

Internet Banking: Boom or Bane

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Abstract

Internet technology holds the potential to fundamentally change banks and the banking industry. Banking through internet has emerged as a strategic resource for achieving higher efficiency, control of operations and reduction of cost by replacing paper based and labour intensive methods with automated processes thus leading to higher productivity and profitability. The present paper analyses the performance of scheduled commercial banks (SCBs) in term of labour productivity, branch productivity and profitability in pre and post e-banking period. Information technology has revolutionized the entire communication system. It has affected the productivity, profitability and efficiency of the banks to a large extent. The paper concludes that the performance of SCBs improved after the introduction of IT Act, 1999. At the same time internet banking suffers some pitfalls with regard to risks associated with internet banking i.e. credit risk, interest rate risk, liquidity risk, transaction risk and reliability risk. The paper also focuses on opportunities and challenges of e-banking. At the end the paper suggests that banks need to equip themselves for the competition keeping track of ever changing banking industry.

Keywords: Banking, Internet Banking, E banking, SCBs, IT, Productivity, Profitability, Opportunity

Introduction

The cutting edge business today is electronic commerce (e-commerce). Broadly defined, electronic commerce is a modern business methodology that addresses the needs of organizations, merchants, and customers to cut costs while improving the quality of goods and services and increasing the speed of service delivery. In the present cut throat competition, the banking industry is also booming. It is only the blessing of electronic age that the Indian banks

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are facing competition boldly. Before liberalization, there were so many deficiencies prevailing in the Indian economy, particularly in the financial sector and also in banking sector. During that time productivity was low, profitability has been eroded, several public sector banks and financial institutions have become weak financially, some public sector banks have been incurring losses year after year, their customer service was poor, their work technology was outdated and they were unable to meet the challenges of a competitive environment. Indian financial system becomes more competitive with the introduction of financial sector reforms in 1991.

Banking is an industry that is based on intensive information, and transactions in banking can normally be consummated without any physical exchange. These ingredients have made banking a perfect passenger for the internet vehicle. Electronic banking in simple term means that it does not involve any physical exchange of money, but it's all done electronically, from one account to another, using the internet. Internet banking is just like normal banking, with one big exception. You don't have to go to the bank for transactions. Instead, you can access your account any time and from any part of the world, and can do so when you have time, and not when the bank is open. As a whole, delivery of bank's services to a customer at his office or home by using electronic technology can be termed as e-banking. The quality, range and price of these e-services decide a bank's competitive position in the industry.

Types of Financial Services Provided by E-banking

The second banking sector reform initiated in the year 1998 with the introduction of recommendations of Narasimham Committee II gave much importance to the modernization and technology upgradation. The IT Act, 1999 started the speedy process of e-banking. The virtual financial services can be largely classified as follows:

Automated Teller Machines

- Ø Cash withdrawals
- Ø Mini-statements
- Ø Detail of most recent balance of account
- Ø Statement ordering facility
- Ø Deposit facility
- Ø Fund transfer.

EFTPos

- Ø Authorization and transaction capture processes take place electronically
- Ø Transaction confirmed manually
- Ø Funds not debited electronically.

Remote banking services

- Ø Balance Enquiry
- Ø Statement ordering
- Ø Funds transfer (payment) to third parties
- Ø Funds transfer between customer's different accounts
- Ø Order travels cheques and other financial instruments.

Remote banking does not provide the following services:

- Ø Cash withdrawals
- Ø Cash/cherub deposit
- Ø Sale of the more complex types of financial services such as life insurance mortgages and pensions.

Facility of Smart Cards

- Ø Stored value cards
- Ø Works as a replacement for all types of magnetic stripes cards like ATM cards, Debit/credit cards, Charge Cards etc.
 - One smart card contains the functionality of several different types of cards issued by different banks while running different types of networks.
 - Smart card a truly powerful financial token, giving user access
 - STM
 - Debit Facility
 - Charge facilities
 - Credit facilities
 - Electronic purse facilities at national and international level.

Internet Banking

Internet is an interconnection of computer communication networks spanning the entire globe, crossing all geographical boundaries. Touching lifestyles in every sphere the Net has redefined methods of communication, work study, education interaction, health, trade and commerce. Internet banking offers a variety of features and perks, rushing to lure online customers. The race is on to increase market share and create customer loyalty with features that make online banking friendlier, more useful, and less expensive. Presently, there are three basic kinds of internet banking that are being employed in the marketplace:

- (a) **Information:** The basic level of internet banking is information. Bank has marketing information about its products and services on a stand-alone server. This level of internet banking service can be provided by the bank itself or by sourcing it out. Since the server or website may be vulnerable to alteration, appropriate controls must therefore be in place to prevent unauthorized alterations to data in the server or website.
- (b) **Communication:** Communication refers to the interaction between the bank's system and the customer through electronic mail, account inquiry, loan applications or static file updates. The risk is higher with this configuration than with the earlier system and therefore appropriate controls need to be in place to prevent, monitor, and alert management of any unauthorized attempt to access bank's internal network and computer systems. In this type of internet banking the customer makes a request to which the banks subsequently respond.
- (c) **Transaction:** Another important system of internet banking is transaction in which customers are allowed to execute transactions including accessing accounts, paying bills, transferring funds etc. Comparing to the information and communication types of internet banking, this system possesses the highest level of risk architecture and must have the strongest controls.

