A STUDY OF CONVENIENCE FOR CONSUMERS USING UNIFIED PAYMENT INTERFACE (UPI) COMPARED TO TRADITIONAL PAYMENT METHOD IN INDIA

Dr. Bhandari Jitendra¹, Praful sarangdhar², Sachin Kshirsagar³, Amruta Kshirsagr ⁴ and Vivekanand Gaikwad⁵ **MM's IMERT**

profiitendra@gmail.com¹, amrutakshirsagar@mmimert.edu.in², sachinkshirsagar@mmimert.edu.in³, prafulsarangdhar@mmimert.edu.in⁴, vivekanadgaikwad@mmimert.edu.in⁵

ABSTRACT

In 2016 National Payment Corporation of India (NPCI) under Reserve Bank of India developed Unified payment interface (UPI).UPI payment interface is system that links with any bank account with smartphone app to make transfer of funds without need of account number, IFSC code or other bank details. The advantage of UPI is it reduces the process bank details. Can send and receive money with virtual payment address in form of QR code or UPI ID. UPI is been accepted by multiple applications and banking applications, e-commerce websites UPI platform enables payment to other options of payment UPI has been effective tool for small vendors, a small businessman owners for quick receipt of electronic payment. UPI reduces conjunction cost improves management. (NPCI, 2023). Study is carried exploring secondary data from various sources. Paper focuses on progression of UPI in consumer's life over the years and its growth compared to other forms of payment.

Keywords: UPI, digit payment, Quick Response code, banks, Consumers.

Introduction

An oldest form of payment transaction is, use of currency notes and coins as in form of cash transaction. In 1987 HSBC Bank launch its ATM in India. ICICI Bank net banking service was launched in late 1990. In 2016 National Payment Corporation of India (NPCI) under Reserve Bank of India developed Unified payment interface (UPI) on 11th of April 2016 pilot launch of UPI was done with member banks by governor of RBI Dr. Raghuram Rajan. (NPCI, 2023)

UPI payment interface is system that links with any bank account with smartphone app to make transfer of funds without need of account number, IFSC code or other bank details. The advantage of UPI is it reduces the process bank details. Can send and receive money with virtual payment address in form of QR code or UPI ID. UPI is been accepted by multiple applications and banking applications, ecommerce websites UPI platform enables payment to other options of payment UPI has been effective tool for small vendors, a small businessman owners for quick receipt of electronic payment. UPI reduces conjunction cost improves management. (Bhist, 2023)

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Literature Review

Mobile phone as a primary instrument for making and receiving payments through UPI. UPI technology has enabled opportunities for business, efficient and convenient technology has opened huge opportunities for consumers and retailers. To remember bank details and other confidential information of receiver is hectic for businessmen. Without use of POS machine smallest merchants can use option of digital payment to collect payment. India's high mobile penetration rate has supported the success of UPI as an convenient tool. (Dr.A.Shaji George1, 2023)

As there is rapid increase in use of digital payment, use of cash in society is dominated because of insecurity and data privacy. UPI is best convenient option through digital payment without using machining. (SHAJU, 2022)Service Available from no. of operators 189 Banks and 21, 3rd Party App live on UPI as on Oct. 2020 Interoperable Services Offered Balance Enquiry, Transaction History, Send / Pay Money, Virtual Address, A/c no. & IFSC code, Mobile no. and MMID, Aadhaar (to be made functional), Collect Money - on Virtual Address, Add bank account, Change / Set **Notifications** MPIN, A/cManagement. (Dinesh M. Kolte, 2020)People accepted UPI as part of their daily life. Youngsters least prefer use of cash. Doctors, Business owners,

housewives seem to prefer cash. UPI is preferred as equal to cash by online purchasers. Adoption of UPI is because of perception of people that UPI as a safe option for transaction of money. Ease of use is major factor why people prefer Google Pay over other apps. The transition to a cashless economy is being made gradually. (Satyajitsinh Gohil, 2023)As mobile penetration increased, the initial use for QR code in payment service came from market players as a way to exchange the information required to initiate and/or receive payments. cost of acquisition Due to low maintenance, Merchants and acquirers are attracted towards use of QR code. The maintenance expenses for merchant presented QR code are reprinting the sticker in case of wear and tear, paper based QR code are cost effective. (Group, 2021)

UPI has the potential to be a major facilitator of financial inclusion in India, enabling a large portion of the population to engage in the digital economy. Biometric authentication in UPI will not only make payments more reliable but will also mark a significant step forward in the integration of next-generation technology with current payment systems. UPI operates on a safe, stable, and robust platform that includes numerous security features that make it more secure than any other payment system currently in use. UPI has eliminated the need for transacting parties to know the complicated payment credentials, and hence, making payments convenient and transparent for all parties involved. Digital financial transactions contribute to a lessening of corruption and reduction in the contagion of the parallel (Mahesh A, 2021)UPI is both a funds transfer as well as a merchant payment system. The various participants in UPI include payer PSP, payee PSP, remitter bank, beneficiary bank, NPCI, bank account holders (payer and payee / merchants) and Third Party Application Providers (TPAPs). The system facilitates settlement of payment transactions using a combination of these participants.

