BORANG PENGESAHAN STATUS TESIS

JUDUL: E-BOOK MARKETING SYSTEM

SESI PENGAJIAN: <u>SEMESTER 1 2007/2008</u>

Saya IDWAN ADLY BIN ALIAS

(HURUF BESAR)

mengaku membenarkan tesis (PSM/Sarjana/Doktor Falsafah) ini disimpan di Perpustakaan Fakluti Tekonologi Maklumat dan Komunikasi dengan syarat-syarat kegunaan seperti berikut:

1. Tesis dan projek adalah hak milik Universiti Teknikal Malaysia Melaka.

2. Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dibenarkan membuat salinan untuk tujuan pengajian sahaja.

3. Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dibenarkan membuat salinan tesis ini sebagai bahan pertukaran antara institusi pengajian tinggi.

4. ** Sila tandakan (/)

SULIT (Mengandungi maklumat yang berdarjah

> keselamatan atau kepentingan Malaysia seperti yang termaktub di dalam AKTA RAHSIA RASMI

1972)

TERHAD (Mengandungi maklumat TERHAD yang telah

ditentukan oleh organisasi/badan di mana

penyelidikan dijalankan)

TIDAK TERHAD

(TANDATANGAN PENULIS)

Alamat tetap: No 33,

Bukit Peringgit, 75400 Melaka.

Tarikh: 09 Oktober 2007

(TANDATANGAN PENYELIA)

Cik Nuridawati Bte Mustafa

Nama Penyelia

Tarikh:

CATATAN: ** Jika tesis ini SULIT atau TERHAD, sila lampirkan surat daripada pihak

Tesis dimaksudkan sebagai Laporan Projek Sarjana Muda (PSM)

E-BOOK MARKETING SYSTEM

IDWAN ADLY BIN ALIAS

This report is submitted in partial fulfillment of the requirements for the Bachelor of Computer Science (Software Development)

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY UNIVERSITI TEKNIKAL MALAYSIA MELAKA 2007

DECLARATION

I hereby declare that this project report entitled

E-BOOK MARKETING SYSTEM

is written by me and is my own effort and that no part has been plagiarized without citations.

STUDENT	•		Date:	12/11/07
SUPERVISOR	:	(IDWAN ADLY BIN ALIAS)	Date:	12/11/07
		(CIK NURIDAWATI BTE MUSTAFA)		

DEDICATION

To my God, Allah SWT

To My Greatest idol, Rasullah SAW

To my beloved parents, Alias b. Md Saad and Zaliha bte Abdul Aziz

To all my sisters and brothers and

To my beloved friends.

ACKNOWLEDGEMENTS

All praises to Allah S.W.T because of His willing I am able to successfully complete PSM project.

Please take a few minutes to read the names of the people who have contributed for the completion of my final year degree project (PSM 2) report – they have earned it, and I am humbly grateful to them all.

I gratefully acknowledge my beloved parents who have been a source of inspiration, giving me endless support and motivation throughout PSM 2 in terms of financial and moral support.

I would like to extend my gratitude to Cik Nuridawati bt. Mustafa for guiding me throughout the PSM 2. Thank you for giving me the guidance and support all along this project. I really appreciate the time you have spent with me.

Thanks to my friends who have been supporting me and motivating me to give my very best all the time.

ABSTRACT

E-Book Marketing System is a new idea of e-commerce and marketing strategy. The problems with the current system, there are many systems do not have marketing function and e-commerce function in one system. The difficulties faced by the user that they must have two or more system to make sure they can have both functions. The main objective is generating new system, which combine e-commerce and marketing system in new system. The users of these systems will be internet marketer, affiliate and website visitor. The modules for each of the user differ according to their user level. The main modules will be the e-commerce with the connection with pay pal account and marketing function via email. Besides that, there are also have affiliate module and admin management module This system is upload at malaysiahoster hosting, so all the process from start buying the e-book, promotion and until download the product. This system uses the client-server model that involved 3-tier architecture. This system is used the PHP as a language script and MySQL as a database. The e-book marketing system also used the "Waterfall" as a methodology and the entire project used the Object-Oriented Analysis and Design (OOAD) with SSADM as an approach techniques.

