Core Banking Solutions in Urban Cooperative Banks- Issues and Challenges

B Munirajasekhar and B Sudheer
1KMM Institute of Postgraduate Studies, Tirupati. 
2Department of Management Studies, Sri Venkateswara University, Tirupati.

ABSTRACT

Currently, there are about 1,750 urban co-operative banks in India, which form 14% of the banking sector. While the focus has always been on private and public sector banks who are riding the technology wave to emerge as front runners in the global banking arena, cooperative banks, have been laggards when it comes to technology adoption. The drivers of performance for UCBS, as for any organisation, includes indicators such as increased employee satisfaction, increased customer satisfaction, financial stability, lower average time to resolution, and innovations in information and communications technology (ICT). Banking system in modern times has become part and parcel of life and one cannot do anything without banking. In the age of information technology, the banking systems have reengineered and have changed its total functioning. Though, in comparison to other sector banks, cooperative banks are slow in IT deployment, the decision makers are serious on this issue. There is, however, no doubt that the expenditure of the banking sector in general on IT has increased in decade or so, in particular after the scare about the year 2000. A number of cooperative banks used the opportunity afforded by the Y2K scare to update their computerisation systems, procure new Y2Kcompliant computers to extend computerisation to cover some front- and back-office operations.

Customers are demanding access to sophisticated products and services through multiple channels like the telephone, Internet, cellular phones and the ATM. Today, the top managements of several Indian banks are viewing IT as a business enabler and a vital part of their strategy. Banks are revisiting their technology architecture. This has facilitated the banks to provide efficient and effective customer services and has resulted in economising on the costs per transaction. Apart from computerization of basic operational systems, the cooperative banks especially Urban Cooperative banks have also computerized major loan accounts, the investment operations and clearing systems. However still there are gaps in technology up-gradation in the Cooperative banks.

Factors Influencing Technology Initiatives in the Banking Sector

- Heightened competition, a persistent bearish market, and a general erosion of consumer confidence continue to influence banks’ IT decisions
- Increasing number of banks are looking at IT deployment as part of a comprehensive IT strategy, rather than as fragmented investments.
- Offering of allied products such as insurance and investment products will drive the growth for total automation.
- In wholesale banking, banks will further harness Internet-enabled technologies to improve customer offerings and service.
- New initiatives by the RBI, such as data warehousing, Real Time Gross Settlement, cheque truncation will open a lot of new avenues.
- Payment and settlement systems and computerisation of the government securities, money market and foreign exchange operations in the banking sector as a whole.

Benefits of Core Banking Solutions Implementation in banking Sector

The visible benefits of IT in day-to-day banking in India are quite well known.

- The ‘Anywhere Banking’ through Core Banking Systems, ‘Anytime Banking’ through new, 24/7/365 delivery channels such as Automated Teller Machines (ATMs), and Net and Mobile Banking, etc. are also increasingly becoming an integral part of the services provided by the UCBs.
- IT has enabled the efficient, accurate and timely management of the increased transaction volume that comes with a larger customer base.
The MIS reports so generated help the top management as an effective risk management and a strategic decision making tool. Use of IT reduces the costs of financial transactions, improves the allocation of financial resources, and increases the competitiveness and efficiency of financial institutions.

Most importantly, it enables to take any product or service to the general masses. The use of Smart Card technology, mobile ATMs, coverage of post offices under electronic payment networks in remote areas could play significant role in providing financial services to unbanked and underbanked people.

India is experiencing an explosion in the use of mobile communication technology. Mobile phone users now belong to all strata of society, spread across metropolitan, urban, semi-urban and rural centres. Banks and financial service providers can leverage the advantage by reaching out to people through this medium for providing various financial and banking services. The mobile phone can function as a multi-application smart card, thus making banking services available to virtually every mobile phone owner.

The technology based solution would go a long way for achieving inclusive growth in India.

