, Business correspondents will act as customer banks. Customers need to verify their authenticity using the UID (Aadhaar). Key services that will be supported by smaller ATMs are withdrawals, deposits, transfers, and balance checks. The only requirement for Micro ATMs is that one must link one's bank account with Aadhaar.

With a view to becoming a leading payment network in the world and a goal to reach all Indians with one or more payment services, NPCI, a powerful payment system in India committed to driving a digital India that serves all Indians. It was established in 2008, under the auspices of the State Bank of India and Indian banks. An organization, the NPCI has launched a campaign to reach all Indians through its diversity list of digital payment products such as UPI, BHIM, RuPay, NETC, AEPS, BHIM Aadhaar, Bharat BillPay, NFS, NACH, CTS, IMPS and simplifying secure digital payments.

Overview of BHIM

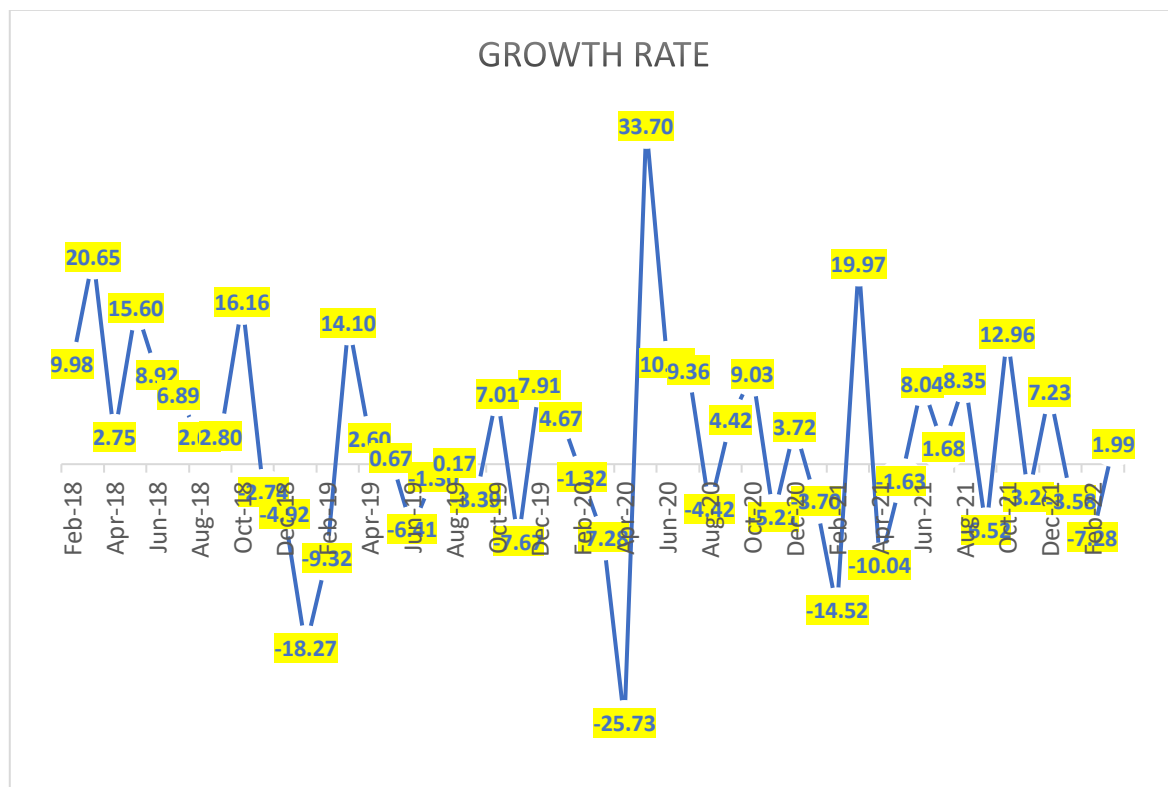
Established and developed by the National Payments Corporation of India (NPCI), BHIM was named and launched by the Honorable Prime Minister of India, Narendra Modi on 30 December 2016 to bring Investment to the nation and the digital community. Bharat Interface for Money (BHIM) is a payment app that allows to perform simple, easy and fast tasks using the Payments Interface (UPI) interface. One can make direct bank payments to anyone in the UPI using his UPI ID or scan his QR with the BHIM app. You can also request an application via the UPI ID. It is noted that there is difference between UPI and BHIM. "UPI is a platform while BHIM is a separate mobile wallet app, such as Paytm, Mobikwik, Freecharge and others. The UPI platform has already allowed all major banks to offer the services offered by BHIM at present. However, for different banks, one will need to use different UPI and VPA (Real Payment) applications, such as separate email IDs. So, if one has two accounts in two banks, to enable UPI transactions on both the accounts, one will have to use separate UPI apps of both the banks and generate unique VPAs. The BHIM app, is an integrated UPI-based application that can be synced to any UPI-enabled bank accounts. However, only one UPI enabled account can be added to BHIM and not many. There is an option to switch accounts. The BHIM app provides a very simple interface and most importantly allows users to create a VPA with a certified mobile number. In fact, the BHIM app is an advanced version of existing banking UPI applications. The BHIM app easily offers what other mobile wallets offer. This is something that can be done with existing UPI bank applications.

