G Padmanabhan: Getting "IT" right

Keynote address by Mr G Padmanabhan, Executive Director of the Reserve Bank of India, at the seminar on "Beyond Core Banking", organized by the Institute for Development and Research in Banking Technology (IDRBT), Kochi, 14 November 2011.

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Dr V A Joseph, Managing Director and CEO, South Indian Bank, Shri B Sambamurthy, Director, IDRBT, other senior bank officials, ladies and gentlemen, it is indeed a matter of great pleasure for me to deliver the keynote address at the workshop on "Beyond Core Banking". I am extremely grateful to IDRBT for giving me this opportunity.

The city of Kochi brings many thoughts to my mind, but I would confine myself mainly to the topic of our round table today. Kochi had the unique distinction of being the forex capital of this State (which required the RBI to even set up an office here many years ago), and many a decision relating to foreign exchange management has been shaped by the international trade activities of this region. Kochi also had the unique distinction of having two clearing houses – one in the island area and the other in Ernakulam till a few years ago; these two were merged thanks to technology and the advent of computerised clearing using MICR technology about a decade ago. Thus, in a way, this city got technology in the right manner for its benefit and today this region is striving to attain the status of being a trend setter in IT. If that be so, can IT based techno-banking, which is the norm of the day, lag behind? It is thus, most appropriate that we are gathered here today to discuss the future of banking, now that we should look beyond Core Banking.

I would like to begin by reflecting on why we are, today, discussing Core Banking or to be precise, "beyond Core Banking". The reasons are not far to seek. Indian banking has taken rapid strides in the last few decades and is growing at a healthy pace. According one estimate, Indian banking sector may become 3rd largest in asset size by the year 2025 (*cf. IBA-FICCI-BCG report – Being five star in Productivity-Roadmap for excellence in Indian banking*). The growth achieved so far and the one projected ahead has many facilitators, but implementation and leveraging of technology is, by far, amongst the biggest enablers in the context.

I have divided my talk today into three parts. In the first part we would look at core banking, the journey so far and the need to look "beyond Core Banking". In the second part I would be touching upon the initiatives taken by IDRBT and the areas and technologies that the banks should set their focus on. In the concluding part I would be speaking on the initiatives taken by the Reserve Bank of India in the area of Information technology.

Part I

Core banking solution – an assessment

Core banking Systems (CBS) have facilitated building up customer-centric, service oriented architecture of banking services at front end and also created the capacity to efficiently handle large volumes of transactions, data and book-keeping requirements. CBS is positioned as an integrated solution to the basic banking operations pertaining to deposits, withdrawals, credit delivery, and attendant backend jobs, mainly in the retail and small business segments. It has enabled the introduction of efficient and convenient delivery channels like ATMs, Net banking, tele banking etc. So, when the banking industry has reached, so to say, a critical mass as far as using CBS is concerned, what's next? Do we need to go "beyond core banking" and if so, what should be the areas and technologies that the banks need to focus on?

Let us now look at the banking services in India from a different perspective. It is said that India lives in its villages. Then, isn't it strange that only 5% of them have proper banking services and that there's only 1 branch per 15,000 persons. It is also a fact that although banking in India is fairly well developed in certain areas, it is fairly under-penetrated and grossly under-served in other areas. If one views the areas which have not been served, it may be said that that until now, banks have not seen banking in rural areas as an attractive business, although, in the recent past, the opportunity and growth in rural markets is equalising with urban markets. The fact that there is tremendous potential for inclusive banking is, now, making banks recognise rural banking as economically-viable, at least to a certain extent. To make this become attractive, technology provides solutions. Banks need to utilise technology to harness this potential by providing products suitable for such markets along with appropriate delivery channels.

Another aspect to look at banking services in India and technology deployment is that while developing products, services, channels and strategies, focus was mostly on providing better and efficient services to the existing class/ classes of customers, since the existing set of services was in itself way behind the requirements/ expectations. Many industry participants perceived that their operations were customer-centric, simply because they had customers. However, to their credit, when the banking sector was opened up, they adapted very quickly to the new rules of the game. But, the rules of the game are changing as the banking industry is undergoing a rapid transformation phase. Unlike in the past, banks today are market driven and market responsive. The top concern for every bank is to increase or at least retain the market share. This makes it imperative that banks provide best possible products and services to ensure customer satisfaction. With the customers getting increasingly tech savvy, irrespective of the age profile, banks have greater challenges to ensure customer satisfaction. With the advent of advanced technologies there is significant scope to utilise the information/ data base gathered through the tech enabled service bouquet. I intend to revisit some of these issues in more detail later.

