

Growth and development of Digital Payments - Problems & Issues

Ramakanth Dasari
Research Scholar
dramakanth65@gmail.com

Ramineni Sivarama Prasad
Professor
Department of Commerce and
Business Administration,
Acharya Nagarjuna University,
Guntur
Raminenisivaram@yahoo.co.in

Abstract

With the introduction of digital payment methods, financial transactions in India have seen a substantial transformation. To enable safe and simple digital transactions, the Indian government introduced a number of payment platforms, including the Unified Payment Interface (UPI), mobile wallets, RuPay cards, Aadhaar Enabled Payment System (AePS), Bharat Bill Payment System (BBPS), and National Electronic Toll Collection (NETC). The ease with which people may send and receive money, pay bills, and purchase online has revolutionized India's adoption of digital technology. Along with the introduction of new varieties of products and methods in the evolution of digital payments the problems and issues are also growing proportionately and parallel in the society. We can conclude that there is **no** impact of continues growth in volume of digital payments for the development in value of digital payments. The reason for the increase in the volume might be due to the introduction of variety of payments, payment applications, and payment systems. That there is a relation between of problems in digital payments for the growth of digital payments. It's important to note that the Indian government and various organizations have been actively working to address these issues and promote the adoption of digital payments.

Keywords: Digital payments, types, growth, problems, issues

Introduction

With the introduction of digital payment methods, financial transactions in India have seen a substantial transformation. To enable safe and simple digital transactions, the Indian government introduced a number of payment platforms, including the Unified Payment Interface (UPI), mobile wallets, RuPay cards, Aadhaar Enabled Payment System (AePS), Bharat Bill Payment System (BBPS), and National Electronic Toll Collection (NETC). The ease with which people may send and receive money, pay bills, and purchase online has revolutionized India's adoption of digital technology. By enabling citizens from all walks of life to



participate in the digital economy, our indigenous systems have significantly contributed to the promotion of financial inclusion in the nation.

Due to the government's constant dedication to encouraging financial inclusion and a paperless economy, India's digital payment landscape has undergone exponential expansion in recent years. The basis for a diversified and inclusive digital economy has been built by the JAM trinity (Jan Dhan, Aadhaar, and Mobile), allowing a variety of payment instruments to meet the various demands of the populace. Platforms like UPI, mobile wallets, RuPay cards, AePS, BBPS, and NETC have completely changed how transactions are carried out, encouraging user trust and convenience. As of March 2023, UPI in particular had over 8.15 billion transactions totaling INR 136 trillion, making it the most popular digital payment method.

Review of literature

From the literature which was in the references were been studied and screened to find out the research gap for this paper by using systematic literature review technique. Around 24 papers are been selected and 10 research papers from then national and international had been screened and been reviewed for the current paper.

Objectives of the paper

To understand the digital policy and the growth & development of Digital payments in India

To identify the problems and issues arisen in the adoption of digital payments

Hypothesis for the study

H₀₁: There is an impact of continues growth in volume of digital payments for the development in value of digital payments.

H₀₂: There is a relation between of problems in digital payments for the growth of digital payments

Digital payments

All the modes of payments are been governed, regulated and directed by a comprehensive introduction of the law by the name **payment and settlement system Act 2007**. It was the law that governs all the aspects of payments which include electronic mode i.e. in other words as digital payments.

I addition to that the following acts are the regulatory towards the payments in India, they are

The Banking regulation Act, 1949

The Reserve Bank OF India Act 1934

The Foreign Exchange Management Act 1999

The Information Technology Act, 2000

The Negotiable Instrument Act, 1881

The Consumer protection Act, 1986

The Indian Contract Act, 1872

In accordance with Section 7(3) of the **payment and settlement system Act 2007**, RBI may refuse to approve the application by providing a written notice outlining the reasons why and providing a reasonable window of opportunity to the applicant.



Definitions as per Sec 2(1) of Payment and settlement system Act 2007

Payment Obligation- It is a debt that one system participant owes to another as a result of the clearing or settlement of payment instructions relating to transactions involving funds, securities, foreign exchange, or derivatives.

