

EMPOWERING DIGITAL INDIA PROGRAMME THROUGH THE DIGIDHAN MISSION: A GOVERNMENT INITIATIVE

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ABSTRACT

Through the provision of digital governance and digital services to all citizens, the Digital India Programme seeks to convert India into a society and knowledge economy that is enabled by technology. An important component of the Digital India programme is the promotion of the digital payment's ecosystem, which has the power to expand inclusive financial services and change the face of the Indian economy. The banking sector is expected to undergo tremendous productivity growth, significant increases in customer satisfaction, and a major change in the nature and level of competition as a result of the digital revolution. The development of the Internet and information and communication technologies have opened up new business opportunities. Digital payments, one of the most ground-breaking technological advancements to date, are a method of transaction. India's digital payment environment is undergoing a significant transition. India's consumers have demonstrated a strong affection for digital technology, which has sped up the development of the digital payment infrastructure. Startups, Fin-tech companies, and banks comprise the payment ecosystem. Major technological companies that have a substantial user base currently use the UPI platform to offer payment services. They are significantly contributing to the growth of digital payments. In the Union Budget for 2017–18, the Indian government announced the creation of a mission to promote digital payments with a goal of 2,500 crore digital transactions through UPI, USSD, Aadhaar Pay, IMPS, and debit cards during the financial year. In recent years, economic transactions are being carried out through electronic means across the globe especially in developed countries and developing countries like India. As a result of increased digital means of payment has brought down usage of cash transactions in the economy. In present paper, the researchers have emphasized the relevance of DigiDhan Mission of Government to empower the Digital India Programme. The discussions and the observations of present study will be useful to Indian government's initiative of Digital India and will provide substantial inputs to government agencies, financial institutions, mobile and telecommunications operators, and researchers.

Keywords: DigiDhan, Digital India, Cashless Transactions, Digital Transactions, UPI, BHIM.

Introduction

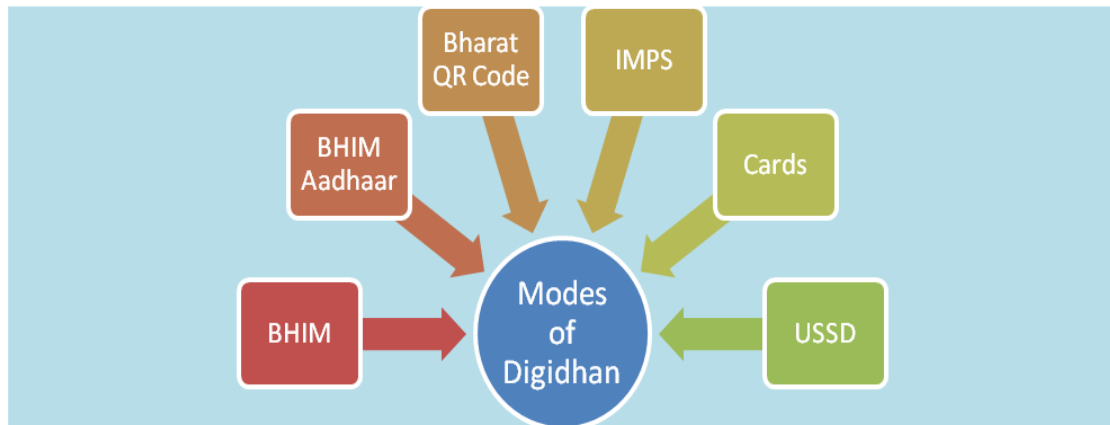
The way people live, work, communicate, and socialize is about to undergo a major transformation in India as a result of the digital revolution. To realize its goal of a digital economy, the government has given individuals the push they need to switch to online platforms. The digital infrastructure needed to transform India into a knowledge economy and society with a strong digital presence will be made available through government initiatives like Digital India. The emergence of new technology and more government support have helped the Indian financial services sector rapidly embrace digitization.

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The Indian government has recently taken several actions to support and promote digital payments. As part of the Digital India initiative, the principal objective of the government is to develop a digitally powerful economy that is Faceless, Paperless, and Cashless. In the Union Budget for 2017–18, the Indian government announced the setting up of a mission to promote digital payments with a goal of 2,500 crore digital transactions through UPI, USSD, Aadhaar Pay, IMPS, and debit cards during the fiscal year.

Chart 1: Modes of Digital Payment in India



Source: <https://www.meity.gov.in/modes-digital-payment>

The Indian Banks' Association and the Reserve Bank of India launched the National Payments Corporation of India (NPCI) as an initiative to provide the essential infrastructure for various payment systems. The widely utilised Unified Payments Interface (UPI), which was supported by over 200 banks, and the card scheme RuPay as the domestic substitute for MasterCard, Visa, and UnionPay are two examples of these services. The latter was also a part of the comprehensive Pradhan Mantri Jan Dhan Yojana (PMJDY), which aims to make financial services and digital payments accessible to large segments of society.

Review of Literature

B. Angamuthu (2020) in his study “**Growth of Digital Payments in India**” discussed that India's financial system is continuously evolving with the help of emerging technologies to make online transactions easier, safer, accessible and more personalized for customers. The researcher described the positive growth in terms of actual volume (24.11%) and value (15.84%) of overall digital payments in the country over the last 7 years. Further, the country is expected to generate 28,000 lakh transactions exceeding INR 15,20,000 billion in digital transactions in 2020-2021.

