RABIATUL ADAWIYAH BINTI ABDULLAH BTMI 2015 UTeM

STUDENT ACCEPTANCE OF DIGITAL PORTFOLIO

RABIATUL ADAWIYAH BINTI ABDULLAH

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

© Universiti Teknikal Malaysia Melaka

I hereby confirm that I have examined this project paper entitled:

STUDENT ACCEPTANCE OF DIGITAL PORTFOLIO

By

RABIATUL ADAWIYAH BINTI ABDULLAH

I hereby acknowledge that this project paper has been accepted as part fulfillment for the degree of Bachelor of Technology Management (Hons) in Innovation Technology

Signature : ……

Supervisor : PUAN MISLINA BINTI ATAN @ MOHD SALLEH

Date : 26th JUNE 2015

Signature : ……

Evaluator : PROF. MADYA. DR. MD. NOR HAYATI BIN TAHIR

Date : 26th JUNE 2015

© Universiti Teknikal Malaysia Melaka

STUDENT ACCEPTANCE OF DIGITAL PORTFOLIO

RABIATUL ADAWIYAH BINTI ABDULLAH

Report submitted in fulfillment of the requirement for the degree of Bachelor of Technology Management (Hons) in Innovation Technology.

Faculty of Technology Management and Technopreneurship

Universiti Teknikal Malaysia Melaka

JUNE 2015

© Universiti Teknikal Malaysia Melaka

"I declare that this project is the result of my own research except as cited in the references. The research project has not been for any degree and is not concurrently submitted in candidature of any other degree."

Signature : ……

Name : RABIATUL ADAWIYAH BINTI ABDULLAH

Date : 26th JUNE 2015

© Universiti Teknikal Malaysia Melaka

DEDICATION

First of all, this complete research paper is lovingly dedicated to my parents, En. Abdullah Bin Mohamed and Puan Aziah Binti Abdul Rahman, who have been my constant source of inspiration and thank you for their unconditional support with my studies. I am honored to have their as my parents. Thank you for giving me a chance to prove and improve myself through all my walks of life and for giving me strength to reach for the stars and chase my dreams. To all my family, brother and sisters, thank you for believing in me, for allowing me to further my studies and have given unconditional support to me.

© Universiti Teknikal Malaysia Melaka

ACKNOWLEDGEMENT

Alhamdulillah, Thanks to Allah whom with His willing giving me an opportunity to complete this research paper entitled "Student Acceptance of Digital Portfolio" to fulfill the compulsory requirements of Universiti Teknikal Malaysia Melaka (UTeM) and the Faculty of Technology Management and Technopreneurship (FPTT). I have to thank my parents for their love and support throughout my life. I would like to thank, without implicating to my fellow classmates, lecturers, supervisor, family and friends for helping me working on this research project.

I would like to sincerely thank to my supervisor, Puan Mislina Binti Atan @ Mohd Salleh, for her guidance, sharing her experience and support throughout this study during two semesters in session 2014/2015, and especially for her confidence in me. I would also sincere appreciation and thanks to Prof. Madya. Dr. Md. Nor Hayati Bin Tahir for his comments and sharing the knowledge were very beneficial in my completion of this research paper and also thanks to Dr. Chew Boon Cheong and Dr. Ismi Rajiani for sharing their experience and knowledge in the Research Methodology subject and SPSS system that really helped me through the writing of this research.

Lastly, deepest thanks and appreciation to my family members, their endless support, encouragement, and full support during the report completion from the beginning till the end. To all my friends, thank you for your understanding and encouragement in my many.

Thank you very much.

© Universiti Teknikal Malaysia Melaka

ABSTRACT

Continuous developments in education technologies are accompanied by diversity of methods and applications in education. The process starting with computer-assisted learning is now in a different dimension via increasing internet possibilities. Transition from portfolio to digital portfolio is one of the current examples to be given about changing process in education technology. The concept of "digital portfolio" has replaced portfolio as information and communication technologies have become main components in education. The objectives of this research are to identify the factors that influence user acceptance towards digital portfolio and to determine the use intentions in using digital portfolio among UTeM students. Besides that, the research framework is adopted by Unified Theory of Acceptance and Use of Technology (UTAUT) to identify the user acceptance towards Digital Portfolio based on these constructs; performance expectancy, effort expectancy, social influence, facilitating conditions, behavioral intention and user behavior. This research is based on explanatory research where is to determine the relationships between independent variables and dependent variable. The researcher chooses to use quantitative method by conducting a survey through questionnaire to a sample of 300 respondents among UTeM students in Melaka. From this research, the data gathered were analyzed by using descriptive analysis. The finding indicates that all variables have a significant relationship between independent variables (performance expectancy, effort expectancy, and social influence, facilitating conditions) with dependent variable (Behavioral Intention).

