

## **Abstract**

Paper-based restaurant menu is a conventional medium that using for information transfers from restaurant to consumer, however, because of the meal information of menu is always be limited by a numbered pages, since of it, some information has been skip and come into being an incomplete information transfers. It is not suitable anymore in the information age, because the incomplete information of restaurant menu may confuse consumer during meal ordering and which is hard to fill up consumers' more and more requirements or expectations.

Since of it, the main task in this project is trying to find out the better solution for restaurant menu's information transfer system for filled up the disadvantage at current paper-based restaurant menu.

The process of this project will be start from the theory study for restaurant and some basic understanding of software program, and two kinds of research about restaurant and consumer in Jakarta. The one is paper-based restaurant menu in Jakarta, primarily focus on menu's information transfer system from restaurant to consumer, and another one is focused on consumers' viewpoint to see restaurant menu and their expectation on it.

The theory study is for understanding more about restaurant business and the software that will be use then. The research analysis result that will see the form of restaurant menu's information transfer system in using now and the problem of it, and consumer's requirement of restaurant menu. Both of them will be use as the guidance for creating better restaurant information's transfer system in this project.

The E - multimedia restaurant menu is a multimedia application menu through electronic computer system presenting and is the new form of restaurant menu that would be introducing here with the main objective to develop current weakness at restaurant menu's information transfer system.

This new form of restaurant menu will present the higher ability in information transfer by using computer technology. Due to it, the current disadvantage factors of conventional paper-based restaurant menu will be fill up and restaurant's information could be able to transfer to consumer more completely and effectively. Except of it, E – multimedia restaurant menu is also owns an advantage at paper saving and some more new features will also be accompanied by for satisfy of consumers' requirements.

Because of a lot of advantage of E – multimedia restaurant menu, since of it, that will be the better choice to instead conventional paper-based restaurant menu for restaurant's information transfers in the future.

