ACCEPTING MOODLE BY ACADEMIC STAFF AT THE UNIVERSITY OF JORDAN: APPLYING AND EXTENDING TAM IN TECHNICAL SUPPORT FACTORS

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Abstract

The Technology Acceptance Model's (TAM) extension is applied to identify staff attitudes towards Moodle. Quantitative and qualitative approach to collect the required data done by distributing questionnaires and conducting semi-structural interviews**.**

The results indicate that the perceived ease of use (PEOU) is a more significant barrier in adopting Moodle. This means the instructors tend to use Moodle if they think Moodle is easy to use. (PEOU) refers to the degree to which instructors believe Moodle usage would be free of effort and it would easy to handle. Only 18.8 % of instructors find uploading materials for students using Moodle is easy in opposed to 27.5% of instructors who believe that Moodle is not easy to upload materials. Apparently, 27.5% tend to be neutral and can't decide if Moodle is easy for uploading materials or not.

Keywords: TAM, Moodle, software testing

Introduction

In a world where technology has changed lifestyles, making the use of computers and internet as integral parts of one's life. The education system has also been affected, and teaching and learning has started to lean towards using technology in class. This paper plans to explore the acceptance of university academic staff in using Moodle as their supplementary method of teaching. In order to achieve this, The Technology Acceptance Model's (TAM) will be used to see the various levels of acceptance.

nified Theory of Acceptance and Use of Technology (UTAUT) and Technology Acceptances Model (TAM)

Technology Acceptance Model such as Unified Theory of Acceptance Use of Technology (UTAUT) and Technology Acceptances Model (TAM) all try to explain the degree of acceptance of the use of information technology. These theories assess whether the user will be able to accept these new technologies and user's ability to deal with it. The Technology Acceptance Model helps managers and decision makers to assess the success of the introduction of technology to the organization, and motivate users to accept the systems.

Unified Theory of Acceptance and Use of Technology (UTAUT)

UTAUT has been used and applied by many educational institutions and research to answer one of the most critical questions: What are the user's attitudes towards accepting ICT solution? Regardless of the level of available infrastructures and support administrations, there is a concern as to whether teachers are prepared to integrate available technology into effective lessons for their students.

UTAUT (Figure 1), was formulated by Venkatesh et al (2003), which consists of four main concepts, Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), and Facilitating Conditions (FC). These four main concepts are independent variables which influence dependent variables, behaviorals and usage. Gender, age, experience, and volunteers of system use have indirectly influenced the dependent variables via the four main concepts . Behavioral intention is seen as a critical predictor of technology use (Venkatesh et al., 2003).

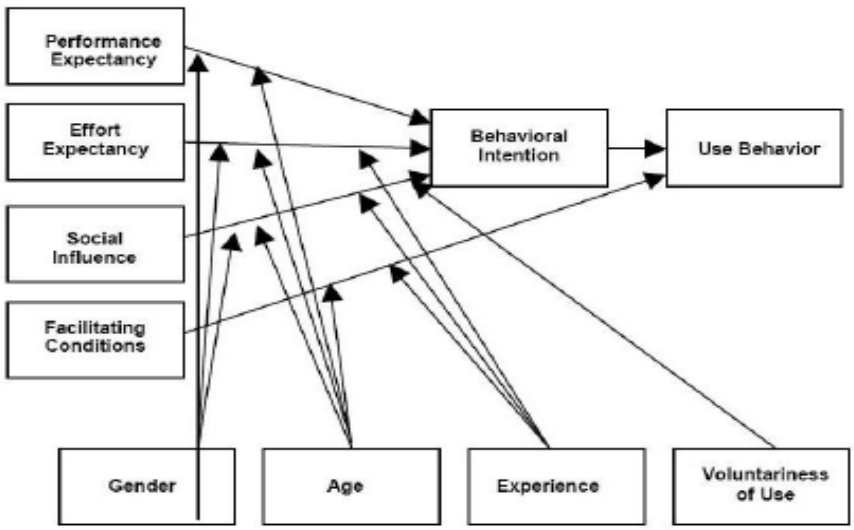

Figure 1: Unified Theory of Acceptance and Use of Technology UTAUT (Venkesh et al 2003)

Performance expectancy: "The degree to which an individual believes that using the system will help him or her to attain gains in job performance" (Venkatesh et al., 2003). Performance expectancy is hypothesized to moderate the influence on behavioral intention by gender and age.