Rajat Deb (2020) in his research paper entitled “**Influence of Mobile Apps on Household Saving-Spending Behaviour**” studied the impact of using pre and post mobile-apps with household saving-spending behaviour. This study reported nearly 50 percent increase in saving and spending decisions in post-mobile-app use than the pre mobile-app use.

Ravi kumar et al. (2019) in their study “**Impact of Digital Payments on Economic Growth: Evidence from India**”, analyzed the impact of digital payments on economic growth in terms of real Gross Domestic Product (GDP). The authors reported that among the various digital payment modes, only retail electronic payment positively impacts the real GDP significantly in the short-run, but in the long run, retail electronic payments don't impact the real GDP. Further, digital payments at large and retail electronic payments don't contribute to economic growth in India directly in the long run.

David et al. (2018) examined in their research paper “**Distributed ledger technology in payments, clearing, and settlement**” the importance of Distributed Ledger Technology (DLT) in the area of payments and settlement system along with opportunities, challenges associated with its long-term implementation and adoption. This study concluded that it is possible to use DLT in payments, clearing and settlement including cross border payments, transfer and record the ownership of digital assets, immutably and securely store information, provide for identity management and other evolving operations through peer-to-peer networking.

Jubair and Yakoob (2017) in their descriptive and analytical study “**Acceptance of Digital Wallets in Kerala: An Empirical Study**”, analyzed the awareness and adoption of digital wallets in urban and rural areas. This study reveals that around 2/5th of the people are aware about digital wallets both in urban and rural areas, but adoption and usage of digital wallet services is higher in urban areas than in rural areas.

Objectives of DigiDhan Mission

Promotion of digital payments through all available digital payment methods, including BHIM Aadhaar Pay, USSD, IMPS, and UPI;

Promoting and directing the development, expansion, and maintenance of a strong, inclusive, and national digital payments ecosystem;

The creation of practical digital payment methods and a nationwide infrastructure for accepting them to facilitate seamless digital payments and widespread adoption of them by consumers.

Raising awareness of the advantages of digital payments through advertising, education, and training.

Developing and promoting suitable standards for effective, reasonably priced, and secure digital payment services;

Ensuring the ecosystem for digital payments is secure.

Research Gap

Various studies have covered different aspects of digital payments system in India. The researchers have tried to show the impact of digital payment system on economic growth of India and the relationship between the customers and their perception towards the adaption of digital payment system. Very few studies have focused about the DigiDhan Mission of Government of India and its relevance towards the empowerment of Digital India Programme. Hence, this study is a foot forward in the direction of fulfilling this gap for further fellow enthusiasts to take forth.

Objectives of Study

The research paper primary aims to:

- Discuss the various modes of payment under DigiDhan Mission of Government of India and their growth.
- Employ a survey to gauge consumer adoption of these options and their expectations regarding the same.
- Explore the reasons behind the growth of various digital payments in India.
- Analyze the risk factor and obstacles involved in usage of digital modes of payment.
- Examine what precautionary measures are being adopted by customers while using digital mode of payments.

Hypothesis of the Study

The following research hypothesis have been formulated for the topic “DigiDhan Mission: An Initiative of Government to empower Digital India Programme”-

H₁: People are not aware about the benefits and privileges of using digital modes of transaction.

H₀: People are aware about the benefits and privileges of using digital modes of transaction.

H₁: Barriers of digital payment transactions do not influence users to adopt digital mode of payments.

H₀: Barriers of digital payment transactions influence users to adopt digital mode of payments.

H₁: There is no significant impact of covid-19 on digital payment system in India.

H₀: There is significant Impact of covid-19 on digital payment system in India.

Research Methodology

Present research study is analytical in nature. For this study, both primary and secondary data has been used. The overall growth of digital payments in India during the five financial years from 2017-18 to 2021-22 has been presented in this study.

- **Universe:** The universe regarding present research paper consist all customers who are using digital mode of payment.

