REQUIREMENT MODEL FOR PURCHASING MANAGEMENT SYSTEM: A CASE STUDY AT AGENSI ANTI-DADAH KEBANGSAAN KEDAH (AADK)

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REQUIREMENT MODEL FOR PURCHASING MANAGEMENT SYSTEM: A CASE STUDY AT AGENSI ANTI-DADAH KEBANGSAAN KEDAH (AADK)

A dissertation submitted to the Graduate School in partial fulfilment of the requirements for the degree Master of Science (Information and CommunicationTechnology) Universiti Utara Malaysia

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Dean of the Faculty of Information Technology Universiti Utara Malaysia 06010 UUM Sintok Kedah Darul Aman. Model Keperluan untuk Sistem Pengurusan Pembelian dapat membantu pihak pengurusan organisasi untuk menangani pelbagai isu di dalam aspek pembelian dengan lebih baik dan lebih berkesan. Kajian kes yang hanya memfokuskan kepada aktiviti pembelian sebagai domain kajian ini dibuat di Agensi Anti-dadah Kebangsaan Kedah. Ianya dipilih bertepatan dengan pengaplikasian aktiviti pembelian semasa di organisasi ini yang tidak terlalu ringkas atau terlalu kompleks. Model yang di bangunkan ini bertujuan untuk membantu pembangun sistem untuk memahami konsep, tatacara dan prosedur yang betul di dalam mengendalikan aktiviti pembelian. Atas alasan tersebut maka kajian ini diadakan bagi membina Model Keperluan untuk Sistem Pengurusan Pembelian yang dijadikan asas untuk membangunkan Sistem Pengurusan Pembelian yang dapat menangani pelbagai masalah yang wujud di dalam aktiviti pembelian di organisasi. Model Keperluan ini dibangunkan menggunakan Unified Modelling Language (UML) yang terdiri daripada model bergambar rajah iaitu Use case Diagrams, Class Diagrams, Activity Diagrams dan Interaction Diagram (Sequence Diagrams dan Collaboration Diagrams) yang disertakan dengan beberapa maklumat sokongan seperti Use Case Specification dan Requirement List. Test Script Technique dan sampel sistem (prototaip) kemudian dibangunkan untuk mengesahkan kebolehgunaan model yang dibangunkan. Di dalam kajian ini, keputusan model keperluan menunjukkan 47 keperluan fungsi dan 3 keperluan bukan fungsi diperlukan untuk membangunkan Model Keperluan untuk Sistem Pengurusan Pembelian. Kajian ini dipercayai amat berguna dan dapat membantu organisasi untuk membangunkan Sistem Pengurusan Pembelian untuk boleh diguna pakai di semua organisasi kerajaan dan juga di syarikat-syarikat swasta yang berkaitan.

Requirement Model for Purchasing Management System can help organisation to overcome all purchasing issues in a proper and effective way. This case study which focuses on purchasing activity as the domain of study was conducted at Agensi Anti-dadah Kebangsaan Kedah. This organisation was chosen because of the current implementation purchasing activities that was implemented at AADK is very complex. So hopefully that this constructed model will help system developer to understand the concept, flow as well as procedures in managing purchasing activities. Therefore this study is to utilise a Requirement Model for Purchasing Management System as a basis to develop a Purchasing Management System so as to overcome all purchasing issues in the organisation. This requirement model was developed using Unified Modelling Language (UML) that consists of certain model diagrammatical such as Use case Diagrams, Class Diagrams, Activity Diagrams and Interaction Diagram (Sequence Diagrams and Collaboration Diagrams) and supported by certain textual information likes Use Case Specification and Requirement List. Test Script Technique and Sample System (prototype) is then developed to validate this constructed model. Through this study, requirement model findings shows that it consists of 47 functional requirements and 3 non-functional requirements that were needed to construct Requirement Model for Purchasing Management System. This study can provide a better solution for organisation to develop a Purchasing Management System that can be implement at all government agencies as well as all related private sector companies.

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LIST OF ABBREVIATIONS

AADK	Agensi Anti-dadah Kebangsaan Kedah
ERMS	Electronic Records Management System
MDD	Model-Driven Development
MoReq	Model Requirement for Management of Electronic Records
ODBC	Open Database Connectivity
PiMS	Purchasing Management System
SBAS	Small Business Accounting System
SLDL	Rosetta System Level Design Language
UML	Unified Modelling Language

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

This project purpose was to perform a Requirement Model for Purchasing Management System based on the user requirements. Agensi Anti-dadah Kebangsaan Kedah (AADK) is chosen as a study for this research. As a government agency, AADK's main objective is to prevent people from being influenced by all type of drugs. This organization also involve in purchasing activities to perform their tasks and responsibilities to the civilians.

The purchasing procedure which is used in this organization is about the same with other government organizations. The purchasing begins when the store department issues a requisition to the purchasing department asking them to order a given amount of a particular item. The purchasing department will raise an order from the vendor via direct purchase, quotation or tender selection method. All the particular of the delivery items are recorded before raising the payment to the vendor. Referring to Daff (1986), the purchasing procedure of an organization is stated as below:-

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