

## The Roadmap of Electronic Banking: Indian scenario

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### Abstract

This study is based in Indian Banking Sector and Mobile Banking in India. Banking sector in India has adopted technology based operation system. In other words it is called as **“Digitization, Online Banking.”** Reserve Bank of India has launched small payments bank system in India. It has given birth to **Mobile Banking**. This study also explains about popular mobile wallets in India and how these wallets are competing with bank’s online transactions. In the last part this study shows five mobile banking strategies. These strategies are basically for banks so as to become **Future Banker** in India. Indian banking sector already has adopted technology like **Chatboats, Artificial Intelligence, and Blockchain**.

**Keywords: E-Wallets, Digitization, Mobile Banking, Chatboats.**

### Introduction

The Banking Sector is a backbone of every country’s economy. India is not an exception for this. In fact, Indian Banking Sector shows the potential to become world’s largest banking industry in near future. Indian Banking Industry is contributing nearly 7.7% in the national GDP. In India the total numbers of public sector banks are 12, total private sector banks are 22, foreign banks are 46, regional rural banks are 56, urban cooperative banks are 1485, and rural cooperative banks in addition to cooperative credit institutions are 96,000. As on January 31, 2020, the total number of ATM’s in India is 210,263 and it is expected to increase to 407,000 by 2021. The Indian Banking has adopted innovative banking system like payments and small finance banks. The digital payment system in India has made its place among 25 countries with India’s **Immediate Payment Service (IMPS)** which is at 5<sup>th</sup> level in Faster Payments Innovation Index (FPII).

Indian Economy has moved towards the all over digitization after **demonetization** was announced on 8<sup>th</sup> November 2016 by Indian Prime Minister Shri. Narendra Modi. Though demonetization of the 500 and 1,000 rupee banknotes caused economic commotion in all over the country. This step has given rise to the digital economy. Globally, payments market has marked drastic growth in digital markets during this period. The digital payments in South Asian country recorded a value of 769 percent share of the total GDP in the financial year 2019. Digital payments were processed in 1.5 million locations in the year 2017 only. And till 2019, 10 million subscribers have made the online payments. About India, it is marking the fastest growth in mobile payments in the world in terms of value, by CAGR of over 20 percent between 2019 and 2023. It shows the figure of 660 million Indians using mobile payments. India is contributing 2.2 percent in the world’s digital payment market.

The Indian government has purposefully taken initiative to promote digitization and offered discounts while using the mobile wallets and UPI transactions. In India, Non-banking mobile payment agencies like **Google pay, Paytm, and Phone Pe** has reached to every individual person who never thought of online banking. These players have made their own place in the digital market. These players are increasing their competitors day by day as it shows rapid growth. India has expanded this facility to all Indians with introducing new scheme **“Pradhan Mantri’s Jan– Dhan Yojana.”** This scheme made customers to open accounts in banks. Rural population of India being facilitated with linking accounts with Aadhar card. Many people couldn’t open an account in the bank

