Evolving Customer Friendly Payment Systems in India A Continuing Agenda*

G. Padmanahhan

Mr. Jaganathan, distinguished guests, officers and staff of Tamilnad Mercantile Bank (TMB) and ladies and gentlemen. It is my pleasure to be amongst you on this occasion of the launch of mobile banking service by TMB. TMB which has a history of 90 years of banking has come a long way from 4 branches in 1947 to 258 branches as on date.

- 2. I am pleased to note that TMB has been in the forefront in embracing modern technology providing value added services to its three million customers. The Bank has launched various technology driven products such as Internet Banking, SMS Banking and other electronic payments like Real Time Gross Setlement (RTGs)/National Electronic Fund Transfer (NEFT) etc. Launching of mobile banking service would be another feather to the bouquet of products being offered by TMB to its customers.
- 3. Given that payment systems are continuously evolving, it is necessary that all the stakeholders including the regulators are continuously engaged in gearing up to provide safe, efficient, robust, accessible and affordable payment services to our citizens. The challenge, therefore, is to understand the various issues and the subtle nuances of this ever evolving payments landscape and devise appropriate strategies in short we should continue to stay ahead of the curve. Have we as an industry been able to achieve this? I have accordingly focused my thoughts on some issues in payment systems which I think need our collective attention.

Innovations in Payment Systems – Create a Need or Deliver a Need?

- 4. Innovations in payment systems especially electronic payment methods have and are being attempted keeping in mind the potential benefits in terms of more choices, reduced processing costs, increased revenue and overall social benefits. However, not all innovations in electronic payments have been successful. The success or failure of an innovation in payment system would depend on the critical mass or what is generally known as the network effect achieved which should be large enough to support its cost in the long run and generate adequate returns.
- 5. Introduction of innovations in payment system often poses the classical 'chicken or egg dilemma'. Unless there is product innovation, the customers would not have a choice of products. And unless the customers express a need there is no incentive to introduce new innovative payment products. However, it does not mean that every innovation would be embraced by the public, providing the innovation with a critical mass and sustainability that would make it a standard practice.
- 6. It is often the case that the success of innovation depends on factors such as: (i) how eager are the consumers to use the new technology this has definite relation to the feeling of 'safety' (ii) the 'ease' factor the perception in the mind of the customer on the easy to use factor; (iii) the associated cost *vis-a-vis* existing products; (iv) the convenience in terms of using the product 'any time', 'any where'.
- 7. Given the above, it must be said that introduction of new and innovative payment systems is a long-haul as these have an associated large cost and long gestation periods to achieve 'network' effects. As in

^{*} Inaugural address by Shri G.Padmanabhan, Executive Director, Reserve Bank of India on the occasion of the launch of Mobile Banking services by Tamilnad Mercantile Bank Ltd on January 9, 2012 at Chennai. Assistance rendered by Shri G.Srinivas, K.Sivaraman, Saswat Mahapatra and Smt. Radha Somakumar is gratefully acknowledged.

any new entrepreneurial venture, there is an element of financial risk associated with new payment systems, as it may not achieve the desired public acceptability of the new product.

- The last few years have seen the unveiling of a plethora of innovative retail payment products (both paper and electronic) in the market, driven primarily by technological developments, consumer demands and changing habits and complimented by policy initiatives/interventions of/by public authorities. If we review our own payments system landscape, the introduction of new payment products and methods during the previous decades could be termed as supply driven such as Magnetic Ink Character Recognition (MICR) technology, electronic payment systems viz. Electronic Clearing System (ECS), Electronic Funds Transfer (EFT), National Electronic Funds Transfer (NEFT), National Payment Switch (NFS), Cheque Truncation System (CTS), various type of plastic cards etc. These supply-driven innovations for both paperbased and electronic payments have gained wide acceptance over a period of time. All these innovations and new payment methods have been driven by the regulator. The products were rolled out and banks were encouraged to make use of these products to render better, faster, safer and secure services to their customers. All these payment products have stood the test of time and have been success stories. This illustration proves that the supply-driven approach used by the regulator has resulted in providing the Indian consumer with new payment systems and products.
- 9. Is it, therefore, the case that only the above approach would result in consumers using new payment products and not otherwise? The answer to this again is perhaps not very clear. While it would be true that in the case of an emerging market country like India, the regulator has to be pro-active and induce supply driven innovations in payment products to bring in safety and efficiency, the same may not hold true in the case of other countries. Such a regulatory stance as taken by the Reserve Bank is largely determined by the mandate which the statute provides it with.

