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Regulatory framework of Digital Financial Services in India

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Abstract

Digital financial services(DFS) can expand the delivery of basic financial services to the poor through innovative technologies like mobile-phone-enabled solutions, electronic money models and digital payment platforms. Digital channels can drastically drive down costs for customers and service providers, opening the door to remote and underserved populations. Mobile banking is one of the largest opportunities for financial inclusion in countries, and the RBI, through its policy efforts, is trying to ensure that it reaches maximum penetration in the country. E-commerce is growing in the country, leading to a new financial space being created, which the RBI is privy to. The NPCI has been a boon in this sector, achieving a considerable amount since it was launched. P2P lending, a new and relatively untested development is gaining momentum in the country, and the RBI has begun to take concrete steps to make sure it does not get out of hand.

Key words: DFS, E-Commerce, NPCI, P2P.

A: Introduction:-

The advent of new technology usually leads to innovation in industry. Regardless of the sector, new technology is almost always adopted to make tasks easier and more efficient, and this applies to the financial sector as well. Advancements such as credit cards and ATMs have fundamentally changed the process of banking and finance. The past few years have seen some major innovation in the sector, leading to a shift in the way people interact with the financial system of the country. Pursuant to the same, the Reserve Bank of India has responded to these advancements to make sure that they do not go unchecked.

The e-commerce industry in India has seen unprecedented growth over the last few years, largely because of a higher level of internet penetration among the population. From a worth of $3.9 billion in 2009, the worth of the Indian e-commerce market went up to $12.6 billion in 2013. The number of online shoppers was 35 billion in 2014, and is now expected to cross 100 million by the end of this year. The newfound presence of the e-commerce industry in the country has led to a new form of payment: the online wallet. A more

convenient method than using a credit card for every transaction, it is expected to achieve a compound annual growth rate of 68% this year.

B: Digital financial services(DFS):-

"Digital financial services(DFS) can expand the delivery of basic financial services to the poor through innovative technologies like mobile-phone-enabled solutions, electronic money models and digital payment platforms. Digital channels can drastically drive down costs for customers and service providers, opening the door to remote and underserved populations."

"Digital financial inclusion" can be defined broadly as digital access to and use of formal financial services by excluded and underserved populations. Such services should be suited to customers' needs, and delivered responsibly, at a cost both affordable to customers and sustainable for providers. There are three key components of any such digital financial services: a digital transactional platform**,** retail agents, and the use by customers and agents of a device – most commonly a mobile phone – to transact via the platform.

- A digital transactional platform enables a customer to use a device to make or receive payments and transfers and to store value electronically with a bank or nonbank permitted to store electronic value.
- Retail agents armed with a digital device connected to communications infrastructure to transmit and receive transaction details enable customers to convert cash into electronically stored value and to transform stored value back into cash. Depending on applicable regulation and the arrangement with the principal financial institution, agents may also perform other functions.
- The customer device can be digital (e.g., mobile phone) that is a means of transmitting data and information or an instrument (e.g., payment card) that connects to a digital device (e.g., POS terminal).

C: Mobile Banking in India:-

Perhaps the biggest change in banking in recent times has been the introduction of mobile banking. From 2010 to 2012, the number of users of mobile banking services grew 277.68% (from 5.96 million to 22.51 million) and the value grew a whopping 875.6% (from Rs. 6.14 billion to Rs. 59.90 billion). These figures clearly indicate that mobile banking in the country is growing at a very high rate. Yet, as of 2014, there were 350 to 500 million unique mobile subscribers and only 22 million mobile banking customers.

The Reserve Bank of India (RBI) published its first guideline for mobile banking in 2008, where banks were permitted to transfer funds from one bank account to another through the mobile platform. The conversation on integrating Aadhaar numbers with bank account numbers on one hand and mobile numbers on the other started as soon as UIDAI was established. However, it is the post-2010 period, with rapid growth of the e-commerce sector in India, that saw rise of digital financial services and intermediaries, and hence the demand for regulatory intervention in the sector. This essay by Shivalik Chandan tracks RBI policies

and guidelines responding to and shaping the regulatory framework of the digital financial sector in India, including both mobile banking and online transactions.

The RBI clearly recognised the potential for a widespread increase in mobile banking as well as the opportunity of increasing financial inclusion in the country, and made recommendations for "addressing the consumer acquisition challenges as well as the technical aspects". Recommendations such as alternate channels for mobile registration such as ATMs, uniformity in the mobile registration process across banks, and standardisation and simplification of the MPIN generation process were made by the RBI. Despite the potential in mobile banking as a channel for financial services, and financial inclusion, the RBI identified several challenges with the platform, which were of two types – customer enrolment related issues, and technical issues.

