

IMPACT AND IMPORTANCE OF UPI ON INDIAN ECONOMY FOR FINANCIAL INCLUSION AND CROSS BORDER TRANSACTIONS

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ABSTRACT:

UPI (Unified Payment Interface) platform has been used especially in India since 2016. This paper is aimed at exploring how UPI is useful for every participant and how it is impacting on financial inclusion and globally economic development of India. This examining study is an attempt to present the present status of UPI in India and the extent of UPI services offered by banks and participants. In addition, it seeks to examine the factors affecting the extent of UPI services. The purpose of the study is to help fill significant gaps in knowledge about the UPI landscape in India. Moreover, this paper contributes to the scope and usability of UPI in a developing country, i.e. India. In addition to that, it is found that post covid-19 there is significantly increase in acceptance of UPI which in turn is significantly causing economic development. The main implication of the study is that UPI is helping people in more than one way. It is not only supporting the financial inclusion of nation but also contributing to cross border economic relation in geopolitical level.

Keywords: UPI, IMPS, Financial Inclusion.

INTRODUCTION:

The idea of making payments directly from your bank account, without the need to carry debit cards, long passwords, and many logins was seen as a profitable market. Thus came into existence UPI – Unified Payment Interface.

Unified Payments Interface (UPI) is a system that powers multiple bank accounts into a single mobile application. It merges several banking features, seamless and transparent fund routing & merchant payments into one hood. It is faster than faster than NEFT, RTGS and IMPS. With the above context in mind, NPCI conducted a lead launch with 21 member banks. The pilot launch was on 11th April 2016 by Dr. Raghuram G Rajan, Governor, RBI at Mumbai. Banks have started to upload their UPI enabled Apps on *Google Play store* from 25th August, 2016 onwards. However, UPI was also linked with GOI (Government of India) as an innovative initiative for the financial inclusion.

This UPI (Unified Payment Interface) is a digital innovation with an instant payment option developed indigenously in India. The first major step taken by India to achieve a cashless economy was the introduction of Unified Payment Interface (UPI). With the help of this feature, your Smartphone can be used as a virtual debit card. You can also receive and send money with the help of UPI.

OBJECTIVES:

To study the concept of UPI.

To study the post Covid growth of UPI.

Limitations and Future scope of UPI

RESEARCH METHODOLOGY:

The study is based on secondary sources of data/information. Different blogs, journals, newspapers and relevant websites have been consulted in order to make the study an effective one.

CONCEPT OF UPI:

UPI stands for Unified Payment Interface (UPI). It enables money to be immediately transferred via your Smartphone from one bank account to another. Payments can be rendered via supporting mobile phone apps. The cash transactions through UPI are available 24x7. The concept of UPI was interesting. Eventually, to streamline the digital payment market within the country, NPCI (National Payments Corporation of India) was established. National Payments Corporation of India (NPCI), an umbrella organization for operating retail payments and settlement systems in India, is an initiative of Reserve Bank of India (**RBI**) and Indian Banks' Association (**IBA**) under the provisions of the Payment and Settlement Systems Act, 2007, for creating a robust Payment & Settlement Infrastructure in India. Retail

payments are typically payments between consumers, businesses and public authorities. They can be everyday consumer transactions, but also include, for example, salary and tax payments made by businesses.

NPCI, during its journey, has made a significant impact on the retail payment systems in the country. Dedicated to the nation by our former President, Shri Pranab Mukherjee, endorsed by the Hon'ble Prime Minister, Shri Narendra Modi.

Year NPCI is moving towards the vision to be the best payments network globally. So in this journey it came up with UPI. **UPI (Unified Payments Interface)** has been termed as the revolutionary product in the payment system. NPCI conducted a pilot launch with 21 member banks. Dr. Raghuram G Rajan, Governor of RBI in Mumbai, launched the pilot on 11 April 2016. Banks began uploading their UPI powered Apps to the Google Play store on August 25, 2016. Afterwards UPI is become a strong payment model.

Services Available Through UPI:

The primary objective of UPIs is facilitating seamless transfer of funds between two bank accounts. Here are the transactions you can perform through your UPI App;

Send Money: This function allows the user to send money using the Virtual Payment Address (VPA) or a combination of Account Number and IFSC, or even by scanning the QR code.