- 10. However, there have been instances where supply—driven innovations have not been so successful. For example, one of the banks in India experimented with 'tap and pay' payment product using 'Near Field Communication' technology. The response received was reportedly not encouraging enough for launching the product. However this technology is again making its appearance and is likely to be available on a larger scale.
- 11. It is not always easy to classify an innovative payment product as either being supply-driven or demand-driven. For example, it would be difficult to determine whether mobile banking is purely supplydriven (in terms of enhancing the capacity of the chip in the mobile to undertake banking functions as well) or is it demand-driven by the customers who would see this particular service as a 'value added service'. (along with ringtone downloads for example) that has prompted banks, payment service providers and telcos to provide this service. Is it because of the technology capability to transmit financial information in an efficient and secure manner that has made banks consider development of mobile-based applications for banking or is it the ubiquitous character of the mobile phone and its affordability that has heralded m-banking as the next-generation innovation? There is no clear answer. But what is evident is that mobile banking as an innovative and inclusive payment method which delivers and fulfills a social need is here to stay.

Is Mobile the Most Appropriate Delivery Channel for Banking Services?

- 12. As a logical corollary, should then one conclude that the mobile device is the most appropriate delivery channel for financial services? If the test of safety, security, soundness, efficiency, accessibility and authorised operations has to be positive, then I think the mobile phone has the capability of providing these services and empowering the common man to conduct his/her payment transactions any time and from anywhere.
- 13. The Reserve Bank recognised the potential of the mobile phone as a channel for conduct of financial

services quite some time back and the first measure to regulate this area was taken in October, 2008. The Reserve Bank consciously opted for a bank-led model of mobile banking and the reasons are well known.

- 14. In our endeavour to enable enhancements in mobile banking both in terms of the nature of services offered and the value of transactions to be permitted under mobile banking, we have been in constant dialogue with the stake holders and intervened to liberalise the mobile banking guidelines in a phased manner the - latest being the removal of the cap of ₹50,000/-. Remittance from a bank account for cash pay out to the beneficiary through the medium of mobile at an ATM/BC outlet has also been facilitated with the remitting bank obtaining the beneficiary details. The Interbank Mobile Payment Services (IMPS) operated by the NPCI with the approval of the Reserve Bank has enhanced the efficiency of mobile banking by enabling real time transfer of funds between bank accounts and providing a centralised interbank settlement service for mobile banking transactions.
- 15. Data reveals that as at the end of July, 2011 the total wireless subscriber base was 858 million, which included 292 million subscriptions in the rural areas. As against this only 55 per cent of the people of India have deposit accounts. It is evident that mobile phones have reached more households than basic banking services.
- 16. Given this scenario, should banks not embrace this new technology at a more sustained pace and provide mobile banking services to their customers?
- 17. Let me provide you with some facts and figures on this issue. RBI has so far authorised 52 banks for providing mobile banking services, out of which 44 banks have commenced offering these services. Transactions in mobile banking have been showing an uptrend. During October 2011 more than 22.45 lakh transactions for close to ₹161 crore were transacted. In terms of both volume and value of transactions on a month-on-month basis the growth has been a little over 9 per cent. A little over 96 lakh bank customers have so far registered for mobile banking service. These numbers while looking impressive are not really

heartening if we juxtapose them with the data on the number of bank accounts and the mobile subscriber base. They seem like a drop in the ocean! What this means is that banks have not really made a significant penetration even amongst their existing customers to extend mobile banking services.