Effort expectancy: "The degree of ease associated with the use of the system" (Venkatesh et al., 2003). Effort expectancy hypothesized to moderate the influence on behavioral intention by gender and age, and experience.

Social influence: "The degree to which an individual perceives that important others believe he or she should use the new system" (Venkatesh et al., 2003). Social influence, hypothesized to moderate the influence on behavioral intention by gender and age, and experience, and volunteers of system.

Facilitating conditions: "The degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system" (Venkatesh et al., p. 2003). Hypothesized to moderate the influence on behavioral intention by age, and experience.

The UTAUT survey was tested by Venkatesh et al. and found to have an R^2 of 70%, indicating that the model explains 70% of the variance in user intentions in order to use information technology (Venkatesh et al., 2003).

Technology Acceptances Model (TAM)

TAM was developed by Bagozzi et al. (1989)under contract with IBM Canada, Ltd in order to understand the factors that affect users to accept the new systems that are mainly PC-based applications in multimedia, and image processing solutions. This would guide the industry to invest in new product development. (Figure 2) illustrative TAM.

Many previous studies have shown and proved that TAM is the most effective model to predict users' acceptance of technology. (Davis, 1993) (Davis et al, 1989). TAM explains the causal link between user's beliefs and user's attitudes, intentions, and the actual usage of the system. User's beliefs consist of the easy usage of a system and its usefulness. TAM's understandability and simplicity became one of the most widely used theories used to examine the influence of those external variables on behavioral intentions (King and He, 2006).

TAM can be used to identify and investigate user acceptance, and factors the effect of accepting e-learning solutions (Sharp, 2006). TAM used by Morris and Dillon, (1997) to identify and investigate user acceptance towards search engines, which is mentioned in Web Applications Area by Sánchez and Roldan, (2005). Also used by Gefen and Straub, (1997) in the area of electronic mail. Selim (2003) applies TAM to investigate student

acceptance of a web-based course, and the result showed that there is a significant relationship between usage and8 ease of use for the web-based course. Ngai et al. (2007) study and investigate the factors behind user acceptance of WebCT in Hong Kong's higher education institutions that extend TAM's model to include technical support factor. The study results reveal that the technical support has influenced directly the feeling of the system that is easy to use. Raaij and Schepers (2008) used extended TAM model called TAM2 model which is produced by Venkatesh and Davis (2000) to study optional users' acceptance and usage of LMS in China. The study proved that the perceived usefulness has a direct effect on the use of LMS.

Through reviewing relevant literature, researchers usually carry one out of two approaches when using TAM: Empirical validation of TAM in context of specific ICT solution, or the extension of the theoretical model of TAM with specific factors.

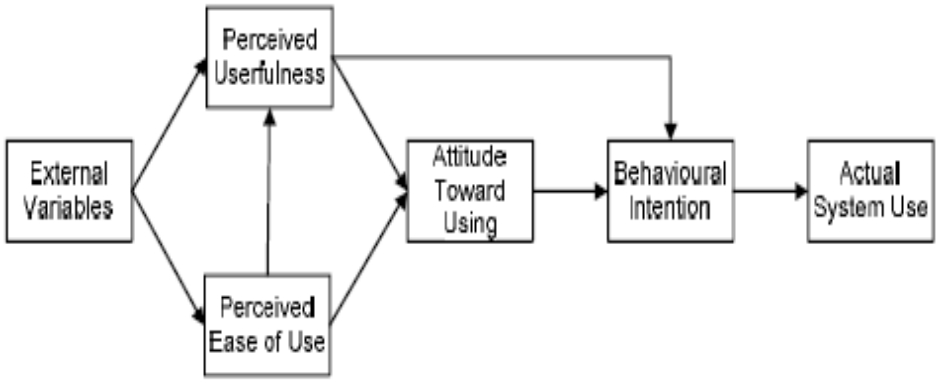

Figure 2: Technology acceptances Model TAM (Bagozzi et al. 1989)

According to Martins and Kallermanns (2004), easy usage and perceived usefulness are considered the main factors in explaining user's acceptance in using new technologies.

