

Impact of Covid- 19 on Digital Payment Systems in India

Amit Kumar¹, Gargi Raj ², Ritu Raj³

¹ *Research Scholar, Faculty of Commerce, Banaras Hindu University, Varanasi, India*

² *Research Scholar, Department of Management Studies, National Institute of Technology Silchar, Assam, India*

³ *Research Scholar, Department of Management Studies, National Institute of Technology Silchar, Assam, India*

Abstract- Online banking is one of the most significant advancements in the history of the banking business. However, despite the numerous benefits that online banking gives to users, there are a number of important problems and challenges for online banking marketers. Mobile phones, desktops, laptops, and other wireless devices provide additional avenues for bank account access and payment service use. Digital payment refers to payments made via various technological gadgets. Digital payment has advanced significantly long way after a history of several futile attempts to make an impact on society. It is a developing field with the potential to influence the market and alter future payment actions. Unlike banks, digital payment methods can be used at any time and from any location. Following the COVID-19 pandemic, banks are advising the public to use digital banking services rather than visiting bank locations. Banks are focused on contactless banking in the midst of the COVID-19 pandemic. Digital payment apps like UPI-based BHIM, phone pay, Google pay, and others are useful not just for sending and receiving money, but also for opening accounts and applying for loans. Since the shutdown, there has been a shift in payment methods from cash and plastic cards to online payments over the internet.

Keywords- Digital payment, COVID-19, UPI, Lockdown

INTRODUCTION

Prime Minister Narendra Modi began the Digital India initiative on July 1, 2015, with the goal of creating a faceless, paperless, and cashless economy. The fundamental strategy was to promote universal digital literacy, build digital infrastructure, and deliver government services digitally. To meet India's digital banking needs, the State Bank of India released the YONO (You only need one) app in 2017. In less than two years, SBI YONO will have surpassed the milestone of 51 million downloads and 24 million

registered users by July 2020. YONO now has 24 million registered users. Rajnish Kumar (Rajnish Kumar, 2020) This demonstrates that India is a technology-driven country, and all that is required is an initiative to realise the goal of a cashless economy. The National Payment Corporation of India (NPCI), which worked on the Unified Payments Interface (UPI) to facilitate e-payment operations, introduced the BHIM (Bharat Interface for Money) app on December 30, 2016, as part of the Digital India project. UPI is a payment system designed by the National Payments Corporation of India to allow inter-bank transactions. These tactics, which were once a convenience, are now a part of our daily lives. They serve as a necessary tool to keep us from gathering, coming into contact with potentially sick people, and keeping social distance. The use of digital modes of payment is gradually becoming a habit as consumers accept it as the most efficient way of payment. When the digital India campaign was launched in 2015, people expressed concerns about the digital mode of payment, believing it was insecure and only technology-savvy people could use it. However, the digital mode of payment has stood the test of time, proving itself to be a viable replacement option for physical cash and even plastic cards (debit and credit cards). Although digital payments are not expected to replace plastic cards, they are expected to replace paper notes in the future. The usage of banknotes is one of the various methods by which COVID-19 can be communicated from one person to another. Given that a considerable part of the population in an economy like India relies on cash for payment transactions, the prospect of COVID-19 spreading through banknotes becomes serious. At this point, all banks' digital distribution platforms are considered to be highly straightforward, customer-focused banking

experiences. All financial institutions will prioritize digital distribution channels that demonstrate uncomplicated, customer-focused banking experiences. This has significantly boosted the digital payment system. During the lockdown, e-Wallet usage jumped by 44%. "Paytm" and "Google pay" have emerged as the most popular digital payment apps (PTI, 2020). Because of the growing number of smartphone users in India, the transition from physical to digital payments appears to be straightforward. As of December 2019 (Gadgets360, 2020), the country had 502.2 million smartphone users. According to "Business Standard," mobile wallet transactions are expected to increase in value from Rs 5,500 crores in 2015-2016 to Rs 30,000 crores in 2022. Umarji (2018) Because of the rising use of digital transactions, cybercrime attacks surged by much to 86% during the shutdown months of March and April 2020. (Desai, 2020). In India, 44,546 incidences of cybercrime were reported in 2019. 2020 (National Crime Records Bureau)

