Application of Structural Equation Modeling to Investigate Factors Affecting the Intention to Adopt Internet Banking in Jordan

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ABSTRACT

The purpose of this study was to investigate the key determinants of Internet banking adoption in Jordanian context. This study further attempted to validate the appropriateness of the modified Technology Acceptance Model (TAM) within the context of Internet banking in Jordanian context.

According to technology acceptance model (TAM), the perceived ease of use (PEU) and perceived usefulness (PU) constructs are believed to be fundamental in determining the acceptance and use of various IT applications, such as Internet banking. Using the technology acceptance model (TAM) as a theoretical framework, this study has introduced "perceived trust" as a new factor that reflects the user's security and privacy concerns in the acceptance of Internet banking.

Based on a sample of 317 users, structural equation modeling technique was applied, using AMOS 7.0 (Analysis of Moment Structure), to investigate the suggested model. The results strongly supported the modified TAM in predicting the intention of users to adopt Internet banking. The two main predictors relevant to this study (perceived trust and perceived usefulness) were significant and explained a significant amount (59%) of the variance in predicting a customer's intention to adopt Internet banking. The findings also showed that perceived ease of use had no significant direct effect on behavioral intention; instead, it had indirect effect through the perceived usefulness on behavioral intention to adopt Internet Banking.

Keywords: Internet banking, Technology acceptance model (TAM), Perceived usefulness, Perceived ease of use, Perceived trust.

INTRODUCTION

The increasingly competitive environment in the financial services market has resulted in pressure to develop and utilize alternative delivery channels. One of the most recent delivery channels to be introduced is the Internet banking. The Internet is the driving engine of the new economy and it has given birth to Internet banking (Daniel, 1999). The technology role in service organizations has been predominantly employed to reduce costs and eliminate uncertainties. Internet-based services are believed to be superior to those delivered through the regular channels because of their convenience, interactivity, relatively low cost, and high degree of Customization/personalization among other advantages (Khalif a & Liu 2002).

The rapid development of information and communication technologies during the 1990s has enabled companies to introduce more and more high-tech services. Considering these developments, it is obvious that service researchers need to pay more attention to customer evaluations of technology-based services (Parasuraman and Grewal, 2000). The Internet offers banks the opportunity to better meet customer needs through enhanced interaction, data mining and customization. By using the Internet, it is possible for banks to offer a number of banking services, such as account creation, fund transfer, bill payment and money management services 24 hours a day. For example, customers can get up-to-date balance information on

Received on 6/5/2008 and Accepted for Publication on 23/2/2009.

deposit and loan accounts, transfer funds between accounts, and communicate with the bank by e-mail (Daniel, 1999). For the purposes of this study, Internet banking includes monitoring accounts, paying bills and transferring money between bank accounts, including third party accounts as well as those held at other banks.

Recently, several retail banks in Jordan have introduced and diffused Internet banking systems to improve their operations as well as to reduce costs. According to Telecommunication Regulatory Commission (TRC) in Jordan, 1.2 million Internet users in Jordan represent 20% of population (HTTP1). Nevertheless, Internet banking services in Jordan are still in their infancy. Despite all the efforts to develop better and easier Internet banking systems, Internet banking is under-utilized, because many customers do not accept it. There is very little understanding, however, of the factors that affect customer satisfaction with Internet-based services (Khalif and Liu 2002). Thus, there is a need to study and understand users' acceptance of Internet banking services in order to identify the factors affecting their intention to adopt Internet banking. The purpose of this study is to investigate the factors influencing the adoption of Internet banking by Jordanian customers. Such a study will help banks to formulate appropriate strategies to ensure rapid movement of customers towards online banking, thus, bring down operating costs.

The rest of the study has been organized as follows: the next section introduces the profile of Jordan, followed by a review of relevant literature, study method and procedure, findings of the study, discussion of results of the study, conclusions and areas for further research.

Country Background

His Majesty King Abdullah II has strongly emphasized the need for Jordan to commit itself to the Information and Communication Technology (ICT) plans developed in the region. As a result, Jordan paied great attention to technology systems. Hence, the government has identified communications and information technology (IT) as a major potential growth area for the economy as well as a primary component of infrastructure.