Perceived ease of use (PEOU): "The degree to which a person believes that the use of the the particular system would be free of effort." (Davis, 1993).

Perceived usefulness (PU): "The degree to which a person believes that using a particular system would enhance job performance." (Davis, 1993).

Attitude Toward Using (ATU): "A summary evaluation of a psychological object captured in such attribute dimensions as good-bad, harmful-beneficial, pleasant-unpleasant, and likable dislikable."(Ajzen, 2001).

Behavioral intention (BI):" The degree to which a person has formulated conscious plans to perform or not perform some specified future behavior" (Davis, 1993).

Critical evaluation and selection of Technology Acceptances Model (TAM)

The new systems failures are often due to the lack of user acceptance in dealing with them, either because they do not perceive it as beneficial, or because of its complication, and this causes them a lot of trouble in dealing with the system, and thus, the inability to perform their daily tasks as required results in a system failure.

The LMS is one of the most important information communication technologies (ICT), a kind of technology that is used nowadays. The End User is the one who usually faces a problem in not being able to deal with these new technologies due to its innovative and high complexity, and the difficulty of dealing with it. When the employee believes that the use of a particular system would enhance and ensure his career, it would be an important factor to increase the acceptance of any new system, and therefore will lead to a better use for this new technology. This will reflect positively on the performance of work and realize a benefit from the using system.

TAM has been used and applied by many educational institutions and researches to answer one of the most critical questions: What are the user attitudes towards acceptance ICT solution? Regardless of the level of the available infrastructure and support from administration, there is a concern as to whether teachers are prepared to integrate the technology that is available to them into effective lessons for their students. TAM focused in information technology solution, and will be used to answer the following question.

What are the factors that stand behind and affect the acceptance and use of Moodle by academic staff at thr University of Jordan?

Professors and faculty members, use LMS, which is the main core of the Virtual learning environment (VLM), to do multiple functions, such as delivering content to students, assess learning using assignments and quizzes, manage learning content materials, manage students and their grades, check the uploaded students' work, prepare, create content and dissection groups etc. The project applied by the TAM to identify key barriers prevent instructors at UJ to sufficiently use the new LMS (Moodle). Quantitative data in this study was obtained using the survey of TAM items and additional information on age, gender, and teaching area. Figure 3 illustrates the causal links that are hypothesized, and the research's model adapted and extended from TAM to include technical support factor.

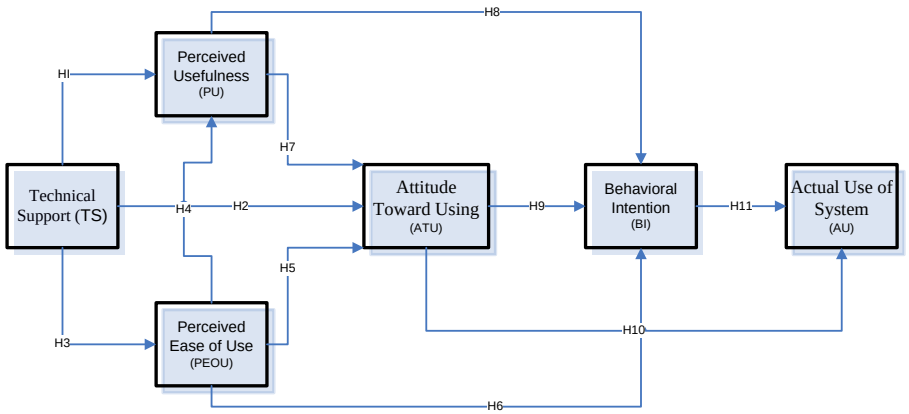

Figure 3: The Research Model

According to Hofman, (2002) and Sumner and Hostetler (1999) Technical support has a direct influence on technology acceptance, therefore the researcher is supposed to do the following hypotheses

H1: Technical support has a positive effect on the perceived usefulness of Moodle.