1. Customer Enrolment Issues identified by the RBI-

The following customer enrolment issues were identified by the RBI:

(a) Mobile Number Registration: In order to avail mobile banking services, the customer needs to go to a branch of the bank or an ATM of that bank to register their mobile number. The RBI recommended that registration be made possible through other channels as well, and that registration forms be made uniform to ease the customer experience.

(b) MPIN Generation: The process for MPIN generation is different across banks, and requires a visit to the bank branch in some cases. The RBI recommended that the process be standardised and that the MPIN be intimated to the customer through their handset without necessitating a visit to the bank.

These recommendations were implemented by the RBI in its Master Circular issued in December 2014.

2. Technical Issues identified by the RBI-

One of the major technical issues identified by the RBI was the fact that there is a large disparity in the type of mobile handset, and consequentially, the technology most customers have. The majority of handsets in the country are GSM or CDMA enabled, and a comparatively small number have GPRS technology. The RBI identified three major ways of mobile banking utilised by most banks as SMS, USSD, and application based banking. The problems the RBI identified with the SMS method were that the service is not encrypted, and that it may become inconvenient for customers to remember the syntax required for the commands. The USSD system solves the complexity issue, as it presents an interactive menu and is much faster than SMS. However, it is still not a secure means of communication. A big step forward for the USSD system has been the implementation of the National Unified USSD Platform by the National Payments Corporation of India with a single short code (*99#) to utilise the common USSD channel for mobile banking for all banks.

The RBI conceded that application based mobile banking is the best way to offer the service both in terms of user friendliness as well as security, but stated that developing these applications requires a large amount of research and development due to the extremely high

number of permutations and combinations of handsets and operating systems available on the market, and that smart phones are in the minority as far as type of handsets go. To resolve these issues, the RBI suggested that banks continue offering all three services, so that the largest number of people can take advantage of mobile banking services. The RBI also recommended that all banks implement a uniform mobile banking system across all three architectures (SMS, USSD, and applications) for the ease of consumers.

3. The Way Forward-

In the two years since these recommendations were published, smart phones and GPRS connections (both required for application-based mobile banking) have become a lot cheaper and have permeated a larger section of the Indian society. Hopefully, this trend will gradually reflect in the banking sector and lead to a boom in application-based mobile banking. The next challenge that the RBI will face in the coming years in the field of mobile banking is the replacement of credit cards with smart-phones. Both Apple and Google (with Apple Pay and Android Pay) are utilising Near Field Communication(NFC) technology in smart-phones to enable customers to store their credit card information on their Smart-phone and simply tap it onto a terminal to complete the transaction, and even though it is available in a small number of countries presently, it is only a matter of time before it is introduced in India, and this development has been addressed by the RBI in the 'Vision 2012-2015' document, where they have addressed the requirement of updating all POS terminals at the merchant ends, as well as developing an open standard for all NFC transactions, regardless of the payment system operators.

The RBI has announced its intention to review the guidelines for mobile banking to address issues relating to customer registration, safety and security of transactions, risk mitigation, and customer grievance redressal measures, with the intention of promoting mobile phones as access channels to payment and banking services. The policy efforts will also focus on ensuing that mobile banking services are provided to non smart-phone users across the country as well.

D: Online Payments in India:-

The National Payments Corporation of India was set up in 2009 as an umbrella organisation for all retail payment systems (under section 25 of the Companies Act) with the core objective of consolidating and integrating the multiple systems with varying service levels into a nation-wide, uniform, and standard business process for all retail systems. In 2012, the RBI, in its Vision 2012-2015 document, recognised the development of new e-payment systems and the increasing proportion of transactions taking place through these systems. The introduction of technology such as cloud computing, mobile telephony, service oriented architecture, and an increasing popularity of the virtual world would, according to the RBI, lead to significant changes in the way payments would be processed in the future. The document elucidated the possibility of the movement away from cash transactions to electronic transactions, leading to their goal of a 'less-cash economy'. The RBI set the objective of innovating towards the convergence of products and services which should be available across all delivery channels to all, in a low-cost, safe, and efficient manner. The

RBI held that its regulatory stance would be to promote innovation to achieve the goals of inclusion, accessibility, and affordability, while remaining technology neutral.

1. Regulatory Response to Online Payment Instruments-

The introduction of online wallets has provided consumers with a simpler and more efficient method to complete online transactions across a wide variety of merchants, and is growing at a considerable rate. A master circular was issued by the RBI in December 2014, outlining the guidelines that these wallets (which are considered a part of 'pre-paid payment instruments') must follow. In the circular, RBI defined three types of payment instruments or wallets.

