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A Study on Impact of Covid-19 on Mobile Banking

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ABSTRACT
Banking has changed from the conventional brick and adhesive model to modern banking which has allowed the customers to reach their banks easily through their mobile phones. The GOI has also extended its support to the mobile wallets through its partnership prototypes with various banks to increase the acceptance of M-Banking among the users. RBI has also encouraged the digital payments through mobile wallets during the Covid-19 pandemic as it would make sure that the social distancing protocols are being followed. Dr. Jain et al. (2020) After, demonetization, the Covid-19 pandemic is the second largest situation that has led to 5% growth in the mobile banking just in a period of 3 months from January to March 2020(Statista) and is further expected to grow even more. Hence this study is aimed at towards identifying the growth in mobile banking during Covid-19. The research also intends to study how crucially these online transactions have helped during Covid-19 pandemic.

Key Words: Mobile Banking, Covid-19 pandemic, digital payments.

I. INTRODUCTION

Mobile banking refers to provision of banking and financial services with the help of mobile banking telecommunication devices. After the launch of mobile banking in India, mobile banking transaction have seen some growth. still mobile banking has a long way to go as, majority of customer prefer banking in traditional ways. The banking sector reforms and introduction of e-banking has made very structural changes in services quality, managerial decisions, operational performance, profitability and productivity of the banks .so in order to run the mobile banking effectively, proper care has been taken care of and take adequate steps to improve the quality services. The use of mobile phones in order to effectuate banking transactions is bound to increases in a significant way in the near future. the rapid pace of technological development has created opportunities for financial service provider to offer their service via multiple electronic channels. mobile banking is an emerging alternate channel for providing banking services. India is a second largest telecom market in the world, which is having high potential for expanding banking service using mobile. The main objective of this study is to identity the mindset and security issues in mobile banking customers in India.

Mobile banking plays a major role during pandemic covid-19. The covid-19, coronavirus pandemic has affected many lives. Covid-19 has spread worldwide and impacted on banking services. The pandemic has changed the view of the people around the world in digital banking. According to the report of WHO, coronavirus is similar to AIDS. Covid-19 has forced people to use online, phone and mobile banking. In mobile banking users are allowed to access their account, check status online anywhere at any time worldwide. According to the reports, there is a huge rise in use of mobile bank payments in India. The total digital wallet transaction in India nearly doubled to according to Reserve Bank of India (RBI)data during pandemic.

The pandemic has undoubtedly increased the human dependence on online transaction and became a trend to stay later. Mobile applications for transaction create a unique platform for bank to communicate with customers and fulfil customer satisfaction. Mobile banking has a great rise in online transaction worldwide after this covid-19 day by day. Many banks already invested in digitalization and mobile banking services and trying to create digital relationship with customers so that quickly adjust with the demand for mobile

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banking. Banks have been successfully using the digital tools and providing alternatives to person. In India, people prefer contactless transaction only through online mode does not prefer cash transaction among each other to avoid infection. This growth will be majorly due to change in customer behaviour, rise in focus of the people from visiting bank branches to online use of bank services.

Due to pandemic, ATM cash withdrawals are pulled down, where e-commerce and contactless transaction are at peak. The ATM usage in recent months has jumped high in volume compared with last year, while branch rush fell from February. The pandemic has reduced the rush on branches and ATM traffic for cash withdrawals. These days due to pandemic covid-19 coronavirus physical exchange of cash will risk to infection among peoples. Due to pandemic and lockdown most peoples tried to learn mobile payment as it become compulsory task during that period. Mobile banking like Google Pay, Phone pay, amazon pay, BHIM UPI etc enhance banking sector and transaction hindrance among people become easier.

Letić, J., Budanović, N., Arežina, L., & Jovanović, B. (2021, February 10) is here, it is clear till now that mobile gadget dictates our existence. Based on recent calculations published by Statistics, the number of mobile users is rapidly approaching 7 billion. Mobile app usage statistics show that the average person examine their phone 63 times a day, mobile banking included. If world mobile banking statistics are to be believe in, we can look for these numbers continuously rising. The total value of payments done using mobile gadgets will have reached $503 billion in 2020. 79% of smartphone user have used their gadgets for an online purchase in the past six months.

Editorial Team. (2020, December 7)ICICI Bank today announced that it has changed its state-of-the-art mobile banking app, iMobile, into an app that offers payments and banking services to customers of any bank. Speaking on the action, Mr. Anup Bagchi, Executive Director, ICICI Bank said, "ICICI Bank has always been at the frontline of introducing changes. These inventive have played a key role in transforming the way towards digital India banks. In light with this rich tradition, we introduced the country's first mobile banking app, iMobile, in 2008. We thought that users will like these changes as it offers them the special benefit of payment apps and banking apps in one single spot.