RBI has not issued instructions regarding charges for UPI transactions. The Government has mandated a zero-charge framework for UPI transactions with effect from January 1, 2020 (paragraph 7.6). This means that charges in

UPI are nil for users and merchants alike. (India, 2022)

Objectives of the study

- 1) To study the utility of UPI in India
- 2) To study the convenience factors for consumers using UPI apps
- 3) To determine drawbacks of selected traditional payment method in India
- 4) To examine a comparative study of UPI and traditional payment methods.

Methodology

Study focuses on growth of UPI as an payment tool in retail market. Study is carried out using secondary source of information through websites, articles and databases.

Discussion

Digital payment ecosystem consists of payers (initiator), Acquirer (receiver Bank) Issuers (Payers Bank) Digital payment ecosystem connect all of these parties through paperless mode of payment. As per RBI there are various digital payment instruments in Indian digital ecosystem.

Digital payment instruments are as follows:

- 1) Banking card debit card/ credit card.
- 2) Unstructured supplementary service data.
- 3) Aadhaar enabled payment system
- 4) Internet banking: NEFT, IMPS, RTGS
- 5) Pre payment instruments (PPI)
- payment 6) Unified interface (UPI). To facilitate payment system in retail digital payment transaction UPI was developed because of restriction is 2 lakh in upi system importance **NEFT** and RTGS transactions businesses as per data from NPCI 10.56 billion transactions were recorded in September 2023 it increase to 11.41 billion in October 2023 with value of rupees 1715 168 Crores.

Convenience factors for consumers using UPI

- 1) Pay a request money instantly 24 X 7 even on bank holidays
- 2) All bank accounts can be accessed using single upi app.
- 3) No need to provide ATM card number /Account details while making transaction.
- 4) Neither the payee nor the beneficiary required Bank details.

5) Payment can be made directly through virtual payment address (VPA)

6) Fund transfer or Bill payment is completely

free of cost.

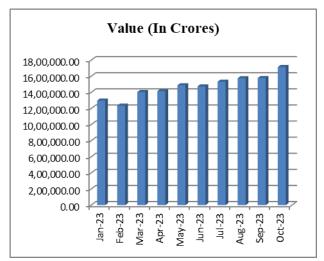
7) Complaints can be raised the mobile app directly.

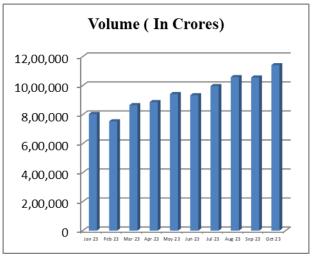
Data Analysis:

UPI Transactions in Year 2023

Month	Value (In Crores)	Volume (In Crores)
January 2023	1,299,058.78	803.859
February 2023	1,235,846.58	753.476
March 2023	1,404,950.59	865.163
April 2023	1,415,504.71	886.326
May 2023	1,489,145.50	941.519
June 2023	1,475,464.26	933,506
July 2023	1,533,536.44	996,426
August 2023	1,576,536.54	1058,602
September 2023	1,579,133.18	1055,569
October 2023	1,715,768.34	1140,879

Source: NPCI website





Interpretation: UPI transaction in year 2023 is showing frequent increase in terms of Value and in volume.

Touch inputs to complete transaction in digital Payments

Parameter of	UPI	Internet Banking	
Comparison			
Speed of transaction	The average number of touch inputs from the customer to complete a transaction is 6.	The average number of touch inputs from the customer to complete a transaction is 50.	
Cost of fund transfer	No extra amount is charged.	A small fee is charged per transaction (usually Rs. 5 to Rs. 15).	
Banks offering service	29 banks.	Almost all banks.	
Beneficiary addition	Only the Virtual Payment Address (VPA) of the beneficiary is required	Pre-addition of beneficiary's details (like bank account number and IFSC code) is required.	

https://askanydifference.com/difference-between-upi-and-internet-banking/

Interpretation

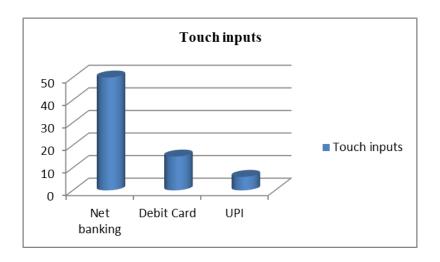
The UPI transaction gets completed in as little as 10 seconds. In comparison, transactions that used to require manual intervention or a minimum processing time of up to 3 days now only take 30 seconds. UPI transactions have also reduced payment gateway costs by five percent. Since there's no need for both parties

to be present during the exchange, the transaction can be processed faster. This makes UPI ideal, particularly when it comes to large amounts where speed is most important. Also, because it can be easily integrated, businesses have more options than ever before when it involves adding financial services to their existing applications via APIs.

