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Trust Factors Influencing Intention to Adopt Online Payment in Kuwait

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ABSTRACT

While there is a large body of research that studied trust in e-commerce, this study investigates causes and consequences of customer trust in online payment system within an Arab culture. The paper develops a theoretical model that exhibits the impact of five exogenous variables namely (internet experience, personal innovativeness, familiarity, propensity to trust, and presence of third party seal) on intention to use online payment via the mediation of three endogenous variables (perceived enjoyment, perceived risk and perceived trust). Data was collected via on online questionnaire (150) and paper-based questionnaire (200), and the analysis provides validation of the proposed model. Findings shed light on the role of customer trust and perceived enjoyment to mediate the effect of external variables (personal innovativeness, familiarity, propensity to trust, and presence of third party seal). This could assist in enhancing online payment websites acceptance by potential consumers in Arab countries.

Keywords

Online payment, intention to adopt, customer trust, familiarity, propensity to trust, presence of third party seal, personal innovativeness, risk, enjoyment

RESEARCH MOTIVATION

The growth of information and communication technology has altered traditional payment systems. People can now carry out different transactions for goods and services using new electronic payment systems, noted EPS, instead of traditional methods of cash and cheques. These EPS may include credit cards, online EPS, e-cheque, etc. With EPS, individuals can pay for goods and services over the counter and via the Internet without the use of cash. E-commerce total revenue is increasing and is expected to reach $12.4 trillion worldwide by 2012, and this increase depends part of the availability and acceptance of a variety of EPS by potential customers, besides other factors.

There is a variety of EPS that can be classified into three categories: prepaid, pay now and pay-later systems (Stroborn, Heitmann, Leibold and Frank 2004). Prepaid are systems which take away a certain amount of money from the customer before he makes any purchase. Pay Now are systems that debit the account of the customer at the exact time the customer purchases something. Pay later, known also as "post payment" are systems in which the customer actually receives the goods before being debited.

Among these EPS, CashU (www.cashu.com) is a famous Arab online payment service provider that started in 2002 in United Emirates Arab, and then quickly spreads and extends its activities to customer in more than 51 countries distributed over four continents (Africa, Asia, Europe, America, and Australia/New Zealand). Despite the number of CashU's customers is increasing worldwide its adoption and usage to pay online transactions remain low, and recent studies on EPS (Kim, Ferrin, and Rao 2008; Kim, Tao, Shin and Kim 2010; Ramayah, Ling, Suki and Ibrahim 2005; Tsiakis and Sthephanides, 2005) and ecommerce (Gefen and Straub 2004) have shown that customer perceived trust is an important obstacle toward such adoption.

While many studies have previously studied EPS in the west, and they provided a solid foundation for predicting consumers' intention to adopt these systems, several other factors are important to be considered if a business is willing to serve other cultures such as the Arab region. An important gap is that extant studies have all-but ignored the Arab world, which is an emerging player in the EC market. Second, these studies did not consider certain characteristics of the Arab culture which scores high on power distance (90) and uncertainty avoidance (80). The first gap that we address in this paper is that the use of an EPS system in other culture such as the Arab one is an incomplete picture of whether the system is trusted. This leads us to raise the following research question:

What are causes and consequences of perceived trust of potential consumers during online EPS adoption in an Arab country?

This study focuses on the role of perceived trust and its relationship to perceived security and perceived enjoyment associated with CashU.com, a new online EPS, for several reasons.

First, little empirical research has been undertaken on the direct relationship between consumers' perceived security and perceived trust in EPS compare to those focused on ecommerce. A notable exception is the study of Kim et al. (2010) about EPS, and no study has examined the relationship between consumers' perceived security, perceived trust in EPS and perceived enjoyment.

Second, companies that provide EPS service have expressed great interest on how to boost potential consumers to adopt these new technologies.

Third, availability of different EPS is a factor that contributes to the success of e-commerce web sites, besides other factors (Guseva, 2010; Halaweh and Fidler, 2008).

