

# Study of UPI/BHIM Payment System in India

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**Abstract:** After the demonetization there is growth in digital payments in India. The government of India had initiative called Digital India for the transparency and quick services for the people in Republic of India. Due to Digital India initiative there is tremendous growth in use of mobile phones and internet which directly help increased growth in digital payments. The use of digital payments gives more transparency in money transactions this improves the economy of India. In last few years due to the digital payment platform by NPCI called UPI and BHIM app there is positive changes in digital payments. The objective of this research paper is to study the positive impact of UPI and BHIM app on digital payment system. This research paper focuses on the use of UPI or BHIM app by users. Primary data collected from 200 students studying in the Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

**Keywords:** Electronic Payments, E-Payments, Digital Payments, Online Payments, UPI, BHIM

## 1. Introduction

Youngsters has a special concern about technology. The Government of India has been taking several measures to promote and encourage digital payments in the country. As part of the 'Digital India' campaign, the government aims to create a 'digitally empowered' economy that is 'Faceless, Paperless, and Cashless'. There are various types and modes of digital payments. Some of these include the use of debit/credit cards, internet banking, mobile wallets, digital payment apps, Unified Payments Interface (UPI) service, Unstructured Supplementary Service. Digital payment methods are often easy to make, more convenient and provide customers the flexibility to make payments from anywhere and at any time. These are a good alternative to traditional methods of payment and speeded up transaction cycles. Post demonetization, people slowly started embracing digital payments and even small time merchants and shop owners started accepting payments through the digital mode.

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. It also caters to the "Peer to Peer" collect request which can be scheduled and paid as per requirement and convenience. Each Bank provides its own UPI App for Android, Windows and iOS mobile platform(s). The advanced cloud computing features provide the youth a flexible and an easy usable platform for resource sharing, information storage and for world-wide interactions. This facility is facilitated by National Payments Corporation of India (NPCI).

National Payments Corporation of India (NPCI) is an umbrella organisation for operating retail payments and settlement systems in India, it 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 and Settlement Infrastructure in India. Considering the utility nature of the objects of NPCI, it has been incorporated as a "Not for Profit Company under the provisions of Section 25 of Companies Act 1956 (now Section 8 of Companies Act 2013), with an intention to provide infrastructure to entire banking system in India for physical as well as electronic payment and settlement systems. The Company is focused on bringing

innovations in the retail payment systems through the use of technology for achieving greater efficiency in operations and widening the reach of payment systems.

NPCI during its journey for last six years, has made a significant impact on the retail payment systems in the country. Dedicated to the nation by Shri Pranab Mukherjee, endorsed by the Prime Minister, Shri Narendra Modi and later made the card of choice for the ambitious Pradhan Mantri Jan Dhan Yojana, RuPay is now a known name. With Immediate Payment Service (IMPS), India has become the leading country in the world in real time payments in retail sector. National Financial Switch (NFS) and Cheque Truncation System (CTS) continues to be the flagship products of NPCI. Unified Payments Interface (UPI) and Bharat Interface for Money (BHIM) has been termed as the revolutionary products in the payment system. Bharat Bill Payment System (BBPS) has also been launched in pilot mode. The other products in pipeline include RuPay Credit Card, National Common Mobility Card - Tap & Go and Electronic Toll Collection.

Pioneered and developed by National Payments Corporation of India (NPCI), BHIM has been conceived and launched by the Hon'ble Prime Minister of India, Narendra Modi on 30th December 2016 to bring in Financial Inclusion to the nation and a digitally empowered society. Bharat Interface for Money (BHIM) is a payment app that lets you make simple, easy and quick transactions using Unified Payments Interface (UPI). You can make direct bank payments to anyone on UPI using their UPI ID or scanning their QR with the BHIM app. You can also request money through the app from a UPI ID.

### Prerequisites to start the service

- Bank a/c
- Mobile number should be linked with bank a/c
- Smart Phone with internet facility
- Debit Card for re-setting MPIN.

