The Effect of Information Technology in Saderat Banking System
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Abstract
Information technology has been playing such a vital role in all aspects of today marketing and all the sections of business that its importance cannot be over emphasized. The purpose of this study is to examine the effects of information technology in Saderat banking system. Data were obtained from both the customers and employees at the banks. The data were analyzed using percentage and five-point Likert scale to objectively determine the impacts of IT on the banking. The findings indicate that IT can improve bank's performance in three ways: IT can reduce operational cost (cost effect), and facilitate transactions among customers within the same network (network effect) and last but not least It can save the time dramatically.

1. Introduction

The world is fast entering the Information Age. Transactions and information may be packaged through data. There is a disintegration of the concrete to give way to what is abstract and digital. The digital and information for that matter are equally shaping and determining the contemporary world. We cannot deny that the advancement of technology was a necessity of the current era. Businesses need to adopt and embrace new technologies to provide excellent business operation and services to their clients. The bank industry is not an exception with regards to this adaptation. With the emergence of computers and internet, communication between businesses and clients are becoming faster than before.

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.

Owing to the advancement of technology, banks’ superiority in information is disintegrated. Entry obstacle has been declining, new competitors have appeared. Some financial products and services have become more recognized and commodities, customer show willing to separate the demand for financial products and services, all these lead to a more competitive market environment. As a result of lowered entry and exist and deconstruction, for some sub–financial markets, contestability in banking is also raised.
It has become clear that information technology has been providing solutions to banks to take care of their accounting and back office requirements. This has, however, now given way to large scale usage in services aimed at the customer of the banks. IT also facilitates the introduction of new delivery channels--in the form of Automated Teller Machines, Net Banking, Mobile Banking and the like. Further, IT deployment has assumed such high levels that it is no longer possible for banks to manage their IT implementations on a standalone basis with IT revolution, banks are increasingly interconnecting their computer systems not only across branches in a city but also to other geographic locations with high-speed network infrastructure, and setting up local area and wide area networks and connecting them to the Internet. As a result, information systems and networks are now exposed to a growing number.

Banks rely heavily on gathering, processing, analyzing, and providing information in order to meet the needs of customers. Banks endeavor to get the money of their customers so in turn, that money can be used to make loans. In order to meet customer's need, banks started using automated information processing technology during 1960's. With processing transactions becoming automated, it allowed for employees to concentrate on other tasks or projects. Also, it helped employees learn how to use a computer.

Technological progress has allowed banks to provide innovative, new services or improvement in quality and convenience that attract new customers and increase demand. Today many banks encode their daily work, which allows checks to be digitally scanned. After scanning at the bank, the items are sent to the clearing house before sent to the central bank. Any of a particular person has started to use electronic banking, which allows a customer to check their balance and process bill payments via a secure Internet and a computer, and is available twenty four hours a day. It is fast, convenient, and is easier than going to the bank to get funds. With electronic banking, there are other functions in IT that have evolved such as: Automated teller machine, Direct Deposit, and Electronic Bill payment, and so on.

The following 22 Technology Products are the main advantages enjoyed by banking industry: (1). Net Banking; (2). Credit Card Online; (3). One View; (4). InstaAlerts; (5). Mobile Banking; (6). NetSafe; (7). e-Monies Electronic Fund Transfer; (8). Online Payment of Excise & Service Tax; (9). Phone Banking; (10). Bill Payment; (11). Shopping; (12). Ticket Booking; (13). Railway Ticket Booking through SMS; (14). Prepaid Mobile Recharge; (15). Smart Money Order; (16). Card to Card Funds Transfer; (17). Funds Transfer (eCheques); (18). Anywhere Banking; (19). Internet Banking; (20). Mobile Banking; (21). Bank@Home (i) Express Delivery; (22). Cash on Tap

1.1 Research Questions
1. Does IT have a meaningful effect on decreasing operational costs of bank Saderat Iran?
2. Does IT have a meaningful effect on facilitating transactions among customers of bank Saderat Iran within the same network?
3. Does IT have a meaningful effect on saving the time of customers and employees of bank Saderat Iran?
4.

