

THEORIES AND HYPOTHESIS THAT EXPLAIN THE USAGE OF E- DELIVERY SERVICES

Yasir Abdullah ALzaydi¹, Mohammad Alzubi², Abdoulrahman Al jounaidi³, Zakarya Mohsen Muthanna Mohammed⁴

Al-Madinah International University, Malaysia

Abstract

In the new digital era, electronic commerce is a modern industry with an increasing number of Internet users worldwide. The technological development of the Internet as a prerequisite for e-commerce certainly took place quickly and robustly. E-commerce is regarded as the most effective form of trade because of its low cost and simplicity. It should be noted that, as the Internet increases competition, lower prices and more meaningful options are available to consumers. This research aims to identify theories that explain THE USAGE OF E- DELIVERY SERVICES , And from that he reached In particular, theories which cover IT issues and IT issues, and the importance of information technology, have been clarified.

Keyword: Factors, E-Delivery, Services, Usage

1. RESEARCH BACKGROUND

The literature on electronic commerce analyzed factors that influence the use of online shopping (Chang et al. 2005). Electronic commerce factors may be broken down into (a) user features, (b) platform features, (c) site or application features, (d) provider / organization, (e) situation factors, and (f) product / service features.

In terms of value, goods and services associated with high market commitment are less susceptible to online purchase than goods and services without these features (Black et al. 2002; Mayo et al. 2006). Although it is hypothesized in multiple studies that 'priced products / services are less often consumed.' The empirical evidence of the relation was found by Phau and Poon (2000), but it was unable to show Vijaya (202) for this.

Secondly, its addictiveness for the online plats can be affected by the "ability to determine product/service

efficiency" (De Figueiredo 2000). Tangible goods, as well as highly 'complex' products and services (Fenech and O'Casey 2001), are less suitable for online shopping. With regard to tangibility, for instance, Phau and Poon (2000, p103) argue that "The uniqueness of the web is that only two of our 5 senses can be replicated in practice: vision and sound. Items advertised on the Web cannot smell, feel or taste. "Standard products and services' empirical findings are non-conform, i.e. low differentiation: although Elliot and Fowell (2000) positive findings of 'standard products and services' for online shopping amenities, Phau and Poon (2000) had the opposite impact.

Parasuraman (2000) proposed that the technology should be ready to take into account the latest appropriate technology. Research has revealed the obvious strong predictors of customer behaviour by engines such as confidence, creativity and inhibitors as fear and discomfort. Subsequently, in a particular way, other studies used 1.0. The new TPR index, including cloud computing, mobile commerce and social media, has been updated by Parasuraman and Colby (2015) by altering certain measures.

SSTs have been described by Meuter et al. (2005) as "technological interfaces which allow customers to offer service without any direct-service station's involvement." Rowley (2006) reviewed previous research in the field of electronic services and self-service technology. Therefore, the self service packages are different from the regular option as an alternative to the home delivery service. For example, without having to meet the courier consumers can receive parcels from their office or online shop.

The goal of this study is to evaluate the potential background to artificial smart devices in service provision by working on a new UTAUT model to tackle

research issues in a good way. The next study aims to accomplish the objectives:

1. To identify the effects of Performance expectancy (PE), social influence (SI), Facilitating Conditions (FC), effort expectancy (EE), Trust Factor (TF), and Culture (C) on the usage behavior of e-delivery services.
2. Identifying the impact of usage activity on the ongoing use of e-services.
3. To identify the moderating effect of demographic factors (education and age) on Performance expectancy (PE), social influence (SI), Facilitating Conditions (FC), effort expectancy (EE), Trust Factor (TF), Culture(C), variables with e-delivery services.

2.LITERATURE REVIEW:

Literature in this field has provided us with several acceptability models and theories covering certain IT and information technology problems in particular: (a) Reasoned Action Theory (TRA) (b) Planning Behavior Theory (TPB), (c) Technological Model Acceptance (TAM) (D) TAM extension, or so called TAM 2, (a) (e) The theory of innovation in diffusion (IDT), (f) TAM and TPB (C- Tam-TPB), (g) Motivational Model (MM), (h) PC-Usage Model (MPCU), I Social Cognitive Theory (SCT), and (j) Unified Acceptory and Technology Model Theories, and (m) (UTAUT).