As COVID fades, people will still have an emotional need for human interaction at precious life moments. People need to feel comfortable when it comes to life events like sending a child away for education, managing boomer wealth transfers, establishing a wealth plan, buying a home. This means we can expect some back to "normal" post-COVID – and branches will see a significant proportion of this type of activity. Now depends on people, how far people they will be willing to use video conferencing as part of covid, which may in turn depend on situation like how long social distancing remains. It is clear that COVID itself hasn't suddenly caused the shift to digital, rather it has simply advanced it as more and more people have digital environment as part of their lives. For instance, the shift away from cash towards digital payment methods has been rising for years. Physical money can be the source for the virus when it is touched by an infected person. Therefore, the WHO recommend using digital payment when possible (Brown, 2020).

The covid-19 pandemic could move the world more rapidly towards digitals payments. the digital India programme is a flagship programme of the Indian govt whose vision is to transfer India into a digital society and knowledge economy." Faceless, paperless, cashless, is one of the roles digital India professes. Demonetization is likely to be described as game changers of the Indian economy. On the other hand, Demonetization is leading to boom cashless payments. In this futuristic world, all 2payments will be made by contactless cards, mobile phone applications and other electronic means while notes and coins will stand abolished. The Danish central bank will stop printing currency, and banks will stop carrying cash. In Sweden, it is common practice already for parents to pay pocket money to their children electronically. An environment where everyone is paralyzed at home, Covid -19 is further increasing the need for E-cash transactions. Bought via video is currently being introduced. This will help to further increase electronic transactions.

The mobile payments markets were valued at USD 1449.56 billion in 2020 and expected to reach USD 5399.6 billon by 2026 and grow at a CAGR of 24.5%over the forest's periods. the stores and services across the worlds are rapidly assuming and combining mobile payments applications such as PayPal, Samsung pay, Apple Pay, Alipay, and We chat, to accept payments. owing to changes lifestyles, daily commerce, and instant growth in online retaining, this trend is expecting to continues over for subsequent many years, many govt are also encourages banks to builds infrastructures to enables safe and secures mobiles payments in rural areas which is a massive opportunity for vendors. And closing the gap between the awareness and

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adoptions of this technology is considers as a major challenge for this industry.

These days due to covid-19 crisis physical handling of cash is risky as there may be chances of getting infected. Customers can use digital payment i.e., mobile banking facility from their homes irrespective of visiting branches. This ultimately limits the use of paper money which is very risky during this pandemic phase. Mobile banking wallets like Google pay, phone pay Paytm amazon pay mobikwik, BHIM UPI, SBI yono, freecharge etc. has boosted the banking sector and enhance daily transactions to overcome the barriers of human interactions. The covid-19 crisis has tied with terrific progress in technology; hastened the appearance of all-digital competitor banks across the sphere. Due to sudden shock of pandemic and lockdown most of the people learn how to use mobile banking services and it is no longer an option left and became a mandatory task. Thus, it has become necessary for banks to reconsider their marketing strategies. Apart from physical branches, banks need to offer alternative means of access to services, including via the internet (Zhao, Hanmer-Lloyd, Ward & Goode, 2008). The context of this study is South Africa, a developing economy. It is envisaged that this paper bears relevance and has applicability to other developing economies. Sriram and Krishnan (2003) believe that information technology and the internet have had a profound impact on the financial services sector, as organizations in the industry are relying on information technology as an immediate source of competitive advantage. According to Gopalakrishnan, Wischnevsky & Damanpour (2003), banks are at the forefront of pioneering the adoption of information technology and are actively pursuing their internet business.

Coronavirus (COVID-19) pandemic forced nationwide lockdown in India. Preventive measures like social distancing compelled people to use digital payment applications. During the period of lockdown usage of e-Wallet increased by 44%. “Paytm” and “Google pay” have emerged as mostly used digital payment apps (PTI, 2020). The shift from physical payments to digital payments seems to be smooth owing to the increasing number of smartphone users in India. There were 502.2 million smartphone users in the country as of December 2019 (Gadgets360, 2020). “Business Standard” reported that in terms of value, the mobile wallet transactions are estimated to jump from Rs 5,500 crores in 2015–2016 to Rs 30,000 crore in 2022 (Umarji, 2016). However, there is a grey side to this advancement as well. With the increased usage of digital transactions, Cyber-crime attacks have also increased as much as by 86% between the lockdown months of March and April 2020 (Desai, 2020). All over India, 44,546 cases of cybercrimes were registered in 2019 (National Crime Records Bureau, 2020) and Rs 1.24tn amount was lost (Mehta, 2020). By August 2020, that is only in 8 months 8,546 cases of cybercrimes were registered in Pune surpassing a total of 7,700 cases in the calendar year of 2019 (Madaan, 2020).

