

## **Investigating Customers' Acceptance of Online Banking Based on Technology Acceptance Model: An Empirical Study in the Saudi Banking Market**

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**KEY WORDS:** Saudi Banking Market, Technology Acceptance Model, online banking, customer's acceptance, perceived usefulness, perceived ease of use.

**Abstract.** The aim of this study was to investigate customers' acceptance of online banking in the Saudi market by developing a theoretical model based on the Technology Acceptance Model (TAM) and includes a website security factor. It also tested the extent to which we can predict customers' acceptance of online banking services. Approximately three hundred questionnaires were collected from customers of different banks to fulfill the objectives of this research. The returned data were analyzed, discussed and compared with previous literature. This study considered three constructs; perceived usefulness, perceived ease of use and perceived website security. It was found that all three constructs directly influence customers' acceptance of online banking services. The empirical findings of this study provided further insight into online banking adoption in the Saudi market, and highlighted the factors affecting customers' acceptance of online banking services and concepts. The results supported TAM by confirming its usefulness for prediction of customers' acceptance of adopting online banking services. It also suggested that TAM is helpful in finding useful information for the strategy development process. Users' acceptance of online banking services in Saudi Arabia will be enhanced if perceived usefulness, perceived ease of use, and perceived website security are improved. Saudi bankers should focus mainly on the benefits of using online banking services if they want to achieve competitive advantages.

## 1. Introduction

Internet has brought enormous changes in different business sectors. Those businesses are benefiting much more now because of internet utilization by consumers. Banks are going online and thus realizing benefits in lower operations costs, and in having a low number of staff and fewer branches. Customers, as direct stakeholders, are also benefiting from convenient availability through 24 hours and an improvement on process speed. Lee. et al., (2011) explored the factors that affect attitude and intention towards switching from the physical to the virtual market in the context of online banking. The results of their study showed that perceived usefulness, perceived ease of use and online trust have positive effects on attitudes towards switching. Online bankers, however, are unhappy with the survey statistics by ACNielsen and NetRatings (2003) that show a small number of active internet users who are visiting the online banking services. Similarly, this is the case in Saudi Arabia, since banking leaders lack a comprehensive electronic banking service representation that treats customer interaction services (AlAjmi, 2010). To realize online banking potential to bank customers, we need to introduce new services and products to let the customers feel not only secure, but also comfortable while using them.

Thus there is a need to investigate in detail all the factors influencing customers' acceptance of online banking so that banks will be in a good position to form better strategies in the long run for both protecting their brands and maximizing the usage of online banking. This study investigated Saudi customers' acceptance of online banking services, with focus on its usefulness, security and ease of use to meet their banking needs.

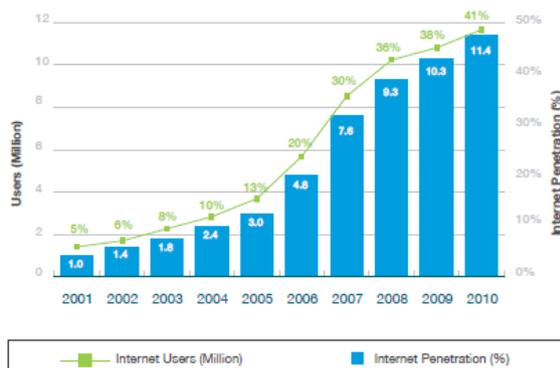
## 2. Online Banking in Saudi Arabia

The term "online banking" is defined as remote banking services provided by authorized banks, or their representatives through devices operated either under the bank's direct control and management or under

an outsourcing agreement. The following terms used to describe the various forms of online banking are often used interchangeably: personal computer (PC) banking; Internet banking; virtual banking; e-banking; home banking and remote e-banking. Usually, online banking also involves phone banking and the use of automated teller machines (ATMs), but these are not covered under the online banking definition above (the Saudi Arabian Monetary Agency, e-Banking Rules 2010).

