Effect of Electronic Interactive Technologies Usage on Services Marketing Activities

Empirical Study on Banking Sector in Jordan
Zakaria A. Azzam¹, Nidal M. Alramahi²

Abstract

The important of new technology in marketing of financial services can't be ignored, since such technology has a great positive impact on the financial company. Interactive technology helps marketers to inexpensively engage consumers in one- to- one relationships fueled by two way conversation via mouse click on computer. Touch-tone buttons on a telephone or surveys completed at a kiosk. Several organizations especially in services businesses are increasingly strengthening their marketing function by effectively interacting with their customers with the help of sophisticated interactive technologies in an integrated manner. Enough research in the usage or adoption of electronic data interchange (EDI) can be found both in information systems and marketing literature. A careful review of available literature further shows that the usage or adoption of internet and e-mail has been studied in detail by various researchers across the world. Therefore; it appears that different interactive technologies have been studied individually by different researchers. We did not come across any study making an attempt to understand the motivation for usage of all adopted interactive technologies together in an organization for the purpose of marketing activities in particular. This gap is wider when one tries to find out studies related to interactive technologies and their usage or adoption especially for marketing activities in a developing country like Jordan. This paper attempts to understand the effect of the usage of interactive technologies in services businesses with the intention to derive implications for the development of interactive technologies to suit its intended users.

Keywords: Interactive Technology, E-Banks, Marketing Activities.

Introduction

Many of the traditional boundaries are being eroded as new technologies offering innovative forms of financial services marketing enables news player to enter the financial markets. Thus, financial Institutions are being forced to spend heavily on interactive technologies in the new millennium, not just to reduce the costs associated

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with traditional marketing activities, but also to maintain a competitive edge in an increasingly competitive market (Harrison, 2000; Gaur and Abdul Waheed, 2003; Gunningham et al. 2005).

Research has found that an increasingly large number of people in the world operate their bank accounts over the internet, where in the USA internet penetration is approaching 60% of the population, 15% of internet users operate their bank accounts through using internet technology methods (NUA 2002). In Sweden 54% of internet users operate their banking activities over the internet (Jayawardhana 2004).

Interactive technology helps marketers to inexpensively engage consumer in one-to-one relationship fuelled by two-way conversation via mouse clicks on a computer, touch-tone buttons on a telephone or surveys completed at a kiosk. Interactive technologies include interactive telephone, internet, digital technologies (Harrison, 2000; and Gaur, 2003).

At present, with the growth of e-banking services about 53 million consumers, or about 44% of all internet users are operating their bank accounts through using interactive technology methods (Sullivan 2005).

New direct operators, employing interactive technology methods in the financial Institution are appearing almost daily. The effect of computer technology has rendered old geography and other fronties meaningless, as financial institutions move out of the high street and in to cyber space. Brokerage firms offer on-line securities trading and a access to real time market data and sophisticated investment management tools. Currency and other commodity traders operate around the clock, passing the book from one office to the next in a continuous race around the globe (Gaur, 2003).

The present study is an attempt to analyse the effect of interactive technology uses on services marketing activities such as main technological development took place in financial market in terms of the delivery of financial services, incorporating. Self-service technology such as automated teller machines and telebanking, Prepayment cards, including smart cards, and on-line banking in the form of home banking and internet banking. It also tries to evaluate the effect of Interactive technology use age on the banks' ability to satisfy customers effectively.

**Research Background**
Dinlersoz and Murillo (2005) studied the diffusion of the Internet in manufacturing, retail and services sectors. The study concluded that the finance services firms are among the sectors that witnessed a rapid development of the adoption of e-commerce and internet. On the other hand, the study concluded that the volume of business-to-business e-commerce transactions far exceeds that of business-to-consumer e-commerce transactions.