Fourth, Arab culture is highly social and family-oriented, and has strong emphasis on leisure activities and high degree of enjoyment toward new technology adoption (Rouibah 2008). It also scores low on uncertainty avoidance compare to western culture, which make the study about causes and consequences relevant in term of identifying which factors contributes to increase trust and intention to use EPS. It is therefore expected that enjoyment potential users may perceive in cashU.com will play an important role toward its intention to use.

LITERATURE REVIEW

A large body of past studies focused on EPS, and these studies despite their merit have some limit with regard to the objective of this study.

Tsiakis and Sthephanides (2005) discussed security and trust issues that are essential for every EPS in order to be accepted. Chang, Li, Hung and Hwang (2005) examine of the Internet tax-filing system acceptance in Taiwan. Rigopoulos and Askounis (2007) studied users' attitudes towards EPS adoption in Greece. These two studies found that both usefulness and ease of use are predictive of intention to use EPS. However, they both ignored security and trust issues. Ramayah et *al.*, (2005) examined intention to use an online bill payment system in Malaysia. They found that perceived risk affects indirectly and negatively intention to use the EPS. Schierz, Schilke and Wirtz (2009) developed a model that explains consumers' acceptance of mobile payment (i.e. payment over mobile phone) services in Germany. The model includes several variables including perceived security, perceived usefulness, and perceived ease of use. Their results revealed that perceived security is an important factor that drives on intention to use mobile payment. Guseva (2010) studied e-commerce systems' quality criteria by a sample of European frequently online purchasers. Results revealed that important criteria motivating users towards e-commerce adoption and use are: existence of high security standards, followed by availability of variety of EPS systems, and availability of online help and support during e-commerce transaction. Kim *et al.*, (2010) examined effect of perceived trust, perceived security and their causes on intention to use EPS system in Korea. They found that both perceived security and perceived trust affect current use of EPS, and the effect of trust is stronger than that of security. Also they found the presence of security statement seal affects perceived security and but it has no effect on perceived trust. Gholami, Ogun, Koh and Lim (2010) investigated factors that affect individuals' intention to adopt EPS in Nigeria. They found that several variables, including customer trust, affected individuals' intention to adopt EPS.

Despite the existence of numerous past studies focusing on EPS and mobile payment, still acceptance of EPS in Arab culture requires more studies. The following remarks can help understand the unique features of our study compare to previous ones:

First, past studies have shown that both trust and security are very important factors that drive intention to use EPSs.

Second, most past studies either focused on trust or security on EPS and not both in one model, except (Kim *et al.*, 2010).

Third, we found very few past studies that investigated the effect of perceived trust on EPS compare to those that integrate it in ecommerce studies. The rare studies we found were conducted respectively in Greece (Tsiakis and Sthephanides, 2005), Taiwan (Hung, Chang and Yu, 2006), South Korea (Kim et al., 2010), and USA (Carter and McBride 2010; Schaupp and Carter 2010), and Nigeria (Gholami et al., 2010).

Fourth, there is scarcity of studies that have been done on the diffusion of EPS in developing (Gholami et al., 2010; Ramayah et al., 2005) and Arab countries (Rouibah, 2007).

Fifth, past studies have identified many variables as causes and consequences of perceived trust (e.g. Gefen and Straub, 2004). Among identified causes are: perceived risk, perceived security, disposition to trust, perceived privacy, ability, reputation, familiarity, integrity, benevolence, website quality, enjoyment, and presence of third party seal. In addition, several consequences were also studied including intention to participate (transact, buy, purchase, inquire), attitude toward the site, willingness to buy, recommend to others, repeat purchase, loyalty, current usage, and satisfaction.

Sixth, information system researchers have urged that traditional models of technology adoption be expanded to include factors such as intrinsic motivation or "enjoyment" to help explain technology adoption (Heijden, 2004). But none past study did integrate perceived enjoyment in any EPS adoption.

Therefore there is room for improvement and studies are encouraged to look at perceived trust construct, its causes and consequences from different lens in other cultures other than the west in order to shed new light on its effect. Hence, it is interesting to look at the effect of perceived trust, perceived risk and perceived enjoyment and their effect on intention to use EPS from the perspective of consumers that belong to an Arab country.