Saudi Arabia made a huge effort in the telecom sector, which has grown at an average annual rate of 15% from 2000 to 2011 (Business Source Premier 2011). The Saudi telecom market is considered by most to be the largest telecom market in the Gulf countries. This high growth is driven by rising demand for broadband internet, smart devices, mobile financial services and sophisticated telecom services, as identified by the country's leading telecoms provider. According to industry research experts RNCOS, overall IT spending in Saudi Arabia is set to hit USD 5.7 billion by the end of 2014, up from USD 3.5 billion in 2010. The country's per capita IT expenditure is expected to amount to USD 200 by 2012 (SAM Advisor Middle East, 2012).

The Communication and Information Technology Commission (CITC) is a government institution that aims to provide regularity and a well established environment for information and communication technology services in Saudi Arabia. The number of Internet users grew from around 1 million in 2001 to an estimated 11.4 million at the end of 2010. Internet penetration increased to 41% of the population by the end of 2010. Internet penetration has increased at high rates during the past few years, from 5% in 2001 to roughly 41% at the end of the year 2010, as shown in Figure (1). Internet penetration in the Kingdom is higher than the world average of 28.7%, the Arab States average of 24.9% and the developing countries' average of 21%, but is lower than the developed countries' average of 71%. (CITC Annual Report 2010).



Source CITC Annual Report 2010

With that promising market, Saudi banks have been able to adopt new technologies to provide a new range of services, bringing them into the high-tech era.

One of the principal functions of the Saudi Arabian Monetary Agency (SAMA) is to supervise the network of commercial banks and monitor bank–customer relations. In more recent years, it has taken the lead in establishing electronic banking services. SAMA endorses the “Risk Management Principles for Electronic Banking” (2003) issued by the Basel Committee on Banking Supervision (Bank for International Settlement 2003). Banks should take into account the requirements of those principles in establishing their policies and processes for e-banking. The principles are based mainly on the BCBS’ principles, contain some purposeful redundancies, and set the minimum requirements for compliance by the banks (SAMA, e-Banking Rules 2010).

Over time, it is expected that there will be a huge acceptance of online banking as awareness and education in Saudi Arabia grow. People are shifting to online banking and are readily accepting the usefulness of this service, which allows customers to manage their accounts from any place at any time for minimum cost (Qureshi et al., 2008). The attitude of the customer is the significant factor, which is the main behavioral cause of the customer accepting or rejecting a technology (Davis et al., 1989). Davis

(1993) and Taylor & Todd (1995) both argue that “the relationship found between attitude towards using and usage was significant”. The attitude of the customers will significantly affect their use of a system, so the Saudi banks have to observe the customers’ attitude very keenly, and must provide robust systems which could be easily accessible without affecting the attitude of the customers.

### 3. Literature Review

We are living in the Information Technology (IT) revolution era, with innovations touching almost every area of our lives, on both personal and professional levels. IT has been developing rapidly in the past two decades, where significant transformations in IT-related services allow businesses to grow and prosper in a very short time. From the business point of view, IT advances have brought major change in the global economic and business environment (Qureshi et al., 2008).

The adoption of IT is defined as “the act of receiving information technology use willingly” (Saga and Zmund, 1994). One can easily find research studies available about the adoption of technology for business purposes, both by employers and customers. Similarly, such studies available in banking businesses have focused on technology adoption as they are going online, but there are few studies that focus on users’ perspectives for adoption of technology in banking. Here we have to distinguish between IT adoption and adoption of technology in banking. Adoption is the acceptance and continued use of a product, service or idea. According to Straub (2009), technology adoption is a complex, inherently social, developmental process; individuals construct unique yet malleable perceptions of technology that influence their adoption decisions. Thus, a common theme underlying various models that explain information technology adoption is the inclusion of perceptions of an innovation as key independent variables.

