

ADOPTION OF SOCIAL NETWORK SITES FOR TEACHING AND LEARNING

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I would like to dedicate this thesis to my Father and specially my beloved mother, for her endless supports and encouragements.

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ABSTRACT

In the era of globalization social network make a big revolution in communications tools in which to convenient erroneous of process that can be applied in teaching and learning. Undeniably, there are numerous of learning applications that somehow make improvement performance of students in academic societies. Even though SNSs (Social Network Sites) gained an egregious reputation for providing high quality of leaning but unfortunately appropriate position for this kind of educational website disregarded sometimes in which provides interesting gap of knowledge for researcher in order to considered and investigate the educational benefit of non-commercial social networks sites such as Edmodo, Ning, Elgg and etc. Specify use in this research use Edmodo. The main goals of this study are to identify the important factors in which has impact over Task-Technology Fit by students of Faculty of Computing in UTM throughout the survey of 317 questionnaires that has been distributed among students in order to propose appropriate adoption of social network teaching and learning model in Faculty of Computing. SmartPLS has in chosen in order to investigate the collected data and also test the hypotheses of this research. The results exhibit that Task Structure and Task Complexity are important factors for Task Characteristics and also Communication, Mobility, Trust, Privacy are important factors for Technology Characteristics that these significant factors has influence over adoption of social network teaching and learning in Faculty of Computing. Finally, to help Faculty of Computing in order to have successful social network teaching and learning some recommendations suggested.

ABSTRAK

Dalam era globalisasi, rangkaian sosial merupakan satu revolusi dalam arena komunikasi di mana ia mudah diadaptasi dan boleh digunakan dalam pengajaran dan pembelajaran. Tidak dapat dinafikan, terdapat banyak aplikasi yang boleh meningkatkan prestasi pelajar dalam pembelajaran. Walaupun SNSs (Laman Rangkaian Sosial) mempunyai reputasi tinggi dalam pendidikan tinggi yang berkualiti, ia kurang mendapat liputan dan kajian yang meluas. Ini menyediakan ruang kajian yang sangat menarik untuk dipertimbangkan oleh penyelidik untuk mengkaji faedah penggunaannya kepada tapak media social seperti Edmodo, Ning, Elgg dan lain-lain. Bagi tujuan kajian ini, penyelidikan dilakukan melalui Edmodo. Matlamat utama kajian ini adalah untuk mengenal pasti faktor-faktor penting dalam yang mempunyai kesan ke atas Kesesuaian Tugas Teknologi oleh pelajar Fakulti Komputeran di UTM di mana 317 soal selidik telah diedarkan di kalangan pelajar untuk mencadangkan penggunaan rangkaian sosial pengajaran dan model pembelajaran yang bersesuaian untuk Fakulti Komputeran. SmartPLS telah dipilih sebagai instrumen bagi mengkaji dapatan kajian dan hipotesis kajian. Hasil kajian menunjukkan yang Struktur Tugas dan Kerumitan Tugas adalah factor penting dalam ciri-ciri tugas manakala faktor komunikasi, mobiliti, kebolehpercayaan dan privasi merupakan faktor-faktor yang penting dan berpengaruh ke atas penggunaan pengajaran rangkaian sosial dan pembelajaran di Fakulti Komputeran. Akhir sekali, beberapa cadangan telah diusulkan bagi membantu Fakulti Komputeran dalam menjalankan pengajaran berasaskan Laman Rangkaian Sosial.

TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
	DECLARATION	ii
	DEDICATION	iii
	ACKNOWLEDGEMENT	iv
	ABSTRACT	v
	ABSTRAK	vi
	TABLE OF CONTENTS	vii
	LIST OF TABLES	xi
	LIST OF FIGURES	xiii
1	INTRODUCTION	1
	1.1 Introduction	1
	1.2 Problem Background	2
	1.3 Problem statement and research question	5
	1.4 Research Objective	5
	1.5 Research Scope	6
	1.6 Importance of research study	6
	1.7 Summary	7
2	LITERATURE REVIEW	8
	2.1 Introduction	8
	2.2 Use of Technology in Education	10
	2.3 Social networking sites definitions	11
	2.3.1 History of SNSs	11
	2.3.2 Benefits of Social Networking Sites	14

2.4	Social Networks in Teaching and Learning	14
2.4.1	Ning	15
2.4.2	Elgg	15
2.4.3	Edmodo	16
2.5	The Potential Theory	16
2.6	Social Networks Characteristics in Education	21
2.6.1	Interaction	21
2.6.2	Collaboration	22
2.6.3	Active Participation	23
2.6.4	Information and Resource Sharing	23
2.6.5	Critical Thinking	24
2.7	Previous Study about Factors That Influencing Social Network Adoption	24
2.8	Task Technology- Fit (TTF)	26
2.8.1	Focus previous study on Task Characteristics and Technology Characteristics	28
2.9	Conceptual Model	31
2.10	Proposed hypothesis	33
2.10.1	Task characteristics	34
2.10.2	Technology characteristics	36
2.10.3	Linking Task technology-Fit and performance, Intention to Use of SNSs	40
2.11	Chapter Summary	43

3	RESEARCH METHODOLOGY	44
3.1	Introduction	44
3.2	Research location	45
3.3	Research Approach	45
3.4	Research Design	46
3.4.1	Phase 1: Initial Planning	47

	3.4.2 Phase2: Critical Review of Literature	48
	3.4.3 Phase 3: Pilot Study	48
	3.4.4 Phase 4: Main Study	55
	3.4.5 Phase 5: Discussion and Conclusion	59
	3.5 Chapter Summary	59
4	PILOT STUDY	60
	4.1 Introduction	60
	4.2 Design Appropriate Instrument	60
	4.3 Demographic Information	61
	4.4 Pilot Analysis	65
	4.4.1 Internal Consistency	65
	4.5 Results of Internal Consistency	67
	4.5.1 Task Structure	67
	4.5.2 Task Complexity	68
	4.5.3 Communication	69
	4.5.4 Mobility	70
	4.5.5 Trust	71
	4.5.6 Privacy	72
	4.5.7 TTF	73
	4.5.8 Performance	74
	4.5.9 Intention use of SNS	75
	4.6 Validity	76
	4.6.1 Convergent validity	76
	4.6.2 Discriminant validity	77
	4.7 Discussion	78
	4.8 Chapter Summery	79
5	DATA ANALYSIS	80
	5.1 Introduction	80
	5.2 Questionnaire Development	81
	5.3 Demographic Statistics	81
	5.3.1 Demographic Statistics by Gender	81

5.3.2	Demographic Statistics by Age	82
5.3.3	Demographic Statistics by Educational Level	83
5.3.4	Demographic Statistics by Semester	84
5.3.5	The Participation in Social Networks	84
5.3.6	The Most Popular Social Networks	85
5.3.7	The Purposes for Using Social Networks	86
5.3.8	The Usefulness of Social Networks	87
5.4	Hypothesis Testing	87
5.4.1	Testing of Hypothesis 1	90
5.4.2	Testing of Hypothesis 2	91
5.4.3	Testing of Hypothesis 3	93
5.4.4	Testing of Hypothesis 4	94
5.4.5	Testing of Hypothesis 5	94
5.4.6	Testing of Hypothesis 6	95
5.4.7	Testing of Hypothesis 7	96
5.4.8	Testing of Hypothesis 8	97
5.4.9	Testing of Hypothesis 9	98
5.5	Final Model	99
5.6	Recommendation	101
5.7	Chapter Summary	104
6	CONCLUSION AND DISCUSSION	105
6.1	Introduction	105
6.2	Achievements	105
6.3	Contribution of the research	108
6.4	Constraints and Challenges	109
6.5	Future Works	109
6.6	Chapter Summary	110
	REFERENCES	111
	APPENDIX A	120