II. LITERATURE REVIEW

Furst et al. 2002 in their study observed that Internet banking has its origin back in 1995 and with the use of the internet as a remote channel for the delivery of banking services it allows banks to offer informational as well as transactional services. The market for internet banking is predicted to grow smartly in the next few years, affecting the aggressive advantage liked by traditional banks with physical branches (Duclaux, 1996; Liao et al., 1999)

M.Thangajesu Sathish et al. (2020) in their study revealed that the traditional system of cash payment cannot be completely replaced by card or e-payment systems. The study also discusses the trust is the main factor affecting users’ satisfaction directly and it impacts on many user’s intention to adopt mobile wallets. Internet banking services are critical elements for the long-term longevity of banks in the world of electronic commerce (Tan and Teo, 2000). Jahangir and Begum (2008)establish that consumers’ faith on safety and privacy are both important factors in influencing the assumption of online banking in Bangladesh (another developing country), which like Vietnam, is at an early stage of online banking implementation.

PTI (2020) In a study conducted by Press Trust of India it was observed that Coronavirus (COVID-19) pandemic had forced nationwide lockdown in India and preventive measures like social distancing compelled people to use digital payment applications. During the period of lockdown usage of eWallet increased by 44%. “Paytm” and “Google pay” emerged as mostly used digital payment apps in 2020. A.M. Umraji (2016), conducted a study on smartphone users found out that in terms of value, the mobile wallet transactions are estimated to jump from Rs 5,500 crores in 2015–2016 to Rs 30,000 crore in 2022.Wijayanthi (2019) reported that “consider trust” and “consider usefulness” influence the behavioural “intention to use” e-wallet among Indonesian young consumers.

Nandi. S (2020) India’s push towards cashless payments accelerated in 2019, as card and

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mobile payments as a percentage of GDP rose to 20% in the October-December quarter, from 135 in the same quarter a year ago. (Brown, 2020; Huang, 2020) in their studies found out that Government support on e-wallets innovation during this deadly outbreak might also influence intention to use e-wallets. Following WHO's advice the government should encourage its people to engage in e-wallets payment respectively.

Hoe (2020) reports some trends in consumer behaviour fixed by the measures to limit physical contact and cash use under the pandemic crisis: there was an increase in the registration of banking account with electronic banks in South-East Asia; similar, the opening of online banking accounts of small and medium-size enterprises in Malaysia increased; the limit for the smart card's payment was increased in the UK. By examining the effect of the COVID-19 pandemic on the use of cash and payments, the work of Auer et al. (2020) underlines that the shift toward digital payments might have a negative impact on older and adults those who do not have banks, which suggests that cash have to be protected. The same work reviews the behaviour towards cash and the measures taken by several governments and central banks: some countries, including India and Indonesia, have encouraged the use of cashless payments; several central banks, such as the Fed, central banks in China, South Korea, Hungary have purified and isolated banknotes; at the same time, other central banks (for example, the Bundesbank, the South African Reserve Bank) have encouraged trust in cash, communicating that the risk of coronavirus transference through banknotes is low.

According to the World Bank analysis of the COVID-19 financial sector support measures, low-income countries have taken measures to upgrade the use of digital channels in the payment sector, such as waiving charges, fees and clarifying digital recognition procedures (Mora, 2020). There is a change in the view of consumers in using internet opportunities (Celic et al., 2018).

Soodanand Rana (2020) considered factors influencing the adoption of e-Wallets. They stated that "hedonic motivation, perceived security, general privacy, facilitating conditions, performance expectancy, perceived savings and social influence and price value in this order, influence the intention to adopt e-wallets." They advocated to modify existing services to maintain the customers' "privacy and security."

(Jain et al. 2020) WHO stated COVID-19 as the global pandemic. The business has been damaged on a very large scale. However, some of them who managed to allow the digital technology and payment method seriously have increased the operation like big basket, Grofers, 1MG, Netmeds, Pharmeasy, Medlife, Jio services, Ed-Techs like Coursera and edx, and the payment platforms such as Paytm, Google Pay, Amazon Pay, Airtel Payment Bank, PayPal etc. Meanwhile RBI has been forcing the digital payment during COVID-19. Use of NEFT, IMPS and UPI like services will keep the operations moving and operations wouldn't be fully shut down and will also us to maintain social distancing norms.

(V & Manu, 2020) We briefly see the body of related work that is available on the "Impact of COVID-19 on Mobile Banking services", this study found that in India there is highly demand for Google Pay and due to this pandemic, it has shown important increase in its useable and trustable. COVID has destroy the lives, social reach and also have affected the economy in the shorter term. In India are facing many struggles due to now shutdown, necessities were needed to meet and transactions were done through mobile apps with advances services. Their study says this technology tool also helped to maintain social distance in order to safeguard their life. Their primary analysis clearly states that usage has increase due to COVID-19.