RESEARCH MODEL

The research model proposed in this study (see figure 1) depicts causes and consequences of perceived trust in EPS. We advocate that the adoption of an online EPS is a socio-technical process. Such adoption depends on customers' perceptions of technical, attitudinal, and demographic variables. When a potential customer wants to transact online with an EPS provider, he may pay attention to several factors including the risks he may encounter when transacting with the service provider itself, available information to get familiar with the service provider as well as his confidence of the partner with whom the online service provider transacts and contribute to secure online transactions (presence of third party seal such as VerySign). Adoption also depends on the individual characteristics (level of internet experience, willingness to be the first to use new technologies, i.e. personal innovativeness, and perceived enjoyment when surfing online). Focusing on perceived trust from the perspective of customers' view, how they perceive the EPS provider as well as third party that contributes to offer them secure services from this perspective is expected to shed light on the Arab behavior with regard to new technology adoption.

While several past studies focused on perceived enjoyment and customer trust in e-commerce (Hwang and Kim, 2007; Ha, and Stoel, 2009), very few studies integrated customer trust and perceived enjoyment (Hwang and Kim, 2007), and no past study investigated this relationship in EPS adoption. Hwang and Kim (2007) proposed a direct path between perceived enjoyment and customer trust. They developed a model that integrated perceived e-trust and *perceived enjoy*ment. Unlike Hwang and Kim (2007) our study will hypothesize a path from customer trust to perceived enjoyment.

For the first time two new hypotheses are proposed: H9 and H10. The rational for H9 is that more people have tendency to be the first to try new technologies more they will trust using CashU.com. For H10, more people have experience with internet more they will enjoy using of CashU.com, because Arab people enjoy more when using new technologies than when working (Rouibah, 2008).

Number	Path between variables	Direction (+ or -)	Supporting studies
H1	Propensity to trust ➔ Customer Trust	+	Gefen (2000); Teo and Liu (2007)
H2	Propensity to Trust ➔ Intention to adopt	+	Kim et al. (2008)
H3	Presence of third-party seal ➔ Perceived risk	-	Kim et al. (2008); Kim et al. (2010)
H4	Presence of third-party seal ➔ Customer Trust	+	Kim et al. (2008) and Kim et al. (2010) hypothesized but failed to prove significance
H5	Presence of Third-Party Seal ➔ Intention to adopt	+	Kim et al. (2008)
H6	Familiarity ➔ Customer Trust	+	Gefen (2000) Kim et al. (2008)
H7	Familiarity ➔ Intention to adopt	+	Gefen (2000) Gefen and Straub (2004) Kim et al. (2008)
H8	Personal Innovativeness ➔ Perceived enjoyment	+	Rouibah and Abbas (2010)
H9	Personal Innovativeness ➔ Customer Trust	+	New hypothesis
H10	Internet experience ➔ Perceived enjoyment	+	New hypothesis
H11	Propensity to Trust ➔ Perceived risk	-	New hypothesis
H12	Internet experience ➔Intention to adopt	+	Nysveen and Pedersen (2007)
H13	Customer Trust ➔ Perceived enjoyment	+	Reverse hypothesis of Hwang and

			Kim (2007)
H14	Customer Trust ➔ Perceived risk	-	Teo and Liu (2007); Kim et al. (2008); Kim et al. (2010)
H15	Customer Trust ➔ Intention to adopt	+	Gefen (2000); Kim et al. (2008); Kim et al. (2010)
H16	Perceived enjoyment ➔Intention to adopt	+	Rouibah and Abbas (2010)
H17	Perceived Risk ➔ Intention to adopt	-	Teo and Liu (2007); Kim et al. (2008) ; Kim et al. (2010); Ramayah et al. (2005)

