

ANALYSIS OF TECHNOLOGY ACCEPTANCE MODEL (TAM) IN STUDENTS' PERCEPTION TOWARDS BEHAVIORAL INTENTION TO USE E-LEARNING: A CASE STUDY OF A PRIVATE UNIVERSITY IN ERBIL

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Abstract

The main purpose of this study is to analyze the factors influencing consumer's acceptance of electronic learning in private university in Erbil. In this research two factors discussed that will have impact on consumer's acceptance of electronic learning. One of these factors perceived usefulness (PU), according to Davis (1989) perceived usefulness is the degree to which an individual believes that the term of technology, under exploration, will improve her/his efficiency or outcome, and perceived ease of use (PEOU) according to Davis (1989) PEOU is the degree to which an individual believes that using a technology will be easy, clear and simple. The researcher used two independent variable (perceived usefulness and perceived ease of use) to measure the dependent variable which is Factors influencing consumers' acceptance. The quantitative method used to analyze the current study. 120 students were participated in this study. a single regression analysis used, the findings showed that that an increase in students' perceptions of ease of use an electronic learning should lead to increased perceptions of usefulness in an electronic learning, accordingly the first research hypothesis was supported. An increase in the perceived usefulness of an electronic learning will lead to an increasingly positive attitude toward an electronic learning, therefore; the second research hypothesis was supported and finally, an increase in the perceived usefulness of an electronic learning will lead to increases behavioral intention to use electronic learning.

Keywords: TAM, e-learning, private university, Erbil

Introduction:

Technology brought huge revolution in education as it surpasses traditional methods of teaching. According to (Imel, 2002), the advancement in academics and Industry is increasing expeditiously in terms of products in e-learning and favorable chances in domains of training and education. E-learning supplements many challenges that traditional learning faces in terms reduced distance, time and cost. According to (Saade, 2003), numerous Universities encounter lot of difficulties in attaining strategies that prosperous which contains approval of the courses, delivery and effectiveness of courses. Learner attributes and system are exterior variables which have effect on observed usefulness and utilization of system as per the hypothesis as per Pituch and Lee (2006).

Researchers conducted Structural Equation Modeling technique with Macintosh text editor LISREL, they deduced that characteristics of the system were factors which plays key role to comprehended functionality, comprehended simplicity of usage, utilization of e-learning system and TAM which is theoretical model oriented are to be encouraged. According to (Maldonado, Khan, Moon and Rho, 2011), e-learning is delivery of training and education via various technologies which are communication and information based. It is advanced technology electronically to manage, create and deliver content of learning, to enable association and communication among users and providers.

Literature Review:

Online programs for learning will be successful when the students are interested to use and it depends on the contentment of them as per (Brahmasrene & Lee, 2012) though there are many advantages in e-learning. As per (Vonderwell, 2003), students' contentment and online classes affect in negative manner as they fail in getting involved with community and feel lonely. The TAM concentrates on technology and its utilization result, but Social Cognitive

Theory (SCT) adds opinions such as self-efficacy which is significant as per (Gong, et al., 2004). He stated that computer self-efficacy towards web based learning system exhibits positive effect PEOU.

As per (Park, 2009), Technology Acceptance Model (TAM) is popular model that is affiliated to acceptance of technology and its utilization. It exhibits appreciable capacity in understanding and anticipating the behavior Information Technology (IT) users. In 1986, Davis proposed Technology Acceptance Model (TAM) and stated that Perceived Ease of Use (PEOU) concerns to the feeling of users of a particular technology which can reduce the effort and Perceived Usefulness (PU) is feeling of users at their job which can enhance their performance. TAM was a theoretical model to describe and forecast the behavior of IT users according to (Legris, Ingham and Colletette, 2003).

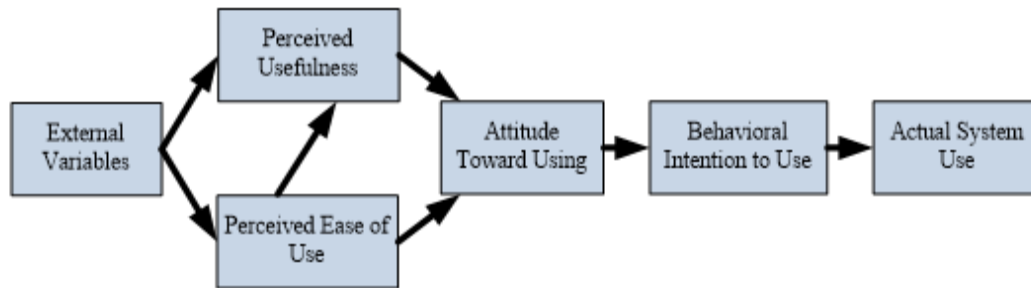


Figure 1-Figure: original TAM (Davis, 1989)