While the adoption of technology in banking means using recent delivery channels such as internet or online banking, online banking entails consumers using the internet to access their bank accounts, and to undertake banking transactions. There are several factors that affect such involvement, such as awareness among the customers about the service/product, ease of use for this innovation, safety and security of transactions over the Internet, and how reasonably the service/product was priced (Sathye, 1999).

Research on customers' attitudes towards online banking has isolated several factors that seem to predetermine a customer's attitude towards this technology: age; socio-economic position; motivation for banking technologies; and customer acceptance of new technology (Juwaheer et al., 2012).

Indeed, it has been found that the likelihood of adopting online banking is influenced by one's computer literacy (Laforet and Li, 2005). This may be because the adoption of online banking forces users to think about things like password integrity, privacy and protection of personal information (Benamati and Serva, 2007). In addition, the user must have access to a computer and an internet connection and interact with that technology regularly. Because banking is something people do regularly, offering online banking at a certain level of comfort became necessary (Servon and Kaestner, 2008).

Liao and Cheung (2008) suggested that the following attributes are most likely to attract customers to an online banking service:

- Perceived usefulness
- Convenience
- Ease of use
- Responsiveness
- Security
- Continuous improvement.

Al-Gahtani (2008) investigated the applicability of the TAM model in the Saudi culture context and extended his study to empirically examined TAM by incorporating gender, age and educational level as moderators of the model's core relationships. Al-

Gahtani's findings emphasized that most of the key relationships in the model are moderated.

Al-Somali et al., (2009), in a study to identify factors that encourage customers to adopt online banking in Saudi Arabia, found that the quality of internet connection, the awareness of online banking and its benefits, the social influence and computer self-efficiency all significantly affected whether customers accepted online banking. Other influences they found included level of education, amount of trust, and general resistance to change. On the other hand, the findings of Sohail et al., (2007) were that customers were influenced by factors such as the efficiency and responsiveness of the service. By using the TAM model in their study, Riffai et al., (2012) explored the factors that influence Omani consumer acceptance of online banking. Their findings are significant, in that trust, usability and perceived quality are deemed key drivers. Further, their study emphasized that the banking sector will need to manage the covert tension between technology driving "fast time", and the Omani culture, religion and tradition demanding face-to-face "slow time". In a similar study applying the TAM model conducted by Yiu et al., (2007), the study explored the adoption of Internet Banking concert and other factors by retail customers in Hong Kong. The researchers incorporated two additional elements of personal innovativeness and perceived risk. The study concluded by emphasizing that strategy in the banking services sector can be refined to better meet the demands and profile of the Hong Kong market.

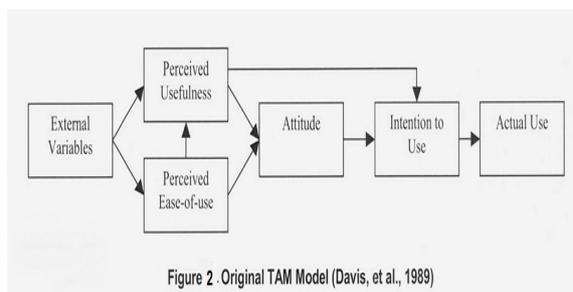
Studies of attitude and adoption of online banking showed that there are a few factors that affect customers' acceptance of online banking, such as a person's demographic, motivational and other factors that relate to geographical area, for instance cultural or religious factors as well as behavior towards online banking and acceptance of adopting technology (Zeithaml et al., 2000; Laforet and Li, 2005; Jayawardhena and Foley, 2000). According to Amin (2009) the perceived credibility and social norm are suitable to be added into the extended TAM to better reflect online banking acceptance.

Subsorn and LimwiriyakulIt (2012) examined 12 Thai commercial banks and generated a feasible guideline for these banks. The investigation revealed that there was a distinct lack of internet banking security information provided on each of the selected Thai banks' websites as compared to the selected Australian banks, which provided better internet banking security information.