Table 1. **Rational and Summary of Research Hypotheses for the Research Model**

RESEARCH METHODOLOGY

Sample and procedure

The survey was administrated via two different modes: On online mode and a paper-based mode. The first mode is a web-based survey. The online questionnaire survey was designed and posted via Qualtrics. The questionnaire collection was kept running continuously for one month. Authors administrated this online questionnaire via e-mail to a mailing list of 1000 employees who graduated from the business administration school between 2001 and 2010. Those who did not respondents were sent an automatic e-mail reminder two times successfully. The survey was attached with a letter that explained the objectives of the study, and a brief summary about cashU.com. Cashu.com is one of the leading and early Arab e-payment service provider that allows potential customers to shop online, and is easy to use. It can be purchased from many points of sales in Kuwait as well as from the web site (www.cashu.com), and can be used instead of a credit card. The attached letter also included a picture that indicates logo of the Third Party Seal and its meaning. This logo refers to a trusted third party that guarantees the confidentiality and reliability of customer's transactions e-payment. The second method for data collection is paper-based questionnaire that was distributed to 240 students enrolled in eight classes involved in a course of introduction to management information system in two business administration schools. Author of the paper attended each class in which he made a presentation about the CashU.com web site in term of benefits, capabilities and security. He also answered questions and then distributed the questionnaires to be filled out. 350 complete and accurate questionnaires were selected from this study. 200 were from the paper-based survey and 150 from the online survey.

Construct measurement

Well known and validated items constructs, used by other researchers were adapted for the purpose of this study. Three items were used to measure adoption Intention from Gefen (2000) and Kim et al. (2008). Perceived enjoyment was measured using three items from Agarwal and Karahanna (2000). Propensity to trust was measured using 3 items from Gefen (2000). Personal innovativeness was measured using three items from Rouibah and Abbas (2010). Consumer trust was measured using four items from Gefen (2000) and Teo and Liu (2007). Familiarity was measured by 3 items from Gefen (2000). Presence of third-party seal was measured by four items from Kim et al., (2008). Perceived risk measured was by three items from Jarvenpaa et al. (2000) and Kim et al. (2008). And finally, internet experience was measured by daily internet frequency use (Teo and Liu 2007).

RESULTS AND DISCUSSION

Data was analyzed using SPSS software. Factor analysis reveals the existence of nine distinct factors, which accounted for 78.81 per cent of the variance. All indicators of the variables in our research model loaded on the correct factors. The factor validation process described above met the base criteria for retention. Reliability was assessed using internal consistency (Cronbach alpha). Results reveal that Cronbach's alpha for the nine constructs were comprised between 0.72 (for customer's trust) and 0.95 (for the presence of third party seal), which are above the cut value point of 0.60 required in social studies, and that demonstrates excellent reliability. Then, four regression analyses were employed to explore the causal interrelationship between variables of the research model. The results are presented in figure 1. The path coefficients between variables were examined for significance.

