

UNIVERSITY TECHNOLOGY MARA

**EVALUATING THE INFORMATION
ARCHITECTURE (IA) OF AGRIBAZAAR 2.0 WEB-
BASED SYSTEM USING WEB ARCHITECTURAL-
INDUCING MODEL (WAIM) FRAMEWORK**

NOOR SYAZANA BINTI MD. YUSOF

IT Project submitted in partial fulfilment of the requirements for the degree of

Master of Science (Information Technology)

February 2013

ABSTRACT

The art and science of website's organizing and labeling, intranets, communities in online application, and usability that supported by software is all about the information architecture. As information proliferates rapidly fast usability became a critical success factor for websites and software applications. Well value of IA is a foundation needed for an information system that made sense to the user. Evaluating the Information Architecture of Agribazaar 2.0 Web-Based System is to revealed issues pertaining to the Information Architecture (IA) aspects of the AgriBazaar Web-Based System and evaluates the Web-based System in terms of Information Architecture. The preliminary investigation was done through the interview and observation with an expert of Human Computer Interaction. However, the evidences revealed IA issues based on the preliminary investigations. Therefore, an experimental study should be conducted to evaluate the system based on the IA aspects. AgriBazaar 2.0 Web-Based System was developed since 2008 and being deployed in the Web-Based System in 2011. However, this system has not yet been evaluated in terms of Information Architecture. Thus, there is a need to evaluate the IA of Agribazaar 2.0 Web-Based Systems and investigate its usability through the experimental study intended for design the new prototype of IA.

ACKNOWLEDGEMENT

In the name of Allah, The Most Gracious and The Most Merciful

First of all, I would like to express my gratitude to Allah S.W.T, The Almighty for giving me strength and patients in completing this project in a given time periods. Special thanks dedicated to my beloved supervisor, Dr. Wan Abdul Rahim, HCI expert Puan Natrah Abdullah@Dolah, Dr. Fariza Hanis Abdul Razak, and my coordinator Dr. Wan Adillah Wan Adnan because give guidance and recommendations from the beginning until the end of this research process. All their kindness for helping me in many ways during the research will not be forgotten. All the moral supports given throughout the completion of this thesis and all the guidelines they taught. Special appreciation also goes to my beloved mother Normah Mohamaddin, beloved father Md. Yusof Saad, and my beloved friend Sri Rahayu Muhammad for their patience, supportive words and devotion that give me the strength to carry out this research also because of their help to complete this research. Thank you for understanding all my needs. I always love you all, and you all are the first priority in successful of this Information Technology Project.

February 2012

NOOR SYAZANA BINTI MD. YUSOF

TABLE OF CONTENTS

	Page
STUDENT'S DECLARATION	i
ABSTRACT	ii
ACKNOWLEDGEMENT	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	iv
LIST OF FIGURES	iv
CHAPTER 1: INTRODUCTION	1
1.1 Background of Study	1
1.2 Problem Statement	3
1.3 Research Questions	4
1.4 Objectives	4
1.5 Scopes and Limitations	4
1.6 Methodology Overview	5
1.7 Research Thesis Structure	6
CHAPTER 2: LITERATURE REVIEW	8
2.1 Information Architecture	8
2.2 Information Architecture Principles	10
2.3 Information Architecture as a Process	11
2.4 Information Architecture for World Wide Web Application	12
2.5 Information Architecture Research Issues	13
2.6 Evaluation Methods and Techniques in Human Computer Interface: Information Architecture	13
2.7 User-Centred Design Evaluations	15
2.7.1 Methods at a Glance	15

2.7.1.1	User Requirements Methods	16
2.7.1.2	Building the Information Architecture	16
2.7.1.3	Design	17
2.7.1.4	Content	18
2.7.1.5	Evaluation	18
2.7.2	Formative Evaluations	19
2.7.3	Summative Evaluations	19
2.7.4	Heuristic Evaluation	20
2.7.5	Task Analysis	21
2.8	Web Architectural-Inducing Model (WA-IM) Framework	21
2.8.1	Content-Information	23
2.8.2	Content-Trust	23
2.8.3	Navigation-Trait	24
2.8.4	Navigation-Way finding	25
2.8.5	Context-Information Design	25
2.9	Chapter Summary Error! Bookmark not defined.	26
 CHAPTER 3: RESEARCH METHODOLOGY		 27
3.1	Research Approach and Methodology	27
3.2	Research Methodology Phases	29
3.3	Exploratory Phase	32
3.3.1	Knowledge Acquisition	32
3.4	Experimental Design	33
3.4.1	Internal and External Experimental Validity	34
3.4.2	Apparatus and Instrument Design	36
3.4.3	Pre-Study	38
3.4.4	Evaluation Experiment	38