(Dubey et al. 2020) The creative writing is appraising to examine available methods that could be used to carry on the day-to-day transaction during the hardest times like COVID-19. Their paper focuses on paperless transaction how people manage to pay their bills as cash transactions may carry some rottenness. Internet of Things(IoT) and Artificial Intelligence(AI) has made the mobile banking easier. They speak about Reg Tech will prove be winner post COVID-19. Contactless payment has indirectly helped us to follow some social distancing measures. People have started accepting, building faith, feeling secured using various mobile banking platforms from online bill payment to online hard cash transfer using UPI. They conclude by stating that advancement in mobile banking has been comfortable to avail all services at their door step.

Research Methodology

Research Approach

Empirical assessment of sustainable banking model by using survey method.

In this phase, the primary data is collected by using predetermined, structured and undisguised questionnaire. The data collected in this phase is subjected to SEM technique for the validation of proposed sustainable banking model of Indian banks.

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Research Design

This phase of the study uses a descriptive research design which is based on a single cross-sectional design to validate the data and further refine the list of variables. In the case of a cross-sectional design, the information is collected from any given sample of population element only once. This type of design is also called a sample survey research design (Malhotra, 2007).

The collected data is then analysed with the help of the Statistical Package for Social Sciences (SPSS) Version 22.0. Descriptive statistical analysis of the variables is also calculated with the help of one-way ANOVA to investigate mean score differences on different organizational and demographic characteristics of the respondents.

Research Process

The steps followed in research process are explained with the help of the following flow chart-

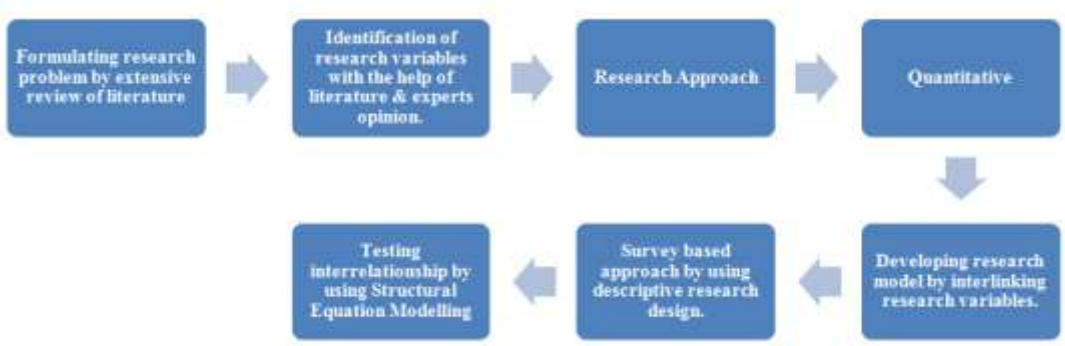

Table 1 Steps of Data Collection

Steps of Data Collection
I. Questionnaire was sent to150 people through emails as google form link.
10 questionnaires bounced back. 20 emails were received as not available. No response from rest 120 for next 1 week.
II. Questionnaires were resent through email as google from link to (120+20)
30 emails returned as not available No response from 110 for another 1 week.
III. Questionnaire was resent to 140 people through google forms link & extensively followed up by phone, text, WhatsApp etc.
IV. After multiple times follow ups through emails, phone, text messages, WhatsApp. The questionnaire was again resent to many of them occasionally.
V. Questionnaires were sent as PDF and Word attachments for those who did not prefer google docs.
VI. Responses at last received.
4 responses were received PDF 18 were received through Google Form

Source- Questionnaire made for Data Collection

Research Variables

The present study explores the impact of COVID-19 on Mobile Banking/payments. For this purpose, variables of mobile banking are identified such as Usage of mobile banking before Covid-19, different types of mobile banking, reason of using mobile banking, preferred payment mode at offline shops, types of mobile payments done, chances of visiting bank branches in future.

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S.NO.	Name of the Variable
1.	Usage of mobile banking before COVID-19
2.	Different types of mobile banking options
3.	Reason behind using mobile banking
4.	Preferred payment mode at offline shops
5.	Types of mobile payments done
6.	Chances of visiting bank branches in future

Table 2 Variables

Source- Questionnaire made for data collection.

Research Instrument

Once research variables and related items were identified, they were compiled in the form of a questionnaire.

Research Instrument is developed by following these four steps:

Step 1: Identification of measures/constructs: After an extensive literature review, research constructs are identified. Items related to the research constructs were drawn from the extant studies.