Payment System- It is a system that makes it possible for payments to be made between a payer and a beneficiary. It includes clearing, payment, and settlement services, but it excludes a stock exchange. It went on to say that the payment system contains a system that permits operations involving credit cards, debit cards, smart cards, money transfers, etc. Stock exchanges or clearing organizations established under stock exchanges are not covered by this Act, according to Section 34 of the PSS Act.

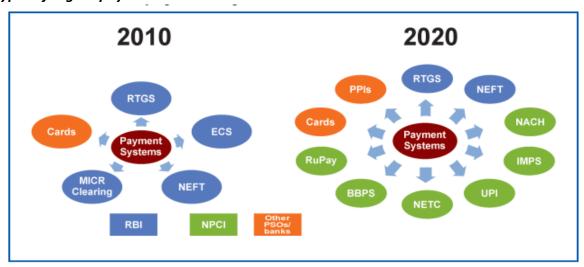
Payment Instructions- Payment instructions can take the shape of a document, an order, or a request in any format, including one that can be carried out electronically. They can be given by one person to another participant in the payment system or by one participant to another participant in the payment system. Both manual and technological methods can be used to communicate the payment. Manual methods include things like payment orders and cheque draughts.

Origin and evolution of payments



Source: References no. 1 to 5

Types of Digital payments



Source: Database on Indian economy – payment systems



Digital payments in India have evolved significantly over the years. Here's a brief overview of the key developments and origins of digital payments in the country:

Credit Cards: Credit cards were among the first forms of digital payments in India. Credit cards were introduced in the 1969.

Debit Cards: debit cards became prevalent in the year 1996. This laid the foundation for electronic payments.

Online Banking: With the internet becoming more accessible in the year 1996 online banking services were introduced. This allowed users to conduct various financial transactions over the internet.

Real-Time Gross Settlement (RTGS): NEFT and RTGS are electronic fund transfer systems maintained by the Reserve Bank of India (RBI). NEFT operates on a deferred net settlement basis, while RTGS offers real-time settlement. Both systems have been instrumental in india from 2004

Immediate payment Service (IMPS): It was the mode of electronic payment for fast and on spot transfer of amount between account and it was introduced in the year 2010 with the establishment of National Payments corporation Of India (NPCI)

Aadhaar Enabled Payment System (AEPS): AEPS was introduced in year 2010 to simplify financial activities involving Aadhaar authentication, such as deposits, withdrawals, fund transfers, and balance queries. Through Aadhaar and biometric authentication, it enables those living in rural areas without smart phones to access financial services.

Unified Payments Interface (UPI): The National Payments Corporation of India (NPCI) introduced UPI in 2016. By facilitating instant financial transfers between bank accounts via mobile devices with the aid of the UPI software, UPI revolutionized digital payments. Peer-to-peer transactions were made easier and more seamless as a result.

Bharat Interface for Money (BHIM): BHIM is a UPI-based payment app launched by the Indian government in 2016. It aimed to promote digital transactions and financial inclusion by providing a simple and user-friendly platform for UPI payments.

Types of problems & issues

Along with the introduction of new varieties of products and methods in the evolution of digital payments the problems and issues are also growing proportionately and parallel in the society. Some of those frauds faced by the users of digital payments are as follows.

November 29 & 30, 2023, Mysuru, India



Some common issues in growth of Digital Payments

Digital Literacy: A large portion of the Indian population, especially in rural areas, may not be digitally literate. Lack of understanding about digital transactions and online security can deter people from using digital payment methods.

Infrastructure: In many rural areas, there is a lack of proper internet connectivity and electricity supply. Without a stable internet connection and power, digital transactions become difficult, if not impossible.

Security Concerns: There are concerns about the security of digital transactions. People worry about data breaches, identity theft, and online fraud, which can discourage them from adopting digital payment methods.

Limited Acceptance: While digital payment methods are gaining popularity, not all merchants and service providers accept digital payments. This limited acceptance can be a barrier for people who want to use digital payment methods exclusively.

Transaction Charges: Some digital payment methods, especially for businesses, involve transaction charges. Small businesses, in particular, might find these charges burdensome and could opt for cash transactions to avoid additional costs.