ABSTRAK

E-book Marketing System adalah idea baru dalam perjualan buku secara online dan teknik pemasaran internet. Masalah yang dihadapi ialah kebannyakkan sistem sedia ada tidak mempunyai fungsi strategi pemasaran dan pembelian secara terus melaluai internet dalam satu sistem yang sama. Pengguna terpaksa mempunyai dua atau lebih sistem untuk fungsi pemasaran dan pembelian melaluai internet. Objektif utama sistem ini adalah untuk mengabungkan pembelian secara online dan startegi pemasaran internet didalam satu sistem yang baru. Pengguna-pengguna sistem ini ialah Internet Marketer, affiliate dan pelayar website. Modul-modul bagi setiap pengguna adalah berbeza bergantung kepada tahap pengguna tersebut. Modul-modul utama bagi sistem ini merupakan modul bagi pembelian secara terus melaluai paypal dan strategi pemasaran melaluai email. Selain itu terdapat juga modul affiliate dan modul pengurusan admin. Sistem ini dimuatnaik di malaysiahoster hosting, maka semua proses dari pembelian, promosi dan muat turun e-book di lakukan di internet. System ini mengunakan konsep model pelayan pelanggan yang melibatkan penggunaan 3-tier architecture. Sistem ini di bangunakan dengan mengunakan bahasa PHP dan MySQL sebagai pangkalan data. Sistem ini juga mengunakan konsep "Waterfall" sebagai metodologi dan keseluruhan projek mengunakan Object-Oriented Analysis and Design (OOAD) dan penggunaan SSADM sebagai aplikasi teknik.

TABLE OF CONTENTS

CHAPTER	SUB	BJECT	PAGE
	DEC	CLARATION	ii
	DEI	DICATION	iii
	ACI	KNOWLEDGEMENTS	iv
	ABS	TRACT	v
	ABS	TRAK	vi
	TAE	BLE OF CONTENTS	vii
	LIS	Γ OF TABLES	xi
	LIST	Γ OF FIGURES	xiii
	LIST	Γ OF ABBREVIATIONS	xiv
CHAPTER I	INT	RODUCTION	
	1.1	Project Background	1
	1.2	Problem Statement	2
	1.3	Objectives	3
	1.4	Scope	4
	1.5	Project Significance	5
	1.6	Expected Output	6

	1.7	Conclusion	7	
CHAPTER II	LITERATURE REVIEW AND PROJECT			
	METHODOLOGY			
	2.1	Introduction	8	
	2.2	Fact and Finding	9	
		2.2.1 Domain	9	
		2.2.2 Existing System	9	
	2.3	Project Methodology	15	
		2.3.1 Waterfall Methodology	15	
		2.3.2 Approach	20	
	2.4	Project Requirements	21	
		2.4.1 Software Requirement	21	
		2.4.2 Hardware Requirement	21	
		2.4.3 Other requirements	22	
	2.5	Project Schedule and Milestones	22	
		2.5.1 Milestones	22	
		2.5.2 Gantt Chart	24	
	2.6	Conclusion	24	
CHAPTER III	ANA	LYSIS		
	3.1	Introduction	25	
	3.2	Problem Analysis	26	
		3.2.1 Background of Current System	26	
		3.2.2 Problems Statement	29	
	3.3	Requirement Analysis	31	
		3.3.1 Data Requirement	31	
		3.3.2 Functional Requirement	32	
		3.3.3 Non-functional Requirement	41	
		3.3.4 Other Requirements	43	
	3.4	Conclusion	46	

