



A STUDY ON GROWTH OF UPI APPS IN INDIA AFTER COVID OUTBREAK

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ABSTRACT

India's tech prowess was on display when it built and delivered its digital payments system Unified Payments Interface or UPI. Since its inception in 2016, UPI has achieved various milestones and has become the most preferred mode of payments among Indians. Unified Payments Interface (UPI) is an instant real-time payment system developed by National Payments Corporation of India (NPCI) facilitating inter-bank peer-to-peer (P2P) and person-to-merchant (P2M) transactions. The interface is regulated by the Reserve Bank of India (RBI) and works by instantly transferring funds between two bank accounts on a mobile platform. In the covid pandemic when social distancing is the most critical norm, the Unified Payments Interface (UPI) is like a godsend. The instant real-time payment system has turned out to be the best financial innovation post-Independence in India and has begun in earnest the process of replacing the cash economy altogether. It has contributed its might to make the country one of the fastest growing digital economies in the world.

KEYWORDS

Unified Payment interface, National Payments Corporation of India(NPCI), Financial inclusion

INTRODUCTION

In April 2009 with the objective to integrate all the payment mechanism available in the country and make it uniform for retail payments, National Payment Corporation of India was formed. By March 2011, RBI found out that in India only six non-cash transactions happen every year per individual citizen while 10 million retailers accept card base payment. Around 145 million families have no access to any form of banking. There is also the problem to tackle black money and corruption that happens mostly in cash. RBI in 2012 released a vision statement for a period of four years that indicated commitment towards building a safe, efficient, accessible, inclusive, interoperable and authorized payment and settlement system in India. It is part of the Green Initiative to decrease the usage of paper in domestic payments market. UPI was officially launched in 2016 for public use. Under RBI guidance, NPCI became the primary body with the task to develop a new payment system that is simple, secure and interoperable. UPI works on four pillar push-pull interoperable model where there will be remitter/beneficiary front end PSP (payment service provider) and remitter/beneficiary back-end bank that settles the monetary transaction for the users. UPI became one of the most successful deep tech innovations coming out of India. With exponential growth of UPI, India became the world's largest real-time payment market with 25.5 billion annual transactions in 2020 as per data from ACI Worldwide and Global Data leaving behind China and the United States.

As per the Economist Intelligence Unit Report 2021, UPI made India a leader in global real-time payment market followed by China and South Korea. After the decision of Ministry of Finance to nullify merchant discount rate (MDR) in 2019 on UPI, the number of low value transactions skyrocketed making huge gains on real-time transaction volume data. Many nations such as Brazil, Bahrain, Saudi Arabia, Singapore, United States and European Union are now trying to emulate the success of UPI in their own market.

REVIEW OF LITERATURE

Somanjoli Mohapatra (2017) In their study reported that the 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 ushering in a less-cash society in India.

Radhika Basavaraj Kakade, Prof. Nupur A. Veshne (2017) In their study reported that the UPI has made digital transaction for individuals as easy as sending text messages. Service is available 24X7, not like RTGS or NEFT which don't work on holidays or during non-banking hours. This will bring enormous efficiency in the system and help India become a truly cashless economy.

Roshna Thomas, Dr. Abhijeet Chatterjee (2017) The study reported that UPI is a tool with compatible features that can make monetary transactions easy and affordable to the customers though it is difficult to sideline the challenges. A strong Aadhar platform (UID) combined with statistics for the country pertaining to increased financial inclusion, Smartphone adoption and telecom subscription indicate positive prospects for UPI whereas competition from mobile wallets and possible cases of failure from banks to overcome technical errors especially relating to the front-end platform designed by them may negatively impact the scope of this innovative payment tool.

Ravish Rana (2017) In their study reported that adoption of digital payment is influenced by the education level of the customer. If a person has studied beyond matriculation and internet savvy, he or she will be inclined to use the digital payment mode. It was also found that in the areas/region where education level is high such as Delhi(NCR) and other metropolitan area, the possibility of acceptance of digital payment is much higher. The growth of users of Smartphone and internet penetration in such area also facilitated the adoption of digital payment.

STATEMENT OF PROBLEM

The Covid pandemic seems to have made people focus on contactless payments in their daily life. Though a significant number of people started using contactless payment options such as UPI (Unified Payment Interface) even before the pandemic, its usage has gone up significantly post-lockdown. The growth is significant as it not only points at increasing traction for digital payments in India but also a revival in business activity following pandemic-induced lockdowns in May. Now, with experts expecting transaction growth to sustain, three billion UPI transactions a month—an average of 100 million daily—could soon be a reality.

OBJECTIVES OF THE PAPER

- To study the concept of UPI.
- To know the impact of UPI.
- To study the growth of UPIs due to covid pandemic.
- To know the challenges faced by UPI apps.

RESEARCH METHODOLOGY

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

UNIFIED PAYMENTS INTERFACE (UPI)

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.

With the above context in mind, NPCI conducted a pilot 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.

Blown away by the framework of UPI, even Google had written to the US Federal Reserve Board about the successful example of NPCI-owned payment railroad to build faster digital payments service in the country. UPI has just completed its fifth fiscal year. While the first fiscal year (FY17) was the testing period, it came into limelight and picked up pace post demonetization era.

FEATURES OF UPI

- Any UPI client app may be used and multiple bank accounts may be linked to single app
- Instant payments possible (through Immediate Payment Service (IMPS) which is faster than NEFT), can be used 24*7
- 2 factor authentication process
- Uses Virtual Payment Address which is a unique ID as given by the bank
- Bill Sharing facility available
- Complaints can be filed from mobile app directly

WHAT HAS BEEN ITS IMPACT?

