



PAYMENTS INNOVATION IN INDIA - NPCI LEADING THE CHANGE

Ladies and Gentlemen,

At the outset, I thank Network International for inviting me to be part of this Conference and I appreciate their choice of host country and host city of New Delhi. This is the best time for New Delhi and I hope the delegates are enjoying their stay.

I have been requested to share my thoughts on Innovations in Payments System in India. In this connection, I would like to share under two broad categories of innovation – **Institutional Innovation** and **Product Development Innovation**.

Let me first dwell on Institutional Innovation.

Institutional Innovation

Institutional Innovation refers to a series of steps taken by the Reserve Bank of India (RBI) since the year 2005 starting with setting up of a Board for Payments and Settlement System which is a Committee of the Central Board of the RBI. Alongwith Board formation, RBI created a functional department called the Department of Payments & Settlement Systems (DPSS), which I had the privilege of heading as the first Department Head for three years. The Payments & Settlement Act was passed by the Parliament in the year 2007 legally empowering the RBI to regulate and supervise the Payments System. The Act also recognized 'netting' as a legal process. Further, the Act also made bouncing of electronic payment transactions equivalent to bouncing of cheques as a criminal offence. Once institutional strengthening was done at the Central bank recognizing the importance of Payment Systems in the economy, a regular process of consultation and finalization of Payment System Vision document also started with the first Vision document published in 2005. In the first Vision document (2005-08), two proposals were made – one for creating a specialist payment system organization for all retail payment systems and the second for building a domestic card

payment network. These two proposals were included once again in the Vision document for the period 2009-12. National Payments Corporation of India (NPCI) which is a reality today is part of that Vision. Similarly, RuPay – the domestic card payment network is the realization of that Vision.

Being the first MD&CEO of the new Organization, let me elaborate a little why it is an Institutional Innovation.

As evident from the name itself, the Corporation aims to be a national institution. It has been designed as a 'Not-for-Profit' company with an objective that it would act as 'Utility' for the entire banking industry. Though the Company has been promoted by 10 banks at the instance of Indian Banks' Association (IBA) and the RBI, the process had started for broad-basing the ownership. Ownership has more to do with who took the initiatives and less with the privileges that the owners enjoy. The Board of Directors consists of persons of eminence as independent directors apart from the 10 promoter banks. The RBI has also a nominee director on the Board; but lest there be any conflict of interest, usually a former CMD of a bank is the nominee director of RBI. The Company has opted to adopt high standards of governance as applicable to listed companies. Creation of the Company has relieved the RBI of a few operational responsibilities so that the RBI can focus on regulation and supervision. The day-to-day operations which RBI used to handle are gradually being passed on to this Corporation. In a short span of four years, the Corporation has taken over three operations – ATM Switching from the IDRBT – the technology arm of RBI and Cheque Clearing and Automated Clearing House processing from RBI. Simultaneously, the Corporation have built three new lines of business, i.e. Money transfer, domestic card payment network and Aadhaar based payment platforms. NPCI is currently working on quite a few products based on Contactless and NFC.

NPCI has now emerged as the key financial market infrastructure in the country.

I would now reflect on the second part of Innovation, i.e. Product Development Innovations.

Product Development Innovations

First and foremost is on building a domestic remittance system called the **IMPS** which operates on 24x7 basis on real time. When we started the system, it was only on mobile channel and we had named it as Interbank Mobile Payment Service (IMPS). Soon we realized that the system can be made channel independent and can be used as a platform similar to two remittance platforms already being operated by the RBI, i.e. RTGS and NEFT. So, we renamed the platform as Immediate Payments Service keeping the acronym IMPS unchanged. While RTGS system is mainly for large

value transactions, NEFT system operates only during scheduled hours. We wanted to build something which would be used 24x7 and would cover customers of all bank branches in the country. There were a lot of apprehensions in the initial period with questions like – whether there is really a need for 24x7 payment system and whether the real time system would bring additional settlement risks and security concerns. It was felt that real time system would not pose any settlement challenge if the amount of individual transactions is kept low and transactions are initiated by the banks with sufficient margin money.

