Technology in Banking – In Pursuit of Excellence* Anand Sinha

Director Institute for Development and Research in Banking Technology (IDRBT), Shri B Sambamurthy, faculty members and officers of IDRBT, officials from banks, members of the selection panel, my colleagues from the Reserve Bank and all the other participants. It is indeed my privilege to be present here today to honour the recipients of the banking technology awards and deliver the keynote address for the 7th edition of the awards. I am grateful to IDRBT for giving me this opportunity. My heartiest congratulations to all the winners.

- This is a special moment for me to be presenting the awards to banks for their contribution towards adoption and implementation of technology in different domains of their businesses. As I look at this, I feel both humble and inspired. Humble, because I can honestly say that, a decade ago, I could not have imagined or predicted the impact of technology that is so overwhelmingly prevalent today. Inspired, because banks have employed the present-day technology very successfully and have pushed the right levers to bring about a tremendous impact to their business potential. The role of IDRBT in this long and interesting journey has been commendable. It has essayed, to perfection, its role as a service provider and also as an 'incubator' for research and development activities in the area of banking technology.
- 3. My remarks today are divided into two main parts. In the first part, I would be touching upon the contribution of technology to the Indian banking industry, the role played by IDRBT and the significance of banking technology awards, in fostering the technological developments of banks. In the second part, I would be delving into a few issues in the area of business-technology alignment that are critical in fully leveraging the benefits of technology by banks.

I. Contribution of Technology in Changing the Face of Banking

Technology adoption has changed the face of banking in India. What started as a mere automation of some routine work processes in banks in the mid-80s has moved on to become business process reengineering which has resulted in making banking services branchless, anytime and anywhere; facilitated new product development, and enabled near real time service delivery. Technology has helped banks to reach the doorsteps of the customer by overcoming the limitations on geographical/physical reach in branch banking and easing the resource and volume constraints posed by the brick-and-mortar model. All the stakeholders have benefitted from the expansion of delivery channels, product innovation and efficiency enhancement which have been facilitated by technology adoption. Banks, however, need to guard against losing personal touch with their customers in such a technology-driven environment as this would result in their losing valuable information needed for their business. Overall, technology that began its journey in Indian banking as an enabler, has now become a business driver, and is poised to be an inseparable part of banking business process. This journey has come to the present stage by virtue of the push given by the Reserve Bank and the wholehearted co-operation by industry participants.

Reserve Bank and Banking Technology

5. Reserve Bank of India started this push with the Rangarajan Committee Report I & II on Computerisation in Banks, followed by Saraf and Vasudevan Committee Reports. Some of the significant developments during this journey have been introduction of MICR-based cheque clearing, automation of bank branches, computerisation of Govt. business, setting up of IDRBT, commissioning of INFINET, launching of IT-based delivery channels, providing guidelines for internet

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banking, implementation of NFS, *etc.* The role played by the Reserve Bank continues.

As you all know, the Reserve Bank has recently released an IT Vision Document 2011-17, which identifies the key focus areas for banks in India. The document indicates the significance to be accorded to the enhanced use of IT in areas like Management Information System (MIS), regulatory reporting, financial inclusion along with the need for appropriate risk mitigation measures and business continuity management. It envisages banks to work towards utilising technology for cost reduction of small-value transactions, improved customer services and effective flow of information within the banks and to the regulator. The document emphasises the need to move towards integrated IT environment for tapping the synergistic benefits of holistic system implementation.

Setting up of IDRBT – Contribution in Banking Technology & Research

Setting up of the Institute for Development and Research in Banking Technology (IDRBT), Hyderabad in the mid-nineties, as a research and technology centre for the banking sector was a major step to facilitate and support the 'technological revolution' in banking. It was set up in the year 1994 as an apex-level institute for spearheading technology absorption in the Indian banking and financial sector. It focuses on the training, research and development activities in the field of information technology. The commissioning of INFINET as the backbone for financial communication has been a major achievement for IDRBT. IDRBT also acts as a Certifying Authority (CA) for issuance of digital certificates for players in the banking and financial sector. Structured Financial Messaging System (SFMS), a secure and common domestic financial messaging solution for intra-bank and interbank applications, developed on the lines of SWIFT was the brainchild of IDRBT. IDRBT has also been active in dynamically assessing the needs of the banking community and in organising trainings and workshops in relevant ITrelated areas to address such needs. It has been performing its designated role as an important component of the Reserve Bank's banking technology push and continues with its endeavor.

