

AN OVERVIEW OF ELECTRONIC PAYMENT METHODS: A STEP TOWARDS THE DIGITAL ERA

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ABSTRACT

Information technology (IT) has altered several parts of our life: perhaps most notably, it has made digital payments simple. The Indian government required everyone to do all business transactions, whether directly or indirectly, online during the demonetization era. The general public has been switching from conventional payment methods to digital ones since they are safer, more secure, and more convenient. The Indian market has pushed the acceptance of digital payments due to the availability of cheap smartphones and simple internet connections. The current study's objective is to learn more about the many digital payment transactions that regular people use daily. Additionally, to compare them and learn about their current situation.

Keywords: Electronic Payment Methods, E-Payments Status, Most Favorite E-Payment Mode, Digital Payments Instruments.

INTRODUCTION

Internet History

Life without the Internet is like fishing without water. However, the Internet did not exist without ARPANET (Advanced Research Projects Agency Network). It was established in 1969. University of California, Los Angeles, Stanford Research Institute, University of California, Santa Barbara, and the University of Utah were networked via I.M.P. (Interface Message Processor). However, this was not an online phase. The Internet age started in 1974 when TCP/IP was invented. This invention made the Internet what it is today. Then, other organizations began constructing their networks, including BITNET, USENET, EARN, JANET, EUNET, and NSFNET (Arpanet, 2021).

Digital payment

Digital payment refers to identical numbers sent simultaneously to the payer and the payee, i.e., a specific digit is added to the payee's wallet or bank account. There is no physical opposition between them. For digital payments, a smartphone is not necessary. However, a phone with a keypad but no internet connection may be used.

Digital Payments Methods

Digital India is the Indian government's main programme to convert India into a digitally equipped society and knowledge economy. "Faceless, Paperless, Cashless" is one of Digital

India's purported roles. Customers can make payments from anywhere and at any time using digital payment methods, which are often more straightforward and convenient.

After demonetization, individuals gradually began using digital payments, and even small retailers and store owners began taking digital payments. There are several varieties and methods of digital payments. Use debit/credit cards, online banking, prepaid payment instruments, Aadhaar Enabled Payment System, Unified Payments Interface (UPI) service, Unstructured Supplemental Service Data (USSD), and Point of Sale are a few of these methods (Bhatia, 2021).

OBJECTIVES OF STUDY

- To understand the different digital payment methods.
- To compare selected digital payment methods.
- To analyze the current status of digital payments.

STUDY METHODOLOGY

Research design: This paper is conceptual and analytical in nature. Identifies the predominant digital payment type and examines the features of digital payment options.

Data Collection: This research employed secondary. The information was collected from the RBI website, scholarly journals, and respected newspapers. Data from 2019 to 2022 were used in the study to accomplish the goals.

Statistical tools: The data acquired from secondary sources are examined using the statistical tools 3D clustered column chart and clustered bar chart.

DATA ANALYSIS AND RESULT

The data analysis contains four sections to fulfill the study objectives.

A. Digital Payment Methods

Since COVID-19, the digitalization of our world has accelerated. Customers increasingly regard digital payments as a quicker, safer, and more convenient option as cash becomes outmoded. A significant portion of the population utilizes digital payments in their everyday lives. As a result, the payment industry is expanding fast, and a considerable amount of the public has grown acquainted with electronic payment systems. Here are the leading digital payment methods the customer uses daily.

1. Internet Banking: This electronic payment method is also known as net banking and online banking, a service banks give to their consumers. When a user creates an account at a bank, the bank provides the option of online banking, which can be used for all forms of bill payment, online transactions, and money transfers, among other things. Internet Banking has three types, namely:

- a. **RTGS:** RTGS is the abbreviation for Real Time Gross Settlement. All transactions become instantaneous. As soon as you transfer money by entering the Beneficiary Customer's details accurately, the funds are promptly transferred.
- b. **IMPS:** The abbreviation IMPS stands for Immediate Payment Service. It is a banking payment system service that enables the instantaneous transfer of funds from one account to another.
- c. **NEFT:** The abbreviation NEFT stands for National Electronic Fund Transfer. It is a shortened version of RTGS in which typically fewer amounts are sent. By which funds may be securely transferred between bank accounts.

