

A STUDY ON THE EMERGENCE OF DIGITAL PAYMENT SYSTEM AND ITS ACCEPTABILITY BY RESIDENTS OF VADODARA

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ABSTRACT

Digital Payments are payments done using online modes with no physical exchange of money involved. (1) Various methods of digital payment include UPI, Debit Cards, Credit Cards, AEPS, USSD, Mobile Wallets, Mobile Banking, Mini ATM's, Point of Sale, Internet Banking. The paper aims to study the enablers contributing to fast growth of the digital payment system in India and analyse its impact on the economy. Also it focuses on studying the challenges existing in digital payment system. The paper also targets the residents of vadodara city of Gujarat State, to know their acceptability for Digital Payment System and difficulties faced by them while using it and their desire to move back to cash payment system. The primary data from 200 respondents has been collected via questionnaire. The paper concludes, majority respondents are youngsters willing to continue using most preferred Digital Payment mode i.e. UPI in future. Many are facing difficulties like Technical error, Payment failure, Fear of fraud, Hidden charges, Lack of Knowledge, Complicated instruction, other issues. As though there are some difficulties, many still want to continue with the ideology, "more digital, less cash". Government needs to take more initiatives to promote the Digital Payment System and make it fraud proof, technical- glitch free, reliable and user friendly.

Keywords: Digital Payment System, COVID-19, Vadodara, UPI, Debit Cards, Credit Cards, USSD, Gujarat.

Introduction

Digital payments are transactions happening by digital or online mode, and there is no exchange of physical money. Our Government aims at promoting digitalization in every field, they aim at "cutting carbon footprints and promoting Paperless and Cashless economy."

There are various modes of digital payment system:

- **Banking Cards**
It includes ATM Card, Debit Card, Credit Card and Travel Cards.
- **USSD (Unstructured Supplementary Service Data)**
A *99# service that include services like interbank fund transfer, balance enquiry, mini statement, etc. without any need of internet connection.am banking services.
- **UPI (Unified Payments Interface)**
UPI allows to link multiple bank account to a single mobile application.

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- **Internet Banking**

Internet banking has substitute names like online banking, e-banking or virtual banking. Using Banks official website customer can conduct variety of financial transactions.

- **Mobile Banking**

It's a app provided by all financial institutions to conduct financial transactions access all banking services via mobile.

- **Micro- ATM's**

A device used by Business Correspondents to deliver banking services.

Enablers for Fast Growth

Since long India being a "CASH" economy. Still many factors contributed to push people towards digital payment system:

- **Currency Demonetization:** In October 2016, RBI demonetized 500 and 1000 rupees currency notes across India. Their primary objective was to curb black money. Due to shortage of cash in circulation, many customers migrated to digital means of payment.
- **Merchant Discount Rate:** The MDR percentage charged on transactions via Debit and Credit card was reduced and it ranged between 0.5% to 2%. (2)
- **Cheap Internet:** Entry of "Jio" telecom company, which was offering free internet, ensured all class of people to access low cost data overall India and it indirectly made them comfortable to accomplish transactions using digital payment options. (2)
- **Fintech Startups:** Many fintech startups developed innovative payment solutions and it made digital payment more accessible and convenient for users. (2)
- **COVID-19 Pandemic:** During lockdown volume of transactions decreased. Concerns over the transmission of virus through the exchange of physical currency gave a uptick to digital payment. This includes mostly online grocery stores, pharmaceuticals, online gaming, recharges and utility bill payments.

Challenges and the Way Forward

Though Digital Payment users are increasing drastically, but there are still many challenges existing to make India "A cashless economy". The challenges like lack of infrastructure to support digital payment system in rural areas, because of which majority people are deprived of facility of digital payment system. Also, after COVID-19, the cyber frauds and scams are increasing on a higher rate, and many people lost all their savings in few seconds, which is really a matter of concern. (2)

Literature Review

Extensive research related to digital payment has been carried out worldwide from various perspectives. Some studies have analyzed the adoptability of digital payment system in specific area or to specific gender during COVID-19 situation. But this paper aims to study the enablers which dragged people towards Digital Payment in India and challenges existing in Digital Payment System. Also the paper targets the residents of vadodara city of Gujarat state to know their acceptability for Digital Payment System and difficulties faced by them while using it and their desire to move back to cash payment system.