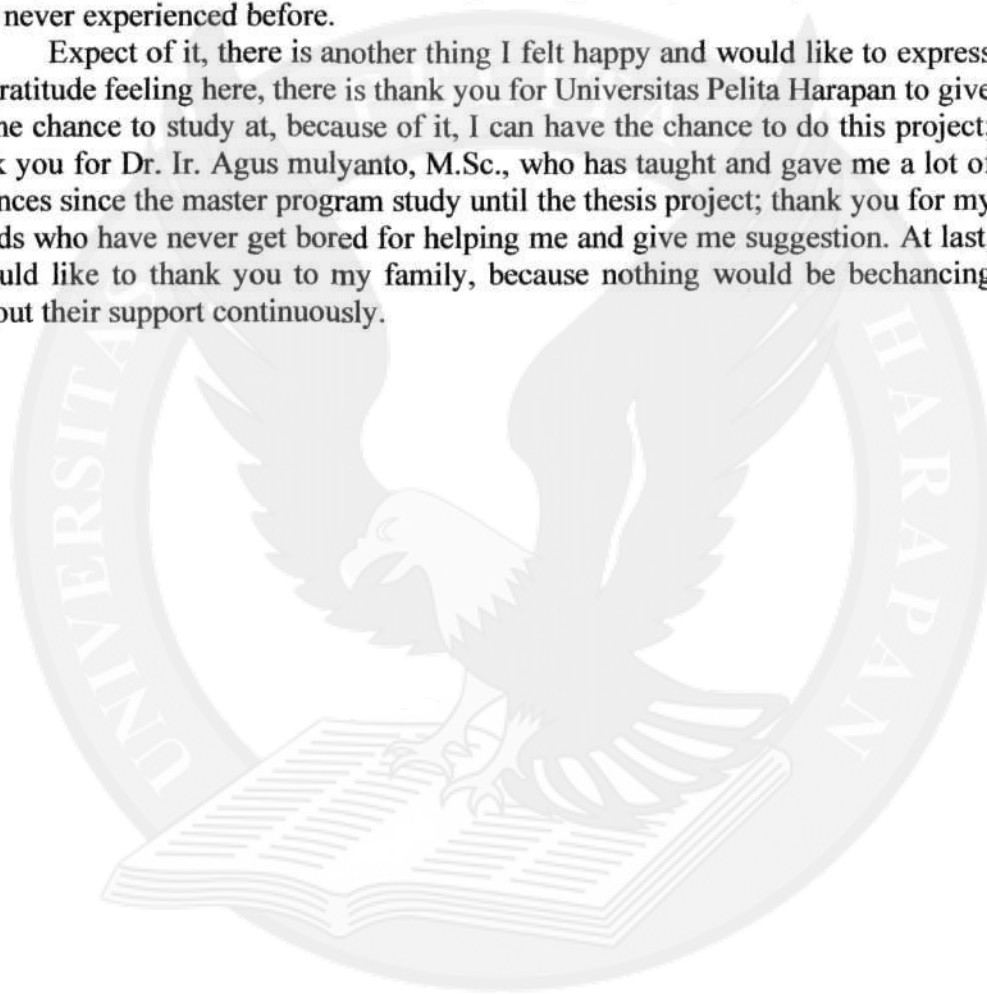
## **Preface**

At this time, it is happy to have the chance to do “Self-order E – Multimedia Restaurant Service System Based on Consumer Research Result in Jakarta” for my thesis project.

E – multimedia restaurant menu is a new type of information transfer system, which information can be assembling in an informative way, present by multimedia elements, and shows a fresh looking to fit in the fast change environment.

In this project, it is able to use the knowledge that I have learned during the study of master program in the college, and got many new experiences that I have never experienced before.

Expect of it, there is another thing I felt happy and would like to express the gratitude feeling here, there is thank you for Universitas Pelita Harapan to give me the chance to study at, because of it, I can have the chance to do this project; thank you for Dr. Ir. Agus mulyanto, M.Sc., who has taught and gave me a lot of advances since the master program study until the thesis project; thank you for my friends who have never get bored for helping me and give me suggestion. At last, I would like to thank you to my family, because nothing would be bechancing without their support continuously.



