



icODEeL 2012

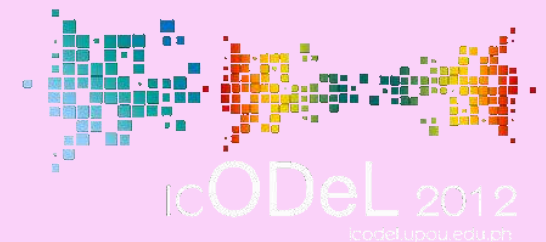
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# INTRODUCTION

**The quest to give education in a borderless environment is now within the reach of every individual through mobile learning (m-learning).**

**At present, there are 5.3 billion or 77 percent of the world's population are mobile subscribers. This phenomenon was taken advantage by different establishments by installing access points or hotspots to provide additional service to its clientele.**

**This technological advancement gave birth to m-learning. An additional option to deliver quality education by providing meaningful teaching and learning process is now available 24/7 either stationary or while on the move.**

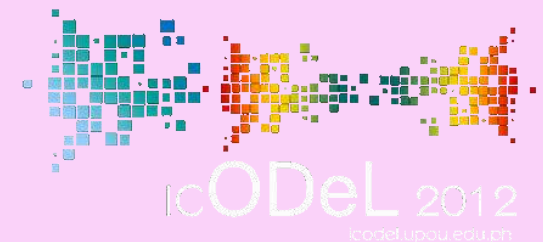


# **ADOPTION OF WIRELESS FIDELITY(WI-FI) IN CEU:**

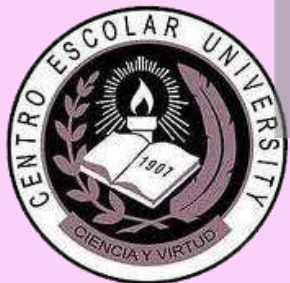
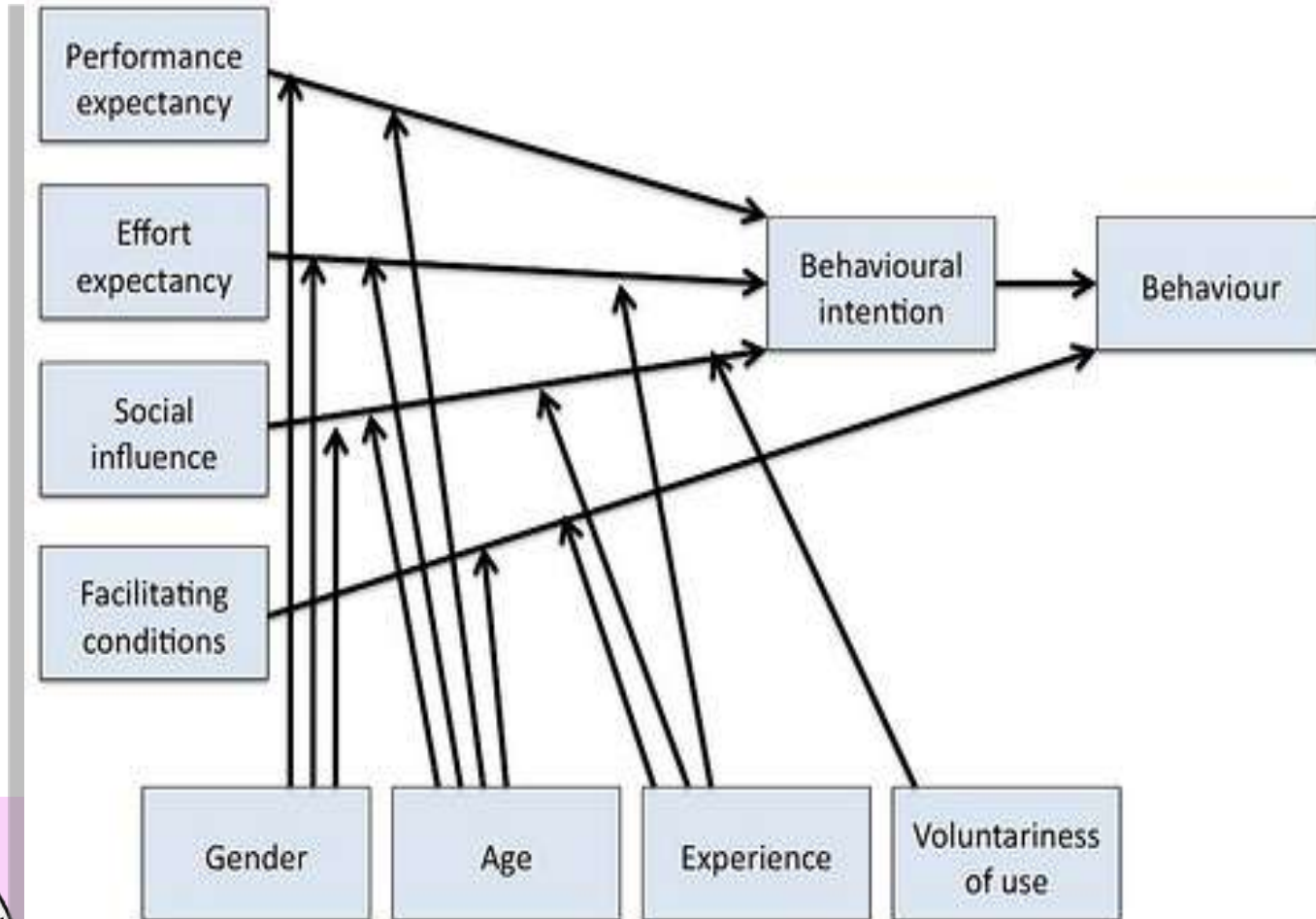
## **BASIS FOR MOBILE LEARNING IMPLEMENTATION**