H2: Technical support has a positive effect on the Attitude Toward Using Moodle.

H3: Technical support has a positive effect on the perceived ease of the use of Moodle.

Many studies such as Zhang et al (2008), Liao and Pratt (2009), VanRaaij and Schepers (2008) revealed that there is a positive link between PEOU and PU. This link is not significant in case the LMS is being used voluntary (Lee, 2006). The researcher proposes the following hypotheses:

H4:PEOU will have a positive effect on **PU**.

Based on Liao and Pratt (2009), Lee (2010) **PEOU** has positively affected the **ATU** therefore the researcher proposes the following hypotheses:

H5: **PEOU** will have a positive effect on instructors' attitudes towards using Moodle.

PEOU has influenced on **BI** according to Zhang et al (2008) and Chatzoglou et al (2009). In case of volunteers using LMS, the result can be different as revealed by Shen and Eder (2009). The researcher proposes that the following hypothesis:

H6:PEOU will have a positive effect on Moodle usage intention by instructors.

According to Lee et al (2005) **PU** is the most important predictor of **BI**. Zhang et al (2008), Liao and Pratt (2009), and Chatzoglou et al (2009

reveled that **PU** positive effect **BI**, and **ATU**. Therefore researcher supposes the following hypotheses:

H7:PU will have a positive effect on the instructor's attitude towards using Moodle.

H8:PU will have a positive effect on the instructor's intention to use Moodle.

ATU is a direct determinant of **BI** and **US** Lee et al (2005) Shen and Eder (2009). Therefore the researcher has supposed the following hypotheses:

H9:ATU will have a positive effect on an **instructor's** intention to use Moodle.

H10:ATU will have a positive effect on an **instructor's** actual use of Moodle.

According to Liaw et al (2007) and Yi-Cheng et al (2007) **BI** can be a determinant for the **AU** of an LMS. Thus, we propose the following hypothesis:

H11: an instructor's **BI** will have a positive effect on his or her **AU** of Moodle.

Data Collection Method and Critical Evaluation

According to Sharp and Howard (1996), several methods of data collection are used such as: Field observations, laboratory measurements, archives, questionnaires and interviews; in order to collect the required data, a questionnaire is designed and distributed at the UJ campus. Extensive interviews is maintained with clients to understand the organization's infrastructure and other related issues. The advantages of interviews: Able to clarify any confuse terms, expand on points, follow new ideas as they come up. The disadvantages of interviews: Time intensive, no certainty that interviewees are asked the same questions in the same manner. Advantages of the questioner: Questions are asked in exactly the same way for all participants. Disadvantages are: The answers to open-ended questions may be hard to read, participants may not see the need to complete and return it. Qualitative data will be used to illuminate answers given by participants on the surveys.

Questionnaire Design and Implementation

Data collection method depends on questionnaires. A questionnaire's valuable information and numbers are processed and analyzed by using the Statistical Package for Social Science (SPSS Version17) software.

TAM questionnaire is aimed at collecting data to examine the proposed hypotheses, which is discussed and mentioned earlier. The TAM questionnaire is distributed to academic staff at the Faculty of Foreign

Languages and Information Technology. The questionnaire used LikrRT scale from 1-5. Table 1 provides a summary about academic staff questioner.

Academic Staff Questionnaire	
Population	UJ academic staff.
Sample Unit	Foreign languages faculty and Information technology faculty academic staff.
Location	UJ campus.
Number of distributed questionnaire	80 questionnaires distributed randomly
Survey method	Paper questionnaire distributed to instructors to be answered.

Table 1: Academic Staff Questionnaire

The estimated number of instructors in both faculty Information technology and foreign languages is 250 instructors; the sample size selected to analyze is 80 instructors. This sample size examines 32 % of the total population. The response rate for the instructor's survey was 86.25 % since the total number of questionnaires distributed to instructors 80 questionnaires and 69 questionnaires were given back. The respondents profile is clear in Table 2.