Review of Literature

Arora (2003) highlighted the significance of bank transformation. Technology has a definitive role in facilitating transactions in the banking sector and the impact of technology implementation has resulted in the introduction of new products and services by various banks in India. Das (1999) concluded that while there is a welcome increase in emphasis on non-interest income, banks have tended to show risk-averse behavior by opting for risk-free investments over risky loans. Das (2003) concluded that during 2000-01, corporation bank emerged as the topmost bank followed by Andhra bank and OBC whereas in business performance. During the same time period, the listed banks ranked higher than the unlisted ones. Joseph (1999) investigated the influence of the internet on the delivery of banking services. They found six dimensions of i-banking service quality, namely, convenience and accuracy, feedback and complaint management, efficiency, queue management, accessibility, and customization. Liu and Arnett (2000) identified five important dimensions of online service quality in relation to customer satisfaction on the website. Among these, the quality of information, that is relevant, accurate, timely, customized and complete, are given priority for the customer satisfaction in the online service. Mohan (2003) expressed his views regarding the transformation in Indian banking that if Indian banks are to compete globally, the time is opportune for them to institute sound and robust risk management practices. Ram (2002) was of view that business is being completely reinvented because transaction costs are much lower on the internet than in traditional channels. The banks are rapidly shifting their business functions & customers relationships on to the web. Sandhu (2003) the paper analysis the impact of IT and particularly e-delivery channels on the performance of Indian banking system. The paper also highlights that ATM is a major e-delivery channels, which is used mostly in the metropolitan and urban cities. The paper concludes, they are providing better services than the other banks. Satyamurthy (1994) clarified the concepts of profits, profitability & productivity applicable to the banking industry organized by the bank managements that the pressure on the profitability is more due to the factors beyond their control. Shapiro (2000) studied the effects of cyberspace on efficiency and productivity of banks. He also analyzed the nature of bank transformation. Vasya (2006) developed a theoretical model for measuring the quality of online services. They modified the theoretical model for measuring the online banking services in particular. As a result of the analysis the initial theoretical model

has been modified, so that the final version of the model for measuring quality of online banking services includes four quality dimensions, namely service performance, website characteristics, communication and efficiency. Ziqi (2002) measured and identified consumer attitudes towards the usefulness and willingness to, use the internet in e-retail banking in Singapore. They showed that expectations of accuracy, security, and network speed, user friendliness, user involvement and convenience were the most important quality attributes underlying the perceived usefulness.

The review of literature reveals, lot of work has been done on the internet field of study. This shows that Indian banking industry is going through transformation and information technology is playing vital role in bringing this transformation.

Objectives of the Study

- Ø To analyze the performance of SCBs in pre and post e-banking period.
- Ø To know whether internet banking is a boon or bane for the banking industry.
- Ø To study the challenges and opportunities for all e-banking SCBs.

Research Methodology

The present paper is related to the Indian banking industry. All SCBs have been taken into consideration. To compare the performance of the SCBs, the study is divided into two periods i.e. pre e-banking period (1991-1999) and post e-banking period (2000-2009). A simple comparison has been done to analyses the performance of SCBs during pre and post banking period and Profitability ratios has been calculated to know the overall impact of the introduction of the internet banking in banking industry.

Results and Discussions

The growth of internet banking has been very encouraging and subsequently financial institutions are actively pursuing internet banking. A large number of customers are benefiting from these services. It is only the result of this new e-age that the performance of banks is improving day by day. Table 1 shows the labour productivity in term of deposits and credits. It

brings into light the employee's capacity to produce. The table concludes that pre e-banking period i.e. 1991-99, there was marginal increase in per capital deposits and credits of SCBs whereas there is tremendous increase in both during post e-banking period i.e. 2000 onwards.

Labour Productivity of Commercial banks Table 1

Years	Per Capita Deposits of SCBs (Rs)	Per capita Credit of SCBs (Rs)
1991	2368	1434
1995	4242	2320
1999	7152	3969
2003	12253	7275
2007	23382	17541
2010	39107	28431

Source: RBI, Handbook of Statistics

Table 2 highlights the branch productivity of SCBs which depicts the capacity of a branch to produce. Table shows that deposits and credit per office shows marginal rise during pre e-banking period whereas both the deposits and credits shoot up rapidly during post e-banking period.