LITERATURE REVIEW

To avoid visiting banks and waiting in ATM lines, RBI Governor Shashikant Das urged the general public to embrace digital modes of payment for transactions rather than cash payments in order to reduce the spread of COVID-19. Until 2019, the use of digital payment methods was slow. The reasons behind this are a cash-based society, democracy, and a lack of technical knowledge. However, the four phases of lockdown from March to May and the restrictions during the unlock phase beginning in June resulted in consumers being accustomed to and comfortable with digital payment. Transactions based on IMPS and BHIM-UPI: IMPS and BHIM-UPI-based digital transactions enable real-time account-to-account money transfers, whether person-to-person or person-to-merchant. Its ease of use has made it a well-accepted means of retail payments and money transfers. It is mostly based on mobile Apps. (Das, Jaiswal, & Sonthalia 2020). (Sathye, 1999) investigated internet banking acceptance among Australian consumers by examining characteristics such as security, the convenience of use, awareness, pricing, reluctance to change, and infrastructure. According to the findings, security concerns and a lack of knowledge about internet banking and its benefits

were identified as barriers to internet banking adoption in Australia.

According Venkatesh (2000) investigated how training affected how people perceived something. The study underlined the significance of perceived ease of use (PEOU) in predicting IT adoption and made the case that training might affect users' perceptions of ease of use by influencing their knowledge of (or awareness of) internet technologies. Trocchia and Janda (2000) Argue that consumers' internet adoption rates are related to their previous experiences with the technology. The 22 negative experiences of non-users were considered to have a significant impact on their impressions of the internet. Gresvik and Owre (2001) investigated how much it costs Norwegian banks to process different payment instruments. It discovers that using payment cards for cash withdrawals at ATMs costs significantly more because the transactions require cash replenishment, maintenance, and security charges. Furthermore, it was discovered that using cheques for cash withdrawals was three times more expensive than using ATMs.

Duvvuri Subbarao, (2020) In his book, he revealed the government's request to act. Both the government and the RBI are working to move India away from a cash-based economy by pushing individuals to switch from cash to electronic payments for all transactions. The transition from cash to electronic payments is a continuous and ongoing process. Still, its execution will be dependent on public acceptance, which is partly determined by making electronic payments more convenient for consumers. In the end, though, enabling the transition to a less cash economy is a matter of real financial inclusion.

(Dr. M. Chelladurai & Dr. V. Sornaganesh, 2016) He discussed the circumstances at the moment of demonetization in his article. The researcher tried to research the effects of demonetization and financial technology firms. The study also examined the demonetization period's impact on the payment services industry. To address this liquidity issue, some companies that produce fast-moving consumer goods have prolonged their credit cycles. Some of these companies have given credit to distributors through RTGS. From a technological standpoint, digital payment represents the biggest wager in the mobile internet area.

OBJECTIVE OF STUDY

- To take a look at the major modes of Online Payment.
- To examine the relationship that exists between the bank's digital services and overall customer experience during COVID- 19 lockdown period.
- Growth of Digital Payment in Rural India
- To compare the trend of digital payment before and during a lockdown.
- To analyze the problems faced by the general masses during online

STATEMENT OF PROBLEM

The fear of COVID-19 has brought out different perspectives of people. A section of society prefers online transactions because it is safe as there is no physical contact & it provides fast settlement. They find it beneficial due to the user-friendly apps, discounts, rewards & acceptance at large. On the other hand, despite the advantages, some people feel that offline transaction is conventionally a safer and more secure mode of payment. Hence, this study focuses on understanding the impact of the COVID-19 lockdown on the digital payment system in India.