		Frequencies	**Parentage %**
Gender	Male	36	52.2
	Female	33	47.8
Faculty	Humanities	17	24.6
	Scientific	52	75.4
Age	24 - 29	8	11.59
	30- 39	28	40.57
	40- 49	26	37.68
	50-59	7	10.17
Experience years	1-4	28	40.6
	5-9	29	42
	10-15	12	17.3
Frequency of Moodle use	Daily	24	34.8
	Weekly	37	53.6
	Monthly	8	11.6
How hard it is to learn how to use Moodle	Easy	16	23.1
	Neutral	17	24.7
	Hard	36	52.2

Table 2: The instructor's respondent's profile

TAM Reliability Analysis

A reliability analysis was conducted to estimate the degree of a reasonable level of reliability, the internal consistency was assessed by Cronbach's Alph (α). Cronbach's Alph (α) used to estimate the extent to

which multiple indicators for a latent variable belongs together . Cranach's Alpha scales should exceed the cut-off value of 0.70 (Schmitt , 1996). Since each computed statistic is above 0.70, TAM construction appears to have a good degree of reliability as shown in Table 3.

TAM Constructs	Related Question	Cronbach's Alpha (α)	Number of Items
TS	1- I can make E-mail enquiries when there is a technical problem with Moodle. 2-I can make Fax enquiries when there is a technical problem with Moodle. 3-Moodel technical problem hotline is available at any time 4-Moodle technical team offers good technical support.	0.849	4
PEOU	6- It is easy for me to upload materials to students by using Moodle. 7- The process of using Moodle is clear and understandable. 8- To become skillful person in using Moodle is easy for me. 17-Using Moodle is easy for me.	0.855	4
PU	9- Moodle is useful in my point of view 10- Moodle improves my academic performance 11- Moodle gives me more control over my student's learning 12- Moodle enhances my chances to provide knowledge for my students 13- Moodle helps me to accomplish tasks more quickly	0.856	5
ATS	5- Moodle is an attractive way to teach. 14 -Using Moodle is fun. 15 -Using Moodle is a good idea for me . 16 -In total I like using Moodle	0.826	4
BI	18- In the next six months I intend to use Moodle. 19- I predict I will use Moodle in the next six months 20- In the next semester I plan to use Moodle.	0.827	3

Table 3:TAM Reliability Analysis

TAM Correlation Analysis

Testing the relationships of TAM's construction helped examine the validity of the hypotheses of Spearman's Correlations test as conducted, and evaluate the strength of the relationships between TAM's variables. A

significant relationship is at .001 level signed by (**), and a significant relationship at .05 is signed by (*). Table 4 provides a summary of a Spearman correlation analysis.

		BI	TS	PU	ATU	PEOU
BI	Correlation Coefficient	1				
	Sig. (2-tailed)	.				
	N	69				
TS	Correlation Coefficient	-.018-	1			
	Sig. (2-tailed)	0.882	.			
	N	69	69			
PU	Correlation Coefficient	.260*	.434**	1		
	Sig. (2-tailed)	0.031	0	.		
	N	69	69	69		
ATU	Correlation Coefficient	.273*	0.143	0.054	1	
	Sig. (2-tailed)	0.023	0.24	0.662	.	
	N	69	69	69	69	
PEOU	Correlation Coefficient	0.122	.532**	.340**	0.035	1
	Sig. (2-tailed)	0.319	0	0.004	0.775	.
	N	69	69	69	69	69

***** 2-tailed Significance at .001; * 2 tailed significance at .05.***

Table 4: Spearman's Correlations Analysis.

While the TAM research model suggests a positive relationship between Technical supports and the Attitude towards using Moodle, it appears that the data does not support a significant relationship between these two concepts. The results did not provide a support for the hypothesis H2: Technical support has a positive effect on the attitude toward using Moodle. However, a significant relationship can be found between Technical support and the perceived usefulness, as well as between Technical support and the perceived easy usage of Moodle. These results support the hypotheses of H1 (significant level =0.434) and H3 (significant level=0.532).

H1: Technical support has a positive effect on the perceived usefulness of Moodle.

H3: Technical support has a positive effect on the perceived easy usage of Moodle.