(Robert Cull, et al.,2023) in their research work on "Digital Payments and the COVID-19 Shock" examined enablers and safeguards that resulted in expansion of digital payment and digital financial inclusion. They concluded government and private sector can overcome all issues relating to undeveloped banking system and weak regulation of digital economy. (7)

(Dr. Kamini Shah, et al.,2018) in their research work on "A Study of Awareness and Perception about Digital Payments among Women in Gujarat" analyzed the awareness of women for digital payment system and how they perceive new payment method. The study proved majority womens are aware of digital payment system but are not using it. The study indicates that most of the demographic factors like income and profession can not affect their perception but age and education does have impact on their perception. (8)

(Dr. Darshana Gandhi, et. al.,2023) their research titled "A Study on Awareness about Digital Payments among Homemaker Specially Female in Vadodara District" to examine their awareness level and usage of digital payment among homemakers in India specially females. (9)

Research Gap

- The study is restricted only to Vadodara city in Gujarat state.
- Primary data was collected through questionnaire which may suffer from the subjectivity biases of the respondent.
- The present study is limited to only 200 respondents of Vadodara City in Gujarat state. Although the care has been taken in selecting the samples but then also it may not be representative of the actual population.

Research Methodology

Objectives of Study

- To study the enablers contributing to fast growth of digital payment system in India.
- To identify the challenges existing in digital payment system.
- To investigate the residents of vadodara to know their acceptability for digital Payment system.
- To assess the difficulties faced by residents of Vadodara in using Digital Payment System and their desire to move back to cash payments system.

Research Design

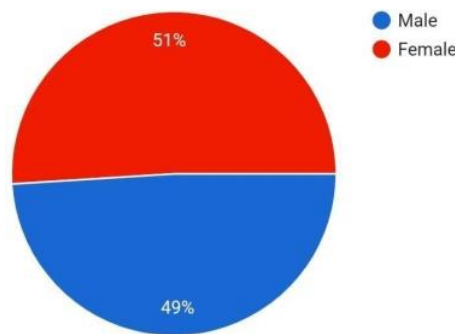
The primary data is collected via questionnaire being sent to residents of vadodara city of Gujarat. The secondary data is extracted from sources such as journals, research papers; newspaper, internet, etc.

Sample Size & Technique

200 respondents consist vadodara residents. Convenience sampling technique was used to collect data.

Data Analysis

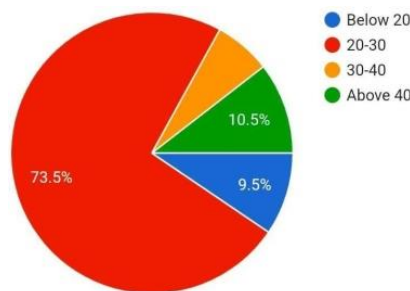
- **Gender**



Interpretation: Chart 1

From total responses, majority (51%) are females, while male constitute 49%.

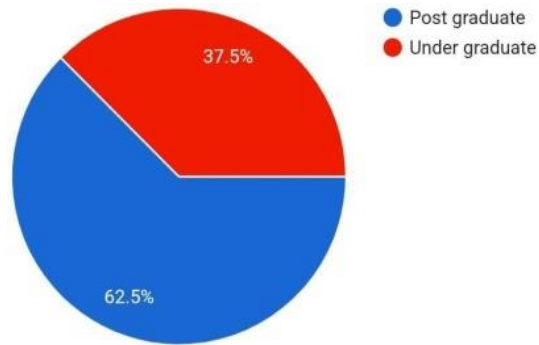
- **Age**



Interpretation: Chart 2

From total responses, majority respondents (73.5%) belong to age group 20-30, 10.5% are above 40 years. Whereas, 9.5% are below age 20 and 6.5% between age 30-40 years.