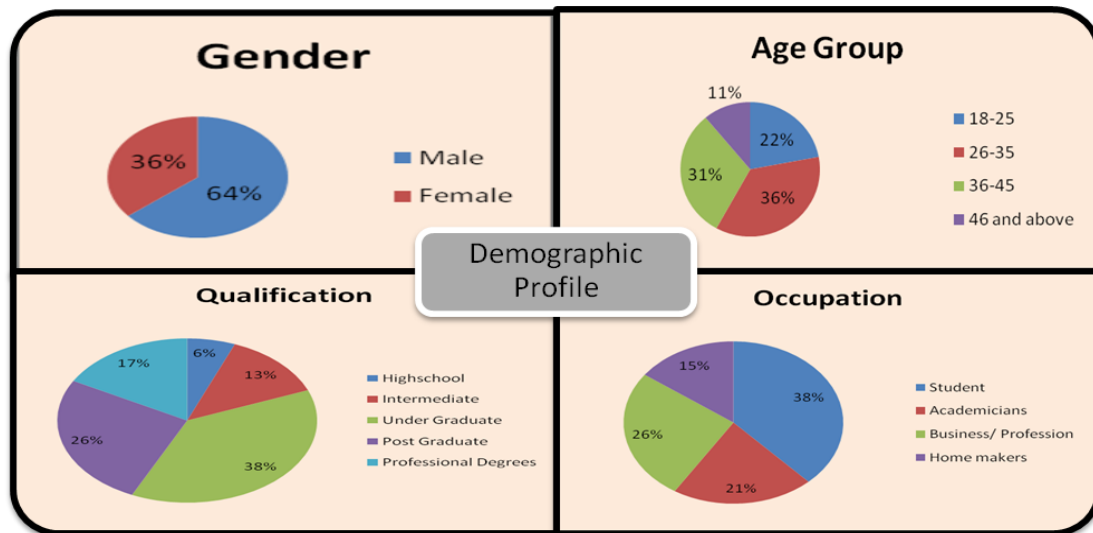
- **Sample Size:** for this study, a sample size of 100 respondents has been taken from different segments of society.
- **Sampling Technique:** Convenient sampling method has been used which includes both Questionnaire (Google form) and interview techniques to collect data regarding perception of customers who are the users of digital mode of transaction.
- **Sources of Data Collection:** Present research study is based on the data collected from both the sources i.e., primary and secondary. Primary data has been collected from the users of digital modes of transactions from different segments of society and the secondary data for the study has been collected from the website of Ministry of Electronic and Information Technology, Reserve bank of India and other Government agencies.
- **Statistical tools for data analysis:** For analysis purpose, the growth performance of digital payment during the study (2017-18 to 2021-22), both value and volume of transactions have been taken. Five likert's scale method has been used starting from strongly agree, agree, neutral, disagree and strongly disagree to know the perception of respondents regarding various aspects of digital mode of transactions. Various table and charts have been used to support the study.

Data Analysis and Interpretation

Demographic Profile of Respondents

In first section of questionnaire, the demographic profile of respondents were asked which is depicted in the following chart:

Chart- 2 Demographic Profile of Respondents



Source: Primary Data Collection

The above chart indicates the demographic profile of 100 respondents. Out of total respondents, 64% are male and 36% are female. In terms of age group, 22% respondents fall under the age group of 18-25, 36% are related with the age group of 26-35, 31% respondents come under the age group of 36-45 and 11% respondents are from the age group of 46 and above. In terms of qualification of respondents, 6% respondents have the qualification of high school, 13% respondents are intermediate, 38% respondents are graduate, 26% are post graduate while 17% respondents have professional degree like CA, CMA, and CS etc. According to occupation of respondents, 38% are students, 21% respondents are academicians, 21% are business man or professionals and 15% respondents are home makers.

Testing of Hypothesis

Hypothesis 1

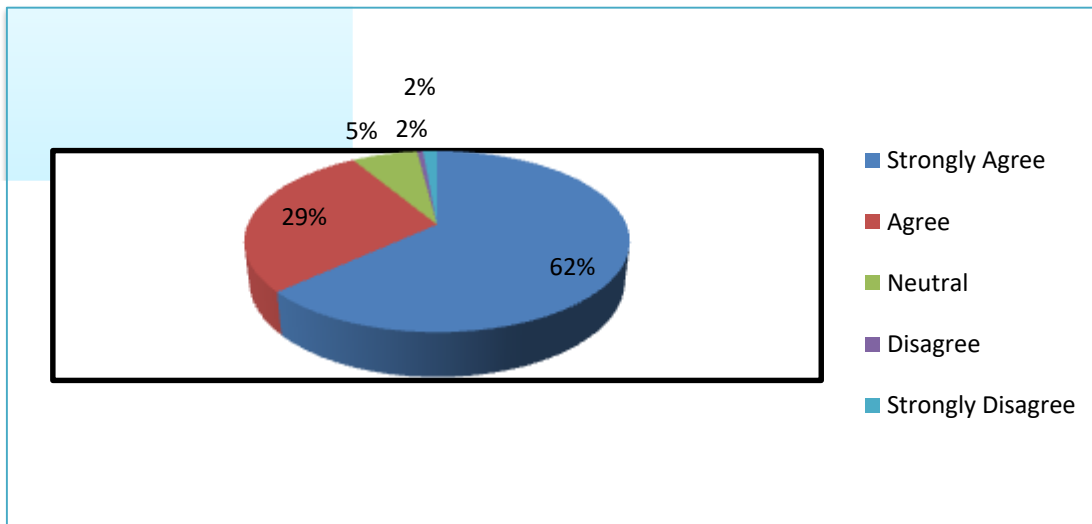
H₁: People are not aware about the benefits and privileges of using digital modes of transaction.

H₀: People are aware about the benefits and privileges of using digital modes of transaction.