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**CENTRO ESCOLAR UNIVERSITY**



# UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY



# STATEMENT OF THE PROBLEM

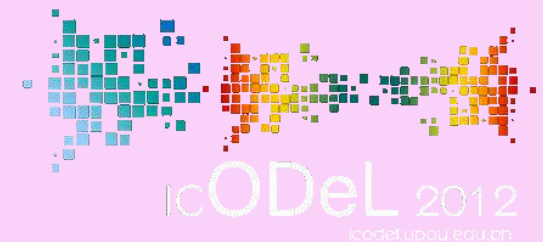
## 1. What is the profile of the respondents in terms of the following:

1.1 age;

1.2 gender;

1.3 experience;

1.4 voluntariness of use?



# STATEMENT OF THE PROBLEM

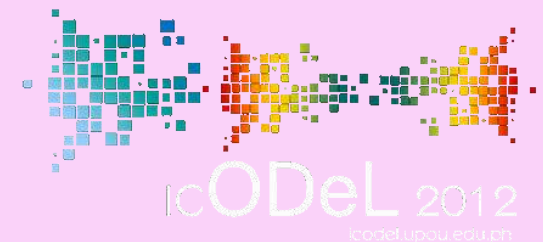
**2. How do the respondents assess the use of WI-FI and m-learning based on the following determinants of user intention?**

**2.1 Performance Expectancy (PE);**

**2.2 Effort Expectancy (EE);**

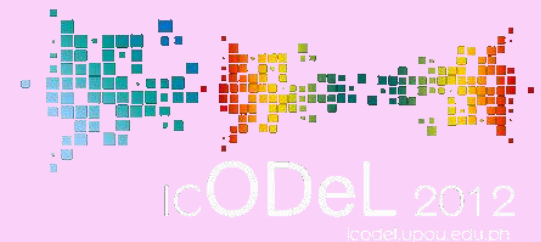
**2.3 Social Influence (SI);**

**2.4 Facilitating Conditions (FC);**



# STATEMENT OF THE PROBLEM

3. How do the respondents assessments of WI-FI technology and 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. Is there a significant relationship between wi-fi and m-learning adoption?



