

# Role of E-Business in improving Banking Services

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**Abstract-** The introduction of ICT and E-Business in the Banking Industry (hereinafter the BI) has had a significant impact on banks operating with physical branches. Value creation in e-business is one of the most important issues in deciding about e-business component investments. Banks have invested heavily to leverage the Internet and transform their traditional businesses into e-businesses in the last ten years. Nationalized and private banks have increasingly resorted to e-business to capitalize on the opportunities of business efficiencies. These banks adopted the Business to Consumer (B2C) e-business model to increase market share, offer better customer service and to reach out to customers at greater geographic distances.

**This paper is focusing on the role of e-business in improving banking services. The study objectives are to identify how developments in E-Business are affecting the structure and dynamics of an organization.**

**Keywords – E-Business, BI, ICT, PSNR**

## I. INTRODUCTION

Electronic business (e-business) is a major force in the global economy. Businesses and consumers alike increasingly engage in e-business. Despite the burst of the dot-com bubble, many firms continue to deploy e-business extensively in their enterprise value chains.

Organizations of all kinds continue to expand their involvement in E-Business. This requires considerable financial investment in IT, in processes and in people. It might be expected that there would be a concern to ensure that performance measurement systems are capable of justifying these investments, and of evaluating their worth once implemented.

E-Business provides the online business; it's very faster and cost effective as compared with the traditional business. Bill Gates, co-founder of Microsoft Corporation stated, "The information highway will... carry us into a new world of low-friction, low-overhead capitalism, in which market information will be plentiful and transaction costs low. It will be a shopper's heaven." (Albert H., Judd, Rivers, 2006).

E-business has dramatically changed how companies' business processes are implemented and enhanced, altered industry structures, and shifted the balance of power between corporations and their suppliers and customers (both downstream partners and consumers) (Amit Basu and Steve Muylle, 2007).

In the BI, all the main purposes for the use of ICT and e-business are highly relevant, as companies in the BI use ICT to reduce costs by increasing process efficiency, to improving and innovating customer relationship management strategies, to better serve the customers by developing new products and services to meet customer's needs, and enabling growth by increasing market reach, either by acquiring companies with innovative ICT skills or by using ICT to smoothen mergers and acquisitions. For implementing E-Business facilities, the BI must have

to empower the work force by appropriate investments in training and skill-formation, which is very important. Without sufficient capabilities of the human workforce to use the ICT-investments efficiently, the costly investments bear a high risk of becoming ineffective.

The increasing use of e-banking in the banking industry (BI) has increased competition within the industry. Due to the introduction of ICT in the BI, the entry barriers to the industry have been lowered as the demand for fixed assets in order to start up a bank has decreased. This has opened up the BI to competition from other actors in the financial markets, as can be seen from many of the banks, where an insurance company has entered the BI. The introduction of ICT in the BI has also entailed that in banking, and especially e-banking, power has shifted away from banks to their customers, by allowing the customers to shop around for the best price for products.

The technological development in the retail financial sector was expected to have an impact on the distribution of physical branches in the BI, on the role of other physical channels (such as ATMs), and on the role of remote channels (such as the telephone and the Internet).

Now mobile phone penetration is very high in India and there is a great potential for mobile banking also. Mobile banking, for instance, is among other things performing balance checks, account transactions, payments etc. via a mobile phone, normally via text messages.

## II. REVIEW OF LITERATURE

Some preliminary works on e-business and banking have been made through using data analysis. This literature review was also conducted to help put the research methodology in a better conceptual framework. In this regard the review focused on: the evolution and definition of e-business; processes of e-business adoption; benefits, barriers and challenges to e-business adoption.

E-Business probably began with electronic data interchange in the 1960s (Zwass, 1996). However, (Melao, 2008) suggests that it was only in the 1990s, primarily via the Internet, that e-Business has emerged as a core feature of many organizations. In his opinion, the hope was that e-Business would revolutionize the ways in which organizations interact with customers, employees, suppliers and partners. Some saw e-Business as part of a recipe to stay competitive in the global economy.

The term “e-Business” has a very broad application and means different things to different people. Furthermore, its relation with e-commerce is at the source of many disagreements. (Melao, 2008). A more comprehensive definition of e-business is: “The transformation of an organization’s processes to deliver additional customer value through the application of technologies, philosophies and computing paradigm of the new economy.” In a simple sense, E-Business can be defined as, “the organized effort of individuals to produce and sell, for profit, products and services that satisfy society’s needs through the facilities available on the Internet” (Brahm Canzer, 2009).