As was clear from the literature review, most of the research studies conducted in this field had used a model known as the Technology Acceptance Model (TAM). In this study, we have used the same model to find out Saudi users' acceptance of online banking. Indeed, this study would be of interest to many academics and bankers, for it seeks to discover the individual user's perception of the adoption of online banking, as banks in Saudi Arabia are trying to offer and improve more online services each day. The following section explains the model and its usefulness for such research studies.

### 3.1 Technology Acceptance Model

The original TAM model, shown in Figure 2, was developed mainly in the management information system field to predict users' acceptance of new technologies. It was developed on the basis of five variables: usefulness, ease of use, attitude toward use, intention to use, and actual use. The TAM model overlaps with the theory of reasoned action (TRA) and the theory of planned behavior (TPB); the latter linkages replace the effects of attitudes and subjective norms under the TRA and the effects of attitudes, subjective norms, and perceived behavioral control under the TPB. Significantly, TAM has consistently outperformed the TRA and TPB in explained variance across many studies (Bagozzi, 2007). The TAM model has stood the test of time by being the leading model for nearly two decades and earning many commentaries. In sum, the importance and impact of TAM are impressive.



According to Davis 1989, who developed TAM, adoption of technology (internet and computer system) depends on the user's behavioral intentions for using it. He further explains this dependency and relates it to attitudes of users (perceived ease of use and perceived usefulness) (Davis, 1989). Davis's work was based on an earlier theory proposed by Fishbein and Ajzen in 1975. Fishbein and Ajzen proposed TRA, which stated that intention is the immediate determinant of the corresponding behavior. Davis put forward in TAM that perceived usefulness and perceived ease of use are fundamental determinants of system use in organizations. Those constructs are better in providing measures for predicting and explaining system use (Edwin et al., 2006). For this reason, TAM is used for prediction of acceptance and use of IT, and most recently has been applied for the internet adoption in different geographies. Researchers like Lederer et al. (2000) and Moon and Kim (2001) have used this model for their respective research into the usage of World Wide Web (WWW), and it was positively supported. Perceived usefulness and perceived ease of use are the two most important determinants of system usage and intention; studies showed, however, that perceived ease of use has a more significant effect on attitude than on usefulness (Wu and Wang, 2005). Even though TAM is a model applicable to a variety of technologies, it has been criticized for not providing sufficient information on individuals' opinions about novel systems (Moon and Kim, 2001)

### 3.2 Theoretical Model for Online Banking Adoption

TAM is one of the most utilized models that suggest two beliefs to determine the Attitude Toward

Using (ATU) technology: Perceived Usefulness (PU) and Perceived Ease of Use (PEU) (Al-Somali et al., 2009). PU is defined as a user's subjective probability that using a specific application system will increase his or her job performance within an organizational context, while PEU is defined as the degree to which the user expects the target system to be free of effort (Venkatesh et al., 2003).

Perceived Website Security (PWS) is a crucial aspect for any online services, and thus bank customers require security for their personal details, because most people would take precautions when giving their information to a third party. Indeed, security is a major issue of technology, especially in the electronic commerce, online banking, and cloud computing fields. Therefore, it is important for online banking users to know that their data are safe and secure. The online banking studies showed that security is critical, because financial transactions contain sensitive information and involve multiple different parties through the Internet (Al-Somali et al., 2009). The importance of security issues, however, may vary from one action to another. For example, holding customers' bank accounts secure is more sensitive than saving or using e-mails on the public domain.

The internet is a new distribution channel for banking services. Online banking is an important and interesting area for academics, researchers and bankers to understand and assess customers' intention and acceptance of these services. TAM is chosen as Model for this research study, as it is the most tested model in the subject area. Strength of the following hypotheses in prediction of customers' acceptance to adopting online banking in Saudi Arabian culture will be tested with the relationships rooted in the theoretical model.