Branch Productivity of Commercial Banks Table 2

Years	Deposit Per office (Rs Lacs)	Credit Per Office (Rs Lacs)
1991	334	202
1995	620	339
1999	1078	598
2003	1925	1143
2007	3675	2757
2010	5479	3983

Source: RBI, Handbook of Statistics

Table 3 shows that the profitability increases rapidly during post e-banking period.

Profitability Ratios of SCBs Table 3

Years	Net Profit as percentage of Total Assets
1991	0.39
1995	0.41
1999	0.49
2003	1.01
2007	0.9
2009	1

Source: RBI, Handbook of Statistics

The above analysis reveals that the performance of all SCBs is much better in post e-banking period than pre e-banking period. The assessment of data shows that banks have adopted this technology in an efficient manner.

Boon side of Internet Banking

Internet technology holds the potential to fundamentally change banks and the banking industry. Internet banking is expected to affect the mixture of financial services produced by banks, the manner in which banks produce these services and the resulting financial performances of these banks. The benefits of internet banking are plentiful as witnessed by the consequential reaction of a tremendous rise in usage and application.

- (i) **Reduced Transaction Costs:** Widely use of internet banking has reduced the transaction costs to a great extent. The cost of conducting the transaction on the internet is only a tenth of the actual cost.
- (ii) **Availability of Perfect Information:** Information is available to all market participants through internet. The internet performs the function of dismantling the oligopoly of a few providers and bringing about a structure favorable toward perfect

- competition e.g. facility of e-loan. This facility allows the potential borrowers to search and compare the offerings of thousands of providers. The internet make less likely, for example, for an individual to hide a bad credit history from prospective providers frequently. In all, there is little room for hearsay, verbal/oral accounts, and its related subjectivity. In short the internet has resulted in a wide dissemination of quality information.
- (iii) **Accessibility of Accounts:** Internet banking customers now have the ability to view their accounts online, including checking, savings, loans and credit cards. Customers are no longer required to wait for their monthly statements or wait in queue for the next available customer service representative. Accessibility of account enables customers to view most recent activity on accounts, and balances as of previous days activities.
 - (iv) **Online Applications:** Consumers can begin their banking relationship with an online application. Customers are not required to waste their time driving to a local branch to begin a banking relationship. They can fill out and submit electronically all necessary information needed to open a checking, savings account or even a fixed deposit.
 - (v) **Perfect Competition:** Internet banking offers an electronic market place that is tending towards perfect competition. This is achieved by two means. The first is through the aggregation of buyers and sellers and also through the provision of a search function platform. The second is by bringing about efficiency in determining price that is enabled by the online auction mechanism which makes pricing transparent and also makes it dynamic since it is driven by near perfect market conditions of demand and supply. Moreover internet banking help companies to raise money at much fine spreads by creating competition among the providers of capital.

Bane of Internet Banking

Internet banking has a lot of advantages to the financial institutions. But just as every coin has two sides, internet banking also suffers some drawbacks. Internet banking has to face a lot of risk related to different facets e.g. interest risk, credit risk, transaction risk, liquidity risk and

reliability risk. The first, credit risk is the risk to earning and eventually capital, arising from a borrower's failure to meet the terms of a credit contract with the bank or otherwise to perform as agreed. Internet banking has helped the customers to approach the institution from anywhere in the world. Due to the lack of personal contact, it is challenging for institutions to verify the bonafide of the customers, which is an important element in making sound credit decisions. Therefore to control the risk associated with such loans requires effective policies, process, and practices.

The second type of risk associated with internet banking is interest rate risk, which refers to the risk to earnings arising from movements in interest rates. From an economic perspective, a bank focuses on the sensitivity of the value of its assets, liabilities and revenues to changes in interest rates. Interest rate risk arises from differences between the timing of rate changes and the timing of cash flows (repricing risk); from changing rate relationships among different yield curves affecting bank activities (basis risk); from changing rate relationships across the spectrum of maturities (yield curve risk); and from interest related options embedded in basic products (options risk).

The third type of risk related to internet banking is the liquidity risk. It is the uncertainty arising from a bank's inability to meet its obligations as and when they occur. Internet banking increases deposit volatility from customers who maintain accounts solely on the basis of rates or terms. It allows all transactions to occur in real time. The management must therefore be prepared for immediate changes and consequently immediate solutions.

