

A Study on the Role of Information Technology in Banking Sector: A Study on Regional Rural Banks in Karnataka



Commerce

KEYWORDS: Banking Sector, Risk Management, Automated Systems and Processes, Mobile Banking, Electronic fund transfer.

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ABSTRACT

In the era of globalization Commercial banks and most of the rural banks in India have aligned IT with their business processes. The study evaluates the types of technological facilities used by bank customers, the benefit of technology and its challenges to customers. The results indicate that IT facilities used most by customers are ATM, Internet banking, and Electronic Fund Transfer at Point of Sale. ATM, direct deposit, withdrawal services and branch networking were the facilities that were highly used and offered by all the banks. The introduction of IT services by the banks has positively impacted the rate at which customers' visits banking halls and services received. How much knowledge customers had about the services affected the number of times they would use the service as well as the number of times they visited the banking halls. Some of the challenges encountered by customers are: low knowledge in using technology facilities, Internet connectivity problems, challenges posed by internet fraud and IT avoids personal interaction, making it difficult to get instant solutions to problems. The study recommends that there should be periodic educational campaigns about the technological facilities and their usage by the banks to promote customer patronage. The ATM machine should be monitored always to make sure it has the capacity to provide its 24/7 service as expected of it 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.

INTRODUCTION

In the globalization trends world over it is difficult for any nation big or small, developed or developing, to remain inaccessible 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 unsound 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 grouping 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 particularly in regional rural banks in India.

TECHNOLOGICAL DEVELOPMENT IN BANKS

After the new economy policy came into existence in India made Developments in the field of information technology strongly support 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.

EMERGING TRENDS IN BANKING TECHNOLOGY:

1. Financial Inclusion
2. Mobile Banking
3. Electronic Payments
4. CRM Initiatives
5. IT Implementation and Management
6. IT for Internal Effectiveness
7. Managing IT Risk
8. IT for business innovation

Rural Banking Delivery Channels - Multi-agency Approach to Rural Lending

Rural credit has been a laboratory for various policies, initiatives, investigations and improvements since 1955. The first major strategy adopted for improving rural credit delivery was the institutionalization of the credit delivery system with the cooperative as the primary channels. The multi-agency approach to the rural credit delivery emerged with the induction of the commercial banks into the scene. In 1979, specialized institutions called Regional Rural Banks and subsequently, another breed of institutions called Local Area Banks, came on the scene. With the operationalization of the Lead Bank Scheme, the area approach to rural lending was formalized and attempts were made to match infrastructure development with bank credit flows for ensuring development of the rural areas. The Scheme sought to give a special supply-leading role to the banking system in rural development and also to ensure access of the rural population to bank services through rural branch expansion. A multi-agency credit delivery system is in place for financing credit-based development activities, under the Lead Bank Scheme. In 1988, the Service Area Approach was also introduced as a strategy for improving the quality of rural lending. The Lead Bank Scheme Information System and Service Area Monitoring Information System (SAMIS) have also been operationalized using monitoring arrangements. The micro-finance and linkage of the banks to the self-help groups / NGOs and the issues of Kisan Credit Cards are among the recent developments in the area of rural lending in India. The latest policy initiatives are the enabling of the Non-bank Financial Companies and of the "correspondent" banking for

increasing delivery of rural credit. The National Agricultural Credit Review Committee (NACRC) headed by Prof. A S Khusru has established that the cost of rural lending by commercial banks and cooperative banks is unsustainable and does not break even. In fact, it has been sustained through cross subsidization. The two elements of the costs namely, capital costs and the current expenses are of the rural branches. Rural bank branches are such that the transaction in the rural area cannot support them.

Role of E- Banking System in the Development of the Financial System in India

E-banking made its debut in UK and USA in the 1920s. It became prominently popular during 1960, through electronic funds transfer and credit cards. The concept of web-based banking came into existence in Europe and USA in the beginning of 1980. In India e-banking is of recent origin. Technology will bring fundamental shift in the functioning of banks. It would not only help them bring improvements in their internal functioning but also enable them to provide better customer service. Technology will break all boundaries and encourage cross border banking business. Banks would have to undertake extensive Business Process Re-Engineering and tackle issues like a) how best to deliver products and services to customers b) designing an appropriate organizational model to fully capture the benefits of technology and business process changes brought about. c) how to exploit technology for deriving economies of scale and how to create cost efficiencies, and d) how to create a customer - centric operation model. Entry of ATMs has changed the profile of front offices in bank branches. Customers no longer need to visit branches for their day to day banking transactions like cash deposits, withdrawals, cheque collection, balance enquiry etc. E-banking and Internet banking have opened new avenues in convenience banking. Internet banking has also led to reduction in transaction costs for banks to about a tenth of branch banking. Technology solutions would make flow of information much faster, more accurate and enable quicker analysis of data received. This would make the decision making process faster and more efficient. For the Banks, this would also enable development of appraisal and monitoring tools which would make credit management much more effective. The result would be a definite reduction in transaction costs, the benefits of which would be shared between banks and customers.