© Universiti Teknikal Malaysia Melaka

ABSTRAK

Perkembangan yang berterusan dalam teknologi pendidikan disertai dengan kepelbagaian kaedah dan aplikasi dalam bidang pendidikan. Proses bermula dengan pembelajaran bantuan komputer kini dalam dimensi yang berbeza melalui meningkatkan kemungkinan internet. Peralihan daripada pemfailan portfolio kepada digital portfolio adalah salah satu contoh semasa yang akan diberikan mengenai proses perubahan dalam teknologi pendidikan. Konsep "digital portfolio" telah menggantikan portfolio sebagai teknologi maklumat dan komunikasi di mana menjadi komponen utama dalam pendidikan. Objektif kajian ini adalah untuk mengenalpasti faktor-faktor yang mempengaruhi penerimaan pengguna terhadap portfolio digital dan menentukan niat pengguna dalam menggunakan portfolio digital di kalangan pelajar UTeM. Di samping itu, rangka kerja penyelidikan yang diguna pakai oleh Teori Unified Penerimaan dan Penggunaan Teknologi (UTAUT) adalah untuk mengenal pasti penerimaan pengguna terhadap Portfolio Digital berdasarkan konstruk ini; jangka prestasi, jangka usaha, pengaruh sosial, memudahkan keadaan, niat tingkah laku dan tingkah laku pengguna. Kajian ini adalah berdasarkan kepada penyelidikan penerangan di mana untuk menentukan hubungan antara pembolehubah bebas dan pembolehubah bersandar. Penyelidik memilih untuk menggunakan kaedah kuantitatif dengan menjalankan kajian melalui soal selidik kepada sampel sebanyak 300 responden dalam kalangan pelajar UTeM di Melaka. Dari kajian ini, data yang dikumpul dianalisis dengan menggunakan analisis deskriptif. Dapatan kajian menunjukkan bahawa semua pembolehubah mempunyai hubungan yang signifikan di antara pemboleh ubah bebas (jangka prestasi, jangka usaha, dan pengaruh sosial, keadaan memudahkan) dengan pembolehubah bersandar (Niat Tingkah Laku).

© Universiti Teknikal Malaysia Melaka

TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
	DECLARATION	**ii**
	DEDICATION	**iii**
	ACKNOWLEDGEMENT	**iv**
	ABSTRACT	**v**
	ABSTRAK	**vi**
	TABLE OF CONTENT	**vii**
	LIST OF TABLES	**xiii**
	LIST OF FIGURES	**xv**
	LIST OF SYMBOLS	**xvi**
	LIST OF ABRREVIATIONS	**xvii**
	LIST OF APPENDICES	**xviii**

© Universiti Teknikal Malaysia Melaka

CHAPTER 1	INTRODUCTION		PAGE
	1.1	Introduction	1
	1.2	Background of the study	2
	1.3	Problem Statement	4
	1.4	Research Questions	5
	1.5	Research Objectives	6
	1.6	Scope of the study	6
	1.7	Limitation	7
	1.8	Key Assumptions of the Study	7
	1.9	Importance of the study	8
	1.10	Summary	9
CHAPTER 2	**LITERATURE RIVIEW**		
	2.1	Introduction	10
	2.2	Higher education & Learning	11
	2.3	Digital portfolio	11
		2.3.1 Function of Digital Portfolio	12
	2.4	Student Digital Portfolio	12
	2.5	Innovation	13
	2.6	UTAUT Model	14
		2.6.1 Performance Expectancy	15

© Universiti Teknikal Malaysia Melaka

CHAPTER	TITLE		PAGE
	2.6.2	Effort Expectancy	15
	2.6.3	Social Influences	16
	2.6.4	Facilitating Condition	16
	2.7	User acceptance	16
	2.8	Behavioral intention	17
	2.9	Theory UTAUT	17
	2.10	Theoretical Framework	18
	2.11	Hypothesis	21
	2.12	Summary	22
CHAPTER 3	**RESEARCH METHOD**		
	3.1	Introduction	23
	3.2	Research Design	24
	3.2.1	Descriptive Research	24
	3.3	Methodological Choices	25
	3.3.1	Quantitative Research	26
	3.4	Data Source	27
	3.4.1	Primary Data	27
	3.4.2	Secondary Data	28
	3.5	Location of the study	29

