# **Diagnosing Adoption to Mobile Learning**

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**Abstract**—This study was undertaken to address the need to modernize the modes of teaching and learning pedagogy by taking advantage of the proliferation of electronic gadgets and mobile devices since, as counted there are more computers than the people in the world [1]. This research found out how learning in the new platform could be adopted by teachers and students. In addition, it tested the different variables involved in the use of mobile in learning by faculty and students of Centro Escolar University (CEU) to determine factors that made implementing technology a success or a failure.

To attain the set objectives, this study made use of descriptive and inferential method to the data gathered from respondents via stratified random sampling. Specifically, it employed frequency, mean, standard deviation, t-test, analysis of variance and multiple linear regressions for the treatment of data derived from the survey questionnaires. To complete the triangulation approach and for consistency of findings, observation and interview were also conducted.

Subsequently, in order to determine adoption to mobile learning the modified Unified Theory of Acceptance and Use of Technology (UTAUT) model was employed. This model shows relationship of moderating variables which are age, gender, voluntariness of use and experience from independent variables like performance expectancy, effort expectancy, social influence, facilitating conditions, anxiety and self-efficacy.

After all the statistical treatments were applied, Anxiety, Self-Efficacy, Effort Expectancy, Performance Expectancy and Facilitating Condition contribute to the success of the introduction of technology to the organization, while social influence was excluded as the reasons why users adopt it.

Keywords-Mobile learning, technology adoption,

## 1 Introduction

A new breed of era started when mobile devices landed on peoples' hands. These technology savvy individuals find ways on how to use these gadget to their advantage. With the recent studies [2], [3] it revealed that by 2020 the number of things connected to the internet will reach 50 billion and by the year 2019 there are 5 billion smart phone and tablet users.

Looking at the spread of these gadgets, this will make an impact in all fields. From industrial to manufacturing to agriculture, this phenomenon could be an enabler to more advanced things or could disrupt existing traditions and processes. Education will not be spared from it. In fact Daniel Burrus, chief executive officer of Burrus Research Associates Inc., predicted that mobile learning represents an amazing disruption and opportunity [4].

The use of innovative technology in the classroom has a positive impact on students learning [5]. As a way of embracing changes, it is interesting to note that schools and universities are coping up by searching and introducing new platforms. They are working towards improvement and innovation, knowing that classroombased lessons and other approaches may not suffice to the growing mobile users and fast paced development in technology. The availability of these gadgets combined with creativity of teachers, this tool can be used to deliver quality teaching and amazing learning experiences among students.

However, implementing mobile learning is still not as easy as *abc*, aside from learning the technicality to use this state the of the art technology, human factors in order to adopt it, needs to be studied as well. What are the factors that will make teachers and students adopt mobile learning? If there are studies that show people reject new technologies when they replace humanity while embraces them when they support human desire for purpose, challenge, meaning and alignment with nature even if these technologies are unwieldy, expensive, time-consuming to use, and constantly break down [6].

In fact, when smart phones and tablet landed on the hand of teachers and students and a number of website offers on-line education at no cost, there was an assumption that adopting to it will take a leapfrog. However when Edx was launched even Harvard faculty argued on its impact to its current system [7]. Moreover, since technology gadgets can influence the socio emotions of students, balancing and controlling the use of it are needed [8]. This is one of the evidences of human's resistance to adopt to changes. An illustration that even technological advances offers a modern way on how to do things there are barriers for its implementation.

Since financial investment is at stake in implementing mobile learning, identifying variables on user adoption to it is deemed necessary. This study gives light on which factors to address and the challenges administrators are facing in enhancing teaching and learning through technology. When all these where identified and considered, adoption will no longer an issue if in the future new technology for improvement and sustainability are introduced.

# 2 Background of the Study

Currently, Centro Escolar University is considering a new learning management system (LMS) as an enhancement to its various learning modalities for its diverse learners that can be accessed in mobile. In the context of this study, mobile learning includes the use of LMS in mobile devices. Since both technologies offers features that when adopted could provide a brand new way to conduct classes as well as in-

crease teachers' productivity and enrich classroom experiences to the students, this study was conducted. This study determined the adoption of mobile learning using Unified Theory of Acceptance and Use of Technology (UTAUT). Using this model, it could determine teachers' and students' attitude, preparedness and concerns with regard to mobile learning adoption [9].

