



Implementation of Information Technology in Banking Sector

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ABSTRACT

Indian banking industry, today is in the midst of an Information Technology revolution. A combination of regulatory and competitive reasons has led to increasing importance of total banking automation in the Indian Banking Industry. Information Technology has basically been used under two different avenues in Banking. One is Communication and Connectivity and other is Business Process Reengineering. Information technology enables sophisticated product development, better market infrastructure, implementation of reliable techniques for control of risks and helps the financial intermediaries to reach geographically distant and diversified markets. The term "Information Technology" describes the phenomenon created by the convergence of technologies associated with computing, communication and office systems. In the past, most accounting procedures in banks were paper oriented. With the advent of new technique like computers, electronic equipments and communication network, the modern accounting system have undergone a sea change both in their preparation and presentation. The traditional system of preparing the account at quarterly, half yearly and annual lost their relevance since the information are constantly updated and made available at anytime and anywhere. The information technology enabled the banking organisations to redesign and restructure their functioning.

KEYWORDS : Information Technology, Banking sector, Electronic media, Communication Network

INTRODUCTION

The banking sector is in a transitional mode towards a vibrant global market and sophisticated information technology. Due to this changing scenario, banks are paying more attention to expanding their activities from just lending and borrowing to other ends like, Insurance, merchant banking, leasing, electronic banking etc. Even though these changes were expected after the nationalization of banks in 1969, it was noticed that it had only slow and steady progress necessitating a total revamping of the banking sector. Various reform measures were taken to strengthen the foundation of the system by improving asset quality, enhancing capital and improving profitability along with structural changes in the system. During this transition, banks have seen fierce competition, risk and revolutionary changes forcing them to take immediate steps to retain market share, redress the grievances of customers as fast as possible by maintaining good ambience, rendering courteous service to customers with the help of latest technological innovations and products.

The entry of Information Technology infrastructure in the corporate world of banks has brought with it many innovations. The services provided by using electronic technology and media are called Information Technology or Electronic Banking or E-banking. E-banking has given an opportunity for banks to find solutions to management problems like saving time money and energy or customers by reducing/minimising paper works, waiting in queues, lack of communication and lack of efficiency. E-banking has provided ease and flexibility in banking operations. The recommendations of Narasimham Committee (1998), for the free and liberal entry of foreign banks in India have further improved the scope for E-banking. As many foreign banks and private sector banks like CITI Bank and ICICI, HDFC banks brought with them IT based products like ATM, credit cards, debit cards, on-line banking etc. This forced the public sector banks and other banks to think on the same lines as these services would help banks to retain their customers, target on banking products and services more effectively to customers.

Customers are also benefited as they are given more free time to indulge in e-commerce business. Therefore, after 1980 throughout the world majority of banking transactions done through nets or by using information technology. So the information technology solves many problems of the banking industry and very useful to the customers too.

APPLICATION OF INFORMATION TECHNOLOGY

The Indian banking industry is not lagging behind, it has started providing services electronically over the internet. These services rendered over electronic media include:

- Phone Banking
- ATM-Automatic Teller Machine
- Credit Cards
- EFT-Electronic Fund Transfer
- SPNS-Shared Payment Network System
- ECS-Electronic Clearing Service
- POS-Point of Sale
- D-Mat Accounts
- Electronic Data Interchange
- E-cheques
- Computerised Accounting
- E-mail
- RBI Net
- Internet

Phone Banking

Bank on phone, provides easy access for customers to have large businesses through telephones. Data are exchanged over the phone regarding any queries, to issue instructions on balance transfer, statement of account, cheque-book, stop payments, new schemes, interest rates etc. At any convenient time and place. Tele-banking has gone a long way in providing maximum customer satisfaction within the limited infrastructure.

Automatic Teller Machines (ATM)

Banks in the cities to provide cash dispensation to their customers around the clock install ATMs. Now, the banks provide this facility in a more sophisticated way that a customer of one bank and branch can withdraw from any other banks, at any other branch, nationwide. In developed countries, this service is provided to their blue chip client globally. This is possible only through worldwide networking and communication system.