Some authors view e-Business as the evolution of e-commerce from the buying and selling over the Internet, and argue that the former is a subset of the latter (Turban et al., 2006). Others defend that, although related, they are distinct concepts (Laudon and Traver, 2008). Others use both terms interchangeably to mean the same thing (Schneider, 2002). (Kalakota and Robinson, 2000) proposed a definition of e-business that clearly stresses the difference between e-commerce and e-business. More precisely they assume that “e-business is not just about e-commerce transactions or about buying and selling over the Web; it is the overall strategy of redefining old business models, with the aid of technology, to maximize customer value and profits”. Kalakota and Robinson’s definition is of great importance because it describes e-business as an essential business-reengineering factor that can promote company’s growth.

According to (Melao, 2008) the clear commonalities among these definitions, include the improvement of business processes and the use of ICT in intranets, extranets and the Internet to conduct business. He defines e-Business as the use of ICT as an enabler to (re)design, manage, execute, improve and control business processes both within and between organizations. Thus, front and back-office integration and multi-channel integration become crucial in e-Business, which requires a challenging process improvement approach to support the necessary organizational, technological and social changes.

The article published by Rahmath Safeena, Hema Date and Abdullah Kammani in January 2001, states that, the various areas where the banks are preparing to use e-business approach include familiar and relatively mature electronically based products in developing markets, such as telephone banking, mobile banking, credit cards, ATMs, and direct deposit. This means that most of the banks have recognized the need to change their business process to conform to changing business trends in order to keep up with competition.

The customers are using net banking, to pay the utility bills, insurance premium, to book orders online, to book railway tickets also to book flight tickets, purchasing the products online using net banking or online banking (e-banking), credit cards, debit cards or smartcards also.

The development in the e-business however means that an increasing number of jobs are being changed from traditional tellers to branch advisors/ counselors. Bank staff is increasingly asked to provide highly qualified

financial advice rather than perform simple teller functions. By using intranet the communication is very fast in the banks. The banks can handle their transaction very fast online, using e-banking.

Karjaluoto in 2002 indicated that banks have the choice to offer their banking services through various electronic distribution channels technologies such as Internet technology, video banking technology, telephone banking technology, and WAP technology. They also indicated that Internet technology is the main electronic distribution channel in the banking industry. In other words, e-banking as an online banking that involves the provision of banking services such as accessing accounts, transferring funds between accounts, and offering an online financial service.

Chiemekwe (2006) conducted an empirical investigation on adoption of e-banking in Nigeria. The study identified the major inhibiting factors to Internet banking adoption in Nigeria such as, insecurity, inadequate operational facilities including telecommunications facilities and electricity supply, and made recommendations on how Nigeria banks can narrow the digital divide. Also, the report revealed that Internet banking is being offered at the basic level of interactivity with most of the banks having mainly information sites and providing little Internet transactional services.

### III. STATEMENT OF PROBLEM

Organizations cannot compete solely on past record of success in today's rapidly changing business environment that is characterized by boundary blurring, disintermediation and hyper competition. To move ahead of these rivals they need to seek innovation constantly at every level of activities. Their ability to generate successful business models and strategies as well as new products, will be the key for their survival in new economy. The first step of such innovation is internet, which made the traditional commerce to evolve in to E-Business trend.

In order to participate in the new online business environment, businesses have had to make significant financial investments, not only in the necessary technologies but also in the processes and people necessary to operate them. Whether evaluating E-Business investment proposals or monitoring the resulting online business operations requires the existence of an appropriate measurement of the effect of e-business on corporate performance.

The unique characteristics underlying the Web may in some cases require new metrics or at least the careful evaluation of the e-business implementation including their impact on the corporate performance as compared to the previous traditional systems.

Value creation in e-business is one of the most important issues in deciding about e-business component investments. Banks have invested heavily to leverage the Internet and transform their traditional businesses into e-businesses in the last ten years. Nationalized and private banks have increasingly resorted to e-business to capitalize on the opportunities of business efficiencies. These banks adopted the Business to Consumer (B2C) e-business model to increase market share, offer better customer service and to reach out to customers at greater geographic distances.

#### A. *Objectives of the Study* –

The study objectives are to identify how developments in E-Business are affecting the structure and dynamics of an organization.

#### B. *Scope and Limitations* –

The present study covers banks in Mumbai city and study is limited to four banks.

### IV. RESEARCH METHODOLOGY

This study examines the impact of e-business on banking industry in Maharashtra state. This examination is done by analyzing the strategies with regard to the Internet and related technologies that were utilized by the banks.