There is difference between BHIM and Paytm like mobile wallets. The BHIM app offers great competition for existing mobile wallets. Considered to be directly linked to a bank account and made NPCI, the BHIM application will obviously emerge as the most reliable option for citizens. While BHIM has all the benefits offered by other mobile wallets, one major advantage is that the transaction takes place directly in the bank accounts and there are no costs associated

with the transfer of funds. Therefore, one will not need to re-charge one's BHIM wallet and already, there are no commissions, hidden costs involved.

Growth rate of transaction of BHIM

To explore the above ideas, the researchers calculated the growth rate of the pre-selected months. The basic growth rate formula takes into account the current value and subtracts it from the previous value. This difference is then divided by the previous value and multiplied by 100 to obtain a percentage representation of the growth rate. The following chart shows the growth rate of transaction of BHIM during the study period in value in Rs (cr):



broke out covering the three waves of the pandemic and 25 months before the pandemic. The sample of the present study consists of complete data pertaining to BHIM App in India during the study period. The researchers have conducted a T-Test: Paired Two Sample for means to test the hypotheses of the present study. It is hypothesised for the study that there is no significant difference in the means of number of Banks live on BHIM, volume of BHIM transactions and value of BHIM transactions before and during COVID 19 Pandemic in India. The study has been carried out as follows: the present section gives the introduction about the present research work. The second section discusses a literature review. The third section outlines the methodology of the present study. The fourth section focuses on the result and discussion and the last part of the study outlines the major findings and conclusion.

Literature Review

There has been significant increase in use of digital payments services through various applications in Indian towns and villages during pandemic COVID 19 as compared to use of digital payments before the happening pandemic COVID-19 (Gupta & Singhal, 2021). The usage of digital dealings and virtual fund transfer were stimulated during Covid19 pandemic (Saha, 2021). Even the substantial effects of social distancing on digital dealings have been seen by each of deals' volumes and values (Alber, 2020). The overall digital payment dealings documented substantial evolution in terms of volume and value at CAGR of 24.11% and 15.84% respectively during the period 2012-2013 to 2018-2019 (Angamuthu, 2020).

Noteworthy impact on digital payment modes such as Debit/Credit cards, UPI, IMPS, NEFT and RTGS has been observed during the COVID 19 pandemic in India (Das et al., 2020). Demographic factors such as gender and occupation had significant association with the usage of UPI while age, education qualification and income didn't have significant association with the usage of UPI (Thakkar & Mistry, 2021). During Covid times from January 2020 onwards people in India were diverted to Digital Dealings as lockdown forced them to stay behind the doors (Sachdeva & Jain, 2020). During lockdown period, the banking sector has given services as online or tele-banking in Turkey also (Agan, 2020). Apparent risk and supposed usefulness directly exaggerated purpose to use e-wallets during COVID-19 outbreak. The consequence of government aid on the intention to use e-wallets has completely facilitated by apparent usefulness. There has been a variance between Indonesia and Malaysia in government aid and purpose to use e-wallets association. COVID-19 might drive consumers' purpose to use e-wallets (Aji et al., 2020).

From results of a paired sample t test, it has been observed that COVID-19 had significant impact on use of digital payments (Kaur & Walia, 2021). There is significant difference between the mode of payment while purchasing the product of the respondents before lockdown and during lockdown period as per t-test (Sudha et al., 2020). There has been significant impact of Covid-19 on digital payment system. There are many digital payment modes available in India, but the most of the customers prefer only few digital payment modes. Because they were not having enough information of all the available digital payment systems (Sowmya & Hebbar, 2020). Irrespective of various demographic factors such as gender, age, education, profession, and monthly income, people tend to use digital payment methods in