- 18. In this connection, the question that begs an explanation is, as to why despite enabling collaboration between banks and mobile service providers, this collaborative model is yet to gather steam? Are there any insurmountable challenges inhibiting this partnership? If yes, what are they?
- 19. I am aware that some of the issues that come up in this regard relate to (i) who owns the customer? and (ii) who controls the transactions? Has there been any worthwhile attempt to resolve them in a mature way? Or like sulking infants is each one trying to wear out the other including the regulator? Let me say that if the latter is true, it can be a painfully long and expensive process benefitting none and does not help in our efforts to achieve true financial inclusion. Therefore I would urge upon the banks and MSPs to get their acts together. On behalf of the Reserve Bank let me assure you, once again, that we stand committed to the success of this collaboration and would remove all genuine obstacles!

Responsibilities of Banks and Customers-A Balancing Act.

20. Let me raise the issue of consumer protection and responsibilities of banks and customers in the event of fraudulent/unauthorised payments in the customer's account and where we stand when compared to other countries. Let me recount a conversation narrated to me by a friend between a customer and his bank in US. The bank informed the customer that unauthorised transactions were being suspected in his credit card account. The customer retorted that the transactions were taking place in bank's books and not in his account as he had not carried out those transactions as the card was very much in his custody. The customer further added that the bank is responsible for ensuring that fraudulent transactions are not carried out when the card is in the possession of the customer. If the same

question were posed by a bank customer in India, what would be the response of the card-issuing bank here?

- 21. As you may be aware major credit card issuers in US have adopted zero liability policies or limited liability policies to protect the costumers from fraudulent or unauthorised transactions in their credit cards. Zero liability policies go beyond the requirements of federal law, which limit individuals' out-of-pocket expenses to \$50 if a credit card is lost or stolen and then used fraudulently. Zero liability protection increases the costumer's confidence in credit card transactions.
- 22. But in India the liability often shifts to the customers. Generally the credit card issuers are not liable for fraudulent transactions unless the customer reports the unauthorised transactions immediately. So the shift in liability from customers to banks comes into effect only after the customer informs the bank. Banks argues that they take adequate steps to ensure safety of card transactions, and the least they expect from the customer is to report the card loss immediately. This is understandable and logical.
- 23. But the logical consequence of this would be that where a customer has adhered to all the risk measures prescribed by the bank, but yet unauthorised transactions have taken place in his account, should the responsibility then not be with the card issuing bank? This being the case, is the time now ripe for us to implement a zero liability policy? I leave it to the industry to debate and discuss the issue.
- 24. Therefore, the continuing message for us is that improving safety, security and efficiency in payment system requires coordinated and cooperative efforts from all stakeholders. Together we have achieved significant milestones be it 2FA for card not present transactions or SMS/E-mail alerts for card transactions etc. However, I regret to note the areas where banks are not meeting the requirements.
- 25. Take the example of the NEFT system. NEFT is a pan-India one-to-one funds transfer platform enabling near-real-time settlement of funds, is the major retail electronic payment system. The feature

of positive confirmation to the remitter either through SMS/e-mail — unique I might add, is one of its main attractions! However, a large number of customer complaints are received regarding non-receipt of confirmation SMS/e-mail. The beneficiary banks which are required to send confirmation messages (N-10 messages) to the originating banks are either not sending such N-10 messages at all or they are only sending them partially. Such behaviour patterns have resulted in many customer complaints and impacted the overall systemic efficiency of NEFT.