## **3** Statement of the Problem

- 1. What is the profile of the respondents in terms of:
  - (a) age;
  - (b) gender;
  - (c) experience;
  - (d) voluntariness of use and
  - (e) mobile devices ownership?
- 2. How do the respondents assess mobile learning based on the following determinants of user intention?
  - (a) Performance Expectancy (PE);
  - (b) Effort Expectancy (EE);
  - (c) Social Influence (SI);
  - (d) Facilitating Conditions (FC);
  - (e) Anxiety(AX);
  - (f) Self-Efficacy(SE);
- 3. How do the respondents assessments of mobile learning in terms of performance expectancy, effort expectancy, social influence and facilitating conditions compare when grouped according to age, gender, voluntariness of use and experience?
- 4. Among the determinants of behavioral intention, which are the factors that will make the teachers and students adopt mobile learning?

### 4 Hypothesis

The factors that will make the teachers and students adopt mobile learning will not be determined by the use of UTAUT.

# 5 Methods and Procedures

The Sloven's Formula was used to identify the number of respondents needed in this study. The questionnaire was composed of two parts. The first part is for demographic profiling that served as moderating variables which includes the age, gender, voluntariness of use and experience. Part II is patterned to the UTAUT model that made use of determinants of behavioral intention namely performance expectancy, effort expectancy, social influence, facilitating conditions anxiety and self-efficacy. A marked of .957 or excellent verbal interpretation when the questionnaire was checked for internal consistency using Chronbach's Alpha. 461 questionnaires were distributed among the students and employees in CEU. These were tested and treated using Statistical Packages for Social Sciences (SPSS) application. The following statistical method, frequency distribution, percentage, mean, standard deviation, T-test, Analysis of Variance (ANOVA) to come up with the needed answers to the question posted.

#### 5.1 Theoretical framework

This study is anchored at The Unified Theory of Adoption and Use of Technology. This theory explores the different factors that make adoption to the technology a success. UTAUT is consists of moderating variables such as age, gender, experience and voluntariness of use. These variables when relate to dependent variables performance expectancy, effort expectancy, social influence and facilitating condition factors on the use and adoption can be identified. These identified factors are useful to make necessary adjustment to ensure success in implementation. In the case of this study, all moderating variables were tested to the different dependent variables and on the additional factors, anxiety, self-efficacy and attitude towards using technology thereby increasing the scope on what to consider.



Fig. 1. Modified Unified Theory of Acceptance and Use of Technology (UTAUT)

#### 5.2 **Profile of the respondents**

Out of 461 respondents, majority of it is within the age ranges from 19 to below or 65.9% percent. The respondents were mostly female or 63.4%, which is in the third year level and consider using mobile in learning as voluntary. A number of respondents answered smartphones as the device they use for mobile learning which is 76.8 percent while tablets and netbooks scored 34.5% and 9.3 percent respectively.

#### 6 **Results and Discussions**

In assessing the different determinants of user intention a five-point Likert scale was used.

The Assessments of Mobile Learning in terms of Performance Expectancy is presented on table1. The respondents agreed that learning from mobile is useful to his/her work or study (x=4.25). It enables them to accomplish the task quickly (x=4.18), increases productivity (x=4.13), and increases the chance of getting good grades or good performance in their job (x=4.02). The overall mean (x=4.48) strongly suggest that learning from mobile help them attain gain in study/job performance. Performance expectancy has direct effect on the adoption of web based training [10] [11].

To take advantage of the results presented, teachers could use mobile devices in enriching the teaching and learning experience of the students within or outside the campus by creating activities because students will surely take interest on it.