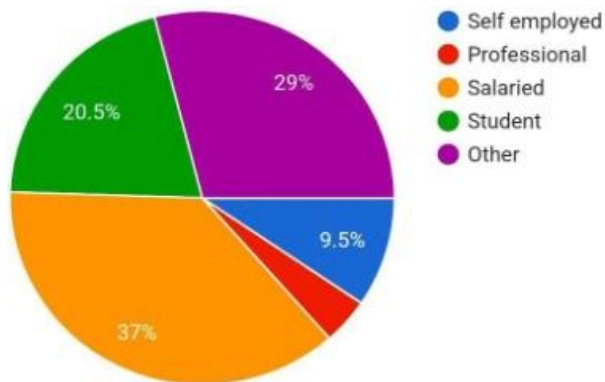
- **Education**



Interpretation: Chart 3

Majority (62.5%) respondents are post graduates, while there are only 37.5% undergraduates.

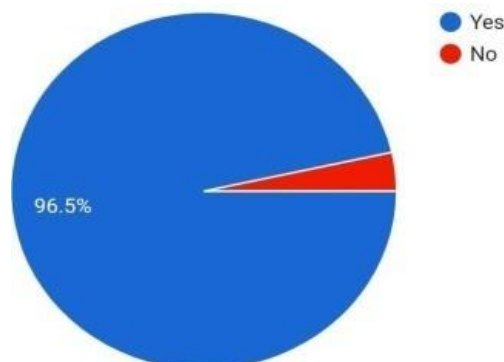
- **Occupation**



Interpretation: Chart 4

Out of 100% respondents, 4% are professionals, 9.5% are self employed, 20.5% are students, 37% are salaried and rest 29% belong to other.

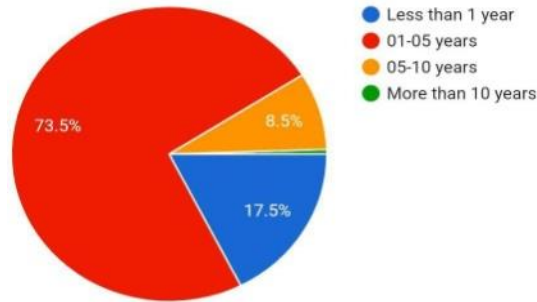
- **Are you using any Digital Payment?**



Interpretation: Chart 5

Out of total respondents, 96.5% agreed on using digital payment system.

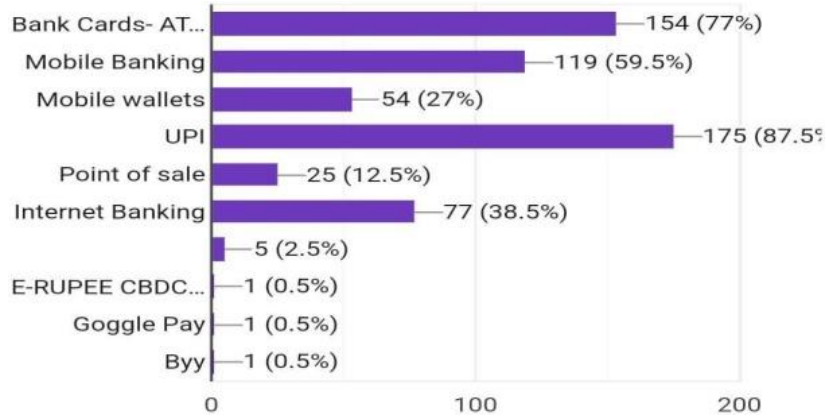
• **Duration of using digital payment system?**



Interpretation : Chart 6

Majority (73.5%) respondents are using it from 1-5 years, 17.5% from past one year, while 8.5% from 5-10 years and only one respondent is using this system from more than 10 years.

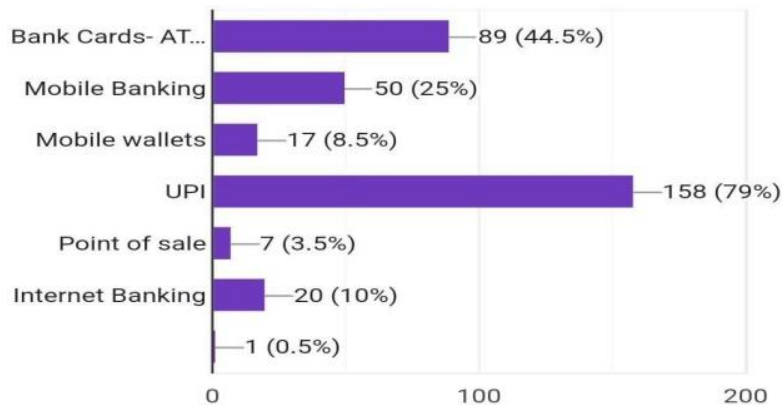
• **Which of the following digital payment modes, you are familiar with?**



Interpretation: Chart 7

Most familiar mode of payment is UPI, Bank cards, Mobile Banking, Internet Banking, Mobile Wallets, Point of Sale.