times of Covid pandemic (Siby, 2021). Even the five independent variables such as perceived usefulness, perceived ease of use, perceived security, perceived health security and perceived benefits is better predicting the dependent variable intention to use e payment system in India particularly referring to the Covid-19 (Kaur et al., 2021). As far as consumer perception is concerned, there is no significant difference between education, profession, gender, age and income on the perception of digital payment methods in times of Covid pandemic in Ernakulam district of Kerala (Siby, 2021). It has affected fast-growing digital payments which are closely linked to the manufacturing, auto, retail, aviation and hospitality sectors. Shut shops, travel bans and reduced discretionary spends by consumers are further negatively impacting digital payments on this sector but overall, there has been increase in Digital payments in India during COVID 19 pandemic (Perwej, 2020). COVID-19 may have given a substantial drive in the endeavour to downgrade cash transactions, but not so far as to eliminate it completely but Covid-19 has been a silver lining, in many ways, for suitability of digital payments in India (Panwar et al., 2020).

However, Covid – 19 Pandemic has transformed the entire way of living and influence thereof can be noticeable on digital payment system. Contactless fund transfer, security, quick clearances, consumer friendly Operating System and rewards can be some of the features which have endorsed the usage of digital payment system in India. Despite India being a cash preferred economy, security and nonexistence of infrastructure are of great concern, various modes of digital payments have categorically assisted in fund transfer without terror of getting infected people during Covid 19 (Anandan & Mouli, 2020). There has been quick upsurge in UPI Payments throughout Covid 19 lockdown, society equipped to use UPI as an alternative of cash and UPI payments facilitated to safeguard social distancing (Jawade & Suryavanshi, 2021). Even the Reserve Bank of India and the government insisted the people to shift to digital payment modes with a view to remain protected in Covid 19 pandemic. National Payments Corporation of India and other state governments have been confirming that further providers of crucial services have been on the digital platform. The government has also carried out drive on social media to stimulate the usage of online payments and dampen the usage of cash during Covid 19 (Nirmala & Parvathi, 2021). The way to protect us from virus can be to take alternative of digital payment which will allow the consumers to transfer fund for the goods and services without physically carrying the currency. Even the keypads of diverse modes of fund transfer can be retrieved contactless. Such initiatives into digital payments to a sure degree will curtail the effect of the Covid-19 (Kaur & Kushwaha, 2021). Social isolation was the best way to protect ourselves from COVID-19 and that digital payments helped us to keep social distance when shopping (Gurleen & Prasad, 2021). The Covid-19 epidemic has changed the whole way of life and that its impact has been felt in the online payment system (Kiran & Mouli, 2020). There has been significant difference in the means of Number of Member Banks offering IMPS, in the means of Number of IMPS transactions and in the means of volume of IMPS transactions before and during Covid 19. With the increase in Number of Member Banks offering IMPS, there has been increase in usage of IMPS which has been reflected by the Number of IMPS transactions and Volume of IMPS transactions (Mistry & Vyas, 2021). There was a negative or declining growth rate in UPI during the first and second wave lockdown of

Covid-19 and a significant difference between the number of member banks and the size of UPI transactions. Further a strong positive relationship was observed with selected variables (Vyas & Mistry, 2021). There has been a significant difference in the means of No. of Banks live on *99# before and during COVID 19. In contrast, there has been the insignificant difference in the means of Volume of *99# transactions and Value of *99# transactions before and during COVID. The study found that there has been significant decrease in means of no. of Banks Live on *99# during Covid 19 but marginal increase in volume and value of *99# during Covid 19 (Mistry & Vyas, 2022)

The physical health policy promoted by the World Health Organization (WHO) has encouraged consumers to engage in non-violent activities, including payment services. Government officials in a growing number of countries are taking action to promote non-compliant payments during the COVID-19 epidemic. Due to the lack of studies on this topic, Aji et al. (2020) contributed to the literature on the impact of perceived risk, government support, and the perceived use of e-wallet for customer use during the outbreak of COVID-19. This study concluded that the perceived risks and perceived use directly affected the purpose of using e-wallets during the outbreak of COVID-19. The study also concluded that the impact of government support on the purpose of using e-wallets was completely remedied through visual use. Finally, the study found that there are differences between Indonesia and Malaysia when it comes to government support and the purpose of using e-wallets. In short, this study found that COVID-19 could encourage consumers to use e-wallets.

Research Gap:

From the above review of empirical works, it is clear that during COVID 19 usage of modes of digital payments have increased significantly across the nation as well as worldwide. Most of the researchers have taken into account the first wave of the COVID 19 for studying the effect of COVID 19 on the digital payments. Some of the researchers have conducted analysis on the basis of the primary data about respondent's perception, preference about digital payments during COVID 19. Some authors have approached their research on Digital payments in different ways in varying levels of analysis. These different approaches helped in the emergence of more and more literature on the subject during the recent time. It gives an idea of extensive and diverse works on digital payments in India during the Covid 19 pandemic. It has been noticed that the studies on factors affecting digital payments provide divergent results relating to the study period. The main reason for the divergence in the results is the use of the different methods for the measurement of factors affecting digital payment. All the studies aimed to study impact of Covid 19 on digital payments in India & abroad as a whole.