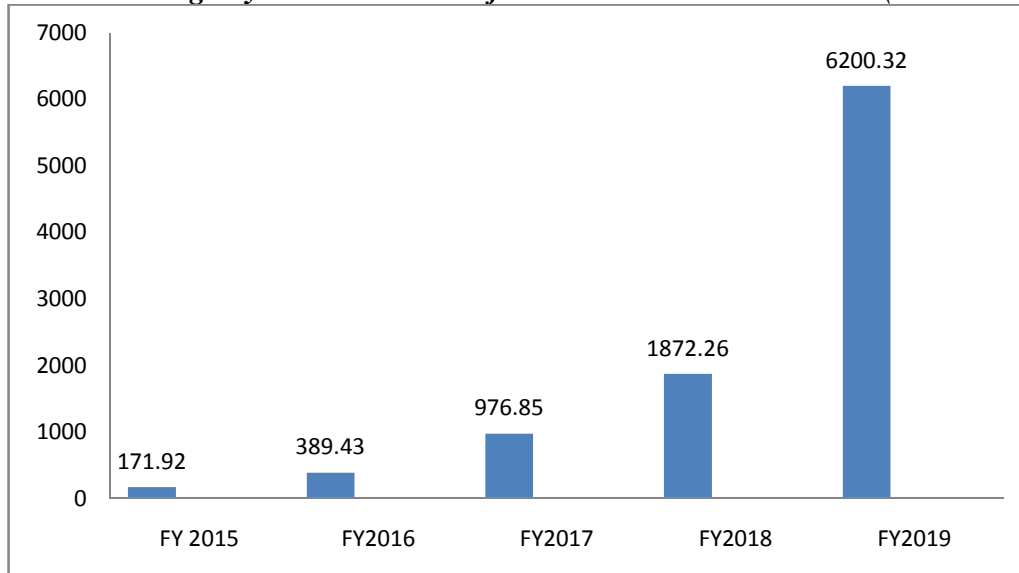
because they were unable to present identity proof so as to complete KYC (Know Your Customer). Aadhar card facility made rural people open accounts in the bank. Specifically for rural population government has taken initiative in cooperation with NPCI including BHIM app and RuPay, this is how Mobile payment were accelerated in India.

### **History of Mobile Payments in India**

Mobile payments are also known as Mobile Wallet, E- Wallet, and Mobile Money. In simple words, it is a payment service which is availed through banks and operated on mobile phones. As digitization has been growing rapidly, the cashless transactions have become the first priority of every customer. The Mobile Payment system has been adopted by countries in different manner. The First patent defined ‘Mobile Payment System’ was filed in the year 2000. In developing countries mobile payment system is adopted as another strategy to extend financial services to the society which is “underbanked” or “unbanked.”

India has high non banking population. The traditional banking cannot reach till last person of the country. So as to cater banking services to the maximum population of the country, banking sector adopted new ways of banking and **Mobile Banking** is one of them. In traditional banking customers were dependent on methods like cheque, cash or credit card. Now customers can directly use mobile phone to transfer money or to make payments on purchase. Mobile Payments in India works under Mobile Payment Forum of India (MPFI). In India, the oldest mobile wallet was “**Oxigen Wallet**” which was launched in July 2004. It is considered as the first ever e-wallet or mobile wallet in India. The total number of mobile banking payments in India is 6.2 billion approximately in the fiscal year 2019. Following graph shows the growth of mobile payments in India.

### **Mobile Banking Payment across India from Financial Year 2015-2019(in millions)**



### **Mobile Banking Payment across India**

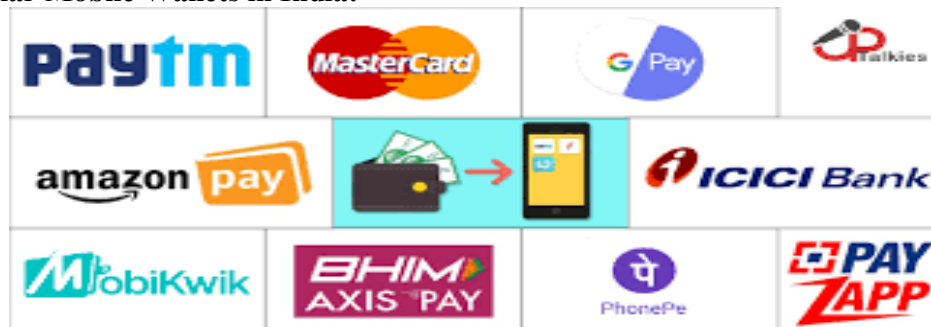
Mobile payments are growing day by day, here in this above graph from financial year 2015 shows only 171.92 million number of payments in India. In the year 2016, 389.43 million numbers of transactions were made. There is more than double the number of transactions done in the year 2015 to 2016. However, in the financial year 2017 to 2019 the graph shows highest growth in the year 2019. It has been found that 6200.32 online mobile payment transactions made in the financial year 2019.

