A Study of UPI Payments in India

1Dr.Arjun Waykar & 2Dr.Yashwant Waykar

1Associate Professor, Swami Vivekanand Sr. College, Mantha, Dist-Jalna (India)
2Assistant Professor, Department of Management Science, Dr. B.A.M.U. Aurangabad (India)

ARTICLE DETAILS

Published Online: 16 Aug 2019

Keywords

UPI, Payment, BHIM-UPI APP.

ABSTRACT

Unified Payment interface is payment solution developed by National Payments Corporation of India (NPCI). UPI payment allows the users to transfer or receive money between the bank accounts which are linked with user's mobile number, with the help of this mobile number user link to app with the BHIM-UPI app. The popularity and increasing number of transactions conducted on the UPI platform increases the likelihood of fraud or unauthorized debits without the consent of the account holders. Most of Indian Banks introduced their own UPI payments App integrating the BHIM-UPI platform, after the launch of NPCI's UPI payment platform. Using UPI's API and partnering with Indian Banks as well as some of other third-party companies have also created their own UPI payments app. 144 Banks have already joined in UPI payment platform in April 2019. The popularity and increasing number of transactions conducted on the UPI platform increases the likelihood of fraud or unauthorized debits without the consent of the account holders. So all the mobile users must be aware of these probable frauds and has to be careful while using and making UPI payments.

1. Introduction

According to the Reserve Bank of India (RBI), the Unified Payment interface is payment solution developed by National Payments Corporation of India (NPCI). UPI payment allows the users to transfer or receive money between the bank accounts which are linked with user's mobile number, with the help of this mobile number user link to app with the BHIM-UPI app. Virtual Payment option is another way. Instead of IFSC code, the VPA is something like this username@sbi etc. which senders and receiver can use. For such type of transaction, there is no need of IFSC code.

With the help of BHIM-UPI is an official android app or instead of this using any Indian bank, you can create multiple VPAs. With the help of this we can link to more than one bank account. Linking the same mobile number with the bank is must. UPI payments app will verify your linked mobile number by sending an SMS on that registered mobile number, after this to authenticate the linked Bank Account before creating the VPA. To send and receive money on real time basis, Social media sites like Twitter, Facebook and many other popular messaging applications like hile Messenger integrate UPI platform. Also several digital payment apps have already launched in India.

The UPI which launched by NPCI's latest version is UPI 2.0. Some advance features have included in new version of UPI as follows:

- There is need of overdraft account with UPI for an example. Add a credit account, which were before not possible.
- Pre-authorized debit mandate for debit after account. This option enables the banks to create a pay-per-option later on the payment gateway.
- A more secure QR code payment through additional signed signed QR form. Passcode is not required at QR scanning.

2. Objectives

1. To study the UPI payment status in India
2. To analyze the UPI payment Apps with respect to transaction volume
3. To recommend the security measure to users for UPI payments

3. Research Methodology

The secondary data is used to conduct the said research such as reports of organizations & data from web sites, research journals. Etc. The descriptive research method is used for this research.

4. Data Analysis & Interpretation

NPCI launch the UPI 2.0 version, after that Many Fintech companies and ICICI banks have introduced the Pay Later service for digital credit system for their customers for Digital Credit, you can read the best Pay Later App in India.

With the help of six different methods, UPI Payments works.

1. VPA id: You will need to share your VPA ID, after which the store will start the payment process. Then you will receive a notification on your mobile, you will need to confirm the transaction by accessing the UPI app in your MPIN. This type of methods available on online shopping stores like Flipkart, Amazon etc.
2. QR Code: Instead of using passcode, you can use QR signed and intended for use, According to the latest
version 2.0. Entering MPIN into your UPI payment app and confirm the amount by scanning the QR code which is displayed in various merchant stores.

3. **Mobile Number:** By sharing MMID, you can transfer money to mobile number which is linked to any Bank Account.

4. **Aadhaar Number:** with the help of linked aadhaar number we can send and receive money in bank. With the help of this process you have to scan fingerprint for transferring money.

5. **Contact Less or Audio NFC Technology:** The contactless method is the most innovative method for transferring money with the help of NFC technology. You do not need to share any VPA IDs or confirm any validations. Instead, the ultra-high-frequency sound wave communicates between two UPI enabled devices and the wave-lengths of the two devices. It can quantify money transfer.

   Any third-party organization or organization can create a UPI SDK that integrates its APIs. A sponsored bank or payment services bank is required to enable UPI. Because without any sponsored or partner bank, the UPI transaction would not be possible.

