THE ROLE OF FACILITATING CONDITION AND SOCIAL INFLUENCE TOWARDS CONTINUANCE INTENTION TO USE E-LEARNING

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Abstract—The success of an e-learning service depends on both its initial adoption (acceptance) and its continued usage. Given its vital role in today's education processes, uncommon, inappropriate, and ineffective long-term use of information system (e-learning) often contributes to corporate failures. Current study proposed two determinants based on Unified Theory of Acceptance and Use of Technology (UTAUT) to explain the intention to continue using e-learning. The objective of this research is to analyze the impact of social influence and facilitating conditions on intention to continue e-learning usage among Malaysian public higher education students. Stratified random sampling was used in this study with a total sample of 416 university students. Research model is developed and tested using questionnaires. Data were analyzed using the Statistical Package for the Social Sciences Ver. 19 (SPSS 19) and Partial Least Squares (PLS). The results indicate that social influence (B = 0:41, p < 0.01) and facilitating condition (β = 0.44, p < 0.01) were positively related to continuance intention explaining a total of 58% variance. Therefore, this study is able to improve the understanding of the factors influencing continuance intention to use e-learning.

Index Terms— Continuance intention, e-learning, partial least square, social influence, facilitating condition

I. INTRODUCTION

The concept of e-learning is based on technology education. According to [20], the concept of e-learning is aided learning encompasses all forms of technology. The learning process will be more fun, more flexible and have better learning effects [21]. E-learning has been implemented in Malaysia as early as the 1980's, and in turn influence the process of learning and teaching especially higher education institutions. However, the study found that the percentage of e-learning among students is relatively low as compared to the 77 per cent of lecturers where only 63.4 percent of them were students [7]. Hence, the result shows that something going wrong as the government has been spending a lot of e-learning facilities. If the facility is not fully utilized, then it is considered as a waste [2]. Thus current study was aim to determine the factors that influence students to continue using e-learning system. This study was conducted to answer the research questions on what factors that affect the continuation of the use of elearning systems.

II. SOCIAL INFLUENCE

Social influence is the degree of an individual feel important ones which believe that she or he should use the new system [19]. Past studies have shown that factors of social

influence and facilitating conditions affect the user to continue the use of the technology.

Studies [3] have shown empirically the impact of social influence consumers to make use of web 2.0. Study [5] and [10] also proved that social influences have an influence on the continuation of the use of e-learning systems. Therefore this study hypothesizes that:

H1: There is positive relationship between social influence and continuance intention.

III. FACILITATING CONDITION

Facilitating condition is the belief of the existence of aspects and resources that will assist students in learning activities that use e-learning. Previous studies that tested the relationship between facilitating conditions and intention to continue the use prove that the relationship is positive and significant [5]; [6]; [13]; [17], Hone, and Liu, 2013). Thus the study hypothesizes that:

H2: There is positive relationship between facilitating conditions and continuance intention

IV. CONCEPTUAL FRAMEWORK

Based on the discussion of the literature review the researchers have developed a research model as shown in Figure 1.



Figure 1: conceptual framework

V. METHODOLOGY

Number of samples in the actual research is 427 people. Two universities were selected based on respondents who have used e-learning. Because this study focuses on the intention to continue as a dependent variable, then the respondent should consist of respondents who have had experience in using e-learning [14]. The questionnaire used was adapted from the study of previous research relevant to this study. Because the instruments used have to meet the aspects of validity and reliability, the aspect of content validity were met [15]. In this study, social influence and facilitating conditions were adapted from [19].

PLS has the advantage of being able to model multiple dependent (complex model)[12]; [18], prediction oriented research [9] The stability of PLS parameter estimates in the presence of non-normally distributed data ([1, 22]

VI. FINDINGS AND DISCUSSION

Reliability and validity of the measurement model is proved by the internal consistency, convergent validity and discriminant validity.

FIGURE 1: MEASUREMENT MODEL

Latent	No of. item	Mean	standard deviation	Composite reliability	AVE	Cronbach Alpha
Facilitating condition	3	3.45	0.73	0.91	0.78	0.86
Social influence	3	3.46	0.77	0.87	0.70	0.79
Continuance intention	3	3.58	0.77	0.94	0.86	0.92

The tests prove the convergent validity is satisfactory for the measurement model and meet the standards set by previous researchers where the AVE must be greater than 0.5 [8], Furthermore, a composite reliability greater than 0.7 is considered adequate [4] and Cronbach alpha value must exceed 0.7 [11]. For discriminant validity, square root of AVE should be greater than the correlation between variables [8]. As a summary, see Table 1 and Table 2.

FIGURE 2: DISCRIMINANT VALIDITY

Latent	Continuance intention	Social influence	Facilitating condition
Continuance intention	0.92		
Social influence	0.68	0.83	
Facilitating condition	0.70	0.63	0.88

After an evaluation of the measurement model, the structural model was evaluated to draw conclusions regarding the relationships between constructs. The weights of the relationships between the latent exogenous variables and the latent endogenous variable show the strength of relationship between them. Values close to +1 or -1 express a strong relationship and those close to zero, a weak one, while the contribution of all independent variables on the dependent variable is determined by the value of R^2 . [4] states that the value of R^2 is a strong 0.67, 0.33 is moderate, 0.19 is weak.

