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Growth of Digital Transactions and the Emergence of FinTech in India

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Abstract

In view of the growing ecosystem and infrastructure favoring digital transactions in India and the world, this paper intends to provide an overview of the current advancements in the domain of Fintech, with a focus on digital payments and the factors that led to the rise of the overall industry from the context of market players, consumers and the facilitating agencies and organizations including the reforms and initiatives led by the government in enabling the huge growth in the country. The paper also seeks to understand and suggest the prospects of the future growth and direction of the industry so that an implementation plan can be made as per the predictions of the associated market.

Keywords: Digital transactions, Fintech, Digital Payments

Introduction

Over the past two decades in India, technology developments and evolution of device from factors have led to a gradual transformation of digital payments. The advent of internet and the rapid adoption of smartphones has opened a variety of new markets including one that encompasses the online payment technologies, accentuated with the rise of UPI and certain governmental interventions have enabled a conducive environment for the growth of digital payments in India. The financial services domain has observed a massive inclination towards the digital ecosystem and have opened a surfeit of opportunities around FinTech.

While features phones were limited to USSD (unstructured supplementary service data), the advent of smartphones and the internet has opened a host of form factors and access to payment technologies. Parallelly, rise of smartphone users along with the availability of internet at one of the cheapest rates in the world has been decisive in the exponential growth of digital transactions in India.

Global landscape of digital payments

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According to the data by Bank for International Settlements, with a total volume of cashless payments standing at 24,430 million, India saw an increase in digital transactions by 54.5% in 2018, as compared to 48% in the case of China and 23% in case of Indonesia. Being a developed economy with a mature market for card transactions, the UK saw a growth of 10% for cashless transactions. With a CAGR of 20.2%, India is being forecasted to experience the highest growth in terms of the value of digital payment transactions between 2019 and 2023, ahead of even China and the United States of America. Lack of digital infrastructure and high population without access to banking services is one of the reasons for comparatively lower adoption of mobile payments in the emerging economies.

Table No: Table shows the overall growth of digital payments according to volume and value of transactions

Table 1: Overall Growth of Digital Payments in India

Reference Period	Volume of Transactions(in lakhs)	Percentage change	Value of Transactions (Rs. In crores)	Percentage Change
2012-2013	65,812		5,53,51,198	
2013-2014	80,353	22	6,40,61,822	16
2014-2015	98,695	23	7,24,00,501	13
2015-2016	1,20,593	22	8,02,26,850	11
2016-2017	1,57,412	31	9,59,12,592	20
2017-2018	1,90,858	21	11,64,68,676	21
2018-2019	2,36,484	24	13,29,05,595	14
2019-2020*	2,48,850	5	13,97,59,460	5
2020-2021*	2,77,126	11	15,26,51,924	9
Mean	1,35,744		8,81,89,605	
CV (%)	45.82		32.18	
CGR (%)	24.11		15.84	

Source: Reports from reserve bank of India

For year-on-year basis, Table 1 indicates that there is a gradually increasing trend of digital payments in India both in terms of volume and value of transactions. On an average, 135,744 lakhs volume of transactions (CV 45.82%) brings the digital payment value to INR 881,896.05 billion (CV 32.18%) per year across the study period. The Compound Growth Rate for the study period 2012-2013 to 2018-2019 indicates volume growth rate of transactions at 24.11% and value growth rate of transactions at 15.84% of the country's digital payment system. Moreover, the growth of digital payments is likely to be nearly 28,000 lakhs in terms of volume of transactions and INR 1526,519 billion in terms of value of transactions in 2020-2021 with growth rate of 17.19 percent and 14.86 percent respectively over the year 2018-2019. The actual overall growth rate of digital payment transactions in terms of volume is lower than expected during the study period 2014-2015 to 2017-2018. It started an upward trend since 2018-19 (refer to Figure 1). The actual overall growth rate of digital payment transactions in terms of value of transactions was higher than