Reasons behind Acceptance of Digital Payments in India

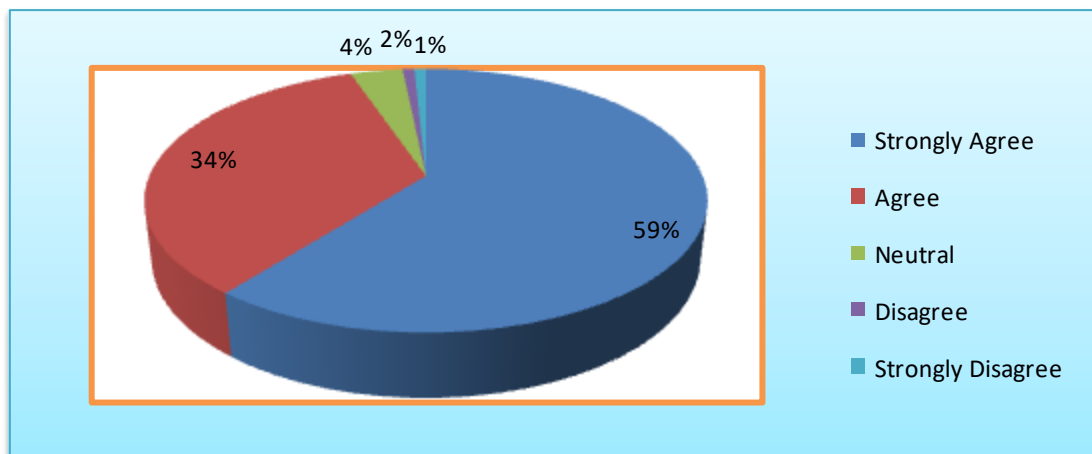
It is the common occurrence that people use to buy any product to satisfy their definite needs and prospect to meet their unambiguous requirements. Reasons for accepting digital transactions or purchase of financial products is also not differ from this fact. The responses indicate the perception of customers regarding the benefits of making payment through digital modes in compare to cash. As per the views of respondents, the reasons include convenience at the time of making payment, less time duration in transaction, safe and secured mode of transaction than carrying cash, saving of cost and time and effort, ease of using digital payments at anywhere and anytime, international acceptability in certain countries and as a symbol of social status and pride which has been shown on Likerts' five scale measurements. The reasons behind acceptance of DigiDhan Mission of Government of India is depicted in following charts-

Chart 3: Digital Payment as Convenient Mode of Payment



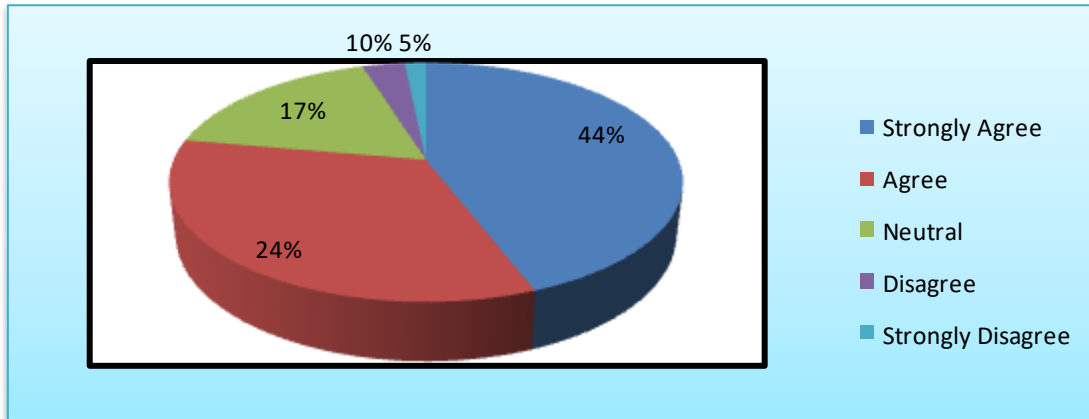
The above chart presents the view point of respondents regarding the reason behind acceptance of digital payments as these modes of payments are convenient in nature as compare to cash. The responses indicates that majority of respondents are in favour that the payment via digital mode is convenient as compare to cash. 62% respondents are strongly agreed and 29% respondents are agreed with this point and due to their convenience, they started using digital modes of payments.

Chart 4: Digital mode of transactions facilitates Quick Transactions



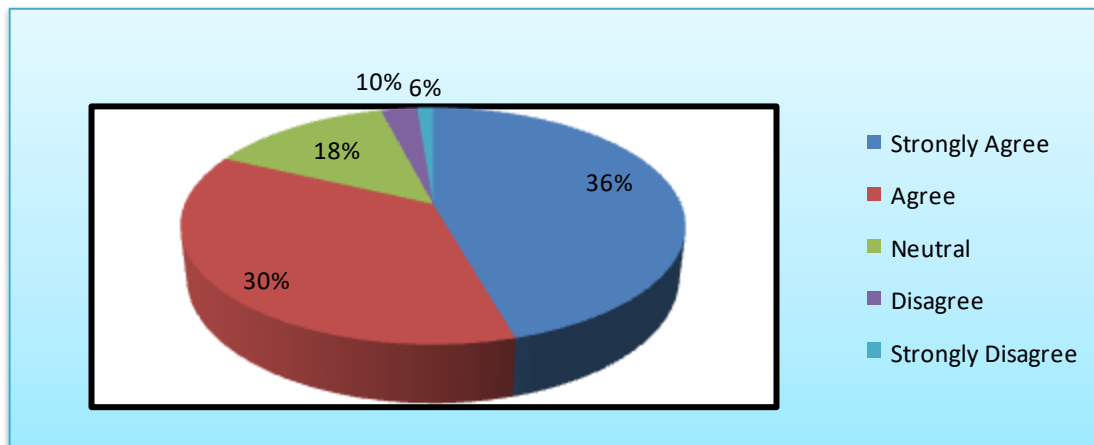
The above chart presents the overview of respondents on the point that digital mode of transactions facilitate quick transaction as we don't need to be present one to one for any transaction via digital mode, hence it is quick in nature as compare to cash transaction. With the help of internet, any transaction can be done within seconds at any-time and anywhere. 59 % respondents were strongly agreed with this point while 34% respondents were agreed. Only 3% respondents are not agreed with this point which may be due to lack of their knowledge. Thus, we can say that the transactions done via digital mode is quick as compare to cash transaction.

