

Technological Innovation in Banking Sector

Ca Mahesh Kumar¹, K Naresh², K Sravani³

¹(Asst, Prof), Department of Management, Gates Institute of Technology, Gooty, A.P (India)

^{2,3}P.G Student, Department of Management Studies, Gates Institute of Technology, Gooty, A.P (India)

ABSTRACT

Indian banks are going through a vital transformation from all verticals and slight and not – so – slight makeovers in banking products are vigorously transforming the face of banking. The focus is shifting from mass Banking to Class banking with introduction of value added and customized products. Technology now allows banks to create what looks like a branch in a business building's foyer without having to hire manpower for manual operations. Now a day's banking sector plays a very important role in human life, banks motivates human to make saving money for their future. It provides number of facilities to the people, banking service has become a need of the society. In this 21st century every sector have a great challenges i.e. customer satisfaction , and being a part of the society banks also facing this challenges, and banks are accepting challenges very nicely for the improvement of service banks are providing innovative services to the customer so that they can get proper benefit in this sector. Today we have electronic payment system along with currency notes. India's financial sector is moving towards a scenario, where it can have new instruments along with liquidity and safety. Arrival of card, introduction of Electronic Clearing Service (ECS) in late 1990's , introduction of Electronic Funds Transfer, Real Time Gross Settlement (RTGS), introduction of NEFT (National Electronic Funds Transfer), mobile banking, online banking are the various innovations in banking. Banks are investing heavily in adoption of these innovations.

Keywords: Banking sector, customer satisfaction, Innovative services financially needs.

I. INTRODUCTION

Banking sector has become a promising sector in India, their services are upsetting to the human life and their life style, no one can deny that now the banks are becoming inevitable of everyone, in this era the need and satisfaction level of human has moved beyond the previous benchmark, and banking sector is providing lot of services to the customer, traditionally banks were providing only saving facility to the public and there were less number of banks are available, now scenario has been changed, there are around 340 banks which are working in India, in which some are public sector banks and some are private sector banks are working. Earlier the banks worked only for urban side of the country, but now they are focusing on the rural side, they are providing much facility for upliftment of their life style and their economic conditions, and it's happening, see how the villagers are producing the crops and they have no fear of money lender, who were made fool them, but apart of these we cannot ignore the technological challenges for every sector, and banking sector are also facing the great challenges, that's why they are more serious about the innovation policy and strategy. This paper deals with all the innovative strategy and the policy which are made by banks to retention of the existing and valuable customer and the backward side society.

Indian Banking Transformation –

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:

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

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

II. REVIEW OF LITERATURE

E-commerce is now considered to hold the guarantee of a new commercial revolution by offering an reasonably priced and direct way to exchange information and to sell or buy products and services. This revolution in the market place has set in movement a revolution in the banking sector for the provision of a payment system that is compatible with the demands of the electronic marketplace (Balachandher et al, 2001).

Innovations in information processing, telecommunications, and related technologies – known collectively as “information technology” (IT) – are often credited with helping stimulate strong growth in the many economies (Coombs et al, 1987). It seems obvious then that, technological innovation affects not just banking and financial services, but also the way of an economy and its capability for continued growth. IT is defined as the modern handling of information by electronic means, which involves its admittance, storage, processing, transportation or transfer and delivery (Ige, 1995). According to Alu (2002), IT affects financial institutions by lessening enquiry, saving time, and improving service delivery. In recent decades, investment in IT by commercial banks has served to rationalize operations, improve competitiveness, and increase the variety and quality of services provided. According to Yasuharu (2003), implementation of information technology and communication networking has brought revolution in the performance of the banks and the financial institutions. It is argued that theatrical structural changes are in store for financial services industry as a result of the Internet revolution; others see a continuation of trends already under way.