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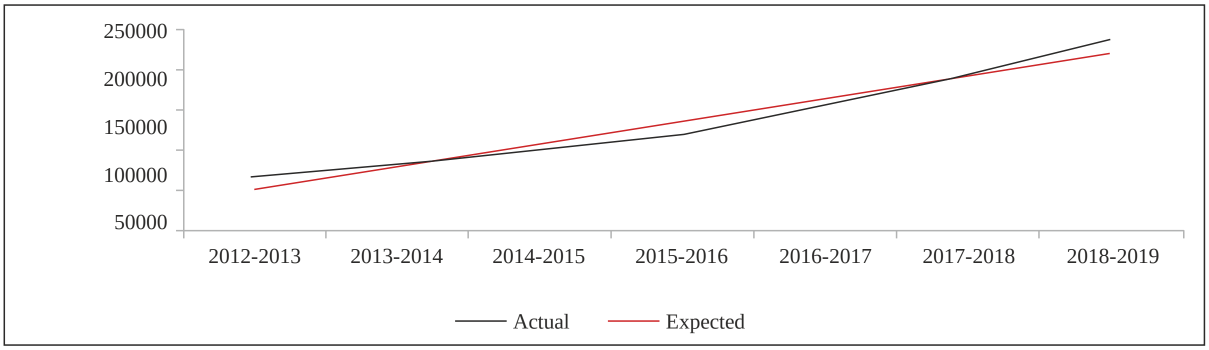
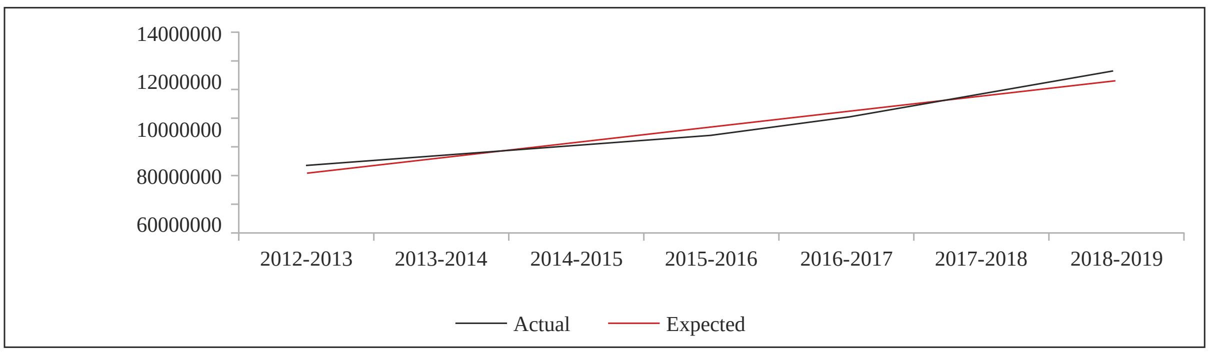
expected during the periods 2012-13 and 2013-14, whereas it has seen an increasing trend since 2017-2018.

Figure 1: Growth Movement in Volume of Transactions in Digital Payments



Source: Reports from reserve bank of India

Figure 2: Growth Movement in Value of Transactions in Digital Payments



Source: Reports from reserve bank of India

Table 2: Growth of Digital Payments across categories

Mode	Volume of Transactions (in lakh)		Value of Transactions (Rs. In crore)	
	Mean	CGR (%)	Mean	CGR (%)
RTGS Customer Transactions	971.93	12.41	78422569	15.37
Cheque Truncation System (CTS)	8787.50	22.26	6259320	20.44
Immediate Payment Service (IMPS)	5121.72	213.93	446401	257.16
Credit Cards	9430.24	28.79	302543	30.6