Chart 5: Digital transactions are Secured Mode of Transaction



The above chart presents the responses on the point secured mode of payment for digital transactions. The chart indicates that there is a conflict in mind of respondents regarding the security issue of digital payments. 44% respondents are strongly agreed and 24% respondents are agreed with the point that digital mode of payment is secured in nature. 17% respondents are neutral while 15% respondents opposed this point that digital payment is totally secured in nature. According to them, due to new technologies and innovations, the cyber crime has increased in the nation and security issues raised in digital transitions as the hackers are very active over internet which creates the fear in mindset of customers to go cashless.

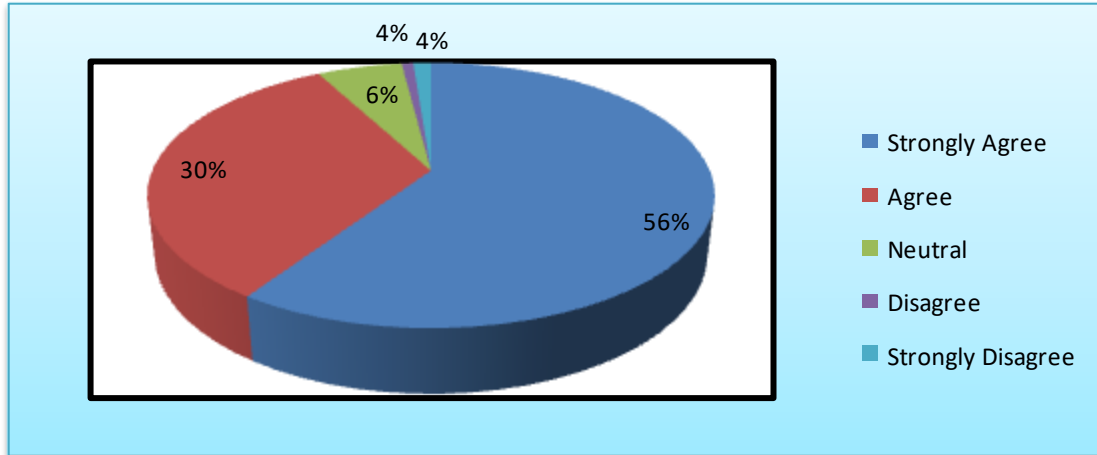
Chart 6: International Acceptability of Digital Payments



The above chart indicates the viewpoint of respondents regarding the benefit of international acceptability of digital payments. The chart indicates that 36% respondents are strongly agreed and 30% respondents are agreed with the point that there is a benefit of accepting digital mode of payment as it is internationally acceptable in some countries. 18% respondents are neutral with this point while 16% respondents are not aware about this fact.

At present, consistent effort is being made by the government to expand the usage of India's digital payment system across the globe. The UPI payment system and RuPay have partnership with countries like Malaysia, Singapore, France, UAE etc. to use India's payment system. The new entrant countries are Belgium, Netherlands, Luxembourg and Switzerland.

Chart 7: Ease in Making Digital Payments



The above table indicates that 56% respondents are strongly agree and 30% respondents are agree with the benefit of using digital payments as they feel ease in making digital payments in compare to cash. 6% respondents are neutral while 8% respondents are not agreed with this point. They still think that cash transaction is easier for them as compare to digital transactions.

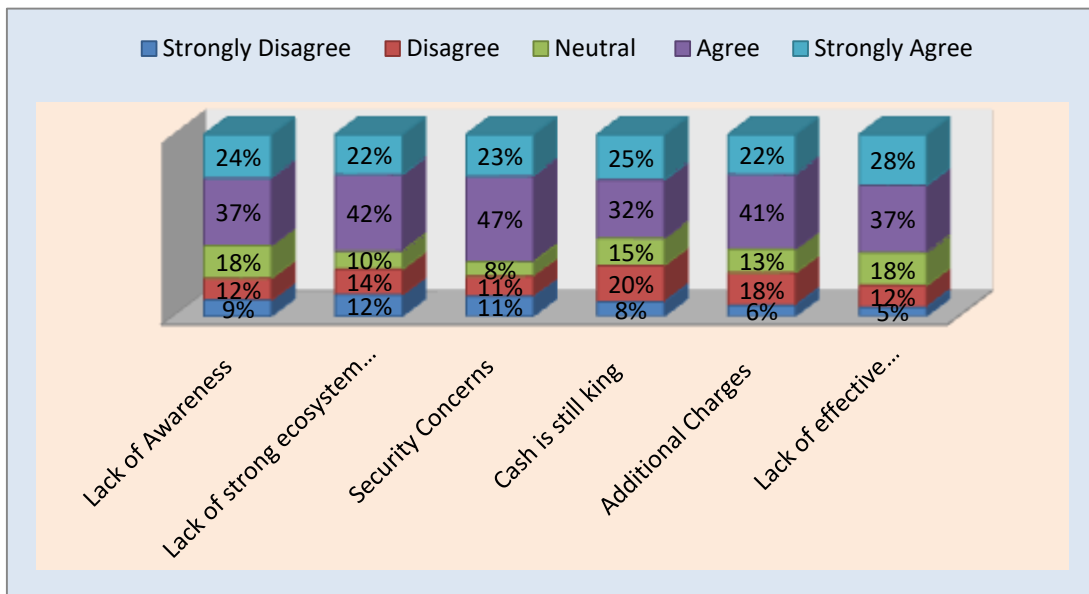
Hypothesis 2

H₁: Barriers of digital payment transactions do not influence users to adopt digital mode of payments.