Request Money: This function allows the user to initiate a collection request by entering the Virtual Payment Address (VPA). In addition, using your UPI App, money can also be transferred using Mobile if it is registered with BHIM or *99#. It is also mandatory that the mobile number of the customer be connected to the bank account.

Scan & Pay: Customers can pay by scanning the QR code using 'Scan & Pay' and creating QR codes in the Payment Program.

Transaction Records: This option allows a user to search the history of transactions. It also highlights pending UPI collection requests (if any) so that the user can accept or deny payment requests. There is a report problem tab if the consumer is able to make a query about transactions.

Profile Management: The profile management option in any UPI app lets users display the static QR code and payment addresses generated. The QR code can be downloaded and exchanged via various messaging applications such as WhatsApp, Email, etc.

UPI mandate: UPI Mandate is a feature that allows you to pre-authorize (Mandate) transactions to be debited from your bank account later.

- Allows you to create mandates for payments that are to be done on a future date.
- It serves as a promise to both the customer and the merchant in the case of payment/service by the merchant.

IMPORTANCE OF UPI:

- One mobile application for access to different bank accounts. Apps that are easy to installation and secure over Google play store.
- Every Bank provides its own UPI for different mobile platforms like Android, IOS.
- Immediate money transfers via mobile device 24*7 days and 365 days.
- Single Click 2 Factor Authentication – Compliant with the Regulatory Guidelines, but offers a very strong feature of convenient single-click payment.
- Immediate fund transfer which is faster than **NEFT**.
- Proper approach to Cash on Delivery hassle, race to ATM, or giving the exact amount.
- One stop shop for your Utility Bill Payments, Counter Payments, Barcode (Scan and Pay related payments.
- Bill Sharing with your friends.
- Enable payments at your merchant establishment through a single app or in-app payments.
- Use this feature for all your needs like Donations, Collections and Scalable Disbursements.
- Allows you to raise Complaint directly from the Mobile App.

BENEFITS OF UPI FOR BANKS:

- There is a universal application for one transaction
- This is a single click Two Factor authentication
- It is safer and more secure
- It enables easy transactions
- Unique Identifier
- Payment basis Single

BENEFITS OF UPI FOR MERCHANTS:

- Easier fund collection
- There is no risk of storing the customer's virtual address
- This is suitable for e-Com and m-Com transaction
- Tap customers do not need credit/debit cards
- In-App Payments (IAP)
- It resolves the hassle of cash on delivery
- Merchant Discount Rate (**MDR**): MDR is an amount/percentage paid to the payment gateway by the merchant; Typically, for most payment methods like cards and wallets, the cost is around 1.8%. For UPI, the MDR is Zero. This means that when a customer purchases Rs 100 through UPI, the business receives that entire Rs 100.

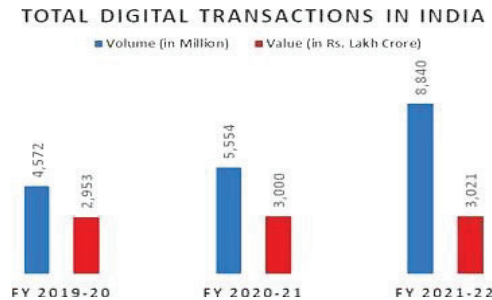
BENEFITS FOR UPI FOR CUSTOMERS:

- It is a single application for accessing various bank accounts
- There is round the clock availability
- You can easily raise a complaint from the mobile app directly
- The use of Virtual ID is secure.

IMPACT OF UPI ON INDIAN ECONOMY:

Item	Volume (lakh)			Value (₹ lakh crore)		
	2019-20	2020-21	2021-22	2019-20	2020-21	2021-22
I.	2	3	4	5	6	7
A. Settlement Systems						
CCIL Operated Systems	36	26	33	1,341.50	1,619.43	2,068.73
B. Payment Systems						
1. Large Value Credit Transfers – RTGS	1,507	1,592	2,078	1,311.56	1,056.00	1,286.58
2. Credit Transfers	2,06,297	3,17,666	5,77,632	285.57	335.04	427.23
2.1 AsPS (Fund Transfers)	10	11	10	0.005	0.01	0.01
2.2 AsPS	16,747	14,373	12,296	0.55	1.11	1.33
2.3 ECS Cr	18	0	0	0.05	0	0
2.4 IMPS	25,799	32,763	46,626	23.38	29.41	41.71
2.5 NACH Cr	11,100	16,465	16,730	10.37	12.17	12.77
2.6 NEFT	27,445	30,528	40,407	229.46	251.31	287.25
2.7 UPI	1,25,186	2,23,307	4,59,581	21.32	41.04	84.16
3. Debit Transfers and Direct Debits	6,027	10,457	12,222	6.06	9.66	10.38
3.1 BHIM Aadhaar Pay	91	161	226	0.01	0.03	0.06
3.2 ECS Dr	1	0	0	0	0	0
3.3 NACH Dr	5,642	9,646	10,788	6.04	8.62	10.31
3.4 NETC (Linked to Bank Account)	93	650	1,207	0.002	0.01	0.02
4. Card Payments	73,364	57,787	61,786	14.26	12.82	17.02
4.1 Credit Cards	21,773	17,641	22,399	7.31	6.30	9.72
4.2 Debit Cards	50,611	40,146	39,387	7.04	6.51	7.30
5. Prepaid Payment Instruments	53,811	49,743	65,812	2.16	1.98	2.94
6. Paper-based Instruments	16,414	6,704	6,998	78.26	66.27	66.55
Total - Retail Payments (2+3+4+5+6)	3,46,933	4,42,557	7,34,451	366.38	414.65	524.07
Total Payments (1+2+3+4+5+6)	3,50,440	4,44,149	7,36,529	1,697.94	1,470.65	1,810.65
Total Digital Payments (1+2+3+4+5)	3,40,926	4,37,445	7,19,531	1,619.69	1,414.59	1,744.14

One of the major objectives of Digital India is to achieve “faceless, paperless and Cashless” status. The promotion of digital payments has been accorded the highest priority by the Government of India to bring each and every segment of our country under the formal fold of digital payment services. The vision is to provide the facility of seamless digital payment to all citizens of India in a convenient, easy, affordable, quick and secured manner.



Source: <https://pib.gov.in>

During the last three years, digital payment transactions have registered unprecedented growth in India. Easy and convenient modes of digital payment, such as UPI have also grown at a fast pace. BHIM-UPI has emerged as the preferred payment mode of users. UPI has been termed a revolutionary product in the payment ecosystem. To further strengthen and popularise the interface, Prime Minister Narendra Modi launched the BHIM- UPI App during the inauguration of the ‘DigiDhan Mela’ on December 31, 2016. UPI has gone a long way in making digital payments a habit, and in firmly placing India on the track toward a cashless economy. In the month of August 2022 alone, 346 banks were live on the

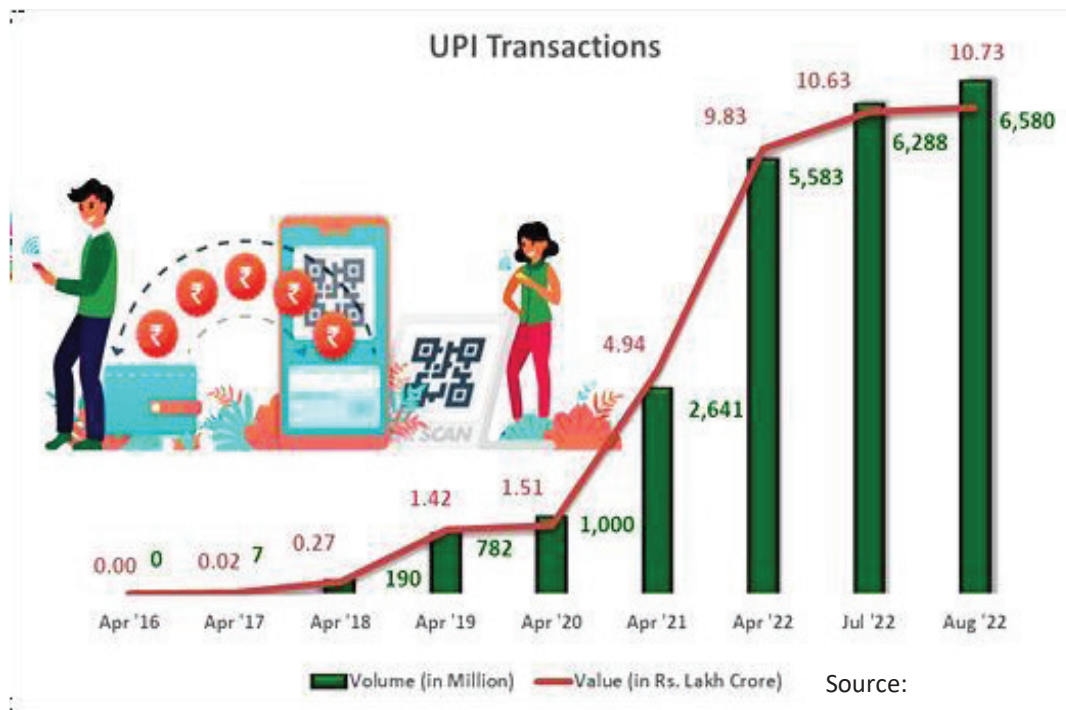
UPI interface, with 6.58 billion financial transactions being carried out for a total value of nearly Rs. 10.73 lakh crores.

