



# IMPACT OF INFORMATION TECHNOLOGY ON SELECTED INDIAN AND JORDANIAN PRIVATE SECTOR BANKS

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## ABSTRACT

### KEYWORDS:

*Information Technology, Indian and Jordanian private sector banks, time saving, customer benefits,*

*The introduction of information technology to every aspect of human life and business has been so apparent that it does not need to be highlighted more. Information technology has become of great importance in banking system. This study aims to investigate the effect of information technology in the banking system of selected Indian and Jordanian private sector banks. The data are obtained through the senior employees of the banks under study. The data was analyzed using the mean, standard deviation, t-test to find out the impact of Information technology in the banking system dealings for private banks under study. The findings of the study showed that Information technology contributes to the banking system in mainly three different ways as follows: Use of IT saves the time of the customers and the employees to a great extent and provides up to date information, IT decreases the expenses and IT improves service quality of the banks. It was found that the difficulties encountered by the banks were in Technology up gradation and lack of knowledge of how to use technology. The findings also showed that the use of web as a tool improved customer relationship.*

## INTRODUCTION

All the requirements of present life are a fact that information for the modern organization is a resource equivalent in importance to land, labor and assets. It is very important and a precious resource. The segment that has been most drastically affected by the information technology developments is the banking system. The information technology has turned out to be a significant business resource because its nonexistence could result in poor decisions and eventually business failure. Technology has opened up new markets, new products, new services and efficient delivery channels for the banking industry. Online e-banking, mobile banking and internet banking are just a few examples. Information Technology has also provided banking industry with the ability to deal with the challenges the new economy poses. Information technology has been the keystone of recent financial sector reforms aimed at increasing the speed and reliability of financial operations and of initiatives to build up the banking sector. The IT revolution has set the stage for exceptional increase in financial activity across the globe. The progress of technology and the development of worldwide networks have significantly reduced the cost of global funds transfer.

It is information technology which enables banks in meeting such high expectations of the customers who are more demanding and are also more techno-savvy compared to their counterparts of the past. They demand instant, anytime and anywhere banking facilities. Other researches show 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.

This promising technology influences the banking industry, mainly in the following three aspects: 1. Technology

is influencing competition and the degree of contestability in banking. 2. Technology influence Economy of scale 3. Technology influence the economics of delivery.

## REVIEW OF LITERATURE

**Aduloju and Oghojafor (2011)** explore the question of how IT could enhance firm performance in the area of customer's service and organization's profitability in the Nigerian insurance industry. Authors propose three hypotheses which are tested with the aid of Kolmogorov-Smirnov test, a non-parametric tool used to test the goodness fit of an ordinal data. The findings show that while most companies have a comprehensive data base of their customers, not all make provision for their customers to make major transactions online because they have not fully integrated their customer relationship management with information technology. The study also finds out that effective combination of customer relationship management with information technology leads to improve customer service and organization's profitability. Consistent with some previous studies, this study supports the view that the use of IT can enhance service delivery.

**Daneshvar and Ramesh (2012)** have analyzed the panel data of two public banks to examine impact of IT investments on profitability and productivity of Indian public sector banks. It uses correlation analysis to measure the strength of inter-relationships between the IT variables (amount of IT investments and number of ATMs) and banks' performance indicators. Further, the study applies multiple regression analysis to evaluate the impact of strategic variables on banks' performances. Regression analysis used four independent variables in terms of 'number of ATMs', 'number of employees', 'number of branches' and 'staff costs as percentage of total expenses' and predicted three dependent variables in terms of 'deposits', 'ROA' and 'profit per employee' as banks' performance variables. The results indicate that investments on IT contributed to increased amount of deposits and return on assets (ROA) as profitability, profit per employees as productivity indicator and decreased the net NPA ratio and staff cost. Finally, the study concludes that public banks tried to adopt strategies like cost reduction and assets quality to compete in the Indian bank market.