# METHODS AND PROCEDURES

## SAMPLING TECHNIQUE

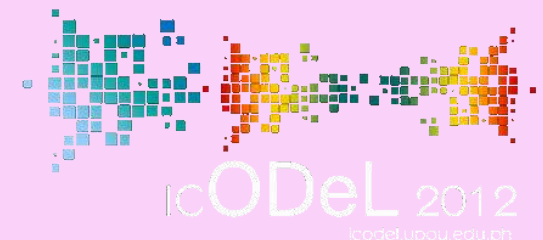
- 14,195 students, faculty and staff from different schools and colleges
- 404 respondents Sloven's formula -2<sup>nd</sup> SY 2011-2012
- Stratified Random Sampling

## DATA GATHERING INSTRUMENTS

- Part I answered problem no. 1 to determine the profile of the respondents
- Part II answered problems no. 2, 3 and 4 based on the UTAUT survey questionnaire to determine the adoption and use of wifi technology and m-learning.
- Statistical Packages for Social Sciences (SPSS)

## VALIDATION

- .957 when Chronbach's Alpha was applied to check the internal consistency of the survey questionnaire.

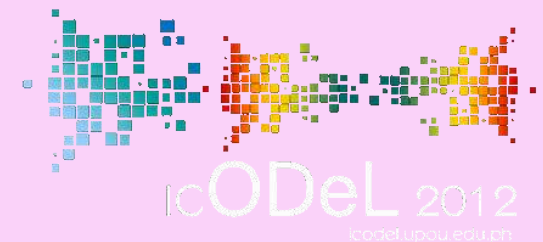




# METHODS AND PROCEDURES

## Statistical Treatment of Data

- **Frequency Distribution**
- **Percentage**
- **Mean**
- **Standard Deviation**
- **T-Test and Anova**
- **Pearson r**



# SUMMARY OF FINDINGS

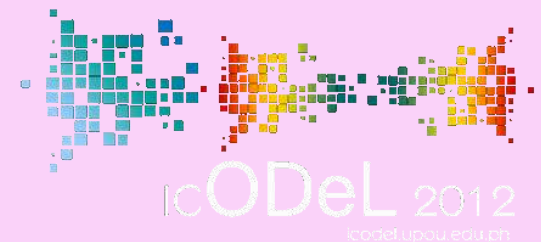
**WHAT IS THE PROFILE OF THE RESPONDENTS IN TERMS OF:**

**Age - majority is within the age ranges from 19 to below**

**Gender – mostly female**

**Experience – majority are students**

**Voluntariness of Use - voluntary**



# SUMMARY OF FINDINGS

How do the respondents assess the use of WI-FI and m-learning based on the following determinants of user intention?

Determinants of User Intention	WI-FI			Mobile Learning		
	Mean	SD	V.I	Mean	SD	V.I
Performance Expectancy	3.11	1.19	Minimally Agree	3.64	1.03	Minimally Agree
Effort Expectancy	2.57	1.00	Disagree	3.38	.98	Minimally Agree
Social Influence	2.88	.97	Disagree	3.30	.94	Minimally Agree
Facilitating Condition	3.06	.95	Minimally Agree	3.41	.95	Minimally Agree



# SUMMARY OF FINDINGS

## PERFORMANCE EXPECTANCY

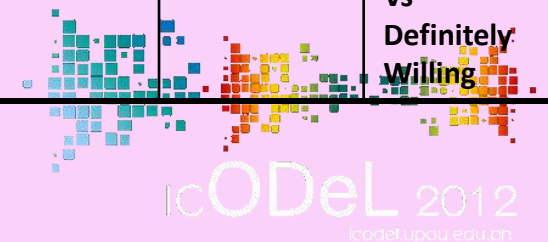
	Wi-Fi				Mobile Learning			
	F	Significance	V.I	Analysis	F	Significance	V.I	Analysis
<b>AGE</b>	5.73	.001	VS	19 and 40	2.45	0.63	NS	
<b>GENDER</b>	T=.802	0.423	NS		T=.640	0.522	NS	
<b>EXPERIENCE</b>	3.294	0.11	VS	Students VS Teachers	2.447	0.51	NS	
<b>VOLUNTARINES OF USE</b>	2.006	0.77	NS		2.770	.018	S	Very probably not willing VS Definitely willing