2.1. Theory of Reasoned Action (TRA)

Fishbein & Ajzen (1975), as cited by Sheppard et al. (1988), established the theory of reasoned behaviour in form of a model analysis of behavioural purposes and not actual use (TRA). In assessing behavioural intent with the four determinants (a) attitude, (b) behavioural intention, (c) actual use and (d) subjective norms, TRA is one of the most frequently used models in the case of Sheppard et al. (1988). In the sense of the TRA, actual use, as Norman and Smith (1995) have pointed out, is not precluded by the intention to behave but by a consumer approach. In the meantime, the attitude and subjective standards of users are controlled (Ajzen & Fishbein, 1975).

In addition, the user's attitude depends on the individual's convictions of the results of the behaviour. It is also a sense of action of a person, and user

confidence is indicated in the subjective standard in respect of another person's views on whether or not they perform a specific activity (Ok & Shon, 2006). Figure 1 shows the model scheme together with its components.

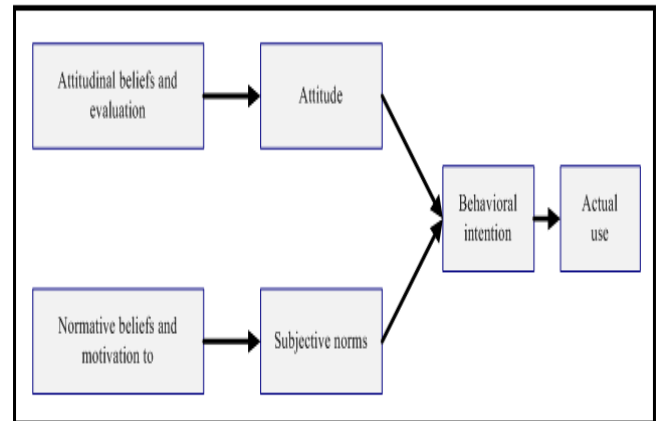


Figure 1: Theory of Reasoned Action, Ajzen (1991)

TRA has used its research in Korea, Ok and Shon (2006), which enables the banking business to gain a competitive edge. TRA is a good measure for people wishing to use internet banking in several social studies. This same study is found (2006). TRA has been a good step. However, a comparison between TRA and Expected Behavior Theory (PTB) found that TPB is higher (higher capacity) than TRA when analysing the individual's intention to use.

Barki and Benbasat (1996) subsequently used TRA in his study to examine information system acceptance, and it was found that TRA was a powerful tool for measuring the academic acceptance of the information system. The latter was also one of the main models for acceptance of IT in companies (Silva & Dias, 2007). Furthermore, Ramayah et al. (2009) have used TRA to analyse investors' intention of using Malaysia's online stock to determine the factors. In the literature reviewed for the acceptance of information systems several TRA vulnerabilities were also identified. There is no doubt that many other factors may affect users' actions using IT. These considerations provide e-services with understanding as well as subjective standards and behaviours. TRA overlooked the ambiguity and the unique circumstances which could influence and use technology (Jaeger & Thompson, 2003; Khan et al., 2010a, 2010b, 2012).

2.2. Theory of Planned Behaviour (Tpb)

The principle of expected behaviour (TPB) was a broader version of TRA, which can help further to increase the risk of willful behaviour. Additional variables like behaviour regulation complement the model. Referring to the comfortability factor; this applies to the understanding of an individual's ability to perform such behaviour. The facilities available and the services recorded in Taylor and Todd's (1995) work also lead to the person's recognised actions with respect to the facilities.

Multiple behaviour tests are available (Ok & Shon, 2006). They include: (i) context, (ii) factors facilitating, and (iii) resources. The implementation of the Planned Conduct Theory (TPB) in IT and communication technology was particularly comprehensive during the assessment of many activities. And not only that, the TPB model explains how a person completely controls his/her actions. In their analysis in Korea, Ok and Shon (2006) the authors investigated acceptance of internet banking and confirmed that TPB could predict such acceptance. According to the results. In other words, the TPB is much better than the TRA. Meanwhile, in analysing shoppers' usage of the ecommerce Internet site, both Song and Zahedi (2001) have used theory of expected actions and found that TPB is more suited to the type of information collected about shoppers' contacts with the ecommerce websites. The TPB model does not, however, permit the use of IT, in the manner of the TRA, to be influenced by civil wars and abuse.