RESEARCH METHODOLOGY

The information regarding this study has been collected from both primary and secondary sources data. The primary data has been collected through a field survey i.e. by taking personal interviews with the people involved in this business. The secondary sources of the data are published and unpublished sources like books, journals, reports, publications and concerned websites etc.

DIGITAL PAYMENT SYSTEM IN RURAL INDIA

The Online Payment System is used more in cities than in rural areas. Approximately 44% of consumers in metropolitan regions have used digital payment methods, while 16% of rural clients have done so. The

goal of a cashless economy cannot be realised if only a few people from rural areas use digital forms of payment. Despite a considerable disparity between users from rural and urban backgrounds, the adoption of digital modes of payment is increasing as it gradually becomes the customer's preference. According to a survey conducted by (Puttaswamy, 2018), banks with full-fledged financial services are only available in 3400 villages out of India's 6.4 lakh villages. There are still approximately 5 lakh unbanked villages. The Ministry of Electronics and Information Technology (MeitY) has launched a new scheme under Digital Saksharta Abhiyan (DISHA) called "Digital Finance for Rural India: Creating Awareness and Access through Common Service Centres (CSCs)" with the goal of enabling CSCs to become Digital Financial Hubs by hosting awareness sessions on government policies and digital finance options available to rural citizens, as well as enabling various mechanisms of digital financial services. Covid-19 and the subsequent lockdown have highlighted the need for digital financial services in rural households – daily wage employees, low-income farmers, and small companies – and encouraged them to use digital payments in their daily lives. This will not only open up a whole new world for them but will also provide them with a deluge of advantages through the government's numerous financial inclusion programs. After all, the success of digital financial services would be dependent on rural India's transition from a cash-driven to a less-cash and more digital payments economy. (2021, Dilip Modi)

MAJOR MODES OF DIGITAL PAYMENT

Demonetization paved the stage for digital payment methods to emerge. While older digital payment channels such as NACH, CTC, and NETC previously existed, newer user-friendly digital payment modes such as IMPS, UPI, and AEPS were also introduced under the National Payments Corporation of India (NPCI). NPCI was established in 2008 under the direction of the RBI and serves as the umbrella organisation for retail payment systems in India.

BHARAT BILLPAY- It is a one stop ecosystem for payment of all bills. It has multiple payment modes and provides instant confirmation service to customers through a network of agents of registered member as

Agent Institutions (AI), enabling multiple payment modes, and providing instant confirmation of payment via an SMS or receipt.

UPI- UPI is a system that powers multiple bank accounts into a single mobile application, merging several banking features, seamless fund routing and merchant payments into one hood. (UPI: Unified Payments Interface - Instant mobile payments | NPCI, 2020).

AEPS- Aadhar-enabled payment service is a unique way of transaction where one uses his aadhar card to get money from his aadhar enabled bank account. This system uses aadhar authentication and doesn't require the use of debit card or signatures for transactions. One doesn't even need to visit the bank branch and can draw cash from local Bank Mitra.

IMPS- For transferring funds 24/7/365 interbank. Earlier NEFT and RTGS were available but only during banking hours. It was launched on 22nd November 2010 and could be accessed on multiple channels like mobile, ATM and SMS.

Mobile Wallets- Mobile wallets allow you to store digital currency in your cellphone. Bank cards can be linked to mobile wallet applications to allow money to be transferred online to mobile wallets. This is a convenient and secure method of buying because the user does not need to carry his credit or debit card with him and may make purchases using his mobile wallet. You can use your smartphone, tablet, or smart watch to make purchases instead of your real plastic card. Most banks and some private companies have e-wallets.