H₀: Barriers of digital payment transactions influence users to adopt digital mode of payments.

Barriers of Digital mode of Payments

Chart 8: Barriers of Digital Transactions in India



Source: Primary Data Collection

The above chart indicates the perception of respondents regarding barriers of using digital modes of transactions. The chart shows that there are many barriers are being faced by customers to adopt digital mode of transaction which includes lack of awareness, lack of strong ecosystem for digital payments especially in semi urban and rural areas, security concern, the role of cash in economy, additional charges of using digital modes of payments and lack of effective complaints and redressal mechanisms. The majority of respondents are with this opinion that these barriers are playing a significant role to prevent them for using digital modes of payments.

Hypothesis 3

H₁: There is no significant impact of covid-19 on digital payment system in India.

H₀: there is significant Impact of covid-19 on digital payment system in India.

Growth of Digital Payments in India

The digital India programme is the key outcome of the Government's mission to transform India into a digitally empowered society and knowledge economy. The main aim of Digital India is to make a nation where people are advised to accept Faceless, Paperless and Cashless transactions. The DigiDhan Mission announced by the Ministry of Electronics and Information Technology has been playing the role of catalyst to promote the digital payment ecosystem in India. The trend of digital payment system in India is steadily increasing since last few years. According to the reports of Reserve Bank of India, the transaction volume of digital payment has increased from 2,070.95 crore in FY 2017-18 to 8,637.87 crore in FY 2021-22.

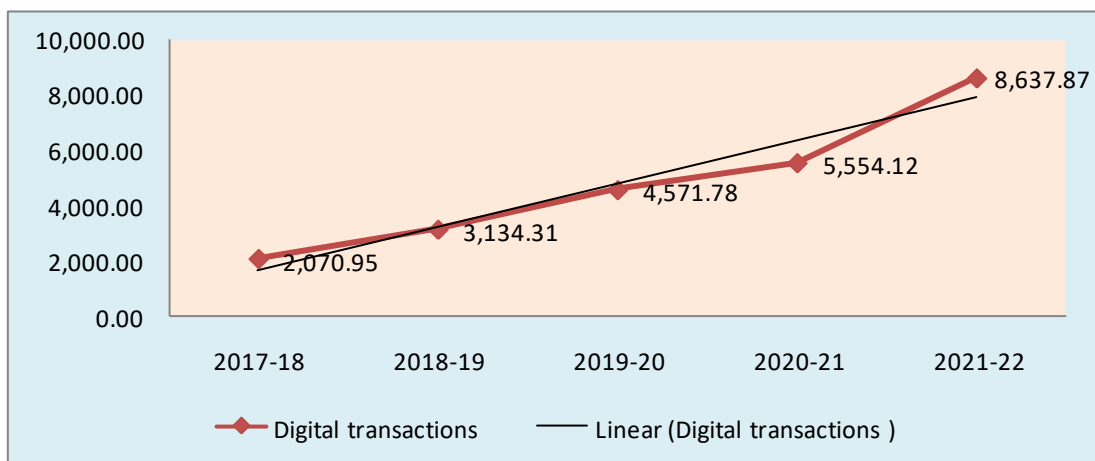
Table 1. Financial Year & Volume of Transactions (in Crore)

S. No.	Duration	Digital Transactions - Current (Crore)	BHIM Transactions - Current (Crore)	Debit Card - Current (Crore)
1	2017-18	2,070.95	91.31	334.34
2	2018-19	3,134.31	535.16	441.79
3	2019-20	4,571.78	1,251.75	512.38
4	2020-21	5,554.12	2,232.95	411.47
5	2021-22	8,637.87	4,560.79	414.75