III. VARIOUS FORMS OF TECHNOLOGICAL INNOVATIONS (ELECTRONIC DELIVERY CHANNELS)

This segment describes the various forms of technological innovations or electronic delivery channels adopted by banks. Technological innovations have been identified to contribute to the distribution channels of Banks. The electronic delivery channels are collectively referred to as Electronic Banking. Electronic Bankers now see a kind of development in their business, partly, because the world has taken a quantum jump in the use of technologies in the last several years. The various electronic delivery channels are discussed below:

Automated Teller Machines (ATMs)

ATMs were introduced to the Indian banking industry in the early 1990s initiated by foreign banks. Most foreign banks and some private sector players suffered from a serious handicap at that time- lack of a strong branch network. ATM technology was used as a means to partially overcome this handicap by reaching out to the customers at a lower initial and transaction costs and offering hassle free services. Since then, innovations in ATM technology have come a long way and customer receptiveness has also increased manifold. Public sector banks have also now entered the race for expansion of ATM networks. Development of ATM networks is not only leveraged for lowering the transaction costs, but also as an effective marketing channel resource.

Phone and mobile banking

Phone and mobile banking are a fairly recent phenomenon for the Indian banking industry. There exist operative guidelines and restrictions on the type and quantum of transactions that can be undertaken via this route. Phone banking channels function through an Interactive Voice Response System (IVRS) or tele banking executives of the banks. The transactions are limited to balance enquiries, transaction enquiries, stop payment instructions on cheques and funds transfers of small amounts (per transaction limit of Rs 2500, overall cap of Rs 5000 per day per customer). According to the draft guidelines on mobile banking, only banks which are licensed and supervised in India and have a physical presence in India are allowed to offer mobile banking services. Besides, only rupee based services can be offered. Mobile banking services are to be restricted to bank account and credit card account holders which are KYC and AMC compliant.

Internet Banking

Internet banking poses high operational, security and legal risks. This has restrained the development of internet banking in India. The guidelines governing internet banking operations in India covers a number of technological, security related and legal issues to be addressed in relation to internet banking. According to the earlier guidelines, all internet banking services had to be denominated in local currency, but now, even foreign exchange services, for the permitted underlying transactions, can be offered through internet banking.

Internet banking can be offered only by banks licensed and supervised in India, having a physical presence in India. Overseas branches of Indian banks are allowed to undertake internet banking only after satisfying the host supervisor in addition to the home supervisor.

Branch Networking

Networking of branches is the computerization and inter-connecting of geographically scattered stand-alone bank branches, into one unified system in the form of a Wide Area Network (WAN) or Enterprise Network (EN); for the creating and sharing of consolidated customer information/records.

Satellite Banking

Satellite banking is also an upcoming technological innovation in the Indian banking industry, which is expected to help in solving the problem of weak terrestrial communication links in many parts of the country. The use of satellites for establishing connectivity between branches will help banks to reach rural and hilly areas in a better way, and offer better facilities, particularly in relation to electronic funds transfers. However, this involves very high costs to the banks. Hence, under the proposal made by RBI, it would be bearing a part of the leased rentals for satellite connectivity, if the banks use it for connecting the north eastern states and the under banked districts.

Card Based Delivery Systems

Among the card based delivery mechanisms for various banking services, are credit cards, debit cards, smart cards etc. These have been immensely successful in India since their launch. Penetration of these card based systems have increased manifold over the past decade. Aided by expanding ATM networks and Point of Sale (POS) terminals, banks have been able to increase the transition of customers towards these channels, thereby reducing their costs too.

Payment and Settlement Systems

The innovations in technology and communication infrastructure in recent years have impacted banks in a large way through the development of payment and settlement systems, which are central to the major portion of the businesses of banks.

Cheque Truncation System (CTS)

Truncation is the process of stopping the movement of the physical cheque which is to be truncated at some point en-route to the drawee branch and an electronic image of the cheque would be sent to the drawee branch along with the relevant information like the MICR fields, date of presentation, presenting banks etc. Thus, the CTS reduce the probability of frauds, reconciliation problems, logistics problems and the cost of collection.