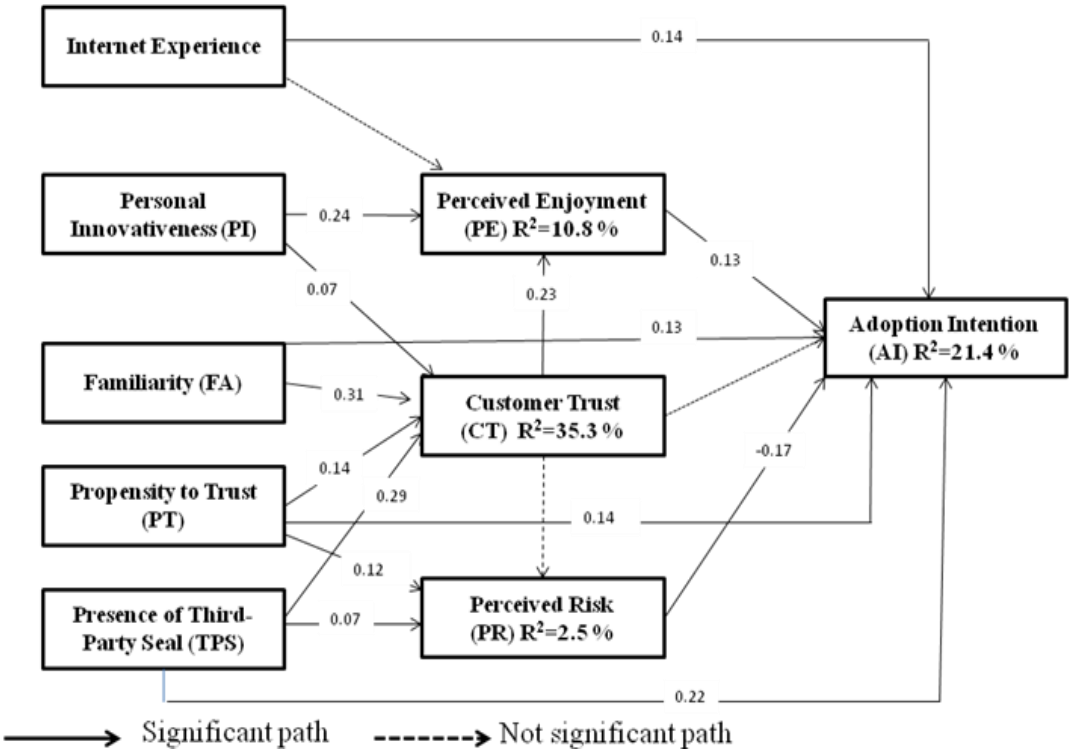

Figure 1. Results of the Research Model

Prediction of perceived customer's trust

Four variables (propensity to trust, presence of third-party seal, familiarity, and personal innovativeness) have a direct effect on beliefs customer's trust; therefore, H1, H4, H6, and H9 are supported. Results also indicate that familiarity exerts the strongest effect on customer's trust followed by presence of third-party seal, familiarity. On the other hand, personal innovativeness exerts the weakest effect. Effect of propensity to trust (β =0.14) is supported Gefen (2000) and Teo and Liu (2007). We also found that effect of propensity in our study is less than that found by Gefen (2000) in USA (β =0.53). This study also found that presence of third-party seal has direct and positive effect on customer trust. This result extends those of Kim et al. (2008) and Kim et al. (2010). In fact these two studies hypothesized a path between the presence of third-party seal and perceived trust, but they failed to find statistical significance. This study also found and positive and direct effect of familiarity on perceived trust. This result also supports finding of Gefen (2000) and Kim et al. (2008), but our effect (β =0.31) is larger than these two studies (Gefen 2000; Kim et al., 2008).

Prediction of perceived risk

Presence of third party seal has a direct effect on perceived risk. Therefore H3 is supported. Such result supports two past studies Kim et al. (2008) and Kim et al. (2010). But our effect (β =0.07) is smaller than that of these two studies: B= -.165 (Kim et al., 2008) and β =0.251 (Kim et al., 2010). In addition, unlike it was hypothesized, the effect of propensity to trust was positively (and not negatively) linked to perceived risk (β =0.12), leading to accept partially H11. Also the effect of propensity to trust is stronger than that of presence of third party seal. This result extends the finding of Teo and Liu (2007) who did not posit a direct effect, but an indirect effect through the mediation of perceived trust. Perceived trust has no effect on perceived risk, leading to reject H14. This is an important finding of this study that contradicts most past studies (Kim et al., 2008; Teo and Liu 2007).

Prediction of perceived enjoyment

Only personal innovativeness, and customer trust have direct effect on perceived enjoyment, and the effect of personal innovativeness is stronger than that of customer trust. Internet experience has no effect leading to reject H10, and accepting H8, and H13. The effect of customer trust (B= 0.23) on perceived enjoyment is new since none past study examines this path. Personal innovativeness has also a direct and positive effect on perceived enjoyment. This result is also supported by Rouibah and Abbas (2010). Our study also found that the effect of personal innovativeness on perceived enjoyment is stronger than that of customer trust.