Credit Cards

These plastic cards enable customers to spend whenever he/she wants within the prescribed limits and pay later. Debit card is a pre-paid card with stored value, whereas credit card is post paid with fixed limits. It is seen that spending is higher through debit cards than with credit cards currently CITY Bank and time bank have started with Debit cards and now other banks are also following these to launch their own cards.

Electronic Funds Transfer (EFT)

Electronic funds transfer is a system of processing and communication of payment through electronic methods. EFT assumes greater significance in the banking system as the RBI also encourages the commercial banks to adopt this technique. Inter and intra bank

transfers of funds are now made through this EFT mechanism. Transactions of high value i.e., at least more than one lakh is now made through this cost effective and quick system of settlement. Normally, payments are made through cash, cheques, drafts and credit cards. The latest in these processes are the debit card system, charge, digital cash, and electronic purse and so on.

Shared Payment Network System (SPNS)

SPNS installed by the IBA in the city of Mumbai, enables electronic banking service like cash transactions, extended hours of banking, utility payments, cheques, point of sale facilities by the SPNS can go to any ATM linked to SPNS.

Electronic Clearing Services (ECS)

Electronic clearing of funds from one centre to another for handling bulk transactions like salary, interest, dividend, commission etc., has dispensed the cheques. A part of electronic clearing service is computerized clearing of clearing of cheques at metropolitan centers and linking with international communication system of SWIFT. These services have contributed in a great way towards improving the customer's services globally. ECS was introduced in India in 1996. It has made it possible for customers to get the funds next day itself.

Point of Sale (POS) Terminal

Payment card at a retail location for electronic transfer of fund is called POS. The client enters his personal identification number (PIN) and confirms the amount due. Customer's account is automatically debited with the amount of purchases and it credits the retailers account POS installed at petrol stations and large retail houses are linked to banks network.

D-Mat Accounts

Transacting shares business through electronic media is called D-Mat. Investor opens an account called Demat Accounts with DPS. They get shares in electronic form. Then they send the actual shares to the investor. Investor pays for the opening, maintenance and collection of shares. This has reduced the paper work, bad deliveries; loss of shares and less transaction cost. However delays in demating, higher cost charged by the investors has not given a good start for the growth and scope of Demat in India. Depository participant sometimes make illegal money at the cost of investors. SEBI should find ways to overcome this to give a good scope for Demat in India.

Electronic Data Interchange-EDI

EDI refers to the electronic exchange of structure information using telecommunication like payment orders, debits credits, statement of account etc. As per of EDI, satellite communication network is also entering the banks. bEDI will very soon do away with branch banking and the customers will be identified as ban customer and not branch customer.

E-cheques

Digital cheque used by the payer to the payee through internet is called e-cheques. Electronic versions of cheques are issued, received and processed. Most of the banks use e-cheques. A secure means of operation is provided for collecting, payments, and transferring cash flows through this method. The payer issues a digital cheque to the payee and the entire transactions are done through internet.

Computerised Accounting

Development in computer has brought about a change in the accounting practices in banks. A wide range of software packages were developed recently, which attributed to the widespread use of computers to increase the information needs. Microcomputer are used to keep records and for processing microcomputer is small unit capable of doing calculations, storing data and programmers. These computer ranges from small personal computer to a blue chip "desk top" business computer. The microcomputers are used for word processing, spreadsheet application etc. If the computer is not properly used, and it will result in unfair accounting and loss of information. However, computer provides better information and increases the efficiency of the banks.

Data base with different technology such as lost terminal, file server and client server system established all over the world. For creation, manipulation and share information, tools such as Microsoft windows

were developed and applied. This Microsoft windows provide graphical user interface, window based word processing along with window based spreadsheet and E-mail package. Information technology now uses geographic information system and global positioning system, GIS means type in a map to any other type of data. GIS is capable of converting data into pictures and graphs. GPS means the system, which enabled the precise navigation and targeting of many of the weapons used during the gulf war.

