

# UPI (Unified Payments Interface) - The Futuristic Payment Method

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**Abstract:** UPI 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. It also caters to the “Peer to Peer” collect request which can be scheduled and paid as per requirement and convenience. It is the cheapest method of fund transfer which is hassle free in comparison to conventional payment methods.

**Key Words:** UPI, Real-time payment, Digital India, Security, Banking, Cashless economy.

## 1. INTRODUCTION:

UPI abbreviated as “Unified Payment Interface” is a real time digital payment system build over IMPS (Immediate Payment Services). It enables users to manage multiple banking accounts and use several banking features like checking balances and transaction histories from a single mobile app. Since it is a digital system, UPI can be used to transfer the payments and funds, 24 hours a day and 7 days a week. The process of UPI fund transfer can be initiated simply by using Aadhaar identity number, virtual payment addresses and mobile phone numbers. The process does not require beneficiary’s bank account details to transfer the funds.

Post the launch, UPI has truly become a revolution in banking industry and has opened the gates of innovation to open banking. Started with 27 banks as a pilot project by National Payments Corporation of India (NPCI), it has shown a massive growth and is now available with 139 banks.

### 1.1 HISTORY

Unified Payment Interface is an initiative by National Payments Corporation of India’s (NPCI), set up with the support of the Reserve Bank of India (RBI) and Indian Banks Association (IBA) on 11th April 2016 on pilot basis by Dr. Raghuram G Rajan, former Governor of RBI. An IMPS (Immediate Payments Service) was also an initiative of NPCI. UPI is the advanced version of IMPS.

### 1.2 BENEFITS OF UPI

#### 1.2.1 BENEFITS FOR BANKS

- Single click Two Factor authentication
- Universal Application for transaction
- Leveraging existing infrastructure
- Safer, Secured and Innovative
- Payment basis Single/Unique Identifier
- Enable seamless merchant transactions

#### 1.2.2 BENEFITS FOR CUSTOMERS

- Round the clock availability
- Single Application for accessing different bank accounts
- Use of Virtual ID is more secure, no credential sharing
- Single click authentication
- Raise Complaint from Mobile App directly

#### 1.2.3 BENEFITS FOR MERCHANTS

- Seamless fund collection from customers - single identifiers
- No risk of storing customer’s virtual address like in Cards

- Accept payments from customers not having credit/debit cards
- Suitable for e-Com & m-Com transaction
- Resolves the COD collection problem
- Single click 2FA facility to the customer - seamless Pull
- In-App Payments (IAP)

**1.3 LIMITATIONS OF UPI**

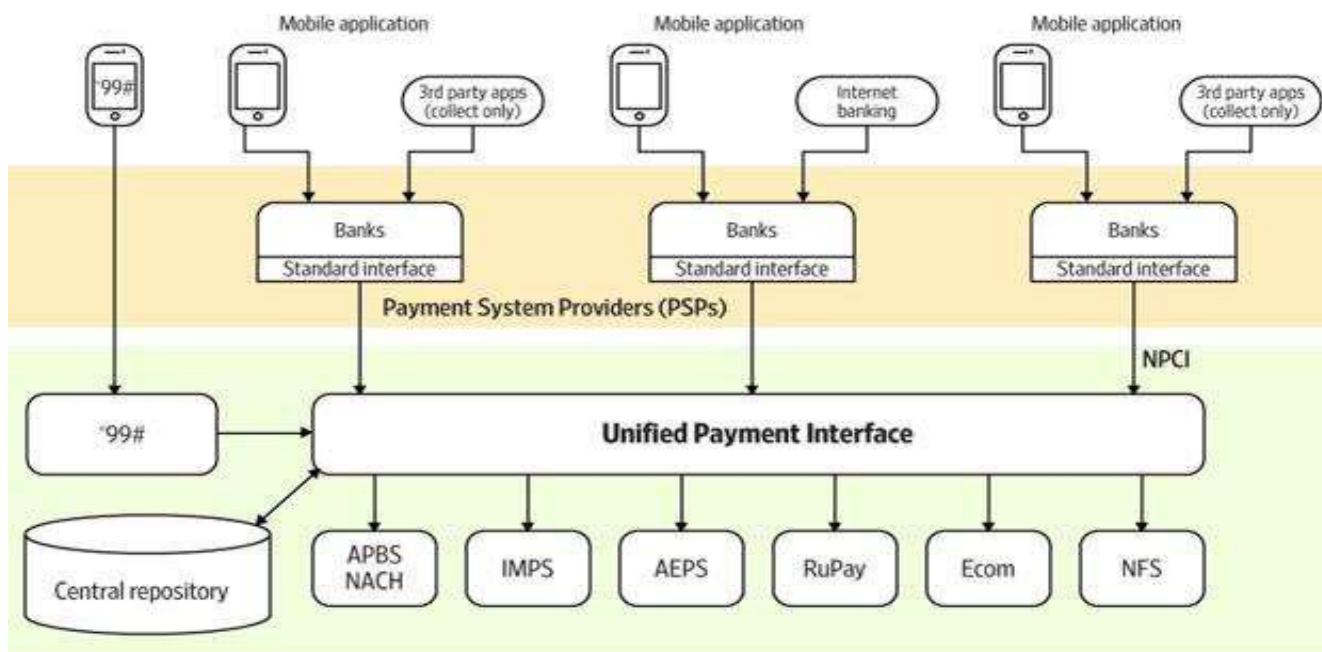
- Transaction Limit - In UPI the transaction amount is limited to 1 lakh rupees, thus making UPI suitable for only small sized transactions.
- Requirement of Internet and Smart phone – The UPI transaction facility can be availed only on internet enabled smart phone.