Google Pay mobile payment apps cash mode works using this method. Other UPI payment apps like Phone Pay or the HDFC Bank PayZAP UPI payment app can launch proximity payments soon.

6. **Sharing account Number & IFSC:** It is common to transfer money to different banks.

   **Facts & Features of UPI:**
   - You can comply with your existing KYC e-Wallet account, According to RBI guidelines. And because of this, the service has been launched by only a few UPI app providers in India. In future we will see more UPI app integrating the interoperability of mobile wallets.
   - The maximum upper limit of UPI is Rs.1.00 Lacs.
   - We can initiate maximum of 24 transactions in a day.
   - On a real-time basis, UPI transaction will perform.
   - UPI is easy to use and easy to understand as compare to IMPS, whereas both run on same platform.
   - Anyone can have multiple UPI VPA ID.
   - For merchants, all transaction fees of Rs. 50 crore are being annulled for transactions made using UPI and QR codes.
   - 142 banks in India are now involved in UPI transactions, As of March 2019.Anyone can add any number of Bank Account using any banks payment app.
   - In UPI transaction, only commercial banks can act as a PSP According to RBI’s guidelines.

   **While using UPI Apps for Transaction following are Safety Tips:**
   - The popularity and increasing number of transactions conducted on the UPI platform increases the likelihood of fraud or unauthorized debits without the consent of the account holders.
     1. While dealing with UPI on mobile some essential security measures are as follows:
     2. Never share your VPA ID with anyone.
     3. If the message shows that someone has asked you for money, then the account which is linked with UPI will be debited if you accept the request.
     4. Do not authorize any UPI Transaction Alert without careful inspection on the mobile or how the money is going.
     5. Never install any UPI app that is not trusted. You will find numerous apps like BaramModi, Bharat Bhima or Modi’s BHIM type fake UPI app which have been available in Google Play store. Always try to install authorized UPI apps nowadays a fraudster using this method of transferring money from a bank account. If you use Google Pay, you’ll need to keep an eye on how you see the money, which will indicate where your money is headed.
     6. Always careful about sending and requesting alerts from anyone.
     7. Remote access apps like Djack or Team Viewer do not install on your smartphone. This can lead to data siphoning.

   More 12 million active mobile users and mobile payment apps after the Indian government has taken several measures to promote digital payment solutions.

   Many Indian banks and third parties have introduced many mobile payment apps in India with the implementation of UPI platform. In the Google Play Store or iOS App Store you can easily find the list of these type of UPI paid applications.

   These payment apps integrate UPI platform for sending and receiving money between the UPI linked bank accounts.

   In this section, you will find the list of some unique and innovative UPI payments app which you can install it from the Android or iOS App Store easily.

   Most of Indian Banks introduced their own UPI payments App integrating the BHIM-UPI platform, after the launch of NPCI’s UPI payment platform. Using UPI’s API and partnering with Indian Banks as well as some of other third-party companies have also created their own UPI payments app. 144 Banks have already joined in UPI payment platform in April 2019.

   Here is the UPI transaction statistics for India in March 2019.

<table>
<thead>
<tr>
<th>Sr.No</th>
<th>Year</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2016</td>
<td>0.093</td>
</tr>
<tr>
<td>2</td>
<td>2017</td>
<td>6.161</td>
</tr>
<tr>
<td>3</td>
<td>2018</td>
<td>178.05</td>
</tr>
<tr>
<td>4</td>
<td>2019</td>
<td>799.54</td>
</tr>
</tbody>
</table>

Data sources: NPCI and ET.
5. Conclusion

Many internet merchant websites like Amazon, Ola, Uber are also launching their UPI app in India. The popular messaging app Whatsapp has also approved the Reserve Bank's data localization standards and has partnered with UPICI Bank soon.

With the latest updates, the government is making QR code-based payment system mandatory in all types of shops, so we can see many folds in UPI payment system in retail segment of India. With the revolution of mobile payments in India, many new and old UPI payment apps in India introduce many new innovations in the digital payment system.

Mobile users now have different options for transferring money to accounts using the latest and innovative technology. Recently popular messaging service WhatsApp introduces WhatsApp Pay using the UPI platform. This payment option is in its infancy, only a WhatsApp paid user can activate another user's in-pay payment option. You can see the WhatsApp payment option only if someone sends money using WhatsApp.

The popularity and increasing number of transactions conducted on the UPI platform increases the likelihood of fraud or unauthorized debits without the consent of the account holders. So all the mobile users must be aware of these probable frauds and has to be careful while using and making UPI payments.

References

3. https://www.profitbooks.net/upi-unified-payment-interface/
4. https://upipayments.co.in/best-upi-apps/
5. https://www.npci.org.in/