- UPI has been a boon to the Indian consumers. It has made transactions a lot easier with the facility of instant payments available 24*7 and since it only needs a virtual payment address to make payments, it has eliminated the need to enter bank details or other sensitive information each time a customer initiates a transaction.
- Interoperability between banks is also a unique feature of UPI. Unlike e-wallets earlier, a user doesn't need to store money in a separate wallet for each app.
- And with introduction of UPI 2.0, a user can also pay bills and make payments to merchants. There's also a facility to autopay in case of recurring payments.
- UPI has also enabled many new businesses to flourish. It has helped create business for a lot of Fintech companies and start-ups in India. UPI's network allows banks, e-wallets, and payment service companies to link with the framework and create applications via a smartphone device. It also acts as a domain portal for payments.
- For start-ups, it has opened up many doors to develop creative ideas that can improve the consumer experience. There is a huge scope of innovation in this area.
- Merchant-client relationship has improved tremendously. Customers no longer need to think about storing their payment details on the merchants' side. It definitely helps the small businesses for whom the degree of confidence of the consumer is weak, and the current expense of the payment gateways is prohibitive.

FINANCIAL INCLUSION

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.

SCOPE OF UPI

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.

GROWTH OF UPI APPS IN INDIA AFTER COVID OUTBREAK

The last fiscal data captures the explosion in mobile-based instant inter-bank transactions facilitated by UPI. Across the country, merchants, service providers, small companies, and traders have already made UPI a part of their daily life. The instant transfer of funds between two bank accounts on a mobile platform, and the fact that it is regulated by the RBI, have made it a darling of the payment ecosystem.

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. As of March 2021, the total volume has jumped to 2,732 million transactions, worth ₹5,04,886 crore. At the beginning of the fiscal, in April 2020, the total volume stood at 999.6 million with the total value of transactions at ₹1,51,141 crore.

The number of banks that are live on UPI has gone up to 216 from 153 in April 2020. When the platform began operations in April 2016, there were only 21 banks on board.

As the pandemic set in and consumers started opting for digital payments, UPI transactions grew in double digits through the lockdown months. The recent slowdown in growth could be attributed to rising transaction failures because of frequent technical glitches at banks, which also dethroned Google Pay as the UPI market leader. Google Pay had registered 857.8 million transactions in October and reached a peak of 960 million transactions in November, commanding close to 43% market share in UPI payments. The platform has seen a continuous drop in transactions since. It recorded 854.4 million transactions in December, 853.5 million in January, and 827.86 million in February.

UPI market leader PhonePe also crossed a milestone during March. "We crossed a billion UPI transactions in March. Last month, the total transactions on our platforms across the payment instruments of wallet, card, and UPI that we offer stood at 1.3 billion," a PhonePe spokesperson said.

Bharat Interface for Money (BHIM), an Indian mobile payments app based on UPI and developed by the NPCI, has seen a growth in transactions too. The app, which reported around 14 million transactions (at a value of ₹4,504 crore) in April 2020, has reported 24.4 million (₹7,653 crore) in March 2021.

Indian banks, especially smaller banks, have also reported a jump in their number of transactions, though the base continues to be small. Axis Bank and YES Bank have reported the fastest growth to 72.9 million transactions (2 million a year ago) and 29.1 million (1.9 million a year ago), respectively. Large-sized banks have, however, reported a slower growth. ICICI Bank, which reported 10.6 million transactions in April 2020, has shown 13.95 million in March 2021. India's largest commercial bank, State Bank of India, reported 4.6 million transactions vis-à-vis 2.7 million reported a year ago.

Asked about the reasons for this growth, Mahabaleshwara MS, Managing Director and Chief Executive Officer of Karnataka Bank Ltd, told that, the urge among people to go in for contactless payment options is one of the important factors for the growth of UPIs in the post-covid scenario. While demonetisation triggered compulsions for alternative channels of payment, the user-friendly characters of UPI platform led to the easy adoption by masses prior to the country witnessing Covid pandemic, stating that future banking is driven by digital innovations and a lot of contactless initiatives have been happening in the banking space and UPI is one among them. Contactless banking is the perfect remedy for Covid-type of situations as well as further enhancing the efficiency of banking.”

LIMITATIONS ON GROWTH OF UPI

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 centres is 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. This triggers a platform risk of existing infrastructure to become incapable of handling such high volumes of transactions. Since UPI transactions are expected to grow in the future, there is a need for building adequate infrastructural capability for all stakeholders.
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. Thus, customer experience is hampered due to high failure rates.
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.
4. Complex structure and multiple failure points: UPI transactions are carried out involving the core banking systems of both sender and receiver banks. The UPI payment architecture has a complex structure and multiple failure points. There are four participants (the PSP, sender bank, NPCI and receiver bank) involved in a transaction and a typical UPI transaction flow involves 18 steps, thus increasing the risk of potential failures

CONCLUSION

The growth of UPI apps in India post 2020, its contribution to digitalisation, development of many fintech companies and start-ups and the payment system recording two billion transactions in a month are phenomenal for the digital payment space. The transparency in the economy will increase through the digital payment apps. This will increase the credibility of the country and make a rise in investments. While there are new business areas that are adopting UPI, the payment system must also focus on building required infrastructure for absorbing such large-scale growth and minimising technical failures.

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