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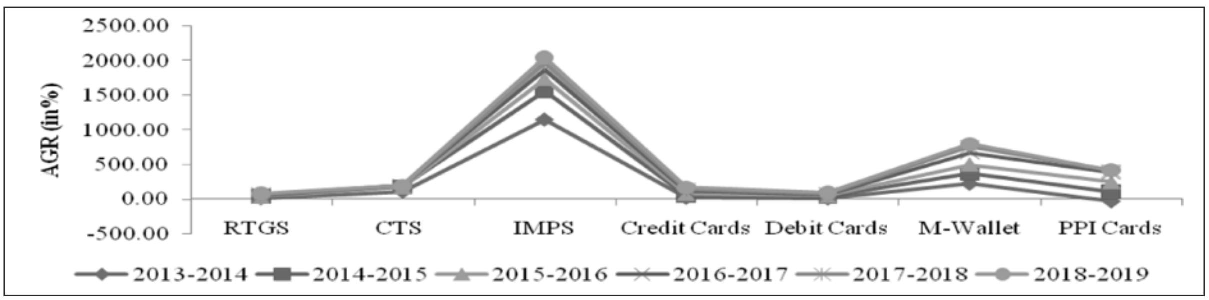
Debit Cards	95308.32	16.18	2685933	13.43
M-Wallet	13992.05	127.73	54035	142.05
PPI Cards	2132.11	72.46	18805	48.44

Source: Reports from reserve bank of India

Table 2 explains that the maximum contribution on average growth performance of digital payments in terms of volume of transactions takes place by the way of debit cards, M-Wallet, and credit card payments, whereas maximum contribution on the average growth performance of digital payments takes place by the way of RTGS, CTS and Debit cards. Over the past seven years, both volume and value of digital payment transactions have grown multi-fold. Therefore, the CGR across the categories of digital payments for the period 2012-2013 to 2018-2019 indicates positive growth in the country, both in terms of volume and value of digital payment transactions. Among various categories of digital payments, both IMPS and M-Wallet services have the highest growth rate as compared to other categories of digital payments in terms of both the aspects during the study period.

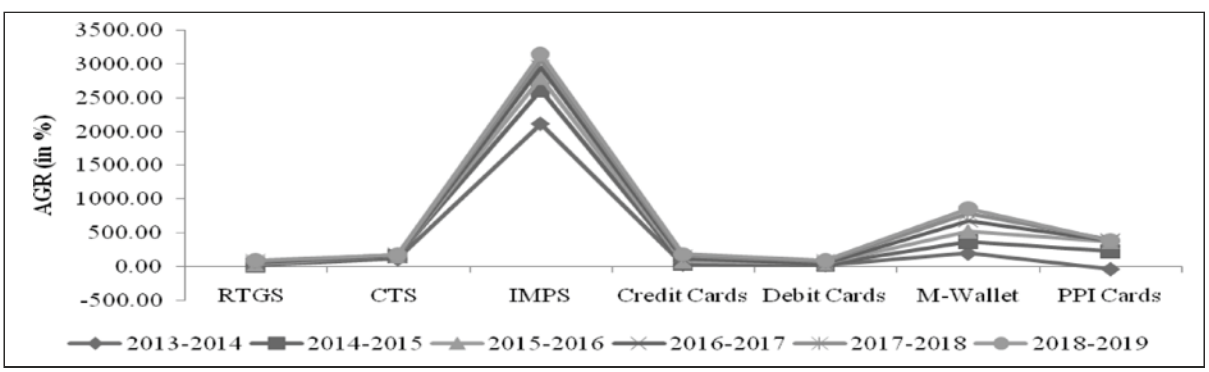
For visual representation, the annual growth rate in volume and value of digital payments among various categories is given in Figures 3 and 4.

Figure 3: Growth Rate in Volume of Transactions across Categories of Digital Payments



Source: Reports from reserve bank of India

Figure 4: Growth in Value of Transactions across Categories of Digital Payments



Source: Reports from reserve bank of India

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FinTech in India

The increase in focus of the government towards the financial inclusion coupled with the assertion of cashless transactions had a major impact on the Indian startup ecosystem in the category of fintech. With UPI clocking record figure of 1218.77 million in volume[5], real-time money transfer through a mobile device has been made easy and promoted the form of financial transaction. A report by PwC and ASSOCHAM states that the adoption rate for fintech in India is at 57.9%, the second highest globally[6].