# SUMMARY OF FINDINGS

## EFFORT EXPECTANCY

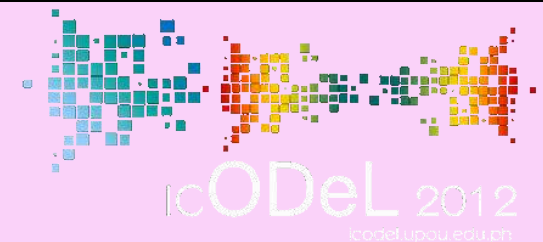
	Wi-Fi				Mobile Learning			
	F	Significance	V.I	Analysis	F	Significance	V.I	Analysis
<b>AGE</b>	5.361	.001	VS	19 VS 40	3.182	0.24	VS	19 VS 40
<b>GENDER</b>	T=.823	.411	NS		-0.27	.978	NS	
<b>EXPERIENCE</b>	4.152	0.003	VS	Students VS Teachers	1.683	0.153	NS	
<b>VOLUNTARINESS OF USE</b>	1.114	.352	NS		3.744	.003	VS	Very Probably not willing Vs Definitely Willing



# SUMMARY OF FINDINGS

## SOCIAL INFLUENCE

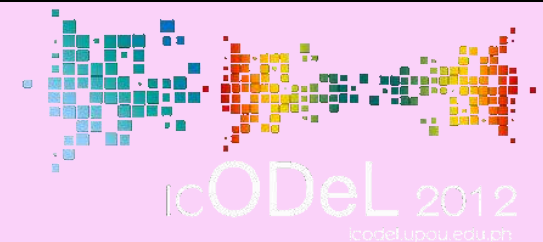
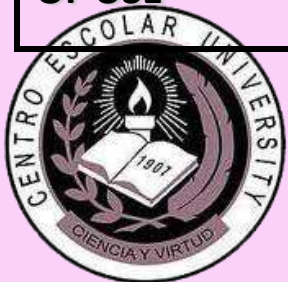
	Wi-Fi				Mobile Learning			
	F	Significance	V.I	Analysis	F	Significance	V.I	Analysis
<b>AGE</b>	2.182	.090	NS		2.316	0.75	NS	
<b>GENDER</b>	T=.312	.755	NS		T=.667	.505	NS	
<b>EXPERIENCE</b>	2.564	0.38	S	Students VS Teachers	1.552	.186	NS	
<b>VOLUNTARINESS OF USE</b>	.911	.474	NS		3.692	.003	VS	Probably W VS DW



# SUMMARY OF FINDINGS

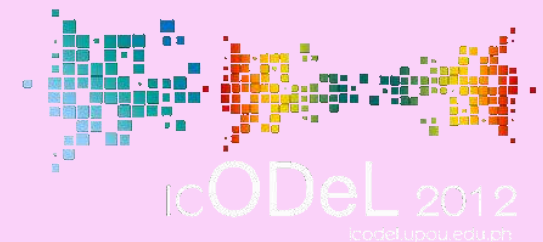
## FACILITATING CONDITIONS

	Wi-Fi				Mobile Learning			
	F	Significance	V.I	Analysis	F	Significance	V.I	Analysis
<b>AGE</b>	1.183	.316	NS		1.641	.179	NS	
<b>GENDER</b>	1.974	0.49	S	Male VS Female	1.681	0.93	NS	
<b>EXPERIENCE</b>	1.095	.358	S	Students vs Teachers	0.901	.463	NS	
<b>VOLUNTARINESS OF USE</b>	.630	.677	NS		3.839	.002	VS	Probably willing VS DW



# SUMMARY OF FINDINGS

		<b>Pearson Correlation</b>	<b>Sig. (2-tailed)</b>	<b>V.I</b>
<b>Wi Fi Behavioral Intention</b>	<b>Mobile Behavioral Intention</b>	<b>.511**</b>	<b>.000</b>	<b>Very Significant</b>