UPI currently constitutes well over 40% of all digital transactions taking place in India. It has given a boost to small businesses and street vendors as it enables fast and secure bank-to-bank transactions even for considerably small amounts. It also facilitates quick money transfers for migrant workers. The technology is convenient to use as it requires minimum physical intervention, making it possible to transfer money simply by scanning a QR code. UPI has also been a saviour during the Covid-19 pandemic, with its adoption expanding rapidly due to its ability to allow easy, contactless transactions.

POST COVID GROWTH OF UPI:

The Covid-19 pandemic has catalyzed the momentum of adopting digital payments across

the country. The UPI had faced minor challenges in the first two waves of the pandemic, but apart from that, UPI transactions are growing as the broader economy flourishes. The UPI network facilitated 6.28 billion transactions worth Rs 10.63 trillion in July 2022. According to data from NPCI, the total number of active Indian banks on the UPI network was 338 in July 2022. If we compare the current data with June 2022 figures, the Volume and the Value of the July 2022 transactions are up by 7.16 per cent and 4.76 per cent, respectively. State Bank Of India, HDFC Bank Ltd and Bank of Baroda are the top UPI Remitter Banks. At the same time, Paytm Payments Bank, Yes Bank Ltd and State Bank of India are the leading UPI Beneficiary Banks. According to the latest data compiled by the National Payments Corporation of India (NPCI), which manages UPI, it has reported a threefold increase during the last fiscal (2020-21) in both the number of transactions and the value.



Global Scenario: Post India's Success

Global acceptance and adoption of UPI would strengthen an overdue beginning, pulling down the cross-border remittance cost.

- ☐ UPI has earned an endorsement in Singapore, Bhutan & Nepal.
- ☐ On June 17, 2022, NPCI announced—UPI and Rupay cards will soon be accepted in France;

- NPCI is also targeting additional Asian markets like Malaysia, Vietnam and Thailand
- In April 2022, the BHIM UPI app went live in the UAE at NeoPay terminals operated by Mashreq Bank.
- The Reserve Bank of India and the Monetary Authority of Singapore (MAS) have announced a link their fast payment systems. UPI and PayNow. The linkage will enable users of the two systems to make instant fund transfers (remittances) without the need to get on boarded onto the other system. In other words, a user of UPI does not require to be a part of Pay Now system to be able to transfer funds to a PayNow user in Singapore and vice versa.
- The UPI-PayNow linkage is expected to be a significant milestone in the development of infrastructure for cross-border payments between India and Singapore, and aligns with the G20's financial inclusion priority of enabling faster, cheaper and more transparent cross-border payments. It can also contribute towards fulfilling United Nations (UN) Sustainable Development Goals (SDG 10.c)' by reducing cost of remittances. The linkage is expected to be operationalized in the second half of 2022. Source: RBI.