Cunningham et al (2005) studied the perceived risk and e-banking services. The study investigates the premise that purchasing e-banking services is perceived to be riskier than purchasing traditional banking services. They studied the dynamics of perceived risk throughout the various stages of the consumer buying process. The study reveals that a risk premium for e-banking services that follows a systematic pattern throughout the consumer buying process. The study reveals that financial risks drives the risk premium while psychological, physical, and time risk play ancillary roles as risk drivers at certain stages of the consumer buying process. A major implication of this study is that there is a risk premium for e-banking services and the risk premium permeates all stages of the consumer buying process.

Sullivan (2005) studied the online banking usage soar. The study concentrated on the growth of e-banking usage in general, e-commerce sales accounted for only 9.1 percent of all retail activity for the third quarter of 2004, up form 1.7 percent the year before. Although the growth of e-banking services is now at about 53 million consumers, or about 44 percent of all internet users.

Jayawardhena (2004) studied measurement of service quality in Internet Banking: the development of an instrument. The study shows that service quality in e-banking can be measured using twenty – one parsimonious measures spread across five dimensions, namely, access, website interface, trust, attention and credibility. Research has found that an increasingly large number of people in the developed world operate their bank over the internet. In the USA, where internet penetration is approaching 60% of the population, 15% of internet users operate their bank accounts online (NUA 2002). However, there is wide variation in the proportion of internet user conducting their banking activities over the Internet, with a high of 54% in Sweden and a low of 12.5% in Italy. The study concluded that there are a number of ways in which the foundation for a number of uses both in e-banking services and other delivered over the internet can be suggested. First, the integration of the finding of this study can feed into e-banking service performance by highlighting critical
areas. Second, applications of this instrument can be further expanded by segmenting the customer base in accordance with customer's need by combining with geodemographic indicators, diagnosing problem service areas by examining scores across dimensions for problem areas. Third, although the study was conducted with e-banking services, the results could apply equally well to the measurement of service quality in other internet delivered service.

Sarel and Marmosetin (2004) studied marketing online banking services. They argue that the next wave of adopters is very different from those who adopted e-banking early. The study concluded that, the next wave of possible adopters are less aware of the potential benefits, but they are very concerned about cost and risks involved and do not necessarily feel a strong need for the service. They concluded also that, banks are not taking the necessary marketing step to win over indifferent consumers.

Lang and Colgate (2003) studied the relationship quality, online banking and information technology gap. The study concluded that the compatibility of channels with customers needs has an impact on trust and gaining the trust of customers is crucial in getting customers committed to online banking. This is important for the marketing of financial Services by the banks to notes.

Gaur and Abdul Waheed (2003) studied the motivations to use Interactive Technologies in marketing of services sector. They conducted the study on banking sector, insurance sector, hotel industry, express industry and travel industry. The study revealed that the banking sector globally is probably a sector most influenced by the development in interactive technologies. The banking sectors core service basically involves handling money wherein the importance of interaction between banks and customers is being felt on both sides. The study concluded that there are certain motivations a bank adopt to use interactive technology which are, selling core products, providing information about the organization, projecting a favourable organizational image, accessing inaccessible customer and providing opportunity for feedback, generating qualified leads for sales people. The study also shows that in banking sector brand positioning, customer loyalty one-to-one marketing opportunities were perceived to be almost equally but extremely important factors influencing the usage of interactive technologies. Finally the study concluded that interactive technologies help marketers interact one-to-one with their customer
inexpensively via mouse clicks on a computer, touch one bettors on a telephone or surveys completed at a kiosk.

Tim Hughes (2003) studied the marketing challenges in E-banking standalone or integrated. The study has examined some of the marketing challenges involved in e-banking through comparing two case studies exemplifying contrasting approaches. A fundamental decision facing many organizations is whether to offer an integrated e-commerce service or to set up a distinct separately branded operation. The study reveals two different ways to handle e-banking. At Builds CO, there is recognition amongst many of the respondents of the need for fairly radical change to manage customer in an integrated way, but the reality is that the internet channel is added one to an existing organizational structure. In contrast Inter bank demonstrates the way that integrated and responsive customer management can be implemented effectively, with the luxury of starting with a blank sheet of paper and the opportunity to recruit new staff and outsourcers. The study took key structural, management cultural and process differences into consideration.