2. Prepaid Payment Instruments: PPI is also called an E-wallet/ digital wallet. A digital wallet is a virtual wallet used for online transactions on a computer or smartphone. A bank is not required to create a digital wallet; any commercial firm, such as Mobikwik, Jio Money, or Airtel Money, is acceptable. E-Wallet has three types, namely:

- a. **Closed E-wallet:** E-Wallet may only be used to purchase the company's products. E.g.: - Flipkart, Amazon's E-wallet
 - b. **Semi-Closed E-wallet:** You may purchase items and services from many firms through this form of E-Wallet. E.g.: - Phonepe, Paytm.
 - c. **Open E-wallet:** The bank provides this form of E-Wallet, which may be used in various ways, including to withdraw cash from an ATM (Team, 2022).
- 3. Debit Card:** It is a service supplied to the customer by the bank. When a consumer opens a bank account, the bank issues them a debit card. A customer can take cash from an ATM and do all online transactions. With an ATM card, a customer can perform various operations, including bill payment, mobile recharge, dish recharge, and money transfer.
 - 4. Credit Card:** This card is identical in look to a Debit Card. However, it operates differently than a debit card. The bank does not provide this card to every user. Those with a high CIBIL score or exceptionally trustworthy bank customers are eligible. When this card is used to make a purchase, the shopkeeper's account is credited even if the customer's balance is 0 rupees. Within 45 days, the borrower must return the money to the bank without interest.
 - 5. UPI:** It has been upgraded to IMPS. It has become a revolutionary digital payment system, making India the global leader in real-time payments. UPI is a system that enables you to transfer funds from your bank account anywhere, at any time. You may pay using UPI and utilize UPI if you have made purchases at your local market. Taxi price, money for movie tickets, money for the airline.
 - 6. AePS:** By providing your KYC information and a micro-ATM, you may connect your account to Aadhaar. This service is enabled in 1 to 2 minutes, and you require a micro-ATM. With your physical presence, money can be withdrawn from the micro-ATM. The issue is that you may only utilize this service at approved and reputable locations.
 - 7. Point of Sale:** Typically, money is accepted from a machine by scratching your credit or debit card while buying at shopping centers. This device is known as a point of sale. This machine, referred to as MDR, charges sweeping card fees (Merchant Discount Rate). MDR usually is between 1-2%.

8. USSD: Unstructured Supplementary Service Data is analogous to the shorter-form Short Message Service (SMS). Call *99# on a feature phone to make or receive payments (Choudhary, 2022).

B. Comparison of Various Digital Payment Methods: Table 1

S.No	Particular	AePS	USSD	UPI	PPI	Internet Banking			Cards	POS	
						IMPS	RTGS	NEFT			
1	Availability	Business hour of BC center	24x7							Business hour	
2	No. of transaction	5-10 per day			No limit						
3	Minimum transfer Limit	₹ 1				₹2,00,000	₹ 1				
4	Settlement	Instant				30 second	30 minutes	Instant	Next day		
5	Add Beneficiary requirement	No			Yes			No			
6	Cost	Yes	No							1% - 2% M.D.R.	
8	Technical requirement	Smartphone, Internet, and Biometric device	Smart or feature phone	Smartphone and Internet							POS machine
9	Maximum transfer limit	Bank set Limit	₹5000 per transaction	₹10000 per day	₹10000-50000 per month	₹50000	₹1000000-2000 crores	₹75000 per transaction			
10	Info.	Aadhar no.	MPIN, VPA, or A/C no., IFSC		Login and pay	MPIN or OTP		CVV, card no., expire	Physical card		
11	User Friendly	moderate	Hard	Easy		Hard			Easy		
12	Authentication	Biometric Verification	MPIN		Passcode	MPIN / OTP		OTP	ATM PIN		

