# EVALUATING THE ADOPTION OF EDUCATION-BASED INFORMATION SYSTEM USING EXTENDED TECHNOLOGY ACCEPTANCE MODEL (TAM)

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# EVALUATING THE ADOPTION OF EDUCATION-BASED INFORMATION SYSTEMS USING EXTENDED TECHNOLOGY ACCEPTANCE MODEL (TAM)

A project submitted in partial fulfillment of requirements for the degree Master of Information and Communication Technology, Universiti Utara Malaysia

by

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#### ABSTRAK

Tujuan kajian ini adalah untuk mengkaji tahap penerimaan dan kesediaan menguna Sistem Maklumat Murid (SMM) dan Sistem Analisis Peperiksaan (SAP). Model jangkaan yang direkabentuk adalah berdasarkan kepada kajian-kajian lepas untuk menentukan factor-faktor seperti kegunaan persepsi, pemudahguna persepsi, tahap kecelikkan IT, kekayaan maklumat, penawaran produk, kesulitan dan kemudahan sekitar terhadap kesediaan dan kesanggupan menguna sistem-sistem tersebut. Berdasarkan kajian lepas, model TAM digunakan asas dan ia berjaya mencungkil dan menerangkan kesediaan menguna sistem-sistem tersebut. Model jangkaan turut disokong menunjukkan tahap perhubungan terhadap pembolehubah-pembolehubah cadangan dengan kesediaan menguna sistem-sistem tersebut. Kajian ini dijalankan di sekolah rendah di Kota Setar, Kedah Darulaman sebagai satu kaji selidik. Borang kaji-selidik digunakan sebagai alat dalam kaedah kajian dan data mentah yang diterima diproses dan dianalisis dengan menggunakan statistic analisis (PASW SPSS 18.0). Kaedah analisis yang digunakan adalah seperti analisis diskriptif, cronbach's alfa, hubungan Pearson Chi-Square, hubungan logistic. Hasil kajian menunjukkan bahawa terdapat hubungan yang signifikan dengan pembolehubah-pembolehubah yang dicadangkan terhadap kesediaan mengguna sistem SMM dan SAP. Jadi, hasil factor menyumbang kepada kajian ini membuktikan bahawa enam kesediaan/kesanggupan menguna SMM dan SAP dalam arena pendidikan.

#### ABSTRACT

The aim of this study was to evaluate teachers' acceptance of Student Information System (SMM) and Examination Analysis System (SAP). The research model created based on prior research to address the factors of perceived usefulness (PU), perceived ease of use (PEOU), IT literacy level, information richness, product offering, complexity and facilitating conditions towards intention to use and actual use of these systems. Based on the previous study, Augmented Technology Acceptance Model (TAM) has been to determine the teachers intention to use SMM and SAP. This study has been carried out in primary schools in Kota Setar, Kedah Darulaman as case studies. Questionnaire has been used as instrument in this descriptive survey method and the raw data is preprocessed and analyzed using statistical analysis. Statistical analysis software (PASW SPSS 18.0) were used to analyze the primary data using descriptive analysis including crosstabulation, chisquare and logistic regression analysis. The results from the statistical analysis indicate the significant contribution of these independent variables towards intention to use these systems. Thus, this analysis reveals that there are six factors significantly contribute and influence the intention to use SMM and SAP in education institution.

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## **DEDICATION**

To my beloved mother Rajamal Arumugam, my husband Kumar, and also to

my children Dinitha, Mivesh and Sehveetrraa.

# **TABLE OF CONTENTS**

PERMISSION TO USE i
ABSTRAK ii
ABSTRACT iii
ACKNOWLEDGEMENT iv
DEDICATION v TABLE OF CONTENTS vi
LIST OF TABLES xi
LIST OF FIGURES xiii
LIST OF ABBREVIATIONS xiv

## **CHAPTER 1: INTRODUCTION**

1.1	Overview	1
1.2	Problem Statement	5
1.3	Research Objectives	6
1.4	Research Questions	6
1.5	Significance of Research	7
1.6	Scope and limitations of research	8
1.7	Summary of Chapters	9