- 26. With regard to alternate/electronic payment channels, the following issues have been flagged to us:
- ATM 'out of order' board being utilised as a 'cash management tool' particularly by outsourced entities in places like University campuses which record heavy footfalls. If you chose to ignore the sign you are often in for a pleasant experience of ATM actually working!
- On site ATMs following the same opening and closing timings as the attached branch!
- 27. Similarly there are several complaints regarding inordinate delays in crediting customer accounts and very poor or nil response from Customer Facilitation Centres. In many instances customer accounts are credited only after the Reserve Bank takes up the matter directly with banks. Instances of banks not paying any penalty for delay in crediting customer accounts have come to our notice. In one instance, the bank at fault insisted that they would pay the penal interest to the customer only if the Reserve Bank writes to them advising them to do so!! Such aberrations need to be rectified at the earliest.
- 28. At the same time, we also have to contend with a set of people who try to defraud the same system using uniquely Indian approaches forcibly holding on to a few pieces of notes in ATM machines that has cash retraction system- (*i.e.*, cash getting sucked back by the machine, if not removed within a specified tome, often seconds), and then claiming non-receipt of cash. We have now agreed to the proposal of National Payment Corporation of India (NPCI) to remove this functionality from all machines after a pilot proved

extremely effective in curbing such misuse. Of course due notice will be given to all customers. So remember hereafter if you are careless to walk away from an ATM forgetting to collect your cash, it is lottery for the next user!

Pricing Payment Products

- 29. Let me flag a related customer service issue-pricing of payment products which has been engaging our attention. One of the dilemmas that a central bank like the Reserve Bank faces is whether it should play an active role in pricing of payment products. The banks may argue that pricing should be market-driven and left to the banks. The public may expect the regulator to ensure a fair pricing structure. The difficulty for the regulator is in balancing the expectations. The Reserve Bank as a policy does not usually intervene in pricing of payment products and expects the banks to self regulate and ensure a fair price structure.
- 30. However, our intervention becomes necessary when the industry behaves in a manner where the public policy objectives of affordability and accessibility to modern electronic payments are not being served. Our intervention is necessary when customers shy away from using payment products on account of arbitrary fixation of charges. The rationalisation of service charges for paper and electronic products by the Reserve Bank was accordingly an attempt in this direction.
- 31. Notwithstanding the above, anomalies in pricing structure continue to be present. There have been instances where the fees for intra-bank fund transfers have been higher than inter-bank fund transfers using NEFT and RTGS. The dichotomy is more baffling when on one hand banks encourage their customers to use net-banking and other new channels but on the other hand discourage them by pricing the intra-bank charges higher than the inter-bank charges. Banks have also found innovative means for levying additional fees such as charging additional fees for cheques collected under speed clearing.
- 32. The banks should introspect on their pricing strategies for payment products especially so in a technology-driven system keeping the objective of

affordability and accessibility in mind. The pricing should be commensurate with the cost of conducting the transactions. The very purpose of technology proliferation in payment system is cost reduction, increased convenience, service improvements, and risk mitigation, *etc.* Banks must find ways of distributing the benefits of technology to the customers in terms of reduced transaction costs.

33. I would like to pose a few thoughts on pricing to the industry. How can banks help their customers and themselves in influencing the payment system behaviour of the customers by adopting an appropriate pricing structure? Should the pricing structure of banks not encourage usage of use of electronic products over paper based products? Is there a need for differential pricing (interchange fee) for credit card and debit card transactions?

Access Criteria- to Be Liberal or not to Be?

- 34. The Reserve Bank has recently reviewed and revised access criteria norms for centralised payment systems *viz.* RTGS, NEFT and NECS. These have been revised based on the objectives of: (i) strengthening the risk management framework of payment systems by ensuring that financially sound entities gain access to systemically important payment systems; and (ii) facilitate wider reach and access to payment systems by suitably adjusting the entry norms and thereby complimenting the financial inclusion endeavours of the Government and the Reserve Bank.
- 35. Post revision of access criteria guidelines, we have been receiving a large number of applications from banks for access to payment systems. We have till date accorded approval to 17 banks for membership to centralised payment systems.
- 36. There are two issues which I would like to highlight in this context. First, should we consider a bank's technological capability in the form of a CBS as the sole criterion for providing membership to payment systems? The answer to this is that while technological capability would be one of the determinants to access centralised payment systems, it cannot be the sole criterion for providing membership. Financial soundness along with regulatory comfort are other

essential parameters for gaining access to payment systems. This is necessary to ensure the safety, security and efficiency of payment and settlement systems which are the bedrock of financial stability.