E-mail

The system of sending messages from one computer to another is known as "E-mail. E-mail originally was introduced in the year 1983 in U.S.A. to send the messages through E-mail, a mini personal computer, one telephone line, a modern and software support is required. Modern is of various types like kotex, robotex, multi-modern etc. The change for sending a message with 250 characters (bits) through E-mail is Rs. 2. There are different commands like read mail, prepared mail, mail list, status, message forward etc. Each of these commands do different functions.

RBI Net: (RBI NET)

This scheme facilitates the transfer of funds by a customer former any bank, any branch, any center to his client at some other center, so other bank and/branch. Settlements between banks and with the RBI are now a day done through this system. Inter and Intra bank clearing are also done through this electronic communication system.

Internet

Internet is a system interconnect with network worldwide. The increasing popularity of the Internet is the worldwide web (WWW), which connects millions of servers. In India there are 500 Internet hosts and more than 750 web million computer buffs and their population explodes at a d150 countries. Arpanet developed by the USA in 1969 was the base for this magical development of Internet. The Internet has many features. E-mail is one of the simplest facilities available on the Internet. Through this Internet, a subscriber can set up a newsletter, or a discussion through which the possible to transmit texts; pictures and voices information from anywhere, in any form in the world is accessible to the subscriber at the press of a button and at a very minimum cost. Computer on the Internet communicate with each other in a number of ways. These methods are called services. The most popular services are:

- Worldwide web
- E-mail
- FTP (File transfer protocol)
- Use net news
- ERNET
- Browser
- Graphic Viewers
- New Reader
- Uniform Resource Locator (URL)
- Hypertext Transfer Protocol (http)
- Gopher News
- Wide Area Information Service (WAIS)
- Application of Information Technology in the Banking System

Proceeds

The information technology can be administered in the banking system. The application of information technology will help in increasing the operating efficiency of the banking system. Its application will result in saving in cost. The quality of the information can be improved. The branches can provide improved customer services. This will enable the domestic banks to face and challenge the competition from their foreign rivals. There will be a reduction in the staff strength to a considerable extent due to the adoption of information technology. The working condition of the bank branch can be improved.

- It reduces cost of both in services and administration.
- Overcoming the geographical barriers.
- Cost minimized for customers.
- It helps to maintain customer loyalty.
- Web site enable banks to develop advertisement.
- Information technology enables banks to deliver products and services.
- Multimedia capabilities offer homogenous branding.

- On-line banking encourages promotion of various schemes of the bank.
- Individualized and customized services with the help of integrated customer data.
- Minimising fraud and misappropriation by inter-branch reconciliation.
- Convenient to customers-like card free banking, cash free banking provides a domain of access to banking services.

CONCLUSION

The current trends are quite comforting for customer but it does pose threats and problems to banks. As we find information technology invading the banking sector, only banks, which used the right technology, could come out with success. Banks are required to 'restructure', Re-Invent and reengineer themselves to meet the necessary performance improvement and get the competitive edge due to the introduction of information technology (E-banking) being an important output of information technology has ushered in an era which is transforming the entire functioning of banks. The till in the banks from traditional to modern E-banking services has been welcomed due its advantages, but banks in India are taking time to get rooted. Banks are slow but are going to offer in further more E-banking services to keep in pace with the evolving pattern of customers demand. The flexibility of E-banking offers unprecedented opportunities for the bank to reach out to its customers. With the rapid expansion of the Internet facilities, E-banking is all set to play a very important role in the 21st century. Banks have to deal with the sophisticated clientele with the help of latest technology like E-banking. E-banking if taken in the right way by banks and customers would take the economy to its best and make it a boon to customers. Further research may be conducted on the feasibility of the introduction of home banking, mobile ATM, office banking, phone banking edger payment system and so on.

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