UNIVERSITI TEKNOLOGI MARA

EVALUATION STUDY OF INFORMATION ARHITECTURE USING CARD SORTING TECHNIQUE: A CASE IN LEMBAGA HASIL DALAM NEGERI (LHDN) OFFICIAL WEBSITE

ATIQQAH BINTI KAMAR ZAHARUDDIN

IT Project submitted in partial fulfilment of the requirements for the degree of Master of Science in Information Technology

Faculty of Computer and Mathematical Sciences

Jan 2017

ABSTRACT

Web portal has become one of popular tools to search for information. Vast amount of information can be searched by entering only a single keywords and single click on the web portal. A high increase in number of web applications can be seen from days to days where peoples foresee that searching information using a web portal make life easier and simplified daily tasks. Due to this demands, the increase in the numbers of online web applications is not only applied to e-commerce but also to academics and government field itself. Malaysia has been seen to keep in pace with this demands and many egovernment website are now accessible by the citizens online. By providing online platform, citizens are now having more options in resolving matters related to egovernment and no longer need to always walk in to the physical buildings. However, providing an online platform only is not reliable if the information or services placed in the web portal is not user-centred. This study will perform an evaluation study on current Information Architecture (IA) in Lembaga Hasil Dalam Negeri (LHDN) official website. Information Architecture (IA) is a discipline in determining an efficient ways on how information on an online website should be arranged in order to deliver information to the users effectively and efficiently. From the preliminary study conducted, respondents felt that it is not easy to search for intended information on LHDN web portal as the arrangement of menu on the web site are not fulfil respondents' logical relationship on those menu. The objectives of this study is to identify user requirement on information arrangement for LHDN official web portal. With the collected requirements, this study will propose a user-centred information arrangement for LHDN official web portal. Card sorting technique will be used in this study to see respondents' logical mental model in arranging and grouping set of menu in LHDN official web portal. Outcome from this study can be used a support alternative for the website architect to enhance LHDN information architecture hence all the information and services provided on the web portal can be fully utilized and improve users' browsing experience.

ACKNOWLEDGEMENT

In the Name of Allah, the Most Gracious, the Most Merciful. All the praises and thanks be to Allah, for blessing me with all the courage and strength throughout the process of completing this research. Without His utmost blessing, with all the challenges I have encountered, this research completion will be impossible. Again, my eternally gratitude of all shall be bestowed Him, the most merciful.

A very special thanks goes out to my supervisor, Puan Mudiana Mokhsin whose expertise, understanding and patience added considerably to my research experience. It was under her tutelage I developed a focus and clear view to complete my research.

I would also like to thank my family for their endless support provided through my entire life and I must acknowledge my husband, without whose love, encouragement and understandings this research would have been possible.

Thank you very much everyone, may Allah bless all of you.

TABLE OF CONTENTS

		Page
AUTHOR'S DECLARATION	× è	i
ABSTRACT		ii
ACKNOWLEDGEMENT		iii
TABLE OF CONTENTS		iv
LIST OF TABLES		viii
LIST OF FIGURES		х

CHAPTER ONE: INTRODUCTION

1.Į	Introduction	1
1.2	Research Background	3
1.3	Problem Statement	3
1.4	Research Questions	6
1.5	Research Objectives	6
1.6	Scope of the Research	6
1.7	Significance of the research	7
1.8	Outline of the Research	7

CHAPTER TWO: LITERATURE REVIEW

2.1	Introduction	8
2.2	Government Institutions in Malaysia	8
2.3	e-Government implementation in Malaysia	9
2.4	Lembaga Hasil Dalam Negeri (LHDN) official website	11
2.5	Overview of Web Portal concept	13
2.6	Web Design	15

2.7	What is Information Architecture	16
2.8	Usability	19
	2.8.1 Card-Sorting Technique	21
2.9	Summary	24

CHAPTER THREE: RESEARCH METHODOLOGY

3.1	Introduction	25
3.2	Research Methodology	25
	3.2.1 Planning Phase	25
	3.2.2 Information Gathering Phase	26
	3.2.3 Data Collection and Analysis Phase	26
	3.2.4 Design Phase	27
	3.2.5 Documentation Phase	28
3.4	Summary	34

CHAPTER FOUR: FINDINGS AND ANALYSIS

.

4.1	Introduction	35
4.2	Accomplishment Objective 1	36
	4.2.1 Preliminary Study	36
	4.2.2 Web Observation	37
	4.2.3 Questionnaire	37
	4.2.3.1 Findings and Analysis on Questionnaire	37
4.3	Accomplishment Objective 2	47
	4.3.1 UXSort card sorting exercise	47
	4.3.2 UXSort : Card sorting exercise Analysis	54
4.4	Accomplishment Objective 3	58
4.5	Summary	59