Performance Expectancy									
	N	Mean	Std. Devia- tion	Verbal Interpretation					
Learning from mobile is useful to my work/study.	460	4.2478	1.3331	Agree					
Using mobile devices enables me to accomplish task more quickly.	460	4.1826	1.3008	Agree					
Learning from mobile increases my productivity.	458	4.1332	1.2715	Agree					
Learning from mobile increases my chances of getting a good grade/good performance rating.	459	4.0261	1.2466	Agree					
Performance Expectancy	461	4.478	1.2094	Agree					

Table 1. Assessments of Mobile Learning in terms of Performance Expectancy

As seen on Table 2, on the Assessments of Mobile Learning In Terms of Effort Expectancy. The result on effort expectancy connotes that both students and faculty do not have a hard time to use mobile devices in teaching and learning. The overall mean (X=3.65) suggests that respondents exerted less effort to use the system to achieve his/her goals in using mobile to learn/teach. Based on the rating, respondent's claimed that it is easier for them to use mobile in the learning/teaching(x=3.59) as well as to become skillful (x=3.87). On the other hand, the rating on the use of mobile devices (x=3.62) and connecting to internet (x=3.51) using their gadgets were easy for them as noted on the results. Effort expectancy confirms that when a technology is easy to use and require less effort is one of the reasons why user adopts a system [12].

Social Influence as defined by Venkatesh is the degree to which an individual perceives that people who are important to him/her believe that he/she should use the new technology which the overall mean of (x=3.92) implies as reflected on table 3.

People who influence respondent's behavior (x=3.87) and those that are important to them (x=3.82) think that they should teach/learn through mobile. The support to use mobile devices is also seen in their classmates and colleagues, in fact respondents claimed they have been helpful in the use mobile in the teaching/learning (x=3.92). However, the results minimally agree was yielded when the respondents were ask on

the university's support on the use of mobile in teaching/learning (x=3.09). On the interview with the respondents in investigating on why the aforementioned results were derived, the policy on mobile use inside the classroom as well as the low wi-fi signal in the campus are the two common reasons. People adopt technology to blend or connect to other people [13]. However, after the user used the technology social influence is no longer significant [14].

Effort Expectancy				
	N	Mean	Std. Deviation	Verbal Interpretation
Using mobile to learn/teach is easy for me.	461	3.5900	1.19920	Agree
It is easy for me to become skillful through mobile learning/teaching	461	3.8698	1.12113	Agree
Mobile devices in teaching/learning is easy for me.	461	3.6291	1.20467	Agree
Connecting to internet for mobile learning is easy for me.	460	3.5087	1.20182	Agree
Effort Expectancy	461	3.6497	1.05943	Agree

Table 2. Assessments of Mobile Learning In Terms of Effort Expectancy

Table 3. Assessments of Mobile Learning in terms of Social Influence

Social Influence								
	N	Mean	Std. Deviation	Verbal Interpretation				
People who influence my behavior think that I should teach/learn through mobile	461	3.8655	1.07102	Agree				
People who are important to me think that I should use mobile devices in teaching/learning	461	3.8265	1.09358	Agree				
My classmates/colleagues have been helpful in the use mobile in teaching/learning	460	3.9174	1.15363	Agree				
In general, the university has supported the use of mobile in learn- ing.	461	3.0954	1.18119	Minimally Agree				
Social Influence	461	3.9262	.99850	Agree				

On facilitating condition as seen on table 4, the overall mean score of 4.14 shows the respondents' belief that an organizational and technical infrastructure exists to support the use of mobile in the teaching and learning. The ratings on the table reflected that availability of resources exists in CEU (x=4.23) and respondents have the necessary knowledge (x=4.34) to use mobile devices in teaching and learning. The respondents also agreed that their mobile device is always compatible with other systems they use (x=3.95) and in case they need assistance there is a specific person or group is available (x=4.04). Financing, skills, capacity and infrastructure are examples of challenges encountered when implementing technologies [15].

In the case of CEU, the Teaching and Learning Technology Department (TLTD) and Information Communication Technology (ICT) are the departments responsible in

facilitating the use of modern technology. The former is responsible in implementing technological advances in the teaching and learning process while the latter is on implementing such infrastructure needed to modernize CEU.