Paytm, Freecharge, Mobikwik, Oxigen, mRuppee, Airtel Money, JioMoney, SBI Buddy, itz Cash, Citrus Pay, Vodafone M-Pesa, Axis Bank Lime, ICICI Pockets, freecharge, SpeedPay, and other similar services (Sornaganesh, Sathish, Ganesh, and Chellama, 2020)

PROGRESS OF DIGITAL PAYMENT

Razorpay became the fifth Indian fintech company to reach a \$1 billion valuation in October 2020. The Unified Payments Interface (UPI), governed by the RBI and implemented in 2016, has been the biggest

advancement in fintech. In terms of volume and value, UPI accounted for 9% of all retail digital transactions at the time of demonetization. UPI's market share had surpassed 50% in volume terms and 16% in value terms by February 2020. Vaidik Dalal, (2020)

With 25.5 billion real-time payment transactions, India has maintained its global leadership position. China is second with 15.7 billion transactions. Instant payments and other electronic payments each had a transaction volume share in India of 15.6% in 2020, while paper-based payments had a share of 22.9% per cent for instant payments and other electronic payments respectively, while paper-based payments had a considerable share of 61.4 per cent. According to the report, as the pandemic continues to influence consumer and business behaviour, banks, merchants, and intermediaries across the payment ecosystem are responding quickly, prioritizing the shift to digital to protect current revenue streams while seeking new ones through a fully digitized customer experience. According to the survey, mobile wallet adoption will reach a high of 46 percent in 2020, up from 40.6 percent in 2019 and 18.9 percent in 2018.

The analysis shows that real-time payments were expanding rapidly, with 70.3 billion real-time transactions occurring globally in 2020, an increase of 41% compared to 50 billion in 2019. In 2020, 9.8% of all electronic transactions took place in real-time, up from 7.6% in 2019. By 2025, it is expected to be 17.4%. Abhinav Singh, (2021)

FINDINGS AND CONCLUSION

The use of digital payment apps is becoming more common in India. After demonetization in 2016, there was a 440% increase in digital payment usage. Digital payments are secure and take less time to complete. The COVID-19 pandemic, it has enabled people all across the world to carry on with their daily lives while preserving social distance. It has also successfully reached people from rural areas.

COVID-19 brought with it a blessing in disguise: India's transition from a cash-based to a cashless economy. Although India is still a long way from becoming a cashless digital economy, the milestone we have reached in just a few months is nothing short of a dream come true. The basis for adopting a digital payment system is digital literacy. Utilization of online payment systems has increased. Convenience,

safety, and incentives should all be prioritized while marketing online payment systems.

Though it is too soon to predict exactly how each cultural, demographic, and institutional setting will alter, we can be certain that covid-19 is already accelerating current trends toward more digitalization of payments.

The Reserve Bank of India stated last year that it planned to expand the share of digital transactions in the GDP to around 15% by 2021 from about 10% at the time. As consumers are empowered to transact at the touch of a button by the fastest-growing smartphone market in the world, the government is aiming for a billion digital transactions every day.

PROS AND CONS OF DIGITAL PAYMENT

Pros-

- More comfortable as there is no need to stand in queue and fill forms.
- No need to carry debit and credit cards. Hence, no risk of losing money due to robbery or losing wallet.
- Service available 24/7, even on bank holidays.
- It reduces the flow of black money in the economy as all the transactions are legal.
- Transfer of money is easy and takes place within a few minutes regardless of distance between payee and recipient.
- Companies often offer Cashback and gifts to attract customers to use their platform for transactions.
- Digital Payment reduces the workload of bank employees and makes them more productive towards other important work.
- There are many payment apps to choose from and they do not charge any processing fee for the service provided.
- Since the app keeps a record of each and every transaction, it makes it easy for the user to track their transactions.
- All sorts of utility bills can be paid by one single app without any hassle.
- It reduces the circulation of counterfeit notes. The cost of minting currency also goes down.
- A user can not only transfer and receive money but can also check account balance as well as

invest the savings in mutual funds and stock market

- Digital Payment system has proved highly beneficial for farmers and women as they can receive their government subsidies directly in their bank accounts.