Source: Reports from reserve bank of India

Indian startup ecosystem

India has always been a unique market for its interesting demographics. While Fintech unicorn startups were found to be the most valued ones; supply chain, logistics & delivery was the category for most of the unicorn startups, followed by Fintech. It is interesting to note that India is in coherence with the global trend as far as the category of Fintech is concerned but lacks far behind in the domain of Artificial Intelligence.

While most of the developed economies implemented a credit-card based infrastructure of cashless payment decades ago[1], the overall legacy has become a form of burden in terms of adoption to the newly available solutions which are being accepted readily in the growing economies like China, India, etc.

The category is likely to find more innovation in the coming time, as FinTech continues to expand its range of services and disrupt the banking and tech industry though the startups are struggling to build a sustainable business model.

Although the count of unicorn startups in the category of Fintech stands second. It is, however, interesting to note that the valuation of Fintech unicorn startups stands highest among all the above-mentioned categories.

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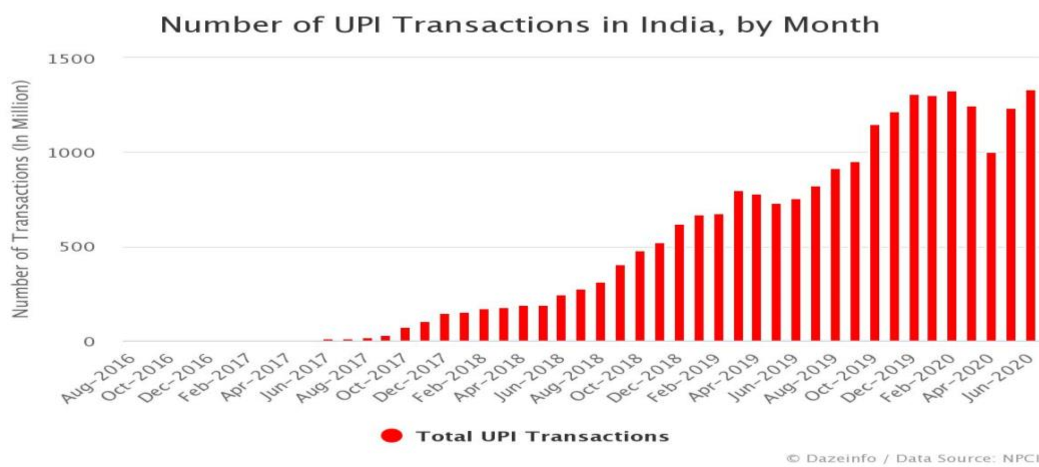
Growth of Unified Payment Interface (UPI)

UPI stands as one of the main elements that accelerated the growth of mobile payments in India at an exponential rate. As of Nov 2019, 143 banks are already live on UPI and facilitated more than 1218 million volumes of transactions[5].

According to a report by Worldline, the emergence of UPI had an impact over the growth of mobile wallets, which saw an increase of 18.4% in the number of transactions in 2019. the number of transactions via UPI in the same period notably, was found to have an enormous growth of 263%.



Source: Reports from reserve bank of India

The statistics, in the report, as per the data by RBI shows that the transactions via on mobile wallets in Q2 2019 were a meager 10% of the UPI's total transaction value, which may indicate that the growth of UPI came at the expense of transactions via mobile wallets.

As per the report by Worldline, in Q2 2019, the highest volume and the value of transactions were clocked at merchant categories including Grocery, Restaurants, Petrol Stations, Apparel Stores and Speciality retail.

The report by RBI on Deepening Digital Payments, May 2019, envisages a ten-fold rise over the next three years in digital payments with a recommendation of the expansion of UPI, from Indians living and traveling abroad, for remittances and payments. Plans for international growth include a plan to launch UPI in countries including Singapore and UAE.

