



# Journal of Internet Banking and Commerce

*An open access Internet journal (<http://www.arraydev.com/commerce/jibc/>)*

*Journal of Internet Banking and Commerce, December 2008, vol. 13, no.3  
(<http://www.arraydev.com/commerce/jibc/>)*

## The Quality of Internet Banking Service Encounter in Jordan

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### Abstract

The purpose of this study is to identify the quality of internet banking service encounter of the retail banks in Jordan, and to identify the quality dimensions that should be improved or sustained, to achieve these purposes the banks' web sites were evaluated by using the web site quantitative evaluation method (QEM), the evaluation of the banks' web sites was conducted in March 2008 for sixteen retail banks in Jordan, the results indicated that; the banks in Jordan have significant positive quality of the internet banking service encounter, further the banks' web sites are rich in their content, and significant in the navigation, but the speed of home page down load and web site accessibility should be developed in the future.

**Keywords: Internet banking, Service encounter, quality, Retail banks, Jordan.**

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### INTRODUCTION

The adopting of internet banking has been increased dramatically during the last few years by the retail banks in Jordan; the number of banks adopting the internet banking in 2003 was two (Awamleh, 2003), but in 2008 the number increased to be sixteen as a response for the changes of customers' needs (Siam, 2006), accordingly the banks in Jordan should focus on providing a better service encounter's quality to their customer as a result of the impact of encounter's quality on the customers' retention (Wakefield,

1996; and Reimer and Kuehn, 2005).

Despite the recent adoption of internet banking in Jordan, some banks has a competitive position in the middle east and Africa; according to Trajhova (2005), Jordan Kuwait Bank was one of the best consumer internet banking provider in the Middle East and Africa, this bank was the best in bill payment, also as reported by Keeler (2007), Standard and Chartered in Jordan was the best in corporate and institutional internet banking in 2007.

Accordingly the reality has been changed since the early contribution of Awamleh (2003), the published facts should be updated to reflect the changes, moreover the retail banks should have up to date facts about the effectiveness of its electronic applications as internet banking, so this study aims to answer the following two questions:

To what extent the internet banking service encounters quality of retail banks in Jordan is significant positive?

What are the quality dimensions should be maintained and improved by retail banks in Jordan?

## **LITERATURE REVIEW**

The early adoption of internet banking in Jordan was emerged in 2000 by two local banks; Arab bank, and Jordan Kuwait Bank (Siam, 2006); during the period of 2001-2003 the banks in Jordan not fully utilized the concept of web banking in comparison to developed international markets as US.

During this period as surveyed by Awamleh et al. (2003); limited number of banks in Jordan conduct the transactions online, only two banks offered a limited number of services through their web, no Jordanian bank offers online opening account service or on line investment application service, the web site was used as informational vehicle mainly; detailed institutional information, promotional information, branch locations and detailed information about the broad of directors, contact details, and information on special events were presented in the web sites.

These limited applications of internet banking in this period reflects the limitation of adopting internet banking in the Middle East; according to Gurn et al. (2003) the internet banking in the Middle East in 2003 was still in its infancy stage where internet usage is limited. In 2001 only 18 of 100 top banks in the Middle East had online transactional capabilities as reported by Southwell (2001).

However the banks in Middle East in general and Jordan in particular directed during the last few years toward more adopting of new technologies and expand the usage of internet banking as a response for customer needs; according to Southwell (2001) 20% of customers in the Middle Easy will leave their banks if they will not move to online banking.

Furthermore according to recent survey of internet banking in Jordan conducted by Siam (2006); the banks desire to adopt internet to achieve a competitive position and as a

response to the changes of customers' needs toward low cost and more fast transactions, also as reported by Arab Advisors (2007) the banks in Jordan directed toward the adoption of high technologies in order to push cost more on the front of customers.

The adoption of internet banking in Jordan has been increased dramatically during the last few years, the number of banks adopting internet banking increased from two banks in 2000 to fourteen banks in 2008 out of 23 banks working in Jordan; the kind of players of internet banking in Jordan is clicks-and-mortar model.

Despite this recent adoption of internet banking in Jordan, some banks has a competitive position in the middle east and Africa; according to Trajhova (2005), Jordan Kuwait Bank was one of the best consumer internet banking provider in the Middle East and Africa, this bank was the best in bill payment, also as reported by Keeler (2007), Standard and Chartered in Jordan was the best in corporate and institutional internet banking in 2007.