Step 2: Development of questionnaire: On the basis of the identified variables, a rough draft of the questionnaire was developed. The questionnaire incorporated statements designed to capture the content of the subject matter.

Step 3: Incorporating inputs from academicians and practitioners for face validity: Face validity means to check the scale whether it 'looks like' that it will measure the same aspect which is supposed to be measured (Leedy & Ormrod, 2005). The face validity of this instrument is checked when two different researchers suggest the items for the instrument (Leedy & Ormrod, 2005). Then the items suggested by them are compared with the items of the originally drafted questionnaire and on the basis of this, some minor changes are made. After face validity, the questionnaire is further reviewed by two more researchers of the area just to check the items again and review that all the constructs are measuring the same thing which they are intended to measure. This process is followed just to check that the questionnaire is appeared to be logical and reasonable.

Step 4: Final structuring of the questionnaire: After having obtained the inputs of practitioners and academicians, the questionnaire was given its final shape. Efforts were made to put all the items in minimum possible space so that the questionnaire did not appear length.

Data Collection Method

Data was collected from the people primarily through google forms link methodology. This was done keeping in mind the view of researchers (Foa & Foa, 1980) who have opined that human behaviour is motivated by psychological returns (i.e., whatever is pleasurable or gratifying to the person) and psychological costs (i.e., factors that inhibit behaviours such as physical or mental effort, pain) associated with behaviour. Thus, it was interpreted that personal visit to all the people may not be a feasible idea. Google forms offer the advantage of getting survey instruments filled during leisure time and at one's convenience. It was intended to minimize psychological and other costs. Further, only Google forms methodology was used in the present study to ensure coherence of data collection technique. It was surmised that responding patterns differ with the use of different techniques and hence chances of biases may be present.

A total of 150 questionnaires were sent through Google form links. Out of them 10 questionnaires bounced back, 20 of them were returned as not available in office. Overall, 22 responses were received. These were used for the final analysis of the data & for testing the hypothesis with a response rate of 15%. The range of response rates from internet surveys is from 7 percent to 76 percent (Sheehan & Hoy, 1999; Simsek & Veiga, 2001). Therefore, the response rate of 15% percent is considered logical for those studies which use email and internet-based surveys.

Respondents were agreed to participate on the pre-condition that their personal details would not be shared publicly at any stage. It was accepted as the objective of the study was to measure the impact of COVID-19 on Mobile banking/payments. This assurance about anonymity helps in enhancing the response rate (Podsakoff et. al, 2003; Yammarino et al, 1991).

Sampling Element

Responses were obtained from the targeted people who were using Mobile Banking. Only the users of mobile banking were considered

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because they will be having the real information and therefore it was believed that they are most suitable to target.

Methods of Analysis

SPSS 22.0 is used to generate the descriptive statistics of the respondents. Through SPSS 22.0 we carried out various tests like One-Way ANOVA test, T-Test, Regression, Means test, etc.

Data Analysis

Response Rate and Item Completion Rate

In all, data was generated from a questionnaire that was sent to 150 people of different age groups & different occupations, out of which only 22 responses were received. Hence, the completed survey instruments totalled to around 15.01% per cent response rate.

In addition to the response rate, item completion is another important measure of effectiveness of the survey (Deutskens et al., 2010; Klassen & Jacobs, 2001). Klassen and Jacobs (2001) define item completion rate as the proportion of survey items answered relative to all the items in the questionnaire. Out of the 30 responses initially received, 8 questionnaires had missing data. These were discarded because of non-completion. Thus, the item completion rate for the present study was 73.33%suggesting relatively high survey effectiveness.

Mean Test

Independent Variable- Age

Report

AGE		Mobile banking usage before Covid-19	How did you first hear about Mobile Payments/Banking?	Mobile banking options are you aware of?	reason behind using mobile payments	preferred payment mode(offline shops)	Type of mobile payments done	Chances of visiting banks	How do you want your bank to serve you in the future	most common way of banking (covid-19)
10-20	Mean	2.20	4.20	3.00	2.80	1.40	2.60	2.20	2.20	2.60
	N	5	5	5	5	5	5	5	5	5
	Std. Deviation	.837	.837	1.871	1.643	.548	.548	.837	.447	1.517
21-30	Mean	2.50	2.94	3.56	3.19	2.75	2.63	2.44	2.19	3.00
	N	16	16	16	16	16	16	16	16	16
	Std. Deviation	.632	1.692	1.632	1.167	1.183	1.360	.727	.750	.966
Above 40	Mean	3.00	4.00	5.00	4.00	4.00	3.00	2.00	2.00	2.00
	N	1	1	1	1	1	1	1	1	1
	Std. Deviation	.	.	.	.	.	.	.	.	.
Total	Mean	2.45	3.27	3.50	3.14	2.50	2.64	2.36	2.18	2.86
	N	22	22	22	22	22	22	22	22	22
	Std. Deviation	.671	1.579	1.655	1.246	1.225	1.177	.727	.664	1.082