Part II

Initiatives taken by IDRBT

I must congratulate IDRBT for its continuing contribution towards Indian Banks' journey "beyond core banking". It has been organizing Seminars in association with banks on this theme and this is the fifth in the series. What is commendable is the enthusiasm and zeal with which this institution has been discharging its role and responsibilities in times where technology is changing quickly, constantly evolving and transforming the way business ought to be done.

Next steps – seize the opportunity

Extensive use of technology is bringing about upgrades in general banking environment for all stakeholders. In this context, banks may look at opportunities to introduce technologies that balance the three Cs in their operations, namely, Cost, Control and Customer Service. CBS implementation has ostensibly addressed all the 3 Cs. But has it? I often wonder why should a customer be charged extra if his passbook is updated at a so-called "non-home" branch. Does CBS add on to cost for the bank in this regard? Has CBS really provided better control? I am told that for certain types of transactions, it is very difficult to trace the full etymological details. If this be so, then whither effective controls? What is the logic in returning "at par" cheques with the legend "not drawn on us" in a CBS scenario? It is, thus, time we really revisited the entire gamut of issues pertaining to continued traditional practices even under CBS before we proceed further. This, I would think, is the most important precursor to "Beyond Core Banking". I am sure that IDRBT will be more than keen to collaborate with banks in addressing these essential concerns – which incidentally, is another C!

CRM: deliverance is the key

Let me now move over to the next step after CBS. We are aware of the significance of Customer Relationship Management (CRM) and the role it can play in establishing and retaining a customer by providing better value. Banks now routinely calculate customer value based on factors such as account average balances, account activity, services usage, branch visits and other variables. CRM solutions which are based on CBS inputs, however, offer end-to-end functionality to effectively address the needs of the complete cycle of marketing, sales and service for banking products, resulting in customer retention as well. What is needed is the effort on the banks' part to improve their service delivery levels and exploit the large information base effectively to design segment specific products, offer just the right bundle to the customers as also communicate product availability to the potential clientele. Appropriate use of CRM analytics arms banks with the technology muscle to increase their reach through effective marketing campaigns. It helps in making the service product and delivery levels scalable enough to meet the needs of growing banks. It also enhances capabilities to explore cross selling options for efficient and cost effective marketing.

To my mind, if the basis of competition till now is interest elasticity, it could soon, if not already, be "techno-elasticity" – the bank equipped with better and sophisticated technology but simple to operate financial services would garner higher share of customer business. Today's customer first asks how many ATMs the bank has, how many user_ids would the bank give for net banking, how much it charges for net banking/NEFT/RTGS, how to conduct business from non-home branches, to quote a few. Clearly, better the technology, finer the edge over the competitors. Today's customer maintains accounts in not less than 3–4 banks and if a survey is conducted on the usage and turnover in those accounts, I am sure, it would reveal a distinct positive bias towards technology facilitation. I would therefore, sum up by stating that effective CRM systems are the natural offshoot of CBS and banks now need to focus in this arena.

Analytics and business intelligence – use the right technology

Today's banks are trying to build more direct and lasting relationships with more carefully selected customers instead of the age old practice of extending services to any customer who comes along. How do banks select their value-adding customers and products for them? Answers lie in the use of analytics. Banks can use the huge information that is stockpiled in its databases. Mining this database can yield rich information on individual preferences, which would help in segmenting the customer base and providing new products targeting a particular segment. How does a bank pull ahead of the pack? I feel analytics could be the differentiator. Use of sophisticated data collection technology and analytics can be of tremendous use to the banks. Analytics has the power to transform technology from a supporting tool into a strategic weapon. The ability to instantly explore, augment and analyse all data in near-real time could deliver the competitive edge any bank would need. Serious analytics requires a firm data strategy, good business intelligence software and a matching computing hardware to work on.