Accordingly as a result of the development of internet banking adoption by retail banks in Jordan, further insight about the quality of service encounter or the web sites is very important for the researchers and practitioners alike, accordingly in the context of this research the web sites of the banks in Jordan have been evaluated by using quantitative evaluation method (QEM), in order to minimize the subjective evaluation of web site attributes as suggested by Evans and King (1999);

some researchers as Evans and King (1999), Olisna et al. (1999), Mateos et al. (2001) and Miranda et al. (2006) used the web site quantitative evaluation method (QEM) as a powerful approach to assess the artifact quality, the process of (QEM) is; categorizing, identifying factors, identifying weights, rating the factors, and identifying the total quality indices.

## **THE RESEARCH METHODOLOGY AND DESIGN**

The methodology employs in this paper is the quantitative descriptive survey methodology, the same as proposed by Evans and King (1999), Olisna et al. (1999), Mateos et al. (2001) and Miranda et al. (2006), so the reliability of data will be improved.

### **The Sample:**

The list of population is identified by the Jordan Banks Society's Directory (2008), this directory is web oriented which allowed the researcher to access the banks web sites, the number of retail banks in Jordan adopting internet banking are 16, which are included in the research sample.

### **Data Collection Methods and Techniques:**

A total of 16 Jordan banks' websites were observed directly by the researcher during March 2008, and rated according to websites indices.

The websites were evaluated by using the web site quantitative evaluation method (QEM), this method was employed by some researchers as Evans and King (1999),

Olisna et al. (1999), Mateos et al. (2001) and Miranda et al. (2006), according to Evans and King (1999) a web assessment tool has five main components: categories, factors, weights, ratings and total score.

The first step: is to choose the categories that are critical to web site effectiveness. The four broad categories are selected as the basis for a quality website are: accessibility, speed, navigability and site content, these categories are the same categories employed by Mateos et al. (2001) and Miranda et al. (2006).

The second step: The key factors within each category are selected according to previous studies, the factors chosen and its measures are listed in table (1).

The Third Step: developing the web site index; to do that weights were assigned to categories and factors (the total weights is 100); the weight assigned were the same as the weights developed by Miranda et al. (2006) (see table (1)) with minor modifications; the reasons of employing these indices is that; the indices were developed for the purpose to examine the quality of banks websites; further they follow a rigor methodology.

The fourth step: after assigning the rates to different categories' factors according to scale of 0-100 points; then the rates multiplied by weights, and the quality indices for each bank will be computed by summing the categories indices.

## DATA ANALYSIS METHODS AND TECHNIQUES

One Sample t-test is used to identify the significance of the quality of internet banking service quality of retail banks in Jordan (the significance level is  $\alpha < 0.05$ ), and One-Sample Kolmogorov-Smirnov test is used to examine the normality of the data before conducting the t-test, Microsoft Excel package 2003 has been used to compute the indices of internet banking service encounter's quality, further the Statistical Package of Social Sciences (SPSS) version 12 was used to conduct the t-tests.

Table (1) The Retail Banks' Website Indices  
(Adopted from: Miranda, F.J. Corte's, R. and Barriuso, C. (2006). Quantitative Evaluation of e-banking websites: an empirical study of Spanish Banks. *The Electronic Journal Information System Evaluation*, 9(2),73-82.)

Categories	Weight	Categories	Weight
Accessibility	15	Navigability	15
Google Spine Search engine rank	5	Site map	10
Popularity (internal and external links)	10	Keyword search function	3
Speed	15	Number of clicks to log-in the internet banking	2
Home page size (bytes)	15		
Content quality			55
Information content	20	Transactional content	20
General bank information	4	Online banking	10

Products/Services information	4	Online communication	1
Price information	4	General inquires	1
ATM location	2	Specific inquires	1
Branch location	2	Funds transfer	1
Financial information	4	Brokerage	1
Communication content	15	Savings and investments services	1
Users feedback	6	Accounts and pay cards	1
Contact telephone	3	Applications	1
Contact address	3	Tax payment	1
Contact E-mail	3	Bills payments	1

Total Weights= 100

### THE RESULTS AND DISCUSSION

As presented in table (2) the average of WAI (web assessment indices) of retail banks in Jordan is 71.69 and significant (P-value 0.000), which indicates that the quality of internet banking service encounter is significant positive; the leader banks in the quality of internet service encounter are Jordan Ahli bank and Arab Bank, and the laggard bank is National Bank of Kuwait, so the laggard banks in Jordan can benefit from the experience of leaders' banks.