Researchers including (Hendrickson, et al. 1993, Adam, et al. 1992 and Szajna, 1994) have used TAM to predict users' intention to adopt technologies like computer systems, electronic mail, internet use, database management, voice mail, word processors, and so on. As TAM has proved useful in assessing customers' attitudes and intention to use, this study

uses customers' acceptance of online banking as a dependent variable, for the literature review has shown strong theoretical justification and significant relationship between the customer's acceptance of online banking and usage of technology. Because this work is a survey-based study, a behavioral intention approach that can be measured with contemporaneous beliefs is a more appropriate option, as argued by Agarwal and Prasad (1999). Salisbury et al., (2001) noted that web security is another major concern of most online banking users; it was therefore included in the theoretical model as perceived website Security. This variable is employed as an additional predictor of the customer's acceptance of online banking.

Thus, the independent variable is the consumer's acceptance of online banking services while dependent variables are perceived usefulness, perceived ease of use, and perceived websites' security. This study proposes a consumer's acceptance model displayed as Figure 3. In this model, the consumer's acceptance of online banking services is directly driven by perceived usefulness, perceived ease of use, and perceived websites' security.

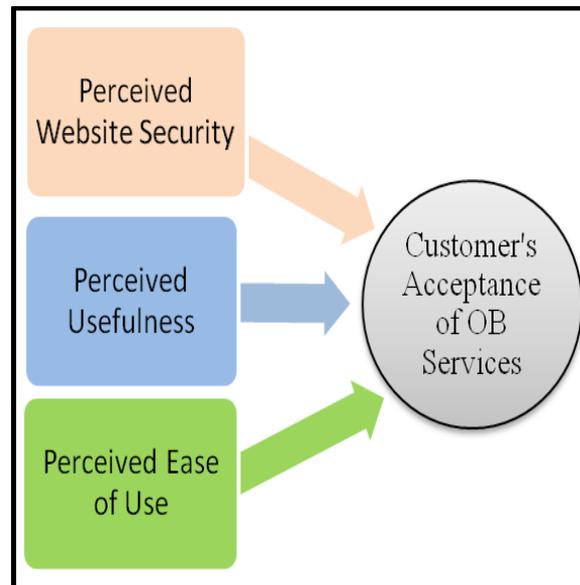


Figure 3 Theoretical Model

### 3.3 Hypotheses Development

On the basis of the theoretical model developed above in Figure 3, the following main hypothesis was developed:

**HA: User's attitude towards online technology affects customer acceptance of online banking services.**

From this main hypothesis, three sub-hypotheses were developed and tested with the help of TAM in the context of online banking adoption.

**HA<sub>1</sub>. Perceived Website Security positively affects the customer's acceptance of online banking services.**

**HA<sub>2</sub>. Perceived usefulness positively affects the customer's acceptance of online banking services.**

**HA<sub>3</sub>. Perceived ease of use positively affects the customer's acceptance of online banking services.**

## 4. Research Methodology

### 4.1 Research Design

This study applied quantitative research that uses a deductive approach, since it looks at the general case and moves toward the specific. The deductive approach in research considers a potential cause of something and hopes to verify its effect. A web-based survey research was conducted for data collection using the framework of TAM as a base for determining the predictors of customers' acceptance of using online banking in Saudi Arabia. Questionnaires were used to collect data. Further, website security level was augmented in the TAM model.

### 4.3 Data Collection

This study primarily aimed to investigate the self-reported behaviors of individual customers and their acceptance of use of online banking services. We developed a web-based survey instrument where we e-mailed the prospective respondents (who were current customers of Saudi banks), and asked them to visit the URL where the survey was hosted. By including the URL in the original e-mail we made it very easy for them to access the survey.

The survey instrument includes a 25-item questionnaire (19 items relate to dependent and independent variables and 6 are demographic and general questions) as a measurement scale for the research. Respondents were asked to submit their completed questionnaires online, since the target sample is customers who use online banking. Data was collected from bank customers in Saudi Arabia who use internet banking and was intended to obtain 600 usable responses. The study used an online survey service to conduct the survey and ask respondents to submit their answers online. The link was sent for survey through e-mails and social networks. The total number of completed responses was 295. In other words, out of 600 invitations sent, only 295 customers participated in this study, resulting in a 49% response rate.