### Activation of Service

- Download the App for UPI
- Automated mobile number verification
- Do registration online on the App with a/c details
- Create a virtual ID
- Set MPIN

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**Prerequisites for Transaction**

- Self Service Mode with Smartphone with internet facility
- Registered device only
- Use registered MPIN

**Transaction Cost**

- NIL to customer by most Banks
- Customer pays for data charges
- The transaction costs are based on available information and may vary based on banks.

**Funds Transfer limit**

- A user can send up to ₹ 40,000 per transaction and a maximum of ₹ 40,000 per day for one bank account.
- The funds transfer limits are based on available information and may vary based on banks

**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 MPIN
- Notifications
- A/c Management

**2. Literature Review**

K. Suma Vally and K. Hema Divya (2018) in the Paper "A study on digital payments in India with perspective of consumers Adoption" conclude that the deployment of technology for digital payments have improved the performance of banking sector and able to achieve the motive cash less country. This study also give emphasis to the percentage of awareness on maximum utilization of technology. Banks should take effective measure in creating awareness towards the effective usage technology and security.

Rahul Gochhwal (2017) in his paper "Unified Payment Interface—An Advancement in Payment Systems" concluded that UPI has enabled mobile phone to be used as a primary payment device for making and accepting payments. UPI leverages high teledensity in India to enable every bank account holder to make digital transactions using a mobile phone. India, which has a poor merchant payment acceptance infrastructure UPI, enables even the smallest merchant to start accepting digital payments without the need for any POS machine.

Anjali R, Suresh A (2019) in the paper "A Study on Customer Satisfaction of Bharat Interface for Money (BHIM)" stated that BHIM application is one of the best move by the government of India for instant bank to bank transaction and it is being accepted and loved by a large number of people in India.

Dr. Virshree Tungare (2018) in his research paper "A Study on Customer Insight Towards UPI (Unified Payment Interface) - An Advancement of Mobile Payment System" described that In contrast to all of payment systems it can be say that UPI is the most advanced payment system in the world. UPI payment system allows money transfer between any two bank accounts by using a smartphone. It allows a customer to pay directly from a bank account to different merchants, both online and offline, without the hassle of typing credit card details, IFSC code, or net banking/wallet passwords. It aims to simplify and provide a single interface to money transfers easy, quick and hassle free. These features of UPI motivates the respondents of service sectors to adopt the tool and the above study revealed that there also a significant difference found between the gender towards the adoption of UPI.

Sanghita Roy, Dr. Indrajit Sinha (2014) . stated that E-payment system in India, has shown tremendous growth, but still there has lot to be done to increase its usage. Still 90% of the transactions are cash based. Technology Acceptance Model used for the purpose of study. They found Innovation, incentive, customer convenience and legal framework are the four factors which contribute to strengthen the E-payment system.

E-payment systems are important mechanisms used by individual and organizations as a secured and convenient way of making payments over the internet and at the same time a gateway to technological advancement in the field of world economy (Slozko & Pello, 2015).

Rakesh H M & Ramya T J (2014) in their research paper titled "A Study on Factors Influencing Consumer Adoption of Internet Banking in India" tried to examine the factors that influence internet banking adoption. It is found that internet banking is influenced by its perceived reliability, Perceived ease of use and Perceived usefulness. In the process of internet banking services expert should emphasize the benefits its adoption provides and awareness can also be improved to attract consumers' attention to internet banking services.

Kartikeya Bolar (2014) In his research paper "End-user Acceptance of Technology Interface In Transaction Based Environment" stated that Creators International Journal of Pure and Applied Mathematics Special Issue 1261 and investors of technology need information about the customers' evaluation of their technology interface based on the features and various quality dimensions to make strategic decisions in improving technology interfaces and compete on various quality dimensions.