**Implementation of Core Banking Solutions in Urban Cooperative banks**

According to the National Association of Software and Services Companies (NASSCOM), the IT market for banks, $500 million in 2002, is expected to grow by 25 per cent a year for the next few years. Senior bankers predict that over the next 10 years, banks will spend on IT and related fields an eye-popping Rs 15,000 crore. Some banks could spend as much as over 10 per cent of their capital. An international bank on an average spends around 9 per cent of its revenues on IT annually. In India, state-owned banks spend only half a per cent of their revenues. Though the private banks spend 4-5 per cent, they still have a long way to go. In contrast the spending on IT by cooperative banks especially Urban cooperative banks in India is comparatively very low than private banks and may end even 0.5 to 2 per cent. The A.P. Mahesh Coop Bank has been a forerunner amongst urban cooperative banks (UCBs) by its performance and setting the benchmark as a good success story in the cooperative banking. The growth of the bank has been impressive as the bank has achieved the milestones of business crossing Rs.1000 crore and Core Banking Solution being rolled out across its network of 30 branches. It is difficult to guess or define on the developments that will take place in IT in near future but one needs to make sure that the known technologies are used appropriately and the vaporware in IT is ignored with proper environmental scanning. It is worth to mention here that Nationised banks in India have taken bold initiatives in deployment of new technology. The Cooperative banks are no exception in this technology race and The Cosmos Cooperative Bank, Pune in Maharsahtra and The Kerla State Cooperative Bank have moved for Core Banking solution and many Urban Cooperative banks are in process of shifting to Core banking . Any Branch Banking by establishing a network in place.

**Present State of Technology being used**

Information Technology has become an essential and integral part of banking. As a result, during last five years UCBs have realized the need to create IT infrastructure in order to have a competitive edge. But with limitations on capital budgets on hand and skilled, professional and IT enabled manpower, the result is inadequate IT infrastructure to face the challenges.

UCBs tried applications developed by vendors who had limitations on technical capabilities, banking domain knowledge and ability to assimilate needs of the changing hour. These systems proved to be inadequate as well incompatible with the business needs except a few gains of saving labor in routine work. The management of the banks who were suppose to be the major beneficiaries had very marginal gains while employees at the front office were relived to a great extent in labor and customers were benefited to some extent by way of few quicker services such as service at the counters for routine transactions, delivery of passbooks, statement of accounts, demand drafts, and better accuracy in interest calculations etc. UCBs have numerous vendors with varied technologies used with different level of comfort for end users. Multi-locational or distributed location of data, ineffective back office activities. Management Information Systems with poor speed in gathering data and questionable accuracy.

At the same time state of IT in PSBs is very different. They have implemented and Integrated leading edge retail banking systems, have improved overall management and appearance of documentation, have centralized databases resulting in quick gathering of data. And are using above systems for better risk cover, customer relations management, better identified and understood opportunities, promoted credit card services, introduced internet based primary banking services.

Considering the future it is suggested to have a centralized solutions which offers advantages over existing system in following areas

**Objectives of Proposed IT Setup**

- Replace old technologies seamlessly with state-of-the-art multi-tier Software.
- Replace multiple disparate and older generation software systems with single integrated multi-product tailor made application software.
- Move to Centralized Processing and handle much higher volumes without a proportionate increase in resources or infrastructure costs.
- Use business intelligence tools to analyze customer needs and create new product offerings.
- Build and retain customer relationships based on the strength of customer service capability.
- Enable and modify product offerings quickly and efficiently based on market needs.
- Reduce costs, improve governance, bottom-line and stakeholder rewards Enable multiple new delivery channels (RTGS, ATM, POS, Mobile, Internet, Telephony)

**Solution:**
- Entire bank will operate as one Unit (Single General Ledger).
- Central Server facility will be created within the premises of head office.
- Operations of the branches will be synchronised with the Central Server.

**Action Plan:**
- The Central Facility Creation will need three major areas to be addressed:
  - Building Infrastructure for the Data Centre to be located at the Head Office.
  - Upgradation of the hardware at the Branches and Implementation of the new software.
  - Establishing Network of all the branches and synchronisation with the Central Host.

