Universiti Teknologi MARA

Preventive, Corrective and Improvement Action System of UiTM Terengganu (ST3P)

Nurliza Mohamed Rasdi

Thesis submitted in fulfillment of the requirements for Bachelor of Information Technology (Hons.) Business Computing Faculty of Computer and Mathematical Sciences

January 2018

STUDENT DECLARATION

I certify that this thesis and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

. .

NURLIZA BINTI MOHAMED RASDI 2014669754

JANUARY 29, 2018

ABSTRACT

This project describes the Preventive, Corrective and Improvement Action System of UiTMT (ST3P) to improve the process of existing procedures of preventive action, corrective action and customer complaint. The problem with the current process is that the relevant records are not updated, no relevant forms and less knowledgeable about file preparation. The element implemented in the system is quality planning, quality control and quality improvement of the Quality Trilogy created by Juran (1986). It is design and developed by using the waterfall model as the methodology of the system. The system has been tested by conducting system testing, expert evaluation and user evaluation. As the result, the suggestion among the experts is to improve the interface of the system to become more user-friendly. Highest mean of system capabilities structure is 4.40 with the mode of 5 has been achieved. This mean value proves that ST3P is capable to be use by all users. Nevertheless, the system need to link with the Online Staff Information System (OSIS) database of UiTMT. It is hoped that ST3P will provide the best solution to organize the process of taking the needed action.

TABLE OF CONTENTS

CONTENT

SUPERVISOR APPROVAL			ii	
STUDENT DECLARATION			iii	
ACKNOWLEDGEMENT			iv	
ABSTRACT			v	
TABLE OF CONTENTS			vi	
LIST OF TABLES		÷.	х	
LIST OF FIGURES			xii	
LIST OF ABBREVIATIONS			xiv	

CHAPTER ONE: INTRODUCTION

1.1.	Introduction		1
1.2.	Current Process Flow		2
1.3.	Problem Statement		5
1.4.	Objective	1.1	7
1.5.	Scope		7
1.6.	Significance		9
1.7.	Project Framework		9
1.8.	Gantt chart		11
1.9.	Conclusion		12

CHAPTER TWO: LITERATURE REVIEW

2.1.	Introdu	ction		13
2.2.	Total Q	Puality Management (TQM)		15
2.2.1.	Deming	g's Theory		16
	2.2.2.	Juran's Theory		17
	2.2.3.	Crosby's Theory		17
2.3.	Quality	Trilogy	2	19
	2.3.1.	Quality planning		20
	2.3.2.	Quality control		 21

	2.3.3.	Quality improvement		21
2.4.	System	n Development Model		22
	2.4.1.	Waterfall Model		22
	2.4.2.	Rapid Application Development Model (RAD)		24
	2.4.3.	Spiral Model		25
	2.4.4.	V-Shaped Model		25
	2.4.5.	Prototype Model		26
2.5.	Simila	r/ Related System		27
	2.5.1.	Student Complaint System (Qatar University)		27
	2.5.2.	Consumer Forum of Malaysia Complaint Portal		28
	2.5.3.	Portal Rasmi Lembaga Pertubuhan Peladang (E-Aduan)		29
	2.5.4.	E-Aduan: Whistle Blower		30
	2.5.5. Kepen	E-Aduan Kementerian Perdagangan Dalam Negeri, Kopera ggunaan (KPDNKK)	si E	Dan 31
	2.5.6.	Comparison between the Similar/ Related System Features		32
2.6.	Implic	ation of Literature Review to Proposed Project		33
2.7.	Conclu	ision		35

CHAPTER THREE: METHODOLOGY

3.1.	Introduction		36
3.2.	Project Development Methodology		37
3.3.	Phase 1: Project Planning		39
	3.3.1. Business Process	т.	39
3.4.	Phase 2: Requirement Definition		41
	3.4.1. User Requirement and System Requirement		41
3.5.	Phase 3: Design		45
	3.5.1. Process Flow Diagram		45
	3.5.2. Context Diagram		50
	3.5.3. Data Flow Diagram (DFD)		51
	3.5.4. Entity Relationship Diagram (ERD)		53
	3.5.5. Table of Entity		54
	3.5.6. Functional Hierarchy Diagram (FHD)		56
3.6.	Phase 3: Development		56
	3.6.1. Hardware Specification		57
	3.6.2. Software Specification		57
3.7.	Phase 4: Integration and Test		58