LIST OF TABLES

TABLE NO.	TITLE	PAGE
2.1	Previous works on the potential theories	19
2.2	Most Important Factors for Social Network Adoption or Social Network in educational area	25
2.3	Task characteristics and technology characteristics in the previous research on TTF	29
3.1	Details of research methodology phases	47
3.2	Types of research methods	49
3.3	Items of variables	50
3.4	Krejcie and Morgan list	57
4.1	Item Loading for Task Structure Measures	68
4.2	Reliability Measurement for Task Structure	68
4.3	Item Loading for Task Complexity Measures	69
4.4	Reliability Measurement for Task Complexity	69
4.5	Item Loading for Communication Measures	70
4.6	Reliability Measurement for Communication	70
4.7	Item Loading for Mobility Measures	71
4.8	Reliability Measurement for Mobility	71
4.9	Item Loading for Trust Measures	72
4.10	Reliability Measurement for Trust	72
4.11	Item Loading for Privacy Measures	73
4.12	Reliability Measurement for Privacy	73
4.13	Item Loading for TTF Measures	74
4.14	Reliability Measurement for TTF	74
4.15	Item Loading for Performance Measures	75
4.16	Reliability Measurement for Performance	75

4.17	Item Loading for Intention use of SNS Measures	76
4.18	Reliability Measurement for Intention use of SNS	76
4.19	AVE	77
4.20	AVE Square roots and inter-correlation	78
5.1	Demographics for Age	82
5.2	Demographics of Educational Level	83
5.3	The Result of Hypothesis	90
5.4	Analysis of the relationship between Task Structure and task- technology fit.	91
5.5	Analysis of the relationship between Task Complexity and Task-Technology Fit	92
5.6	Analysis of the relationship between Communication and Task-Technology Fit	93
5.7	Analysis of the relationship between Mobility and Task-Technology Fit	94
5.8	Analysis of the relationship between Trust and Task-Technology Fit	95
5.9	Analysis of the relationship between Privacy and Task-Technology Fit	96
5.10	Analysis of the relationship between Task- Technology Fit and Performance	96
5.11	Analysis of the relationship between Task- Technology Fit and Intention to Use of SNSs	98
5.12	Analysis of the relationship between intention to Use of SNSs and Performance	99
5.13	List of recommendations	102

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE
2.1	The Structure of Literature review	9
2.2	Task- Technology Fit (TTF) model ((adopted by) Goodhue& Thompson 1995)	28
2.3	The proposed model for Adoption of Social Network Sites for teaching and learning	33
3.1	Phases of research methodology	46
3.2	Usage of E-learning in UTM based on faculties (Source: Centre of Teaching and Learning (CTL), UTM)	56
4.1	Percentage of participants based on gender	61
4.2	Percentage of participants based on age	62
4.3	Percentage of participants based on level of study	62
4.4	Percentage of participants based on semester	63
4.5	Famous social networks for Participants	64
4.6	Percentage of participants using social networks for a purpose	64
5.1	Percentages of participants based on gender	81
5.2	Demographics for Age	82
5.3	Demographics of Educational Level	83
5.4	Semester of participation	84
5.5	The participation in social networks	85
5.6	Famous social networks among students	85
5.7	The purposes for using social networks	86

5.8	The usefulness of social network in teaching and learning	87
5.9	SmartPLS Model of this study	88
5.10	Finalized Adoption of Social Network teaching and learning Model	101

CHAPTER 1

INTRODUCTION

1.1 Introduction

Generally the business and educational environment continually change over the time through non-stop innovations in technology. Nowadays, webs are consist of new, modern and effective in learning environment which is widely used trough out the field of E-learning(Huang, Chen et al., 2008). Through the constant growth of technology in the world, being energetic and active is the only one way to win this competition. All people in the world should adopt their life with this improvement.