Financial inclusion – taking technology to the last rural mile

Financial Inclusion has become an important area of focus as it would enable the base of the pyramid to participate in mainstream economic and social processes. A successful and sustainable rural banking model is one that packs innovative servicing ideas that instil confidence; offers convenient access to credit; and literally draws the rural cash based population into the mainstream banking economy. Delivery of banking services through the conventional banking model is not always feasible in rural areas, but with the kind of technology available today, I am sure that new, implementable mechanisms can be created/ adopted which, far from burdening a bank's balance sheet, will indeed strengthen it. Banks can use innovated products through alternative channels of payment and these can play a decisive role in bringing about cost-effective, improved products and services to the poor. The time has come for the banks to be looking for exploiting technology to improve business, whether it's through mobility, low-cost ATM rollouts, revenue sharing models or service management. Banks should therefore be proactive and work towards transforming this into an opportunity. I would not rule out the significant role played by the service providers in this transformation. Though banks are taking baby steps in this direction, it is time now for more confident strides.

IT governance

The large scale dependence on IT for not only day-to-day operations but also on managerial decision making raises the need for banks to have better focus on the IT implementations at their end. In addition, ever changing nature of technologies and the imperative need to have the updated technology in an increasingly competitive and secure business environment, the costs involved in implementing technology projects require appreciation of these aspects for taking appropriate decisions and providing guidance as well as assuming adequate oversight. It is here that IT Governance assumes significance. IT governance encompasses areas related to IT Projects/architecture, IT security, internal controls and also has an advisory role. Board level technology governance is becoming increasingly important where top management of the bank understands the degree to which they are accountable for technology, for project expenditures, and for monitoring the return on investment from IT.

Here, I would commend the work done by IDRBT in bringing out the publications in the IT Governance Series. The first being a booklet on Organisational Structure for IT in the Indian Banking Sector and latest one is a handbook on Information Security Governance for the Indian Banking Sector. The booklet on the Organisational structure in the Indian banking Industry gives insights for banks on how to set up the IT governance committees and the various roles and responsibilities that have to be taken up by the members of the Committee. In order to achieve a better alignment between IT and business, create efficiencies, improve overall IT performance as also enable better control and security, banks need to move towards adoption of well structured IT Governance models.

Along with all the other areas of concern of increasing efficiency, cost optimisation, speed and accuracy of processing, straight-through-processing etc. one issue which can either make or mar a technology-based offering is the safety and security of operations. Certain imperative security controls, checks and balances need to be in place in the form of IT Security in banks. The handbook on Information Security Governance published by IDRBT, I hope, would provide banks with useful inputs to implement appropriate strategies for achieving the objectives of a safe and secure environment. I am sure this handbook will also help in putting in place a framework for effective Information Security Governance in banks.

Innovate or perish

Historically, banks have innovated at a slower pace compared to other businesses. Regulation and risk mitigation has as much to do with this as the fact that the results of innovation take time to show. But, the pace is picking up. Structured financial products like derivatives are the result of product innovation. Simultaneously, systems and process innovation have transformed the back-office, streamlined customer interaction and enabled several cost management strategies such as outsourcing.

Banks need innovation to sustain in future. Only those banks that can successfully develop new products, services and channels in response to the changed market and technology environment will survive. What are the other trends that will reinvent the delivery of banking services? So far, the Internet has been at the forefront of channel innovation, heralding first online and then, direct banking. But now, other innovative channels are emerging such as mobile technology, near field communications and the like. The most successful banks will be those that combine visionary technology with strong customer centricity.

While talking about innovation, I cannot but talk about one of the greatest innovators in recent times, who has been compared with greatest scientists of all times – and you rightly guessed – Steve Jobs. You would agree with me that the products that Apple makes are also considered by users as perfect pieces of art as well whether it be the iPod, i-Phone or the i-Pad. This is what innovation is all about. Here I would like to quote the master innovator himself which shows the level of perfection that he believed in: "*We do these things not because we are control freaks. We do them because we care about the user, and we want to take responsibility for the entire experience rather than turn out the rubbish that other people make.*"

Agility and change: reflections of one another

There's a symbiotic relationship between agility and change. By definition, an agile bank is surrounded by and is constantly creating change; and only an agile bank can manage change successfully. Often, it is a change driver that makes the bank realise that it needs to become more agile. This is why it is very important for the bank to spot change drivers early, as well as identify those factors that will enable it to mount an agile response to change. Sometimes this change identification and response mechanism may involve big decisions, such as the introduction of service automation or a new banking channel.

Hence, it is crucial that the management of change and agility receives adequate attention from the top, and is backed on the ground by departmental teams responsible for ensuring smooth communication, implementation and transition. Also, best in class technology and analytics solutions can be valuable assets while formulating change management strategy and decisions.