(a) Closed wallets- can be issued by a company to a consumer for buying goods exclusively from that company, such as Flipkart or Amazon. They do not need any sort of permission or regulation from the RBI as they do not permit cash withdrawal or redemption, and hence are not classified as payment systems.

(b) Semi-closed wallets- can be used to purchase goods and services at clearly identified merchant locations which have a specific contract with the issuer to accept the payment instrument. NBFCs can issue semi-closed wallets which need to be authorised by the RBI. The most commonly known online wallets (such as Paytm and Mobikwik) fall under this category.

(c) Open wallets- can be used for the purchase of goods and services (including financial services) at any card accepting merchant terminal and can also be used for cash withdrawal at ATMs. However, these can only be issued by banks with approval from the RBI.

The RBI has classified three categories of pre-paid payment instruments that can be issued:

(i) Up to Rs. 10,000**,** by accepting the minimum details of the customer, provided that the amount outstanding at any time does not exceed Rs. 10,000 and the total value of reloads per month does not exceed Rs. 10,000. These can only be issued in electronic form.

(ii) From Rs. 10,001 to Rs. 50,000**,** by accepting any 'officially valid document' defined under rule 2(d) of the PML Rules, 2005, which are amended from time to time. These are to be non-reloadable in nature.

(iii) Up to Rs. 1,00,000 with full KYC, and these can be reloadable in nature. The balance in the PPI should not exceed this amount at any time.

2. Infrastructure for Online Payments between Private Parties-

Pursuant to the goal of enabling infrastructure for financial transactions between private parties, the NPCI implemented the Immediate Payment Service (IMPS) in 2010. The service offers an instantaneous, 24x7 interbank electronic fund transfer service, which can be utilised through mobile, internet, or an ATM. This service is superior to the previously used NEFT service, as NEFT transactions are settled in batches and hence are not in real time. Also, the NEFT service is only available during the working hours of the RTGS system, while the IMPS can be used at any time.

Building on the IMPS service, the NPCI has developed the Unified Payments Interface (UPI), which will allow customers to transfer money and make payments almost as easily as they send messages. Multiple bank accounts can be linked to one application, and the need for sharing sensitive information such as bank account numbers, OTPs, or mobile

numbers has been eliminated. This interface has been touted to have a large impact on the payment space, and help the economy move closer to a 'cash-less' economy. On launch of the Interface in April of this year, 29 banks concurred to provide UPI services to their customers, and 21 of those banks have already joined the UPI as payment service providers.

On downloading the UPI application of a bank, a 'virtual identifier' is generated by the application which works as a payment identifier for sending and collecting money, and is protected by a single click two-factor authentication. The virtual ID is an email ID-like format: for example, if a customer named ABC had an account in HDFC bank, his virtual ID would be ABC@hdfc. However, the customer has the choice to use his/her mobile number or Aadhar number in place of the name. In order to protect the customer's privacy, there is no account number mapper anywhere except the customer's bank. When a customer selects UPI as the payment mode for an online transaction and the request reaches the merchant's server, it is immediately passed onto the acquiring bank's server where a UPI collection transaction is initiated on the customer's virtual identifier. This request reaches the customer's phone through the UPI server on the basis of the virtual identifier, and the customer authenticates it using the MPIN to complete the transaction.

The UPI can be utilised for real-world transactions as well. Instead of handing over cash, the customer can simply tell the cashier his/her virtual ID. The cashier can then initiate a pay request through the UPI, and the customer can authenticate it on his/her phone, leading to the completion of the transaction.

3. Infrastructure for Online Payments involving the Government-

In the 'Vision 2012-2015' document, the RBI outlined an opportunity of developing a bill payment system for payments toward insurance premiums, utility payments, taxes, school fees, etc. To this end, a committee was set up to analyse the potential for an electronic GIRO (General Interbank Recurring Order) payment system in India. Under the recommendation of the Committee, a Giro Advisory Group (GAG) was set up with the objective of defining a framework which enables the creation of pan India touch points for bill payments, which submitted its report in March 2014. The GAG recommended a tiered system for bill systems in the country – a central unit which would set the standards, and various operating bodies which would work in accordance with the standards set by the central body. Draft guidelines for the Bharat Bill Payment System (BBPS) were published on the RBI website in August 2014 for public comments. Based on recommendations, the RBI published guidelines for the implementation of the BBPS in November 2014.

The BBPS will consist of two types of bodies, which will carry out distinct functions:

(a) Bharat Bill Payment Central Unit (BBPCU): The single authorised body which will set the necessary technical, operational, and technical standards for the entire system and its participants, and will also undertake clearing and settlement activities. The NPCI will serve as the BBPCU.

(b) Bharat Bill Payment Operating Units (BBPOU): The authorised operational units, which will work in adherence to the standards, set by the BBPCU.