### 3. Objective of the Study

- 1) To know the awareness and use of UPI/BHIM services in students of Aurangabad
- 2) To know which UPI/BHIM APPs are commonly used by students
- 3) To know the awareness of UPI/BHIM payment system 200 students were selected from Aurangabad city. The gender wise response were received as per Chart 1.

As per Chart 1 it is observed 47% of female students and 53% male students were participated in the study having basic knowledge of smart phones. There is marginal difference between the gender ration for basic knowledge of smart phones.

The students were divided into 5 age groups as per chart 2 from age 18 to 28.

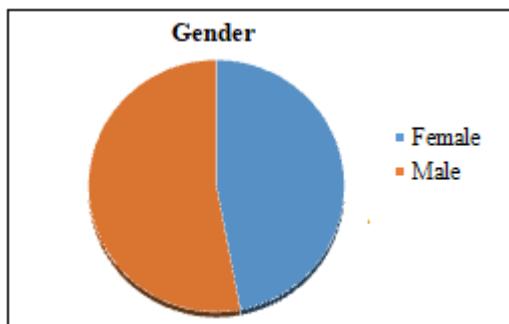


Chart 1: Gender Ratio in percentage

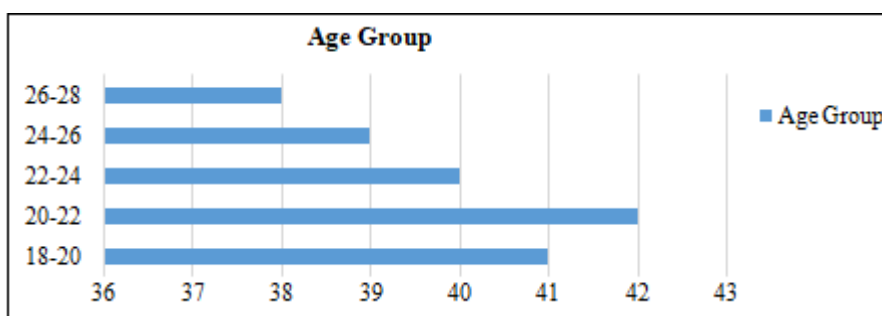


Chart 2: Age groups

The UPI/BHIM app users are categorised based on the use of Apps transaction as per chart 3 given below.

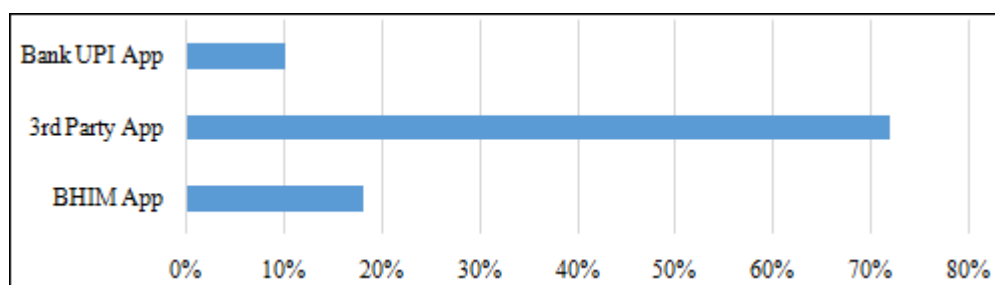


Chart 3

As per chart 3 it is found that the students are mostly using 3<sup>rd</sup> party App for UPI payments like PhonePe, Paytm, Aamazon Pay, Google Pay, etc. The reason for the use of 3<sup>rd</sup> party app for UPI is the cashback and other cashback related offers offered by the 3<sup>rd</sup> party app providers and the advertisement by them.

The transaction amount and ease of use is also plays an important role to select UPI/BHIM for transaction as per the chart 4.