The banking sector in Jordan is very active, dynamic and liberal. With 23 banks in Jordan, the sector is believed to be in a strong position to meet the foreseen economic opportunities. Jordan-based banks often provide pioneer online services to their customers.

Jordan has one of the most opened telecommunications markets in the Middle East and an independent regulator (HTTP3). Internet access has been available in Jordan since 1996. This service is provided through licensed communication companies. By the end of 2005, the number of Internet Service Providers (ISPs) amounted to ten. The Internet services market is still in its introductory stage in Jordan, however, experts in the industry strongly foresee that the coming five years will be glory days for the Internet market.

Although the Jordanian government generally made many efforts to facilitate the adoption of new technology, there is a paucity of literature focusing on factors underlying customer decisions to accept new technology as an important part of their life. Therefore, to gain a better understanding why and how Jordanians decide to adopt new technology, there is a need to identify the factors and conditions underlying their decision-making processes. This article tends to provide greater explanatory power for the question of why customers decide to adopt or not to adopt one of the most advanced technologies today, mainly Internet Banking (IB).

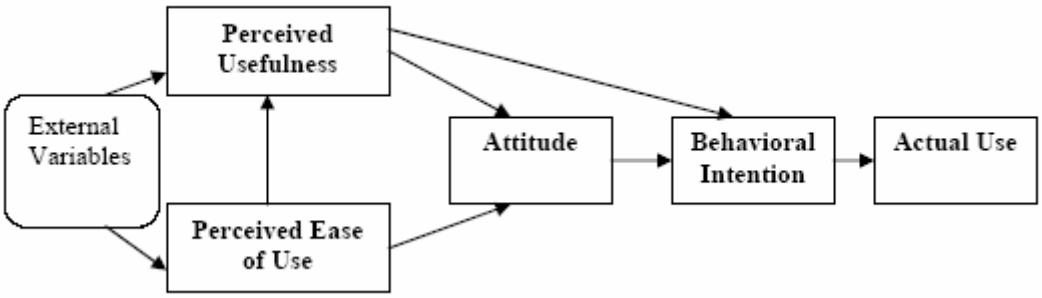
Theoretical background

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) developed by Davis (1989), figure 1, is an information systems theory that models how users intend to accept and use a technology. TAM claims that actual use is determined by behavioral intention and subsequently behavioral intention is determined by attitude. In other words, behavioral intentions are influenced indirectly by external variables through perceived ease of use and

perceived usefulness. Usage is determined by behavior intention to adopt a system, which is jointly determined by a person's attitude towards using the system and its perceived usefulness. This attitude is also jointly determined by both perceived ease of use and perceived usefulness. In addition, both perceived usefulness and perceived ease of use were influenced by external variables.

TAM is one of the most influential extensions of Ajzen and Fishbein's (1980) Theory of Reasoned Action (TRA) in literature. TAM replaces many of TRA's attitude measures with the two technology acceptance measures— ease of use, and usefulness. TRA and TAM both have strong behavioral elements which assume that when someone forms an intention to act, he will be free to act without limitation.



Source: (Davis, 1986)

Figure (1): Technology Acceptance Model

Technology Acceptance Model (TAM) appears to be the most widely accepted among information systems researchers. It provides one of the most parsimonious, yet robust, models in explaining ICT characteristics and their effects on customer adoption/use of new ICTs (Yang, 2005). It has been extensively applied and utilized in the studies of technology adoption and diffusion at individual levels (Davis, 1989; Agarwal and Prasad, 1999; Venkatesh and Davis 2000). The main reason for its popularity is perhaps its parsimony, as well as its wealth of recent empirical support (Agarwal & Prasad, 1999). While the TRA is a general theory of human behavior, the TAM is specific to IS usage (Mathieson et al., 2001). Information systems researchers have investigated and replicated the TAM, and agreed that it is valid in predicting the individual's acceptance of various corporate IT systems. The TAM posits that a user's adoption of a new information system is determined by that user's intention to adopt the system, which is, in turn, determined by the user's beliefs about the system (Luarn and Lin, 2005). Consequently, the technology acceptance model is considered relevant in studying the acceptance, in the adoption, and in the use of a wide range of ICT-based services, including electronic commerce services. TAM is one of the most influential research models in studies which figure out determinants of information system and/or information technology adoption (Chau, 2001).

