

MOBILE BANKING AND ITS EVOLUTION IN THE UPI ERA

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Abstract

Now a day's people use their mobiles for regular banking transactions like sending and receiving money from others paying various bills etc. it's called mobile banking. After the demonetization and the introduction of the various UPI based apps these mobile banking transactions has increased in very large numbers. The paper try to understand the evolution of the UPI based transactions in India and its impact on the paperless transactions. and the problems associated with it.

Key words: UPI, BHIM, Mobile Banking, IMPS, Phone Pay, Google Pay, Pay TM

Introduction

While walking through shopping mall or filling petrol to your vehicle you probably notice that various QR codes in their walls saying scan to pay get reductions. These are the codes you can scan with your mobile phones and directly pay from your UPI apps. Whether you ever wonder how it's working. It is a complex process make easier with the advanced technologies. The amount debited from your account and credit to the merchants account all that happens within one minutes or less than one minutes, faster than the traditional card swiping mechanism. It's possible because of the Unified Payment System.

Unified Payment Interface UPI

Unified Payment Interface is application in the smart phones allow users to send money between bank accounts. It's a single window mobile payment system developed by the National Payment Corporation of India (NPCI). It is very easy to use when you set up a virtual UPI account in your mobile phone. You don't need to enter sensitive information like account number, IFSC or other bank details in any your transactions. You can simply send money to others like sending text messages to them only need to enter you UPI pin for

security. It is a real time payment system that means the amount debited from your account within seconds and credited to the recipients account immediately.

It is designed to enable the peer to peer interbank transfer through a single two click factor authentication process. The interface is also regulated by the Reserve Bank of India, the apex bank. it works by transferring money from one account to another account through a mobile app within minutes. The UPI also is a secured method of transferring funds from one person to another with very secured and systematic ways. The denomination of money transfer has no such a minimum limits, we can even send one rupee through this plat form. But there is some upper limits regard with our account types this system also promote cashless transactions and no need to got the bank branches every time we need to send some cash to others. (GANTI, 2019)

Evolution of UPI

Unified Payment inter face is the mobile banking platform developed by the National Payment Corporation of India in 11th April 2016 by the Ex RBI governor Raghuram Rajan the payment interface is got famous among people after the banning of the 500 and 1000 rupee notes in India by the Prime Minister. Just like the other mobile banking and cashless transaction techniques the UPI has also made huge growth after that. Later the wallet based mobile platforms gets more difficult and UPI become famous because the transaction speed and bank to bank transfer. Unified Payments Interface (UPI) is a trending payments system in India now-a-days, UPI is the fastest payments gateway and has been developed by the National Payments Corporation of India (NPCI) regulated by Reserve Bank of India (RBI). UPI is totally built by the already available IMPS technology which enables a user to instantly transfer funds between their bank accounts through UPI Virtual Address (unique ID generated by the bank) or by using their Bank Account Number and IFS Code (Jayadevan, 2018)

How the UPI works

To starts a UPI transaction first you have to link your bank account with the UPI apps. there are various kind of UPI based apps are available for free some of them provide lots of offers and cash backs to attract more new users like Phone Pay, G pay powered by Google, Pay TM, Razor pay....etc. after downloading the desired UPI app in you smart phone you have to set up your bank account with the mobile number registered with the account. Bank sends you to the OTP to the mobile number associated with account and enter them the app to

complete the registration process. Then you need to provide additional details like debit card numbers etc. and you have to set a UPI pin just like your ATM pin. The UPI pin generally use six digit numbers also called M PIN. You have to remember the M PIN for making any transaction using this UPI account. After the registration complete you got a UPI ID called VPA (Virtual Private Address) it's like a mail id. It's your virtual ID for making online transactions.

UPI Advantages

There are various advantages to the unified payment interfaces the major advantages are listed below:

1. It can use like their account number and IFSC code etc: It can only need to know their VPA or both of the person using same online app for the transactions only need to save their mobile number into the mobile phone.
2. There are no service charges for transactions as of now.
3. It is an instant transfer platform money - debited from the account and instantly credited to their account within no time
4. It's almost act like a wallet – It can also use this online platform to book tickets for travels, pay various bills, buying movie tickets, sending money to various government relief funds within one or two touches with mobile phones.
5. Service initiated by the government - the apps may owned by private companies but ultimately the service is initiated by the Central Government and RBI so it's a Government initiative to encourage cashless economy.
6. Need not to create any additional account like wallet.
7. It can also use your banks UPI apps or other third party apps (Moorthy, 2016)

Famous UPI Based apps

1. Google Pay (formally known as TEZ)
2. Phone pay
4. BHIM UPI
3. Pay TM
4. Razor pay

Review of Literature

1. **Divakar Mandal, (2018)** “From PPIs to UPI Indian Mobile Payments are Evolving”: The researcher analyses the latest trends in mobile banking platforms in India and its evolution from PPI(Prepaid Payment Instrument) to the latest UPI (Unified Payment Interface). He also provide the details about the various players in the UPI based mobile banking platforms and their market shares and their changes in the recent times (Mandal, 2018)
2. **Nupur A. vishne and Radhika Basavaraj Kakade, (2017)** “Unified Payment Interface (UPI) - A Way towards Cashless Economy”: the article is about how the UPI payments systems are working and how to set up a UPI platform in your smart phones. Also includes the details about the various online payment techniques used in Indian and their market shares. It's give the introduction to the UPI platforms and their evolves in the market. (Kakade & Veshne, 2017).
3. **Shivakumar Goel and Deepak Kailash Gupta, (2017)** “A Review on Unified Payment Interface [UPI]: in this scholarly article the authors are mentions the various differences between the UPI and other mobile banking techniques like NEFT and IMPS. They also provide the pictorial representation of the work flow of the UPI (Goel & Gupta, 2017).

