UNIVERSITI TEKNOLOGI MARA

CONTENT ANALYSIS OF USABILITY EVALUATION METHOD FOR ACADEMIC WEBSITES

NIK MASLIZA BINTI RAMLI

Dissertation submitted in partial fulfillment of the requirements for the degree of Master of Science in Information Technology

Faculty of Computer and Mathematical Sciences

January 2018

AUTHOR'S DECLARATION

I declare that the work in this dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as reference work. This dissertation has not been submitted to any other academic institution on non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

Name of Student	:	Nik Masliza Binti Ramli
Student I.D. No.	:	2013779809
Programme	:	Master of Science in Information Technology
Faculty	:	Computer and Mathematical Sciences
IT Project Title	•	Content analysis of usability evaluation method for academic websites

Student	:	Curfu
	:	19 January 2018

Signature of Date

19 January 2018

ж

ABSTRACT

Academic website became the standard tool for delivering services to students, faculty and staff in a cost effective manner. Despite widespread use of web applications, very little has been done to critically examine their usability. There is a very few guideline that new researchers or website developers that they can use to do usability evaluation. Therefore, this study will analyse the appropriate usability evaluation methods that can be used when evaluating academic website and to identify trend or pattern for usability methods used. This study will use content analysis as the method to analyse the appropriate usability evaluation methods. 102 articles related to usability evaluation method from year 1995 to 2017 have been views and read to find the usability evaluation methods that can be used when evaluating academic website. The sources get from ACM Digital library, SpringerLink, IEEE, and Google Scholar. From the study, observational, think-aloud, usability testing, interviews, eye-tracking, survey and questionnaires is more suitable to use if the website already deliver and used by the user or the development of the website is at the final stage. Expert evaluation no need for the evaluation anymore. But, if the website still in prototype process or in progress of development or design, expert evaluation is needed. In the other hand, from the analysis, for the end user evaluation, questionnaire is a preferred methods used to evaluate the website, followed by user testing and survey. While Heuristic evaluation was preferred method for expert evaluation however, the most recent method used is cognitive walkthrough.

ACKNOWLEDGEMENT

Praise to Allah for giving me the strength to complete this research. Though only my name appears on the cover of this dissertation, a great many people have contributed to its production. I owe my gratitude to all those people who have made this research possible and because of whom my graduate experience has been one that I will cherish forever.

First of all, my deepest gratitude is to my supervisor, Dr. Fariza Hanis Abdul Razak for giving me guidance, knowledge, comment and advice in completing this research. She taught me how to question thoughts and express ideas. His patience and support helped me overcome many crisis situations and finish this research. Not forget, a special thanks to other lecturers that have taught me throughout the Master programme.

I also want to voice out my gratitude to my course-mates and friends, for providing me so much information and moral support during the completion of this thesis besides giving me the idea of preparing this research. A special thanks also goes to the lecturer and student of Faculty Science Computer and Mathematics at Universiti Teknologi MARA Shah Alam who involved in this research study.

Last but not least, my supportive and kind hearted family for being my all time motivator and supporting me in the study. None of this would have been possible without the love and patience of my family. Thank you so much and may Allah bless all of you.

TABLE OF CONTENTS

	Page
Author's Declaration	i
Abstract	n
Acknowledgement	ili
Table of Contents	iv
List of Figures	ix
List of Tables	x
Chapter One	1
Introduction	1
1.1 Problem Background	1
1.2 Problem Statement	3
1.3 Aim	4
1.4 Research Questions	4
1.5 Objectives	4
1.6 Scope	4
1.7 Significance	5
1.8 Research Design	5
Chapter Two	6
Literature Review	6
2.1 Introduction	6
2.2 What is website?	6
2.2.1 History of website	8
2.2.2 Type of website	9
2.2.3 Why do people visit websites?	10
2.3 Usable website	11

•

*