Prediction of intention to use

Only customer trust, which is a central construct in this study, was not found to have effect on intention to use. This result leads to reject H15. propensity to trust, presence of third party seal, familiarity, Internet experience, perceived enjoyment and perceived risk, have all positive effect while perceived risk has negative effect leading to accept H2, H5 H7, H12, H16 and H17. Among these factors, presence of third party seal exerts the strongest effect, followed by perceived risk. While, perceived enjoyment and familiarity exert the weakest effect. The effect of Internet experience (β =0.14) supports past studies about other technologies adoption in the Arab world (Loch, Straub and Kamel, 2003; Rouibah and Hamdy, 2009). The effect of Perceived enjoyment supports past studies (Rouibah and Abbas 2010). Effect of familiarity also supports (Gefen 2000; Gefen and Straub 2004; Kim et al., 2008). The effect of propensity to trust supports Kim et al., (2008). Presence of third party seal has also positive effect. This result is new and none study highlighted before. There is only one study that examines the effect the presence of third party seal on intention to adopt but throughout the mediation of the perceived risk, and found a positive effect (Kim et al., 2008). The indirect effect is however less (B= 0.03) than the direct effect we found in our study (β =0.22). Perceived risk (β =-0.17) was found to have a negative and direct effect on intention to use EPS. This result is in line with findings of past studies such as Kim et al. (2008), Teo and Liu (2007), and Kim et al. (2010). An important finding of this study is the lack effect of customer trust on intention. Thus result challenges and contrasts with most past studies (Gefen 2000; Kim et al., 2008) who found the customer trust exerts the strongest effect on intention to use e-retailing; and Kim et al. (2010) who found effect of customer trust to be more than that of perceived risk (β =0.12).

The results also implies that customer trust does not mediate directly the effect of the three external variables (presence of third party seal, familiarity, and propensity to trust) on intention to trust, rather, this mediation is done through the effect of perceived enjoyment. Thus perceived enjoyment emerges as an important factor in Cashu.com to use. Such results extend and challenge previous results of Kim et al. (2010) about EPS adoption and who found that perceived trust and perceived risks mediate the effect of external factors on intention to use EPS. Our results also challenge the model developed by Kim et al. (2008) that shows perceived trust and perceived risk mediate the effect of external variables on intention to use e-commerce.

Potential explanation between our study and previous studies may be attributed to culture characteristics such as uncertainty avoidance where Arab culture (Kuwait) scores high 80 compare to other cultures, Nigeria 55 and south Korea 85.

CONCLUSIONS

This study investigates causes and consequences of perceived trust during EPS intention to use by a sample of 350 potential customers in Kuwait. The study selected four causes of customer trust which are: personal innovativeness, familiarity with EPS Cashu.com, presence of third party seal, and propensity to trust. Consequences of perceived trust are: perceived enjoyment, perceived risk, and intention to adopt. Main achieved results from this study are: (i) perceived enjoyment emerges as an important factor toward intention to use online e-payment system, and (ii) lack of direct effect between customer trust and intention to use as well as between customer trust and perceived security. Such results extends and challenges the model proposed by Kim et al. (2010) who found that perceived trust and perceived risks mediate the effect of external factors on intention to use EPS. Unlike Kim et al. (2010) our study findings highlight the importance of perceived enjoyment and perceived risk to be two major determinants of CashU.com intention to use. External factors have indirect effect on intention to use Cash.com through two paths: the first path is composed of customer trust and perceived security, and the second path through perceived risks.

These findings can be applied to increase cashU.com adoption and provide a decision tool to promote market cashU.com services among potential Arab consumers. With regard to promote CashU services, and since e-payment is almost a recent innovation in Arab countries that depend on the interaction between the client and the company, this study suggests to design a web site that increases security assurance and trust to complete payment transactions. Such design features (e.g. the presence of third party logo) must to be at the heart of any successful strategy that aims to promote product in order to decrease potential customer's concerns associated with transactions security. Therefore this study suggests overcoming these issues by promoting CashU.com in famous places and usually highly frequented by potential visitors such as in universities, colleges, schools, shopping malls and libraries. Such promotional campaigns may make the company widely known and familiar to customers. This study also suggests promotional campaigns aimed at different categories of potential customers with technical background, and who have propensity to trust. It is also suggested that CashU.com makes real life demonstrations to explain the importance of the third party seal protection to ensure potential users to feel high secure when transacting with the company, as well as to attract people who high propensity to trust.

Acknowledgements

This research was funded by Kuwait University, Research Grant IQ 01/10. The author acknowledges the Research Administration Project for its support.