Conceptual framework

Research model

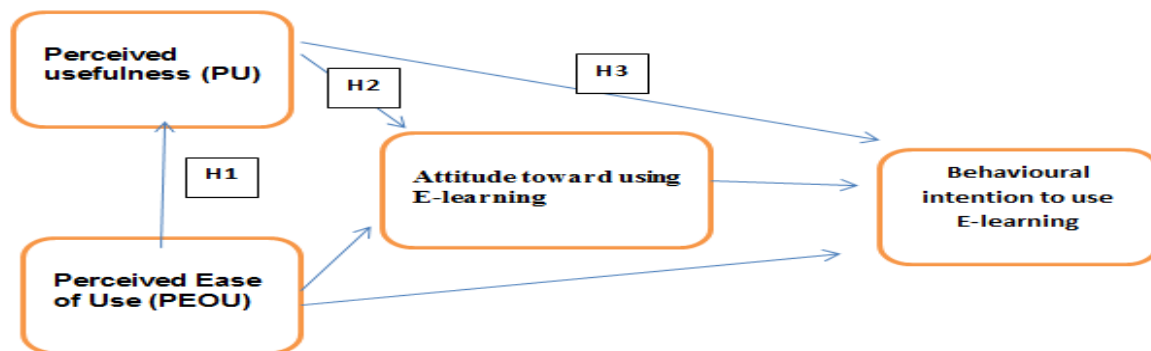


Figure 2-Research model

Research Hypothesis:

Hypothesis 1: Increases in students' PEOU an electronic learning will lead to increased PU in an electronic learning.

Hypothesis 2: Increases in students' PU of an electronic learning will lead to an increasingly positive attitude toward an electronic learning.

Hypothesis 3: Increases in students' PU of an electronic learning will lead to increases behavioral intention to use electronic learning.

Methodology

Research design

The purpose of this research is to investigate technology acceptance model in e-learning. A quantitative method used in order to analyse the current study, the researcher used questionnaire in order to be able to analyse the current study.

Sampling Size and Target Population

A random sampling technique used, where all students had equal chances of being selected for the sample. The study was carried out at Business Administration department at a private university in Erbil. The researcher distributed 145 questionnaires, only 137 questionnaires were received and from 137 questionnaires only 120 questionnaires were completed properly.

Results and Analysis

Table 1-Reliability tests

Factors	Cronbach's Alpha	N of Items
Perceived Usefulness	.832	11
Perceived Ease of Use	.869	8
Attitude Towards using e-learning	.753	3
Behavioural Intention to Use	.743	3

Table (1) shows the reliability analysis for four factors. According to the reliability tests, the researchers found out Cronbach's Alpha for the PU =.832 for eleven items, which are greater than .6 this means that PU's eleven items were reliable for this study. The Cronbach's Alpha for the PEOU =.869 for eight items, which are greater than .6 this means that PEOU's eight items were reliable for this study. The Cronbach's Alpha for the students' attitude towards using e-learning =.753 for three items, which are greater than .6 this means that students attitude's eight items were reliable for this study. The Cronbach's Alpha for the students' behavioural intention to use e-learning =.743 for three items, which are greater than .6 this students' means that behavioural intention to use items were reliable for this study.

Table (2) shows the correlation among four. The value of R between PU and PEOU =.804** which indicates that they are significantly correlated. The value R between PU and attitude towards using e-learning = .796** which indicates that they are significantly correlated. The value of R between PU and behavioral intention to use e-learning = .826** which indicates that they are significantly correlated. The value R between PEOU and attitude towards = .801** which indicates that they are significantly correlated. The value of R between perceived ease of use and behavioral intention to use e-learning = .791** which indicates that they are significantly correlated. The value of R between attitude towards using e-learning and behavioral intention to use e-learning = .782** which indicates that they are significantly correlated.

Regression analysis

The researcher used single regression analysis to analyze the current study. In terms of the first research hypothesis a single regression used (as seen in table 3), with PEOU as an independent variable and PU as the dependent variable.

Table 2-Correlation analysis

		Correlations			
		PU	PEOU	ATTITUDE	Behavioural intention
PU	Pearson Correlation	1	.804**	.796**	.826**
	Sig. (2-tailed)		.000	.000	.000
	N	120	120	120	120
PEOU	Pearson Correlation	.804**	1	.801**	.791**
	Sig. (2-tailed)	.000		.000	.000
	N	120	120	120	120
ATTITUDE	Pearson Correlation	.796**	.801**	1	.782**
	Sig. (2-tailed)	.000	.000		.000
	N	120	120	120	120
Behavioural intention	Pearson Correlation	.826**	.791**	.782**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	120	120	120	120
**. Correlation is significant at the 0.01 level (2-tailed).					

Table 3-Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.723	.230		3.142	.002
	PU	.818	.056	.804	14.694	.000

a. Dependent Variable: PEOU

In terms of the second research hypothesis a single regression used (as seen in table 4), PU as an independent variable and attitude towards using e-learning as the dependent variable.

Table 4-Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.367	.268		1.367	.174
	PU	.926	.065	.796	14.262	.000

a. Dependent Variable: Attitude towards using e-learning

In terms of the third research hypothesis a single regression used (as seen in table 5), with PU as an independent variable and behavioral intention to use e-learning as the dependent variable.

Table 5- Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.838	.224		3.743	.000
PU	.862	.054	.826	15.904	.000

a. Dependent Variable: Behavioural intention to use e-learning

Conclusion:

This research investigated technology acceptance model using learners' acceptance of e-learning technology. Overall, TAM was partially supported. According on data gathered from 120 students, the utility of TAM for explaining acceptance of e-learning technology by students was evaluated. Results showed that increases in students' PEOU an electronic learning will lead to increased PU in an electronic learning, accordingly the first research hypothesis was supported. Increases in students' PU of an electronic learning will lead to an increasingly positive attitude toward an electronic learning, therefore; the second research hypothesis was support and finally, Increases in students' PU of an electronic learning will lead to increases behavioral intention to use electronic learning..

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