

ANALYSIS OF LEARNING MANAGEMENT SYSTEM FOR STUDENTS  
USING THE UNIFIED OF THEORY ACCEPTANCE AND USE OF  
TECHNOLOGY (UTAUT)  
(CASE STUDY: SWISS GERMAN UNIVERSITY)

By:

Arief Budiman  
1-1302-002

BACHELOR'S DEGREE

In

INFORMATION TECHNOLOGY  
FACULTY OF ENGINEERING AND INFORMATION TECHNOLOGY



SWISS GERMAN UNIVERSITY  
The Prominence Tower  
Jalan Jalur Sutera Barat no.15, Alam Sutera,  
Tangerang, Banten 15143  
Indonesia

August 2017

**Revision after the Thesis Defense on (20 July 2017)**

## STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

Arief Budiman

Student

Approved by:

Dr. Dipl.-Ing.Maulahikmah Galinium, S.Kom, M.Sc

Thesis Advisor

James Purnama, M.Kom, M.Sc

Thesis Co-Advisor

Dr. Ir. Gembong Baskoro, M.Sc.

Dean

Date

Date

Date

Date

Arief Budiman

## ABSTRACT

ANALYSIS OF LEARNING MANAGEMENT SYSTEM FOR STUDENTS  
USING THE UNIFIED OF THEORY ACCEPTANCE AND USE OF  
TECHNOLOGY (UTAUT)  
CASE STUDY: SWISS GERMAN UNIVERSITY

By:

Arief Budiman

Mulahikmah Galinium, Advisor

James Purnama, Co-Advisor

SWISS GERMAN UNIVERSITY

The process of this study is to determine whether the use of Learning Management System (LMS) in learning can be accepted in a Swiss German University (SGU) or not. This study uses an acceptance theory as the framework which is The Unified of Theory Acceptance and Use of Technology (UTAUT). It represents Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Perceived Enjoyment (PEJ) and Behavioral Intention (BI). The population of this study has around 212 LMS users and 768 non-LMS users. A Survey methodology that is used to gather respondents is quota sampling method but we need a formula to count the number of respondents that we need from the population is slovin's formula. SPSS statistic 24 is used to calculate validity (Coefficient correlation) and reliability (Cronbach's Alpha). SPSS AMOS 22 is used as a statistical approach to do regression analysis in Structural Equation Model (SEM). The highest value of AMOS output shown as the highest effect which will effect on behavioral intention in using LMS. The conclusion of the research only showed how respondents accept LMS in relation to various factors. and the use of UTAUT is acceptable of analysing Students acceptance in using LMS.

**Keywords:** TAM, UTAUT, LMS, SEM, AMOS



## DEDICATION

I dedicate this thesis to all of my family and the people that has been participated in this thesis.



## ACKNOWLEDGEMENTS

Firstly, thank God has blessed me to finish this thesis and Thank you to my beloved parents, who always give their best to support me until now. Without my parents, I would not have been in this phase. I wish I will always make them proud in the future. To all my IT friends. Since the first semester, we have done our best to accomplish all the tasks so we can be here until this moment. Many thanks to all of you. Then I won't forget to give many thanks to my thesis supervisors, Mr. Maulahikmah Galinium and Mr. James Purnama for spending their times to give me a guidance to finish this thesis. Finally, many thanks to the friend of Swiss German University for helping me and keep giving me their supports to complete this thesis by participated in the survey with the aim for collecting data. By any chance, Swiss German University as study case and it is my university where I was studying at. I wish it will be more successful and become a university that is used to prepare students well for their future.

SWISS GERMAN UNIVERSITY

## TABLE OF CONTENTS

	Page
STATEMENT BY THE AUTHOR.....	2
ABSTRACT.....	3
DEDICATION.....	5
ACKNOWLEDGEMENTS.....	6
LIST OF FIGURES.....	10
LIST OF TABLES.....	11
CHAPTER 1 - INTRODUCTION.....	12
1.1 Research Background.....	12
1.2 Research problems.....	13
1.3 Research Objectives.....	14
1.4 Significance of study.....	14
1.5 Scope.....	14
1.6 Research question.....	14
1.7 Hypothesis.....	15
1.8 Thesis Structure.....	16
CHAPTER 2 - LITERATURE REVIEW.....	18
2.1 Learning Management System (LMS).....	18
2.2 Technology Acceptance Model.....	19
2.3 Technology Acceptance Model 2.....	20
2.4 Technology Acceptance Model 3.....	21
2.5 The Unified Theory of Acceptance and Use of Technology (UTAUT).....	22
2.6 Structural Equation Modelling (SEM).....	24
2.7 Related work.....	25
2.7.1 Synthesis of the literature on rich media learning.....	25
2.7.2 Impact of media richness and flow on e-learning technology acceptance.....	26
2.7.3 An analysis of students and teachers acceptance in using moodle using unified theory of acceptance and use of technology model in smpk2 penabur.....	27
2.7.4 Study on social media users and its relation to the e-commerce activities on youth in Indonesia.....	29
CHAPTER 3 - RESEARCH METHODS.....	32
3.1 Research Methodology.....	32



3.2 Research Design.....	33
3.3 Questionnaire design.....	34
3.4 Population and Sampling .....	35
3.4.1 Population .....	35
3.4.2 Sampling .....	35
3.5 Pilot Study.....	37
3.5.1 Pilot Study Sample Size.....	38
3.5.2 Pilot Study Questionnaire .....	38
3.5.3 Validity Testing .....	41
3.5.4 Reliability Testing.....	42
3.6 Data Collection Procedures.....	43
3.7 Extract Data Sets.....	44
3.8 Construction of Model in Amos .....	44
3.9 The output of Amos .....	45
3.10 Analysis.....	45
CHAPTER 4 - RESULTS AND DISCUSSIONS .....	48
4.1 Actual Study (New questionnaire).....	48
4.2 Actual Study Result .....	52
4.2.1 Participant Demographic (Actual Study).....	52
4.2.2 Validity Testing (Actual Study).....	56
4.2.3 Reliability Testing (Actual Study).....	57
4.2.4 Actual Study Experiment 1: All Students .....	58
4.2.5 Actual Study Experiment 2: Gender .....	60
4.2.6 Actual Study Experiment 3: Faculty.....	61
4.2.7 Actual Study Experiment 4: Computer Experience .....	64
4.2.8 Actual Study Experiment 5: LMS Experience.....	66
4.3 Experiment Summary and Discussions.....	68
CHAPTER 5 - CONCLUSIONS AND RECOMMENDATIONS.....	72
5.1 Conclusion.....	72
5.2 Further Research .....	72
5.3 Recommendation for Swiss German University.....	73
REFERENCES .....	74
GLOSSARY .....	76



APPENDICES .....	77
Appendix A – Questionnaire .....	77
Appendix B – Pearson’s Correlation Coefficient r (Critical Values) .....	82
Appendix C – Research Paper .....	83
CURRICULUM VITAE.....	93