Source: <https://meity.dashboard.nic.in/DashboardF.aspx>

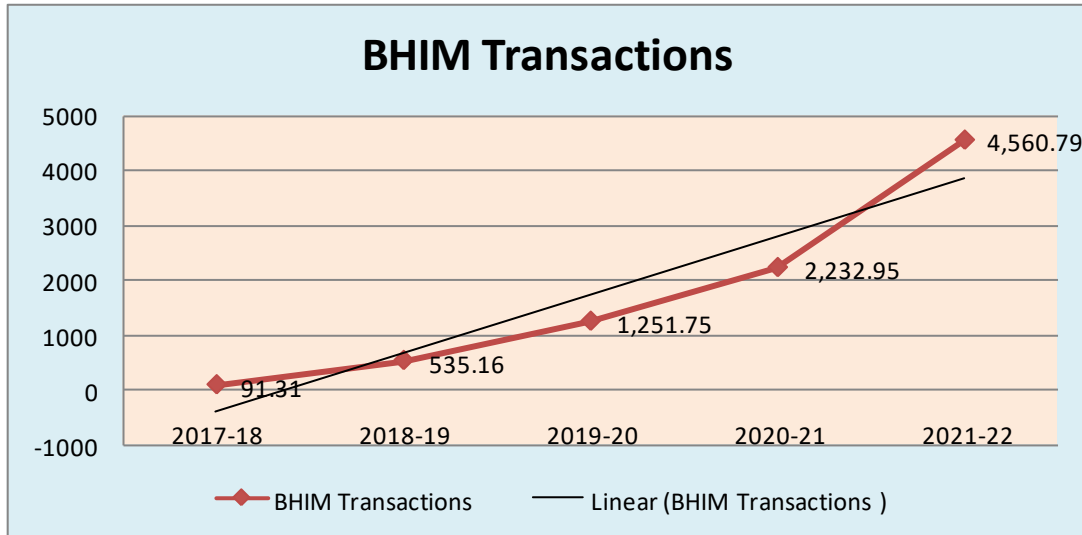
The above table indicates that there is an increasing trend of digital transaction and BHIM transaction continuously. The demonetization of currency in 2016 and the pandemic era played a significant role to push citizens to accept digital mode of payment in compare to do transactions via cash. The main reason behind the acceptability of digital mode is that people are afraid during this pandemic time and they avoid getting personal connections that is pushing them to go through cashless transactions. Due to new technologies and growth of digital transactions and BHIM transactions, the usages of plastic money (debit and credit card) is slightly depicts the fall-down during the covid pandemic era. For clear vision, the data presented in above table has been depicted in the form of charts and a linear trend has been presented-

Chart 9: Digital Payments- Digital Transactions



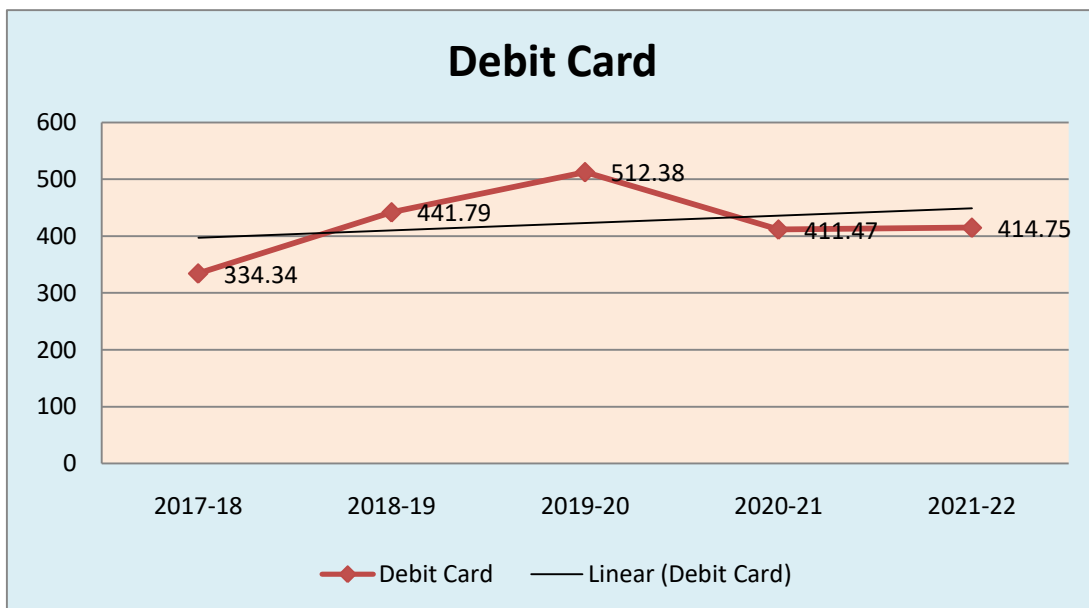
The above chart presents the data of digital payments made during the five financial years from 2017-18 to 2021-22. The chart indicates that there is an increasing trend of digital payment in India as the total volume of digital transactions was 2,070.95 in the financial year 2017-18 which is recorded as 8,637.87 crore in the financial year 2021-22. It is a positive sign for the mission of Government of India to make India a cashless society as the mindset of people are getting change and they are adopting various digital modes of payments instead of using cash for their daily transactions.

Chart10. Digital Payments- BHIM Transactions



The above chart presents the data of transactions via BHIM app of last five financial years which includes the period of 2017-18 to 2021-22. The chart indicates the continuous increase in the transaction via BHIM app as only 91.31 crore transactions were done with the help of BHIM app during the year 2017-18 which was drastically increased during the year 2021-22 and reached upto 4,560.79 crore during the year 2021-22. It is again a positive indicator towards the journey of cashless economy of India.

Chart 11: Digital Payments- Debit Card



The above table presents the data of debit card transactions of last five financial years during the period of 2017-18 and 2021-22. The chart indicates that there is an increasing trend of the transactions via card till the financial year 2019-20 as the announcement of demonetization policy in Nov, 2016 forced people to use their plastic cards as the shortage of cash at that time. People rushed over the banks and ATMs and started using their cards for their daily transactions and merchants also facilitated PoS at their shops which promoted the use of plastic cards in a drastic manner. But at the time of pandemic era, the people got afraid to use their plastic cards also in ATMs and on PoS and they started to accept transactions where no personal contact was required. Hence, during and after the pandemic time, the transaction via plastic cards decreased and reached upto 414.75 crore transactions in the financial year 2021-22.