#### A. *Target Populations*–

This research is exploratory research in nature since it attempts to find out the qualitative factors such as effectiveness, efficiency and other attributes on the corporate performance reference to banking sector in Maharashtra. Hence, it is targeting IT professionals in banks who were involved in handling e-business. Those people are aware of the risk and responses of using e-businesses, several security issues of using e-business facilities in banks. To go further step and measure, in real life, the research is also targeting the customers of the banks who are using these facilities.

#### B. *Sample Size*–

The survey includes approximately 50 banking professionals handling e-business from four banks (both public and private sectors).

C. Primary Data–

Survey questionnaire was administered to empirically assess the level of adoption of e-business in Maharashtra. A survey questionnaire will be completed by the banks employees, customers of the respective banks.

D. Secondary Data–

The secondary data is obtained through the Net, books and related journals. The four banks’ strategies with regard the Internet and Related technologies were obtained from these banks’ annual reports, websites, and referred journals. These annual reports were obtained from the banks’ themselves through their Web sites.

V. DATA ANALYSIS

To find out the impact of e-business on banking industry, data collected through telephonic interview and questionnaire has been interpreted as follows:

Table -1 Percentage of Responses given by Bank Employees for given factors

Attributes	Factors on which E-Business facilities are measured	Bank Employee Responses	
		Yes	No
A1	Improving customer service	96%	4%
A2	Speed and efficiency	86%	14%
A3	Increased market share	82%	18%
A4	Improvement in Productivity	84%	16%
A5	Increment of sales	94%	6%
A6	Improvement in internal and external communication	100%	00%
A7	Lower cost of doing business	80%	20%
A8	Marketing and market access	90%	10%

As shown in table 1, it was found that most of the banking employees prefer e-business as a part of value creation.

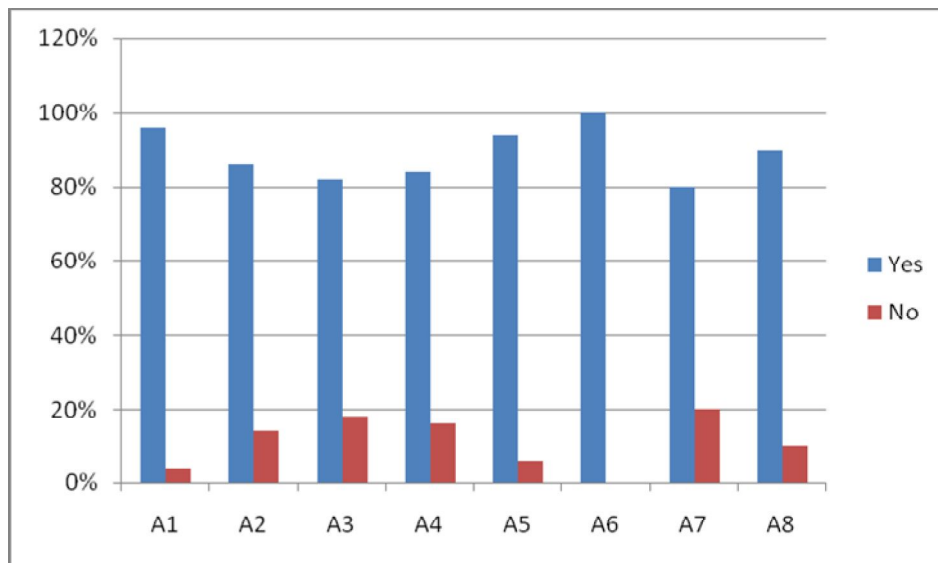


Figure 1. Percentage of responses given by banking professionals in measuring e-business performance

Figure 1 indicates that e-business plays an important role in the today’s scenario. Organizations cannot compete solely on past record of success in today’s rapidly changing business environment that is characterized by boundary blurring, disintermediation and hyper competition. To move ahead of these rivals they need to seek innovation constantly at every level of activities. Their ability to generate successful business models and strategies as well as new products, will be the key for their survival in new economy.

VI. CONCLUSION

The scope of E-Business is as wide as an ocean & there by the implementation hurdles. When one thinks of the Electronic Business even through final goal remains the same as that of the traditional business, but the way in which they function in order to improve the performance is different. As information sharing is the major part of

the corporate industries, networking has given boost to E-Business. This change in view-point has opened door for new opportunities.

Nationalized and Private banks agrees that adopting e-business as a strategy is one of the important steps the banks has taken in its development due to the tremendous benefits e-business adoption provides. According to them their perceived benefits include convenience to customers, speed and quality of service, reduction of queues in banking halls, increment of sales

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