**1.4 HOW TO START USING UPI?**

- Download the UPI app of your bank from Google Play Store/Apple Apps Store and install it in the phone.
- Set app login.
- Create a Virtual Payment Address (VPA). Eg: lohiyashivani@icici
- Add your bank account.
- Set MPIN.
- Start transacting using UPI.

**1.5 HOW DOES UPI WORKS?**

**THE ARCHITECTURE OF UPI**



**1.6 ANALYSIS :**

Month	No. of Banks live on UPI	Volume (in Mn)	Amount (Rs. in Cr.)
Feb-19	139	674.19	1,06,737.12
Jan-19	129	672.75	1,09,932.43
Dec-18	129	620.17	1,02,594.82

Nov-18	128	524.94	82,232.21
Oct-18	128	482.36	74,978.27
Sep-18	122	405.87	59,835.36
Aug-18	114	312.02	54,212.26
July-18	114	235.65	45,845.64
June-18	110	246.37	40,834.03
May-18	101	189.48	33,288.51
Apr-18	97	190.08	27,021.85
Mar-18	91	178.05	24,172.6
Feb-18	86	171.40	19,126.2
Jan-18	71	151.833	15,571.2
Dec-17	67	145.463	13144.3
Nov-17	61	104.841	9640.6
Oct-17	60	76.772	7057.8
Sep-17	57	30.778	5293.4
Aug-17	55	16.608	4127.2
July-17	53	11.444	3381.2
June-17	52	10.155	3067.1
May-17	49	9.168	2765.4
Apr-17	48	7.005	2240.8
Mar-17	44	6.161	2391.4
Feb-17	44	4.156	1902.1
Jan-17	36	4.153	1658.8
Dec-16	35	1.967	706.2
Nov-16	30	0.285	100.5
Oct-16	26	0.103	48.6
Sep-16	25	0.085	32.6
Aug-16	21	0.093	3.1

## 2. LAUNCH OF UPI 2.0 :

An upgraded version of UPI was launched in the form of UPI 2.0 on 16th Aug 2018 by NPCI. The key features of UPI 2.0 are linking facility to overdraft account, one time mandates, invoicing and QR security notification.

### 2.1 FEATURES OF UPI 2.0

- Linking of overdraft account: In UPI, only the current and savings accounts can be linked, however in UPI 2.0, customers can link their overdraft accounts to UPI. They can transact instantly and all benefits associated with overdraft account will be made available to them. UPI 2.0 is an additional digital channel to access the overdraft account.
- One-time mandate: Unlike UPI, in UPI 2.0 mandates are created with one-time block functionality for transactions. A transaction can be pre-authorized and can be paid at a later date. It works flawlessly for merchants as well as for customers. These mandates can be created and executed immediately. On the date of actual purchase, the amount will be deducted and will be received by the merchant/individual user.
- Invoice: This feature is designed for customers to receive and check the invoice sent by merchant prior to making any payment. It helps customers to view and verify the credentials. Customers can pay after verifying the important details like the amount and merchant name mentioned in the invoice.
- Signed intent and QR: This feature can be used by customer to check the authenticity of merchants by scanning QR or quick response code. It notifies the user with information to check whether the merchant is a verified UPI merchant or not. This proves to an additional security. In case the receiver is not secured then the customers will be informed by the notifications.

### 3. RECENT DEVELOPMENTS :

NPCI has announced the slash in the transaction fee for small transaction to aggressively push UPI. For up to 1000 Rupees transaction, the charge has been brought down from 25 paisa to 10 paisa per transaction. More cash backs and incentives will lead to more adoption in long run among payment service providers (PSPs), banks and consumers. Service providers like Google Pay, Paytm, PhonePe and many others are coming up with offers to aggressively promote UPI, like- Google Pay came up with scratch cards and offers exclusive cash backs for specific merchants such as Uber. To promote UPI through its application, recently PhonePe has announced that in the next year it is going to spend Rs.500 Crore in UPI. To be ahead in the retail payment race both PhonePe and Paytm have featured offers and incentives.

Aiming for world wide of the India's digital payment platform, Prime Minister Mr. Narendra Modi launched three Indian mobile payment applications BHIM, RuPay and UPI enabled remittance app of SBI in Singapore. They were launched at 'Business, Innovation and Community Event' held in Singapore where digital platform was the main theme.

### 4. RESULT:

In 1.3 years, transactions on UPI— among India's latest digital payment platforms have raced to 105 million in November'17 from 93,000 in August'16, as reported by National Payments Corporation of India(NPCI). UPI has outperformed the other forms of digital payments in terms of growth and has helped India to quickly jump from cash to smart phone-based payments. In the data released, UPI has maintained the growth momentum by clocking 145 million transactions in Dec'2017 against 105 million in Nov'2017, reporting a massive growth of around 38%. Not only in terms of number of transactions, but the amount sent through the channel has also grown by 36% over the previous month.

Reports further states that the total amount transferred through UPI stood at Rs 13,144 crore in December'2017 against Rs 9640 crore in November'2017. This is the first time when UPI has clocked more than Rs 10,000 crore in a month. In April 2018, the UPI transactions have crossed 190 million in volume amounting to Rs. 27,021.85 in transaction.

### 5. CONCLUSION:

UPI is a revolution in payment system by NPCI. It is a great step in right direction. UPI is not only aiding in peer-to-peer transactions but also creating peer-to-merchant transactions. It has facilitated customers and merchants to do seamless transactions without much hassle. With the amount of growth seen till now, it can be easily concluded that the UPI has truly promoted the digital transaction and with the addition of new innovative features it will help India becoming a cashless economy.

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