### **How Mobile Wallet Works?**

Mobile wallet is also known as digital wallet. It works by mobile wallet app with adding card information into it. The electronic device enables users to buy products online



### Popular Mobile Wallets in India:



### Following are the Popular Mobile Wallets in India

#### **BHIM App:**

National Payments Corporation of India (NPCI) has developed Indian Mobile App called “Bharat Interface Money” (BHIM). It is based on Unified Payment Interface (UPI) launched on 30 December 2016. The objective behind launching BHIM app is to promote cashless transactions and make Indian population use e-payments directly through banks. This application does support to all Indian Banks. It is build over Immediate Payment Service (IMPS). This application needs to be installed in mobile phones or smart phones and linked up or registered with the concern banks. It allows transfer of payments between two parties. The basic uniqueness of this application is that, BHIM app can directly transfer the amount in other bank accounts and other applications like Paytm, Mobikwik, mPesa, Airtel Money etc are holding money in the wallet. There are no transaction fees from Rs. 1 to 1,00,000 but some banks may charge minimal for UPI and IMPS transaction.

#### **Paytm:**

Paytm is an Indian e-commerce payment system company located in Noida, Uttar Pradesh, India. Mr. Vijay Shekhar Sharma is the founder of Paytm mobile wallet. It was founded in the year 2010. It enables users to pay for mobile recharges, bill payments, travel, movie and various other bookings as well as it enables payments at store. As per Paytm firm more than 7 million merchants in India accepts payments directly to their bank accounts. In India, bank to bank payment transfers are being able through Paytm. All Indian banks are working with paytm.

#### **PhonePe:**

PhonePe is e-wallet that enables online payment situated in Bangalore, India. The founder of Phonepe is Mr. Sameer Nigam, Mr. Rahul Chari and Bruzin Engineer made this wallet in the year December 2015. It gives services of sending and receiving money, Mobile recharge, DTH data recharge, make payments. Phonepe has crossed 5 billion transactions in December 2019. The number of PhonePe user is more than 100 million. The PhonePe also has launched its ATM in January 2020. Customer can instantly transfer money to any

mobile number with UPI and also able to send money to any bank account using IFSC Code. PhonePe works with banks like SBI, ICICI Bank, HDFC Bank, Bank of Baroda & more than 140 banks.

**Freecharge:**

Freecharge is an Indian digital wallet for financial services located in Gurugram, Haryana, India. Freecharge offers various services like savings, insurance, investments and lending. The Company focuses cashless transactions and growing with the objective of forming an eco system of innovative products. In 2015 this company was acquired by snapdeal and in July 2017 year, it was acquired by Axis Bank. Axis Bank owned freecharge app and it has become India's number one Payments app. Freecharge has been registered with 22 million users since axis bank acquired it.

**Mobikwik:**

Mobikwik is an Indian mobile phone payment system also called as digital wallet. Customers are able to add money in wallet and utilize money whenever it is needed. It was founded in 2009 year. The company has also launched Mobikwik lite mobile app in November 2016. The company has recorded 1.5 million merchants using services and users are more than 55million. Mobikwik.com has added SBI and 32 more banks for mobile recharge.