REVIEW OF LITERATURE

Lichtenberg (1995), on the other hand, concludes that there is significant benefit from investment in Information Technology especially in the Banking Industry.

Mario Castelino (2006) suggests that Indian banking industry has provided the leading edge to what is happening to the Indian economy. Banks have equipped themselves with the latest of technology--core Banking. Business Process Reengineering has been introduced to enhance speed and efficiency of delivery.

According to VP Shetty (2006), globalization in banking is based on four important pillars viz. 1) trade in goods and services; 2) flow of capital and movement of human beings across boundaries; 3) harmonization of regulatory framework in different countries; and 4) developments in technology, particularly those in information technology.

Morrison and Berndt (1990) concluded that additional IT investments contributed negatively to productivity, arguing that "estimated marginal benefits of investment [in IT] are less estimated marginal.

Loveman (1994) and Barua et al. (1991), posit that there is no conclusive evidence to refute the hypothesis that IT investment is inconsequential to productivity.

Sukanya Bose (2005) the most significant achievement of the RRBs is enabling the weaker sections of the rural community to

institutional credit. The bulk of the loans from RRBs were granted to the priority sectors. In addition, the RRBs have played important role in extending credit for poverty alleviation schemes.

RESEARCH GAP

In regional rural banks Researches on technology advances in banking, application of E-banking services etc are conducted in various other countries. Less number of researches has taken place in India particularly the rural India. Much work has not been done in rural India with regard to use of technology, e-banking services, branchless banking and other operational issues of banks which hinders its profitability.

OBJECTIVES OF THE STUDY

1. To find out the progress of computerization in all the regional rural banks in Karnataka.
2. To analyze the banking innovations after computerization of regional rural banks in Karnataka.
3. To Assess the Perception of the Bank Employees towards the Implementation of Information Technology in the Banks
4. To identify challenges in the implementation of I.T. solutions in the regional rural banks in Karnataka.

HYPOTHESIS OF THE STUDY

H1 : The usage status of customers regarding technology based banking services differs from Age Wise, Gender Wise, Education Wise, Profession Wise, and Income Wise.

SIGNIFICANCE OF THE STUDY

In regional rural bank the use of Information Technology in all spheres of financial and banking sectors is a deep reality. The sector has enabled the banking sector to go beyond its traditional role and is now playing an increasingly important role in its key areas of operation as securitization, risks preference and liquidity among others to which IT helps in a big way. It has assumed such high levels that it is no longer possible for banks to manage their IT implementations on a standalone basis. With I.T. revolution, banks are increasingly interconnecting their computer systems not only across branches in a city but also to other geographic locations which high-speed network infrastructure and setting up local areas and networks are now exposed to a growing number. The customers have high expectations and have become more demanding now as they are also more as compared to other banks. They demand instant, anything and anywhere banking facilities. Though Reserve Bank of India has formulated many policies on adoption of I.T. in the overall working of the regional rural banks in India, yet there is an urgent need to address the issues involved in this respect to compete with the banks at international level. As such there is a great need to focus more on this aspect. The present study helps a lot in this regard.

STATEMENT OF THE PROBLEM

In the modern banking industry in India has witnessed tremendous changes linked with the developments in IT over the years. The quest for survival, global relevance, maintenance of existing market share and sustainable development has made exploitation of the many advantages of IT through the use of automated devices imperative in the industry. Yet, the rural banking sector, which is a key strategic sector in the banking industry in India aimed at accelerating rural and agricultural development, appears to have a blurred picture in the adoption of IT in its operations in the country. This situation coupled with the continuous influx of foreign and multinational banks into the country, with their determination to compete in all fronts in the industry poses a big threat to the competitiveness, profitability, survival and growth of the rural banks in the country. This situation has created a source of concern for the researchers, particularly when it is well-known that the competitive position and the ability to maintain market share and growth in the banking industry is mainly dependent on the degree of diversified services

provided by banks in the industry is facilitated by the adoption of various IT facilities . The implication is that, if the Regional Rural Banks failed to remain competitive or are kicked out of the banking industry, the agricultural sector which is the major contributor to our nation's GDP will greatly suffer as none of the other commercial banks that are leading the competition in the industry is willing to advance funding to the sector.