37. Secondly, the banks seeking membership should have necessarily carried out a cost benefit analysis while seeking access to centralised payment systems. A bank wishing to become a member of RTGS and NEFT should undertake a proper cost-benefit exercise, and should have a proper business case for joining these systems. Considering the fact that the expenditure for putting in place RTGS and NEFT infrastructure would be in the range of ₹10 million to ₹15 million and ₹2-4 million respectively, the need for a proper business case cannot be over-emphasised. Suffice to say, if the volume of transactions is very low, the per transaction cost especially in RTGS would be very high, rendering the whole proposition uneconomical and unviable to the entity and to its customers as well.

38. Given this, smaller banks could explore options such as indirect participation. Illustratively, RRBs have been permitted to participate in NEFT through the Sponsor bank route. Is there a need to extend the contours of this policy to Urban Co-operative Banks is something the Reserve Bank will examine.

Payment Processing Capabilities – the Evolving Challenges

39. Given the emphasis of the Government and the banking industry to extend financial services to all segments of Indian society, the usage of electronic payment products is bound to increase. There is a discernible move in this direction as seen by the rise in the total value of cashless payments as a percentage of GDP registering an increase from 13.9 percent in 2008-09 to 14.3 percent in 2009-10.

40. This rise in volumes in electronic payment systems is primarily stemming from that segment of population that has a bank account. But, given the continued emphasis on shifting cash transactions to non-cash modes; ongoing financial inclusion initiatives (64 million new accounts opened) and the efforts of the Government to transfer all social

benefits electronically to the citizens, the volume of transactions in the electronic payment systems would grow manifold. The enormity of the numbers that we are looking at can be gauged if the present subsidy schemes of the Government are brought into electronic payment modes.

41. From the data available with us, the present government subsidies amounting to ₹29,700 billion would alone translate into approximately 3,810 million transactions per year. This would in turn add 12 to15 million transactions to the payment systems over and above the transactions already being processed on a daily basis.

42. The Reserve Bank is seized of this challenge and is already contemplating measures to strengthen the payment system infrastructure at the processing sites. However, this alone would not be sufficient unless and otherwise banks are in readiness to handle the increased volume of transactions. Banks could argue that a good percentage of such transactions could be intra-bank would not be part of inter-bank payment systems. However, irrespective of the nature of transactions such transactions would ultimately hit the Core Banking Solution (CBS) implemented in banks. Anecdotal evidence indicates that banks are already stretched with their processing capabilities of their CBS systems. The incremental spurt in transactions would further add to the processing load and would raise questions on the CBS of banks' in handling such volumes. Any bottlenecks at banks' end would also undermine the capability of the banking system to handle the future payment transactions and may prove a dampener in our efforts to migrate more payments into the electronic modes.

Conclusion

43. In conclusion, we have come a long way in putting in place a safe, sound and efficient payment systems in India. The challenge is to make them accessible, affordable and inclusive. It is the social responsibility of everyone, who has the resources and the power, to contribute to the success of financial inclusion. While we have the guidelines to M-power financial services, it is necessary for us, the Reserve Bank, banks and the

MSPs in particular, to take this forward in a cruising mode by convincing the common man not only on the power of the Mobile Phone for doing financial transactions but also the safety and security aspects of mobile banking, to provide a level of comfort. I believe there are success stories of mobile banking in states like Bihar, thanks to the combined efforts of all stakeholders which has enabled not only financial inclusion but made less literate people mobile banking-savvy. This needs to be emulated through adequate publicity and education to achieve M-powerment in a significant way.

- 44. I would like to laud the contribution of banks in popularising the non-cash mode of payments. Banks in recent years have introduced plethora of new payment products which have resulted in significant growth in electronic transactions. But as indicated by me, the payment systems issues are a continuing agenda and we all need to contribute to achieving the twin goals of financial inclusion and provision of speedy, efficient, robust, accessible and affordable modern payment methods.
- 45. I once again congratulate TMB for launching mobile banking services for their customers.