

# IMPACT OF COVID-19 ON DIGITAL PAYMENT SERVICES IN INDIA

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#### ABSTRACT

During this COVID-19 pandemic era the working style of people changed as pandemic added to the emergence and adaptability of technology. There is no second thought that pandemic COVID-19 came along with the demise of many lives and business but it too created the digital driven cashless society. Social distancing being the primary and most important way to control the widespread left people with the only choice to use digital payment services. Further the uncertainty of ending of COVID-19 is reducing the dependency of Indian Economy on cash. This technological growth is supported by the increase in the usage of smart phones and internet connectivity. The aim of this paper is to review the literature on the impact of COVID-19 on digital payments in India. According to the study, digital payment services in India have increased dramatically after the COVID-19 was introduced.

Keywords: Digital Payment Services, COVID-19, Indian Economy.

### **INTRODUCTION**

Payments made digitally involve the payment of a certain sum of money through the use of mobile applications or websites on a worldwide basis. There is no physical exchange of money between the parties as the money is directly transferred from the debtor's account to the creditor's account. A nation's government contributes its resources to promoting digital payments services regularly, which have a variety of benefits. The concept of digital payment has been around since the last decade, but is now on the rise with an accelerated pace, especially in towns and villages of India after the global pandemic that is the COVID-19, which has forced all economies to face setbacks due to a full lockdown (Gupta Abhilasha, 2021)

Digital empowerment came into action soon after the initiation of the Digital India campaign by the Government of the India. The aim was to promote and encourage the digital payments in India but due to lack of trust in internet transactions, the masses were reluctant to use digital payment services. The digital payment revolution truly started after the arrival of COVID-19 restrictions on the people. The penetration of internet into the remote villages and affordable smart phone added to the usage of digital payments. COVID-19 had a negative impact on most industries around the



world, including retail, fashion, hospitality, aviation, and a variety of others. The epidemic, on the other hand, has increased the use of digital payments in several areas, such as buying food and online medicine, subscribing to Over-the-Top (OTT) channels, and decreasing the use of cash payments. Online and cashless transactions aren't easily accepted by most of the retailers. Aside from third-party apps, several ecommerce sites, such as Amazon, and messaging apps, such as What Sapp, also provide digital payment services to the general public.

# **DIGITAL PAYMENT METHODS**

Various digital payment methods are available to people for promotion of cashless transactions. These payment services are made possible with use of machine learning and artificial learning. Machine learning examines the usage pattern of people using digital payment services and improvises this experience over time. These improved experiences lead to more security, less fear and greater fraud protection. Table 1 describes the various digital payment methods used for smooth running of economy during this pandemic era of COVID-19.

| Digital Payment<br>Methods                              | Description   |  |  |
|---|---|--|--|
| Banking Cards   | Credit and debit cards with 2 factor authentication for secure payments.  |  |  |
| Unstructured<br>Supplementary<br>Service<br>Data (USSD) | When the internet is unavailable, dial *99# on your phone and Use an interactive menu to transact presented on your phone's screen.   |  |  |
| Aadhar Enabled<br>Payment System<br>(AEPS)              | Financial transactions using Aadhar authentication using any bank's Business Correspondent (BC)/Bank Mitra.   |  |  |
| Unified Payments<br>Interface (UPI)                     | Combine numerous bank accounts into a single mobile app with a variety of banking capabilities.   |  |  |
| Mobile Wallets  | A person's account is linked to their digital wallet, which allows them to load money and carry cash in digital form.   |  |  |
| Internet Banking  | The electronic payment system Customers of a bank or other financial institution<br>may execute various financial transactions through online banking, e-banking, or<br>virtual banking through the bank's website.     |  |  |
| Mobile Banking  | This is a service provided by a bank or other financial institution that allows<br>customers to do a variety of financial transactions via a mobile device app. Bank<br>and financial institution that allows customers |  |  |
| Micro ATM   | Business Correspondents (BC) utilize this device to deliver basic financial services and fast transactions.   |  |  |

**Table 1: Description of various Digital Payment Methods** 

[Source-cashless India\govt. of India]



# **DIGITAL PAYMENT APPLICATIONS**

Various digital payment apps allow transactions to be completed via digital or online modalities without the need for a physical exchange of funds. Both parties, the payer and the payee, use these applications to exchange money utilizing electronic channels. Figure 2 shows the digital payment applications for cashless money transfer.