### 4.2 Measurement of the Constructs

Questionnaires developed by Davis (1989) and Salisbury et al., (2001) were used in devising a measurement instrument for this study, which adopts the scales for PU, PEU (Davis) and PWS (Salisbury et al.). This study has established the validity and reliability for all the instruments. Five-points Likert Scale is used as an instrument to measure all the constructs. The scale used in this study is (1= strongly disagree, 2= disagree, 3= neutral, 4= agree, 5= strongly agree). Constructs explanations: PU is defined as the degree to which a person believes that using a particular technology would improve job performance, while PEU is the degree to which using IT is free of effort for the user (Davis et al., 1989). PWS, according to Salisbury et al., (2001) is a degree of risk involved in online business and that can affect the user's involvement in such business. This is the extent to which users believe that the World Wide Web is secure for transmitting sensitive information.

## 5. Analysis

Out of 295 responses were received, only 250 were accepted as valid for further analysis after removing 45 inappropriate responses that did not use online banking services properly.

### 5.1 Demographic and General Characteristics of the Respondents

The descriptive statistics of the respondents' demographic and general characteristics were analyzed and are presented in Table 1. Of the 250 respondents, 90% were male, 46% were in the 20–29 age group, 44% were 30–39 in age, and 8% were 40–49 in age. Few were under the age of 20, or over 50. Age group representation is shown in Table 1. Of the 250 respondents, 56% had a Bachelor degree, 22% had a Master degree, and 13% had Diploma. Few had a high degree, Ph.D or other high education level. Of the respondents, 80% preferred internet banking as a channel of communication with their banks, 10% preferred ATM, 7% preferred phone banking, and only 1% preferred visiting a physical bank branch. The majority of the 250 respondents were using Al-Rajhi Bank, Samba, and the National Commercial Bank as online banking means with 40%, 20%, and 12%, respectively. Other details can be found in Table 1.

**Table 1 Demographic and general profile**

Demographic and general profile	Frequency	Percent (%)
<b>Sex</b>		
Male	227	90
Female	23	9
<b>Age Group</b>		
Below 20	2	1
20- 29	115	46
30- 39	110	44
40- 49	20	8
50 and Above	3	1
<b>Preferred Communication Channel</b>		
Online Banking	201	80
ATM	27	11

Phone Banking	18	7
Visiting Bank Branch	4	2
<b>Education</b>		
Bachelor	141	56
Master	57	23
Diploma	34	14
High School	13	5
Other	3	1
PHD	2	1
<b>Online Banking Used</b>		
Al Rajhi Bank	101	40
Samba	53	21
The National Commercial Bank	31	12
The Saudi British Bank	19	7
Riyad Bank	16	6
Banque Saudi Fransi	6	2
Arab National Bank	5	2
Saudi Investment Bank	5	2
Bank AlBilad	4	1
Alinma bank	4	1
Bank AlJazira	3	1
Saudi Hollandi Bank	3	1

### 5.2 Hypotheses Testing

Hypothesis testing is a systematic method used to evaluate data and aid the decision-making process. A research hypothesis is a tentative statement that illustrates the relationship between two variables. Essentially, it predicts a research outcome. There are some basic criteria to be considered when a researcher develops a hypothesis: to be based on literature review and has a logical consistency, to be testable, and to be

stated in clear and simple words. Thus, the main use of hypotheses testing in this study is to highlight and cover the nature of relationships between dependant and independent variables, and to form Spearman's correlation to understand the nature of the relationship between the chosen variables for making a decision on the applicable hypothesis. Therefore, null hypotheses are developed from the alternative hypotheses in order to test the alternative hypotheses. To test the research hypotheses, Pearson correlation and multiple regression were used.

**5.2.1 Correlations Matrices**

Correlation analysis was used to test whether we accept the null hypotheses or accept the alternative hypotheses. The following table shows the correlation analysis summary.

