



UPI (UNIFIED PAYMENTS INTERFACE): A BOON FOR MERCHANT PAYMENT IN INDIA

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ABSTRACT:

The digital payments space has been changing by various key drivers like value propositions, conducive infrastructure, supportive regulations, and next generation technologies. Digital payments landscape has been pushed by use of innovative technology. Major payment drivers like QR (Quick Response) codes, NFC (Near Field Communication), Digital Mobile Wallets, and Smart Phones have impacted the adoption of digital payments by millions of users. The success of digital payment depends on several factors. For Merchants and Customers, the perceived functional benefits like ease of use and onboarding, awareness levels and perceived performance levels are key factors as compared to traditional factors like exchanging cash. Payments in the online space are facilitated by a number of intermediaries like the payment gateways and payment aggregators. These intermediaries act as the bridge between the providers of goods / services (merchants) and those that require them (customers). For a successful online experience, the role of such intermediaries is crucial. Efforts have been made in this research to focus on the merchant payments space in India, its growth and development and UPI as payments instruments for merchants in India.

Keywords: Digital Wallets, MDR (Merchants Discount Rate), Merchant Payment, Mobile Payments, QR (Quick Response) code, UPI (Unified Payments Interface).

I. INTRODUCTION

In an online payment transaction, the following entities / players are generally involved – seller (merchant), customer (buyer), customer's bank / wallet account, acquiring bank, the bank having the nodal account, IT and communication hardware / software, middleware, security systems, payment gateways and payment aggregators. The means opted for payment could be a credit card, debit card, bank account, wallet, Unified Payments Interface (UPI), etc. Depending on the payment mode used, additional players like card networks, NPCI (National Payments Corporation of India), banks offering net-banking services, banks / non-banks issuing wallets, etc. may be part of the payment chain. The intermediaries involved in payment collection and settlement between customers and merchants range from banks providing payment gateway services, non-bank aggregators



of merchants and payment options / instruments, technology service providers supporting payment gateway operations and e-commerce marketplaces. Merchant banking services, in India, were started only in 1967 by National Grindlays. Bank followed by Citi Bank in 1970. The State Bank of India was the first Indian commercial bank to set up a separate merchant banking division in 1972. Later, the ICICI set up its merchant banking division in 1973 followed by a number of other commercial banks like Canara Bank, Bank of Baroda, Bank of India, Syndicate Bank, Punjab National Bank, Central Bank of India, UCO Bank, etc. In order to boost digital payments in India, Finance Minister, Ms. Nirmala Sitharaman, in Union Budget announced various measures to boost digital payments like zero MDR (Merchant Discount Rate), business establishments having an annual turnover of more than Rs. 50 Crore are required to provide their customers various low cost digital payments modes. There is a requirement to incentivise and boost digital payments space by making concrete endeavours. Merchant Acquiring is not related to only Banks, but it is also becoming a business for non-bank players. Many fintech companies like PhonePe, Google Pay, MobiKwik, Freecharge, Razorpay and others are doing well in this digital payments space.

II. REVIEW OF LITERATURE

Somanjili Mohapatra (2017) studied that UPI came as a superior customer experience payment instrument across all the payment instruments developed and approved by NPCI and RBI. The interoperability makes UPI the game changer in the payment instruments. Other factors like increasing smart phones, availability of internet at decreasing rate, seamless experience of money transfer, and great access of banking facilities have influence on the proliferation of UPI and digitalisation campaign in India.(6)

Sanghita Roy and Indrajit Sinha (2017) made a research report titled “Factors affecting customers adoption of Electronic Payment” identified factors which influenced customers’ adoption of electronic payments services. They identified several factors among which were perceived ease of usage, perceived usefulness and security towards adoption of electronic payments instruments. (7)

Roopali Batra and Neha Karla (2016) investigated in their report “Are Digital wallets new currency?” the period of digitisation, client recognition, utilisation of design and fulfilment level with respect to advancements in wallet usage. They studied total 52 respondents in their survey and concluded that there is the tremendous scope and opportunity untapped by digital payments instruments ahead.(8)