### **GOOGLE PAY**

Google launched the application in 2015. The most widely used digital payment app is Google Pay, which is available on both Android and IOS devices. The user can transfer money or pay utility bills directly from their bank account or by using the Unified Payment Interface (UPI) id which can only be created after installing the Google Pay application. It offers dual security to its users, as well as security through fingerprints, which protects them from any kind of identity theft. Shopkeepers, wholesalers, and even large companies can use it to make or receive payments. The application has more than 100 million users as of today, of whom more than 67 million are solely from India, generating more than \$110 billion in transactions every year.

### PAYTM

Paytm is a digital wallet and e-commerce firm based in India. Founder of Paytm was Vijay Shekhar Sharma in the year August 2010 and it's headquartered in Noida SEZ, India. Paytm offers online services such as mobile recharge, utility bill payments, travel, movie, and event reservation bookings, as well as in-store payment options such as Paytm QR codes at grocery stores, fruit and vegetable shops, restaurants, parking, tolls, pharmacies, and educational institutions.

#### PHONEPE

Phonepe, situated in Bengaluru, Karnataka, India, is a digital payments and financial services startup. Founder of PhonePe was Sameer Nigam, Rahul Chari, and Burzin Engineer December 2015 in the year. In August 2016, the PhonePe app, which is based on the UPI, was released.

### **INTERNET BANKING**

Users refer to the notion of internet banking as web banking or online banking. A bank account holder can use Transferring funds between bank accounts via internet banking by downloading a mobile application or visiting the company's official website. This provides a variety of corporate and personal banking services, including money transfers, checking recent transactions, creating statements, paying utility bills,



and more. The application offers dual security to its users, allowing them to be free of security concerns and worry. More than 150 million account holders use online banking services as of today, with more than 45 million coming from urban regions.

# LITERATURE REVIEW

Malusare (2019) focused on the issue of digital payments in India and its effects on people and economic system of India. The researcher explained the future scope of the Digital payment system and concluded that In India, digital payments are not purely developed and spread all around the country, which results in low levels of digital literacy. Bhagat (2020) conducted a qualitative survey to find the reasons for adoption of these services by people and their expectations regarding it in the postpandemic times. It was concluded that pandemic has impacted the digital payments system significantly and is considered as the huge game-changer for India in digital payments adoption ever since the demonetization in 2016. Gupta (2021) the notion of digital payment was investigated, as well as the impact of COVID-19 on digital payment services in Indian towns and villages. After the launch of COVID-19, the researcher found a significant increase in the use of digital payment. Digital services provide great contribution in the development of Indian economy as people are nonmore reluctant in the adoption of these services. Fansuri et al. (2021) found the effects of COVID-19 pandemic on transaction related activities of the people. The impact of COVID-19 pandemics somehow has changed the manner of payment from contact to contactless as per the findings concluded by the researcher. The researcher suggests the government to have a complete development planning towards helping people so that are no more hesitant to use digital payment services. S.S. (2021) conducted a study to how much importance of Digital Payment in COVID-19 Pandemic by examining the perception of consumers with regards to usage of digital payments in COVID-19 pandemic. The researcher concluded that safe and easy digital methods are mostly adopted by the users. Dharurkar et al. (2020) analyzed the payment products in time of COVID-19 with the introduction of new technology like Magnetic Ink Character Recognition (MICR) and Automated Teller Machine (ATM). The government's demonetization in November 2016 and authorities' continual push for a less cash economy have accelerated the growth trajectory. Lack of awareness, infrastructure availability, intricacy, and prices all had a role in the nonadoption of digital payments, according to the study.

## **RESEARCH METHODOLOGY**

It's a type of qualitative research that relies on secondary sources including academic journals, books, articles, and magazines. This literature review study paper attempted



to describe the research aims as well as provide further recommendations and arguments for the future adoption of a broader scope of Digital Payment.

# **OBJECTIVES OF THE STUDY**

- To study the trend of usage of Services for Digital Payment in India after COVID-19.
- To study the advantages of Services for Digital Payment.
- To explore the challenges of Services for Digital Payment in India.