2.3. Motivational Model (Mm)

The motivational paradigm is applied to the IT system by Davis et al (1992). In interpreting certain actions this model measures the psychological motives of individuals. The individual's action is measured in particular by analysis of the inner and outer motivation. Again, the drive relates to the level that forces consumers to carry out certain actions, because there is no other motivation than their personal activity (Venkatesh et al., 2003). In many academic projects in various fields and contexts, the MM was used as a well-accepted model as a framework for research. De Sevin and Thalmann have investigated the factors that affect

virtual human design using MM (2004). In the study of virtual persons, the research found MM an important hypothesis. In addition, Ramayah et al. (2003) adapted the MM to examine the effect of Malaysia on Internet use of buildings both inherent and extrinsic. Although perceived (extrinsic) utility is more important than motivating internet user influences, the authors found that perceived pleasure significantly governs the internet. However, many researchers in certain fields have analysed and taken MM into account as a paradigm which, in spite of its defects, concentrates exclusively on the characteristics of technology. This is because the inherent and external motivations are not the only factor to determine a user's intent to use IT. As can be seen in other models, the lack of measurement of conflict and violence between users is a weakness of this model.

2.4. Extension of Tam (Tam2)

In order to provide further explanation on the purpose and meaning of use of the cognitive tool mechanism and of its social impact process, TAM has been extended to Davis and Venkatesh (2000) and TAM2. In the process of social influence, three factors influence individual behaviour. The procedure is aimed at validating the technology recipient's refusal or approval. The three variables below are combined and explained.

The first element is the subjective standard. Lee et al. (2003) points out that this applies to a consumer who trusts that technology is of value to others. The second factor is an image of the perceptual level that improves the image or status of an individual through the use of a certain system. The third factor is that the consumer is discreet when it comes to implementing a certain system voluntarily (Moor & Benbasat 1991). This model was deliberately designed to cover the weakening of TAM by incorporating the subjective standards into the original TAM construction as a usability and intention to use an information system. (i.e. non-inclusion of social influences) In TAM2 three structures, namely perceived utility and perceived usability and subjective norm, were argued as factor factors for behavioural purposes, and also represent social influence. These three buildings also found their place indirectly in this study. As has been mentioned previously, efficiency and energy demand were the causes of perceived value and ease of use, while society affected the arbitrary expectations.

3. HYPOTHESIS DEVELOPMENT

A hypothesis model must be established to clarify the acceptability of people and the use of E-services in the region and to forecast it. With regard to modelling, UTAUT will establish a relationship of belief-intention-behavior. This relationship in particular postulates the immediate application of continuous e-compliance (Venkatesh et al., 2003). The following hypothesis is thus established:

H1: Use Behavior to use E- Services has an effect on Continued Usage Intention of E- Delivery

This work seeks to examine the public acceptance aspects of e-services by analyzing the goal and aim of the person of using e-services. This concept is chosen because this research seeks to explore the level of acceptance and the ongoing use and behavior evidence to accomplish this. Another justification for using these data is that the Continued Use Purpose data indicates that it will continue to be useful in the future. As Parthasarathy and Bhattacharjee (1998) say, using online services means continued adoption of services and this study uses a system of purposes in addition to using the measures to determine e-service acceptance by individuals.

The model used in this study extends the UTAUT concept of belief through the inclusion of three more constructs namely, Performance expectancy (PE), social influence (SI), social influence (SI), Facilitating Conditions (FC), effort expectancy (EE), Trust Factor (TF), Culture (C), Use Behavior (UB) and Continued Usage Intention (CUI) and also Moderator Variables (MV) namely education and age. this study develops the following hypotheses:

H2: The Performance Expectancy of E- Delivery has a direct effect on Use Behavior to use E-services.

H3: The Social Influence of e-services has a direct effect on Use Behavior to use E- Delivery.

H4: The Facilitating Conditions of e-services has a direct effect on Use Behavior to use E- Delivery .

H5: Effort Expectancy has a direct effect on Use Behavior to use E-services.

H6: Trust Factor has a direct effect on Use Behavior to use E-services.

H7: Culture has a direct effect on Use Behavior to use E-services.

H8: The influence of culture (C) on Use Behavior to use e-services in Jubail is moderated by Education.

H9: The influence of Trust Factor (TF) on Use Behavior to use E- Services in Jubail is moderated by Education.

H10: The influence of Effort Expectancy (EE) on Use Behavior to use E- Services in Jubail is moderated by Education.

H11: The influence of Facilitating Conditions (FC) on Use Behavior to use E- Services in Jubail is moderated by Education.