Britner (2001) studied the benefits of self-service technologies. The studies investigate the main expectations of consumers using e-banking. The study reveals that internet technologies are essentially self service technologies that offer the benefits of round – the – clock convenience, ubiquitous availability, time and money saving, and a reduction in the anxiety caused by judgmental service representatives. The study concluded that consumers must be encouraged to use self – services technologies in order to get the advantages of it. The study also reveals that there are also some disadvantages to using the internet such as high cost. System applications , computer phobia and loss of pleasure and social interaction (George 1987). But with the trends in modern days towards using self-service technologies, consumer's point of view was positive towards using this technology. It is reasonable to assume that these same factors might also affect the use of e-banking services. Previous consumer surveys support the premise that e-banking offers convenience and time saving (Pew, 2004); however, security and privacy risks are major impediments consumers are facing while using e-banking (Bhimani; 1996).

Black et al (2001) studied the adoption of internet financial services. They tried to way through which customers adopt new technologically based banking services. The study concluded that the adoption of new technologically based banking services from customer point of view vary greatly.
Larochelle and Sanso (2000) studied an optimization model for the market-mix problem in the banking industry. Their study focuses on a marketing problem of a large bank which seeks new ways to increase the efficiency of advertising due to increasing competition as well as because of the diversification and specialization of services banks offer. The study suggested an optimization model able to target both present and future markets presenting the best opportunities for profitability. The model takes into account market competition and operational constraints. The problem of market – mix is a well-known problem in the literature but it is mostly divided into three sub problem (Kotler 2003) these are the market segmentation, the market targeting and the product positioning. The decision making model could not be independent of change in clients desires for banking products with the new technologies constantly changing banking practice. The model suggested by the study which is able to alter the market – mix that could help prepare a bank for an evolving market, and thus remain profitable.

Dishaw and Strong (1999) studied information technology utilization behaviors. They proposed and tested an integrated information technology utilization model, which is an extension of TMA with the inclusion of task –technology fit model.

Straub et al (1997) studied TAM in the adoption of an information technology innovation namely, e-mail among employees of three different airlines across different countries. Japan, Switzerland, and United States.

Vijayasarathy and Tyler (1997) studied the adoption factors of electronic data Interchange (EDI). They empirically ascertained a variety of factors identified from the conceptual and empirical literature. They also assessed the importance of these factors in the context of the retail industry.

Barczak (1997) studied developing typologies of consumer motives for use of technologically based banking services. The study concentrated on the main motives which attracts consumers to use technologically based banking services. The study indicates that consumers will not adopt a new financial product unless it reduces their costs and does not require them to change their behaviour when using it. The study concluded that banks must provide certain motives and incentives through which consumers are encouraged to use technologically based banking services such as reducing the cost associated with the use of such technologies and orienting consumers psychologically to use technologically based banking services.
Davis (1989) studied the developed technology accepted model (TMA) to explain the usage of information technology (IT) TAM addresses IT adoption implementation, and diffusion in terms of perceived use fullness and perceived ease of use. Perceived usefulness can be defined as the prospective users subjective belief that using a specific application system will increase his or her job performance within an organization context (Toe et al 1999). Perceived ease of use refers to the degree to which the prospective user expects the use of the target system to be free of effort (Toe et al 1999). Perceived ease of use was posited as an antecedent variable for both usefulness and perceived enjoyment of internet usage (Toe et al 1999).