# Contents

**Lembar Judul**

**Pernyataan Keaslian Karya Akhir**

**Lembar Pengesahan**

**Abstract** iv

**Preface** v

**List Table** vi

**List Figure** vii

## **Chapter I - Introduction**

**I.1 Background** 1

**I.2 Project Delimitation** 2

**I.3 Methodology** 2

**I.4 Work-paper Process System** 3

**I.5 Project Purpose** 4

## **Chapter II - Literature**

**II.1 Restaurant** 5

II.1.1 Definition of restaurant 5

II.1.2 Type of restaurant 6

II.1.3 Restaurant economic 6

II.1.4 Restaurant categories 7

II.1.5 Type of ordering service system for restaurant 8

**II.2 Software study** 11

II.2.1 Macromedia Flash 12

II.2.2 3D Studio Max 13

II.2.3 Illustrator 15



II.2.4	Adobe Photoshop	16
II.2.5	Point-of-sale (POS)	18

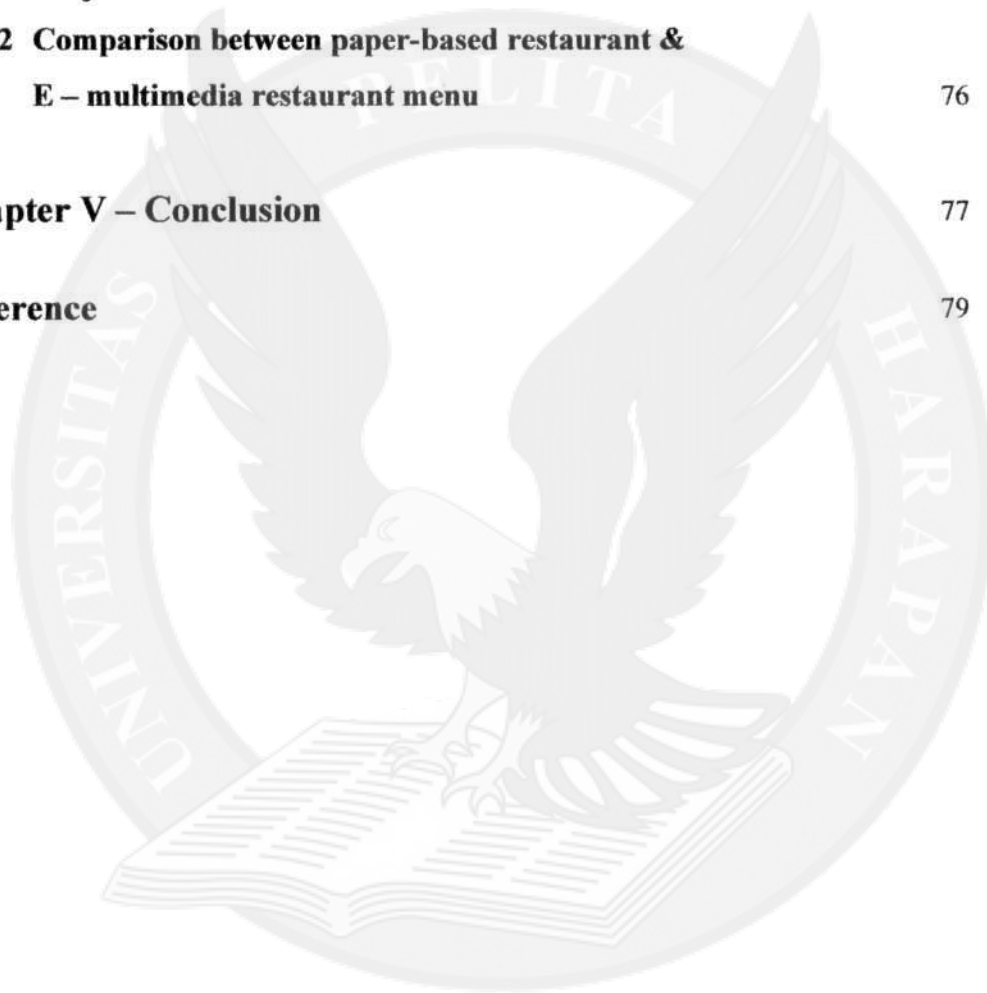
## **Chapter III – Restaurant and consumer research & analysis**

<b>III.1</b>	<b>Mid-range price table ordering system restaurant paper-based menu research in Jakarta</b>	22
III.1.1	Paper based restaurant menu research result & analysis	23
<b>III.2</b>	<b>Restaurant menu questioner research &amp; result from Jakarta resident</b>	30
III.2.1	Restaurant menu questioner	31
III.2.2	Restaurant menu questioner result & analysis	32
<b>III.3</b>	<b>Mid-range prices restaurant consumer analysis</b>	34
<b>III.4</b>	<b>Human's acceptance of text present and picture present</b>	35
<b>III.5</b>	<b>Approximate costing of paper-based restaurant menu</b>	36
<b>III.6</b>	<b>Time-expended of meal order</b>	36

## **Chapter IV – E-multimedia restaurant menu**

<b>IV.1</b>	<b>Developing stages</b>	38
<b>IV.2</b>	<b>Idea background</b>	39
IV.2.1	Incomplete of current paper-based restaurant menu	39
IV.2.2	Consumer behavior	40
IV.2.3	Energy saved (for money, time, and paper)	40
IV.2.4	Technology environment	41
<b>IV.3</b>	<b>E – multimedia restaurant menu concept</b>	42
IV.3.1	Software system	44
IV.3.2	Multimedia element	46
IV.3.3	Project limitation	46
<b>IV.4</b>	<b>Scheduling</b>	48
<b>IV.5</b>	<b>Management activities</b>	49
IV.5.1	Project manager	50
IV.5.2	Prototype programmer	50
<b>IV.6</b>	<b>Delivery system</b>	51

