



## Information and Communication Technology (ICT) Impacts on Indian Baking Industry

M.Subramanyam,  
Assistant Professor,  
Department of Management Studies, Kakinada Institute of Engineering &  
Technology, Kakinada, Andhra Pradesh

**Abstract:** Information technology (IT) industry in India has played a key role in putting India on the global map. IT industry in India has been one of the most significant growth contributors for the Indian economy. Information Technology has been one of the most important factors for the development of mankind. Information and communication technology (ICT) is the major advent in the field of technology which is used for access, process, storage and dissemination of information electronically. Banking industry is fast growing with the use of technology in the form of ATMs, on-line banking, Telephone banking, Mobile banking etc., In recent times, Indian banking industry has been consistently working towards the development of technological changes and its usage in banking operation for improvement of their efficiency and customer's satisfaction in today's world. Therefore, taking an advantage of information technologies (IT) is an increasing challenge for developing countries like India. Hence, the present research has made an attempt to study the Information Technology (IT) importance and its impacts on Indian banking industry.

**Keywords:** Information Technology (IT), Banking Industry, Customer Satisfaction, India

### 1 Introduction

Technological sophistication in the banks is aimed at not only providing better services to customers but also to attain competitive advantages among them. Development of a sound and adequate ICT has become a necessity to meet the challenges of growth and diversification of banking industry. It has given the banks an opportunity to offer a wide range of services to their customers.

The usage of information technology (IT), broadly referring to computers and peripheral equipment, has seen tremendous growth in service industries in the recent past. The most obvious example is perhaps the banking industry, where through the introduction of IT related products in internet banking, electronic payments, security investments, information exchanges (Berger, 2003), banks now can provide more diverse services to customers with



less manpower. Seeing this pattern of growth, it seems obvious that IT can bring about equivalent contribution to profits.

In recent time, Indian banking industry has been consistently working towards the development of technological changes and its usage in the banking operations for the improvement of their efficiency. To get the benefits of enhanced technologies, Indian banks are continuously encouraging the investment in information technology (IT), i.e. ATMs, e-banking or net banking, mobile and tele-banking, CRM, computerization in the banks, increasing use of plastic money, establishment of call centers, etc. RBI has also adopted IT in endorsing the payment system's functionality and modernization on an ongoing basis by the development of Electronic Clearing Services (ECS), Electronic Funds Transfer (EFT), Indian Financial Network (INFINET), a Real-Time Gross Settlement (RTGS) System, Centralized Funds Management System (CFMS), Negotiated Dealing System (NDS), Electronic Payment Systems with the 'Vision Document', the Structured Financial Messaging System (SFMS) and India Card – a domestic card initiative, implemented recently (2011).

### **Information and Communication Technology**

Information Technology (IT) is the automation of processes, controls,

and information production using computers, telecommunications, software and ancillary equipment such as automated teller machine and debit cards. It is a term that generally covers the harnessing of electronic technology for the information needs of a business at all levels. Communication is the conveyance or transmission of information from one point to another through a medium.

An example of how ICT has had an impact on the Banking Industry is that its emergence allows banks to apply credit-scoring techniques to consumer credits, mortgages or credit cards. Hence, products that used to be highly dependent on the banks' evaluation of its customers have now become more standardized. Other examples of ICT impact on the Banking Industry include the increased process efficiency, which can reduce costs in banks, and the branch renewal, where focus is gradually shifting away from traditional brick and mortar banks towards the dual-bank concept presented earlier.

The tendencies above have also produced changes in the structure of bank income. As a result of Increased competition that has lowered margins in lending operations (the banks' traditional business), banks have diversified their sources of income and rely increasingly on income from fees services rather than interest rate



spreads. Fees charged for services include typical banking activities like payment transactions, safe custody and account administration.

Data storage and retrieval is another wonderful innovation brought into the Banking Industry, where specialized software is engaged to create database to be manipulated by Database Management Software (DBMS). A single database created could be used for several purposes within the system in order to eliminate data redundancy.

### **Significance of ICT in the Banking Industry**

ICT revolution has distorted the conventional banking business model by making it possible for banks to break their comfort zones and value creation chain so as to allow customer service delivery to be separated into different businesses. Thus, for example, primarily Internet banks distribute insurance and securities as well as banking products, but not all the products they distribute are produced by their group (Delgado and Nieto, 2004).

However, the main economic argument for diffusion of adopting the Internet as a delivery channel is based on the expected reduction in overhead expenses made possible by reducing and ultimately eliminating physical branches and their associated costs. This

specifically applies to and relevant in the Spanish banking system, which is one of the most "over branched" in Europe. As stated by DeYoung (2005) and Delgado *et al* (2006), the Internet delivery channel may generate scale economies in excess of those available to traditional distribution channels.

Besides them, Haq (2005) also states that bank exists because of their ability to achieve economies of scale in minimizing asymmetry of information between savers and borrowers. The unit costs of Internet banking fall more rapidly than those of traditional banks as output increases as a result of balance sheet growth. In this context, DeYoung *et al* (2007) refer to the Internet banking as a "process of innovation that functions mainly as a substitute for physical branches for delivering banking services". In the case of the Spanish banks, there is some undependable evidence that shows that the Internet distribution channel has lower unit transaction costs than the two other distribution channels (branch and telephone) for a given type of transaction (money transfer, mortgage loan, brokerage or demand deposits).