Regulatory Challenges: The regulatory environment for digital payments is continually evolving. Complex regulations and compliance requirements can be challenging for both businesses and consumers to navigate.

Technological Barriers: Older smartphones or feature phones might not support advanced digital payment apps. As a result, a significant portion of the population might not be able to access digital payment services.



Customer Support: The quality of customer support for digital payment services can be inconsistent. Users might face difficulties in resolving issues related to failed transactions or other payment-related problems.

Dependency on Cash: India has been a cash-dependent economy for a long time. Breaking this habit and encouraging people to switch entirely to digital payments is a gradual process and requires a change in mindset.

Cybersecurity Threats: With the growth of digital payments, there is a corresponding growth in cybersecurity threats. Phishing attacks, malware, and other online threats can compromise the security of digital transactions.

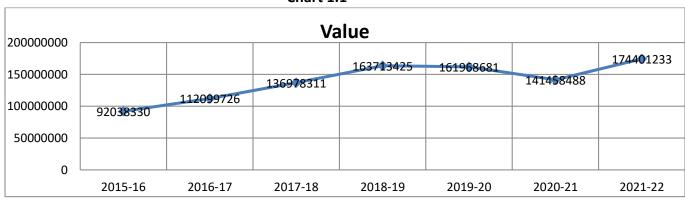
Growth of digital payments

Table 1.1

Year	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Volume (lacs)	59361	96912	145902	232602	340155	437068	719768
(1000)					0.0200		. 20.00
Value (crs)	92038330	112099726	136978311	163713425	161968681	<mark>141458488</mark>	174401233

Source : Database on Indian economy – payment systems

Chart 1.1



Source: From table 1.1

Chart 1.2



Source: From table 1.1

ISBN: 978-93-83302-64-2



Discussion

From the observation of the above table 1.1 and charts 1.1 and 1.2 it was clear that there was continues growth in the volume of transactions when compared with the value it was evident that there is decline in the year 2020-21. So based on this we can conclude that the hypothesis was H_{01} was rejected and we can conclude that there is **no** impact of continues growth in volume of digital payments for the development in value of digital payments. The reason for the increase in the volume might be due to the introduction of variety of payments, payment applications, and payment systems. Where the value was consists of the amount that had been transferred by using these payments options.

Domestic Payment Frauds

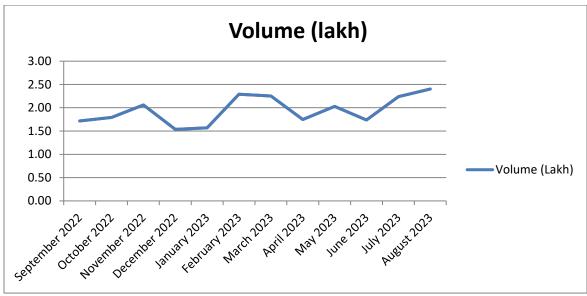
Table 1.2

Table 1.2						
	Volume (Lakh)	Value (lakhs)				
September 2022	1.71	24942.31				
October 2022	1.79	21973.07				
November 2022	2.06	25704.29				
December 2022	1.54	20426.32				
January 2023	1.57	19496.3				
February 2023	2.29	31665.65				
March 2023	2.25	33301.23				
April 2023	1.75	27284.06				
May 2023	2.03	28499.68				
June 2023	1.74	26458.7				
July 2023	2.24	28595.65				
August 2023	2.40	32001.71				

Source: RBI periodical report on Payment system indicators

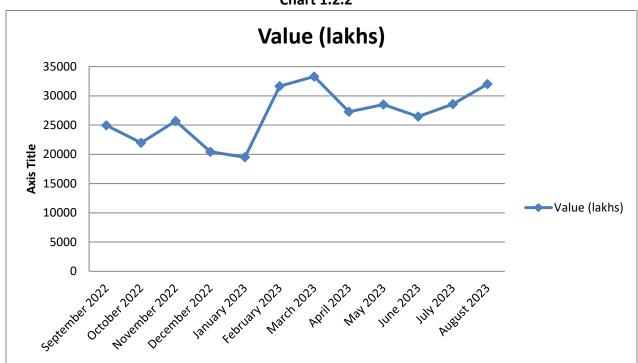


Chart 1.2.1



Source: From table 1.2

Chart 1.2.2



Source: From table 1.2

Discussion

As per the above mentioned list of issues and problems the number of frauds also been fluctuating but the digits are been poking the significance of the issue regarding as per the table 1.2 were consisting of data of recent months which been continuously increasing. Hence H_{02} can be considered to be accepted that there is a relation between of problems in digital payments for the growth of digital payments.



