



## International Cards and Payments Council – Dubai – 12 Nov 14

### Building a new National Payment Scheme in a vast country and how to take it international - A P Hota, MD&CEO, NPCI



Good Morning Ladies & Gentlemen,

First of all I would like to thank the organisers -Lafferty Group - for the opportunity to share the story of building a new National Payment scheme in a vast country like India and the efforts now being made to take this international.

Yes. This is the story of **RuPay** – the domestic Card Payment Scheme that got started in June 2011 and is now a fully operational Debit Card Scheme within a period 3 years.

Let me narrate this story in five chapters.

#### **Chapter-1**

Chapter-1 is simple. The story begins with the Reserve Bank – central bank of the country publishing the Payment Systems Vision document for the period 2005-08. Two critical suggestions were made - both emanating from the big Vision of modernizing the payment system - one on creation of a National level Payment System organisation which will manage all type of retail payment systems in the country, and two, to examine the feasibility of a domestic card payment network to process country's card payment transactions within the country.

The task of implementing these two ideas were given to the Indian Banks' Association – the body of commercial bankers. It took three years for these ideas to gain acceptability by the Indian banking community. There was no mandate from the Central bank. Central bank was clear that it has to be an initiative by the banks for the banks. Central banks can only facilitate. Meanwhile,

Reserve Bank brought out the second Vision document in 2008. While creation of a central infrastructure for retail payments was at advance stage, the idea of a domestic card payment scheme had not taken off except for an Inter- bank Committee report that it is a good idea to have a card payment network similar to China Union Pay.

Finally in April 2009, the new Payment System organisation got commissioned as National Payments Corporation of India (NPCI). I was invited to head the institution as Interim CEO. The organisation itself was an institutional innovation. It was created as a “Not for profit” company with the mandate to take over all the operational retail payment systems from the central bank or its subsidiaries and build new payment schemes as deemed appropriate by the Company. The mandate included cheque clearing, ACH, money transfer, ATM clearing and clearing of other types of retail electronic payments. The task of building the domestic card payment network was also entrusted to the new Company.

Shri N.R. Narayana Murthy, the icon of information technology in India was invited to chair the Board. Ten major banks in the country contributed the initial capital of Rs 10 crore each (approx. 2 million USD then). By 1st January 2010, the Company was up and running. The first service to take up was the switching of inter bank ATM transactions which used to be operated by IDRBT - the technology and research arm of Reserve Bank. Considering the central bank support and guidance on a continuous basis, almost all the mainstream banks in the country could be enrolled as members in a year’s time.

An organisation is now ready with some qualified people who can give some shape and colour to the dream of a domestic card network project. No rocket science. But some engineering and domain expertise is required. My due respect to consultants - It cannot be just the work of a group of consultants. Project leaders would have to be in-house.

## **Chapter - 2**

The real story of the domestic card scheme starts in Chapter-2. Once NPCI proved the capability to manage an ATM network and also rolled out a mobile based money transfer system, Reserve Bank of India (RBI) accorded in-principle approval for a domestic debit network called India card. The debate started whether NPCI should tie up with the International Card Schemes (ICS, only two in the market) and do the co-branding or build a Card Scheme rivalling them. The central bank was agnostic to either approach. The only request from the central bank was that the card payment transactions, if domestic, should be processed within the country, fees to be levied in Indian rupees and banks in India have a say in the operation of the Scheme. Several rounds of discussions were held with the International Card Schemes as to whether they were open to partnership. It was debated whether NPCI would do only domestic processing of the cards of both

the international card schemes as already prevalent for ATM transactions. Bankserv of South Africa was used as the model. At last, the decision was to go for a domestic card brand. A mere processing role would not meet the aspirations of the banks in India or meet the Vision of the Regulator. We appointed a Consultant to start working on the Scheme rules. Since we were quite familiar with the world of processing ATM transactions, the first set of rules could be readied easily. A few banks volunteered to pilot and issue a limited number of ATM only cards. While trying to register the brand name - India Card, we discovered to our horror that three other companies have already applied for registration of India Card as their trade mark. We coined a new name RuPay- "Rupaiya" - Hindi word for money and Payment. We launched ATM only cards in June 2011 in a small function. Domestic card network was thus born.

Getting RuPay cards accepted on all the ATMs in the country was not a problem. Soon after taking over the ATM switching infrastructure from the Reserve Bank's subsidiary, NPCI had focused on inter-operability of ATM infrastructure in the country. A customer can walk to any ATM in the country and access the bank account for various services. Therefore, for making RuPay card acceptable at all ATMs, requirement was simple - a small parameter change in the ATM switch. The only challenge was for a couple of foreign banks which required changes in their global system which also got sorted out in a year's time. Putting the stickers on the ATMs took time, but got completed.