Reaching for the Skies – Banking Technology Excellence Awards

8. Institution of the excellence awards is a step in the direction of encouraging effective adoption of technology by banks. Instituted in the year 2001, with the primary objective of encouraging and recognising excellence in implementation of technology for better customer service, operational efficiency and expansion of banking services to the hitherto-uncovered sections of society, the category of awards has been changing with the change in the technology deployment focus from time to time. This year, banks have been divided into two categories – large and small, to enhance the spirit of 'sporting competition' amongst banks by ensuring a level playing field.

II. Alignment of Technology and Business objectives – Critical Issues

9. Having given the background of the role of technology in banking development and the role essayed by Reserve Bank and IDRBT, I would now like to touch upon a few focus areas in the business-technology alignment, which could become critical in our journey in pursuit of technological excellence.

Leveraging Technology for Financial Inclusion – The Journey so far, Introspection and Way Ahead

Banking, as all of us know, is an industry that provides vital service and support to the economic and financial sectors. As such, it has to cater to all the diverse segments of society. However, more than 50 per cent of the adult population in our country is still excluded from the financial sector. It is not just people in the rural areas; many of the lower income categories of the urban population are also excluded from the banking fold. This is largely because of the way the supply of such services is organised. Our existing banking business model has done laudable work in some of the areas, but has not been able to adequately address these specific challenges. For instance, transaction costs of financial services to the poor are much larger in comparison to their revenue generation potential in the short-term. From the demand side too, there is financial illiteracy and the consequent fear of approaching formal institutions. With this huge chunk of our populace being deprived of basic economic facilitators, or alternatively seen, with this huge resource base remaining untapped, it would not be feasible to achieve our growth potential.

- Technology has the potential to influence financial inclusion in a big way and help resolve many of the above problems. The use of technology in extending banking outreach is an area of contemporary focus in India. Thanks to the versatility of information technology, innovation is giving us the hope that new business models like Banking Correspondents (BCs), innovative payment devices, Unique Identification number allocation, etc. will enable us to achieve financial inclusion, while addressing some of the cost and beneficiary identification issues. Ultimately, the objective is to lower the operating costs through technological innovations, whereby financial inclusion becomes a profitable business. This will result in a huge upside to the bank in the form of stable deposits. Financial inclusion would be a catalyst to growth and would also contribute indirectly to financial stability.
- 12. We hope that the initiatives in this space, encouraged by Government as well as Reserve Bank, shall get enthusiastic support from the banking fraternity and help us achieve the dream of inclusive growth, which can catapult India into the next orbit of development in the foreseeable future.

Wings of Change – Mobile Banking

Over the last few years, the mobile and wireless market has been one of the fastest growing in the world. Mobile phones have become an essential as well as conveniently available communication tool for almost every individual. Using this technology for funds transfers as well as retail payments holds a huge potential. As such, mobile banking is the most happening area of development in the banking sector and is expected to complement and, to an extent replace the credit/debit card system in future. While it has the potential to overcome issues relating to cost, infrastructure and resources, it does pose some new issues of its own. The main amongst these pertain to the dependence on service providers, network availability and security. It would also require deep appreciation of management aspects which relate not

only to appropriate technology deployment and performance at back-end but also to issues such as front-end contact with the customer to provide necessary confidence and convenience. All these issues are receiving due attention for prioritised resolution. The Reserve Bank has also established National Payment Corporation of India for focused attention on development and implementation of requisite technologies for enabling new modes of delivery.

Electronic Payment Systems

- One of the areas where technology has facilitated significant revolution is payment systems. It started with the mechanisation/automation of certain processes by introduction of cheque sorters and readers, MICR-based clearing, etc. and has moved on to use information technology for efficient funds transfer mechanisms such as ECS, NEFT, CTS, RTGS. The focus has shifted from the initial needs of capacity management for handling increasing volumes, to efficiency enhancement in transaction processing for the benefit of businesses, markets as well as retail customers. We are witnessing increasing utilisation of these delivery mechanisms and have to think about the next higher level of technology and sophistication to meet the rising expectations of the market participants. The Reserve Bank has already initiated work towards introduction of new generation Real Time Gross Settlement (RTGS), which will be able to handle rising volumes, provide better functionalities and has better technological adaptability. Our journey towards leveraging technology for making our payment systems at par with the best in the world will continue with appropriate contributions from all concerned.
- 15. Another important benefit derived from information technology deployment is the ability of banks to provide innovative delivery channels. Online banking, debit & credit card payments, ATM access to other bank customers, Point of Sales terminals, *etc.* have all changed the way bank customers are able to transact for their day-to-day needs, thereby creating a huge ecosystem of convenient banking facilities which substantially reduces the need for physical proximity and handling of cash. It also provides access to a large number of global retail markets to our citizens.