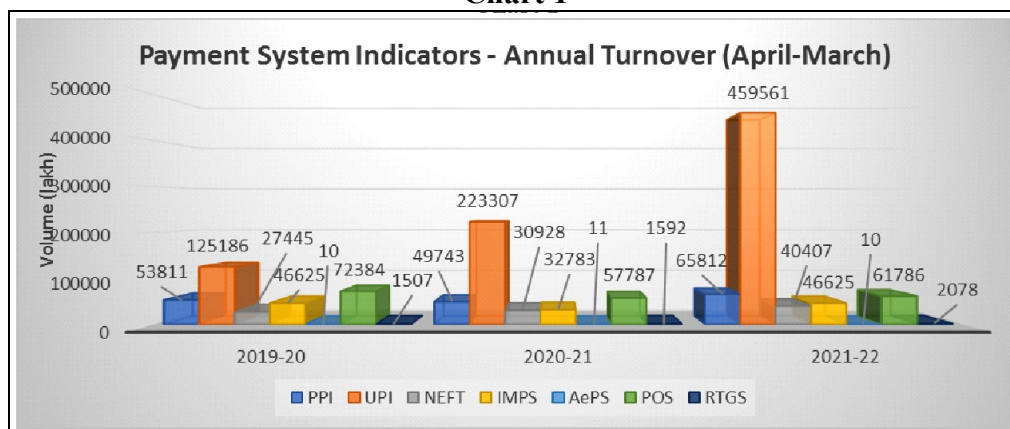
Source: RBI website

Interpretation: after analyzing the data, we can conclude that UPI is the ideal way for students, small merchants, and farmers since it is free, simple to use, safer than credit cards, and has no minimum transaction amount. AePS support for the less-educated client. It is often used by retirees, PMJDY account holders, senior citizens on a pension, and scholarship students. USSD is comparable to UPI,

except it is costly. Each transaction incurs a 0.50rs fee. PPI assistance for the consumer who shops, recharges, and pays bills online. Netbanking is advantageous to big firms and wholesalers due to its high transfer limit compared to other methods. And expertise in transfer techniques must be necessary. Generally, only large retail establishments use cards and POS.

C. Current Status of Digital Payments Methods

Chart 1



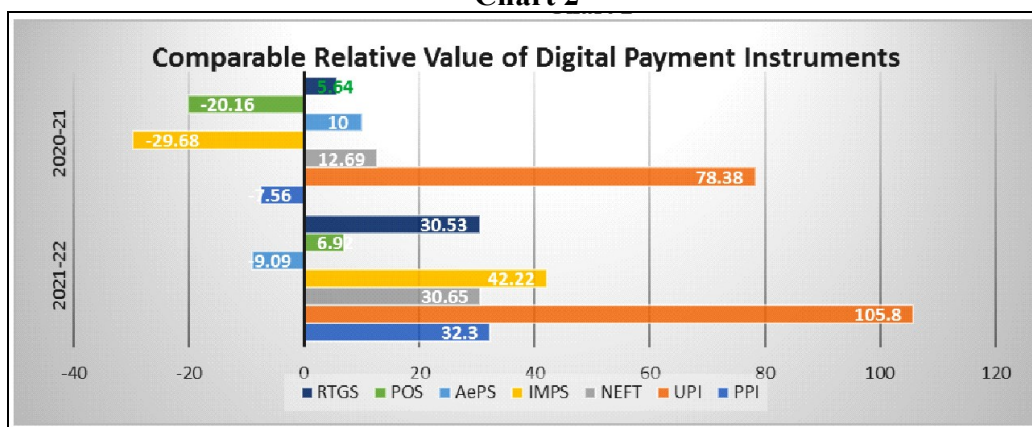
Source: RBI website

Interpretation: The graph demonstrates that UPI is the most popular digital payment method in terms of volume. Every year, UPI reports continuous development. The year 2022 will have the second highest rise in PPI after 2021, which saw a fall in that index. The IMPS and POS all declined in 2020-

2021. In 2022, just one digital payment mode, AePS, is decreased. AePS is used by rural areas people or less educated people. If it declines in a trend, rural regions are far from the digital era. It's not a good sign for becoming a digital economy.

D. Relative Value of Digital Methods

Chart 2



Interpretation: The graphic shows that the UPI has been growing at 105.8%. It has the fastest growth rate of any digital payment option currently available. IMPS comes in second place as the most popular form of electronic payment. However, AePS should be of more concern. It displays a negative percentage of 9.09.

After examining the available data, it is possible to conclude that UPI continues to be the consumer's preferred option, which is now seeing a decline in its growth rate. This is not a positive omen for the economic viability of dental care. When we look at the numbers, we can conclude that the efforts made by the government to transform India into a digital nation have been adequate to a significant degree

CONCLUSION

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