RESEARCH METHODOLOGY

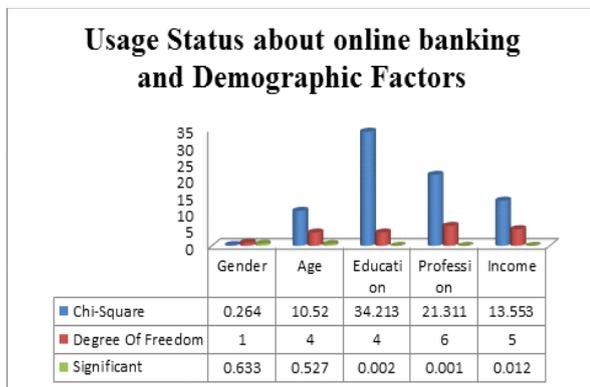
The sample for the study is customers who are all accessing services in the Regional Rural banks with the aid of information technology in Karnataka. This study randomly selects 100 samples at the various places across the sample area. This study collects data from the respondents, who are all having savings bank account and used information technology based service at least one year time frame. This study formulated on the basis of descriptive research design. The survey instrument has been constructed with three parts; first parts deals with demographic profile of respondents, second part seeks to ensure the factors influencing on service accessibility of customers with the adoption of information technology. Third part covers constructive strategies to improve the IT enabled service from the customer's point of view. The survey instrument was pretested; therefore questionnaire has been designed for collecting data. Collected data has been analyzed by using simple percentage analysis and Chi-Square Test.

ANALYSIS AND INTERPRETATION:

H1 : The usage status of customers regarding technology a based banking services differs from Age Wise, Gender Wise, Education Wise, Profession Wise, and Income Wise.

Usage Status and Demographic Factors:

Demographical Factors	Chi-Square	Degree Of Freedom	Significant
Gender	0.264	1	0.633
Age	10.52	4	0.527
Education	34.213	4	0.002
Profession	21.311	6	0.001
Income	13.553	5	0.012



Interpretation: As the P value is lesser than .05 in all demographics except in the case of gender and Age, this signifies that the null hypothesis is rejected in the case of age, education, profession and income. Hence we can conclude that all demographic factors are Age, Education Level, Profession and Income influences the usage status except gender and Age doesn't influences the usage status of the rural customers.

FINDINGS

1. Computerization of banking has received high importance in recent years due to technological advancement that are taking place

in the financial systems world over. Due to market competition in Indian banking industry, the pattern of banking business is changing phenomenally. Moreover banks have to provide a world class services to the customer to their door. Due to this type of quality services and facilities, income is increasing day to day.

2. The global banking industry, one of the most important and profitable industries of the world economy, has witnessed innumerable trends. The global banking industry has been undergoing deep transformation. The changes staring at the face of bankers all relate to the fundamental way of banking--which is undergoing a rapid transformation in the world of today.

3. Location convenience remains preeminent when consumers select a financial institution. The present study invariably finds majority of respondents (74.4%) saying convenience of locations is the main reason they selected their primary banking provider.

4. Majority of the customers demand a consistent service offering through multiple banking channels and they prefer to interact with their bank through multiple channels. Almost two third of customers surveyed, (74%) rate the availability of electronic banking channels play a significant role in choosing the bank.

SUGGESTIONS

1. From the above study conducted, the researcher found that in this era of electronic banking where neither geographical location nor time is a hindrance any more, the bank location remains preeminent when consumers select a financial institution. From the data collected the researcher invariably finds more than 67 % of respondents saying convenience of locations is the main reason they selected their primary RRB's. Thus the banks have to set up their branch premises in locations which are convenient to target larger customer group and ensure that the branch is well equipped with trained staff/employees and at the same time maintain superior service standards.

2. As found from the present study and previous studies as well that the lack of awareness among the non users could be a major reason for non usage of technology-enabled banking services. Thus the banks have to increase awareness levels among the non users through promotional measures advertisement, publicity and even through branch training and so on.

3. The study highlighted that the Regional Rural Banks are way behind the other bank groups in exercising thrust and encouraging their customers to adopt technology-enabled banking services. Hence they have to put in extra efforts in popularizing these services amongst their customers.

4. The survey highlighted that the intensity for thrust and encouragement to bank customers to adopt electronic banking channels was found to be less in case of Regional Rural Banks in comparison to public sector banks and foreign banks who encourage their respective customers to avail the technology-enabled banking services. This shows that this is an area of improvement for the Regional Rural Banks.

CONCLUSION

In the present globalised scenario IT has no doubt changes the overall pattern of banking system. The banking today is redefined and re-engineered with the use of IT and it is sure that the future of banking will offer more sophisticated services to customers with the continuous product and process innovations. Thus there is a paradigm shift from seller's market to buyer's market. So banks also change their approach from "Conventional Banking to Convenience Banking" and "Mass banking to Class Banking". So banks are now more concentrate on providing value added services to customers. But IT can be fully useful only if they enable to meet the challenges in the present environment. In India it can be successful only if it is properly implemented in rural areas also. There is also Need to

maintain privacy and confidentiality of data's. Many nations deem privacy to be subject of human right and consider it to be the responsibility of those who concerned with Computer data processing for ensuring that the computer use does not revolve to the stage where Different data about people can be collected, integrated and retrieved quickly. Another important Responsibility is to ensure the data is used only for the purpose intended. For this, there is a need to implement IT and other Cyber laws properly. This will ensure the developmental role of IT in the banking industry.

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