Touch inputs to complete transaction in digital Payments

Mode of payment	Net banking	Debit Card	UPI
Touch inputs	50	15	6

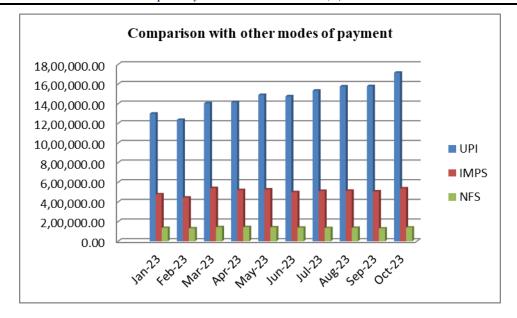
Source: https://medium.com



Comparison with other modes of transaction.

Month	UPI	IMPS	NFS
January 2023	1299,058.78	477,491.47	136,293.08
February 2023	1235,846.58	444,924.05	131,903.45
March 2023	1404,950.59	541,928.35	143,483.72
April 2023	1415,504.71	521,050.26	144,135.28
May 2023	1489,145.50	527,557.73	142,028.37
June 2023	1,475,464.26	500,481.96	138,594.14
July 2023	1,533,536.44	512,311.87	134,661.13
August 2023	1,576,536.54	5,14,279.53	136,929.16
September 2023	1,579,133.18	507,497.24	130,559.55
October 2023	1,715,768.34	538,238.51	139,537.48

Source: NPCI website All Value in Crores





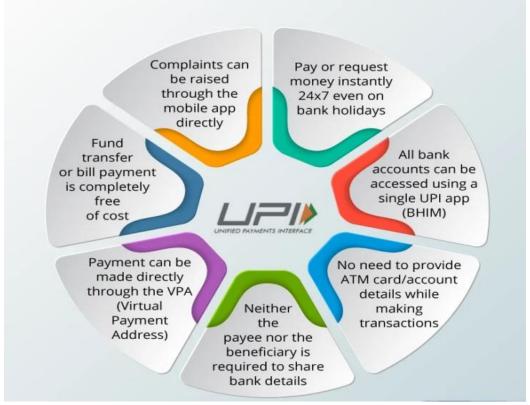
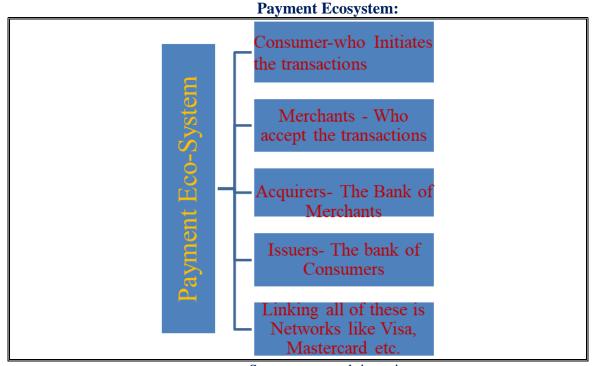


Image Source: paisabazaar.com



Source: smartadvisors.in

Interpretation: Digital Payment Ecosystem consists of the payer (initiator), receiver (accepter), acquirers (receiver's bank), and issuers (payer's bank). A digital payment ecosystem can be referred to as a system that connects all of these parties through a paperless mode of payment or fund transfers. (Bhist, 2023) (Jagriti, 2023) (Jagriti, 2023) (Jagriti, 2023; Tinesh, 2020; Yadav, 2023; Yadav, 2023; Filings, 2019)

Findings of the Study: UPI has shown outstanding growth in retail sector because of the simplicity, low cost, convenience to payer and receiver. After demonetization and Post Covid people preferred digital mode of payment and has become part of netizen and common people. As retailers and small merchants don't need to purchase POS machine or maintain record of Accounts, managing a QR code sticker is less cost and more convenient to use and record is generated at UPI App, date and amount is available any time at a click.

Conclusion

Study proves progression of UPI in consumer's life over the years and its growth compared to other forms of payment. In last few years customer's shift towards contactless payments over other methods has remarkable increase. Use of UPI platform in retail sector has recorded a significant increase because of ease of use, convenience and fast payment.

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