IDRBT Banking Technology Excellence Awards: Remarks*

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I congratulate all the awardees of the IDRBT Banking Technology Excellence Awards. IDRBT instituted these Awards in the year 2001, which reflects the long road traversed by the banking sector in terms of technology adoption. The last few years have seen the convergence of various factors in the payment systems sphere, which makes possible a near-revolutionary improvement in financial access. Unless we take concerted steps to address some of the challenges, however, the full potential of the opportunities may not be achieved. I intend to briefly touch upon some of these issues and challenges in my short remarks today.

Payments systems are the plumbing of the financial system; so long as there is no leakage or clogging, we are unaware of their functioning. But when they do back up, the situation becomes catastrophic quickly.

The Reserve Bank, as the regulator of payment and settlement systems in the country, develops the necessary regulatory framework, generally through a consultative process, to ensure that different types of payment systems cater to the needs of different segments of society. The aim is to ensure easy accessibility and interoperability of the payment infrastructure, while ensuring safety and security of transactions. We encourage a variety of payment channels not only because they cater to diverse needs but also because they add resilience in case some channel breaks down.

Banks have been the traditional gateway to payment services. However, with the fast pace of technological changes, this domain is no longer the monopoly of banks. Non-bank entities are providing innovative payment products and services, forcing banks to reflect upon their strategy – to compete or to collaborate? Banks may not have the wherewithal to compete effectively if they have not been investing in technology and associated personnel. However, if they collaborate without building these capabilities, they may be left with crumbs from the client while their partner takes the whole client cake.

From the RBI's perspective, we welcome both competition and collaboration. What we do find concerning is stasis – for instance, the long period when mobile companies and banks were not willing to work together for fear that one would capture the other's clients. The licensing of payment banks has broken that logjam, and a number of alliances are now under way. Let me broadly describe how we would like to see the payment system evolving.

Some Desirable Features of Payments Systems

Our regulations governing payments systems have to be ownership, institution, and technology neutral so that we encourage the most efficient outcomes. We are more open to experimentation at the early stages of a product or method of service, as will be clear in the soon-to-be-released peer-to-peer lending regulations. At the same time, we have to be more conscious of the risks to stability as innovations catch on and expand. This phased approach is now being called the sand-box approach elsewhere.

Second, we prefer payment platforms that offer broad based access, rather than those that limit access significantly. We would especially like critical channels to be publicly or widely owned rather than monopolised.

Third, we would like payment mechanisms to be cheap and scalable, so that they are suited to our

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economy where ticket sizes are small but transaction volumes huge. An additional desirable element would be for the different payment systems to be interoperable – or at least be able to talk to each other.

Fourth, we need systems that offer security even to the unsophisticated user, and do not place a huge burden of care on them. This requires greater emphasis on transaction monitoring and identification of suspicious patterns by the system operator, rather than an insistence on ever increasing levels of care by the unsophisticated user.

And fifth, we need an effective process of consumer redressal that allows speedy and fair resolution of customer complaints. So long as customers adhere to a reasonable level of care, residual risks should be absorbed by the operator.

Some recent developments

Let me now describe some of what has been happening in payments and relate back to our desires.

- Various payment products and interfaces are now available – Internet banking, cards, mobile banking, ATMs and micro ATMs, prepaid payment instruments including e-wallets and m-wallets.
- Remittance facilities through National Electronic Funds Transfer system (NEFT), Real Time Gross Settlement system (RTGS), Immediate Payment System (IMPS), Instant Money Transfer (IMT), etc., most of which can be accessed through multiple channels including net banking, mobile banking, ATMs and Business Correspondents.
- Leveraging on the high mobile density in the country, mobile banking services are being encouraged through interoperable USSD channel like *99# and the Unified Payments Interface (UPI) provided by National Payments

Corporation of India (NPCI). I am especially enthused by UPI, as smartphones become more widely available. Transfers from bank account to bank account will become easier in a few weeks via smartphone through the Unified Payment Interface. A villager needing to pay a shopkeeper only needs to know the latter's alias – say Ram@xyzbank.psp. He feeds that into his mobile app, writes the payment amount, puts in his password, and presses 'send' and the payment is made, with both getting messages to that effect. Neither needs to visit the bank to take out or deposit money, no point of sale machine is needed. With the price of smartphones falling sharply, we are on the verge of solving the last mile problem.