**Google pay:**

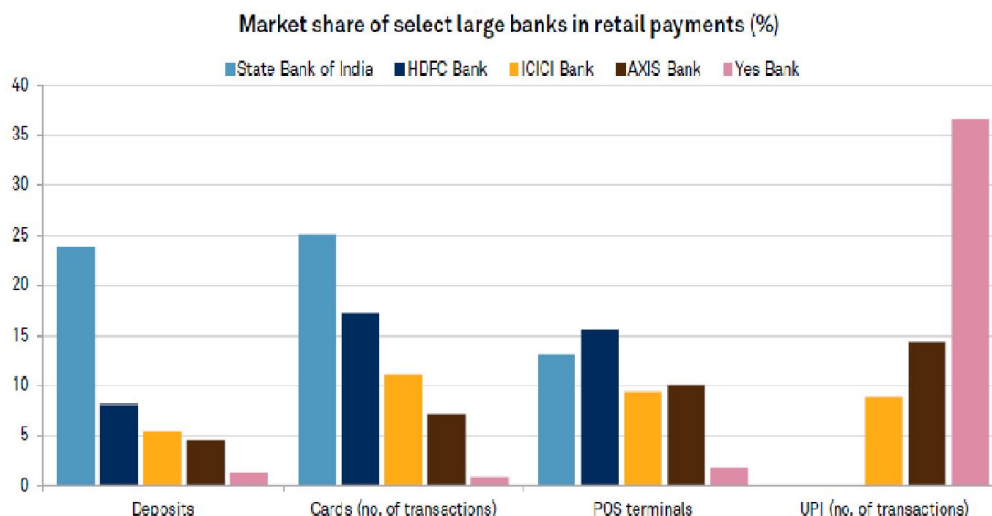
Google pay offers a digital wallet based on online payment system. It offers services like all other wallets offering. Initially it was active as android pay later it was renamed as Google pay. It enables merchants to make transaction very secured and user friendly. The Google app works with 55 banks in India including ICICI bank, State Bank of India and HDFC Bank.

**Amazon Pay:**

Amazon Pay is an online payment service which allows customers to pay the bills, recharge DTH, paying for various purchase, sending and receiving money. This service was being launched by amazon in 2007. This particular service is made available in more than 18 countries of the world. Amazon payments app accepts orders for transfer from more than 50 banks in India.

**Market Share of Indian Banks:**

Some of Indian banks have played a vital role in retail banking by accepting the considerable space in mobile payments. However, banks will always remain important in helping nonbank to move money on UPI system. The largest card issuing and merchant obtaining banks among all Indian banks are HDFC bank, State bank of India, ICICI Bank, and Axis Bank. These four banks accounted for 61% of total debit and credit card transactions in the fourth quarter of 2019. HDFC bank stands first for card transactions as it accounts for 28% of total card transactions. HDFC bank contributes 8% of the total deposits of the country. However YES bank as settlement partner in interbank transfers processed 37% of the total UPI transaction I n the fourth quarter of 2019. Yes bank has partnership with PhonePe.



Data compiled March 11, 2020.

Market share percentages are for the quarter ended Dec. 31, 2019, except for deposits, which are as of year-end 2019.

UPI transactions data settled by State Bank of India and HDFC Bank is not available.

Sources: S&P Global Market Intelligence; Reserve Bank of India; National Payments Corp. of India

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### Mobile Banking users and transactions in the FY 2020:

Name of the Bank	Number of Users	Total Transactions (approximate)
SBI	3.3 Crore	13.82 Crore
HDFC	5.6 Crore	15.60 Million
AXIS	13.65 Million	19.90 Million
IDBI	3.4 Million	11.90 Million

**Source: Annual reports of concerned Banks (FY2020)**

Above table shows number of mobile banking users and payment transactions in the year 2020. State Bank of India lagging behind in mobile banking where, Axis bank is leading in this area with 13.65 million users and 19.90 million mobile payment transactions.

#### Five Mobile Payment Strategies:

Indian Banking Sector is one of the developing sectors in Indian Economy. Hi- Tech banks like Bank of America, J P Morgan and Chase co. and Agricultural Bank of China Ltd. are big players of the global banking market. Banks with large customer base are known for technology based customer service and for their payment systems. Indian banking Sector is lagging behind in technology based services. There can be five basic strategies that bank can use to get in the mobile payments business in India. The banks can be basically classified in two types; one is large banks who have big customer base and the second one is small banks who has small customer base. The strategies are more applicable to the banks on the basis of customer base size and back office strength that can support even high level of transactions. To become successful in this area, it requires specializing in its niche or to enhance the relationship with other mobile application players. Banks need to strengthen back office so as to become pure digital bank.