Facilitating Condition								
	N	Mean	Std. Deviation	Verbal Interpretation				
I have the resources necessary to learn from mobile	461	4.2321	1.13842	Agree				
I have the knowledge necessary to use mobile in learning	460	4.3413	1.12354	Agree				
My mobile device used in learning is always compatible with other systems I use.	460	3.9565	1.18370	Agree				
A specific person (or group) is available for assistance with my mobile device	459	4.0414	1.15805	Agree				
Facilitating Condition	461	4.1421	.98192	Agree				

Table 4. Assessments of Mobile Learning in terms of Facilitating Condition

Anxiety and Self efficacy are the additional variables tested in this study, this test that aside from perceived usefulness other factors are being considered by users before adapting to new technology [16]. Anxiety questions measure the degree of an individual apprehension or even fear when he/she is faced with the possibility of using mobile devices in teaching and learning is reflected on table 5. All indicators of anxiety level were rated minimially agree, from respondents apprehension (x=2.91), security issues (x=2.76), fear of making mistakes (x=2.59), down to the feeling of being intimidated (x=2.61). The overall rating of (x=2.72) suggests that anxiety in using mobile devices is not a matter to consider when in using mobile in the teaching and learning.

Table 5. Assessments of Mobile Learning in terms of Anxiety

Anxiety									
	N	Mean	Std. Deviation	Verbal Interpretation					
I feel apprehensive about using mobile in learning	459	2.9107	1.07303	Minimally Agree					
It scares me to think that mobile learning is not safe	460	2.7630	1.09780	Minimally Agree					
I hesitate to use mobile in learning of fear of making mistakes I cannot correct.	458	2.5939	1.09750	Minimally Agree					
Mobile learning is somewhat intimidating to me.	459	2.6144	1.08054	Minimally Agree					
Anxiety	461	2.7178	.96465	Minimally Agree					

Table 6 shows the result on self-efficacy of the respondents. Self-efficacy refers to an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments [17]. The capacity of the respondents to use mobile in the teaching and learning is high as seen on the different indicators of self-efficacy. This means that respondents believe in their own ability to succeed in accomplishing

task. Students will use technology when it is capable of increasing their efficiency [18].

The overall rating of 3.29 translated to as minimally agree when ask whether the respondents could perform the task when there is someone around to tell them what to do while working (x=4.30), calling help desk for oral instruction(x=3.24), plenty of time and resources are provided (x=3.35) and instruction readily available (x=3.26) are not necessary for them to complete their job or task.

Self-Efficacy									
	N	Mean	Std. Deviation	Verbal Interpretation					
I can complete a job or task using mobile:									
If there is someone around to tell me what to do as I work.	461	4.3080	1.16120	Minimally Agree					
If I can call to help desk for oral instruction	460	3.2391	1.04130	Minimally Agree					
If I have a lot of time to complete the job and resources are provided.	461	3.3536	1.09084	Minimally Agree					
If I have the instruction readily available	461	3.2646	1.09912	Minimally Agree					
Self- Efficacy	461	3.2914	.98283	Minimally Agree					

Table 6. Assessments of Mobile Learning in terms of Self Efficacy

Table 7 presents the comparison of respondents' assessments of mobile learning technology in terms of performance expectancy, effort expectancy, social influence and facilitating conditions when grouped according to age bracket. Looking at the table age of a person yielded a very significant variable in the results of performance expectancy, effort expectancy, social influence and facilitating conditions when analyzing the adoption of an individual to technology. An F value of .949 with a mark of 001 with a verbal interpretation of very significant was observed on pair 19-below VS 30-39, connotes that in terms of performance expectancy, older respondents tend to adopt the technology more compared to younger respondents. This means that technology will be adopted more by older individuals if this will help them excel in their performance or help them in their task or job compared to younger individuals. Therefore, performance expectancy has positive impact to older individuals when compared to younger individuals on mobile learning.

On the other hand, effort expectancy has positive impact to younger individuals when compared to older individuals. An F value of 9.117 with a mark of .001 with a verbal interpretation of very significant was observed to pairs 19-below VS 20 - 29, 19- below VS 30 - 39, 19- below VS 40 -49 and 19- below VS 50-above in terms of effort expectancy. This data connotes that young ones exerted less effort in mobile learning compared to older people.