All hypotheses are interwoven, and the model recommended in this work is based on the building blocks. The proposed research model is the Model for the Acceptation of E-Delivery and is shown in section 2.9.

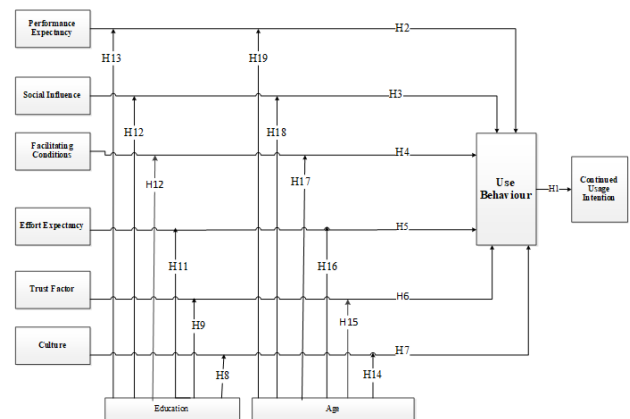


Figure 2 : CONCEPTUAL FRAMEWORK

4. DATA ANALYSIS

We also omitted three elements on the basis of our analysis of reliability and validity. The remaining elements range from 0,759 to 0,855 in the Cronbach alpha coefficients. All these alpha coefficients are greater than the minimum value 0.7. The results show tremendous trustworthiness (Nunnally, 1994).

We used the partial least squares (PLS) approach for evaluating our model among all methods for structural equations, including Amos and LISREL. The PLS has certain advantages compared to others, including less metric scale constraints, sample sizes, and the distribution of raw data (Urbach and Ahlemann, 2010; Hair et al., 2012). To check our concept, we have used Smart PLS 3 bootstrapping.