**Theoretical Background**

Banks may have to change structures, culture and processes to build and maintain customer relationship using the new technology. There are several tools of interactive technologies weed by financial institutions which are as follows (Harrison, Tina 2000)

(1) **Automatic Teller Machine (ATM):**

It was first introduced in the UK more than 30 years ago early machines were largely cash-dispensing terminals which were originally put in place to reduce queues in branches at peak times, cut down the amount of paper work and cash handling and free up staff time in branches. Customers are taking the advantage of the 24-hour access to cash provided by the terminals. ATM has expanded form a single-function cash dispensing terminals to a various multi-function cash dispensing terminals offering customers the choice of balance enquiries, mini-statements, and cheque book ordering services as well as the possibility of accessing information on a range of other financial products. Such ATM terminals are located in a number of remote locations, at supermarkets, train stations, air ports, universities, malls and UN staffed kiosks, allowing financial institutions to get closer to the customers by locating in an area where the institution does not have a presence (Green Land & Mccldnele 1994; Dinleroz Emin 2005).

(2) **Electronic Funds Transfer at Point Of Sale (EFTPOS):**

There are several forces driving the introduction of Electronic funds transfer at point of sale (EFTPOS). Consumers were demanding easier method of payment,
retailers wanted to reduce the amount of cash in the payment system, financial insinuations wanted to reduce the amount of cheque-based payments and the technology suppliers obviously wanted an outlet for their products. (Harisson, 2000 & Gaur, 2003)

(3) Telebanking:-

People who enjoy conducting business over the telephone and prefer the telephone as a method of buying goods have been dubbed telephone. According to the Henley Centre for forecasting, this includes half the population (financial times, 23, April, 1998). The cost advantages of telephone banking are very attractive when compared with the cost associated with a branch network. The cost of servicing retail bank customers by telephone can be as little as percent of the cost of similar Transactions via a branch teller (Balock, 1997; Gaur. 2003; Dinleroz Emin 2005)

Furthermore, for telephone services operated from call centres, there are additional cost saving in terms of premises to be considered. Many centres located in out-of-town or edge-of-town warehouse –style office accommodation which is plentiful and considerably cheaper than high street locations. Telebanking systems can be operated via one of three main methods which differ in terms of the amount of technology involved (Harrison, 2000; Dinleroz and Murillo 2005):

(a) Person-to-person telephone operations:

Person-to-person telephone operations were the first to be established, in which the customer has direct contact to the personnel at the financial institution to process transactions and deal with enquiries. In technological terms it is the least sophisticated of telephone delivery channels since it is merely a development of the ad hoc service which any customer enjoys from their financial institution such service is pearled 24 hours a day. (Harrison 2000)

(b) Tone/Speech-based:

Tone or speech–based telephone service are based on communication via tone generation and can be operated by one of two main telephone -based method. The first of these operates via a push-button telephone or a tone pad and pulse/click phone. The second method is automated voice response. (Harrison 2000; Turban and Kig David 2003).

(c) screen-based:
In screen-based systems communication occurs between the customer's computer television or video text system and the financial institutions computer system. (Turban Efraim and king David 2003)

(4) Smart Cards:-

Smart cards are a relatively recent innovation which offers variety of possible applications including prepayment functions, advanced identification of cardholders, road- pricing schemes and retailers loyalty cards, as well as electronic cash. The card uses a microchip in stead of the magnetic stripe which is currently used in debit and credit cards and many other plastic cards on the market. There are several advantages which the microchip offers over the magnetic stripe (Harrison, 2000; Huffsid and Wade Michael 2000):

- It enables increased amount of data to be stored on the card.
- The microchip allows the data to be accessed and processed remotely as well as on line.
- The microchip is more secure than the magnetic stripe as the technology required to read data on a chip is beyond the reach of all but the most determined counterfeiters, thus, the smart card has the potential to reduce fraud in payment systems.

(5) On-line banking:-

On-line banking systems have wider reaching implications because they do not rely on ATM's or EFTPOS and they are not dependent on co-operative schemes with other banks. They do, however, require the intermediation of communication companies to provide the interactive communication networks.