CHAPTER IV	DES	IGN			
	4.1	Introd	uction		47
	4.2	High-Level Design			48
		4.2.1	System	Architecture	48
		4.2.2	User Int	erfaces Design	50
			4.2.2.1	Navigation Design	58
			4.2.2.2	Input Design	60
			4.2.2.3	Output Design	61
		4.2.3	Databas	e Design	63
			4.2.3.1	Conceptual Database Design	63
			4.2.3.2	Logical Database Design	65
	4.4	Concl	usion		68
CHAPTER V	IMP	LEMEN	TATION	N	
	5.1	Introd	uction		69
	5.2	Softw	are Devel	opment Environment Setup	70
	5.3	Softw	are Confi	guration Management	70
		5.3.1	Configu	ration environment setup	71
			5.3.1.1	Server Configuration	71
			5.3.1.2	Hardware Configuration	71
			5.3.1.3	Client Side Configuration	72
		5.3.2	Version	Control Procedure	72
	5.4	Imple	mentation	Status	74
	5.5	Concl	usion		76
CHAPTER VI	TES	TING			
	6.1	Introd	uction		77
	6.2	Test P	lan		78
		6.2.1	Test Org	ganization	78
		6.2.2	Test En	vironment	79

		6.2.3 Test Schedule	80
	6.3	Test Strategy	80
		6.3.1 Classes of Tests	81
	6.4	Test Design	82
		6.4.1 Test Description	82
		6.4.2 Test Data	82
	6.5	Test Results and Analysis	82
	6.6	Conclusion	83
CHAPTER VII	PRO	JECT CONCLUSION	
	7.1	Observation on Weakness and Strengths	84
	7.2	Propositions for Improvement	86
	7.3	Contribution	87
	7.4	Conclusion	87
REFERENCES			88
BIBLIOGRAFI			90
APPENDICES			91

LIST OF TABLES

TABLE	TITLE	PAGE
2.1	Features for case study 1	10
2.2	Features for case study 2	12
2.3	Features for case study 3	13
2.4	Current system features comparison	14
2.5	Project Miliestone	22
3.1	Comparison between current system and purpose system ma function	rketing 28
3.2	Customer Table	29
3.3	Affiliate Table	29
3.4	Email Friends Table	30
3.5	Admin Table	30
4.1	Main page user interface design	49
4.2	Promotion page user interface design	50
4.3	Download page user interface design	51
4.4	Affiliate page user interface design	52
4.5	Affiliate registration page user interface design	53
4.6	Affiliate menu user interface design	54
4.7	Admin menu user interface design	55
4.8	E-book marketing system input design	58

		XII
4.9	E-book marketing system output design	59
4.10	Data Dictionary for table customer	63
4.11	Data Dictionary for table affiliate	64
4.12	Data Dictionary for table email_friends	64
4.13	Data Dictionary for table admin	64
5.1	MySQL Server Configuration	69
5.2	List of Version Control Procedure	70
5.3	Implementation Status Details for Each Module	69
6.1	Test Organization	76
6.2	Test Facilities	77
6.3	Test Schedule	78

LIST OF FIGURES

TABLE	TITLE	AGE
2.1	Schematic illustrating Waterfall model	16
3.1	Context diagram for current system	25
3.2	Data flow diagram level 0 for current system	25
3.3	Data flow diagram level 1 for module (Buy e-book)	26
3.4	Context diagram for purposed system	32
3.5	Data flow diagram level 0 for purposed system	33
3.6	Data flow diagram level 1 for module 2.0 (Buy e-book)	35
3.7	Data flow diagram level 1 for module 3.0 (Affiliate)	36
3.8	Data flow diagram level 1 for module 4.0 (admin function)	37
3.9	Data flow diagram level 2 for module 3.2 (Purchasing Information)	3.8
3.10	Overview of Non-functional Requirement	41
4.1	3-Tiers Architecture Design	47
4.2	The navigation of flow e-book marketing system	57
4.3	ERD diagram of e-book marketing system	62