**The Software has have functionality in eight major areas:**
- Core Banking - Real Time Accounting
- Products - Retail, Corporate and Treasury
**Particulars** | **Present Setup** | **Proposed Setup**
---|---|---
Software Architecture | Hierarchical Flat file Data | Distributed + Centralized database
Application Software Focus | Branch Automation | Bank Automation
Development Approach | Modules Based | Fully Integrated, seamless, N-tier
Application Performance | Vendor Specific | Highly Optimized
Maintenance of Software | Difficult, delayed, expensive | Easier, Realtime, cheaper
Maintenance of Hardware | More, heterogeneous items | Less, standardized items
Average Transaction Cost | High, multiple acquisitions | Low, single acquisition instance
Back office activities | Intricate, Inaccurate | Quick, guaranteed accuracy
MIS Compilations | Time Consuming, inaccurate | Quick, Central launching
New Products Launching | Slow, more co-ordination | Low due to distributed data
Manpower Requirement | More due to distributed data | More, Seamless Integration
Delivery Channels | Less, Costlier for each Branch | One aspect of Integration
Anybranch Banking | Virtually impossible | Bye-product of Central System
ATM Facilities | Restricted to Branch | Available Bankwide, Inter bnk
Mobile Banking | Not Possible | Easily available
Card Based Transactions | Limited availability | Easily available
Payment Gateways | Not Possible | Very much Possible
Internet Banking | Not Supported | Laborious & poor
Interbranch Activities Control | Easier & Total | One aspect of Integration
Focus on Business Functions | Low, less time for business | High, more time on hand
Business Policy Standards | Variations, lead to losses | Centralized, efficient control
Inter Organization Transactions | Not Possible | Protocol based easy exchange
Customer Relation Management | No capabilities | Effective due to strong database
Monitoring of Advances | Ineffective, delayed information | Effective, realtime information
Risk Management | Lack of IT based assistance | Better understanding, evaluation
Overall Decision Support | Delayed, less reliable | Realtime, highly reliable
Statutory Compliance | Hard to meet deadlines | Easier and quick
Business Opportunities | Less due to more entanglement | More due to simple to administer

- CRM - Customer profiling, relationship, contacts
- Risk Management - Credit Risk and Market management and profitability, ALM
- Delivery Channels - Branch, ATM, POS, Call Center, Internet, Investment Center
- MIS - Reporting, Data warehousing & Mining, Budgeting
- General Facilities - Security, Messaging, Workflow, Depository Linking
- API - Protocol Exchange with Business Alliances & RBI, Payment Gateways

The architecture of the software is designed for high functional performance, ease of use, flexibility and scalability to take on the challenges of future and it is developed around reputed technologies such as:
- Front End based on .net technology
- Back End based on Oracle
- Windows XP or Thin Client as Client Operating System
- Windows 2003 as Server Operating System

**Core Banking** All the transactions originating from any branch or other delivery channel will be processed realtime ensuring that the information acquired is accurate and up-to-date. A perfect acquisition and proper storage of transactions in a structured database leads to high reliability of inputs to further related systems. It will maintain General Ledger with User Definable Chart of Accounts, multiple level sub ledgers, transaction Journals with all the details acquired at the time of transactions. Quick Transaction Processing, Quick Response, Accommodative to new transaction types, easy adaptability to any new delivery channel and easy protocol exchange with external systems will be the focused areas.

**Highlights of the Centralised Application are**
- Unified General Ledger, Profit & Loss and Balance sheet
- Global User Profile and Access.
- Checks and Controls over Customer Transactions with Audit Trails.