## Page

## **CHAPTER 2: LITERATURE REVIEW**

2.1	Evaluat ion of EIS	10
2.2	Technology in Malaysia Education	13
	2.2.1 Education-based Inf. System	13
2.3	Product and System Acceptance (SMM & SAP)	19
2.4	Theoretical Framework	23
	2.4.1 Overview Technology Acceptance Model	25
	2.4.2. Perceived Usefulness and Perceived Ease of Use	28
	2.4.3 Adapting and extending TAM	32
	2.4.4 Related Studies Using Extended TAM model	34
	2.4.5 Previous Studies using extended TAM	36
2.5	Summary	37

### **CHAPTER 3: RESEARCH METHODOLOGY**

3.1	Resea	rch Framework	38
	3.1.1	Perceived Usefulness	39
	3.1.2	Perceived Ease of Use	39
	3.1.3	Subjective Norm	40
	3.1.4	Perceived Behaviour Control	41

3.2	Resea	rch Hypothesis	45
3.3	Resea	rch Design	45
	3.3.1	Descriptive Research	47
	3.3.2	Survey	47
	3.3.3	Questionnaire Development	48
	3.3.4	Sampling	49
	3.3.5	Data Collection	51
	3.3.6	Technique of Data Analysis	53
3.4	Concl	usion	56

## **CHAPTER 4: RESEARCH FINDINGS**

4.1	Respo	ndents' Profiles	57
	4.1.1	Demographics	57
	4.1.2	Experience with SMM	60
	4.1.3	Experience with SAP	61
	4.1.4	Experience as class teacher	62
	4.1.5	Attended Course Related	62

4.2	Reliability and Validity Test	64
4.3	Descriptive Statistics	67
4.4	Correlation Analysis	73
4.5	Logistics Regression Analysis	77
	4.5.1 Likelihood Ratio Test	78
4.6	Summary	85

## **CHAPTER 5: CONCLUSION**

5.1	Introduction	86
5.2	Summation of Research Findings	87
	5.2.1 Research Objective 1	87
	5.2.2 Research Objective 2	90
	5.2.3 Research Objective 3	93
5.3	Discussion	94
5.4	Contributions of the research study	96
5.5	Summary	96

REFERENCES		98
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## APPENDICES

Appendix A:	Instrument Questionnaire	105
Appendix B:	Pilot Study Questionnaire	111
	Crosstabulation Result	115
Appendix C:	Permission to conduct the research from Kedah Education Department (JPN)	121
	Permission to conduct the research from Malaysian Ministry of Education (MMOE)	

## LIST OF TABLES

Page

Table 2.1:	Data Collection Activities Perform by Schools, DEO and SED	18
Table 2.2:	Summary of Extended TAM studies	36
Table 3.1:	The number of questionnaire and class teachers in each School in Kota Setar	51
Table 4.1:	Descriptive Statistics for Types of School	58
Table 4.2:	Respondents' Profiles	63
Table 4.3:	Cronbach's Alpha Test	65
Table 4.4:	Statistics For PU	67
Table 4.5:	Statistics For PEOU	67
Table 4.6:	Statistics For IT literacy level	68
Table 4.7:	Statistics For Information Richness	68
Table 4.8:	Statistics For Product Offering	69
Table 4.9:	Statistics For Complexity	70
Table 4.10:	Statistics For Facilitating Conditions	70
Table 4.11:	Crosstabulation Results For PU (SMM)	71
Table 4.12:	Crosstabulation Results For PU (SAP)	72
Table 4.13:	Correlation Between Intention to use and PU	73
Table 4.14:	Correlation Between Intention to use and PEOU	74
Table 4.15:	Correlation Between Intention to use and IT literacy level	74
Table 4.16:	Correlation Between Intention to use and Inf. Rich	75
Table 4.17:	Correlation Between Intention to use and Product Of	75
Table 4.18:	Correlation Between Intention to use and Complexity	76
Table 4.19:	Correlation Between Intention to use and FC	77
Table 4.20:	PU Towards SMM and SAP usage	78
Table 4.21:	Parameters Estimates (PU)	79
Table 4.22:	PEOU Towards SMM and SAP usage	79