Conclusion

It's important to note that the Indian government and various organizations have been actively working to address these issues and promote the adoption of digital payments. Policies are continuously being refined to make digital transactions more secure, affordable, and accessible to all segments of the population. The developments in the payments are parallel bringing rise in the frauds and fraudulent activities surrounded by the payments.

References

The History And Evolution of Credit Cards https://www.moneytap.com/blog/the-history-and-evolution-of-credit-cards/.

History of Debit Cards https://www.aubank.in/blogs/history-of-debit-cards#:~:text=The%20Beginning%20of%20Debit%20Cards&text=In%20India%2C%20the%20first%20AT M,billion%20Debit%20Cards%20in%20India.

https://www.npci.org.in/who-we-are/milestone, New age era of digital payements

RTGS Services now for Bank Customers: RBI, https://www.rbi.org.in/commonman/English/Scripts/PressReleases.aspx?Id=109#:~:text=It%20may%20 be%20recalled%20that,the%20settlement%20of%20customer%20transactions.

Discussion Paper on Guidelines for Payment Gateways and Payment Aggregators, https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?UrlPage=&ID=943

Guidelines on Regulation of Payment Aggregators and Payment Gateways (Updated as on November 17, 2020, https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=11822&

RBI periodical report on Payment system indicators https://www.rbi.org.in/Scripts/PSIUserView.aspx

RBI Annual Report 2022-2023

NPCI Database of payments

Bibliography

Zhang, J., & Chen, Z. (2023). Exploring Human Resource Management Digital Transformation in the Digital Age. *Journal of the Knowledge Economy*. https://doi.org/10.1007/s13132-023-01214-y

Abdul Hannan, S. (2023). Development of Digital Transformation in Higher Education Institutions. *Journal of Computer Science & Computational Mathematics*, 13(1), 1–8. https://doi.org/10.20967/jcscm.2023.01.001

Soto Setzke, D., Riasanow, T., Böhm, M., & Krcmar, H. (n.d.). *Pathways to Digital Service Innovation: The Role of Digital Transformation Strategies in Established Organizations*. https://doi.org/10.1007/s10796-021-10112-0/Published

Kamel, S. (2021). The Potential Impact of Digital Transformation on Egypt.

Poudel, O., & Sapkota, M. P. (2022). Consumer Perception toward Digital Payment System. *Management Dynamics*, 25(1), 39–50. https://doi.org/10.3126/md.v25i1.53286

Ghosh, G. (2021). Adoption of Digital Payment System by Consumer: A review of Literature. www.ijcrt.org



Oney, E., Guven, G. O., & Rizvi, W. H. (2017). The determinants of electronic payment systems usage from consumers' perspective. *Economic Research-Ekonomska Istrazivanja* , *30*(1), 394–415. https://doi.org/10.1080/1331677X.2017.1305791

Shree, S., Pratap, B., Saroy, R., & Dhal, S. (2021). Digital payments and consumer experience in India: a survey based empirical study. *Journal of Banking and Financial Technology*. https://doi.org/10.1007/s42786-020-00024-z

Tang, Y. M., Chau, K. Y., Hong, L., Ip, Y. K., & Yan, W. (2021). Financial innovation in digital payment with wechat towards electronic business success. *Journal of Theoretical and Applied Electronic Commerce Research*, *16*(5), 1844–1861. https://doi.org/10.3390/jtaer16050103

Shobha BG. (2020). DIGITAL PAYMENTS-ANALYSIS OF IT'S PRESENT STATUS IN INDIA. In *International Journal of Creative Research Thoughts* (Vol. 8, Issue 7). www.ijcrt.org

ISBN: 978-93-83302-64-2



ISBN: 978-93-83302-64-2