- Government direct benefit payments are being made through Aadhaar linked payment systems like Aadhaar Payment Bridge System (APBS) and Aadhaar Enabled Payment System (AEPS).
- Bulk and repetitive payments of corporates and governments can be processed through centralised system of National Automated Clearing House (NACH) to which the decentralised system of Electronic Clearing Service (ECS) is also being migrated.
- In ensuring the safety and security of transactions to build confidence and trust in electronic payments some of the measures put in place include mandatory online alerts for card transactions, mandatory PIN entry for every transaction at ATM, additional factor of authentication for card transactions, need for entering PIN for even magstripe Debit cards when used at POS (Point of Sale), migration from magstripe to Chip and PIN cards in a

phased manner, processing of ATM transactions on chip data when EMV Chip and Pin cards are used, encouraging use of contactless cards using interoperable protocols, *etc.* Merchants who complain about 'dropped' transactions as we require additional factors of authentication should also recognise the additional traffic as customers feel safer using their cards. At the same time, we are open to innovative ideas on how to ease transaction costs while preserving security.

- Bharat Bill Payments System (BBPS) has been put in place to address the needs of the large bill payments market, to provide the convenience of anytime, anywhere, any bill payment facility to the users. It is expected to roll out shortly.
- Another significant area of development has been the Trade Receivables Discounting System (TReDS) which ought to be a gamechanger for meeting the financing needs of Micro, Small and Medium Enterprises (MSME) segment. MSMEs get squeezed all the time by their large buyers, who pay after long delays. All would be better off if the MSME could sell its claim on the large buyer in the market. The MSME would get its money quickly, while the market would get a claim on the better rated large buyer instead of holding a claim on the MSME. All this will happen as the three Trade-Receivables Discounting Systems (TReDS) which the RBI has licensed, start later this financial year. The key is to reduce transaction costs by automating almost every aspect of the transaction so that even the smallest MSMEs can benefit.

With these changes taking place and more yet to come, the roles and responsibilities of the banks need to be underscored. Some of the challenges that merit attention are:

- Does the bank's vision and strategy take into account payment services aspects? Are there adequate human resources to project requirements and implement them?
- Adopting technology is more than automation. It calls for serious efforts at re-engineering business processes. Workaround solutions do not last long and the price for overhauling the system in the long run may be just too expensive to manage. There has to be a conscious evaluation of process dependencies taking into account customer experience, security issues *etc.* besides having a long term view of the developments, particularly those of interoperability within and across systems.
- Despite the huge potential, activation rates and usage levels of various electronic payment services remain at low levels, though growth is picking up. No doubt the fear of taxation as payments move from cash to electronic plays a part in dampening activity. As information technology brings down the possible space to avoid or evade tax, and as the benefits, for example in access to credit, of building verifiable histories of transactions increase. I have no doubt that merchants will push more for electronic payments. Some tax benefits to those merchants who show increases in digital transactions, and perhaps innovative ways to encourage customer participation, may be

- beneficial. For example, service providers could enter every transaction into a high-payout monthly lottery, with a few lucky customers rewarded every month.
- At the same time, we should not rule out the possibility that the reluctance to transact is because of the unknown security consequences and costs of using technology. While banks find it more profitable to cater to the requirements of privileged customers, the digital divide should not widen, with more and more digital payment options being designed to serve the requirements of those who already have access to digital, while a large segment of society is left dependent on cash as they are neither aware of the options nor is the infrastructure made accessible at low cost. Creating appropriate customer awareness would not only enable the customers to choose their mix of payments taking into account time criticality, security and risk, and the cost involved, but also enable the banks to optimise their payment product mix depending upon their customer profiles.
- No technology-based or digital services can be offered without consideration for security of transactions. Recently, there have been a spate of frauds (through vishing and phishing) in some segments of payment services. Banks

- have a very high level of responsibility when adopting digital channels – to not only ensure security of the channel at infrastructure level, to protect data security and personal privacy at system level but also address the need to build customer awareness in security matters. There is no point creating security for the ideal customer, instead the system should incorporate the possibility of mistakes by the actual customer that we have. The RBI has set up an Information Technology (IT) subsidiary to support the IT requirements of the RBI and the sector. The IT subsidiary would focus on IT and cyber security (including related research) of the financial sector and assist in IT systems audit and assessment.
- A related matter is the issue concerning customer liability and risk management for electronic payment transactions. The Reserve Bank will soon be laying down the framework for customer liability in electronic payments. Banks have to necessarily build this aspect into their customer education and grievance handling processes.

To conclude, we are in the midst of a payments revolution. There is a tremendous opportunity for us to solve some of the critical problems of the financial system such as financial inclusion. However, opportunity also brings responsibility, and I am fully confident that the institutions represented here will rise to the challenge.