**Table(2): Correlations**

	CA	PWS	PEU	PU
Pearson Correlation	1	.321**	.603**	.738**
CA Sig. (2-tailed)		.000	.000	.000
N	250	250	250	250
Pearson Correlation	.321**	1	.312**	.305**
PWS Sig. (2-tailed)	.000		.000	.000
N	250	250	250	250
Pearson Correlation	.603**	.312**	1	.753**
PEU Sig. (2-tailed)	.000	.000		.000
N	250	250	250	250
Pearson Correlation	.738**	.305**	.753**	1
PU Sig. (2-tailed)	.000	.000	.000	
N	250	250	250	250

\*\* Correlation is significant at the 0.01 level (2-tailed).

Since the significance is 0, or less than 0.05, we reject the null hypotheses and accept all alternative hypotheses. The direction of the impact between all constructs is positive, but it differs in strength. The effect of perceived usefulness on the customer's acceptance of online banking services equals (0.74), which is stronger than the impact of perceived ease of use on the customer's acceptance of online banking

services (0.60). The latter is stronger than the influence of perceived website security on the customer's acceptance of online banking services.

Those results make sense, since the usefulness of any technology is more important than its facility. By the same token, the easiness of any technology is prioritized to whether it is secure or not.

Therefore, results accept the alternative hypothesis that observed ease of use has a positive impact with customer acceptance for adoption of online banking, and reject the null hypothesis. The impact of perceived website security on customer acceptance is also positive and significant, the results embracing the alternative hypotheses and rejecting the null hypotheses. These results support the study of Salisbury et al., (2001), and explain that culture will make perceived website security important to all users. According to literature (Chimezie et al., 1993; Muhlbracher et al., 1999), culture has a significant effect on consumer behavior. Thus, Saudi consumers tend to have strong risk avoidance, which means there is a great need for strict regulation to ensure a high level of security. The drivers of online banking in Saudi Arabia were underlined, in part, by the IT development, the internet access, personal computer availability and, especially, the emergent electronic banking channels.

**5.2.2 Regression Model**

Multiple regression analysis was used to test hypotheses of the study. Table 2 depicts the multiple regression results.

**Table(3): Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.747 <sup>a</sup>	.558	.553	.36356

a. Predictors: (Constant), PU, PWS, PEU

From the table above, 55.8% of the variations in customers' acceptance were explained by the independent variables (perceived usefulness, perceived ease of use, and perceived website security). In other words, 44.2% of the variations in customers' acceptance of online banking services referred to other variables that are not included in this study.

Table(4): ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	41.117	3	13.706	103.693	.000 <sup>a</sup>
	Residual	32.515	246	.132		
	Total	73.633	249			

a. Predictors: (Constant), PU, PWS, PEU

b. Dependent Variable: CA

that the user's attitude towards online technology has some effect on customer acceptance of online banking services.

According to the above table, we accept the main alternative hypotheses because the significance of statistic F value equals zero. In other words, we accept

Table(5): Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.139	.198		5.748	.000
	PWS	.058	.027	.098	2.175	.031
	PEU	.076	.055	.090	1.391	.165
	PU	.628	.063	.640	9.886	.000

a. Dependent Variable: CA

On the basis of the coefficients table, we can conclude the following:

- The regression equation is:

$$Y = 1.139 + 0.058X_1 + 0.076X_2 + 0.628X_3$$

Where:

Y= Customers' acceptance of online banking services.

X<sub>1</sub>= Perceived website security

X<sub>2</sub>= Perceived ease of use

X<sub>3</sub>= Perceived usefulness

- The significance level for perceived website security and perceived usefulness is less than 0.05 and greater than 0.05 for perceived ease of use.
- Perceived usefulness has the most effect on customers' acceptance of online banking services compared to perceived website security and perceived usefulness.