**Products**
- **Retail Banking**
- **Current and Savings Accounts**
- **Deposits**
- **Loans**
- **Loan Appraisals**
- **Account Services**
- **Cheque Book Management**
- **Corporate**
- **Commercial Loans**
- **Consortium Loans**
- **Letter of Credit**
- **Bills and Collections**
- **Customer Relationship Management (CRM)**
- **Customer Profiling**
- **Customer Relationship**
- **Customer Profitability**
- **Risk Management**
- **Credit Risk Management**
- **Market Risk Management**
- **Asset Liabilities Management**
• Liquidity Risk
• Currency Risk
• Interest Rate Risk
• Behavioral Patterns
➢ Delivery Channels
  • Call Centers
  • Investment Centers
  • Point of Sale (POS) Terminals
  • ATM Network
  • Internet Banking
  • Mobile / WAP Banking
  • RTGS
➢ Management Information System (MIS)
  • Reporting
  • Periodic Returns
  • Data Warehousing and Mining
  • Budgeting
➢ General Facilities
  • Security
  • Messaging
  • Workflow and Documentflow
  • Depository Linking
➢ Application Program Interface (API)
  Linkages with external agencies for Cheque Truncation and other Applications

Problems Associated With New Technology

Functioning in a highly technologically advanced banking environment in the country is in itself a challenge and an opportunity for the UCBs to upgrade to a computerized environment so as to focus on more business opportunities and render better customer service. The challenge now lies in taking greater advantage of new technologies and information-based systems and expanding the coverage of the Indian banking and financial system to under-served markets in rural and semi-urban areas. Factors such as high costs of implementation and maintenance coupled with lack of regional language software support for CBS are deterrents. Then, there is the issue of customization. Most solutions available in the market cater to the needs of traditional banks and cooperatives need rather specific levels of customization. Indian customers find it hard to use technologies like ATM and prefer to do transactions over the counter. Manpower constraints exist in this sector. Moreover, there are basic issues like power and rugged terrain that make it difficult to run a CBS or anything else 24x7.

➢ The staff of the cooperative banks at operational, middle and top level is not very keen in making use of the information technology to its fullest extent in their day to day activities which is also one of the main reasons for the gap in implementation of information technology.

➢ Deployment of new technology in cooperative banks is not an easy task to the management mainly because of the non availability of required qualified professionals, the non competency of the existing staff to make use of IT to cover various activities of the banking.

➢ Increased cash flows are not sufficient to cover the implementation cost

➢ Emergence of new risks related operations, security and maintenance due to adoption of new technology

➢ What we need right now is the appropriate business delivery model which will facilitate taking the banking services to the doorsteps of the people at a lesser cost.

➢ However, the expansion of technology adoption must be accompanied by a minimum level of essential security features and continued compliance with established covenants and international standards relating to privacy of customer transactions in order to enhance the customers’ confidence in the mobile and internet banking by controlling the fraudulent transactions.

➢ The technology solution to the business needs should be user-friendly without much third-party or IT vendor intervention or support requirement for operating the same. In this context, the banks need to redesign their business strategies to incorporate specific plans to promote financial inclusion of low income group treating it both a business opportunity as well as a social responsibility.

Conclusion

The technologically laggard Cooperative banks should realise that the economic class and age composition of their customers is already not favorable. It would obviously be difficult for laggard cooperative banks to attract new young customers if they do not increase their investments on IT in right direction with cautious approach. It is now high time for the decision makers in cooperative banks to realize the need to enlarge the base of computerization and see that the real benefits are delivered at all the levels, customers and stakeholders of the bank. The decision makers have to work out a definitive time frame for technological advancement in their respective banks with complete involvement in monitoring, controlling and evaluating the progress with set parameters.

References:


8. Technology, Financial Inclusion and Role of Urban Cooperative Banks* The Address delivered by Dr. K.C.Chakrabarty, Deputy Governor, Reserve Bank of India at the Foundation Day and Inauguration of the ‘Core Banking Solution Project’ of the A.P.Mahesh Co-op Urban Bank Ltd. on August 9th, 2009 at Hyderabad.

9. G. H. Deolalkar, A Study Of Financial Markets “The Indian Banking Sector- On The Road To Progress”


11. www.thehindu.in

12. www.wikipedia.org