Use of IT for Improving Internal Effectiveness – Significance and Benefits

Focus of technology in Indian banking, so far, has, mainly, been on transaction processing, data storage, service delivery, and rightly so. These were our priorities to make banking better, convenient and more accessible. Now that our banking has reached a stage where many of such services are running on techenabled processes, we can look forward to improving other areas which were not, hitherto, focus of our attention and have huge scope for improvement, such as internal management and back-end processes. Currently, while data storage and retrieval are on computerised systems, the administrative processes are largely manual, warranting huge resource deployment. This adds to costs, impacts efficiency and reduces effectiveness of internal controls. Further, in the existing models followed in many work areas in banks, data flows and reporting for MIS as well as external filings require manual interventions and multiple database access/sourcing. This not only affects the timeliness of data submission but also the quality thereof. Errors in submitted data and, sometimes, subjective interpretations of data submission requirements lead to wrong decisions and, may be, serious consequences. The Reserve Bank has taken the initiative in the form of automated data flow project, through which an attempt is being made to ensure that all banks start furnishing reports to the Reserve Bank by means of straight-through/automated processes which do not require manual intervention. This will ensure that reporting is error-free, direct from business data and timely. I hope, all of you will whole heartedly co-operate and ensure early implementation of this initiative.

Challenges in IT Usage – Costs and Risks

17. Widespread technology deployment in the banking business has brought to the fore some new issues and challenges. These can be broadly divided into two categories-costs and risks. Costs-in terms of increasing expenditure on IT deployment and, risks resulting from reliance on IT systems without necessary safeguards. Cost aspects can be addressed by synergising IT deployment objectives with the broader, strategic business objectives to ensure

adequate operational and management controls over purchase as well as maintenance of appropriate technology solutions. Oversight and governance mechanisms have to be strengthened to ensure that costs involved in IT management are properly evaluated and controlled, technology deployment decisions are based on holistic and considered evaluation, the solutions/process changes have customer in focus and that banking organisations do not end up investing in technology which hampers customer interests. The second aspect relating to IT risks is a very critical issue. With the increased use of IT, there are attendant risks posed to the banks as well as their customers in terms of monetary loss, data theft, breach of privacy and banks need to be extremely cognisant of such risks.

Another significant aspect of banking business is regulatory and supervisory compliance. With the growth and globalisation of markets in general and in the aftermath of recent crisis in particular, number of such compliance requirements is increasing. Basel II & III implementation brings in huge challenges. It requires enormous amount of continuous data capturing for analysis, risk measurement and provisioning, as also validation of models and processes deployed for such assessments. All this has to be essentially carried out using technology-based applications. However, these requirements will entail some costs and banks will have to see as to how appropriate technology usage can help them reduce the costs of compliance process, at least in terms of operational efficiency. At the same time, IT risk itself shall form a large part of the operational risk and shall require focused attention. Within the boundaries of permissible action, some banks may find innovative solutions to shore up asset or liability management efficiency to counterbalance some of the costs. But, again, governance mechanism shall have to be alert and appropriate to ensure that cost considerations do not lead to 'shortcuts' in compliance. IDRBT has collated and published some useful information on their website regarding IT governance, which is appreciable.

Conclusion

19. Technology has revolutionised the way banking is looked at and the way it is conducted in our country. It is growing in stature from a business enabler to

becoming a part of the business process itself. It has opened new avenues for the industry in terms of business opportunities as well as their role in supporting inclusive growth for the Indian economy.

Here I am inspired by a quotation by Carly Fiorina, former CEO of Hewlett-Packard (HP) and I quote:

I believe we are now entering the Renaissance phase of the Information Age, where creativity and ideas are the new currency, and innovation is a primary virtue, where technology truly has the power to transform lives, not just businesses, where technology can help us solve fundamental problems.'

20. I compliment all the participants for their sincere efforts to fruitfully deploy technology, congratulate the winners of awards for the year and hope that this journey towards excellence shall continue, with IDRBT continuing the good work it's doing and each one of the banks chipping in with their best.