Nowadays, social networking is one of the crucial communication tools among people, which is exist on the Internet websites that accessible for millions of people. By Social Networking people create blogs, share their interests, photos, files and videos, and send messages, and chat. At the same time, the occurrence and development of commercial social networking sites (SNSs) is cost spending and widespread, for example in Friendster, Facebook, Live Journal, and MySpace. Furthermore, different types of SNSs exist with various technological affordances that assist a wide range of practices and interests in teaching and learning for instance: Elgg, Ning and Edmodo, which are being considered as an educational technology. This research aims to identify the factors of task characteristics and technology characteristics that influence adoption of social network for teaching leaning and also

better understanding the linkage between task-technology fit and student performance in social network teaching and learning.

1.2 Problem Background

Student's participation is the goal of many online instructors. Students' participation increasing in an online course come up with an increasing approaches for learning (Roblyer and Ekhaml 2000). Learning environment that are quite effective unquestionably provides better and also faster leaning for students. Students learned their subjects online provide a better performance in comparison to those have learned same material using traditional face-to-face approaches. Based on the literature on blended learning, conditions in the classroom and also the online are different based on spent time, curriculum and pedagogy (Roblyer and Ekhaml 2000).

The attractiveness of social networking in educational settings is growing, thus providing influential tools for building online communities, in higher education as well (Means and Toyama et al., 2010). (Lerman and Jones 2006) mentioned that social networking sites ease the partnership among students with students, technological based resources and their teacher. Social network are tools that sustain eagerness in spaces surrounding sharing interest via common resources for sharing, communications, collaborations and having interactions. Social networks provide chance to select appropriate instruments for interactions. In addition, SNSs affect interactions absolutely between students and lecturers by making more welcoming environment (Selwyn, 2007).

E-learning in the UTM is normally described as the ICT application to advance the influences of the teaching and learning procedure (UTM, 2005). In UTM, students has been offered with E-learning tools and website to assist them for both education and communication aspects (e.g. capability to upload notes, make any announcements, conduct an online test, link forum discussion, blogging stuff and messaging system)

simultaneously. Unluckily lectures and students in some faculties do not make use of E-learning appropriately (Oye and Iahad et al., 2012). The problems with current available communication tools are lack of interactive communication ways such as no instant messaging function and dull interface color (Norliza, 2010). In addition, Hamid et al., (2009) mentioned most of the students have complicatedness to access E-learning in UTM due to network connection issues.

SNSs with its new features can solve some of these problems. Providing aforementioned characteristics for educational social networks unquestionably can appropriately build learning environments in the academic world. Many researchers have been introduced SNSs as a modern, new and effecting environment for learning process (Huang et al., 2008; Mirabolghasemi and Iahad, 2013; and Brady et al., 2010). The present trend of social networks is attentive on identity, network base, privacy concerns and technological issues. Nowadays, known the essential for social networks to be utilized as an educational tool (Lockyer and Patterson, 2008). The current reputation of SNS between students has made an anxiety for solitude and security in the educational setting. Whereas, trade of SNS such as Facebook, LinkedIn and Myspace are accepted between students, rising educational SNS such as Ning, Elgg and Edmodo supply an exclusive chance for educators to ease a strapping sagacity of community between students” and support “personal communications that can guide to the formation of novel knowledge and collective cleverness” [Educause Learning Initiative (ELI), 2007].

SNSs have not been used formally at UTM; according to Mirabolghasemi in 2011 make use of Edmodo as a kind of platform for social network can appropriately support the process of teaching and learning in which researcher have prove it formally through creating account for student who participated in the activity that SNSs has positive effect in E-learning at UTM. Based on previous research has been carried on, there are advantages of SNSs and difficulty in E-learning, that from SNSs can come out a satisfactory result among students.