Electronic Clearing Service

The Electronic Clearing Service (ECS) introduced by the RBI in 1995, is akin to the Automated Clearing House system that is operational in certain other countries like the US. ECS has two variants- ECS debit clearing and ECS credit clearing service. ECS credit clearing operates on the principle of 'single debit multiple credits' and is used for transactions like payment of salary, dividend, pension, interest etc. ECS debit clearing service operates on the principle of 'single credit multiple debits' and is used by utility service providers for collection of electricity bills, telephone bills and other charges and also by banks for collections of principal and interest repayments. Settlement under ECS is undertaken on T+1 basis. Any ECS user can undertake the transactions by registering themselves with an approved clearing house.

Electronic Funds Transfer Systems

The launch of the electronic funds transfer mechanisms began with the Electronic Funds Transfer (EFT) System. The EFT System was operationalized in 1995 covering 15 centres where the Reserve Bank managed the clearing houses. Special EFT (SEFT) scheme, a variant of the EFT system, was introduced with effect from April 1, 2003, in order to increase the coverage of the scheme and to provide for quicker funds transfers. SEFT was made available across branches of banks that were computerised and connected via a network enabling transfer of electronic messages to the receiving branch in a straight through manner (STP processing). In the case of EFT, all branches of banks in the 15 locations were part of the scheme, whether they are networked or not.

A new variant of the EFT called the National EFT (NEFT) was decided to implemented (November 2005) so as to broad base the facilities of EFT. This was a nationwide retail electronic funds transfer mechanism between the networked branches of banks. NEFT provided for integration with the Structured Financial Messaging Solution (SFMS) of the Indian Financial Network (INFINET). The NEFT uses SFMS for EFT message creation and transmission from the branch to the bank's gateway and to the NEFT Centre, thereby considerably enhancing the security in the transfer of funds. While RTGS is a real time gross settlement funds transfer product, NEFT is a deferred

net settlement funds transfer product. As the NEFT system stabilized over time, the number of settlements in NEFT was increased from the initial two to six. NEFT now provides six settlement cycles a day and enables funds transfer to the beneficiaries account on T+0 basis, bringing it closer to real time settlement

RTGS

The other payment and settlement systems deployed were mostly aimed at small value repetitive transactions, largely for the retail transactions. The introduction of RTGS in 2004 was instrumental in the development of infrastructure for Systemically Important Payment Systems (SIPS).

CONCLUSION

The Banking sector in India has become stronger in terms of capital and the number of customers. It has become globally competitive and diverse aiming, at higher productivity and efficiency. Exposure to worldwide competition and deregulation in Indian financial sector has led to the emergence of better quality products and services. Reforms have changed the face of Indian banking and finance. The banking sector has improved manifolds in terms of Technology, Deregulation, Product & Services, Information Systems, Etc.

REFERENCES

- [1]. Balachandher Krishnan Guru, SanthaVaithilingam, Norhazlin Ismail, and Rajendra Prasad, (2001) "Electronic Banking in Malaysia: A Note on Evolution of Services and Consumer Reactions."
- [2]. ChanakaJayawardhena, Paul Foley, "Changes I the banking sector- the Case of Internet banking in the UK", Internet Research; Electronic Networking Application and Policy, pp. 19-30.
- [3]. Singh Kanhaiya, Pandey U.S., "Technological Innovation in Indian Banking Sector – Use Of It Products", International Journal of Management and Strategy.
- [4]. AgrawalSunita, Jain Ankit, "Technological Advancement In Banking Sector In India: Challenges Ahead", Abhinav- National Monthly Refereed Journal Of Research In Commerce & Management.
- [5]. <http://www.rbi.org.in/scripts/PublicationReportDetails.aspx?ID=243>
- [6]. <http://bankinnovation.net/tag/trends-in-banking>
- [7]. www.springer.com/economics/financial+economics/book/978-3-7908-2332-5