



THE ROLE OF INFORMATION TECHNOLOGY IN BANKING OPERATIONS

Mr.Mahesh.S.M* Mr.Ganesh.K.T**

*Guest Faculty, Dept. of Commerce, Sir M. Visvesvaraya Postgraduate Centre, University of Mysore, Tubinakere Mandya Dist. Karnataka.

**Asst Professor, Dept of Commerce, Bharathi College- PG & RC, Bharathinagara, Mandya Dist. Karnataka.

Abstract

Ever since the nationalization of banks in India, this sector has been growing without Leaps and bounces and catering to the needs of various segments of the society. In recent times, the Banking Sector has been making rapid straights by using information technology as a platform and endeavoring to scale higher heights. An attempt has been made in this paper to examine various innovative instruments that have been introduced by Banks in recent times. Liberalization and Information technology has attracted many foreign banks to India, thereby opening up new markets, new products and efficient delivery channels for the banking industry. In the development of Indian Economy, Banking sector plays a very important and crucial role. Commercial Banks in India are now becoming a one-stop Supermarket. The focus is shifting from mass banking to class banking with the introduction of value added and customized products. Technology allows banks to create what looks like a branch in a business building's lobby without having to hire manpower for manual operations. The branches are running on the concept of 24 X 7 working, made possible by the use of Tele banking, ATMs, Internet banking, Mobile banking and E - banking. The beauty of these banking innovations is that it puts both banker and customer in a win-win situation. Effective use of technology has a multiplier effect on growth and development.

Keywords: Banking Sector, Risk Management, Mobile Banking, Knowledge Management.

Introduction

With the globalization trends world over it is difficult for any nation big or small, developed or developing, to remain isolated from what is happening around. For a country like India, which is one of the most promising emerging markets, such isolation is nearly impossible. More particularly in the area of Information technology, where India has definitely an edge over its competitors, remaining away or uniformity of the world trends is untenable. Financial sector in general and banking industry in particular is the largest spender and beneficiary from information technology. This endeavors to relate the international trends in it with the Indian banking industry. The last lot includes possibly all foreign banks and newly established Private sector banks, which have fully computerized all the operations. With these variations in the level of information technology in Indian banks, it is useful to take account of the trends in Information technology internationally as also to see the comparative position with Indian banks. The present article starts with the banks perception when they get into IT up gradation. All the trends in IT sector are then discussed to see their relevance to the status of Indian banks.

Indian Banking Transformation – The Starting Point

Since independence Indian banks have undergone through four major shifts which can categorized as pre reform (before 1991) and post reform period (after 1991):

Pre-Reform period

1. A period of consolidation of banks up to 1966
2. A period of historic expansion in both geographical and functional terms from 1966 to mid- 1980s
3. A period of consolidation of branches from mid - 1980s to 1991

These changes were policy induced but not driven by market forces.

Post- Reform Period

Entry of technology in the Indian banking sector can be traced back to the Rangarajan Committee report, way back in the 1980s but during nineties, the banking sector witnessed various liberalization measures. New private sector and foreign banks emerged - equipped with the latest technology. These banks opted for a different model of having a single centralized database through a network infrastructure, instead of having multiple databases for all their branches. These changes were market driven, having the influence especially of globalization. The crux is Indian banks have no control over developments abroad but are subjected to their effects. Hence these changes were not the outcome of internal changes but of external changes. Deregulation has opened up new opportunities for banks to increase revenues by diversifying into investment banking, insurance, credit cards, mortgage financing, depository services, securitization, etc. Now all the banks have started with the concept of multi- channels, like ATMs, credit cards, debit cards, telephone/mobile banking, internet banking, call



centers, etc. The role of banking is redefined from a mere financial intermediary to service provider of various financial services under one roof acting like a financial supermarket.

Technological Development in Banks

A development in the field of information technology strongly supports the growth and inclusiveness of the banking sector by facilitating inclusive economic growth. IT improves the front end operations with back end operations and helps in bringing down the transaction costs for the customers. The important events in the field of IT in the banking sector in India are:

1. Arrival of card-based payments-Debit/ Credit card in late 1980s and 90s.
2. Introduction of Electronic Clearing Services (ECS) in late 1990s.
3. Introduction of Electronic Fund Transfer (EFT) in early 2000s.
4. Introduction of RTGS in March 2004.
5. Introduction of National Electronic Fund Transfer (NEFT) as a replacement to Electronic Fund Transfer/Special Electronic Fund Transfer in 2005/2006.
6. CTS in 2007.
7. Plan for implementation of cheque truncation system as a pilot program in New Delhi in 2007.
8. Migration from cash and cheque based payment system, it has become a necessity to electronic fund transfer system on account of the following reasons:
 - Large volumes of transaction.
 - High cost of physical handling and storage of paper instruments.
 - Delay in realization is a common feature.
 - Finality of payment takes time because the physical movement of instruments in large volumes from branches to and from clearing house, and sorting them according to each bank branch at the center creates problems.