Figure 1 Mean Table

Source- SPSS spreadsheet made from data collected through questionnaire

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Mean Test

Independent Variable: Occupation

Report

OCCUPATION		Mobile banking usage before Covid-19	How did you first hear about Mobile Payments/Banking?	Mobile banking options are you aware of?	reason behind using mobile payments	preferred payment mode(offline shops)	Type of mobile payments done	Chances of visiting banks	How do you want your bank to serve you in the future	most common way of banking (covid-19)
SERVICE	Mean	3.00	5.00	5.00	4.00	3.00	1.00	2.00	1.00	4.00
	N	1	1	1	1	1	1	1	1	1
	Std. Deviation	.	.	.	.	.	.	.	.	.
BUSINESS	Mean	3.00	5.00	5.00	1.00	3.00	1.00	2.00	2.00	2.00
	N	1	1	1	1	1	1	1	1	1
	Std. Deviation	.	.	.	.	.	.	.	.	.
HOUSEWIFE	Mean	3.00	4.00	5.00	4.00	4.00	3.00	2.00	2.00	2.00
	N	1	1	1	1	1	1	1	1	1
	Std. Deviation	.	.	.	.	.	.	.	.	.
STUDENT	Mean	2.37	3.05	3.26	3.16	2.37	2.79	2.42	2.26	2.89
	N	19	19	19	19	19	19	19	19	19
	Std. Deviation	.684	1.580	1.661	1.214	1.257	1.134	.769	.653	1.100
Total	Mean	2.45	3.27	3.50	3.14	2.50	2.64	2.36	2.18	2.86
	N	22	22	22	22	22	22	22	22	22
	Std. Deviation	.671	1.579	1.655	1.246	1.225	1.177	.727	.664	1.082

Figure 2 Mean Table

Source- SPSS spreadsheet made from data collectedthrough questionnaire

ANOVA Test 1

Hypotheses of people to different dimensions across Age.

H01 There was no significant difference in the usage of mobile banking before Covid-19 across age.

H02 There was no significant difference in first hearing about mobile banking across age.

H03 There was no significant difference in mobile banking are you aware of across age.

H04 There was no significant difference in reasons behind using mobile banking across age.

H05 There was no significant difference in preferred payment mode (offline shops) across age.

H06 There was no significant difference in type of mobile payments done across age

H07 There was no significant difference in chances of visiting banks across age

H08 There was no significant difference in serving by banks in future across age.

H09 There was no significant difference in most common way of banking across age.

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ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Mobile banking usage before Covid-19	Between Groups	.655	2	.327	.707	.506
	Within Groups	8.800	19	.463		
	Total	9.455	21			
How did you first hear about Mobile Payments/Banking?	Between Groups	6.626	2	3.313	1.376	.277
	Within Groups	45.738	19	2.407		
	Total	52.364	21			
Mobile banking options are you aware of?	Between Groups	3.563	2	1.781	.627	.545
	Within Groups	53.938	19	2.839		
	Total	57.500	21			
reason behind using mobile payments	Between Groups	1.353	2	.677	.412	.668
	Within Groups	31.238	19	1.644		
	Total	32.591	21			
preferred payment mode (offline shops)	Between Groups	9.300	2	4.650	3.980	.036
	Within Groups	22.200	19	1.168		
	Total	31.500	21			
Type of mobile payments done	Between Groups	.141	2	.070	.046	.955
	Within Groups	28.950	19	1.524		
	Total	29.091	21			
Chances of visiting banks	Between Groups	.353	2	.177	.313	.735
	Within Groups	10.738	19	.565		
	Total	11.091	21			
How do you want your bank to serve you in the future	Between Groups	.035	2	.018	.036	.964
	Within Groups	9.237	19	.486		
	Total	9.273	21			
most common way of banking (covid-19)	Between Groups	1.391	2	.695	.570	.575
	Within Groups	23.200	19	1.221		
	Total	24.591	21			

Figure 3 Anova Table 1
Source- SPSS spreadsheet made from data collectedthrough questionnaire

Difference in the opinions of different people to different dimensions across age are identified with the help of hypotheses. The statistical tool used for measuring these differences was one way ANOVA. Results clearly showed that there did not exist any significant difference in the responses of people to different dimensions across age as the value is >.05.

ANOVA Test 2

Hypotheses of respondents to different dimensions across occupation.

H01 There was no significant difference in the usage of mobile banking before Covid-19 across occupation.

H02 There was no significant difference in first hearing about mobile banking across occupation.

H03 There was no significant difference in mobile banking are you aware of across occupation.