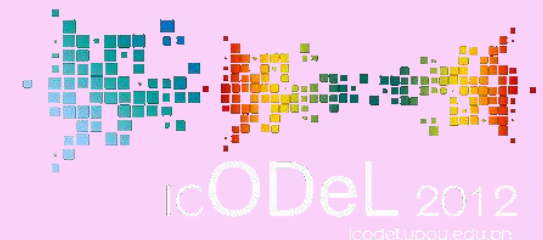




# CONCLUSIONS

## M-LEARNING

- M-learning would be useful to attain positive gains in user's performance.
- Users of M-learning would never have a hard time looking for hotspots.
- Social influence is a factor in adapting m-learning.
- Technical infrastructure such as hardware, software and people ware to support m-learning in CEU is in place.
- M-learning will fit on all ages and regardless of gender.
- Teachers have a higher tendency to adopt m-learning compared with students.
- Though users perceived that m-learning would bring positive results in their performance, they do not exhibit voluntariness to use.
- Users would try m-learning due to their perception on performance expectancy, social influence and facilitating conditions, however all these will be meaningless if effort expectancy would not be met.



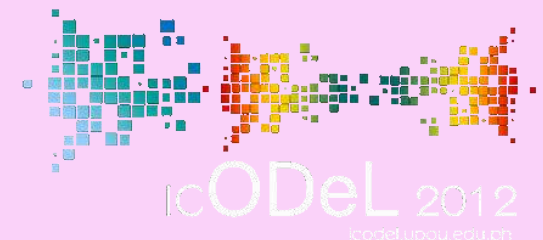
# CONCLUSIONS

## Wi-fi Adoption in CEU

- **Wi-fi is useful to attain positive gains in user's performance.**
- **Users exerted extra effort looking for hotspots in CEU.**
- **Social influence is not a factor in using wi-fi.**
- **Technical infrastructure such as hardware, software and people ware for wi-fi CEU in place.**

## UTAUT Validation

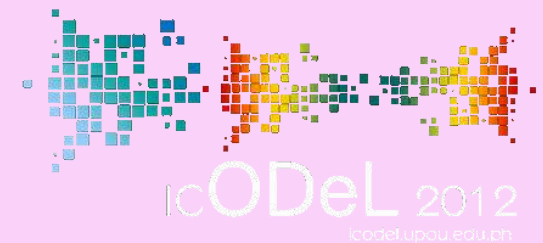
- **Performance expectancy and effort expectancy are higher on older respondents compared to younger respondents**
- **Younger respondents believed that they need to exert extra effort in looking for hotspots to connect to wi-fi and m-learning.**
- **On gender differences male users have higher belief that technical infrastructure such as hardware, software and people resources are available in CEU to facilitate wi-fi connection.**



# CONCLUSIONS

## M-LEARNING AND WI-FI

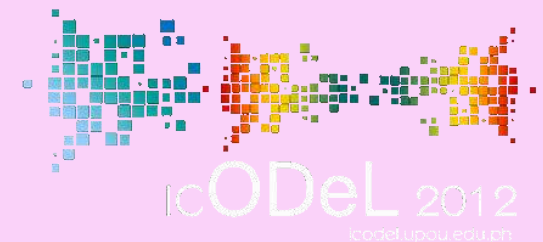
**Wi-fi adopters will most probably adopt m-learning.**



# RECOMMENDATIONS

## Wi-fi Adoption in CEU

- **Restructuring of access point for wireless connection that includes cabling, reviewing and or studying location on where best to install hot spots.**
- **Information Dissemination through flyers, signage's, meetings on the hotspots area in CEU.**
- **Consider revision of interfaces when connecting to wi-fi that will fit to lower years.**
- **Create a department whose main task is m-leaning implementation. This department will focus and/or study the following: additional infrastructure needed, creation of policies, creation and or revision of curriculum, content development, and trainings for m-learning implementers that include teachers and staff and other operational issues.**
- **Consider enforcing m learning to teachers and students.**
- **A study on the effectiveness of m-learning in the academic performance of the students.**



# Thank You!



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