Thus, the lesson for any country venturing on a domestic card scheme is to create conditions for 'inter-operability' and that too ATM network to start with. Had we not been managing the ATM network prior to launch of RuPay, our task would have been much difficult.

### **Chapter - 3**

Chapter-3 makes the RuPay story really interesting and absorbing. Interesting in terms of technical complexity of the project and the art of dealing with various stake holders.

It is common knowledge that technical complexity of card acceptance on Point of Sale (POS) at merchant locations is far more than a card acceptance on ATM. In case of POS acceptance, merchants emerge as the fourth party. They are partly funding the entire eco-system. While the issuing bank does not mind paying interchange for the customer to make a transaction at another bank's ATM, in case of the same customer making a payment at a POS, the same bank expects a good interchange revenue. There were many policy debates on interchange as to whether the new domestic card scheme would make a departure in favour of a very low interchange to boost electronic transactions. The story of interchange intervention in Australia was fresh in the mind of the Regulator and the Regulator was also seized with the issues. The debate ended with the

decision that the interchange as applicable to the international card scheme should continue. The interchange at that stage – both debit and credit card- was around 1.4 percent. Thankfully, the Regulator took a decision that debit interchange requires regulatory measures and in India, the intervention was at Merchant Discount Rate (MDR) level. In other parts of the world, the intervention has primarily been at interchange level. In the new regulated regime, for transaction up to Rs. 2000 (around USD 35), MDR was changed to 0.75 percent and above that amount, 1 percent. Beyond MDR and interchange however, traditionally, existing International Card Schemes levy slew of charges which includes membership fee, certification & testing fee, assessment charges, authorisation charges, Network fee etc, to its members making the overall proposition of card based payment system substantially costly. RuPay as a domestic scheme departed from such established practices of the existing ICS and to have the fixed fee of 60 paise ( 1 cent) to the issuer and 30 paise (0.5 cent) to the acquiring bank. No other charges to the banks. Even IINs were provided free with no settlement or MIS charges. As a result, the chargeable fee to the member banks came down to about one fourth that of the international card schemes. Thus, the domestic card scheme was positioned as a credible alternative to established card schemes at far more affordable cost

Now comes the challenge of technical enablement of the terminals. In India, only 32 banks operate as acquirers. White label POS acquiring has not been permitted so far. Of these 32 banks, only 4 banks account for 85 percent of terminals – three private banks and State Bank of India. But most interesting is that the terminals were of just two types with one terminal brand accounting for 85 percent. The practice hitherto was that whenever the international card schemes launch new schemes, the terminal manufacturers upgrade the terminals at their own cost to make them saleable. This time, the largest terminal supplier refused to make any changes unless it receives the pound of the flesh. The procedural guidelines, interchange and fee structure and technical infrastructure at NPCI level – all were ready with the terminal enablement impasse to be broken.

We took a decision to start the PoS enablement venture in March 2012 only with the terminals of 5 banks without waiting further. We hoped that Government or Regulator would intervene to promote inter-operability. But we were told that market forces need to determine the game. Unfortunately monopoly wins. We agreed to pay Rs. 500 per terminal ( USD 9) to the banks who in turn passed on to the terminal suppliers. We lost one year in prolonged negotiation and took one more year to enable the terminals. Now 1.03 Million POS terminals are RuPay enabled. The only terminals which are not enabled as yet are the terminals of two foreign banks who, I donot know, when their global headquarters would realise that they are missing the opportunity.

Now comes the RuPay enablement on eCommerce. We explored whether we could use the same methodology of Verified by Visa for eCommerce so that experience of the customers remains the same. We faced some hurdles. We decided for PaySecure solution from an US based company

which we found to be more efficient. We launched RuPay eCommerce in April 2013 and in a year's time covered all major eCommerce merchants. RuPay users provided very good feedback and dropout rate was considered much lower than the competitors' offerings.

As on today, RuPay is accepted on all three channels - ATMs, PoS and eCommerce. In Indian mythology, we think of three forces – Brahma , Vishnu and Maheswar. These three channels were like three forces. RuPay, now Made in India, is all rearing to make a mark on Indian Payments scenario

## Chapter - 4

Chapter-4 narrates the story of RuPay issuance. After technical enablement of RuPay on ATMs in June 2011, PoS in March 2012 and eCommerce in April 2013, we expected that member banks would go beyond the pilot stage and start issuing the cards in a big way. But the journey was not smooth. Blessings from the Regulator for building the domestic card scheme was limited to regulatory approval for entry of a new player. NPCI's entry into competition came as a burden to some member banks.