As of now, banks and payment companies in the following countries and regions have partnered with NPCI International Payments Ltd (NIPL), the international arm of NPCI, to accept UPI and RuPay in one form or the other:

Europe (Netherlands, Belgium, Luxembourg, Switzerland, and France to start with) UK, UAE, Singapore, Malaysia, Thailand, Philippines, Vietnam, Cambodia, Hong Kong, Taiwan, South Korea, Japan, Oman, Bhutan, Nepal

One thing is crystal clear with an initiative to link Credit Cards with UPI and other initiatives—The future of money is digital.

FINDINGS:

There are 692 million active internet users in India, including 351 million from rural India and 341 from urban India. A report by The Internet and Mobile Association of India estimates that there will be 900 million internet users in India by 2025. Also the government is trying to make creative policy decisions to construct a Digital Payment Ecosystem and expansive outreach campaigns that already have poised India among the digital Leaders of the world.

The primary objective of the Indian government of launching UPI was to bring in more and more people under the fold of digitization. Since UPI is real time and doesn't cost anything, it has helped incorporate several unorganized industries into the system. With BHIM app which uses UPI, many unconventional users are also covered. Since BHIM is easy to use and is regulated by the government itself, it has inspired trust even in those consumers who were hesitant to use digital route while making payments, due to

lack of digital literacy.

There are talks happening to operate UPI in United Arab Emirates and Singapore, both of which have sizable Indian expatriates, for facilitating their ease of living. Opportunities are also there in crowdfunding, micro-financing, peer-to-peer lending, credit rating, loan disbursement that can be built upon UPI.

UPI Sees Record-Breaking Transactions in June 2021 to 26 Jul 2021

The NPCI has stated that UPI transactions increased by a whopping 10.6% in volume and 11.56% in value in June, compared to the previous month. The total number of transactions carried out in June was 280 crores (2.8 billion) with a value of Rs. 5,47,373 crores. PhonePe continues to dominate the UPI market with a share of 45.27% followed by Google Pay (36.47%) and Paytm (11.44%).

UPI 2.0:

UPI 2.0 is a new and upcoming version of UPI payment system with improved features and benefits

Upcoming Features of UPI 2.0

Although UPI app is chock full of features, UPI 2.0 promises to be a better tool than its predecessor. Here are some of the new features set to be introduced in UPI 2.0:

- Integration of Bharat Bill Payment system with UPI.
- UPI 2.0 resolves the problem of forgetting pending bill payments by adding the feature of pre-authorized transaction.
- The facility of biometric payment authentication would be introduced with the help of the Aadhar service.
- Check on Speed of Transaction.
- Error Resolution.
- Aadhaar Based Payments.

Limitations:

While the growth of UPI has been phenomenal, infrastructural issues have also increased in the recent past. Failure rates have risen sharply in UPI payments and customers have faced multiple issues while carrying out UPI transactions. Recently, digital payment platforms of a large private bank and a public sector bank have faced technical glitches. As per NPCI data, UPI downtime has significantly increased to 0.17%, while most banks faced high rates of technical failure in November 2020. Technical declines have also increased for more banks in the last three months. Outage at data centers are officially quoted by banks as the reason behind increasing in failure rates.

The possible reasons for increasing technical failures are:

- 1. Sudden growth:** UPI transactions have grown unexpectedly in the recent past while infrastructure capability has remained the same.
- 2. No incentives for investment:** UPI service does not add to top line (revenues) for banks and PSPs. Zero MDR and zero customer charges leave no incentives for banks to invest in infrastructure and human resources.
- 3. Accountability for failed transactions:** There is no detailed data on failed transactions and their types. Since there are multiple players involved in a payment service, accountability for failure remains anonymous.

CONCLUSION:

Unified Payments Interface (UPI) is a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood. UPI is a payment system that allows money transfer between any two bank accounts by using a smart phone. UPI allows a customer to pay directly from a bank account to different merchants without the hassle of typing credit card details, IFSC code, or net banking/wallet passwords. The interface has been developed by National Payments Corporation of India (NPCI). It aims to simplify and provide a single interface across all NPCI systems besides creating interoperability and superior customer experience. The UPI seeks to make money transfers easy, quick and hassle free. The proliferation of smart phones, the availability of an online verifiable identity, universal access to banking and the introduction of biometric sensors in phones will proactively encourage electronic payment systems for motivate in a less-cash society in India.

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