There was statistically sufficient evidence regarding the impact of PEOU on PU. That means the results provide support for hypothesis H4 (significant level =0. 340). H4: PEOU will have a positive effect on PU. There was no statistical evidence regarding the impact of PEOU on instructors' attitudes towards using Moodle and Moodle usage intention by instructors. This means that the results did not provide support for hypotheses H5 and H6.

H5: PEOU will have a positive effect on instructors' attitudes towards using Moodle.

H6: PEOU will have a positive effect on Moodle usage's intention by instructors.

Unfortunately, no significant relationships can be found between PU and instructors' attitudes towards using Moodle. A significant relationship can be found between PU and the instructors' intention to use Moodle at the (0.260)level of significance, and this provides support for hypotheses H8, and no support for H7.

H7: PU will have a positive effect on instructors' attitudes toward using Moodle.

H8: PU will have a positive effect on instructors' intentions on using Moodle.

It appears that the data does not provide support for hypotheses H10 and H11, which may be because of their small sample size (N = 69). However, significant relationship can be found between ATU and an instructor's intention to use Moodle. At the (0.273) level of significance.

H9: ATU will have a positive effect on an instructor's intention to use Moodle.

H10: ATU will have a positive effect on an instructor's actual use of Moodle.

H11: Instructors' BI will have a positive effect on his or her AU Moodle experience.

For a deeper understanding of these variables and to know the degree representing an obstacle in accepting the use of Moodle Statistical analysis, instructors' perceptions towards TS,PEOU, PU, ATU, and BI is provided and discussed below:

	TS						
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Mean	Std. Deviation
I can make E-mail enquiries when there is a technical problem with Moodle.	11 (15.9)	**30(43.5)**	8(11.6)	7(10.1)	13(18.8)	3.28	1.371
I can make Fax enquiries when there is a technical problem with Moodle.	0(0.0)	3(4.3)	**35(50.7)**	17(24.6)	14 (20.3)	2.39	.861
Moodle technical problem's hotline is available at any time	2(2.9)	9(13.0)	**28(40.6)**	23(33.3)	7(10.1)	2.65	.937
Moodle's technical team offers good technical support	11(15.9)	**29(42.0)**	11(15.9)	10()14.5	8 (11.6)	3.36	1.248

Table 5: frequencies and corresponding percentages for TS construct

For statistical analysis (frequencies and corresponding percentages) to a richer understanding of the instructors' perceptions towards Technical Support issues for Moodle is summarized in Table 5.

42.0 % of instructors believe that Moodle's technical team offers good technical support when needed, and 43.5 of them confirm that they can make emails enquiries when there is a technical problem with Moodle, 35 instructors out of 69 (50.7 %) tend to be a bit more neutral in terms of ability to make Fax enquiries when there is a technical problem with Moodle and 40.6 % can't decide (Neutral) if there is a hotline for reporting Moodle technical problem.

This indicates that the instructors have a significant confidence in the technical support dedicated for helping and while using Moodle, and the technical support team dooes not hinder the adoption and usage of Moodle from the perspective of Instructors'. This also was confirmed in the questionnaire's open ended questions. One of the written responses was that '*The technical people dedicated for Moodle are very skillful and helpful; they solved almost every problem that we have faced.'* The delay in the technical support response to time and university networks and internet connection stability issues, and other infrastructure issues, were common issues between all instructors who were interviewed.

	PEOU						
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Mean	Std. Deviation
It is easy for me to upload materials to students by using Moodle	14(20.3)	13(18.8)	**19(27.5)**	**19(27.5)**	4(5.8)	3.20	1.220
The process of using Moodle is clear and understandable.	4(5.8)	21(30.4)	**26(37.7)**	11(15.9)	7(10.1)	3.06	1.056
To become skillful at using Moodle is easy for me.	14(20.3)	14(20.3)	16(23.2)	**24(34.8)**	1 (1.4)	3.23	1.178
Using Moodle is easy for me	15(21.7)	6(8.7)	**25(36.2)**	17(24.6)	6 (8.7)	3.10	1.250

Table 6: frequencies and corresponding percentages for PEOU construct

Perceived ease of use (PEOU) refers to the degree to which instructors believe that the use of Moodle will be free of effort and it would be easy to use. Only 18.8 % of instructors find that uploading materials to students by using Moodle is easy as opposed to 27.5 % of instructors who believe that Moodle is not easy to upload materials. Also, 27.5 % tend to be a bit more neutral andcan't decide if it is easy to upload materials on Moodle or not .