Jordanian context:

Few researches have addressed the technology acceptance model in Jordanian context. Alsukkar and Hagan (2005) examined the appropriateness of the TAM model to study the Internet banking in the developing countries, specifically within the Jordanian context. The study suggests that the technology acceptance model, which is the basis for most of the research on IT diffusion, may be more useful if it is extended to include specific issues of culture and trust on the customer side and more basic elements of quality in technology usability and service on the side of the banks.

Another study conducted by AbuShanab and Pearson (2007) investigated the key determinants of the adoption of Internet banking in Jordan. They attempted to validate the appropriateness of the Unified Theory of Acceptance and Use of Technology (UTAUT) within the context of Internet banking. The results of this study indicated that UTAUT provides a good foundation for future technology acceptance research. The three main predictors relevant to this study (performance expectancy, effort expectancy, and social influence) were significant and explained a significant amount of the variance in predicting a customer's intention to adopt Internet banking. The results also indicate that gender moderated the relationships between the three independent variables and the behavioral intention.

Awamleh et al. (2003) replicated the Diniz model using the case of Jordan as an example of an emerging market. The purpose of his study was to compare the Jordanian bank's web applications with the American ones. The findings clearly indicated a gap between Jordanian bank's web applications and those of Americans. The results also indicated that Jordanian banks were successful in the introductory phase of web banking. The results also indicated the importance of focusing on moving Jordanian web banking usage forward with a view to conducting real financial transactions and improving electronic customer relations.

Research model and hypothesis

The research model tested in this study is shown in Figure 2. In the modified model, like many other studies of TAM, the "attitudes" construct was removed for simplification (Hong et al., 2001). Although past studies using TAM often employed self-report usage scales to measure users' usage intention and actual system use behavior, this study intends to explore future adoption of Internet banking services, rather than current usage behavior. The aforementioned decisions on model modification and variable selection are based on the circumstance that Internet banking application is still in its early stage in Jordan and actual customer system usage is limited. Therefore, actual system use will not be a valid measure for the present study (Yang, 2005). Several studies have investigated perceived trust based on TAM (Gefen and Straub, 2003; Suh and Han, 2003). After literature review on customers' online trust and TAM model, the researcher decided to integrate "perceived trust" into the expanded TAM model.

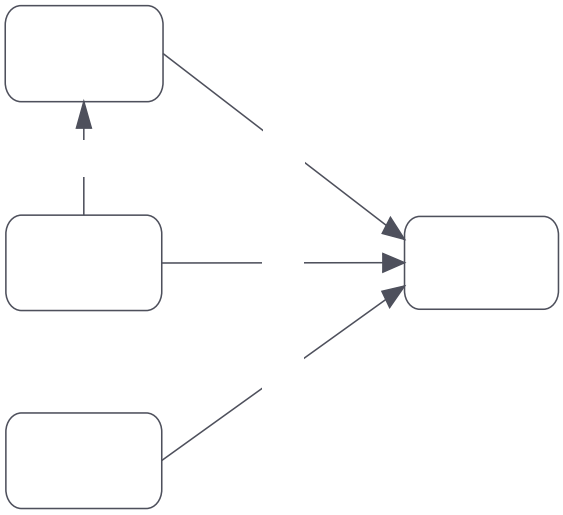


Figure (2): Proposed Study Model

Based on the above discussion, Figure 2 represents the modified technology acceptance model, where behavioral intention to adopt is the dependent variable while three motivational variables (Perceived Usefulness, Perceived Ease of Use and Perceived Trust) serve as independent variables. The proposed constructs are supported by prior studies in information systems literature.

Perceived usefulness

Perceived usefulness represents the degree to which a person believes that using a particular system would enhance his or her job performance (Davis, 1989). Extensive research in the information systems community provides evidence on the significant effect of perceived usefulness on usage intention (Chen and Barnes, 2007; Guriting and Ndubisi, 2006;

Jaruwachirathanakul and Fink, 2005; Eriksson et al., 2005; Davis et al., 1989; Venkatesh, 2000; Venkatesh & Davis, 2000; Venkatesh & Morris, 2000). The ultimate reason people exploit Internet banking systems is that they find them useful. As a consequence, the greater the perceived usefulness of using Internet banking services, the more likely that Internet banking will be adopted (Jaruwachirathanakul and Fink, 2005). Thus, the researcher proposed the following hypothesis:

H1: Perceived usefulness has a positive effect on the behavioral intention to adopt Internet banking.