On-line or PC banking from a personal computer at home or place of work provides the customer with the faulty to perform common banking transactions that would normally require a visit to the branch or perhaps telephone call to process. Thus, it creates convenience allowing the sometimes onerous task of financial management to be fitted around individual's busy life style. There are two main approaches to on-line banking which can be distinguished (Harrison, 2000; Dinleroz Emin and Murillo Ruben, 2005; Sullivan, 2005; Sarel and Marmostien 2004):

(a) Home banking:

Such service requires the user to dial directly to in to the financial service provider system Basic facilities offered includes. The ability to cheek account balances, view trans actions records and account history, pay bills , apply for other services communicate with the financial institution, and transfer money instantly
between accounts. Customers can also download information on to their own PC which enable them to manage their own finances without needing to stay on-line. (Harivsson, 2000; Turban and king David, 2003; Gunningham et al 2005)

(b) Internet Banking:

Where access to the financial institution is made across the internet using a web browser the internet offers an alternative and more portable means of operating on-line banks. (Hughes 2003, Durken and Howcroft, 2003; Tabias 2002; Jayawardhena 2004).

(6) Interactive TV:

Interaction TV offers the integration of television cable satellite and internet services. The concept has been around for more than 25 years, yet its adoption could herald a whole new world in retailing and banking. (Zhu and Kraemer 2002; Dînleroz Emin and Murillo Ruben, 2005).

Research Hypotheses

The study attempts to test the following hypotheses:

H₀: Jordan banks don't have interactive technology.

This hypothesis can be divided to the following null hypotheses:

H₀a: There is no significant relationship between interactive technology and banking Core Services.
H₀b: There is no significant relationship between interactive technology and Processes of banking Services.
H₀c: There is no significant relationship between interactive technology and Promotion of banking Services.
H₀d: There is no significant relationship between interactive technology and Price of banking Services.
H₀e: There is no significant relationship between interactive technology and Distribution of banking Services.
H₀f: There is no significant relationship between interactive technology and People staff working in banking industry.

Study model:

Based on the literature reviewed, the researchers supposes the following model:
Methodology

The population of the study consists of all Jordanian Domestic Banks (Local and Foreign). The number of domestic banks in Jordan is twenty two banks. The researchers covered only the banks headquarters where the targeted respondents were expected to exist. The data is collected by using a self-administered questionnaire that measures the existence of interactive technology and measures its impact on marketing activities. The questionnaire was designed after a preliminary observation on the practice and reviewing the available literature. The researchers circulated the research questionnaire among the parties that had the ability and knowledge to answer it. Therefore, the researchers distributed the questionnaire to the domestic banks department's managers, which was later on collected.

The questionnaire for the present study was designed by the researchers, in which the following dimensions according to their functions and goals were considered:

- Marketing mix:
  - Core Services (3 Questions).
  - Processes: (5 Questions).
  - Promotion (7 Questions).
  - Price: (5 Questions).
  - Distributions (5 Questions).
  - People (6 Questions).
  Interactive technology (8 Questions).

Sixty five questionnaires were distributed to the selected respondents; fifty tow were received in a usable format, indicating a response rate of 80%. One way to assess the potential for non-response bias is to compare data from late respondents to data from on time respondents based on Wallace & Mellor (1988) and Oppenheim
(1992). In the current study three responses were received following a reminder. Those late responses were not significantly different from responses in any of the analysis reported the following results section.

To investigate study instrument validity, the researchers consulted ten experts (Professionals and Academics). The experts were asked to make sure that the research questionnaire does not miss any element that might affect the study results or create bias in the questions. The researchers used Cronbach's Alpha to check the questionnaire for all of its components. Furthermore, reliability analysis allowed the researchers to study the measurement scales and the items that make them up*. In the current study, the researchers did not use some of the central tendency measurements such as the mean, because it is only valid for the nominal scale. Consequently, the researchers did not calculate the mean for respondents' answers that were measured by using nominal scale (Exist/ Not exist). Furthermore, variance measure was not used because it is calculated by using squared distances from the mean since the researchers utilized the nominal scale. Finally, Linear Regression, that investigates the straight-line relationship of the type \( Y = a + bX \) where (Interactive technology) is the independent variable, and (banking Core Services, Processes of banking Services, Promotion of banking Services, Price of banking Services, Distribution of banking Services, People staff working in banking industry) is the dependent variables.