Table 4.23:	Parameters Estimates (PEOU)	80
Table 4.24:	IT literacy level Towards SMM and SAP usage	80
Table 4.25:	Parameters Estimates (IT literacy level)	81
Table 4.26:	Information Richness Towards SMM and SAP usage	81
Table 4.27:	Parameters Estimates (Information Richness)	82
Table 4.28:	Product Offering Towards SMM and SAP usage	82
Table 4.29:	Parameters Estimates (Product Offering)	83
Table 4.30:	Complexity Towards SMM and SAP usage	83
Table 4.31:	Parameters Estimates (Complexity)	84
Table 4.32:	Facilitating Conditions Towards SMM and SAP usage	84
Table 4.33:	Parameters Estimates (Facilitating Conditions )	85
Table 5.1:	Crosstabulation Test For PU & PEOU	88
Table 5.2:	Significant Items For PU & PEOU	91
Table 5.3:	Significant Items For IT literacy level	91
Table 5.4:	Information Richness (Significant Items)	92
Table 5.5:	Product Offering (Significant Items)	92
Table 5.6	Complexity (Significant Items)	92
Table 5.7	Facilitating Conditions (Significant Items)	92

#### **LIST OF FIGURES**

Figure 2.1:	ISs Success Model	11
Figure 2.2:	Screenshot of Student Information System	16
Figure 2.3:	Screenshot of Examination Analysis System	17
Figure 2.4:	SMM and SAP Data Collecting Process	19
Figure 2.5:	Basic concept underlying User Acceptance Model	21
Figure 2.6:	Product Acceptance in Shakel	22
Figure 2.7:	Product Acceptance by Nielson	23
Figure 2.8:	The Theory of Reasoned Action Model	26
Figure 2.9:	Final Version of TAM (Venkatesh & Davis, 1996)	30
Figure 2.10:	Augemented (extended) TAM	34
Figure 3.1:	Framework of research extending of TAM model	44
Figure 3.2:	Research Design	46
Figure 3.3:	Sampling Selection	50
Figure 3.4:	Scatter Plot For Data Transportation	54
Figure 4.1:	Percentange of respondents for gender	58
Figure 4.2:	The frequency of age group	59
Figure 4.3:	Distribution of respondents based on race	59
Figure 4.4:	The percentage of respondents based on marital status	60
Figure 4.5:	The percentange of respondents based on experienced With SMM	61
Figure 4.6:	The percentange of respondents based on experienced With SAP	61
Figure 4.7	The percentage of respondents based on experience. As class teacher	62
Figure 4.8:	The percentage of respondents based on attended Course related	62
Figure 5.1:	Construct Research Model for Acceptance of SMM	93
Figure 5.2:	Construct Research Model for Acceptance of SAP	94

#### LIST OF ABBREVIATIONS

ІСТ	Information and Communication Technology
MMOE	Malaysian Ministry of Education
EIS	Education-based Information System
SMM	Sistem Maklumat Murid
SAP	Sistem Analisis Peperiksaan
SSDM	Sistem Displin Murid
SIS	Student Information System
ТАМ	Technology Acceptance Model
IDT	Innovations Diffusions Theory
SCT	Social Cognitive Theory
TRA	Theory of Reasoned Action
ТРВ	Theory of Planned Behavior
DTPB	Decompassed Theory of Planned Behaviour
UTAUT	The United Theory of Acceptance and Use of Technology
PU	Perceived Usefulness
PEOU	Perceived Ease of Use
IT	Information Technology
Α	Attitude
BI	Behavioral Intention
RAM	Random Access Memory
SED	State Education Department
DEO	District Education Office
Р	Probability
PASW	Predicted Analytics Software
IS	Information System

# CHAPTER ONE

# **INTRODUCTION**

#### 1.1 Overview

Globalization and technology change the processes that have speeded up the global economy together over the past twenty years which leads to a new global economy creation, powered by technology, fueled by information and drived by knowledge through computer science, information and communication technology (ICT). The form of this new global economy has serious implications for the nature and purpose of educational institutions.

Most developing countries have the capabilities to develop and increase the value of eduaction through ICT (Blurton *et al.*, 2002). In fact, ICT is reported has changed the traditional educational foundation and assist as well as improving learnin among the students. ICT transformation has brought with it a variety of means, including productivity software, multimedia and network devices along with the dispersal of personal computers which opened new horizon of the development and implementation

# The contents of the thesis is for internal user only

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