REFERENCES

1. Chang I., Li Y., Hung W., and Hwang H. (2005) An empirical study on the impact of quality antecedents on tax payers' acceptance of Internet tax-filing systems *Government Information Quarterly*, 22, 389–410.
2. Gefen D. (2003) TAM or just plain habit: A look at experienced online shoppers, *Journal of End User Computing*, 15, 1-13.
3. Gefen D., and Straub D.W. (2004) Consumer trust in B2C e-Commerce and the importance of social presence: Experiments in e-products and e-services, *Omega*, 32, 407 – 424.
4. Gefen, D. (2000) e-Commerce: The role of familiarity and trust, *Omega: The International Journal of Management Science*, 28, 725–737.
5. Gholami L., Ogun A., Koh E., and Lim J. (2010) Factors affecting e-payment adoption in Nigeria, *International Journal of Handheld Computing Research*, 2, 1, 51-67
6. Guseva N. (2010) E-commerce system's quality criteria: Customer Approach, *Proceeding of the Ebee Conference*, Turkey 26-28th May 2010.
7. Ha S., and Stoel L. (2009) Consumer e-shopping acceptance: Antecedents in a technology acceptance model, *Journal of Business Research*, 62, 565–571
8. Halaweh M., and Fidler C. (2008) Adoption of electronic payment systems in ecommerce websites within Jordan. *IADIS Multi-conference on Computer Science and Information Systems*, 71-77.
9. Ho S.M and Ng V.T.F. (1994) Customers' risk perceptions of electronic payment systems, *International Journal of Bank Marketing*, 12, 8, 26 – 38.
10. Hung S., Chang C., and Yu T. (2006) Determinants of user acceptance of the e-Government services: The case of online tax filling and payment system. *Government Information Quarterly*, 23, 1, 97 – 122.
11. Hwang Y., and Kim D.J. (2007) Customer self-service systems: The effects of perceived web quality with service contents on enjoyment, anxiety, and e-trust, *Decision Support Systems*, 43, 3, 746-760.
12. IDC (2008) IDC finds more of the world's population connecting to the internet in new ways and embracing Web 2.0 activities in 2008.
13. Jarvenpaa S. L., Tractinsky N. and Vitale M. (2000) Consumer trust in an internet store, *Information Technology and Managem*ent, 1, 45-71.
14. Kim C., Tao W., Shin N., and Kim K. (2010) An empirical study of customers' perceptions of security and trust in e-payment systems. *Electronic Commerce Research and Applications*, 9, 1, 84 – 95.
15. Kim D.J, Ferrin D.L., and Rao H.R. (2008) A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents by, *Decision Support Systems*, 44, 544–564.
16. Loch K. D., Straub D. W., and Kamel S. (2003) Diffusing the internet in the Arab world: The role of social norms and technological culturation. *IEEE Transactions on Engineering Management* Vol. 50, No 1, pp. 45-63.
17. Ramayah T., Ling C.Y., Suki N.M. and Ibrahim A. (2005) Determinants of intention to use an online bill payment system among MBA Students, *E-Business*, 9, 80 – 91.
18. Rigopoulos G., and Askounis, D. (2007) A TAM framework to evaluate users' perception towards online electronic payments, *Journal of Internet Banking and Commerce, 12*, 3, 1-6.
19. Rouibah, K., and Abbas H. (2010) Effect of personal innovativeness, attachment motivation and social norms on the acceptance of camera mobile phones: An empirical study in an Arab country. *International Journal of Handheld Computing Research*, 1, 4, 41 – 62.
20. Schaupp L.C., Carter L., and McBride M.E. (2010) E-file adoption: A study of U.S. taxpayers' intentions. Computers in Human Behavior, 26, No 4, pp. 636-644.
21. Schierz Paul Gerhardt, Schilke, Oliver, and Wirtz, Bernd W. (2009) Understanding consumer acceptance of mobile payment services: An empirical analysis. *Electronic Journal Research and Applications*, 9, 209 – 216.

22. Stroborn K., Heitmann A., Leibold K., Frank G. (2004) Internet payments in Germany: A classificatory framework and empirical evidence. Journal of Business Research 57; 1431– 1437.
23. Teo T. S.H., and Liu J. (2007) Consumer trust in e-commerce in the United States, Singapore and China; *Omega*, 35, 1, 22-38.
24. Tsiakis T., and Sthephanides G. (2005) The concept of security and trust in electronic payments. *Computers & Security*, 24, 1, 10-15.