Influencing younger individuals on the adoption to mobile learning is much easier compared to older individuals. The data prove this because an F value of 5.823 with a mark of .000 with a verbal interpretation of very significant was observed to pairs 19-below VS 20 - 29, 19- below VS 30 - 39, 19- below VS 40 - 49 and 19- below VS 50-above in terms of social influence. Opinions of the people who are important to them

are much regard and by young ones compared to older people. Therefore social influence in mobile learning has positive impact to younger compared to older individuals.

When it comes to facilitating condition, there is a positive impact on older individuals on the adoption to mobile learning compared to younger individuals. An F value of 5.9775 with a mark of .000 with a verbal interpretation of very significant was observed to pairs 19- below VS 30 - 39, 19- below VS 40 -49 and 19- below VS 50above was the basis of this analysis. Older persons have more positive views that organizational and technical infrastructure exist to support mobile learning compared to younger individuals. This shows that older persons are more aware that in the organization there is a unit that will assist them on the use of mobile learning. This difference suggest that adults put emphasis on facilitating condition compared to younger person [19]. Using this finding older people will look for someone to assist them on their technology needs.

An F value of 2.963 with a mark of .016 and a verbal interpretation of significant was observed to pairs 19 - below VS 50 above, 20 - 29 VS 50 above, 30 - 39 VS 50 above and 40 - 49 VS 50 above yielded from Anxiety. The data connotes that younger individuals exhibit a positive emotional reaction towards mobile learning compared to older persons.

It is safe to say that self-efficacy of the respondents when related to age is not significant in the adoption of mobile learning, an F value of 1.504 with a mark of .200 as seen on table. Understanding age difference is beneficial on the use of technology [20].

Among the determinants of user intention, facilitating condition and self-efficacy were found to have a significant difference when the respondents are grouped according to gender. The scores for facilitating condition in female respondents(x=3.0234, SD=.98717) and male respondents (x=3.3159, SD=.94511) with a value of =3.096, p=.003) suggests that male respondents have higher belief that organizational and technical infrastructure such as hardware, software and people resources exists in CEU for mobile learning compared to female respondents.

In terms of self-efficacy, the results show that female respondents(x=3.1750, SD=1.02900) and male respondents (x=3.4835, SD=.86999) with a value of =3.259 p=.001). Male users' belief in his capacity towards mobile learning is greater when compared to female respondents. This suggests that male users are more independent in doing task related to mobile learning and that male are more users of technology compared to female. This findings relates to that male students has higher self-efficacy in computing than the male students.[21]

However in table 8, there is no significant relationship when respondents' assessments of mobile learning in terms of performance expectancy, effort expectancy, social influence and anxiety when grouped according to gender.

		Mean	SD	F	Sig.	V.I.	Pair		
	19 below	4.01	1.19						
Performance Expec-	20 - 29	4.24	1.21						
	30 - 39	4.80	1.05	040	001	Very	10 halow VS 20 20		
tancy	40 - 49	4.5	1.30	.949	.001	Signin-	19- Delow VS 50-59		
	50-above	4.91	1.14			cunt			
	Total	4.14	1.22						
	19 below	3.53	0.99						
	20 - 29	3.60	1.00			<b>X</b> 7	19- below VS 20 - 29		
Effort	30 - 39	4.19	1.13	0.117	001	very Signifi	19- below VS 30 - 39		
Expectancy	40 - 49	4.39	1.48	9.117	.001	cant	19- below VS 40 -49		
	50-above	4.84	1.16			cunt	19- below VS 50-above		
	Total	3.65	1.06						
	19 below	3.83	0.98						
	20 - 29	3.88	0.99			<b>x</b> 7	19- below VS 20 - 29		
Social	30 - 39	4.45	0.83	5.823	000	very Signifi	19- below VS 30 - 39		
Influence	40 - 49	4.39	1.07		.000	cant	19- blow VS 40 -49		
	50-above	4.75	1.18			cant	19- below VS 50-above		
	Total	3.92	0.99						
	19 below	4.02	0.95						
	20 - 29	4.22	0.91						
Facilitating	30 - 39	4.54	1.04	5 077	000	Very	19- below VS 30 - 39		
Condition	40 - 49	4.56	1.16	5.977	.000	Signifi-	19- below VS 40 -49		
	50-above	4.98	1.16			can			
	Total	4.14	0.98						
	19 below	3.7803	0.94302						
	20-29	3.7323	0.94102				19 - below VS 50above		
	30-39	3.5081	1.02161	2.072	016	Signifi-	20 - 29 VS 50 above		
Anxiety	40-49	3.625	1.07626	2.963	.016	cant	30 - 39 VS 50 above		
	50 above	2.8409	1.10834				40 - 49 VS 50 above		
	Total	3.7178	0.96465						
	19 below	3.2281	0.9947						
	20-29	3.4066	0.91584						
	30-39	3.5806	0.86936	1 50 4	200	Not			
Self-Efficacy	40-49	3.375	1.03682	1.504	.200	Signifi-			
	50 above	3.0682	1.33272	1		can			
	Total	3.2914	0.98283	1					