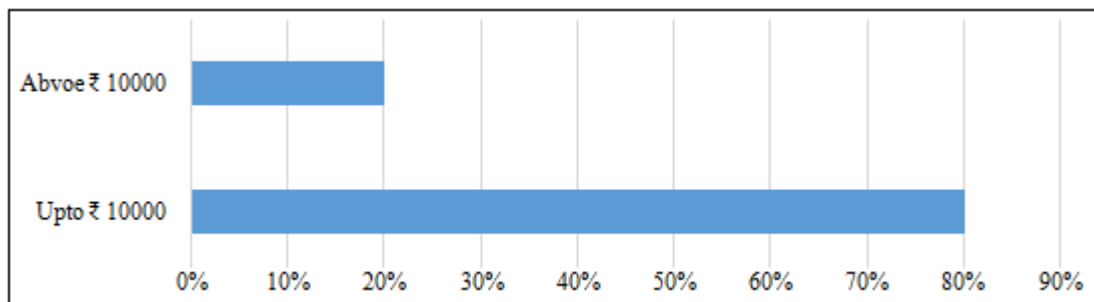


Chart 4

As per chart 4 it is observed that 80 % UPI/BHIM users transact from ₹ 1/- to ₹ 10,000/- while only 20 % are using it for transaction above ₹ 10,000/- using various UPI/BHIM Apps.

There are various feature available with UPI/BHIM. The chart 5 shows the feature of UPI/BHIM and its use.

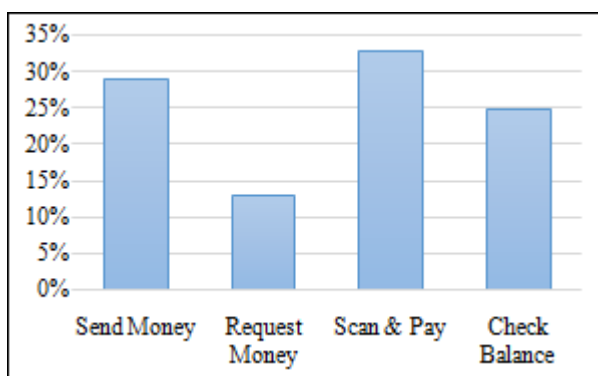


Chart 5

As per chart 5 it is observed that Scan & Pay feature is popular then Send Money feature and Request Money feature is least used. It is also important the students are checking balance on regular interval using UPI/BHIM App.

There are various UPI/BHIM Apps issued by banks and 3<sup>rd</sup> party like PhonePe, Paytm, Aamzon Pay, Google Pay, etc. used by students. The Chart 6 show the popular apps used by students.



Chart 6

As per chart 6 it is observed that 3<sup>rd</sup> Party Apps are mostly used by students than that of native UPI/BHIM App. The PhonePe is the most popular 3<sup>rd</sup> party app among others due to quick settlements. It is also observed that due to cashback, related offers and advertisement are playing important role while selecting the UPI/BHIM App for transaction. It is also observed that students are having more than one UPI/BHIM App install on the smartphone.

#### 4. Limitation of the Study

- 1) Only students from age 18-28 were selected for the study.
- 2) Geographic data from Aurangabad city were selected for the study.
- 3) Only UPI/BHIM option was considered for this paper

#### 5. Findings of the Study

- 1) It is found that there is marginal difference between the gender ration for basic knowledge of smart phones.
- 2) It is also observed that students using UPI/BHIM but they are known by third party Apps.
- 3) It is found that students are passionate real-time payments and its settlement in bank account.
- 4) It is also observed that students are commonly use UPI/BHIM for ₹1 to ₹ 10,000/- payments.
- 5) The researcher reveals that the most commonly used UPI/BHIM App are the 3<sup>rd</sup> Party Apps like PhonePe.

## 6. Conclusion

As per the above study it shown that students are extensively using the 3<sup>rd</sup> partyUPI/BHIM on mobile phones. For students it is convenient payment system and can be a very useful tool with students for online transactions. This will help students for digital payments without need of any complex mechanism and boostcountries economy with transparency.On phone online transaction option for recharge, bill payments, rent, bank balance, etc. are available. Banks and NPCI have to promote native BHIM App as 3<sup>rd</sup> party apps are more popular among the students.

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