**Mohammad Khurram Manzoor et.al. (2013)** In this paper the authors have said that the revolution of information technology has influenced almost every facet of life, among them is the banking sector. The banks, be it domestic or foreign are investing more on providing on the customers with the new technologies through e-banking. PC banking, mobile banking, ATM, electronic funds transfer, account to account transfer, paying bills online, online statements and credit cardstock, are the services provided by banks. This research paper aims at examining the impact of electronic banking on the profits of Pakistani banks. E banking has increased the competition among the banks and both domestic and foreign banks are offering more and more modern ways of e-banking. This study looks into the services provided by the banks and also the impact of these services on the profitability of the banks. It is a notable task as it reveals the factors that lead to successful operation of banks making them more profitable and manage risks of using the electronic means and at the same time using electronic services for banks benefit and how they stand apart in the market because of these services which lead to increased profitability of banks be it public or private.

**Chowdhury and Marufullah (2013)**, in their research paper entitled "Usage of Information Technology by the Commercial Banks Operating in Bangladesh-Current Situation and Its Future" go on to mention that the positive impact of Information Technology on productivity of banks is very hard to demonstrate in the area of net profit and asset (predominantly loans) increases. Apart from the above statement, banks can increase productivity by enhanced spending on IT and better management of IT resources. This will lead to increase in various areas, i.e their competitiveness through differentiation and customer service improvement, reduced costs, better risk avoidance and maintaining the stability of their customer base and market share.

## OBJECTIVES OF THE STUDY

To study the nature and extent of use of information Technology in private sector banks in India and Jordan with special reference to providing accounting services by these banks.

## HYPOTHESES

The present study will be carried out by formulating hypothesis. A hypothesis is an unproven proposition or supposition that tentatively explains certain facts of phenomena. The proposed study is carried out keeping in view of the following hypothesis.

H<sub>0</sub>: The selected Jordanian banks do not use more Information Technology related accounting services than the selected Indian banks

H<sub>1</sub>: The selected Jordanian banks use more Information Technology related accounting services than the selected Indian banks

## RESEARCH METHODOLOGY

### Data Source

#### Primary Source

The primary source of data includes discussions with senior managers of selected banks in India and Jordan. The discussion is based on semi-structured questionnaire covering all aspects to meet the objectives of the study.

#### Sample Size

The sample size considered for the study is 104 respondents from selected Indian and Jordanian private sector bank branches. Data collected was from the managers or senior officials of the main branches of the banks as all the banks have adopted the core banking system.

#### Time Period

The time period of the study is for a period of 5 years 2012-13 to 2016-17

## SCOPE OF THE STUDY

In the present study five private sector banks from India and three private sector banks from Jordan are considered. This study work is based on the following selected banks.

The selected private banks in Jordan are

1. Arab Banks
2. Jordan Commercial Bank
3. The Housing Bank for Trade & Finance

The selected private banks in India are

1. Axis Bank
2. ICICI bank
3. HDFC bank

4. IndusInd bank
5. YES bank

## TOOLS AND TECHNIQUES

The data collected was analyzed to test the hypothesis. Mean, Standard deviation and t-test were used to find the result to the objective.

### Data Analysis and Interpretation of Primary Data:

**Table 1: Customers Benefits with Electronic Banking**

One-Sample Statistics								
	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)	Mean Difference
Minimizes the cost of transactions	104	4.60	.757	.074	61.910	103	.000	4.596
Saves time	104	4.93	.252	.025	199.803	103	.000	4.933
Minimize inconvenience	104	4.74	.441	.043	109.733	103	.000	4.740
Provided up to date information	104	4.90	.296	.029	168.820	103	.000	4.904
Facilitates quick responses	104	4.54	.880	.086	52.567	103	.000	4.538
Improves service quality	104	4.42	1.021	.100	44.176	103	.000	4.423
Minimizes the risk of carrying cash	104	4.79	.410	.040	118.995	103	.000	4.788

Source: Primary Data

From the above Table 1 it is found that in the case of “Customers Benefits with Electronic Banking Factor” in e-banks all the seven variables possess the mean values greater than 4. All the t-values are positive and significant at 5%

level. Hence it can be inferred that the factors ‘Saves time and provide up to date information’ are considered as the most important customer benefits with electronic banking factor in e-banks with a mean value of 4.933 and 4.904.