This may be interpreted from one direct quote taken form one instructor's interview: "*Uploading materials for student require a lot of time, since the allowed maximum size of a file that is uploaded on Moodle is only 10 MB, many large files I need has to be edited and manipulated before I uploading it to Moodle, and that consumes a lot of my time*." Thus, the time citing for preparing the content and materials to be uploaded to Moodle by instructors may be considered as barriers for using Moodle from the perspective of the Instructors'.

The process of using Moodle refers to how to navigate through the system, how to login to the system and obtain the required information; 30.4 % of instructors believe that the process of using Moodle is clear and understandable as opposing to 15.9 % of instructors who did not agree with that. 26 instructors (37.7 %) did neither agree or disagree. In one of the instructor's interview, however, he said that "*The Moodle pages have a lot of sub and sub menus which makes you feel lost inside system*." This problem could be solved with more training and with proper usage of the system. Users will then become more familiar with it and appreciate the user-friendly system.

In response to the question: 'To become a skillful user in using Moodle is easy for me', 34.8 % of instructors reported that to become skillful at using Moodle is quite difficult and challenging. Furthermore, When the instructors asked if using Moodle is easy for them, statistics show that 24.6 % tend to find that Moodle in general is difficult to use. The possible explanation for this finding in the instructors' answers is because they lack computer skills, unlike the IT department. This leads to the difficulty most

staff face and making Moodle easy would be an issue. Also, this may relate to resistance to issues of change.

PU							
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Mean	Std. Deviation
Moodle is useful in my point of view	11(15.9)	**28(40.6)**	17(24.6)	7(10.1)	6 (8.7)	3.45	1.145
Moodle improves my academic performance	6(8.7)	**26(37.7)**	23(33.3)	10(14.5)	4 (5.8)	3.29	1.016
Moodle gives me more control over my student learning	7(10.1)	**38(55.1)**	9(13.0)	11(15.9)	4 (5.8)	3.48	1.066
Moodle enhances my chances to provide knowledge for my students	7(10.1)	**34(49.3)**	7(10.1)	10(14.5)	11(15.9)	3.23	1.285
Moodle helps me accomplish tasks more quickly	10(14.5)	**33(47.8)**	13(18.8)	1(1.4)	12 (17.4)	3.41	1.276

Table 6: frequencies and corresponding percentages for PU construct

Perceived usefulness (PU) refers to the instructors' beliefs that using Moodle would enhance their job performance. The results indicate that the instructors (47.8 %) have significant confidence and belief that Moodle will help them accomplish and finish their daily tasks related to teaching more quickly. Nevertheless, 55.1 % of instructors agree that Moodle gives them more control over their student learning and 49.3 % of instructors believe that Moodle enhances their chances to provide knowledge for student. 37.7 % of instructors oppose 14.5 % of those who believe that Moodle will improve instructors' academic performance .

ATU							
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Mean	Std. Deviation
Moodle is an attractive way to teach.	2(2.9)	**29(42.0)**	18(26.1)	11(15.9)	9 (13.0)	3.06	1.110
Using Moodle is Amazing.	6(8.7)	2(2.9)	**45(65.2)**	9(13.0)	7 (10.1)	2.87	.954
Using Moodle is a good idea for me	2(2.9)	**28(40.6)**	20(29.0)	14(20.3)	5 (7.2)	3.12	1.008
In total I like using Moodle	2(2.9)	**31(44.9)**	17(24.6)	8(11.6)	11 (15.9)	3.07	1.155

Table 7: frequencies and corresponding percentages for **ATU** construct

Attitude Toward Using (ATU): "A summary evaluation of a psychological object captured in such attributes dimensions as good-bad, harmful-beneficial, pleasant-unpleasant, and likable dislikable" (Ajzen, 2001). The results indicate that 44.9 % of instructors like to use Moodle, and