Perceived Ease of Use

Perceived ease of use (PEU) represents the degree to which a person believes that using a particular system would be free from effort (Davis, 1989). Rogers (1983) stated that perceived ease of use is the degree to which customers perceive a new product or service as better than its substitutes. Similarly, Zeithaml et al. (2002) stated that the degree to which an innovation is easy to understand or use could be considered as perceived ease of use.

Extensive research over the past decade provides evidence of the significant effect perceived ease of use has on usage intention, either directly or indirectly (Hernandez and Mazzon, 2007; Guriting and Ndubisi, 2006; Eriksson, 2005; Wang et al., 2003; Venkatesh, 2000; Venkatesh and Morris, 2000). Chen and Barnes (2007) have empirically found that two technological aspects of the interface, namely perceived ease of use and perceived usefulness, significantly affect customer adaptation intentions. In order to prevent the ‘‘under-used’’ system problem, Internet banking systems must be both easy to learn and easy to use. Thus, the researcher proposed the following hypothesis:

H2: Perceived ease of use has a positive effect on the behavioral intention to adopt Internet banking.

Past TAM research shows strong empirical support for a positive relationship between perceived usefulness and Perceived ease of use. Previous TAM research (Legris et al., 2003) argued that perceived usefulness is influenced by perceived ease of use because a technology will be perceived as more useful if it is easier to use (Venkatesh and Davis, 2000). Sun (2003) conducted a study on TAM research models and found that perceived ease of use has a significant direct effect on perceived usefulness. Several researchers such as Yu et al. (2005) proved repeatedly the direct effect of perceived ease of use on perceived usefulness. Thus, the researcher proposed the following hypothesis:

H3: Perceived ease of use has a positive effect on the perceived usefulness of Internet banking.

Perceived Trust

All business transactions require some elements of trust especially those conducted in uncertain environments (Lee, 1998). In electronic commerce, trust can be viewed as a perceptual belief of confidence or as the level of confidence that one expects from the other party during an online transaction (Javenpaa et al. 1998). Gefen and Straub (2003) added trust construct to the TAM in an online shopping context. They suggested trust as a third belief in addition to ease of use and usefulness in predicting electronic commerce adoption. Suh and Han (2003) added trust to the original TAM model. They tested their model by empirical evaluating responses from personal customers of five major banks in South Korea. They revealed that “trust”, together with PU and PEU, is an important predictor of the attitude toward the Internet banking system. Eriksson et al. (2004) made the same conclusion while studying the meaning of trust with Estonian private customers. Wang et al. (2003) also successfully introduced a trust-related construct, perceived credibility, as a new TAM factor to reflect the user’s security and privacy concerns in the acceptance of online banking. Considering the results of previous studies, this study extends TAM by adding perceived trust to the model. Thus, the researcher proposed the following hypothesis:

H4: Perceived Trust has a positive effect on behavioral intention to adopt Internet banking.

Research Design and Method

This study uses a sample survey methodology to test the above hypotheses and proposed model. A

theoretically grounded questionnaire was developed to call for responses from Jordanian customers about their intention to adopt Internet banking.

Sample

The survey was conducted at the three largest universities in Jordan (University of Jordan, Yarmok University, and Mutah University). University students are likely to be the first customer segment to adopt Internet banking because of their high educational level and income potential. In addition, age also makes university students more open to new Information and Communication Technologies (Yang, 2005).

A convenience sample of university students was recruited. A total of 317 questionnaires were collected. The sample size is comparable to other TAM studies using student participants as the study sample (Legris et al., 2003).

Among the 317 respondents, 63.1 percent (N = 200) were male and 36.9 percent (N = 117) were female. 53.0 percent (N = 168) of the respondents were 20 years old or under and 47.0 percent (N = 149) were above 20 years old. 76.6 percent (N = 243) were B.A students, 18.3 percent (N = 58) were Master students, and 5.0 percent (N = 16) were Ph.D. students. Detailed descriptive statistics related to the respondents' characteristics are shown in Table 1.