**Table 2 Difficulties Faced by the Bank employees to work with e-channels**

One-Sample Statistics								
	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)	Mean Difference
lack of knowledge regarding how to use/ operate	104	3.44	.943	.092	37.214	103	.000	3.442
lack of trust	104	2.85	1.012	.099	28.674	103	.000	2.846
Increasing expectations of customers	104	3.28	1.127	.111	29.660	103	.000	3.279
Problem of Security	104	2.76	1.119	.110	25.148	103	.000	2.760
Resistance to change	104	3.43	.943	.092	37.136	103	.000	3.433
lack of proper training	104	3.30	1.023	.100	32.883	103	.000	3.298
Technology up gradation	104	3.49	1.207	.118	29.497	103	.000	3.490
Strain, due to e-banking as compared to manual banking	104	3.06	1.276	.125	24.441	103	.000	3.058

Source: Primary Data

From the above Table 2 it is found that in the case of “Difficulties faced by the Bank Employees to work with e-channels Factor” in e-banks all the eight variables possess the mean values between 2 and 3 and a unique variable has a value less than 3 in its mean value. All the t-values are positive

and significant at 5% level. Hence it can be inferred that the factor ‘Technology up gradation and lack of knowledge how to use/operate’ is considered as the most important difficulties faced factor in e-banks with a mean value of 3.62 and 3.54

**Table 3: Customer orientation of IT facilities**

One-Sample Statistics								
	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)	Mean Difference
Your bank uses the web as a tool to improve customer relationship	104	4.39	.491	.048	91.258	103	.000	4.394
Internet helps you to identify profitable customers	104	4.34	.475	.047	93.140	103	.000	4.337
Internet banking customers carry out more Transactions than traditional customers	104	4.38	.804	.079	55.601	103	.000	4.385
Internet banking can help to offer more complete products of an equivalent quality with lower costs to more potential customers	104	4.38	.545	.053	82.016	103	.000	4.385
Internet banking is helpful in product offerings	104	4.36	.520	.051	85.446	103	.000	4.356

Source: Primary Data

From the above Table 3 it is found that in the case of “Customer orientation of IT facilities Factor” in e-banks all the five variables possess the mean values greater than 4. All the t-values are positive and significant at 5% level. Hence it can be inferred that the factor ‘Banks use the web as a tool to improve customer relationship’ is considered as the most important customer orientation of IT facilities factor in e-banks with a mean value of 4.394. The two factors ‘Internet banking customers carry out more transactions than traditional customers’ and ‘Internet banking can help to offer more complete products of an equivalent quality with lower costs to more potential customers’ with a mean value of 4.385 also help customer orientation of IT facilities in the modern banks.

## FINDINGS

The research brought to light the fact that IT has been of great impact on Indian and Jordanian private sector banks the findings from the questionnaires clearly reveal that IT leads to saving the time of the customers and the employees, cutting down the expenses and providing up-to-date information.

From the table 1 it is found that in the case of “Customers Benefits with Electronic Banking Factor” in e-banks all the seven variables possess the mean values greater than 4. All the t-values are positive and significant at 5% level. Hence it can be inferred that the factors ‘Saves time and provide up to date information’ are considered as the most important customer benefits with electronic banking factor in e-banks.

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## CONCLUSION

The outcome of this study is limited only to the data gathered from the questionnaire about information technology and its impact on Indian and Jordanian private sector banks. It cannot be denied that the progress of technology was a necessity of the current period. Businesses need to accept and adopt new technologies to provide outstanding business operation and services to their customers. The banking sector is not an exemption with regards to this adaptation. So it is of great significance that the banking sector needs to spend more on IT and improved application of IT to improve its operations, customer services and products. Banks ought to allocate more funds to growth of secure IT systems, services and products

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