For the hypotheses that measures the existence of interactive technology in the Jordanian Banks, the researchers used Z-test for proportion that pertain to population proportion \( P \) interactive technology Model attributes implementation percentage by calculating the sample proportion \( P_s \), then the values of this statistic compared to the hypothesized value of the parameter \( P \) (Implantation Standards) so that the decision can be made about the hypothesis.

**Results**

The majority of the respondents (85 %) as shown in Table (1) reported that they had three or more years of experience in their current position, while only (15%) of the respondents had less than three years of experience in their current position.

**Table (1). Frequency distribution of the respondents**

SPPSS tutorial.
Almost (81%) of the respondents declared that they had three or more years of experience in the same bank, while only (19%) reported that they had less than four years of experience in the observed bank.

**Table (2). Frequency distribution of the respondents experience in the observed bank**

<table>
<thead>
<tr>
<th>Experience</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3 Years</td>
<td>8</td>
<td>15%</td>
</tr>
<tr>
<td>3-7 Years</td>
<td>14</td>
<td>28%</td>
</tr>
<tr>
<td>7-11 Years</td>
<td>20</td>
<td>38%</td>
</tr>
<tr>
<td>11-15 Years</td>
<td>10</td>
<td>19%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>52</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

It can be concluded from the above tables that the individuals who answered the questionnaire had the minimum required level of knowledge, which may increase the credibility and reliability of their answers.

**Hypothesis test**

- **Jordan banks don't have interactive technology.**
  
  Upon the results of Z test with significant level (0.05), null hypothesis should not be rejected, which states that there is application of interactive technology in Jordan banks because $Z = 1.162476$, this means that it is within acceptance field ($1.96 < Z < 1.96$), moreover $p = 0.245$, which is more than the required significant level 0.05.

- **There is no significant relationship between interactive technology and banking core Services.**

  Through the results of simple regression shown on tables (3, 4, and 5) we find the following results:

**Table (3) Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
</table>

13
The analysis of the linear regression shows correlation between Interactive technology frequency and Core Services (R=83.2%). In addition, the results show that 69.3% of the variance in Core Services frequency is explained by Interactive technology. On the other hand, F value is (112.609) and this value is significant at p equal or less than 0.05. According to the previous findings, the researchers reject the null hypotheses.

- **There is no significant relationship between interactive technology and Processes of banking Services.**

Through the results of simple regression shown on tables (6, 7, and 8) we find the following results:

**Table (4) ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>9.638</td>
<td>1</td>
<td>9.638</td>
<td>112.609</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>4.279</td>
<td>50</td>
<td>.086</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>13.917</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table (5) Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-2.215</td>
<td>.543</td>
<td>-4.080</td>
<td>.000</td>
</tr>
<tr>
<td>Interactive technology</td>
<td>4.687</td>
<td>.442</td>
<td>10.612</td>
<td>.000</td>
</tr>
</tbody>
</table>

**Table (6) Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.279a</td>
<td>.078</td>
<td>.059</td>
<td>.54278</td>
</tr>
</tbody>
</table>
Table (6) Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.279</td>
<td>.078</td>
<td>.059</td>
<td>.54278</td>
</tr>
</tbody>
</table>

Table (7) ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1.244</td>
<td>1</td>
<td>1.244</td>
<td>4.223</td>
<td>.045</td>
</tr>
<tr>
<td>Residual</td>
<td>14.731</td>
<td>50</td>
<td>.295</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15.975</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Interactive technology
b. Dependent Variable: Processes

Table (8) Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.858</td>
<td>1.007</td>
<td>.851</td>
<td>.399</td>
</tr>
<tr>
<td>Interactive</td>
<td>1.684</td>
<td>.819</td>
<td>.279</td>
<td>2.055</td>
</tr>
</tbody>
</table>

The analysis of the linear regression shows correlation between Interactive technology frequency and Processes (R=27.9%). In addition, the results show that 7.8% of the variance in Processes frequency is explained by Interactive technology. On the other hand, F value is (4.223) and this value is significant at p equal or less than 0.05. According to the previous findings, the researchers reject the null hypotheses.