<b>IV.7 Design concept</b>	51
IV.7.1 Structure design	52
IV.7.2 Storyboard design	54
IV.7.3 Consumer and restaurant expectation implementation	63
<b>IV.8 Prototype preview</b>	64
<b>IV.9 Prototype testing</b>	73
<b>IV.10 Approximate costing of E – multimedia restaurant menu</b>	74
<b>IV.11 Project future extension</b>	75
<b>IV.12 Comparison between paper-based restaurant &amp; E – multimedia restaurant menu</b>	76
<b>Chapter V – Conclusion</b>	77
<b>Reference</b>	79



## List Table

<b>Table III - 1</b>	<b>Paper-based restaurant menu's research result from fifty restaurants in Jakarta</b>	23
<b>Table III - 2</b>	<b>Consumer research result from fifty interviewees in Jakarta</b>	32
<b>Table IV - 1</b>	<b>E – Multimedia restaurant menu's process schedule</b>	49



## List Figure

<b>Figure III – 1</b>	<b>Number of languages are using in current menu from fifty restaurants research result</b>	<b>24</b>
<b>Figure III – 2</b>	<b>Picture or visual present on restaurant menu from fifty-restaurant research result in Jakarta</b>	<b>26</b>
<b>Figure III – 3</b>	<b>Menu detailed information research result from fifty restaurant's menu in Jakarta</b>	<b>27</b>
<b>Figure IV – 1</b>	<b>E – Multimedia restaurant menu developing stage overview</b>	<b>38</b>
<b>Figure IV – 2</b>	<b>E – Multimedia restaurant menu's concept draft</b>	<b>43</b>
<b>Figure IV – 3</b>	<b>E – Multimedia restaurant menu's software system</b>	<b>45</b>
<b>Figure IV – 4</b>	<b>E – Multimedia restaurant menu's structure flow outline</b>	<b>52</b>
<b>Figure IV – 5</b>	<b>Structure flow at each language branch of menu</b>	<b>53</b>
<b>Figure IV – 6</b>	<b>Cover / 1<sup>st</sup> page of E – Multimedia restaurant menu interface design</b>	<b>55</b>
<b>Figure IV – 7</b>	<b>"Language / menu category" page of E – Multimedia restaurant menu interface design</b>	<b>56</b>
<b>Figure IV – 8</b>	<b>"Menu content" page of E – Multimedia restaurant menu's interface design</b>	<b>57</b>
<b>Figure IV – 9</b>	<b>"Billing Info" page of E – Multimedia restaurant menu's interface design</b>	<b>58</b>
<b>Figure IV – 10</b>	<b>"Branch" page of E – Multimedia restaurant menu's interface design</b>	<b>59</b>
<b>Figure IV – 11</b>	<b>"Menu detail information" page of E – Multimedia restaurant menu design</b>	<b>60</b>
<b>Figure IV – 12</b>	<b>"1<sup>st</sup> command processing" page of E – Multimedia restaurant menu design</b>	<b>61</b>
<b>Figure IV – 13</b>	<b>"2<sup>nd</sup> command processing" page of E – Multimedia restaurant menu design</b>	<b>62</b>

<b>Figure IV – 14</b>	<b>“Cover / 1<sup>st</sup> page” of E – Multimedia restaurant menu design final rendering</b>	<b>65</b>
<b>Figure IV – 15</b>	<b>“Language / menu category” page of E – Multimedia restaurant menu design final rendering</b>	<b>66</b>
<b>Figure IV – 16</b>	<b>“Menu content” page of E – Multimedia restaurant menu design final rendering</b>	<b>67</b>
<b>Figure IV – 17</b>	<b>“Billing Info” page of E – Multimedia restaurant menu design final rendering</b>	<b>68</b>
<b>Figure IV – 18</b>	<b>“Branch Info” page of E – Multimedia restaurant menu design final rendering</b>	<b>69</b>
<b>Figure IV – 19</b>	<b>“Menu detailed information” page of E – Multimedia restaurant menu design final rendering</b>	<b>70</b>
<b>Figure IV – 20</b>	<b>“1<sup>st</sup> command processing” page of E – Multimedia restaurant menu design final rendering</b>	<b>71</b>
<b>Figure IV – 21</b>	<b>“2<sup>nd</sup> command processing” page of E – Multimedia restaurant menu design final rendering</b>	<b>72</b>