Research Problem: The survey of the existing literature reveals that no specific work has been carried out to examine and ascertain usage of BHIM during Covid 19 Pandemic as well as impact of COVID 19 thereon. The present study is an attempt in this direction and therefore, aims to enrich the literature thereon.

Research Question: The present study is an attempt to find the answer to the following research questions. Is there any increase in No. of Banks live on BHIM, in No of BHIM Transactions and in value of BHIM Transactions before and during the Covid 19 pandemic in India?

Research Objectives: The present study has been carried out with the following objectives:

- 1) To study various digital payment methods in general and BHIM in particular
- 2) To study usage of BHIM during Covid 19 and its impact on Number of Banks Live on BHIM, Number of BHIM transactions and Value of BHIM transactions before and during Covid 19 pandemic.

Methodology

Research Design: Founded on the Works Review, the present study begins with a basic data i.e. No. of Banks live on BHIM App. To study the exact impact of the pandemic on Usage of BHIM App, variables such as No of BHIM Transactions as well as Value of BHIM Transactions have been selected. Thus, the present study gives a complete status of BHIM App in Indian Banking Sector before and after COVID 19 Pandemic.

Geographical Coverage and Duration:

The current study has covered the area of the Indian banking sector. The study looked at a 50-month period, that is, 25 months after Covid -19 (March 2020 to March 2022) and 25 months before Covid -19 (February 2018 to February 2020). The duration of research study takes into account not only first wave, second wave, third wave of Covid 19 pandemic in India. The reason for choosing the current study period was to study the effects of the epidemic on the usage of BHIM during all the three waves.

Sample and Data Collection:

Given the objectives of the current study, it was necessary to cover all the member banks that offer BHIM during the study. Therefore, all banks offering BHIM during, i.e., February 2018 to March 2022 are included in the current survey sample. That is, the population was taken as a sample in the current study. In addition, the work is based on the secondary data collected on the website of the National Payments Corporation of India.

Hypothesis:

H0: There is no significant difference in the means of Number of Banks live on BHIM before and after COVID-19 Pandemic broke out.

H1: There is significant difference in the means of member banks offering BHIM before and after COVID-19 Pandemic broke out.

H0: There is no significant difference in the means of volume of BHIM transactions before and after COVID-19 Pandemic broke out.

H1: There is significant difference in the means of volume of BHIM transactions before and after COVID-19 Pandemic broke out.

H0: There is no significant difference in the means of Value of BHIM transactions before and after COVID-19 Pandemic broke out.

H1: There is significant difference in the means of Value of BHIM transactions before and after COVID-19 Pandemic broke out.

Hypothesis Testing: To determine whether the means of the selected variables before COVID 19 and after COVID 19 pandemic broke out in India are different or not, T-Test: Paired Two Sample for means has been conducted.

Limitations: The existing research work is based on secondary data, so the outcome of the study depends upon the accuracy of the secondary data. The terrestrial room was restricted to one of the digital payment modes i.e., BHIM App only.

Further Scope of Study: The present study can further be extended by covering different modes of digital payment system prevailing in India.

Results and Discussion:

Table 1: t-Test- Paired Two Sample for Means of Number of Banks Live on BHIM App

	<i>Before Covid 19</i>	<i>After Covid 19 pandemic broke out</i>
Mean	108.12	176.84
Variance	196.1933333	1221.973333
Observations	25	25
Pearson Correlation	0.95738545	
Hypothesized Mean Difference	0	
df	24	
t Stat	-15.67289498	
P(T<=t) one-tail	0.00000000000000207987	
t Critical one-tail	1.71088208	
P(T<=t) two-tail	0.000000000000004.15974	
t Critical two-tail	2.063898562	

It is necessary to examine whether the number of banks live on BHIM App has increased significantly or not after the Covid-19 outbreak compared to the number of banks prior to Covid-19. It can be seen from the Table 1 that since the p value is less than 0.05, the null hypothesis is rejected and alternative hypothesis is accepted. The difference between the

number of banks before and after Covid-19 is statistically significant. Therefore, the selected sample provides sufficient evidence to conclude that the two population means are different, so there is a significant difference in the number of banks live on BHIM before and after Covid-19 pandemic broke out in India.