Objectives of the Study

1. To know the evolution of Mobile banking after the implementation of the UPI.
2. To find out the growth rate of various mobile based payment applications.

Statement of the Problem

Using the smart phones it can send money to friends or relatives or any one with just like sending text messages to them. The revolutionary method of fund transfer with your Virtual Payment Address (VPA) was developed by the National Payment Corporation of India in 2016. After the implementation of UPI and introduction BHIM (the Indian Government owned UPI app) the UPI transaction has familiar among people. The entry of the Google, Pay TM and Phone Pay people are very much attracted with their offers and scratch card offers for sending and receiving money. Because of it's a new technology there hasn't enough study conducted in this area. The intention of the paper is to discuss the various UPI payments apps and their growth rates in recent scenario.

Research Methodology

The data were collected from various secondary sources like publications, magazines, websites, and statistics provided in the National Payment Corporation of India.

Research Design

The methodology used for the study is in descriptive nature, because the study used already published data in NPCI and RBI websites.

Limitations of the Study

1. This study is merely used secondary data only no primary data were used.
2. The UPI apps are used various kind of reward systems to attract more users and it has major impact on their market share increase or decrease, that part didn't include in this study.
3. The study excluded the wallet based payment system that's also a mobile based payment platform.

Analysis and Interpretation of Data

Table1. UPI Growth Story

Month	VOLUMN	VALUE(RS Cr)
Aug-16	92000	3.1
Nov-16	285000	100.45
Dec-16	1.96 M	706.16
Jun-17	10.1 M	3067.05
Sep-17	30.1 M	5293.4
Nov-17	105 M	9679.2

Data: NPCI

Source: Bhata, 2017

Above the table shows that the growth rate of the UPI based transactions of the first 12 months from its implementation in 2016. It's easy to understand that the growth rate is very high and phenomenal in the month of August 16.

Table2. No of Banks Live on Unified Payment Interface

Month	No. of Banks live on UPI
July - 2019	143
January - 2019	134
July - 2018	114
January - 2018	71

July - 2017	53
January-2017	36
August - 2016	21

Source: (National Payment Corporation of India (2018))

This table clearly state that the involvement of the banks in the UPI segment is rapidly growing. at the time of the introduction of the UPI only 21 banks are involved and now its 143 banks associated with the Unified Payment Interface.

Suggestions

In this study clearly states that the UPI based payment platform are playing a crucial role in the mobile based payments. And there are various private corporate giants like Google, Phone Pay, Pay TM, Amazon and other companies playing their marketing tricks to attract more users in their UPI apps. The Government has to strictly over look them to protect the customer's rights and proper systems to dispute the UPI related complaints especially the money debited from account and not received the benefits. It's a common error occurred sometimes due to various reasons. The money doesn't loss but it took 3 to 7 working days to get back. the government must support the BHIM UPI (Bharath Interface for Money) is the government owned UPI app is reducing the market shares due to the high competition, government must have provide more offers and cash backs to be a focus for more people to its UPI platform.

Conclusion

The researcher find the study concluded that the Unified payment interface is still new in India and its evolving and developing in very rapidly. Google Pay Tm and Phone pay are the major contributors of this latest payment methods and the government owned BHIM app is losing its market shares while other hold more and more with their cash backs and other various marketing techniques. UPI is ideal for smaller fund transfer, when an amount is high than other modes of online transfer are preferable.

Scope for Further Study

This study conducted a descriptive analysis of the current UPI structure in India and its growth rates by using the available resources in the National Payment Corporations websites and from various other sources. This study doesn't include the user satisfaction about various UPI based apps and their trust worthiness among them, there is a scope for further research in that area.

References

1. Bhakta, P. (2017, December 15). *Story behind surge in UPI transactions and what can make it truly transformational*. Retrieved August 27, 2019, from Economic Times: <https://economictimes.indiatimes.com/small-biz/startups/features/story-behind-surge-in-upi-transactions-and-what-can-make-it-truly-transformational/articleshow/62075406.cms?from=mdr>
2. GANTI, A. (2019, August 4). *Unified Payment Interface(UPI)*. Retrieved August 29, 2019, from Investopedia: <https://www.investopedia.com/terms/u/unified-payment-interface-upi.asp>
3. Goel, S., & Gupta, D. K. (2017). *A Review on Unfied Payment Interface [UPI]*. Retrieved august 29, 2019, from ijsrd: <http://www.ijserd.com/articles/IJSRDV5I41170.pdf>
4. Jayadevan, J. (2018, March 27). *All you should know about Unified Payments Interface (UPI)*. Retrieved august 30, 2019, from esds: <https://www.esds.co.in/blog/know-unified-payments-interface-upi/#sthash.gGaslvFu.dpbs>
5. Kakade, R. B., & Veshne, N. A. (2017, Novemebr). *UNIFIED PAYMENT INTERFACE (UPI) - A WAY TOWARDS CASHLESS*. Retrieved August 30, 2019, from <https://www.irjet.net>: <https://www.irjet.net/archives/V4/i11/IRJET-V4I11136.pdf>
6. Mandal, D. (2018, February 12). *From PPIs to UPI – Indian Mobile Payments Are Evolving*. Retrieved August 29, 2019, from gomedici: <https://gomedici.com/from-ppis-to-upi-indian-mobile-payments-are-evolving>
7. Moorthy, V. (2016, December 29). *UPI - Simple Introduction*. Retrieved August 28, 2019, from A Medium Corporation[US]: https://medium.com/@vel_Indian/upi-simple-introduction-6ac68a740ca9
8. National Payment Corporation of India. (2018, August 8). *UPI Product Statistics*. Retrieved August 30, 2019, from NPCI: <https://www.npci.org.in/product-statistics/upi-product-statistics>