LIST OF ABBREVIATIONS

UTeM Universiti Teknikal Malaysia Melaka

Fakulti Teknologi Maklumat dan Komunikasi **FTMK**

PSM Projek Sarjana Muda

GUI Graphic User Interface

LAN Local Area Network

ERD Entity Relationship Diagram

UI User Interface

DDL **Data Definition Language**

LDM Logical Data Model

DBMS Database Management System

MySQL My Structure Query Language

OOAD Object-Oriented Analysis and Design

PC Personal Computer

PHP Hypertext Pre-processor

CHAPTER 1

INTRODUCTION

1.1 Project Background

E-Book Marketing System is developed to make a new system which has marketing and e-commerce function. This system used e-book "Secret Internet Service System" as example for promote and sell the e-book with online business. The main problem for the current is, there are many systems like Joomla, PhpNuke and ZenCart at the market which can develop an interesting web with shopping cart function but do not have marketing function. Besides, many internet marketers have thier good product and service but no buddies know about their business or web. So the desired system combined web management and marketing function to increase the company customer to buy the e-book.

This system that will be developed from the beginning process including connection with paypal and credit card service for e-commerce transaction until confirmation from paypal for complete download. Before this, some internet marketer sell their e-book manually which customer have to wait respond from internet marketer email to download direction and this process consumed a long time if internet marketers do not check their emails

There are several way on how to increase customer like generate friends, affiliate programs (MLM), mailing list, promote with famous web and etc. Therefore E-Book Marketing System will combine all these function with web management. This system can also save their mailing list and auto responds email for every action. This system also includes management function for every transaction report, affiliates list sales report and helpdesk for customer inquiry.

1.2 Problem statement

After doing some research about internet marketing and e-book strategy promotion, there are some problems occurred from the process of current system which stated as below:-

1) Do not have marketing function

The main problem in current web system are, there are many web which have web management function but do not have marketing function like Zencart, Jomlaa and Mambo. Therefore, internet marketer cannot promote and sell their product or service because nobodies know about their address web.

2) Do not provide all function in one system

The current system function's were build in different system. For example www.affiliatepayceter.com has affiliate function and www.autoresponds.com have mailing list function. So admin (Internet Marketer) cannot manage their entire customer and must login to different system to view their sell or promotion progress.

3) Do not have stored mailing list function

The current system do not allow customer to view others email list. Therefore internet marketer cannot promote their other product or service. Besides, auto responds mail also cannot save and view their customer list. Internet marketer only can get their email list form paypal confirmation transaction.

4) Do not have admin function for marketing

Since all the marketing function did not combined in one system, therefore the current system does not have admin function for marketing. So admin cannot manage their promotion and their profit for every purchasing.

1.3 Objective

There are a few objectives of developing E-book Marketing System. The objective of this system is to make sure that this system will reach the goals and the objectives are stated as below:

- 1. To developed and combine three marketing function in one system which are:
 - Affiliates System (MLM).
 - Email promotion
 - · Auto responds Mail System
- 2. To connect with paypal service and credit card until finish to download e-book
- To provide management module for every transaction report, affiliates list sales report and helpdesk for customer inquiry.

1.4 Scope

Following are the two categories of scope:

1) Users:

There are three users used E-book marketing system:

- Admin for this system
- Customer or website visitor
- An affiliate who is joins affiliate programs.

2) Modules:

Web Management Module

This module will be used to attract customer to buy the e-book. This module functions as sales page for this system. It is contained all informations about e-book such as price, chapter and design cover e-book.

Affiliates Module

These modules function as MLM (Multi Level Marketing). This module involves three users which are admin, Affiliates, and customers. This module is optional either the customer want to join the system or not. If they interested to join this system, customer need to register and they will get affiliate id which they can promote our e-book and get commission for every sale. This module has two sub modules which are registration module and login module. After user register they can get promotion link from this company.

Generates Friend Modules

This module is to increase mailing list traffic to promote the web to their friends. In this module, customer can get discount if they tell their friends about this e-book. Customer can tell this promotion via our auto responds email.

Auto Responds Mail Modules

This module is the main function of this system. Basically, this module will be able send email to customer to track mailing list and promotion. This module will be developed using SMTP protocol using admin hosting server (for SMTP address and username/ password details). This module will be used at three sections which are:

- 1. At generate friend module to tell their friend about the promotion
- After complete the payment transaction with paypal credit card in order to send username and password for download e-book.
- After complete registration with affiliate module in order to send password and link promotion.