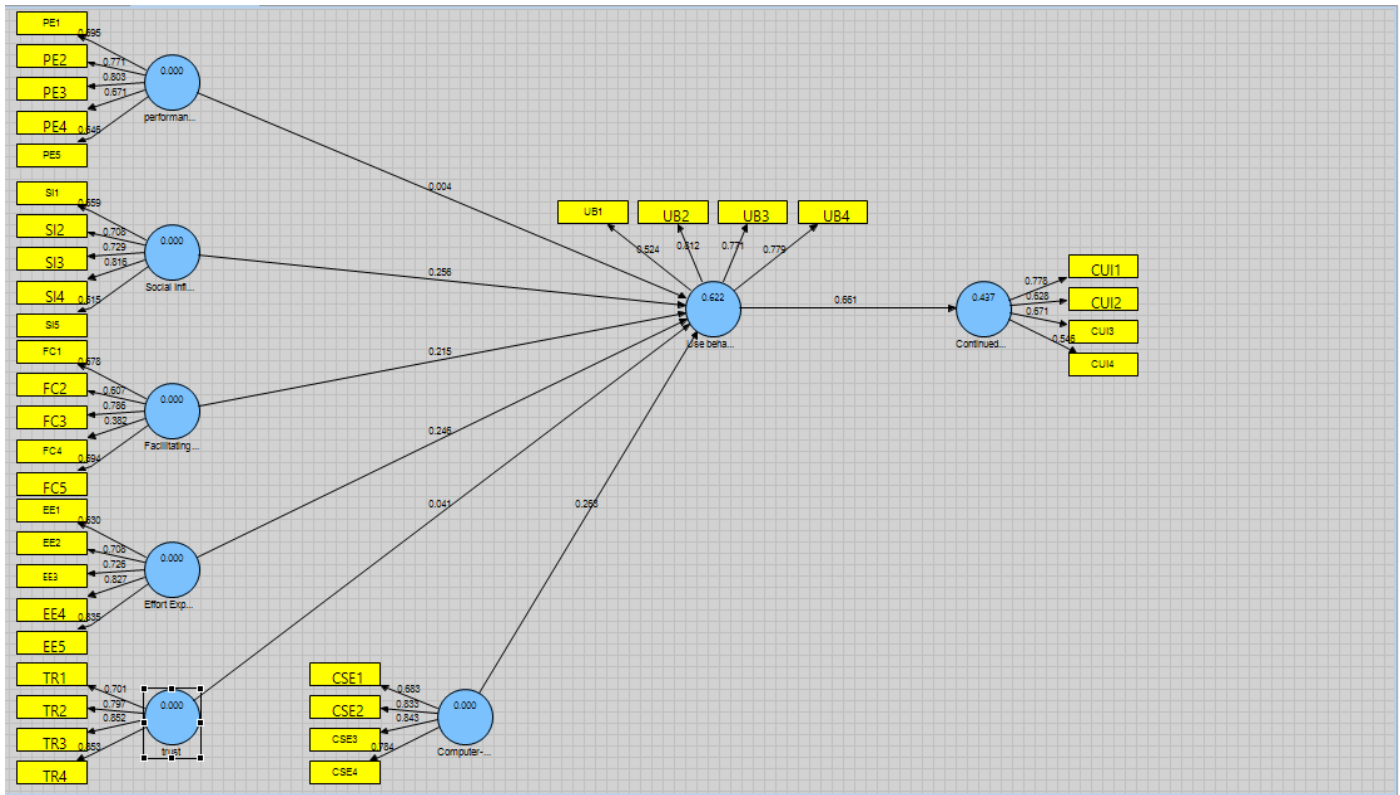


Figure 3: Original Study Model

5. HYPOTHESES TESTING

The last step in PLS-SEM is the checking of the hypothesized relations. For this reason the researcher has performed the PLS

algorithm and Smart PLS 2.0 3 M bootstrapping algorithm. Although path coefficients are extremely important in PLS analysis, Hair et al. (2011) confirmed that the hypothesis of previous paths should be refused in the situation where paths are non-significant or where signs are anticipated. At the other hand the trigger relationship predicted is empirically confirmed in cases where large paths follow the hypothesized course. In addition, the authors indicated the value of increasing track coefficient can be assessed by applying the bootstrapping method similar to the weight and loading of the indicators.

In the assessment of path-coefficients the use of bootstrapping method involves the smallest bootstrap of 500 and cases should be identical with the number of observations in the initial sample (Winnie, Poh-Ming Wong, 2014; Winnie & Ramayah, 2015; Sumo & Regien,

2015; Lorenzo-Romero & Carlota, 2014; Henseler, Jörg, 2012; Monecke & Armin, 2012; Rubel & Mohammad, 2014; Iivari & Juhani, 2005).

Moreover, the important T-values for double-decker testing tend to be 1.65 (10% mean), 1.96 (5% significance), and 2.58 (1% significance). (1% meaning). In this line the investigator set 500 re-samples of bootstrap cases with a replacement number equal to the initial sample number (400). This leads to defects and statistics.

Hypothesis 1: Use Behavior to use E- Services has an effect on Continued Usage Intention of E- Delivery.

The result revealed that the proposed association between use behavior and continued usage intention shows association ($\beta = 0.639$, $t = 16.587$), and hence, the hypothesis was supported.

Hypothesis 2: The Performance Expectancy of E-Delivery has a direct effect on Use Behavior to use E-services.

The result revealed that the proposed relationship between Performance Expectancy of E- Delivery and Use Behavior to use e-services did not show any association

($\beta = 0.0492$, $t = 1.196$), and hence, the hypothesis was not supported.

Hypothesis 3: The Social Influence of e-services has a direct effect on Use Behavior to use E- Delivery.

The Social Influence of e- services shows association with a direct effect on Use Behavior to use e-delivery services ($\beta = 0.198$, $t = 2.697$), and hence, the hypothesis was supported.

Hypothesis 4: The e-services enabling conditions specifically impacts the use of e-delivery behaviour.

The result revealed that the proposed relationship between Facilitating Conditions of e- services has a direct effect on Use Behavior to use e-delivery services ($\beta = 0.276$, $t = 5.492$), and hence, the hypothesis was supported.

Hypothesis 5: Effort Expectancy has a direct effect on Use Behavior to use E-services.

The result revealed that The Effort Expectancy has a direct effect on Use Behavior to use e- services ($\beta = 0.237$, $t = 4.917$), and hence, the hypothesis was supported.

Hypothesis 6: Trust Factor has a direct effect on Use Behavior to use E-services.

The result revealed that The Trust Factor did not show any association with Use Behavior to use e- services ($\beta = 0.0609$, $t = 1.191$), and hence, the hypothesis was not supported.

Hypothesis 7: Culture has a direct effect on Use Behavior to use E- services.

The result revealed that The Culture has a direct effect on Use Behavior to use e- services ($\beta = 0.291$, $t = 4.763$), and hence, the hypothesis was supported.

Hypothesis 8: The influence of culture (C) on Use Behavior to use e-services in Jubail is moderated by Education. $t = 2.208$ P-value = 0.037 significant since t-statistics is higher than 1.96.