© Universiti Teknikal Malaysia Melaka

CHAPTER	TITLE			PAGE
	3.6	Research Strategy		30
		3.6.1	Survey	31
	3.7	Sampling		31
		3.7.1	Probability	32
	3.8	Time Horizon		32
		3.8.1	Cross-Sectional Studies	33
	3.9	Scientific Canons		33
		3.9.1	Reliability	33
		3.9.2	Validity	35
			3.9.2.1 Construct Validity	35
			3.9.2.2 Internal Validity	35
			3.9.2.3 External Validity	36
	3.10	Pilot Test		36
			3.10.1 Validity Test	37
			3.10.2 Reliability test	40
	3.11	Statistical tools: Multiple Regression Analysis		42
	3.12	Summary		42

© Universiti Teknikal Malaysia Melaka

CHAPTER 4 RESULT AND ANALYSIS PAGE

4.1 Introduction 43

4.2 Description of Samples 44

4.3 Demographic Analysis 45

4.3.1 Gender 46

4.3.2 Ethnics 47

4.3.3 Status 48

4.3.4 First time use of computer 49

4.3.5 Average computer usage per day 50

4.3.6 Where do you keep your file 51

4.3.7 Heard digital portfolio 52

4.4 Reliability for Research 53

4.5 Descriptive analysis 54

4.6 Descriptive statistic for each variable 66

4.7 Inferential Analysis 67

4.7.1 Multiple Regression Analysis 67

4.7.1.1 Hypothesis testing 72

4.8 Pearson Correlation Coefficient 75

4.9 Summary 76

© Universiti Teknikal Malaysia Melaka

CHAPTER 5 CONCLUSION AND RECOMMENDATION PAGE

5.1 Introduction 77

5.2 Discussion 78

5.2.1 Research objective 1 and conclusion 78

5.2.1.1 Multiple Regression Analysis 79

5.2.1.2 Hypothesis testing 80

5.2.2 Research objective 2 and conclusion 83

5.3 General Recommendation 84

5.3.1 University Role 84

5.3.2 Student Role 85

5.4 Recommendation for Research 86

5.5 Conclusion 87

REFERENCES 88

APPENDICES 94

© Universiti Teknikal Malaysia Melaka

LIST OF TABLES

TABLE	TITLE	PAGE
Table 3.1	Validity testing for pilot test	38
Table 3.2	Rules of thumb Cronbach's alpha Coefficient range	40
Table 3.3	Cronbach's alpha for each variable	41
Table 4.1	Descriptive Statistics of Respondent's Profile	45
Table 4.2	Reliability Statistics	53
Table 4.3	Descriptive analysis for Performance Expectancy	54
Table 4.4	Descriptive analysis for Effort Expectancy	56
Table 4.5	Descriptive analysis for Social Influences	58
Table 4.6	Descriptive analysis for facilitating conditions	60
Table 4.7	Descriptive analysis for Behavioral Intention	62
Table 4.8	Descriptive analysis for Use intention	64
Table 4.9	Descriptive statistic for Each Variables	66
Table 4.10	Model summary of Multiple Regression Analysis	68
Table 4.11	ANOVA	69

© Universiti Teknikal Malaysia Melaka

TABLE	TITLE	PAGE
Table 4.12	Table coefficient of determination	70
Table 4.13	t and significant value	72
Table 4.14	Rules of thumb about Correlation Coefficient	75
Table 4.15	Pearson correlation	76
Table 5.1	Descriptive statistic summary for Behavioral Intention	78
Table 5.2	Descriptive statistics summary for Use Intention	83

© Universiti Teknikal Malaysia Melaka

LIST OF FIGURES

FIGURE	TITLE	PAGE
Figure 2.1	Theoretical Framework adopt by Venkatesh (2003)	17
Figure 2.2	Theoretical Frameworks for Students Acceptance Via Digital Portfolio	18
Figure 4.1	Respondent's Gender	46
Figure 4.2	Respondent's Ethics	47
Figure 4.3	Respondent's Status	48
Figure 4.4	Respondent's first time using the computer	49
Figure 4.5	Respondent's average computer usage per day	50
Figure 4.6	Respondent's keep files	51
Figure 4.7	Respondent heard about digital portfolio	52

© Universiti Teknikal Malaysia Melaka

LIST OF SYMBOLS

SYMBOL		MEANING
t	=	t value
p	=	significant
β	=	Beta
α	=	Cronbach's alpha
N	=	Sample of Respondent
X	=	Independent Variable
Y	=	Dependent Variable

© Universiti Teknikal Malaysia Melaka

LIST OF ABRREVIATIONS

NAME	ABRREVIATION
Universiti Teknikal Malaysia Melaka	UTeM
Research and Development	R&D
Technology Acceptance Model	TAM
Unified Theory of Acceptance and Use of Technology	UTAUT
Statistical Package for the Social Sciences	SPSS
Multiple Regression Analysis	MRA
Pearson's Product Moment Correlation Coefficient	PMCC

© Universiti Teknikal Malaysia Melaka

LIST OF APPENDICES

APPENDICES	TITLE	PAGE
A	Questionnaire	94
B	Gantt chart	101
C	r Product Moment Value Table	102

© Universiti Teknikal Malaysia Melaka

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter will be discussing about the introduction of study. This introduction is important to describe and explain in details about the research. This will determine the success of the study using the iron triangle. In this chapter there are some contents in introduction of research that should be included which is background of study, problem statement, research question, research objective, scope, limitation and key assumption of the study.