H04 There was no significant difference in reasons behind using mobile banking across occupation.

H05 There was no significant difference in preferred payment mode (offline shops) across occupation.

H06 There was no significant difference in type of mobile payments done across occupation.

H07 There was no significant difference in chances of visiting banks across occupation.

H08 There was no significant difference in serving by banks in future across occupation.

H09 There was no significant difference in most common way of banking across occupation.

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ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Mobile banking usage before Covid-19	Between Groups	1.033	3	.344	.736	.544
	Within Groups	8.421	18	.468		
	Total	9.455	21			
How did you first hear about Mobile Payments/Banking?	Between Groups	7.416	3	2.472	.990	.420
	Within Groups	44.947	18	2.497		
	Total	52.364	21			
Mobile banking options are you aware of?	Between Groups	7.816	3	2.605	.944	.440
	Within Groups	49.684	18	2.760		
	Total	57.500	21			
reason behind using mobile payments	Between Groups	6.065	3	2.022	1.372	.283
	Within Groups	26.526	18	1.474		
	Total	32.591	21			
preferred payment mode (offline shops)	Between Groups	3.079	3	1.026	.650	.593
	Within Groups	28.421	18	1.579		
	Total	31.500	21			
Type of mobile payments done	Between Groups	5.933	3	1.978	1.537	.239
	Within Groups	23.158	18	1.287		
	Total	29.091	21			
Chances of visiting banks	Between Groups	.459	3	.153	.259	.854
	Within Groups	10.632	18	.591		
	Total	11.091	21			
How do you want your bank to serve you in the future	Between Groups	1.589	3	.530	1.240	.324
	Within Groups	7.684	18	.427		
	Total	9.273	21			
most common way of banking (covid-19)	Between Groups	2.801	3	.934	.771	.525
	Within Groups	21.789	18	1.211		
	Total	24.591	21			

Figure 4 Anova Table 2

Source- SPSS spreadsheet made from data collected through questionnaire

Difference in the opinions of different people to different dimensions across occupations are identified with the help of hypotheses. The statistical tool used for measuring these differences was one way ANOVA. Results clearly showed that there did not exist any significant difference in the responses of people to different dimensions across occupations as the value is >.05.

T-Test

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Mobile banking usage before Covid-19	22	2.45	.671	.143
How did you first hear about Mobile Payments/Banking?	22	3.27	1.579	.337
Mobile banking options are you aware of?	22	3.50	1.655	.353
reason behind using mobile payments	22	3.14	1.246	.266
preferred payment mode (offline shops)	22	2.50	1.225	.261
Type of mobile payments done	22	2.64	1.177	.251
Chances of visiting banks	22	2.36	.727	.155
How do you want your bank to serve you in the future	22	2.18	.664	.142
most common way of banking (covid-19)	22	2.86	1.082	.231

Figure 5 One-Sample Statistics

Source- SPSS spreadsheet made from data collected through questionnaire

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One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference Lower	Upper
Mobile banking usage before Covid-19	17.158	21	<.001	2.455	2.16	2.75
How did you first hear about Mobile Payments/Banking?	9.721	21	<.001	3.273	2.57	3.97
Mobile banking options are you aware of?	9.921	21	<.001	3.500	2.77	4.23
reason behind using mobile payments	11.809	21	<.001	3.136	2.58	3.69
preferred payment mode (offline shops)	9.574	21	<.001	2.500	1.96	3.04
Type of mobile payments done	10.506	21	<.001	2.636	2.11	3.16
Chances of visiting banks	15.255	21	<.001	2.364	2.04	2.69
How do you want your bank to serve you in the future	15.401	21	<.001	2.182	1.89	2.48
most common way of banking (covid-19)	12.412	21	<.001	2.864	2.38	3.34

Figure 6 One-Sample Test

Source- SPSS spreadsheet made from data collected through questionnaire.

One-Sample Effect Sizes

		Standardizer[a]	Point Estimate	95% Confidence Interval Lower	Upper
Mobile banking usage before Covid-19	Cohen's d	.671	3.658	2.477	4.827
	Hedges' correction	.696	3.526	2.387	4.652
How did you first hear about Mobile Payments/Banking?	Cohen's d	1.579	2.073	1.315	2.814
	Hedges' correction	1.638	1.997	1.267	2.712
Mobile banking options are you aware of?	Cohen's d	1.655	2.115	1.347	2.868
	Hedges' correction	1.717	2.039	1.298	2.764
reason behind using mobile payments	Cohen's d	1.246	2.518	1.646	3.374
	Hedges' correction	1.293	2.426	1.587	3.252
preferred payment mode (offline shops)	Cohen's d	1.225	2.041	1.291	2.775
	Hedges' correction	1.271	1.967	1.245	2.675
Type of mobile payments done	Cohen's d	1.177	2.240	1.440	3.024
	Hedges' correction	1.221	2.159	1.388	2.915
Chances of visiting banks	Cohen's d	.727	3.252	2.184	4.308
	Hedges' correction	.754	3.135	2.105	4.152
How do you want your bank to serve you in the future	Cohen's d	.664	3.283	2.206	4.347
	Hedges' correction	.689	3.164	2.126	4.190
most common way of banking (covid-19)	Cohen's d	1.082	2.646	1.741	3.537
	Hedges' correction	1.123	2.550	1.678	3.409