Following three strategies are suitable for banks with large customer base:

- **Ecosystem Leader:**

Large banks need to become ecosystem leaders to lead digital markets. So as to become leader banks will have to offer services at one click only. In short, it means that banks in India should work with orchestrations group of operations and services. Banks like State

Bank of India, HDFC have large customer base and potentials to handle activities on large scale. State Bank of India is with the 435 crore customers in the world and 330 lakh registered mobile users in India. HDFC Bank has 5.6 million customers on mobile banking India. Banks emerging with ecosystem leaders are likely to become big mobile player in mobile payment business in India. The Banks Like HDFC and AXIS Bank has adopted new technology like chatboats. HDFC call it as *chat with EVA* and Axis Bank calls it as *Aha chatboat*. Thses (*Chatboats*) are easiest way to resolve the queries of customers. Customers don't have much time to wait for long hours to get their queries resolved. Instead they demand for quick response and solutions. Report by Gartner proves that more than 85% of the customer service interactions will be handled by Chatboats till 2021. Chatboat works on *Artificial Intelligence* where no human interference is needed. This technology processes all the data i.e debit/credit card transaction, ATM withdrawals, Money transfers etc. and automatically provides the answers for the queries.

- **Customer Relationship Builder:**

Every bank has to make strategies on customer relationship to become competent bank in the market. There are banks in India that charge more fees on customer as their customer base is small. In India, banks like HDFC bank and Axis Bank are known for their relationship building with customer. They are leaders in customer relationship building. It is prominently observed that bank with large customer base in India should take necessary actions to build relationship with customers.

- **Back Office Champion:**

In India, banks working in collaboration with fintech organizations to strengthen the back office. Providing 360 degree services through the banking applications software are the basic need of bank to retain in the market. Reaching till the retail customers through digital platforms is possible only when banks have large capacity to do transactions. This particular capacity can be enhanced only by investing more on back office. In India, banks like Axis bank, HDFC bank, and ICICI bank are known for their big capacity to deal with large amount of transactions. They not only deal on digital platforms with their own customers but also they offer services of payment gateways to other banks. When banks desires to become champion in back office, banks will have to adopt technology like *Chatboats, Artificial Intelligence (AI), Blockchain Integration*. Artificial Intelligence is resulting with lower costs and more revenue. It is basically used to aligned customer experiences with robots and chatboats. These technological changes have been adopted by the banks like HDFC and AXIS bank of primary basis.

Following two strategies working efficiently for banks with small Customer Base:

- **Ecosystem Contributor:**

In a large ecosystem, as a team player banks with small customer base in India like Punjab National Bank, Bank of Maharashtra, other RRB's and cooperative Banks are on the edge of developmental phase. In India these banks are trying to form strategies to increase number customers across India. In this stage, if these banks desire to become contributor they tend to adopt technology, API ready services and working with mobile payment players. These banks can play the role of "*the bank of the future*" because they do not have the customer scale to compete otherwise.

- **Niche Market Master:**

Banks need to focus on customer insight and need to innovate so as to enhance wealth management. The mobile payment systems become the part of niche market. Banks should adopt innovation to offer new mobile apps that should work more efficiently than private mobile apps. Banks should work on technology like *cloud computing*, it will make 24/7 customer service available for customer. So as to compete private mobile payment applications with banks owned mobile applications, cloud computing is the most

favorable technique because it promotes safe online payments, digital money transfers, wallets etc.

**Conclusion:**

In India, Banking Sector has adopted modern techniques to make transactions. These include all e- banking services which caters the need of customer. The Indian Banking has adopted innovative banking system like payments and small finance banks. Today, In Indian banks may be just offering banking by phone. Instead banks should offer medical or energy services. Banks should also extend their financial services such as property financing and credit availability. This step will raise middle class in India. The five strategies highlighted in this study shows ways to become successful banker in near future by focusing its business through mobile payment strategy.

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