## 6. Conclusion and Implications

In this study, the customers' perceptions of the major Saudi banks were examined and the variations in their customer usage behavior were measured. For the evaluation of the acceptance of online banking services, a questionnaire was utilized to find out how the Saudi customers of the major twelve banks feel about accepting online banking facilities provided by those banks. Findings of this research study provided supports to both Davis (1989) and Salisbury et al., (2001) theoretical models.

This study is beneficial to both practitioners and academicians. First, it updated the area of online banking in Saudi Arabia. Second, it revealed that perceived usefulness is a powerful driver in explaining why Saudis should use online banking. The study supports all the hypotheses developed earlier, and suggested that perceived usefulness and perceived ease of use directly influence Saudis' acceptance of online banking. The results showed that perceived website

security influences acceptance of online banking in Saudi Arabia, as Saudis are more competent with risk-free online banking services. Perceived website security is a good predicting construct and has a direct effect on Saudi customers' acceptance of online banking, and this result is in line with Amin (2009) research. This study shows its originality on two dimensions: first, it tackles the technology adoption model across the Saudi market. This may allow better generalization of the TAM model. Second, it uses non-student samples, unlike previous studies on TAM.

The study suggested a future research to be conducted at an early stage, when banks are introducing or launching new online products. It could be suggested to bankers to improve not only the process involved, but also to stress and improve the security features of their existing systems. This will build their customers' level of confidence. The Saudi banks need to consider upgrading their websites on the basis of the feedback from their customers regarding how useful the current banking services are and how they could be improved in future.

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## دراسة قبول العملاء للخدمات المصرفية عبر الإنترنت بناء على نموذج قبول التقنية:

### دراسة ميدانية على عملاء البنوك السعودية

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يشكر الباحث عمادة البحث العلمي بجامعة الملك سعود ممثلة في مركز بحوث كلية إدارة الأعمال على دعمها المالي لهذا البحث

الكلمات المفتاحية: نموذج قبول التقنية، الخدمات المصرفية عبر الإنترنت، قبول العميل، أمن الموقع على الشبكة العنكبوتية، سهولة الاستخدام، ملخص البحث. تناولت هذه الدراسة مدى قبول العملاء للخدمات المصرفية عبر الإنترنت في المملكة العربية السعودية من خلال تطوير نموذج نظري مبني على أساس نموذج قبول التقنية (Technology Acceptance Model) متضمنا عامل الأمن في مواقع الإنترنت. كذلك تلقي هذه الدراسة الضوء على مدى إمكانية التنبؤ حول قبول العملاء للخدمات المصرفية عبر الإنترنت. ولقد تم توزيع الاستبيانات على عدد من عملاء البنوك السعودية من أجل تحقيق أهداف هذا البحث. بعد ذلك تم تجميع الاستبيانات تم تحليل النتائج ومناقشتها ومقارنتها مع الدراسات السابقة. ركزت هذه الدراسة على ثلاثة أبعاد رئيسية: الفائدة المرجوة، و سهولة الاستخدام، والأمن في المواقع الإلكترونية. ولقد توصلت الدراسة الى أن هناك علاقة مباشرة بين هذه الأبعاد الثلاثة من جهة و قبول العملاء للخدمات المصرفية من جهة أخرى. أيضا أو ضحت نتائج الدراسة جوانب إضافية في تبني تقديم الخدمات المصرفية عبر الإنترنت في المملكة العربية السعودية. كما أن الدراسة ألفت الضوء على العوامل التي تؤثر على قبول الخدمة المصرفية عبر الإنترنت والمفاهيم المصاحبة لذلك التطبيق. الحقيقة إن نتائج الدراسة تعزز أهمية استخدام نموذج قبول التقنية في التنبؤ في المواقف السلوكية للعملاء حول تبني الخدمات المصرفية عبر الإنترنت. تشير الدراسة أخيراً إلى أن استخدام نموذج قبول التقنية يساعد في الوصول الى المعلومات المفيدة في تطوير الإستراتيجيات.