 R^2 values refer to the percentage of variance in the model and represents the power of a predictor (predictive power). The results of the relationship and the t value are

www.ijtra.com Volume-2, Special Issue 1 (July-Aug 2014), PP. 12-14 of shown in Table 3. The R^2 scores for the dependent variables in the model were 58%.

hypothesis	β	t-value
H1 : There is positive relationship between social influence and continuance intention	0.41	10.01
H2 : There is positive relationship between facilitating condition and continuance intention.	0.44	10.69

The results for the first hypothesis shows that there is a positive relationship between social influence and continuance intention. The results were in line with the findings of [16] and [3].

The findings for the second hypothesis was also found to be positive and significant. These findings thus support the findings of [19].

These findings thus have implications for the parties involved in improving e-learning system. These results provide useful guidelines for both e-learning system developers and practitioners to appropriately design and implement e-learning systems.

VII. LIMITATION

This study uses only two variables of UTAUT theory. Future studies should use full UTAUT theory to explain more variance in the model.

VIII. CONCLUSION

Based on these findings, the variable social influence and facilitating conditions are important factors in ensuring the acceptance of e-learning technology among public university students in Malaysia. This shows that the students will use elearning technology if they found that their colleague is also using the same technology.

REFERENCE

- Aibinu, A. A., dan Al-Lawati, A. M. (2010). Using PLS-SEM technique to model construction organizations' willingness to participate in e-bidding. *Automation in Construction*, 19(6), 714-724.
- [2] Bhattacherjee, A. (2001). Understanding Information Systems Continuance: An Expectation-Confirmation Model. *MIS Quarterly*, 25(3), 351-370.
- [3] Chen, S.-C., Yen, D. C., dan Hwang, M. I. (2012). Factors influencing the continuance intention to the usage of Web 2.0: An empirical study. *Computers in Human Behavior*, 28(3), 933-941.
- [4] Chin, W. W. (1998). The Partial Least Squares Approach to Structural Equation Modeling. *Modern methods for business research*, 295.
- [5] Chiu, C.-M., dan Wang, E. T. G. (2008). Understanding Webbased learning continuance intention: The role of subjective task value. *Information dan Management*, 45(3), 194-201.
- [6] Cho, V., Cheng, T. C. E., dan Lai, W. M. J. (2009). The role of perceived user-interface design in continued usage intention of self-paced e-learning tools. *Computers & Education*, 53(2), 216-227.

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www.ijtra.com Volume-2, Special Issue 1 (July-Aug 2014), PP. 12-14

- [7] Embi, M. A. (2010). Amalan, keberkesanan & cabaran pelaksanaan e-pembelajaran di IPT Malaysia: Kementerian Pengajian Tinggi Malaysia.
- [8] Fornell, C., dan Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- [9] Hair, J. F., Ringle, C. M., dan Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *The Journal of Marketing Theory and Practice*, 19(2), 139-152.
- [10] Lee, M.-C. (2010). Explaining and predicting users' continuance intention toward e-learning: An extension of the expectation– confirmation model. *Computers & Education*, 54(2), 506-516.
- [11] Nunally, J. C., dan Bernstein, I. H. (1994). Psychometric Theory. New York: McGraww-Hill.
- [12] Ohana, M., dan Meyer, M. (2010). Should I stay or should I go now? Investigating the intention to quit of the permanent staff in social enterprises. *European Management Journal*, 28(6), 441-454.
- [13] Rahmat, M. K., dan Au, W. K. (2013). Visual Art Education Teachers' Continuance Intention to Integrate ICT: A Model Development. *Procedia - Social and Behavioral Sciences*, 90(0), 356-364.
- [14] Ramayah, T., Ahmad, N. H., dan Lo, M.-C. (2010). The role of quality factors in intention to continue using an e-learning system in Malaysia. *Procedia - Social and Behavioral Sciences*, 2(2), 5422-5426.
- [15] Sanchez-Franco, M. J., dan Roldán, J. L. (2010). Expressive aesthetics to ease perceived community support: Exploring

- personal innovativeness and routinised behaviour as moderators in Tuenti. Computers in Human Behavior, 26(6), 1445-1457.
 Shin, D. H., Shin, Y. L., Choo, H., dan, Beaom, K. (2011).
- [16] Shin, D.-H., Shin, Y.-J., Choo, H., dan Beom, K. (2011). Smartphones as smart pedagogical tools: Implications for smartphones as u-learning devices. *Computers in Human Behavior*, 27(6), 2207-2214.
- [17] Tarhini, A., Hone, K., dan Liu, X. (2013). User Acceptance Towards Web-based Learning Systems: Investigating the Role of Social, Organizational and Individual Factors in European Higher Education. *Procedia Computer Science*, 17(0), 189-197.
- [18] Urbach, N., Smolnik, S., dan Riempp, G. (2010). An empirical investigation of employee portal success. *The Journal of Strategic Information Systems*, 19(3), 184-206.
- [19] Venkatesh, V., Morris, M. G., Gordon, B. D., dan Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27(3), 425-478.
- [20] Xin, C. (2009). E-learning Applications and Challenges. Paper presented at the Future Information Technology and Management Engineering, 2009. FITME'09. Second International Conference on.
- [21] Zhang, J., Ma, J., dan Yao, Q. (2011). Application of e-learning in college education. Paper presented at the Computer Science and Service System (CSSS), 2011 International Conference on.
- [22] Zhang, N., Guo, X.-h., dan Chen, G.-q. (2007). Extended Information Technology Initial Acceptance Model and Its Empirical Test. Systems Engineering - Theory & Practice, 27(9), 123-130.