Emerging trends

The Big Bang – mobile banking revolution

When it comes to revolution in mobile technology, I think of two types of revolutions. One is the Mobile Revolution as such and the other is Mobile Banking Revolution. Mobile revolution refers to rapid innovations in mobile devices with customers being overwhelmed with a slew of new handheld devices right from Google's Android operating system, Research in Motion's BlackBerry OS and Apple's latest iOS iPhone platform, tablet computer etc. Mobile banking revolution refers to a buffet of potential services that a banker can provide leveraging on mobile technology. In the USA for example, the value provided by banks with mobiles is the remote deposit capture i.e. where the customers increasingly use online mobile services to deposit paper checks. Although it is a driver for mobile banking adoption, increasing efficiency in usage of checks is an important value addition particularly to be noted from the Indian perspective.

Cloud computing – "pay only for what you use"

It is becoming evident that cloud computing is getting cost effective in setting up IT infrastructure. The big and medium enterprises are now migrating to hybrid cloud models. While non-financial industry has taken huge strides in this arena, the banking sector, at least in India, also seems to be moving in this direction. Security is often quoted as a concern for the banks adopting cloud computing, but with robust and modern security devices and software available, the bankers' security concerns regarding protection of data can be addressed. The cloud concept is here to stay and therefore, the focus should be rather on how to use the technology in a secure manner.

Virtually automate branch?

Although the trend towards online banking through internet or mobiles is evident, in a country like India the core of the banking habit is personal banking, meaning visit to the bank branch. Hence a parallel shift towards smarter, more efficient, friendlier and more automated brick and mortar experience is the need of the hour. Integrating self service capabilities into bank branches would be a smart way. Why not make the customers walk virtually into their "home branch"? Why not think of using collaboration technology to have video chats with the valued customers? This leads me to the next line of thought.

How about Social Media?

We have been active in social networking among peer group through various social networking sites like Facebook and Twitter etc. The customers have been discussing about the services good and bad about their banks and sharing their banking experiences too. But have the banks thought of, apart from advertising in those social sites, about participating in such conversations to extract the best and improvise? Although bankers in the west are increasingly starting to participate in the social media, they still mull over the security and other concerns such as accountability in participating in social media. But as it always happens in technology or any other dynamics, the bankers tend to tread with caution and this area is no exception.

Balancing business gain with added risk

The most universal risk worry for banks large and small is the credit risk. Regulators will want to see banks with least credit risk, yet keep credit standards high. Credit risk will continue to be a big focus as long as depositors' interest is paramount. As a result, banks will need to obtain more and better data to make credit decisions and to create analytics based on that data. But the essence of analytics lies in the fact that the qualitative data is not fragmented for consolidation. The dashboard should effectively give drill down view of the underlying credit risk of the top layer of the credit portfolio.

Why not modernise the core?

I am happy that no bank today advertises that "we are 100% computerised or 100% branches under core banking solution". That marketing trend is behind us. But after a decade of CBS wave, the moot point is how many banks have upgraded to the next best level? Have we migrated to the latest OS, application technology, security devices et al? How many banks have migrated to the latest CBS platforms? Perhaps, those who migrated had faced issues and therefore, other may be diffident. But upgrade is the only way to sustain the competitive edge and remain close to reality. Core banking renewal also comes with the prospect of delivering on the promise of conducting business in real time. So being modern to the Core has to be the focus for banks for the days to come.

Why not collaborate?

The modern collaboration has rendered the ability to work together in real time. With the rise of new collaboration technologies – be they based on the web or in the cloud, and whether they are powered by videoconferencing, voice, wikis, software or hosted solutions – collaboration tools have reached a point where cost and familiarity are no longer a barrier to adoption but the content they deliver are making great impact. Imagine the SMS alert of a stolen card swipe and the resultant card block! In this context, I also wish to flag the issue of banks investing huge amounts in Data Warehousing and Modeling. Why are the banks embarking on these efforts individually? Can the industry and IDRBT think of some collaborative models?

PART III

Initiatives of RBI

The Reserve Bank has been a guiding force for banks in their endeavour for implementation of IT initiatives. As the central bank, it has played a pivotal role by providing a environment conducive to promoting technological adoption in the financial sector. The Reserve Bank has, in the last one year, released two documents which are of immense significance for the banks.