Management Module

This module will help admin to manage their marketing plans. In this module it will help admin to organize affiliate's sales list, mailing list for promotion and transaction report from paypal or credit card.

1.5 Project significance

This system will give many benefits to Internet Marketer and website visitor or customer. All of benefits of this system will be explain briefly below:

- 1) Internet Marketer— This system will give many benefits to Internet Marketer especially in their e-book sales and promotion. This system also can increase their customer and website visitor. Basically this system will helps them to combine several internets marketing function like generator friends, affiliates program and auto responds mail. All these functions will help in their promotion in marketing plans. Furthermore, the all process in this system is more effective and systematic because all the customers' mail will be stored and this process will help Internet Marketer in making their own mailing list. This system also helps their admin of the company to manage their marketing management function. Where it help admin to organize affiliate's sales list, mailing list for promotion and transaction report from paypal or credit card. By combining all function and strategy in one plan, it will reduced marketing risk and make the management process to be systematic and well organized.
- 2) Customer/Website visitors Customer can easily understand all information and content of e-book at sales page. Besides customer can join affiliate program and can get benefits or commissions for every single sales they make. Furthermore, all the transaction are using paypal and credit card and it fast and give more security secure for customers.

1.6 Expected Output

The expected output for this subject is to develop a web-based system with complete process including e-commerce, paypal transactions and marketing function. This system can managed internet marketer in their marketing plans and increase their e-book sales. From the marketing function, this system can stored mailing list and calculate their profit and loss. Besides that this system also have affiliate program. Every affiliate has their own account to view their seller and history transactions payment. Therefore, the system can track their id for every purchasing.

Lastly, this system also has admin function for every transaction report, affiliates list sales report and helpdesk for customer inquiry.

1.7 Conclusion

As a conclusion, the introduction chapter clarifies about project background, objectives, problem statement, and project scope. Besides that, this chapter also identifies the expected output and hoped to be completed to solve the problem statement and achieved the desired.

The next chapter is to perform literature review of the existing system. By doing the research, it will be able to compare and developed a system that will fulfill the current system constraints. Besides, the next chapter also explains the project methodology will be used and project schedule such as milestone and Gantt chart.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

This chapter wills briefly specific factors that are relevant to educational aspirations and deviant behavior. Generally, the purpose of doing literature a review is to analyze critically a segment of a published body of knowledge through summary, classification, and comparison of prior research studies, reviews of literature, and theoretical article (University of Wisconsin-Madison, 2006). Once a broad problem area practical or theoretical is identified the next step is to review the literature on topic. Examining both the theoretical and research literature on a current process usually will help to narrow the topic and identify a testable hypothesis (Cooper. H, 1988).

To collect the information to developed E- Book Marketing System, the resources include Books (find more details sources), electronic media (internet), printed media (journal articles), and guidance from lecturer will be refer as a reference. The literature study in current system could give more reference in system development process such as interface, flow process and level of security should be improve and enhance from the current system.

The best methodology will affect the flow of development system. The waterfall development methodology will be chosen to implement this system.

2.2 Fact and findings

The fact and finding are method to review and make research by looking at what work has already been done in the research area. There are few case studies that are related and have similar with current system based on the category, concepts, functions, software and hardware requirement. All of the case study is explained briefly below based on research from internet.

2.2.1 Domain

The domain which related with this project is e-commerce. E-commerce is a new way for user to sell their product or service in internet online business. There are many website use e-commerce like ebay.com, lelong.com.my and etc. Every purchasing and transaction is handled by third party like paypal, clickbank and credit card.

E-book marketing web based system will use e-commerce technique to develope this web. This web provides E-book for internet marketer to sell and increase the number of customer in internet online market.

2.2.2 Existing System

1) Case Study 1: Italian Recipe E-book (http://www.dunway.com/italian recipes)

This web is taken from www.dunway.com which is one of the Italian products selling via online web system. This system is online web-based system which is totally custom-generated using Content Management System (CMS) PhpNuke. Main page of this web is sales pages which explain the content of e-book, price, and some picture to brief the recipes menu.