## **RESULT AND DISCUSSION**

#### THE USE OF DIGITAL PAYMENT SERVICES IN INDIA AFTER COVID-19

The Reserve Bank of India (RBI) created a Digital Payment Index, the first of its kind, to track the extent and bottom of the digital payment system all-over the country. The RBI-DPI is made up of five major parameters, each of which has its own set of sub-parameters and indicators. For the creation of the Digital Payment Index, scientific approaches based on statistical and empirical data were used. The Reserve Bank's Digital Payments Index (RBI-DPI) is a first-of-its-kind index that will be used to measure the distribution and depth of digital payments across the country. To capture this, the RBI-DPI features five primary parameters, each having sub-parameters and indicators with appropriate weights to show their Digital payments ecosystem importance, the following shows the results Table 2.

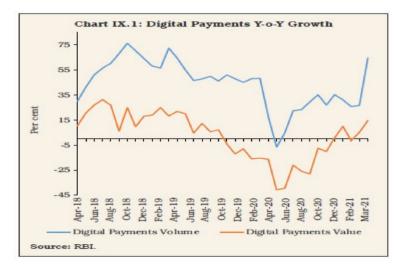
| Parameters                                       | Weight<br>(Per cent) | Indicators   |  |
|--|----------------------|--|--|
| 1. Payment Enablers                              | 25                   | Users of the internet, mobile users, bank<br>accounts, Aadhaar numbers, members of<br>payment systems and digital payment<br>facilitators.                               |  |
| 2. Payment Infrastructure<br>Demand-side Factors | - 10                 | Registration for mobile banking and internet banking, as well as FASTags, were all issued.   |  |
| 3. Payment Infrastructure<br>Supply-side Factors | - 15                 | Payment acceptance points, both physical and digital, as well as payment intermediaries.   |  |
| 4. Payment Performance                           | 45                   | Factors to consider include the volume and value<br>of various payment systems, unique users, check<br>transactions, card-based cash withdrawals, and<br>cash estimates. |  |
| 5. Consumer Centricity                           | 5                    | Declines, complaints, scams, and system<br>downtime are all examples of consumer<br>awareness and education activities.  |  |
| Source: RBI.                                     |                      |  |  |



March 2018 was chosen as the base date because of recent substantial changes in the payments ecosystem (period post demonetization and payment systems vision 2021). (i.e., RBI-DPI score for March 2018 is set as 100). The DPI for March 2019 was 153.47, while the DPI for March 2020 was 207.84, indicating significant growth. From March 2021 onwards, the RBI-DPI will be released on a half yearly basis with a four-month lag.

Figure 1 shows the Digital Payment growth in India from April 2018 to March 2021. In the starting of the pandemic people were in doubt due to security issues but with passage of time the trust developed for the usage of services and it is shown as continuous increase in the graph from June 2020.

The Reserve Bank of India published data the usage of digital payment apps in India as of April 2020. Phonepe 4%, Amazon pay 10%, BHM 6%, google pay 14%, Paytm 33%, other 33%. According to RBI Paytm more then used other apps and the use of phonepe is very less.

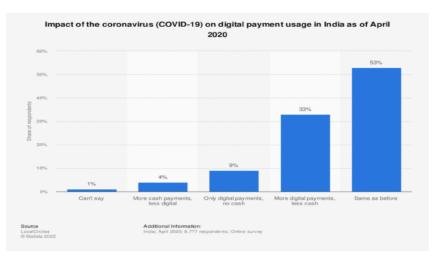


#### [Source – statista 2022]

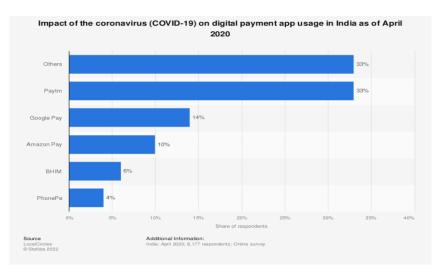
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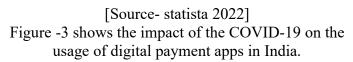
The impact of the COVID-19 on digital payment in India by April 2020 is shown in Figure 2. RBI published this report 1% respondents can't say about digital payments, 4% respondents more preference for cash payments less preference for digital payments, 9% respondents only use of digital payments no cash payments, 33% respondents more digital less cash, 53% respondents more digital payments less cash.





#### [Source- statista 2022]. Figure -2 shows the impact of the COVID-19 on digital payment in India as of April 2020





# ADVANTAGES OF DIGITAL PAYMENT SERVICES

**Money that cannot be faked:** The value of counterfeit money will be regarded useless. People who participate in socially damaging actions have a higher chance of amassing a large sum of money. When the process of transitioning to a cashless economy begins, this collected currency will be useless due to the note ban. Authorities will question anyone who deposits money in the bank about their source of income.