The objective of the BBPS is to implement an integrated bill payment system which offers interoperable and accessible bill payment systems to customers through a network of agents, enabling multiple payment modes, and providing instant confirmations of the payments. Hence, the RBI decided that all existing players (both banks and non-banks) catering to the requirement of bill payments as well as the aggregation of payment services will be a part of the BBPS. Initially, the BBPS is expected to cover repetitive payments for everyday utility services such as electricity, water, gas, telephone, and DTH. The plan is to gradually expand the scope to include other types of repetitive payments like school/university fees, municipal taxes, etc.

On 20 October, 2015, the RBI issued a press release inviting applications from entities engaged in bill payments, for authorisation to operate as BBPOUs, stating the function as "facilitating collection of repetitive payments for everyday utility services, such as, electricity, water, gas, telephone and Direct-to-Home (DTH)".

As of May 2016, 33 companies were reportedly approved by the RBI to function as BBPOUs. PayU India, PayTm, Oxigen, SBI, ICICI bank, HDFC bank, Kotak Mahindra Bank, Bank of Baroda, Axis Bank and RBL Bank and TechProcess have confirmed their BBPOU license.

4. The Way Forward-

The RBI, in its 'Vision 2018' document, has outlined the future plans relating to pre-paid instruments. With an increase in the number of entities authorised to issue PPIs, there has been a growth in their usage for the purchase of goods and services as well as transfer of funds. The RBI plans to review the provisions relating to PPIs about KYC requirements, customer-facing aspects such as safety and security, risk mitigation measures, complaint redressal mechanisms, forfeiture of unutilised balances, and fraud monitoring. The RBI also plans to monitor developments in technology which impact the financial services industry, such as distributed ledgers, block-chain, etc., and develop regulatory frameworks as required.

E: Peer-to-Peer (P2P) Lending:-

Another new development in the banking and finance sector is the introduction of peer to peer lending (hereinafter referred to as P2P lending). P2P lending is a form of crowd-funding which is essentially an online platform designed to bring together lenders and borrowers. A fee is charged from both and this fee goes to providing services such as collecting loan repayments and doing a preliminary assessment on the trustworthiness of the borrower. The RBI issued a consultation paper on this in April 2016 and invited responses from the various stakeholders.

The RBI identified that even though there is no credible data on the total lending through P2P platforms, there are presently around 30 such platforms in the country. After looking at the operational business model of these companies, the RBI found that the major regulatory concerns would relate to KYC and recovery practices.

After holding that regulation might lend credibility to P2P lending and therefore cause low-awareness lenders to make high-risk investments, and might stifle the growth of an innovative and efficient avenue for borrowers who either do not have access to or have been

rejected by traditional loan mechanisms, the RBI argued for regulation in the following ways. Firstly, they held that in its nascent stage, the industry might disrupt the financial sector and it would be better to avoid such disruption. Secondly, the lower operational costs might lead to a softening of lending rates, and the RBI feels that it would benefit the P2P lending platforms if they were regulated. Thirdly, they identified the potential for unethical practices being adopted by any of the players in the market in the absence of regulation. Finally, the RBI held that borrows and lenders which are brought together by the P2P platform might be perpetrating an illegality under Section 45S of the RBI Act if they are unregulated.

Based on these considerations, the RBI recommended regulations on the P2P platforms in order to "facilitate the orderly growth of this sector so that its ability to provide an alternative avenue for credit for the right kind of borrowers is harnessed." Some of the regulations proposed by the RBI were the limiting of P2P lending platforms to the role of an intermediary between lenders and borrowers, a requirement of a minimum capital of Rs. 2 crore and prudential limits on the maximum contribution by a lender (since they may include uninformed individuals), and the enforcement of adequate risk management systems to ensure smooth operations.

F: Conclusion:-

Digital financial services have significant potential to provide a range of affordable, convenient and secure banking services to poor people in developing countries. The RBI, setting out a goal of financial inclusion and a cash-less economy, has kept up with developing technology in the financial sector, in order to ensure that consumers can glean the benefits of these advancements, and the goals it set out can be achieved. Mobile banking is one of the largest opportunities for financial inclusion in countries, and the RBI, through its policy efforts, is trying to ensure that it reaches maximum penetration in the country. E-commerce is growing in the country, leading to a new financial space being created, which the RBI is privy to. The NPCI has been a boon in this sector, achieving a considerable amount since it was launched. P2P lending, a new and relatively untested development is gaining momentum in the country, and the RBI has begun to take concrete steps to make sure it does not get out of hand. Technological advancements will continue to change all industries, including the financial services industry, and it is the task of the RBI to make sure that these advancements are utilised to the best of their abilities, so as to benefit the customers in the country as best as possible.

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