Cons

- Electronic devices like laptop and mobile can be hacked, and user can lose all of their money.
- Their risk of leaking passwords.
- Without access to the Internet, a user cannot make a transaction. If network services are down the transactions might fail.
- Old age people, people from a rural background, less educated folks and people lacking technical knowledge and not familiar with the working of computers and mobile phones have trouble using online payment services and are reluctant to move on from physical mode of payment to cashless mode.
- Some apps are not very user-friendly. The complicated user interface makes it difficult for users to send or receive money.
- Sometimes while doing transactions, due to a technical glitch in the mobile application, money gets stuck in between banks and takes a few days to either clear the transaction or return to the payee's account.
- Spam mail or fraudulent SMS are tricks used by frauds to steal money, and many naïve users fall into the trap of it.
- UPI apps are password protected. Many times, users forget the password making it difficult to log in at the time of need.
- If hackers drain your bank account, or you experience technical issues, you'll have no alternative source of money
- Those with no knowledge, bank accounts, or mobile phones will struggle to keep up with evolving cashless technology

SUGGESTION

The few suggestions of the study are as follows:

- Bank should concentrate more on the server and connectivity-related issues. So that without any problem, one can get the benefits.

- If any new techniques are installed, the same should be educated to the customers. Hence, they will get up-to-date information.
- Bank should conduct some workshops for their customers, this helps the customers to discuss their problems, and they will get the solutions at the right time.
- Customers are having the fear of fraud (hackers); hence the banking system should give awareness to the customers, not to share their banking details, pin numbers, OTP and so on.
- The number of credit card users is very less compared to a debit card, because of the fear of hidden charges; hence the bank should give detailed instructions on the bank charges applicable to credit cards.

REFERENCE

- [1] (meity), M. O. (2020). Mobile Wallets. Retrieved from CASHLESS INDIA:
- [2] [Http://cashlessindia.gov.in/mobile_wallets.html](http://cashlessindia.gov.in/mobile_wallets.html)
- [3] Abhinav Singh. (2021, March 31). India retains top spot in real-time digital payment transactions: Report.
- [4] Angela Scott Briggs. (2020, 01 20). What is Digital Payment, its origin and history in financial technology?
- [5] Bharat Bill Payment System. (2021, February 27). Retrieved from Wikipedia:
- [6] https://en.wikipedia.org/wiki/Bharat_Bill_Payment_System
- [7] Das, A., Das, S., Jaiswal, A., & Sonthalia, T. (2020). Impact of COVID-19 on Payment Transactions. *Statistics and Applications*, 18(1), 239-251.
- [8] Desai, R. D. (2020). Cybercrime in India surges amidst coronavirus lockdown. *Retrieved May, 27, 2020*.
- [9] Dilip Modi. (2021, February 07). 'Success of digital financial services rests on rural India's shift from cash to digital payments economy'. Retrieved from Financial Express:
- [10] <https://www.financialexpress.com/industry/sme/cafesme/success-of-digital-financial-servicesrests-on-rural-indias-shift-from-cash-to-digital-payments-economy/2189985/>
- [11] Dr.V. Sornaganesh, & Dr.M.Chelladurai. (2016). "Demonetization of Indian currency and its impact on. *International Journal of Informative and Futuristic Research*.
- [12] Duvvuri Subbarao. (2016). "Who Moved My Interest Rate?". Penguin Random House India.
- [13] G.Parimalarani. (2020). 'Customer's Perception on Effectiveness of Digital Banking services during covid19 Lockdown period'. *South African Journal of Economic and Management Sciences*.
- [14] Sathish, M. T., Sermakani, R., & Sudha, G. (2020). A Study on the Customer's Attitude toward the E-Wallet Payment System. *International Journal of Innovative Research in Technology*, 6, 12.
- [15] G.Sudha, & Sornaganesh, V. (2019). "A study on Perception towards Demonetization in Thoothukudi ". *Global Journal for Research Analysis*.
- [16] Gadgets360. (2020, February 04). "Over 500 million Indians now use smartphones, 77% of who are online: teachers". Retrieved from NDTV: <https://gadgets.ndtv.com/mobiles/news/over-500-million-indians-now-use-smartphones-77-percent-of-who-are-online-techarc-2172219>
- [17] Gresvik, O., & Owre, G. (2001). Norwegian banks process and payments methods.
- [18] Jain, D., Sarupria, D., & Kothari, A. (2020). The Impact of COVID19 on E-wallet's Payments in Indian Economy. *INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)*.
- [19] Kanungo, D., & Pati, S. (2020). CUSTOMER'S PREFERENCE IN ADOPTION OF DIFFERENT PAYMENT METHODS: A STUDY ON PRE, DURING AND POST LOCKDOWN PERIOD OF COVID 19 IN INDIA. *Research gate*.
- [20] Laura Wood. (2020, November 02). India Mobile Payment Service Providers Market Report 2020: Top Players and their Reaction to the COVID-19 Crisis. Retrieved from BusinessWire:
- [21] Mia Francis Poulin. (2020, 01 20). Electronic Payments: A Brief History. Retrieved from forte.blog:
- [22] National Crime Records Bureau. (2020, October 06). Crime in India 2019 (Statistics Volume I). Retrieved
- [23] From National Crime Records Bureau, (Ministry of Home Affairs) Govt. Of India, New Delhi:

- [24] <https://ncrb.gov.in/sites/default/files/CII%202019%20Volume%201.pdf>
- [25] NPCI. (2020). India Digital Payments Report. Worldline.
- [26] NPCI, B. B. (2020, 01 20). Retrieved from NPCI - National Payments Corporation Under India:
- [27] <https://www.npci.org.in/what-we-do/bharat-billpay/product-overview>
- [28] PTI. (2020, 04 20). 42% Indians have increased use of digital payments during COVID-19 lockdown:
- [29] Rajnish Kumar. (2020, July 14). SBI plans to double YONO user base in 6 months. Retrieved from Business
- [30] Today: <https://www.google.com/amp/s/m.businesstoday.in/lite/story/sbi-plans-to-double-yono-user-base-in-6-months-rajnish-kumar/1/409863.html>
- [31] Sathish, M. T., Sermakani, R., & Sudha, G. (2020). A Study on the Customer's Attitude toward the E-Wallet Payment System. *International Journal of Innovative Research in Technology*, 6, 12.
- [32] Sathye, M. (1999). Adoption of Internet banking by Australian consumers: an empirical investigation. *International Journal of bank marketing*.
- [33] Schwartz, M., & Vincent, D. R. (2006). Distributional effects among cash and card users. Review of
- [34] Network Economics.
- [35] Shubhangi Bhatia. (2020, December 08). Digital Payments in India: Definition, Methods, and Importance.
- [36] Dhiman, S., Sahu, P. K., Reed, W. R., Ganesh, G. S., Goyal, R. K., & Jain, S. (2020). Impact of COVID-19 outbreak on mental health and perceived strain among caregivers tending children with special needs. *Research in Developmental Disabilities*, 107, 103790.
- [37] Shobha, B. G. (2020). DIGITAL PAYMENTS- ANALYSIS OF IT'S PRESENT STATUS IN INDIA.
- [38] The Economic Times. (2020). "Definition of E-wallets". Retrieved from The Economic Times:
- [39] <https://economictimes.indiatimes.com/definition/ewallets>
- [40] Trocchia, P. J., & Janda, S. (2000). Consumer's adoption of Internet. *Journal of Consumer Marketing*.
- [41] Venkatesh, V. (2000). Determinants of perceived ease of use: Integrating control, intrinsic motivation, and emotion into the technology acceptance model. *Information systems research*, 11(4), 342-365.
- [42] Wright, J. (2004). The determinants of optimal interchange fees in payment systems. *The Journal of Industrial Economics*, 52(1), 1-26.