**Transparency:** Computerized payments can assist promote accountability and transparency. Only cashless society may achieve economic progress with obligations.

**Cash Fraud Will Be Reduced**: Theft and fraud involving cash will be reduced. By prohibiting the use of notes, no one will dare to take money, which will make theft more difficult because banks will refuse to accept them.

**Smooth Payment**: The cashless transaction makes payments across the country easy to administer. People who want to transmit money to different parts of India, for example, can use the NEFT system to do so quickly and easily. With the advent of digitization, everyone needs gain digital literacy at some point in order to solve their money transfer concerns and ensure more honest transactions.

**International payments are easy:** Exchanging currencies is monotonous for many individuals who are traveling internationally.

**It's easy and convenient**: One of the most significant importances of digital payments is the seamless experience that they deliver to customers. Online payments are good because of their reduced hand on cash, speedy transfer and easily use.

**Economics progress:** Customers are more likely to transact online when they realize how simple, convenient, and secure it is. As a result, a growing number of people are at ease purchasing items online, investing digitally, and exchanging money electronically. A growth in money flow and online business has assisted the economy's advancement. This is why hundreds of new online enterprises are launched every day, and many of them are profitable [razorpay.com, 2021].

# CHALLENGES OF DIGITAL PAYMENT SERVICES

**Small-business disputes**: Despite receiving an SMS or a paper slip indicating payment acceptance, smaller businesses are concerned about giving away items and not receiving money the next day. This is attributable to two factors: a) a lack of understanding of how digital payments function and what each electronic confirmation involves; and b) inadequate and lengthy dispute resolution systems.

**Cyber Fraud:** India's hacking efforts are second only to those of the United States, demonstrating the country's growing interest in the hacking community. Though large-scale data breaches have been rare so far, the overall security posture continues to evolve. Security technologies are not adequately funded and lack of understanding Individuals who handle data in banks and fintechs are the key factors. In the past, most data breaches have been found to be the consequence of human mistake.



**Corruptibility:** Despite the fact that it is one of the most significant milestones in the digitization of financial transactions, there is no action about crime. Accepting a bribe in cash may require it in the future in the form of a cell phone or computer system (which is based solely on speculation).

**Inequality in the Economy:** It is feasible that obtaining cellphones or other gadgets will become necessary if a cashless system entirely replaces traditional payment methods. Buying a smartphone in a country like India, where many people struggle to satisfy their basic requirements, is clearly a luxury that these poor people cannot afford. Because not everyone can afford it, society would become more unequal if cashless transactions become the norm..

**Excessive spending:** Customers can make payments with only a click; there is no doubting that cashless transactions are easier to accomplish. This transactional advantage contributes to a predisposition for expenditures, particularly among the younger generation.

## CONCLUSION

The RBI's annual report on the impact of COVID19 and its consequent lockdown among Indians found that the majority of respondents study their use of digital payments hasn't changed.. 33% of respondents reported using digital payments more frequently, while 9% exclusively used online payments. The lockdown in India, the largest in the world, was imposed on March 25, 2020, affecting 1.3 billion people until May 3, 2020. The Reserve Bank ensured proper security as part of its efforts to set up government payment and settlement infrastructure in the country, as well as to improve consumers' digital payment experiences. We were able to execute an easy transition to a cashless society with enhanced transaction adaptability and a wonderful electronic experience thanks to these initiatives. The smooth functioning of the payment system was also attempted despite difficulties arising from the COVID-19 pandemic.

The Reserve Bank's focus on improving digitalization for internal users has also contributed to increased adaptability. It also aided in the expansion of digital government transaction coverage. Build up the payments environment, The Reserve Bank's major priority moving forward will be to raise awareness and ensure the facilitation of digital payments across the country. Due to the difficulties involved with digital payments, personal information may be exposed to a data breach. Cashless technology will be tough to keep up with as it evolves for those who lack skills, bank accounts, or mobile phones.There are some challenges associated with



digital payments, but there are also several advantages: There is no tangible money to steal, crime rates are lower and there is always a digital paper trail, and money laundering is less common. Handling, storing, and depositing paper money takes less time and money. Currency conversion is easier while going internationally.

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