Hypothesis 9: The influence of Trust Factor (TF) on Use Behavior to use E- Services in Jubail is moderated by Education.

The influence of Trust Factor (TF) on Use Behavior to use e- services in Jubail is moderated by Education. $t =$

2.1718 P-value = 0.03719 significant since t-statistics is higher than 1.96.

Hypothesis 10: The influence of Effort Expectancy (EE) on Use Behavior to use E- Services in Jubail is moderated by Education.

The influence of Effort Expectancy (EE) on Use Behavior to use e- services in Jubail is moderated by Education. $t = 2.3018$ P-value = 0.0208 significant different since t-statistics is higher than 1.96.

Hypothesis 11: The influence of Facilitating Conditions (FC) on Use Behavior to use E- Services in Jubail is moderated by Education.

The influence of Facilitating conditions (FC) on Use Behavior to use e- services in Jubail is moderated by Education. $t = 0.84307$ P-value = 0.4091 Not significant different since t-statistics is lower than 1.96.

6.CONCLUSION

Chapter recorded the findings in this analysis. It also showed results on the reaction and features, methodologies for improving measurements and reviewing, among other things, the validity and reliability of the instrument tests. The statistics generally showed that respondents in the study have knowledge and strong experience of electronics in the Kingdom of Saudi Arabia. More specifically, the findings of the PLS-SEM study derived from the measuring model, structural model and hypothesis testing have been discussed in this section. Lastly, as indicated in the various analysis above, 1 of 11 key hypotheses were supported for being significant.

REFERENCE

- [1] Chang, M., Cheung, W., and Lai, V. 2005. "Literature Derived Reference Models for the Adoption of Online Shopping," *Information & Management* (42:4), pp. 543-559.
- [2] Black, N.J., Lockett, A., Ennew, C., Winklhofer, H., and McKechnie, S. 2002. "Modelling Consumer Choice of Distribution Channels: An Illustration from Financial Services," *International Journal of Bank Marketing* (20:4), pp. 161-173.
- [3] Mayo, D., Helms, M., and Inks, S., 2006. "Consumer Internet Purchasing Patterns: A

- Congruence of Product Attributes and Technology," *International Journal of Internet Marketing and Advertising* (3:3), pp. 271-298.
- [4] De Figueiredo, J., 2000. "Finding Sustainable Profitability in Electronic Commerce," *Sloan Management Review* (41:4), pp. 41-54.
- [5] Fenech, T., and O'Cass, A., 2001. "Internet Users' Adoption of Web Retailing: User and Product Dimensions," *Journal of Product & Brand Management* (10:6), pp. 361-381.
- [6] Phau, I., and Poon, S. 2000. "Factors Influencing the Types of Products and Services Purchased over the Internet," *Internet Research: Electronic Networking Applications and Policy* (10:2), pp. 102-113.
- [7] Elliot, S., and Fowell, S., 2000. "Expectations Versus Reality: A Snapshot of Consumer Experiences with Internet Retailing," *International Journal of Information Management* (20:5), pp. 323-336.
- [8] Ramayah, T., Rouibah, K., Gopi, M., & Rangel, G. J. (2009). A decomposed theory of reasoned action to explain intention to use Internet stock trading among Malaysian investors. *Computers in Human Behavior*, 25(6), 1222-1230. doi: 10.1016/j.chb.2009.06.007
- [9] Berry, L. L., Bolton, R. N., Bridges, C. H., Meyer, J., Parasuraman, A., and Seiders, K. (2010), "Opportunities for innovation in the delivery of interactive retail services," *Journal of Interactive Marketing*, Vol. 24 No. 2, pp. 155-67.
- [10] Thompson, R. L., Higgins, C. A., & Howell, J. M. (1991). „Personal Computing: Toward a Conceptual Model of Utilization". *MIS Quarterly*, 15(1), 125-143.
- [11] Song, J., & Zahedi, F. i. (2001). Web Design in E-Commerce: A Theory and Empirical Analysis. Paper presented at the Twenty-Second International Conference on Information Systems.205-2020.
- [12] Taylor, S. & P. Todd (1995). „Assessing IT Usage: The Role of Prior Experience". *MIS Quarterly* 19(4). 561-570.
- [13] Malhotra, Naresh John Hall, Mike Shaw, & Oppenheim, P. (2006). *Marketing Research*.