India's Position in Global Market in terms of Payment System Transactions

As per the report published by Accenture which was released on 24 November, 2020, regarding forecasting of India's digital payment system describes that about 66.6 billion transactions that is worth to USD 270.7 billion are expected to shift from cash to cards and digital payments by 2023 in India, and further it is expected to increase upto USD 856.6 billion by 2030.

According to a report published by BCG entitled "Digital Payments in India: A US\$10 Trillion Opportunity", states that the payment system of India has transformed drastically over the past five years. As per the report, 40% of India's total payment (by value) is in digital mode, which contributes to a US\$3 trillion digital payment market on account of quick extension in digital infrastructure, pandemic-led hastening of swing in customer preference, UPI- led immigration to digital, troublesome innovations by fintech and increasing merchant acceptance network.

Chart 12: India's Position in Payment System Transactions - Volume



Source: Red Book 'Country Tables' compiled by the Bank for International settlements

The nation' drives towards the vision of Digital India in collaboration efforts made by RBI towards "Empowering Exceptional E-payments Experience", has led to a hasty deepening and adaption of digital payments in the last few years. The transactions other than cash have grown rapidly which is recorded as 40 billion transactions in the year 2022 with a CAGR of 21% between the years 2017 and 2022. The above chart depicts that there is a rise of 24.4% in payment system transaction over the previous year.

At global level, it is witnessed that in terms of number of payment systems, China (341 billion), United States (184 billion), Russia (56 billion) and Brazil (45 billion) have higher number of transactions than our country in the year 2020.

Major Findings of the Study

The major findings of the study are as follows:

- The responses indicates that majority of respondents are in favour that the payment via digital mode is convenient as compare to cash. 62% respondents are strongly agreed and 29% respondents are agreed with this point and due to their convenience, they started using digital modes of payments.

- 44% respondents are strongly agreed and 24% respondents are agreed with the point that digital mode of payment is secured in nature. 17% respondents are neutral while 15% respondents opposed this point that digital payment is totally secured in nature.
- 59% respondents are strongly agreed with the point that digital mode of payment facilitates quick transaction while 34% respondents were agreed. Only 3% respondents are not agreed with this point which may be due to lack of their knowledge.
- 36% respondents are strongly agreed and 30% respondents are agreed with the point that there is a benefit of accepting digital mode of payment as it is internationally acceptable in some countries. 18% respondents are neutral with this point while 16% respondents are not aware about this fact.
- 56% respondents are strongly agree and 30% respondents are agree with the benefit of using digital payments as they feel ease in making digital payments in compare to cash.
- Many barriers are being faced by customers to adopt digital mode of transaction which includes lack of awareness, lack of strong ecosystem for digital payments especially in semi urban and rural areas, security concern, the role of cash in economy, additional charges of using digital modes of payments and lack of effective complaints and redressal mechanisms.
- The majority of respondents are with this opinion that these barriers are playing a significant role to prevent them for using digital modes of payments.
- The demonetization of currency in 2016 and the pandemic era played a significant role to push citizens to accept digital mode of payment in compare to do transactions via cash.
- The main reason behind the acceptability of digital mode is that people are afraid during this pandemic time and they avoid getting personal connections that is pushing them to go through cashless transactions.
- There is an increasing trend of digital payment in India as the total volume of digital transactions was 2,070.95 in the financial year 2017-18 which is recorded as 8,637.87 crore in the financial year 2021-22.
- There is a continuous increase in the transaction via BHIM app as only 91.31 crore transactions were done with the help of BHIM app during the year 2017-18 which was drastically increased during the year 2021-22 and reached upto 4,560.79 crore during the year 2021-22.
- There is an increasing trend of the transactions via card till the financial year 2019-20 as the announcement of demonetization policy in Nov, 2016 forced people to use their plastic cards as there were shortage of cash at that time.

Conclusion and Suggestions

The innovative technologies have brought drastic change in the payment system and brought a new paradigm in the global market. After demonetization policy the pandemic has unlocked the requirement of adoption of digital modes of transaction more over cash than ever because of the prime concern of social distancing during this period. As per the study, the digital payments are on upward trend which is evidently grown up by the onset of the pandemic. In India's journey towards becoming a cashless economy, two words and their impact played a significant role, 'demonetization' and 'COVID-19'. The demonetization policy laid out the foundation of digital payment and made familiar it with general public and another factor played the role of catalyst and became the main source to build up the friendly environment for digital payments in India.

To achieve the mission of Government of India and to make India a digitally empowered society there is a need to spread the awareness about the new innovative methods of digital payment in semi urban as well as in rural areas also. There is a lack of proper infrastructure and internet connectivity in rural areas which creates the main hurdle for villagers to adopt these modes of transactions. Awareness programmes, financial inclusion, development of infrastructure, sustainable growth are the key initiatives by which the dream of India to become a cashless economy can be achieved. Government should also focus on the security issues and cyber crimes to mitigate the obstacles of adopting digital modes of payment.

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