Dr. Dhani Shankar Chaubey and Piyush Kumar (2017) jointly made a research on “demonetization and its impact on adoption of digital payment: opportunities, issues and challenges”. They analysed digital payment industry and customer perception towards digital banking channels after demonetization. They found that demonetization led people to think rationally about digital payment instruments after demonetization. They analysed the readiness of people for the acceptance of digital channels but they denied for the cost of digital payments. In the context of world, digital channels are being adopted increasingly due to their various benefits.(9)



Mohd. Forman and Waseem Khan (2017) studied “factors affecting adoption of mobile based internet banking in emerging market”. They analysed that the age was the main factor that affect the evaluation of the digital service usage, satisfaction of the digital channels. They reported that there was no relationship between the risk of transaction failure and inconvenience of mobile banking usage. The study also revealed that younger users of age below 25 years were having more trust in digital banking than that of users having age of above 25 years.(10)

III. MOBILEPAYMENTS GROWTH IN INDIA

Mobile payments handled by mobile devices are soaring in India led by “Digital India” campaign. To execute “Digital India” campaign, several measures have been initiated by the government to expedite the growth of digital payments in India. Initiatives taken namely digital payments ecosystem, data localisation, interoperability between wallets, and increase in minimum net worth requirements of MPSPs, simplification and standardisation in KYC rules etc. have strengthen digital payments boost to the country. Apart from these initiatives, one more initiative taken by Finance Minister, Smt. Nirmala Sitharaman, zeroing MDR on UPI and RuPay Debit Cards payments have really benchmarked digital boost in the economy. Following this boost, various merchants whether small or large have started getting payments through made-in India payments instruments namely UPI and RuPay.

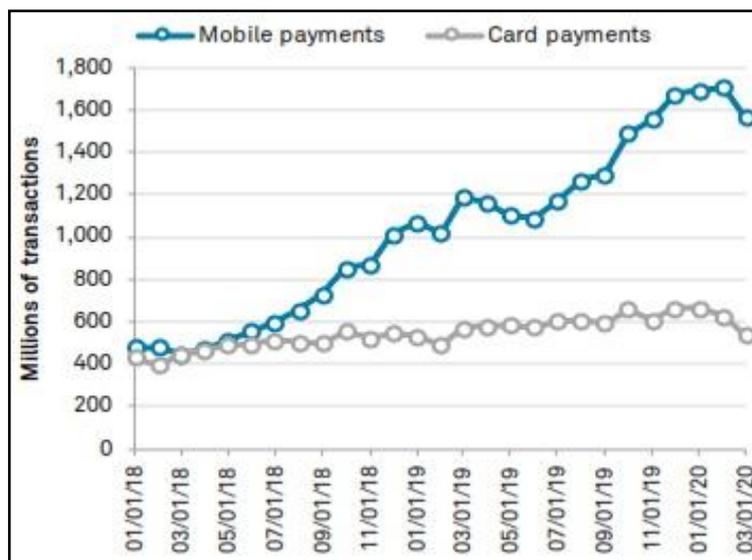


Fig. 1: Mobile Payments vs Cards Payments

In 2019, mobile payments including account-to-account transfer and stored-value accounts rose to 163 per cent by \$287 billion while point-of-sale (POS) transactions including debit and credit cards rose to 24 per cent by \$204 billion.

IV. GROWTH AND DEVELOPMENTIN MERCHANT PAYMENTS:

Technology developments and mobile evolutions from feature phones to smart phones has led the growth of digital payments in India since last two decades. As USSD (Unstructured Supplementary Service Data) is