In particular, the average number of banks live on BHIM in the Covid-19 Pandemic period is significantly higher than it was before Covid-19 Pandemic, so it is said that the number of banks live on BHIM App increased significantly during the Covid-19 period.

It can be concluded that the number of banks live on BHIM during the epidemic has increased significantly and hence it has become essential to check whether the volume of BHIM transactions have increased with the or not with the increase in number of banks live on BHIM.

Table 2: t-Test - Paired Two Sample for Means of Volume of BHIM Transaction

	<i>Before Covid</i>	<i>After Covid 19 pandemic broke out</i>
Mean	15.7024	22.464
Variance	4.598219	11.64761667
Observations	25	25
Pearson Correlation	0.695872977	
Hypothesized Mean Difference	0	
Df	24	
t Stat	-13.73294106	
P(T<=t) one-tail	0.000000000000364856	
t Critical one-tail	1.71088208	
P(T<=t) two-tail	0.000000000000729713	
t Critical two-tail	2.063898562	

Since the p value is less than 0.05 as shown in Table 2, the null hypothesis is rejected and another hypothesis is accepted. The difference in the number of BHIM operations before and after Covid-19 is statistically significant. Therefore, the selected sample provides sufficient evidence to conclude that the two-population means are different, so there is a significant difference in the number of BHIM activities before and after COVID-19 Pandemic broke out in India.

In particular, the average transaction volume of BHIM after the outbreak of COVID-19 pandemic (22.464 Cr) is higher than that of the before COVID-19 (15.7024 Cr). Hence, it can be said that with the increase in member banks live on BHIM App during COVID-19 Pandemic, the volume of BHIM transactions have increased significantly.

It can be said that as the volume of BHIM transactions after the COVID-19 outbreak increased, it is essential to investigate whether value of BHIM transactions have increased or not after Covid 19 broke out in India

Table 3: t-Test - Paired Two Sample for Means of Value of BHIM Transaction

	<i>Before Covid 19</i>	<i>After Covid 19 broke out</i>
Mean	6308.826	7316.5108
Variance	827302.6814	887432.4819
Observations	25	25
Pearson Correlation	0.450480789	
Hypothesized Mean Difference	0	
df	24	
t Stat	-5.189138856	
P(T<=t) one-tail	0.0000128807	
t Critical one-tail	1.71088208	
P(T<=t) two-tail	0.0000257614	
t Critical two-tail	2.063898562	

Since the p value is less than 0.05 as shown in Table 3, the null hypothesis is rejected and another hypothesis is accepted. The difference between the value of BHIM activities before and after Covid-19 Pandemic is statistically significant. Therefore, the selected sample provides sufficient evidence to conclude that the two-population means are different, so there is a significant difference in the Value of BHIM operations before and after Covid-19 broke out.

In particular, the average value of BHIM transactions after Covid-19 broke out (7316.5108 Cr) is higher than before Covid-19 (6308.826 Cr), so it is said that the value of BHIM transactions after Covid-19 break out is higher.

Findings, Conclusion and Recommendations

The current study was conducted with the aim of studying the use of BHIM after the Covid-19 outbreak and its impact on the number of banks live on BHIM, the volume of BHIM transactions and the value of BHIM transactions. It also aims to examine the link between the number of banks live on BHIM, the volume of BHIM transactions and the value of BHIM transactions after the Covid-19 outbreak. The duration of the study the three waves of the coronavirus epidemic in India. As this study is based on the total population, the study results may indicate the exact usage of BHIM App in India after the Covid-19 epidemic broke out in India.

The results of the study revealed that there was a significant increase in the number of banks live on BHIM App, Volume of BHIM transactions and Value of BHIM transactions before and after Covid-19 Pandemic. It can also be concluded that with the increase in banks live on BHIM has increased during the study period, there has been increase in Volume of BHIM transactions. With the increase in Volume of BHIM transaction, there has been increase in Value of BHIM transactions. As the means of number of banks live on BHIM App, Volume of BHIM transactions and Value of BHIM transactions have increased significantly during the three waves of the pandemic in India, it can be concluded that BHIM App has been becoming popular in making digital payments in India as compared to other Apps.

The study also found that the number of banks live on BHIM has increased during the Covid-19 period which is why many banks have started offering customers BHIM during the outbreak. Therefore, it can be concluded that Indian banks have encouraged customers to use BHIM App to avoid physical banking and to maintain public space to protect customers from infection. Customers also love a virtual bank and maintain a community distance to protect themselves and their families from infection. With a view to increase usage of BHIM App in India, it is also suggested to introduce cashback offer for making digital payment and relax maximum transaction limits.

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