Recommendations of the Working Group on Information Security, Electronic Banking, Technology Risk Management and Cyber Frauds

You would be aware that following the recommendations of the Working Group on Information Security, Electronic Banking, Technology Risk Management and Cyber Frauds, guidelines have been issued to the banks. The guidelines are not "one-size-fits-all" and the implementation of these recommendations need to be risk based and commensurate with the nature and scope of activities engaged by banks, the technology environment prevalent in the banks and the support rendered by technology to the business processes. Banks would be required to conduct a formal gap analysis between their current status and stipulations as laid out by RBI and put in place a time-bound action plan to address the gap and comply with the guidelines. Banks would need to pro-actively create/fine-tune/modify their policies, procedures and technologies based on new developments and emerging concerns.

Recommendations of the IT Vision document 2011–17

You would also be aware of the contents of the IT Vision document released during the early part of the year. The Vision Document sets priorities for commercial banks to move forward from their core banking solutions to enhanced use of IT in areas like MIS, regulatory reporting, financial inclusion and customer relationship management. The document also dwells on possible operational risks arising out of adopting technology in the banking sector which could affect financial stability and emphasizes the need for internal controls, risk mitigation systems, fraud detection / prevention and business continuity plans. Although banks have deployed technology for transaction processing, analytical processing by banks is still in a nascent stage. The Report urges banks to work towards reaping benefits of technology in terms of cost reduction of small value transactions, improved customer services and effective flow of information within the banks and to the regulator.

Next Generation RTGS (NG-RTGS)

The RBI is replacing the existing RTGS with the NG-RTGS system which would be using the latest technology and several new features such as advanced liquidity management facility;

extensible markup language (XML)/ISO 20022/SWIFT Compatible based messaging system conforming to international standards; and real time information and transaction monitoring and control system.

Conclusion

To summarise, Indian banks have traversed a long way in their journey to provide efficient, customer centric services. Banks have to adapt to greater regulation, competition and consolidation as also meet increasingly diverse and demanding customer expectations. In such a scenario, adoption of Information technology and CBS in particular has been immensely useful in the progress made, so far. But, there is need to look beyond CBS for leveraging technology for still better and efficient growth.

While the advent of state-of-the-art technologies and global best practices undoubtedly offer improved agility, efficiency, and faster implementation cycles, banks need to be mindful of the challenges associated with deployment of IT. These challenges, once understood and mitigated properly, are perfectly manageable. The times to come will require much more professional and sophisticated IT leadership with vision than ever before. As history indicates, successful banks are those that have understood the potential of new technologies and aligned themselves to fully leveraging its power. These are banks that have focused on the adaptive change that made the technology transformation process successful.

While talking of challenges, one of the challenges that the entire banking Industry and service providers will increasingly face is the ability to provide required services to customers in an uninterrupted manner in normal times, and more so while facing adverse circumstances like catastrophes, sabotage, war, riots, power supply failures, endemics etc. Extensive use of technology has also lead to significantly increased infrastructure sharing and interdependence. Moreover, since financial markets are in a state of high integration, problems in one segment like payment and settlements can lead to severe impact in several other areas, particularly if some problems occur at some significant market participant/ service provider's end. Business Continuity management and Disaster recovery preparations, therefore, need to be given high importance. Gone are the days when BCP and DR were generally documented, but not effectively monitored and DR was understood to be limited to data backup arrangements. Recently, there was an incident where a large number of customers in a large bank had to face inconvenience as the working of the bank was impacted for considerable time due to technical issues. It is possible that something important might have been missed out in the planning, implementation or testing of BCP arrangements. Fortunately, it left no systemic impact in other market segments. But, we may not be so lucky next time and, therefore, I would exhort all banks to look at the need to have an effective BCM as more than a mere technology issue, although technology may be the most important component in the arrangements.

I had earlier mentioned about the need for taking care of a few Cs. I shall add one more C to this. This pertains to Clarity. There are many challenges (yet another C which can be overcome)in respect of appropriateness of the IT model for each bank. More often than not, IT provides solutions for business and not the other way around. With the stabilisation of CBS, it is now the optimal time for business to commence their process of demanding from IT. And once the clarity of requirements is established, the choice (one more C) of the correct (C again!) IT solution would be smooth. To this end, we need to re-orient our efforts so that IT systems are our slaves and not vice-versa.

Finally, in banking, it is imperative to create income efficiencies, technology-driven efficiencies and service efficiencies to reduce cost structures. As technology matures and improves, so will the skills, processes, and bottom lines. And once the ***banks get IT right***, they will get much more for far less.

I wish the Workshop all success.