Today, any bank that doesn't offer the very latest in information and communication technology is bound to lag behind; customers are used to the pace of the "digital" business



world, and they expect a certain standard of compatibility between their online banking services and their laptops, home PC's, Macs, iPhones and so on. For this reason, banks have had to step up and move into the hottest new information and communication technology.

Most customers love the flexibility of online banking and other modern services; however, there may be some who prefer to never expose their banking information online, as they fear hackers, phishing scams, and other violations of their privacy. For people like this, old-fashioned banking may feel safer and more secure.

### **State approaches to development and ICT**

In any major policy initiative that induces a major social change or transformation, the state normally is expected to play the role of the initiator, mediator, facilitator and arbitrator. The Indian state has played a major role in the context of ICT for development from the early 1980s at various levels. The approach paper to Tenth Five-year Plan (Government of India, 2001) has been prepared against a backdrop of high expectations arising from the recent performance of GDP growth. This has improved from an average of about 5.7% in the 1980s to about 6.5% in the Eighth and Ninth Plan period making India one of the ten fastest growing economies and a

substantial part of the buoyancy is due to the growth in the services sectors led by ICT and telecommunications. The Tenth Plan stresses the need for defining the development objectives not just in terms of increases in GDP or per capita income but broader parameters, which enhance human well being. It tries to focus on inter-state inequalities and underlines the strategies to overcome the regional disparities and different growth rates. The Tenth Plan emphasizes on those sectors, which are most likely to create high quality employment opportunities, such as construction, real estate housing, modern retailing, and IT-enabled services. Moreover, it recognizes the comparative advantage of brainpower to absorb, assimilate and adopt spectacular developments in system integration and technology, and harness them for national growth in today's knowledge-based world economy.

The plan identifies telecommunications as a critical part of infrastructure in an emerging knowledge-based economy. It attributes the importance of telecommunications to enormous growth of IT and its potential impact on rest of the economy. India is perceived to have a special comparative advantage in IT, because it can provide excellent communication services at reasonable rates. To maintain this comparative advantage, the Telecommunication Policy should focus on the convergence of data,



voice and image transmission, the use of bandwidth and high-speed internet connectivity.

### LITERATURE REVIEW

In order to improve operational efficiency, quality of customer service and to speed it up, the Committee on public Sector banks (1978) "recommended a judicious use of computers for selected services of banks. Apart from an increase in efficiency, it will reduce the load of routine and repetitive work and leave sufficient time for staff to provide better customer service.

In their study 'Services Marketing - Challenges and Strategies', Dr. Chidambaram and Ms.K.Alameleu (1996) suggested that banks should become technology friendly by investing in technology a bank can carve a niche for itself. Well-furnished premises are a must for the satisfaction of both employees and customers. Professionalized. Well-trained and motivated employees will improve the marketability of a bank."

Gaston Leblanc (1990) studied customer motivations towards the use and nonuse of an Automated Teller Machine (ATM) customer of a financial institution. An analysis of results based on demographic variables revealed significant differences between users and nonusers in terms of education only. Results also show that convenient accessibility of a financial institution and avoidance

of waiting lines is the principal reasons for using the automated teller.

Robert Rugimbana and Philip Iversen's study (1994) was to determine the association between consumer ATM usage patterns and their perceptions of ATM attributes by identifying those variables that distinguish users and non-users. The results based on a survey of 630 retail banking consumers from two separate Australian banking institutions suggest that successful marketing strategies must focus on the most important attributes of ATMs as well as identify different user groups and develop strategies to maximize their patronage.

### Conclusions

The banking industry which is the back bone of every economy is confronted with various challenges such as globalization, deregulation, competition, significant high cost of installing ICT and maintenance. The usage of ICT can lead to lower costs, but the effect on profitability remains inconclusive, owing to the possibility of ICT effects that arise as a result of consistence high demand of skilled work force, issues of increasing demand to meet customer's expectation for customer service delivery, trustworthiness of the information system and competition in financial services.

However, from the discussion whilst reviewing literature many



researchers did not find ICT, for the delivery of customer service and profitable for bank's financial performance. So there has been an arrow head among these findings on perspective of profitability and customer service delivery. While, on the same vein, other researchers found ICT channel making profitable impact on the banks that are only internet start-ups than the conventional banks transforming into click and mortar.

In addition, there are other studies that proclaim due to perceived security risk, lack of comfort with computer technology, either due to lack of awareness or age factor, and a host of other reasons that ICT did not appear to be significantly viable or accepted warmly or quickly by consumers. Other researchers also found that despite all these factors banks, themselves, have been unable to have provided efficient customer service delivery because of which the clients who were even ready to adopt this delivery channel did not turn up again to innovation, and banks couldn't successfully build the required contents of electronic banking environment for consumers. More research need to be carrying out in different location and different time frame may confirmed or refute the previous findings by collecting the primary data to come up to a conclusion for the impact of ICT on customer service delivery and banks performance.

It is quite evident from our study that enhancing ICT in the banking industry is a must in a rapidly changing market place, as the ICT revolution has set the stage for exceptional increase in financial activity across the globe.

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