limited to feature phone only, users can't do anymore payments transactions. But, smartphones has led users to do various payment transactions via P2P transactions, QR code transactions, voice banking and digital payments over the internet. This can be possible due an increase in smartphones user base. It is forecasted smartphones user base will increase 829 million by 2022 growing at a CAGR of 15.5 per cent.¹ RBI (Reserve Bank of India), Central and State Governments, Industrial associations like IBA (Indian Bank Association), and Payments Corporations have led digital payments growth in India. NPCI (National Payment Corporation of India) which is an Apex institute for India's Payments Settlement jointly with IBA and RBI launched UPI (Unified Payments Interface) back in 2016 at the time of demonetisation. Digital payments transactions turnover as a percentage of GDP (Gross Domestic Product) increased from 7.14 per cent in 2016 to 8.42 per cent in 2018². Per capita digital transactions rose from 2.4 per cent to in 2019 and has the potential to grow to 220 by 2021³. In India, the payments landscape is growing faster than world payments average rankings. The key drivers pushing India's payments growth are emergence of mobile payments service providers (MPSPs), evolving business services by new entrants, supportive government policies, robust payments infrastructure, and high consumer adoption. One of the key factors responsible for immersive growth of mobile payments in India is the growth of mobile wallets. Various mobile wallets players have also played a key role at the time of demonetisation for digitisation of payments mechanism. The ease of mobile payments through wallets, ubiquity and convenience were among the top factors which were responsible for the drastic growth of mobile wallets in India. As per the report of Business Wire, the Indian Mobile wallet market continue to expand its market share at a CAGR of nearly 52.2 per cent by volume during 2019-2023.⁴ The next wave in the mobile payments came because of UPI (Unified Payments Interface) based on RTP (Real Time Payments) which works on IMPS (Immediate Payments Service) mechanism.

The data available shows immense adoption of UPI as it processed USD93 billion till May 2019 which is more than combined value of 2016-18⁵. The volume of UPI transactions have increased at a CAGR of 246 per cent during the period of January 2017 to June 2019.⁶ After the skyrocketed growth of UPI in 2017, UPI has made a new footprints in the year of 2019 also. It has started taking away some share from the digital payments market from traditional payments instruments like debit cards, credit cards and net banking.

¹ Smartphone users in India to double to 829 mn by 2022, Financial Express, December 2018

² Payment and Settlement Systems in India: Vision- 2019-2021, Reserve Bank of India, May 2019

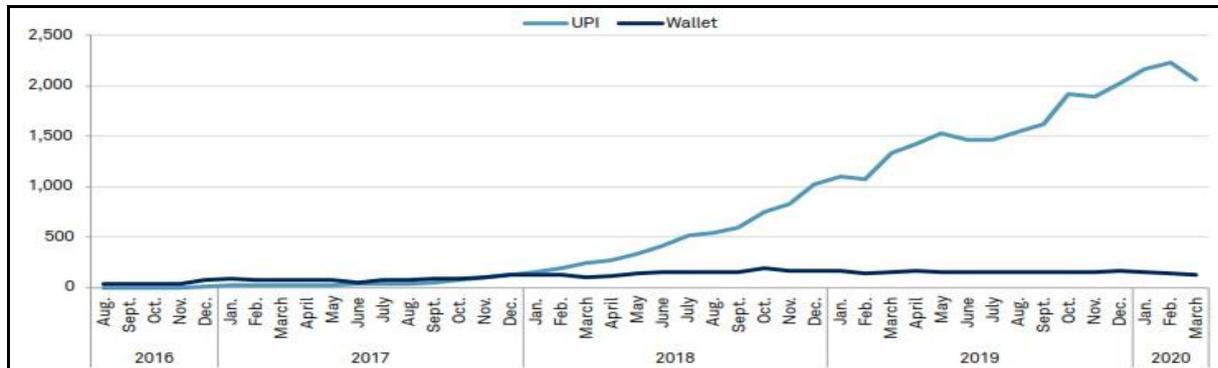
³ Report of the high Level Committee on Depending of Digital Payments, Nandan Nilekani Committee, May 2019

⁴ Indian Mobile Wallet Market estimate, Business Wire, July 2019

⁵ UPI Product statistics, NPCI, May 2019

⁶ UPI Product Statistics, NPCI, May 2019

UPI dominating Digital Wallets



Source: S & P Global Market intelligence

Fig. 2: UPI Payments vs Digital Wallets Payments

The launch of UPI platform in 2016 and tougher norms laid down for PPI instruments by RBI caused digital wallets growth slowdown. Other restrictions like transfer of money from one digital wallet to another digital wallet, stricter KYC norms became obstacles for digital wallets revolution. Banks also have benefited from the UPI customers switching from digital wallets to UPI platform as their money remained deposited with the banks. It is visible from Fig. 2 that UPI based payments are on increasing space in India since the inception of UPI system in 2016. Wallets based payments have been declined due to various drawbacks of mobile wallets service providers like inability to do full KYC within stipulated time frame, inability to provide various modes of loading money into wallet including credit card etc. UPI based digital payments have surpassed from 2018 with the growth of digital payments and digital India campaign. Various UPI service providers including Google Pay, PhonePe, Amazon Pay, Paytm etc. have started providing various services to their customers using UPI.