Another type of risk is transaction risk which is associated with each product and service offered and encompasses product development and delivery, transaction processing, system development, computing systems, complexity of products and services, and the internal control environment. Transaction risk may occur in the form of fraud, error, the inability to delivery products or services, the failure to maintain a competitive position and services, and the inability to manage information properly. The chances of transaction risk shoot ups if the lines of business are not adequately planned, implemented and monitored. Therefore banks are required to meet their customer's expectations. They must also ensure that they have the right product mix and capacity to deliver accurate, timely, and reliable services to develop a high level of confidence in their brand name. The last type of risk associated with internet banking is reliability risk. Some transactions are best suited with internet banking but some transactions really require the

personal contact e.g. transactions such as balance enquiry is ideally suited for internet banking. But transaction such as working capital loan applications are more detailed and personal discussions may be necessary. In the latter case, the absence of a physical channel is a problem.

Opportunities for Internet banking

Although, we have achieved a lot through internet banking, still there is a need to modify the policies of banks. Presently they are facing internal and external challenges. Therefore banks are required to convert these challenges into opportunities with some modifications. Increased globalization has impacted Indian banks also, and the Indian financial sector is set to see tremendous transformation in the coming millennium.

- (i) **Increased Competition:** Increased globalization has increased competition among banking world. Banks must convert this challenge into opportunity and should work to speed up their efforts toward the development of new tech-savvy products.
- (ii) **Banks should be Customer Oriented:** Gone are the days when customers used to come to the door of the banks now banks are required to chase the customers. To survive in the fiercely competitive environment, banks are required to focus on the profitable customers, understanding their needs and preferences, improving the delivery systems and reducing the transaction costs for them.
- (iii) **Technology:** Indian banks, especially the public sector banks are lagging behind in technology. Customers are now tech-savvy and they demands fast, convenient and glitch-free banking services. Therefore banks are required to pay greater attention to foolproof security arrangements and systems to safeguard against frauds.
- (iv) **Credit Assessment Skills:** Till date banks are providing finance to the primary sector of an economy. Now the banks should sharpen their credit assessment skills and lay more emphasis in providing finance to the wide-range of activities in the services sector.
- (v) **Management of NPAs:** The current global shocks in the financial world have revealed that the level of non-performing assets (NPAs) in the Indian banking industry is a greater concern. The internal control systems, risk management systems

and systems to catch early warning signals for timely detection of NPAs have to be strengthened by banks. Moreover, strengthening the Debt Recovery Tribunals and empowering banks to enforce the change without court intervention will result in expedition recovery of bad debts.

Internet banking acts as an alternative delivery channel which offers many opportunities for growth and development of the financial institutions. Financial Institutions have begun to realize that although the internet is simply a delivery channel it is nevertheless an extremely powerful one. Therefore, financial institutions are investing in electronic Customer Relationship Management (eCRM) solutions that span across all channels, with the goal of strengthening customer loyalty and increasing fee-based transactions. ECRM solution track customer interactions across channels, analyzing the aggregate data that will reveal patterns about customer usage of financial products. As a result of this information, financial institutions can generate business rules that define as to which type of offers need to be made to customers at various times of their lives. Increasingly, financial institutions make offers through all channels, tracking the results to make business strategies even more effective.

Challenges of E-Banking

A number of challenges which Indian banks are facing include:

- (i) **Technological Challenges:** It is due to lack of awareness regarding technology that customers are not gaining momentum in its used. Technology prevailing in our system is itself insufficient. There is lack of proper infrastructure for the installation of e-delivery channels.
- (ii) **Psychological Challenges:** Customers are conservative in nature and they prefer to stand in queue in banks rather than using internet facility. This is due to lack of knowledge as well as due to hesitation on the part of customers to use the facility of internet banking. Moreover, they become frustrated due to lack of technical education.
- (iii) **Socio-Economic Challenges:** Socio-economic challenges include cost factor, vast rural branch network, concept of social banking, lack of CRM and low profitability.

- (iv) **Problem of Security:** Internet banking may create loss of data due to technical defaults and moreover there is lack of security measures.
- (v) **Lack of Strong Trust Environment:** There is lack of trust among customers while using internet banking facility. There is always a space of doubt in their minds about the completion of transaction when the transactions are done through online medium.

Conclusion

The present study is an attempt to present the status of internet banking in India and its implications for Indian banking industry. The paper analyses the performances of the Indian SCBs pre and post e-banking period. The introduction of internet banking has helped the financial institutions to cope with new economic and financial policies of the banks. Internet banking is on rise and it becomes a powerful tool for improving customer satisfaction and increasing cross-selling opportunities. At the same time internet banking has its pitfalls too. There are a number of challenges which banks must keep in mind. Keeping track of ever changing banking industry and the latest update in internet technology, banks need to equip themselves for the competition.

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