Table 7. Comparison of Respondents' Assessments of Mobile Learning Technology In Terms
Of Performance Expectancy, Effort Expectancy, Social Influence and Facilitating Con-
ditions When Grouped According To Age

Group Statistics										
	Gender	Mean	Std. Deviation	t value	Verbal Interpretation					
Douforman on Exmantan av	Male	3.1921	1.24308	750 - 448	Not Significant					
Performance Expectancy	Female	3.1024	1.19989	.739 p=.448	Not Significant					
Effort Evenoston ov	Male	2.7605	1.13387	1 842 - 066	Not Significant					
Effort Expectancy	Female	2.5718	1.00489	1.842 p=.066	Not Significant					
a	Male	2.9686	1.02718	915 - 415	Not Circuiff and					
Social Influence	Female	2.8893	.98506	.815 p=.415	Not Significant					
	Male	3.3159	.94511	2.000 002	V. C					
Facilitating Condition	Female	3.0234	.98717	3.096 p=.003	Very Significant					
A	Male	2.8009	1.01366	1 480 120	Not Significant					
Anxiety	Female	2.6623	.93250	1.480 p=.139	Not Significant					
G.16 Eff	Male	3.4835	.86999	2 250 001	Var Ciarificant					
Self -Efficacy	Female	3.1750	1.02900	3.239 p=.001	very Significant					

 
 Table 8. Comparison of the Determinants of User Intention When grouped according to Gender

Table 9 presents the results on the comparison of the respondents' assessments of mobile learning in terms of performance expectancy, effort expectancy, social influence and facilitating conditions when grouped according to experience. Among the determinants of user behavior, experience when related to self-efficacy has no significance. This was based on the yielded data 1<sup>st</sup> Year (x=3.30, SD=0.86), 2<sup>nd</sup> Year (x=3.54, SD=0.99), 3<sup>rd</sup> Year (x=3.17, SD=1.037), 4th Year (x=3.47, SD=1.093) and Employee (x=3.48, SD=0.98) with a value of =1.601 p=.158).

Significant findings were found between pair 1<sup>st</sup> Years and faculty On the assessment on performance expectancy, the mark of 1<sup>st</sup> Year (x=3.05, SD=1.11) and faculty (x=3.95, SD=1.19) suggests that employees adoption to mobile learning is higher because they believe that this will help them in their work compared to students' rating. The same findings are on effort expectancy 1<sup>st</sup> Year (x=2.55, SD=0.94) vs Faculty (x=3.51, SD=1.00), social influence 1<sup>st</sup> Year (x=2.88, SD=0.97) vs Faculty (x=3.43, SD=1.06) and anxiety 1<sup>st</sup> Year (x=2.87, SD=0.90) vs Faculty (x=2.13, SD=0.98). These data suggest that there is a higher tendency for the faculty compared to 1<sup>st</sup> Year students to adopt mobile learning if the use of such technology is easy and effortless, influenced by their peers to use and a worry free adoption.