IMPS have generated a lot of interest within the country and outside. Though we envisaged that 500 Million active mobile hand-set users would be able to initiate payments on a self-service mode, it has not been realized so far because good user-friendly and at the same time secure handset solutions are not ready as yet. Banks have realized that inspite of large number of smart phones, downloading the hand-set solution is still very complex. Also, banks have also not been able to build friction-free straight-through solutions. Nevertheless, we notice about 85,000 inter-bank transactions and about 300,000 intra-bank transactions per day. The potential – both Person-to-Person money transfer and Merchant payments is enormous. Only 59 out of 1500+ banks have been brought under IMPS so far. Bulk of the banks in Cooperative sector and the Regional Rural Banks (RRBs) are still out of IMPS. The vision is to interconnect all the banks and financial service providers in the country. The RBI has now permitted money transfer from Bank Account to Non bank Account like Prepaid service providers and from Non Bank account to bank account. Nearly 10% of the transactions being processed pertain to corridor between banks and non-banks. The good news is that very recently, RBI has permitted domestic leg of international money transfer transactions also to be processed through IMPS platform. Therefore, banks and financial institutions engaged in international remittances have new opportunity for crediting the beneficiary accounts in India real time, if the remitting institution can carry out AML verification real time. A lot of interest is being generated in this regard and I hope that IMPS would play a key role in furthering the money transfer transactions. Since Network International also plays a role in international money transfer to India, I believe that there would be opportunity for NPCI and Network International to work together. I would like to appreciate special efforts being made by Shri Avijit Nanda from TimesofMoney in this regard.

The second product innovation I would like to talk about is **RuPay**.

RuPay has been positioned by NPCI as a domestic card payment network. Focus is primarily the card payment transactions within the country and there is no ambition to compete internationally. Despite stiff competition from international card schemes, we have begun to have to some market share which is visible. Though our focus is domestic market, we have partnered with Discover Financial Services for RuPay international card for the small segment which would like to use international cards. I am happy that Ms. Diane Offereins, President – Payment Services is here today at the Conference and would be addressing immediately after me.

The challenges being faced by us in operating domestic card payment network may not be new. The product offerings also may not be significantly new. We have initiated steps to cardify the bank customers in all segments – rural and urban. Our thrust has been on debit card. Before the entry of RuPay, the number of banks issuing payment cards was around 65. Now the number is 250+. Cards specific to certain segments such as Farmers, have been rolled out with a specific purpose. We are confident that RuPay would play its role in deepening the cards market.

From the experience of running the ATM card switching platform, i.e. National Finance Switch (NFS), we notice that not more than 150 Million customers have been using the cards even if the debit card base is 400 Million. The number of customers using the interbank ATM network of about 1,55,000 ATMs during the month of December 2013 was 75 Million. Assuming that 50% of the bank customers would not have used interbank ATM network platform, the number may still not exceed 150 Million. The positive aspect of this data is that number of unique customers using various channels month by month has increased. For RuPay card base of 15 Million, we see a volume of 6 Million per month. We would consider RuPay project a success, if in the next five years' period, a significant percentage of card holders use all possible channels – ATM, PoS, eCommerce and conduct payment transactions electronically.

The third and final product innovation I would like to share is leveraging **Aadhaar - the Unique Identification Number** allocated by UIDAI for payment services. Aadhaar is primarily an identity and authentication tool. The newness comes from the fact that we have also started using it as a financial address. UIDAI has now built the largest biometric data base in the world and have

enrolled nearly 600 Million, i.e. half the population of the country. The number is growing each day. In consultation with UIDAI, NPCI has now built a Mapper called the 'Aadhaar Mapper' which is essentially a table containing the Identification number and the bank code where the person holding the Identification number maintains an account. Thus, if a customer's Aadhaar number is seeded in the bank's data base and also in the NPCI Mapper, the money transfer is possible using the Aadhaar number as financial address. A unique service called 'Aadhaar Payment Bridge' (APB) has been created on this concept and Government benefit transfers are being paid through APBS. The experiment carried out with 25 Central Government schemes and a few State Government schemes in addition to LPG Gas subsidy has proven beyond doubt that APB can be an effective tool for speedier disbursements of Government benefits, and at the same time, plugging the leakages in the system. In the month of January 2014, NPCI processed around 15 Million transactions using Aadhaar number as the financial address.

The experiment on using Aadhaar as an authentication tool and also for Know Your Customer (KYC) verification has been a great success. NPCI provides both – Gateway service for authentication and also for Clearing and Settlement. I consider this Project as something innovative.

I thank Network International once again, and wish subsequent deliberations, enriching and interesting.

Thank you all.

(Address by Mr. A.P. Hota, MD&CEO at the 'Network International User Conference' held in New Delhi on February 13, 2014)