40.6 % see using Moodle as a good idea. However, 8 instructors (11.6 %) find that Moodle dislikable, and 15.9% see Moodle as an unattractive method of teaching. These findings indicates that the instructors significantly tend to like Moodle and see using it is a good idea. '*Moodle in my point of view involves a change in teaching methodology; I like it and rely on it, and prefer it to chalk and talk'*, this direct quotation may interpret why some instructors tend to consider Moodle as unattractive, reflecting on how Moodle, VLE and ICT adds to new approaches and methodologies in teaching and learning. In ddition to that, staff in general view Moodle as incompatible with established practices that instructors are used to .(Resistance to change and unmotivated staff issues).

	BI						
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Mean	Std. Deviation
In the next six months I intend to use Moodle.	5(7.2)	**22(31.9)**	20(29.0)	14(20.3)	8 (11.6)	3.03	1.137
I predict I will use Moodle in the next six months	4(5.8)	**26(37.7)**	19(27.5)	13(18.8)	7 910.1)	3.10	1.100
In the next semester I plan to use Moodle	5(7.2)	**27(39.1)**	6(8.7)	20(29.0)	11 (15.9)	2.93	1.276

Table 8: frequencies and corresponding percentages for BI construct

Behavioral intention (BI): "The degree to which a person has formulated conscious plans to perform or not perform some specified future behavior" (Davis, 1993) show the percentage of instructors who plan to use Moodle in the next academic semester is 39.1 %. This parentage is consistent with the other results since 37.7 of instructors predict they will use Moodle in the next six months, and 31.9 really intend to use it. However the results also indicate that 20.3 % of instructors do not intend to use Moodle within the next six months, and 20 instructors out of 69 (29.0 %) do not plan to use Moodle in the next semester. This belief is reflected in different interviews; in which two comments by two separate teachers' can clarify and interpret why some instructors do not want to use Moodle. A teacher belief is classified in two groups; the first is related to resistance to change issues, and the other is categorized as lacking adequate involvement in Moodle's implementation and switching process issues.

'No one has a personal problem with Moodle but Moodle requires a lot of time to learn how to use. I am an excellent expert in the use of Blackboard, I do not want Moodle.' (Resistance to change issues)

'I have no intention to use Moodle and Blackboard, I see these systems do not add value to the learning process. Computer Center changes the computer systems that we get used to, and have become efficient without

reference to us or considering us as part of the changing process '. (Lack of adequate involvement in Moodle implementing and switching process).

The above findings indicate that the PEOU is a more significant barrier in adopting Moodle. This means the instructors tend to use Moodle if they think Moodle is easy for using. Perceived ease of use (PEOU) refers to the degree to which instructors believe that using Moodle will be effortless and easy. The results indicate that the instructors of (47.8 %) have a significant confidence and belief in Moodle's help to accomplish and finish their daily tasks related to teaching in a shorter period of time. 37.7 % of instructors oppose 14.5 % believe that Moodle improves instructors' academic performance.

However, 8 instructors (11.6 %) do not like Moodle, and 15.9% see Moodle as an unattractive way to teach. This indicates that instructors significantly tend to like Moodle and see using it as a good idea. Resistance to change, unmotivated staff, and non-participation of all sections in the decision-making process also the absence of a clear goal in applying LMS are the main risks and barriers that lead to failure. Hence, Moodle achieves the desired maximum benefit.

Conclusion

The results of applying TAM matches the results in the literature; the results found proved that technical support has a positive effect on the perceived usefulness of Moodle and technical support has a positive effect on the perceived easy usage of Moodle. Such findings match the result of studies conducted by Hofman (2002), and Hostetler (1999). In addition, result emphasis that PEOU will have a positive effect on PU that match with many studies such as Zhang et al (2008), Liao and Pratt (2009). Also PU will have a positive effect on instructors' intention to use Moodle and ATU will have a positive effect on an instructor's intention to use Moodle, match with result from Lee et al (2005).

From the instructors' point of view, the perceived ease usage of (PEOU) is a more significant barrier when adopting Moodle, this means the instructors tend to use Moodle if they think Moodle is effortless and simple to deal with.

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