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Electronic Banking and Information Technology in India: Developments After Bank Nationalization

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ABSTRACT

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 borrowings to other ends like, insurance merchant banking, leasing, and 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 services to customers with the help of latest technological innovations and products like internet banking, ATM, debit/credit cards, EFT, E-cheque, phone banking, mobile banking etc.

Key words: e-banking, electronic fund transfer (EFT), electronic clearing services (ECS).

INTRODUCTION

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 techniques like computers, electronic equipments and communication network, the modern accounting systems 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 up-dated and made available at anytime and anywhere. The information technology enabled the banking organizations to redesign and restructure their functioning.

These 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/minimizing paper works, waiting in queues, lack of communication and lack of efficiency. 3-banking has provided ease and flexibility in banking operations. The recommendations of narashimham 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.

Application of information technology in banking sector

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, and 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.

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Globalization and liberalization have forced the banks to think in terms of technology benefits and quality service to customers as future is full of challenges and survival will be a difficult task. The entry of IT infrastructure in the corporate world of banks has brought with it many innovations, in particular the internet. Though these changes had started with narasimham committee's (1992) suggestions for computerization and were followed by saraf committee's (1994) recommendations for electronic fund transfer (EFT), electronic clearing services (ECS) and automatic data capture, the banks were actually required to use the BANKET and RBINET and internet to accommodate itself to the innumerous transactions that had resulted as a result of globalization and liberalization.

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

- Internet banking
- Automatic teller machines (ATM)
- Plastic cards
- Electronic fund transfer (EFT)
- Special electronic fund transfer (SEFT)
- National electronic fund transfer (NEFT)
- Real time gross settlement (RTGS)
- Money transfer service scheme (MTSS)
- Electronic clearing service (ECS)
- Electronic data interchange (EDI)
- E-cheques
- Point of sale (POS)
- Dematerialization

- Phone banking
- Mobile phone banking

Internet banking:

Online banking, e-banking, electronic banking, net banking or banking over the internet are the buzzwords of business today-they are commonly used in the banking industry. it is the information technology which has revolutionalized the way of the banking both at the local, national and international level. It is a cutting edge technology, a new business paradigm. E-banking is a concept which will enable anyone to conduct business with a bank from the comforts of the home or office. ATM, telephone and personal computers are the delivery channels for the e-banking system.

Automatic teller machines (ATM)

ATM's used as spring board for electronic fund transfer. ATM itself can provide information about customers account and also receive instructions from customers-ATM cardholders. An ATM is an electronic fund transfer terminal capable of handing cash deposits, transfer between accounts, balance enquiries, cash withdrawals and pay bills. ATM operates through plastic cards. Bank customers can use banking transaction in ATM at anytime and anywhere. There are more than sixty thousand ATM outlets are there in our country.

Plastic cards:

Plastic cards are credit/debit cum ATM cards used at ATM and in mercantile establishments for electronic banking transactions.

Credit card

Credit card is one of the forms of plastic money. It is also one of the services of e-banking system. A credit card is a plastic card with a magnetic strip on which the required vital information of identity like the name of the card holder, account number, credit limit, date of validity, issuing organization, specimen signature of the card holder etc are enclosed. A credit card enables the holder the cashless purchase of goods and services at selected places. Credit card can be called as an equivalent of a loan sanctioned by the bank to the customer. Credit card facilitates and makes it possible to 'use first and pay later'. Survey of credit card industry reveals that around 180 lakh credit cards are in circulation in our country. RBI release that the value of transaction done through credit card is registered as 96,614 crores.

Debit card:

Debit card is of recent origin issued to the account holder in order to save time and then do all cash transaction easier through computerized method. A debit card is a piece of plastic bearing the name and computer number of the holder, its validity period and other particulars. It also bears the signature of the holder.

Debit card is used to withdraw cash up to a certain limit through ATM centre. Banks also give discount on making purchased of goods by using debit cards in mercantile establishment through point on sale (POS) terminal. The debit card market has been seeing a remarkable growth over the years in Indian payment card industry. The number of debit cards issued by banks registering around 29 crores at the end of 2011-12 financial years. The value of transaction done through debit card is registered as 53,432 crores.

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 this process are the debit/credit card system, digital cash, and electronic purse and so on.

Special electronic fund transfer (SEFT):

The SEFT scheme was introduced by RBI in 2003 for inter-bank transfer of funds. The settlement takes place at Mumbai. The SEFT is distinct from the now defunct electronic fund transfer scheme and it covers many cities providing quicker transfer of funds in a safe and secure electronic mode.

National electronic fund transfer (NEFT)

NEFT helps to transfer of funds from the customer account of one bank to other bank customer without any delay or procedural hassles. RBI acts provider and transfers the credit other bank's account. This system is introduced by RBI mainly to sent small value payments at nominal cost. It is an electronic payment system to transfer from one part of the country to any other part of the country.

Real time gross settlement (RTGS)

RTGS is a system through which electronic instructions can be given by banks to transfer funds from one their account to the account of another bank on a 'real time' basis. This system helps to transfer funds quickly and safely. RTGS facility is enabled only in specific bank branches in India.

Money transfer service scheme (MTSS)

The RBI has issued the guidelines for money transfer service scheme. MTSS is a quick and easy way of transferring personal remittances from abroad to beneficiaries in India through authorized banks, fully fledged money changers (FFMCs) or registered non-banking financial companies (NBFCs) and approved travel agents.

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 cheques at metropolitan centres 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.

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 part of EDI, satellite communication network is also entering the banks. EDI will very soon do away with branch banking and the customer's will be identified as ban customer and not branch customer.

E-cheque:

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.

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 (PIN) and confirms the amount due .customer 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. The value of transactions done through POS is registered.

D-mat accounts:

Transacting shares business through electronic media is called D-mat. Investor opens an account called d-mat accounts with DPS. They get shares in electronic form. Then they send the actual shares to the investors. 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 as not given a good start for the growth and scope of d-mate in India. Depositary participant sometimes make illegal money at the cost of investors. SEBI should find ways of overcome this to give a good scope for d-mate in India.

Phone banking

Bank on phone, provides easy access for customers to have large businesses through telephone. 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.

Mobile phone banking:

Conducting banking operations using the mobile phone has been fast catching up around the world for its convenience. One can do their banking operations sitting anywhere, anytime. It is discreet, personalized and on phone. It is an empowering and user-friendly mode of accessing the bank account. The mobile banking service will be available to all customers having a satisfactory running account (current/savings). The customers will have to register for the services. The service will be carrier-agnostic i.e., all customers can avail the mobile banking service with the bank irrespective of the service provider for their mobiles. The service is free of charge. Mobile payments are any monetary transactions that take place with the help of a mobile phone. Mobile payments are done through various types of methods as like

- **M-Commerce**
  Mobile phones linked to credit/debit cards can be used to make payments typically for transportation, vending machines etc.
- **E-Money**
  Cash loaded in the mobile phones at service provider outlets. Consumers use this virtual cash as real value for all types of transactions.
- **Banking channel**
  Mobile phone used for accessing the bank accounts. All payments are routed through the bank.

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 go 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.

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