© Universiti Teknikal Malaysia Melaka

1.2 Background of the Study

Like many other countries Malaysia realizes that it will to continue to improve and innovate to remain competitive with higher education systems in other countries. Transition from portfolio to Digital Portfolio is one of the current examples to be given about changing process in education technology. The approaches which place learners and assignment at the centre has turned into a „learner work file" or in other words "portfolio" format through developing. The concept of „digital portfolio" has replaces portfolio as information and communication technologies have become main components in education.

As we know, education is one thing that is very important to all of us. With having education, people will become more knowledgeable and successful with what you've learned. However, there are various methods that can be used in the learning process in terms of gaining knowledge a normal process that will be passed by all people is through learning in class with friends and teachers. From time to time, there are some other alternatives that we can use to gain knowledge.

Digital portfolio is a collection of evidence assembled and managed by a user, usually on the web. Digital portfolio is one of the new innovations generated to facilitate learner primarily to store and collect their work better and last longer. In development of 21st century skills, one of the seven survival skills of the 21st century is focuses on effective oral and written communication. Based on that, digital portfolio is the one of effective tool that can help engage students in practicing these important abilities.

According to MacDonald et al (2004), in adult education setting, however, a portfolio is a selective group artifact, placed in context within a carefully constructed user interface. Whether the interface is electronic, paper-based or some combination of the two is not important, what is crucial is that the artifacts have been chosen and arranged with thought and purpose.

© Universiti Teknikal Malaysia Melaka

Electronic portfolios (e-portfolios) appear to offer this opportunity for leaner control and to be capable of supporting or promoting deep learning as students are able to make connections between the learning which occurs in different contexts: academic, workplace and community Tosh et al. (2005).

There are many benefits of using digital portfolios, especially for students. With the digital portfolio, students no longer need to send their works translated into hard copy, which requires several steps that need to be done such as print paper, binding, submit to the lecturer and the task manually requires the cost to be produced in hard copy form. It is common for a student, especially students of higher education where the assignment is a job that is always there for each subject.

Change from manual to digital give a lot of effects to students, especially in terms of technology. Students will be easier, uses technology as a medium for their learning than manually, so student can only send the soft copy to their lecturer. Not only benefit the students but also to the teachers and parents because they can see for themselves the work of their children and students. From there, they can assess the students' work.

According to Negelkerke (1991), The JSTOR Archive is a trusted digital repository providing for long-term preservation and access to leading academic journals and scholarly literature from around the world. The Archive is supported by libraries, scholarly societies, publishers, and foundations. It is initiative of JSTOR, a not-for-profit organization with a mission to help the scholarly community take advantage of advances in technology.

© Universiti Teknikal Malaysia Melaka

1.3 Problem Statement

There are several reasons that encourage researchers to conduct research on repository through digital portfolio. Among these problems that have been identified in the education system in terms of intellectual output storage for personal collection. In which, particularly students who have a variety of work that needs to be kept as a reference throughout their learning, so they need the effective repository that can save all their work safely. Apart from that, another problem that most noticeable where everyone can see, especially for a student is the use of paper that is too much to produce paper work or assignment. The question is does the use of paper that too much is environmental friendly?

Sometimes with the use of paper that can cause many students confused with notes of different subjects, wasteful and irregular management system. However, not all students have the same problem as for students who are alert to all his work, will definitely neat and tidy. But for those students who did not take it normally would sell or dispose of all their notes after completion of the final examination. Whether they felt that all the notes and the results of their work are not required in the future? Therefore, the use of digital portfolio system, it can help students organize and manage all jobs with better and more attractive with the use of the web can be designed according to their tastes. Not only the assignment, but include all the other collecting like video, slide and so on.

Based on the observation too, the researcher found that most of the students have problems in storing all the tasks that have been completed for each semester that certainly has a variety of different subjects. They require storage in a more systematic and structured or more properly be called had a good management team in managing all the work, ideas, good presentation slides and complete various other artifacts. Among other problems identified by the researcher is in terms of knowledge sharing notes with friends who are different elsewhere.

© Universiti Teknikal Malaysia Melaka