We could notice that most of the banks have affiliation to both the card companies - either giving equal share of the business ( value proposition being more or less the same ) or by giving credit card business to one scheme and debit card to another. Besides, as the domestic card scheme was being built, the competition had entered into long term issuance arrangements with banks. Since our prices are open and transparent, there was no room for negotiation on one-to-one basis. We donot have a big budget for advertisement. Therefore, we had no way but to focus on those banks which had faced entry barriers due to high cost of building the infrastructure to offer card payment products to their customers. It was also revealing that inspite of more than three decades of operations in the country, the card schemes had only about 53 mainstream banks and a few cooperative banks. We focused on this left out segment and could bring in more than 200 banks in our fold for RuPay card issuance in two years' time. Card issuance by main stream banks was limited to some special types of cards for farmers called Kisan cards. While we could get good volume of card transactions on ATM channel, other two channels could barely be used these card holders

The impetus came with the launch of Prime Minister's Jan DHAN Yojana (PMJDY) of the new Government. On 15<sup>th</sup> August 2014 - on the occasion of Independence Day - the Prime Minister announced the Scheme that envisages opening of 100 Million bank accounts by 26th January 2015 when the next Republic day gets celebrated. In less than 3 months, 70 Million new accounts have already been opened. Every new account holder is being given a RuPay Card. The demand for

issuance of RuPay cards is so much so, that our 12 approved printing and card personalisation agencies have not been able to cope with the demand. As per the last count a week back, the backlog was as high as 45 Million. Only 25 Million PMJDY cards have been issued so far, taking the total volume of RuPay card to about 45 Million.

One would wonder what made the Government of India to direct the banks to issue RuPay cards in a big way. It was the unique loyalty programme that came with the RuPay cards. We provide Accident Insurance of Rs. 100,000/- if the card "remains in force" at the time of accident leading to permanent disablement or death. The definition of "card remaining in force" means, the card should have been transacted in any channel during the last 45 days. What was used by us to boost card payment transaction was taken by the Government as a welfare measure.

The card has a different design and a logo. The card can be accepted in any channel. Due to this Government support, many banks started issuing RuPay cards for main stream customers as well. In a country where only 2-3 percent population is insured, RuPay card will facilitate some form of insurance to almost 60 percent of the population.

The lessons for the countries going for domestic card scheme may note that spin off and unanticipated benefits are many. I would urge that every country with a sizeable population should have its own domestic card payment system.

## **Chapter-5**

Chapter-5 is the story of taking RuPay International

Till recently, almost all the 300 Million cards issued by banks with international card schemes were international enabled. Therefore, while designing the domestic card scheme, we had no choice but to have the provision for international acceptance. Our study showed that only 5 to 6 percent cards issued had been used internationally. Some banks had higher percentage, but the average was small. We had a choice to stay completely domestic. But member banks desired that unless the card is accepted internationally, they would find it difficult to issue RuPay card to customers even if the customer has no plan to go abroad.

We tied up with DISCOVER which uses the rails of Diners Club outside US and its own rails and rails of Pulse within US. Keeping a provision that we may have the option for additional affiliation, we signed a non-exclusive agreement with DISCOVER. That gives us the flexibility for additional affiliation with other regional or global networks. For the present, only 3 banks have started issuing RuPay DISCOVER cards. It uses the IIN of DISCOVER so that no additional work needs to be

done by DISCOVER other than clearing and settlement. Now, we acquire the DISCOVER transactions in India. Limited to ATM transactions, next month we would be operationalising PoS transactions as well.

We are discussing similar affiliation with one more card scheme which has a very good presence in South East and Far East countries. We will be open to more of such regional arrangements as we move forward.

The lesson is that it is difficult to stay isolated in a connected world. Pure domestic card network looks difficult.

## **Conclusion**

In conclusion, I would address whether it makes sense for building domestic card schemes. I would advocate in favour. Domestic card scheme is a necessity to provide governance control in the hands of the local banks, local regulator and the local government. It can be used as an instrument for growth as is being used by the Government in India to eradicate what is called "financial untouchability". Domestic card scheme is not contrary to one world approach similar to development of local culture and tradition is not anti-ethical to going global. Rather they are supplementary.

Card payment system is also a critical tool to make payment systems electronic and bring alternative to cash. The regulators cannot ignore this system and have a great interest in developing local schemes. I see great future for domestic card schemes parallel to development of international card schemes. They can complement each other even in the competitive world.

I hope, my story of RuPay was of some value to the conference and I thank the organisers once again for the opportunity.

Thanking you all.