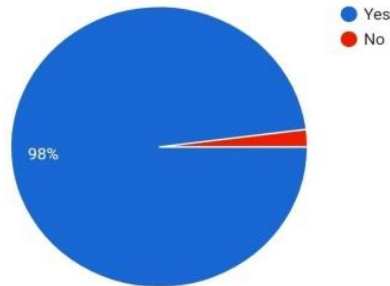
• **Which digital payment mode, you prefer the most?**



Interpretation 8: Chart 8

UPI is the most preferred mode of payment, later comes Bank Cards, Mobile Banking, Internet Banking, Mobile Wallets, Point of Sale.

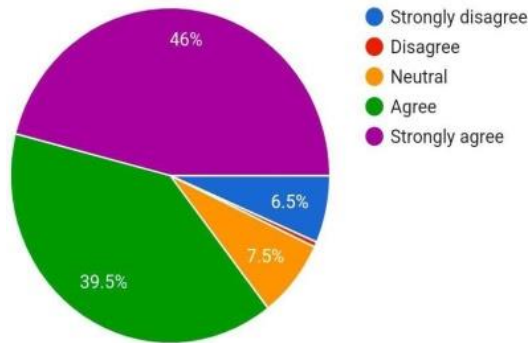
- **After the impact of covid-19, the usage of online payments to pay following bills have increased. do you agree? electricity bill, grocery bill, gas bill, credit card bill, mobile bill, etc.**



Interpretation: Chart 9

98% respondents agreed on their increased usage of online payment system to pay utility bills.

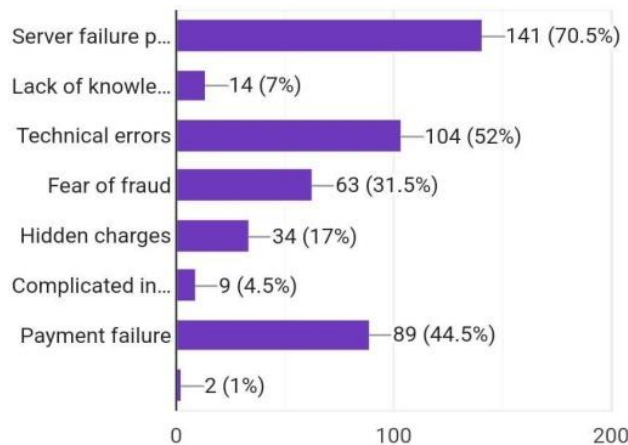
- **Do you agree? online payment system is convenient, saves time, 24*7 services, ease to use, flexibility, increase prestige, cash less transactions.**



Interpretation: Chart 10

46% strongly agree on digital payment system being advantageous, while 39.5% agree, 7.5% are neutral and 6.5% strongly disagree.

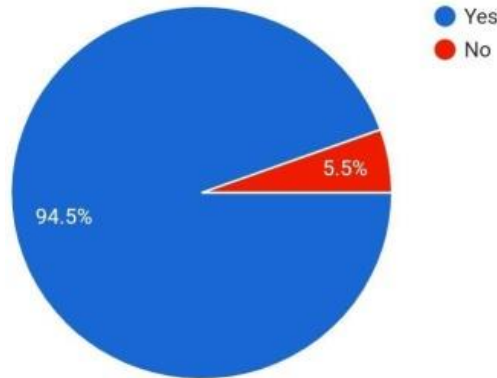
- **The difficulties faced by you while processing transactions from digital payment systems.**



Interpretation : Chart 11

Mostly majority individuals are facing issue of server failure, Technical errors, Payment failure, fear of fraud, hidden charges, lack of knowledge, complicated instruction.