2. The Review of Related Literature

Information technology has been defined a lot in various areas of studies in the literature. The common wealth secretariat (1991) explains that the phrase “information technologies” used to encompass a range of new technologies and their applications, including all aspects of the use of computers, micro-electronic devices, satellite and communication technology. The above definition shows that communications technology is an aspect of information technology. According to Odunfunwa, B. (2002) information technology is a body of tools, with the convergence of communication and computers. Goldberg (2002) describes information technology as series of machines, which can execute sequences of instructions. The sequence of instructions is a programmed made particularly flexible and not rigid and can be charged depending on the information being processed.
In general, existing studies have concluded two positive effects regarding the relation between IT and banks’ performance. First, IT can reduce banks’ operational costs (the cost advantage). For example, internet helps banks to conduct standardized, low value-added transactions (e.g. bill payments, balance inquiries, account transfer) through the online channel, while focusing their resources into specialized, high-value added transactions (e.g. small business lending, personal trust services, investment banking) through branches. Second, IT can facilitate transactions among customers within the same network (the network effect). If ATMs are largely available over geographically dispersed areas, the benefit from using an ATM will increase since customers will be able to access their bank accounts from any geographic location they want. This would imply that the value of an ATM network increases with the number of available ATM locations, and the value of a bank’s network to a customer will be determined in part by the final network size of the bank. Indeed, Saloner and Shepard (1995), using data for United States commercial banks for the period 1971-1979, showed that the concern of network effect is important in the ATM adoption of United States commercial banks.

Information Technology has basically been used under two different avenues in Banking. One is Communication and Connectivity and other is Business Process Reengineering. Information technology enables sophisticated product development, better market infrastructure, implementation of reliable techniques for control of risks and helps the financial intermediaries to reach geographically distant and diversified markets. But focusing on both threats and opportunities of information technology, Blili and Raymond (1993) concluded that the strategic use of information technology can both threaten and benefit small and medium-sized enterprises (SMEs). In this paper, the strategic importance of information technology is analyzed in light of the specificity of these organizations. Planning approaches are then outlined, focusing on how SMEs can attain a mastery of information technology for competitive advantage.

Kozak (2005) examines the impact of the progress in IT on the profit and cost efficiencies of the US banking sector during the period of 1992-2003. The research shows a positive correlation between the levels of implemented IT and both profitability and cost savings. If the network effect is too low, IT expenditures are likely to (1) reduce payroll expenses, (2) increase market share, and (3) increase revenue and profit. The evidence however suggests that the network effect is relatively high in the US banking industry, implying that although banks use IT to improve competitive advantage, the net effect is not as positive as normally expected. In a broader context, the innovation in information technology, deregulation and globalization in the banking industry could reduce the income streams of banks, and thus the strategic responses of the banks, particularly the trend towards mega-mergers and internal cost cutting, are likely to change the dynamics of the banking industry.

3. Method

The research of this study is descriptive. The bank data pertaining to traditional time and IT time were used to be compared to find answer regarding the questions. Questionnaire surveys were also the means to find answers regarding the last two questions. It means that bank data was the only source for the first question but both bank data and the questionnaires were used for the last two questions. The researcher tallied, scored and tabulated all the responses in the provided survey questions. The researcher conducted the survey personally with the respondents. Further library research using bank data, books, journals and magazines was carried to see whether they support the primary data collected to show a clearer picture of the information technology’s effect on Bank Saderat Iran.

3.1 Sampling Design

The sampling design of this study is Random sampling; in order to find answers regarding the last two questions, it is the most appropriate design to use in this study since the researcher decided the sample size of the study i.e. 80 bank customers and a sample of 20 clerical and 10 managerial employees in the bank.

4. Findings and Conclusion

The bank data and the results of the questionnaire surveys along with the library research made it clear that information technology has high impact on Saderat banking system. All the above mentioned sources show that IT
leads to decreasing operational costs, facilitating transactions among customers of bank Saderat Iran within the same network and saving the time of the customers and the employees conspicuously.

The details of the study can be shown as follows:

Research Question 1: Does IT have a meaningful effect on decreasing operational costs of bank Saderat Iran?

Comparing the bank data pertaining to traditional time and IT time indicated that operational costs of the latter decreased by 41% and consequently led support to the positive answer to the first question.

Research Question 2: Does IT have a meaningful effect on facilitating transactions among customers of bank Saderat Iran within the same network? The comparison of the bank data pertaining to traditional time and IT time along with the results of the results of the questionnaires (82% for customers, 87% for employees and 90% for managers) leads support to the meaningful effect of information technology on facilitating transactions among customers of bank Saderat Iran within the same network.

Research Question 3: Does IT have a meaningful effect on saving the time of customers and employees of bank Saderat Iran? Both the customers and employees believe that IT has a meaningful effect on saving the time of the customers and the employees (89% and 92% respectively). The comparison of the bank data pertaining to traditional time and IT time along with the library research led support to this result too.

Finally it should be noted that the findings of this study are limited only to the sample studied, the bank data available and the data gathered from the books and journals about information technology and its impact on bank Saderat system of IRAN. In other words, the results may change if this study is carried out with another banking system, other subjects and for a more longitudinal time.

To sum up, information technology is an integral part of the new millennium. Banking systems should strive to make use of IT more effectively to win in the competing world.

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