a. The denominator used in estimating the effect sizes.
Cohen's d uses the sample standard deviation.
Hedges' correction uses the sample standard deviation, plus a correction factor.

Figure 7 One-Sample Effect Sizes

Source- SPSS spreadsheet made from data collected through questionnaire

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Hypothesis of respondents
H01 There is no significant difference in the mobile banking usage before COVID-19.
H02 There is no significant difference in first hearing about the Mobile banking/payment.
H03 There is no significant difference in the mobile banking options aware of.
H04 There is no significant difference in reason behind using mobile payments.
H05 There is no significant difference in preferred payment mode (offline shops).
H06 There is no significant difference in types of mobile payments done.
H07 there is no significant difference in chances of visiting bank branches
H08 There is no significant difference in how do you want your bank to serve in future?
H09 There is no significant difference in most common way of banking.

VARIABLES	N	MEAN	STD. DEVIATION	T	Sig (2 Tailed)
Mobile banking usage before COVID-19	22	2.45	.671	17.158	<.001
How did you first hear about Mobile banking/payment?	22	3.27	1.579	9.721	<.001
Mobile banking options are you aware of?	22	3.50	1.655	9.921	<.001
Reason behind using mobile payments	22	3.14	1.246	11.809	<.001
Preferred payment mode (offline shops)	22	2.50	1.225	9.574	<.001
Type of mobile payments done	22	2.64	1.177	10.506	<.001
Chances of visiting banks	22	2.36	.727	15.255	<.001
How do u want your bank to serve u in future?	22	2.18	.664	15.401	<.001
Most common way of banking	22	2.86	1.082	12.412	<.001

Table 3
Source- SPSS spreadsheet made from data collected though questionnaire

Interpretation of the result of respondents; In order to determine the difference in the opinions of people across age & occupation, T-TEST is applied, the results clearly indicates that there exists a significant difference in the opinion of people across age & occupation which can be clearly seen from the statistical results as shown in the above table.

III. CONCLUSION

The novel corona virus spread so rapidly that it has changed the rhythm of the globe. Mobile banking has completely rebellion the banking foundation in India. It was launch in the initial 21st century with limited operations, while over the era with the advancements in the fields of information and technology, mobile banking is now emerging as a new normal in the banking rebellion. Mobile banking has been successful in catering to the needs of the buyer with minimal limitation and has provided them with customer fulfilment. Factors such as rise penetration in the smartphone and internet users, Ease of accessibility, Convenience & security in provided digital transactions have evidence to be the building blocks for the promotion of mobile banking services in India. For countries like India, Mobile banking can be used as a higher opportunity to develop the banking rebellion as 34.33% of its population is constituted of the younger generation who are well versed with using the online payment platforms such as mobile banking & e-wallets. Smartphone & Internet

Penetration is regarded as a backbone for the mobile banking in India. It is projected that the internet subscribers will reach 835 Million by end of year 2023 which also means that the mobile internet usage is increasing by nearly 152% per annum Being the second largest smartphone market in Asia, India has a huge potential for adopting mobile banking as internet enabled smartphones have proven to be very efficient in conducting safe virtual banking transactions. Various initiatives of the government Such as Pradhan Mantri Grameen Digital Saksharta Abhiyan (PGMDISHA) and E-Kranti under the Digital India Program have doubled the number of bank accounts opened using smartphones.

The COVID-19 pandemic which oriented in Wuhan somewhere 9 months before has now taken refuge in host bodies in 210 countries all around the globe. The most obvious consequences include economics recession a crisis of global governance trade protectionism and increasing isolationist sentiment people to people cultural and travel exchange have all been restricted. The condition is still uncontrolled and with no proven cure for the virus. Before the covid 19 pandemic people are more often using mobile banking. Now a days people avoid offline banking. Due to COVID -19 people mostly used mobile banking for payments. The pandemic has also reduced the rush on branches and ATM traffic for cash withdrawal. People become more aware about online banking COVID19 Pandemic has wrecked the economy and affected the Export Import services, aviation industry, construction industry, mining and mineral industry, & the retail industry of all the corporate sectors which have further affected the banking infrastructure very drastically due to the nationwide lockdown.

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