Table (1): Sample characteristics

Measure		Frequency	Percent
Gender	male	200	63.1
	female	117	36.9
	Total	317	100.0
Age	20 or Under	168	53.0
	Above 20	149	47.0
	Total	317	100.0
academic	B.A	243	76.6
	Master	58	18.3
	P.H.D	16	5.0
	Total	317	100.0

Measurements

The questionnaire was employed to collect data for the constructs of the study model and it contained scales to measure these constructs. Five-point Likert scales with end points of "strongly disagree" [1] and "strongly agree" [5] were used to examine participants' responses to questionnaire statements. All items of the questionnaire are shown in the study appendix. Measurements for perceived ease of use, perceived usefulness and behavioral intention were adapted from Davis (1986), which established their reliability and validity. Measurements of trust were adapted from Gefen and Straub (2003), which also established their reliability and validity. Demographic questions also collected information about respondents' gender, age and education level.

The questionnaire was originally prepared in English, and it was later translated into Arabic (the native language of respondents) following Craig and Douglas's (2000) methodology. The translated version of the questionnaire was shown to some specialists in arbitration to assure the face validity and the accuracy of translation. The internal consistency reliability of each of the dimensions was assessed by Cronbach's alpha test (table 2). The alpha values for all dimensions vary from 0.68 to 0.84, which are considered acceptable (Hair et al. 1998).

Table (2): Cronbach's Alpha for the Scales

Variable	No. of Cases	No. of Items	Alpha
Perceived Ease of Use	317	3	0.84
Perceived Usefulness	317	3	0.73
Perceived Trust	317	2	0.68
Behavioral Intention	317	2	0.84

Data analysis and results

The AMOS program (Analysis of Moment Structure) version 7.0, a method to analyze the Linear Structural Relationship Model, was used to examine the suggested model. Seven common model-fit measures were used to assess the model's overall goodness-of-fit (Table 3).

Comparison of all fit indices with their corresponding recommended values, as shown in Table 3, provided evidence of a good model fit (χ^2/df = 1.89, GFI = 0.981, AGFI = 0.861, NFI = 0.988, NNFI = 0.936, CFI = 0.989, RMSR = 0.020). Thus, we proceeded to examine the path coefficients of the structural model.

Table (3): Recommended fit indices

Fit Indices	Recommended value
χ^2/df	≤ 3.00
Goodness of fit (GFI)	≥ 0.90
Adjusted goodness of fit (AGFI)	≥ 0.80
Normed fit index (NFI)	≥ 09.0
Non-normed fit index (NNFI)	≥ 0.90
Comparative fit index (CFI)	≥ 0.90
Root mean square residual (RMSR)	≤ 0.10

Source: Luarn and Lin (2005).

Hypothesis testing results

After the measurement model has been assessed, the researcher examined the estimated coefficients of the causal relationships between constructs, which would validate the hypothesized effects. Using AMOS, the researcher tested the hypotheses and determined the path coefficients based on the model. Figure 3 illustrates the coefficients of determination (R^2) for each dependent construct, the estimated coefficients and their significance on the structural model. All of the path estimates are statistically significant, except for that running from Perceived Ease of Use to Behavioral Intention.

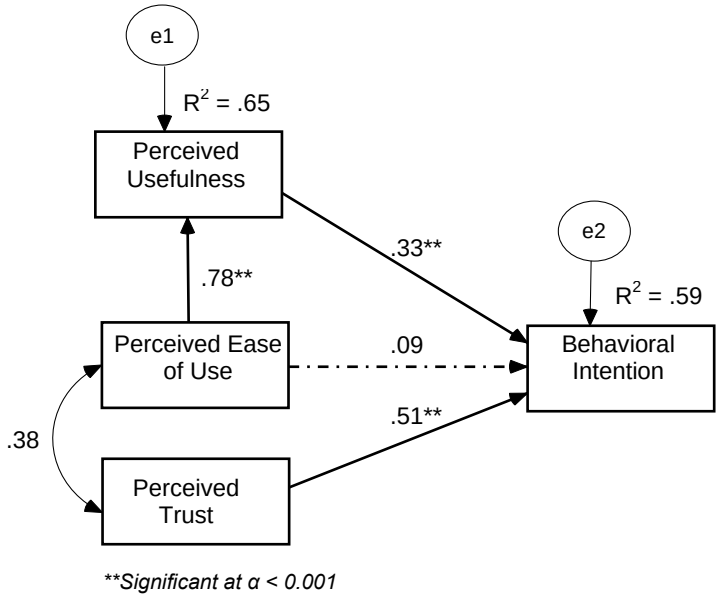


Figure (3): Path diagram for study model.