The goal of this study is to extract opportunities that are existed for intention to use of social network for the purpose of teaching and learning activates. Even though numerous studies have been done in influence of SNSs on education (Fratiglioni, Wang et al., 2000; Borgatti and Cross, 2003; Cho, Gay et al., 2007; Goyal, Bonchi et al., 2010; Means, Toyama et al., 2010; Oye, Iahad et al., 2012) but unfortunately, none of them explores the influence of task and technology as essential factors in their relationship. Thus, it is necessary exploring the opportunities of adopting social networks for teaching and learning. Social network site consumers are rising quickly and half of all adult Americans now utilize social networking sites (Golub and Jackson, 2010). Among youthful people, SNS utilize is considered to be worldwide (Madden and Zickuhr, 2011). The prevalent adoption of these social networking sites by persons of student-age through premature adulthood involves that social network technology does have connotations for training and education. SNS already play significant roles in students' casual education by making easy social learning purposes, appealing users in a variety of multifaceted literacy chores, and provided that a site where students can look for peer support and assist with school-connected chores from present and previous classmates (Greenhow & Robelia, 2009).

Most of the utilization research is based on theories of attitudes and behavior (Bagozzi, 1982; Fishbein and Ajzen, 1975; triandis, 1980). "TTF focuses on a technology provides features and support that fit the requirement of a task." Goodhue and Thompson (1995) Stated the importance of both task and technology to be fitted in order for success of information system and mentioned that appropriately fit task and technology causes good level of performance via good level of intention to use of technology. In the field of student use of SNSs, appropriately fitting task and technology points out to the ability of SNSs to fortify set of student activities for their learning purposes such as communicating with their classmate and lecturer via suitable level of accessing to learning material and also doing assignment, parallel to this activities also supporting several other student abilities. The importance of TTF is in explaining how technology leads to performance impacts. In this field it can be claimed that task-technology fit is being influenced by connection of information systems and performance that necessitate technology satisfy features that is required for performing a task which in turn given rise to satisfying user's requirements that finally influence

over both of utilization and performance. The present study focuses on task characteristics and technology characteristics thus it was applied TTF to identify the factors that has influence over task characteristics and technology characteristics on social network sites for teaching and learning.

1.3 Problem statement and research question

In the line with critical issues aforementioned, the problem statement of this study is as follow:

“How do Task and Technology Fit to ensure Social Network Sites is used in teaching and learning”

The following are sub-research question:

1. What are the factors influences Task-Technology Fit?
2. How do Task-Technology Fit and Intention to Use of Social Network Sites influence Performance?
3. What is the model for Social Network Sites in terms of teaching and learning adoption in Faculty of Computing?
4. What are the Recommendations for Faculty of Computing to adopt Social Network teaching and learning?

1.4 Research Objective

Objectives of this study are:

1. To identify the factors that are influenced on Task-Technology Fit.
2. Identify how Task-Technology Fit and Intention to Use of SNSs influence Performance.
3. To propose a model for adoption of Social Network Sites in terms of teaching and learning in Faculty of Computing.
4. To provide recommendations for Adoption of Social Network Sites teaching and learning in Faculty of Computing.

1.5 Research Scope

The scope of this study is to provide a model for teaching and learning using Social Network Sites such as Edmodo proposes among undergraduate and postgraduate students of Faculty of Computer (FC), in University Technology Malaysia (UTM).

1.6 Importance of research study

Based on the research questions and research objectives, the benefits of research will be as follow:

1. Allow researchers to understand the key factors influencing adoption of Social Network for teaching and learning.
2. This study is considered an important contribution to the offering a Social Network adoption model in higher education for Faculty of Computing.
3. This research will also be able to give recommendations to help Faculty of Computing to make adoption of social network teaching and learning easier in Faculty of Computing.

1.7 Summary

This chapter explains the introduction of study. On the other side, this chapter mentions about problem background and statements. The objective, scope and importance of this project have also been described.

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