Table (2) Internet Banking Service Encounter Quality

Bank	WAI	Accessibility	Speed	Navigability	Content
Jordan Ahli	78.05	4.85	14.7	14.5	44
Bank of Jordan	78.02	3.02	13.5	11.5	50
Arab Bank	76.9	12.9	4.5	14.5	45
Jordan Islamic	77.8	2.8	15	12	48
ABC Bank	75.9	12.9	4.5	14.5	44
Jordan Investment and Finance	75.25	5	10.25	12	48
City Bank	74.35	13.7	4.65	15	41
Arab Jordan Investment	72.45	5.2	5.25	14	48
The Housing Bank	72.2	7.2	N/A	14	51
Jordan Kuwait Bank	71.8	4.5	6.3	10	51
HSBC	71.45	14.45	N/A	15	42
BLOM Bank	70.3	3.9	6.9	14.5	45
Union Bank	67.1	2.1	6	12	47
SGBJ Bank	66.2	3.4	3.3	14.5	45
Cairo Amman Bank	63.2	4.27	N/A	12	47
National Bank of Kuwait	56	0	N/A	12	44
Mean	<b>71.69**</b>	6.26	6.38	<b>13.25**</b>	<b>46.25**</b>
Mean difference	21.68	-1.24	-1.12	5.75	18.75
P-value (One Sample t-test)	0.000	0.29	0.42	0.000	0.000

\*\*P≤0.01

Furthermore the Navigability and Content dimension of the service encounters' quality are significant positive (P-Value 0.000), the leader banks in Navigability are HSBC Jordan Ahli, Arab bank, ABC bank, BLOM bank, and SGBJ bank, and the leaders' banks in the content are Housing Bank, Jordan Kuwait Bank and Bank of Jordan, on the other hand the speed and accessibility are below the quality average (7.5) but not significant, accordingly the concern should be in developing these dimensions in the future, the speed could be developed by decrease the size of home page, and the accessibility could be developed by increase the number of internal and external links also improve the web sites compliance with Google search engine.

Moreover as presented in the table (3); the banks websites are rich in informational content more than other dimensions, the second dimension is the communication and the third is the transactional, all the sixteen banks provide online account and pay cards service, the next services provided is fund transfer, the frequency is 15 out of sixteen bank, followed by bills payment, the frequency is bills payment, the frequency is 12 out of 16, but no banks provide tax payments, these results indicated to the advancements of the content of banks web sites in comparison to the study of Awamleh (2003).

Table (3) The frequencies and percentage of the web site content dimensions

Content Dimensions	Frequency	Percentage	Content Dimensions	Frequency	Percentage
Information content			Transactional content		
General bank information	16	100%	Online banking	16	100%
Products/Services information	16	100%	Online communication	1	0.06%
Price information	16	100%	General inquires	10	63%
ATM location	16	100%	Specific inquires	10	63%
Branch location	16	100%	Funds transfer	15	94%
Financial information	16	100%	Brokerage	3	19%
Communication content			Savings and investments services	3	19%
Users feedback	14	88%	Accounts and pay cards	16	100%
Contact telephone	12	75%	Applications	6	38%
Contact address	11	69%	Tax payment	0	0%
Contact E-mail	13	81%	Bills payments	12	75%

## CONCLUSION

This study was conducted for the purpose to identify the quality of internet banking service encounter of the retail banks in Jordan, and to identify the quality dimensions

should be sustained or improved; the results show that, the quality of internet banking service encounter is significant positive, the most significant quality dimensions are Navigability and content, the banks web sites are rich in the informational content more than other dimensions, the second dimension is the communication and the third is the transactional, these results indicated to the advancements of the content of banks web sites in comparison to the study of Awamleh (2003), also the speed and navigation dimensions should be developed in future by decrease the size of home page, increase the number of internal and external links attached with the web sites, further increase the compliance with the ranks requirements of the Google search engine.

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