In the AMOS text output file, the t-value is the critical ratio (C.R.), which represents the parameter estimate divided by its standard error. Then t-value was obtained by dividing the estimate of the covariance by its standard error (S.E.), when t-value is greater than 1.96 or smaller than -1.96, so it implies statistical significance (Byrne, 2001).

Table (4): Results of the structural equation modeling

Path		Estimate[a]	S.E[b]	C.R[c]	P-value
H1: Perceived Usefulness	→ Behavioral Intention	.325	.073	4.441	.000
H2: Perceived Ease of Use	→ Behavioral Intention	.089	.076	1.171	.242
H3: Perceived Ease of Use	→ Perceived Usefulness	.778	.032	24.455	.000
H4: Perceived Trust	→ Behavioral Intention	.509	.041	12.265	.000

[a] path coefficients.

[b] Standard error.

[c]C.R. is a t-value obtained by dividing the estimate of the covariance by its standard error (S.E.), t-value greater than 1.96 or smaller than -1.96 implies statistical significance (Byrne, 2001).

As indicated in Table 4 and figure 3, perceived usefulness has a strong direct effect on behavioral intention ($\beta = 0.33$; $t = 4.441$; $\alpha = 0.000$). While perceived ease of use has no direct effect ($\beta = 0.09$; $t = 1.171$; $\alpha = 0.242$) on behavioral intention. Perceived ease of use has only an indirect effect of 0.253, mediated by usefulness, on behavioral intention or adopt Internet banking (table 5). Perceived trust has a direct effect on behavioral intention ($\beta = 0.54$; $t = 12.265$; $\alpha = 0.000$), demonstrating its importance in the decision or intention to adopt Internet banking. Additionally, there is no surprise that the two technology-related constructs from the Technology acceptance model (perceived ease of use and perceived usefulness) are strongly related to each other ($\beta = 0.78$; $t = 24.455$; $\alpha = 0.000$). Therefore, the researcher accepts hypotheses 1, 3, and 4, but doesn't accept hypothesis 2.

Table (5): Direct, indirect and total Effects

Variable	Perceived Ease of Use	Perceived Trust	Perceived Usefulness
Perceived Usefulness			
Direct effect	0.778	--------	--------
Indirect effect	--------	--------	--------
Total effect	0.778	--------	--------
Behavioral Intention			
Direct effect	0.089	0.509	0.325
Indirect effect	0.253	--------	--------
Total effect	0.342	0.509	0.325

Also, about 65% of the variance of perceived usefulness is explained by Perceived Ease of Use ($R^2 = 0.65$), and about 59% of the variance of behavioral intention to adopt is explained by perceived Usefulness and perceived trust ($R^2 = 0.59$). Table (4) shows more details about the results of hypotheses testing.

Briefly, the tests of the structural model showed that perceived usefulness affects Jordanian customers' intention to adopt Internet banking, perceived ease of use had a positive effect on perceived usefulness, perceived trust positively affects Jordanian customers' intention to adopt Internet banking, and perceived ease of use had no direct effect on Jordanian customers' intention to adopt Internet banking; instead, it has an indirect effect through perceived usefulness. The above findings are consistent with those from the studies of Davis et al. (1989), and Venkatesh and Davis (2000).

Conclusion and future directions

This study provides insights into the relationships between Perceived Usefulness, Perceived Ease of Use, Perceived Trust and Behavioral Intention to adopt Internet banking in Jordan. This study also offers empirical data to support the suitability of the TAM through examining the emerging Internet banking technology and application in developing countries such as Jordan.

Perceived Usefulness is found to predict customer adoption of Internet banking in this study, as well as many ICT technologies in other TAM research. Perceived Trust is introduced into the TAM research to expand the scope of TAM applicability to Internet banking that is yet to accumulate a critical mass in the diffusion process. Moreover, this study demonstrates the significant effect of perceived trust on behavioral intention. Also it supports the importance of investigating trust in future TAM research.