- There is no significant relationship between interactive technology and Promotion of banking Services.

Through the results of simple regression shown on tables (9, 10, and 11) we find the following results:

Table (9) Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.814</td>
<td>.663</td>
<td>.656</td>
<td>.39552</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Interactive technology
Table (10) ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>15.399</td>
<td>1</td>
<td>15.399</td>
<td>98.432</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>7.822</td>
<td>50</td>
<td>.156</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>23.220</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Interactive technology
b. Dependent Variable: Promotion

Table (11) Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-3.517</td>
<td>.734</td>
<td>-4.791</td>
<td>.000</td>
</tr>
<tr>
<td>Interactive technology</td>
<td>5.925</td>
<td>.597</td>
<td>.814</td>
<td>9.921</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Promotion

The analysis of the linear regression shows correlation between Interactive technology frequency and Promotion (R=81.4%). In addition, the results show that 66.3% of the variance in Promotion frequency is explained by Interactive technology. On the other hand, F value is (98.432) and this value is significant at p equal or less than 0.05. According to the previous findings, the researchers reject the null hypotheses.

- There is no significant relationship between interactive technology and Price of banking Services.

Through the results of simple regression shown on tables (12, 13, and 14) we find the following results:
The analysis of the linear regression shows correlation between Interactive technology frequency and Price \( (R=78\%) \). In addition, the results show that 60.9\% of the variance in Price frequency is explained by Interactive technology. On the other hand, \( F \) value is \( (77.831) \) and this value is significant at \( p \) equal or less than 0.05. According to the previous findings, the researchers reject the null hypotheses.

- **There is no significant relationship between interactive technology and Distributions of banking Services.**

  Through the results of simple regression shown on tables (15, 16, and 17) we find the following results:
The analysis of the linear regression shows correlation between Interactive technology frequency and Distributions (R=85.3%), In addition, the results show that 72.8% of the variance in Distributions frequency is explained by Interactive technology. On the other hand, F value is (133.983) and this value is significant at p equal or less than 0.05. According to the previous findings, the researchers reject the null hypotheses.

- There is no significant relationship between interactive technology and People staff working in banking industry.

Through the results of simple regression shown on tables (18, 19, and 20) we find the following results:
The analysis of the linear regression shows correlation between Interactive technology frequency and People (R=93.8%), In addition, the results show that 87.9% of the variance in People frequency is explained by Interactive technology. On the other hand, F value is (364.081) and this value is significant at p equal or less than 0.05. According to the previous findings, the researchers reject the null hypotheses.

**Conclusions & Recommendations**

Based on above analysis, the research concludes the following results:

It can be noticed that banks in Jordan apply Interactive technology, there is significant relationship between Interactive technology and market mix. Analysis indicated that there is a strong significant relationship between application of Interactive technology and People staff in Jordan banks. Analysis also indicated that there is a weak relationship between application of Interactive technology and process in Jordan banks.

Furthermore it was found that there is a relationship between application Interactive technology and another market mix components in Jordan banks. The
researchers based on the above conclusion recommended that Jordan Banks should provide effective training programs to their employees in order to enhance their ability to deal with interactive technology tools adopted by them. On the other hand, Jordan Banks should adopt all new interactive technology methods which have positive impact on the overall marketing activities as a result of which customers will be highly satisfied and more competitive advantage will be attained by Jordan Banks.

References