Here is, UPI service provider, Google Pay has amassed through bouquet of various digital services in India.

Google Pay offering expanded Features Set in India

		U.S.	GERMANY	JAPAN	U.K.	INDIA
FEATURES	Pay in shops	●	●	●	●	●
	Pay online or in-app	●	●	●	●	●
	Pay for travel by train/bus	●		●	●	●
	Send money to individuals	●				●
	Prepaid mobile recharge					●
	Pay utility bills, insurance premium					●
	Buy gold					●
FUNDING & ACCEPTANCE METHODS	Debit credit cards	●	●	●	●	●
	Bank accounts	●				●
	PayPal account	●	●			
	NFC enabled payments	●	●	●	●	●
	QR code payments					●

Source: S&P Global Market Intelligence



Alphabet's Inc.'s Google Pay and Amazon.com's Amazon Pay are trying to become leading financial intermediaries in India. Google Pay has already become the largest payment processor intermediary running on UPI infrastructure has processed nearly 4 billion transactions in 2019 as per S&P Global Market Intelligence Report. Amazon Pay has started offering its wide range of features set in India to customers and merchants than its four largest markets in terms of its net sales. With the big leap of Facebook's WhatsApp Pay, the U.S. based giants have started various efforts to extend their big moves in India. Google's quest to move money has long been iterating on its payments strategies and expanding in various countries allowing people to add credit and debit cards for making online and contactless in-store merchants payments.

V. CONCLUSION

The downward impact of COVID-19 has found to be significant on payments industry, but, its impact is not repairable. Payments mechanism which were physical in nature, can't withstand in current times of pandemic, and need arises with the digital payments mechanism. This pandemic has compelled individuals and organisations to rethink about digital payments infrastructure to avoid disruption in the payments system. Moreover, the pandemic has lit a spotlight on the vendors which are heavily reliant on cash and inflexible and unable to adapt to digital payments instruments. Cash is not expected to disappear in the near future although many vendors and sellers have jumped to digital modes of payments collection. Thus, COVID-19 may have given a sizable push in the endeavour to marginalise cash transactions but, it is not completely eradicated cash from the payment system. UPI with zero MDR pushed digital transactions space in the payment system to get many customers in the time of COVID-19 pandemic.

VI. REFERENCES

- 1) PTI. (2018 December 3). Smartphone users in India to double to 829 mn by 2022. Financial Express. Retrieved from Smartphone users in India to double to 829 mn by 2022: Report - The Financial Express
- 2) RBI Press Release. (2019 May 15). Payment and Settlement Systems in India: Vision- 2019-2021. Reserve Bank of India. Retrieved from Reserve Bank of India - Press Releases (rbi.org.in)
- 3) RBI Report. (2019 May). Report of the high Level Committee on Depending of Digital Payments. Nandan Nilekani Committee. Retrieved from CDDP03062019634B0EEF3F7144C3B65360B280E420AC.PDF (rbi.org.in)
- 4) Indian Mobile Wallet Market estimate, Business Wire, July 2019.
- 5) UPI Product statistics, NPCI, May 2019
- 6) Mohapatra S. (2017). Unified Payment Interface (UPI): A Cashless Indian E-Transaction Process. New Delhi Publishers. 5, 2, 29 – 42, June
- 7) Roy S., Sinha I. (2017). Factors affecting Customers' adoption of Electronic Payment: An Empirical Analysis. IOSR Journal of Business and Management, Volume 19(Issue 12), 76-90.
- 8) Batra R., Kalra N. (2016). "Are Digital Wallets The New Currency?", Apeejay Journal of Management and Technology, Vol 11, No 1, January 2016.

- 9) Chaubey, D. & Kumar, P. (2017). "Demonetization and its impact on adoption of Digital payment: Opportunities, Issues and Challenges". Researchgate, Volume 6, Issue 6.
- 10) Khan, W. & Farhan, M. (2017). "Factors affecting adoption of mobile based internet banking in emerging market: study of the Indian consumer's observation." Research gate, Vol.22.