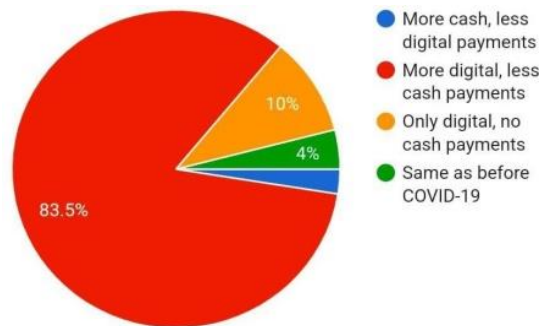
- **Do you want to continue using digital payment systems?**



Interpretation : Chart 12

94.5% respondents are ready to continue using Digital Payment Systems. 5.5% don't want to continue.

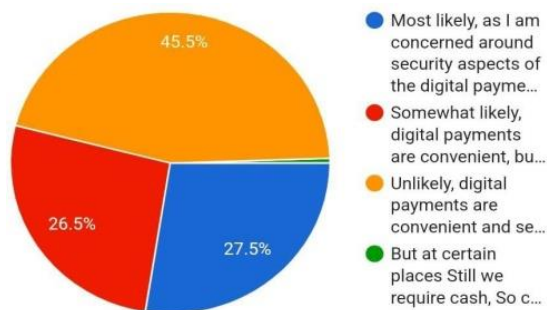
- **State impact of covid-19 on usage of digital payment?**



Interpretation: Chart 13

Incase of impact of COVID-19, 83.5% agreed on More digital, less cash payments. While, 10% wants only digital, no cash payment. Also, 4% want same condition as before COVID-19 and rest want more cash, less digital payments.

- **How likely are you to move back to cash payments post covid- 19?**



Interpretation: Chart 14

Incase of desire to move back to cash payment after COVID-19, 45.5% agreed to continue digital payment as it is convenient and secure. While, 27.5% agreed to move back to cash payments as they are concerned about security aspects of digital payment. 26.5% are somewhat likely to continue with digital payments as they are convenient, but its acceptability is low. 1% agreed as at some places cash is must we require cash payment.

Major Findings

- Out of 200 respondents, majority respondents are females.
- Respondents from age group 20-30 are high.
- Majority respondents are Post graduates.
- Respondents mostly include salaried individuals.
- 193 respondents agreed of using digital payment system.
- Incase of duration of using digital payment system, majority are using since 1-5 years (Since COVID-19 pandemic), while 8.5% are using since past 5-10 years (Demonetisation period)
- Most familiar and favoured mode of payment is UPI, then Bank cards, Mobile Banking, Internet Banking, Mobile wallets and Point of Sale.
- 196 residents agreed of using Digital Payment system to pay utility bills.
- Only 46% individuals strongly agree on Digital Payment System being convenient, Time saver, 24*7 service, Ease of flexibility, Increase prestige, etc.
- Incase of difficulties faced due to Digital Payments, majority agreed on Server failure, then Technical error, Payment failure, Fear of fraud, Hidden charges, Lack of Knowledge, Complicated instruction, other issue.
- Post COVID-19, 94.5% still want to continue using Online Payment System in future.
- Majority agreed on More Digital, Less Cash ideology, when asked about impact of COVID- 19.
- When asked about desire to move back to cash payments, majority residents are unlikely to move, as digital payments are convenient and secure.

Conclusion

Technology has made our life much easy then before. Virtual payment system is one of the innovations in the field of commerce, finance and banking. Present study has made an attempt to understand the factors like demonetisation, Cheap internet, Fintech Industry, COVID-19 impact and Government Schemes/initiatives has contributed to boost Digital Payment. Few challenges faced include lack of digital infrastructure in rural areas, issue of cybersecurity and fraud. A study on acceptability of Digital Payment System on 200 residents of Vadodara City shows that majority respondents were youngsters willing to continue using most preferred Digital Payment mode i.e. UPI in future. Many are facing difficulties like Technical error, Payment failure, Fear of fraud, Hidden charges, Lack of Knowledge, Complicated instruction, other issues. As though there are some difficulties still many want to continue with ideology, "more digital, less cash". Government need to take more initiatives to promote Digital Payment System and make it fraud proof, technical- glitch free, reliable and user friendly.

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