 Table 9. Comparison Of The Respondents' Assessments Of Mobile learning In Terms Of

 Performance Expectancy, Effort Expectancy, Social Influence And Facilitating Conditions When Grouped According To Experience

		Mean	SD	F	Sig.	V.I.	Pair
	1 <sup>st</sup> Year	3.0525	1.11944	3.294 .0	.011		
Deuferman Erwarten	2 <sup>nd</sup> Year	3.4645	1.24428			V	1 VS 5
Performance Expectancy	3 <sup>rd</sup> Year	3.0127	1.20667			very Significant	
	4 <sup>th</sup> Year	2.9265	1.31626				

	Employee	3.9464	1.13162				
	Total	3.1085	1.19753				
	1 <sup>st</sup> Year	2.5543	.94596				
	2 <sup>nd</sup> Year	2.6968	1.01341				
Effort Executor or	3 <sup>rd</sup> Year	2.4552	.98122	4 1 5 2	002	Vam, Significant	1 VC 5
Enon Expectancy	4 <sup>th</sup> Year	2.7500	1.12152	4.132	.005	very Significant	1 1 5 5
	Employee	3.5179	1.31728				
	Total	2.5675	1.00756				
	1 <sup>st</sup> Year	2.8804	.97094				
	2 <sup>nd</sup> Year	3.1330	.95104		.038		1 VS 5
Seciel Influence	3 <sup>rd</sup> Year	2.7690	.94394	2.564		Significant	
Social influence	4 <sup>th</sup> Year	2.9265	1.07079			Significant	
	Employee	3.4286	1.0620				
	Total	2.8800	.97122				
	1 <sup>st</sup> Year	2.87	0.90				
	2 <sup>nd</sup> Year	3.03	1.00		000	V. C. C. A	11/05 21/0 5
A	3 <sup>rd</sup> Year	2.69	0.93	4 0 2 7			
Anxiety	4 <sup>th</sup> Year	2.41	0.78	4.927	.000	very Significant	10852085
	Employee	2.13	0.98				
	Total	2.72	0.95				
	1 <sup>st</sup> Year	3.30	0.86				
Self-Efficacy	2 <sup>nd</sup> Year	3.54	0.99				
	3 <sup>rd</sup> Year	3.17	1.037	1.601	150		
	4 <sup>th</sup> Year	3.47	1.093		.158	Not Significant	
	Employee	3.48	1.096				
	Total	3.29	0.98				

Comparison Of The Respondents' Assessments Of Mobile Learning In Terms Of Performance Expectancy, Effort Expectancy, Social Influence And Facilitating Conditions When Grouped According To Voluntariness Of Use. In terms of respondents' assessments of WI-FI technology when grouped according to voluntariness of use compared with the different determinants of user intention no significant finding were yielded. Free will is not a factor to consider in adopting mobile learning.

Table 10.	Predictor	of the	User	Intention	to ado	pt mobile	learning
1 4010 100	110010101	or the	0.001	meention	to ado	pt moone	ieur ming

Determinants	R square (Coefficient of Determination)	β (Beta Coefficient)
Facilitating Condition	36 %	
Performance Expectancy	44%	
Effort Expectancy	48%	
Self-Efficacy	51%	
Anxiety	53%	
Excluded		
Determinants	R square (Coefficient of Determination)	β (Beta Coefficient)
Social Influence		

Between determinants of user to adopt mobile learning, anxiety top the rank (53%), followed by self-efficacy (51%), effort expectancy (48%), performance expectancy (44%) and facilitating condition (36%) as the last factor. Excluded from the factor is social influence. This explains that among the determinants of user intention respondents' anxiety is a good predictor in adopting mobile learning while influences from their peers will not contribute its success.

# 7 Conclusion

Anxiety, self-efficacy and effort expectancy are the top three identified factors in the use and adoption of mobile learning using UTAUT model. There is a need to mitigate faculty and students findings of apprehension, fear, hesitation and intimidation. Increase the confidence of the faculty and students by providing training workshops and demonstration on the use of mobile learning is necessary. A comprehensive program to implement to develop skills needed in shifting on the use of technology in the teaching and learning process. Since self-efficacy was also identified as one of the factors inclusion of criteria in their performance ranking and on grading system on mobile learning can be a scheme to make adoption a success. Moreover recognizing the effort on the use of technology could also be a strategy. Hence forth in the future anxiety, self-efficacy and effort expectancy will no longer be a factor why adopting to new technology will fail.

### 8 Recommendation

As an initial action to address anxiety on the adoption to mobile learning, training of users, provision of technical assistance to faculty and students and readily available manuals and guidelines should be drafted to ensure success in mobile learning implementation.

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