Digital Payments constitute 96% of the non-cash retail payments between the period of October 2018 and September 2019, as per RBI. NEFT and UPI saw an enormous growth of 252 crores and 874 crores worth of transactions, clocking 20% and 263% growth,

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respectively, during the same period.

Government Initiatives

The government of India has proved to be a catalyst in the growth of digital payments ecosystem in the form of modernization of payment infrastructure, digital literacy and offering an ease of setting up a business. The government pushed a surge of digital inclusion in the country with subsidies, programs and incentives including:

- BHIM cashback and referral bonus scheme.
- Subsidy on digital payments, in the form of 10% discount on payments for rail tickets, highway toll fees and insurance policies.
- Facilitating UPI transactions to accept payments without any MDR (Merchant Discount Rate).
- Launch of NCMC (National Common Mobility Card) for toll and transit payments.
- Mandating Festas for all vehicles for highway toll collection.
- Issuance of virtual payment addresses by India Post Payments bank.
- Digi Dhan Abhiyaan, the outreach campaign enrolling over one crore rural citizens for digital payment methods.
- Interoperability between digital payment wallets.
- Digital literacy programs including Pradhan Mantri Gramin Digital Saksharta Abhiyan[20], Lucky Grahak Yojana, Digi-Dhan Vyapar Yojana, DigiVaarta[21], etc.
- Funds transfer facility through NEFT around the clock on all days including weekends and holidays.

Future Trends:

I. Voice and vernacular language inclusion

In 2021, 536 million Indian language internet-users are projected as compared to 199M English language users. In India, 10 million new internet users were added every month in the year 2018. It was also found that 90% of the new internet users preferred regional language. The rise of platforms like Share chat, which are targeting the audience in tier-2 Indian cities instead of the tier 1 cities targeted by platforms like Snapchat, Instagram, etc., is making sure that the content distribution can be done via regional languages like Hindi and Tamil.

Google is equipping itself to work on its voice search algorithms, because the internet users all around the world, and not just in India, are adopting the voice search mechanism to find content online. According to a study by PwC, around 41% make at least one search via voice per day; moreover, the number is increasing. By the year 2020, around 50% of all the online searches will be directed by voice and this number is exponentially large from that of 20% in 2016.

ii. Digital Wealth management

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Around 69% of the overall HNI (High Net worth Individual) population in India falls in the age group of 30-55 years, who are also the frequent users of social media platforms. With the continuous rise in the number of digital users, a growth of investment can be expected in financial assets in the form of digital investment in categories, including, but not limited to, mutual funds, equities, venture capital including crowd funding. Wealth management will see a significant shift towards investment though web or mobile applications.

iii. Digital Lending ($1 Trillion opportunity)

By the year 2023, it is estimated that MSME (Micro, Small and Medium Enterprises) digital lending may increase 10-15 times to arrive at INR 6-7 Lakh Crore ($80-100 billion) worth of annual disbursements, creating a window for traditional lenders to go digital.

Conclusion:

The exponential growth of digital transactions in India is direct effect of expanding growth of smartphone usage and widespread availability of internet service. The compound annual growth rate is 20.2% for India and that is the highest estimation globally. From 2012 to 2021, the highest change in percentage volume of transaction recorded for the year 2016-2017 and the highest change in percentage value of transactions were recorded for the year 2017-2018. This is an important indicator of heightened growth phase and emergence of fintech to support and develop the channels for growing demand is inevitable. The idea of financial inclusion is made more proximal through these developments. The govt schemes like NCMC (national common mobility card), mandating FAStags, DigiDhan Abhiyaan, creating VPA (virtual payment address) for India post payments banks and conducting literary programs to reach nook and corner of the society showcases the government interest to exploit this potential technology. The challenge remain especially in context of India is the unequal representation in the domains of AI (artificial intelligence) which India failed to have coherent global trend as likely as fintech.

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