Emerging Trends in Banking Technology

- Financial Inclusion
- Mobile Banking
- Electronic Payments
- CRM Initiatives
- IT Implementation and Management
- IT for Internal Effectiveness
- Managing IT Risk
- IT for business innovation

Financial Inclusion

Financial inclusion or inclusive financing is the delivery of financial services at affordable costs to sections of disadvantaged and low-income segments of society, in contrast to financial exclusion where those services are not available or affordable. An estimated 2.5 billion working-age adults globally have no access to the types of formal financial services delivered by regulated financial institutions.

Mobile Banking

Mobile Banking refers to provision and an ailment of banking- and financial services with the help of mobile telecommunication devices. The scope of offered services may include facilities to conduct bank and stock market transactions, to administer accounts and to access customized information.

Electronic Payment

The payment system is an operational network - governed by laws, rules and standards - that links bank accounts and provides the functionality for monetary exchange using bank deposits. The payment system is the infrastructure (consisting of institutions, instruments, rules, procedures, standards, and technical means) established to effect the transfer of monetary value between parties discharging mutual obligations. Its technical efficiency determines the efficiency with which transaction money is used in the economy, and risk associated with its use.

Customer Relationship Management

CRM is a business strategy that optimizes profitability, operational efficiency and customer satisfaction by implementing customer-centric processes. The Eight Essential Building Blocks of CRM initiatives are: vision, strategy, customer experience, organizational collaboration, processes, information, metrics and technology. CRM projects encompass



traditional areas, such as sales force automation, campaign management and customer contact centers, as well as emerging technologies that enable e-commerce, enterprise feedback management, marketing resource management, pricing, performance management and social media.

Information Technology Implementation and Management

Database Systems: Design, Implementation, and Management, Seventh Edition is one of the most comprehensive database textbooks available. The proven success of database design treatment is sustained and further improved in this revision. The proven Parts organizations streamline the chapter coverage, so it is an ideal choice for your classroom. Each Part opens with a new business vignette, which provides real world examples to engage your students. The new edition includes updates in every chapter as well as added exercises and cases. There are new chapters such as Advanced Modeling Concepts, Database Performance Tuning and Query Optimization, and Database Connectivity and Web Development.

Information Technology for Internal Effectiveness

In business and accounting, information technology controls (or IT controls) are specific activities performed by persons or systems designed to ensure that business objectives are met. They are a subset of an enterprise's internal control. IT control objectives relate to the confidentiality, integrity, and availability of data and the overall management of the IT function of the business enterprise. IT controls are often described in two categories: IT general controls (ITGC) and IT application controls.

Management Information Technology Risk

Information technology (IT) plays a critical role in many businesses. If you own or manage a business that makes use of IT, it is important to identify risks to your IT systems and data, to reduce or manage those risks, and to develop a response plan in the event of an IT crisis. Business owners have legal obligations in relation to privacy, electronic transactions, and staff training that influence IT risk management strategies. IT risks include hardware and software failure, human error, spam, viruses and malicious attacks, as well as natural disasters such as fires, cyclones or floods. You can manage IT risks by completing a business risk assessment. Having a business continuity plan can help your business recover from an IT incident.

Information Technology for Business Innovation

Information Technology (IT) represents both a great opportunity and significant challenge for businesses in our region. The Center for Information Technology Innovation (CITI) matches the resources of the university with those of its member companies to provide a forum where innovative solutions to these issues can be explored and implemented. Its mission is to help organizations take full advantage of IT opportunities through programs of excellence in information interchange, education and research, and through collaborative initiatives. CITI is part of the Business School at the University of Colorado Denver and includes prominent Colorado businesses as corporate sponsors and members.

Conclusion

Indian public sector banks that hold around 75 % of market share do have taken initiative in the field of IT. They are moving towards the centralized database and decentralize decisions making process. They possess enviable quality manpower. Awareness and appreciation of IT are very much there. What is needed is a 'big push' the way it was given in the post nationalization period for expansionary activities. IT and India have become synonymous. Whether India becomes a destination for outsourcing or it becomes a development centre is matter of debate. As far as banking industry in India is concerned it can be said that although the Indian banks may not be as technologically advanced as their counterparts in the developed world, they are following the majority of international trends on the IT front. The strength of Indian banking lie in withering storms and rising up to the expectations from all the quarters catching up with all the global trends is a matter of time

References

1. Bakshi, S., 'Corporate Governance in Transformation Times', IBA Bulletin, 2003.
2. Bimil Jalan, "Strengthening Indian Banking and Finance-Progress and Prospects'', The Bank Economist Conference, India, 2002.
3. Reddy, Y.V. (1998) "Financial Sector Reforms: Review andProspects". RBI Bulletin, December.
4. Indian Banking 2010 Special issue 2004, vol. 26 No I, IBA bulletin, IBA Mumbai.
5. Elements of Mercantile Law by N D Kapoor –Sultan Chand & Sons, New Delhi, 2006.
6. Jain Sudhir, Fraudulent Encashment –Impact and Safeguards , The Indian Banker, Vol. 3 No. 3.
7. Uppal R.K., Customer Perception of E –Banking Services of Indian Banks: Some Survey Evidence, The ICAFI Journal of Bank Management, Vol. VII No.10.
8. Pathrose P P (2001), Hi Tech. Banking Prospects and Problem , IBA Bulletin, Vol. 13, No.7.