This study showed that perceived ease of use has no significant direct effect on behavioral intention to adopt Internet banking, but it had an indirect effect on behavioral intention through perceived usefulness. This finding was in accord with the results of Koufaris (2002) and Wu and Wang (2005), who pointed out that perceived ease of use is not a significant determinate for behavioral intention to adopt. This result corresponds to prior research (Venkatesh, 2000). They indicated that perceived ease of use had a direct and significant effect on behavioral intention to adopt in the pre-implementation test (little or no direct experience with a particular system), but little influence on intentions over a period (after experience with the specific system). This effect subsides over time (Wu and Wang, 2005). However, this result violates one of TAM's important relationships. Two possible explanations to this could be that (1) ease of use may not be an important determinant of continued or increased usage as would initial adoption, and (2) as customers continue to persevere, it is only a matter of time for applications to become easy to use (Ndubisi and Richardson, 2002).

This study supported TAM and helps researchers understand the relationships between Perceived Usefulness, Perceived Ease of Use, Perceived Trust and Behavioral Intention to adopt Internet banking. The empirical data confirm that future adoption of Internet banking relies on Perceived Usefulness and Perceived Trust (direct effect) and Perceived ease of use (indirect effect through perceived usefulness).

The findings of this study indicated that the model explaining the behavioral intention to adopt Internet banking in Jordan is acceptable. Therefore, banks that provide Internet banking services should increase promotion on Internet banking services awareness, ensure trust and security to their web sites, protect the privacy of customer's information. Also, the benefits of internet banking, like saving time and cost by using Internet banking, should be promoted.

However, there are a number of issues that remain to be addressed. First, the study was conducted on the context of universities' students, thus, continued research is needed to generalize findings and discussion to include other groups. Second, there is a need to look for additional variables that can improve the ability to more accurately predict usage intention. Third, the study measures perceptions and intentions at a single point in time, thus, longitudinal studies are required to consider the change in individuals' perceptions over time as they gain more experience. Finally, Additional research efforts are needed to evaluate the validity of the investigated models, as well as findings.

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تطبيق نموذج المعادلات البنائية لاختبار العوامل المؤثرة في النية لتبني بنوك الإنترنت في الأردن

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ملخـص

هدفت هذه الدراسة إلى اختبار المحددات الرئيسة لتبني بنوك الإنترنت في الأردن. كما حاولت إثبات مدى ملاءمة نموذج قبول التكنولوجيا في مجال بنوك الإنترنت.

طبقا لنموذج قبول التكنولوجيا (TAM)، فإن سهولة الاستخدام المدركة والمنفعة المدركة تمثل العناصر الأساسية في تحديد مدى قبول واستخدام العديد من تطبيقات تكنولوجيا المعلومات، ومنها بنوك الإنترنت.

وقد تم باستخدام نموذج قبول التكنولوجيا كإطار نظري للدراسة إضافة "الثقة المدركة" كعامل جديد يعكس درجة الأمان والخصوصية المتعلقة بتبني بنوك الإنترنت.

واعتمادا على عينة مكونة من 317 مفردة، وباستخدام نموذج المعادلات البنائية (باستخدام برنامج AMOS 7.0)، فقد أيدت النتائج التي توصل إليها الباحث قدرة النموذج المقترح على التنبؤ بنية العملاء لتبني بنوك الإنترنت. حيث أشارت النتائج إلى أن أهم عاملين في النموذج هما الثقة المدركة والمنفعة المدركة، حيث فسرا ما نسبته 59% من التباين في نية العملاء لتبني بنوك الإنترنت. كما أشارت النتائج إلى أن سهولة الاستخدام المدركة لم يكن لها أثر مباشر ذو دلالة في النية لتبني بنوك الإنترنت، حيث كان أثر هذا العامل في النية غير مباشر ومن خلال المنفعة المدركة.

الكلمات الدالة: بنوك الإنترنت، نموذج قبول التكنولوجيا، المنفعة المدركة، سهولة الاستخدام المدركة، الثقة المدركة.

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تاريخ استلام البحث 2008/5/6، وتاريخ قبوله 2009/2/23.