

**CAPITAL ASSETS AND INVENTORY MANAGEMENT
SYSTEM OF JPKN KOTA MARUDU (*E-ASET*)**

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**FACULTY OF COMPUTING AND INFORMATICS
UNIVERSITI MALAYSIA SABAH
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SYSTEM OF JPKN KOTA MARUDU (*E-ASET*)**

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**THESIS SUBMITTED IN PARTIAL FULFILMENT
FOR THE BACHELOR DEGREE OF COMPUTER SCIENCE
WITH HONOURS
(NETWORK AND SYSTEM MANAGEMENT)**

**FACULTY OF COMPUTING AND INFORMATICS
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2015

DECLARATION

I hereby declare that this thesis, submitted to Universiti Malaysia Sabah as partial fulfillment of the requirements for the degree of Bachelor of System and Network Management, has not been submitted to any other university for any degree. I also certify that the work described herein is entirely my own, except for quotations and summaries sources of which have been duly acknowledged.

30th June 2015

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SUPERVISOR

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ABSTRACT

Capital Assets and Inventory Management System is developed for *Jabatan Perkhidmatan Komputer Negeri Cawangan Kota Marudu (JPKN-KM)*. This system replaces the old method where the JPKN-KM staffs manually register the capital assets and inventory information in a form. The method that JPKN-KM used to keep all the information is not systematic; it requires large spaces for storing the documents and the potential for the documents go missing is high. Besides that, with the old method, JPKN-KM face problem to search, update and supervise all the registered information. The labeling methods that use marker pen and correction paper are considered not systematic. This system has four (4) main functions which are assets officer registration, assets label generation, assets registration and assets report generation. The user of this system is an information technology officer; which has access in assets officer registration module. The second user is the technician, which able to access the movable assets label generation, registration and report generation modules. This system is intranet; it will be installed in office and can only be accessed in office. The programming languages used are PHP, web developer tool is Xampp Control Panel v3.2.1 and the local host browser is Torch. With the establishment of this system hoped that it can facilitate the JPKN-KM to generate label and report automatically from the registered assets information from KEW.PA-2 and KEW.PA-3, besides facilitate JPKN-KM to search the capital assets and inventory registered information.

ABSTRAK

SISTEM PENGURUSAN HARTA MODAL DAN INVENTORI JPKN-KM

Sistem Pengurusan Harta Modal dan Inventori dibangunkan untuk kegunaan *Jabatan Perkhidmatan Komputer Negeri Cawangan Kota Marudu (JPKN-KM)*. Sistem ini menggantikan kaedah lama dimana kakitangan JPKN-KM secara manual mendaftarkan maklumat harta modal dan inventori. Kaedah yang digunakan JPKN-KM untuk menyimpan semua maklumat adalah tidak sistematik; kerana memerlukan ruang yang besar untuk penyimpanan borang dan potensi untuk borang daripada hilang adalah tinggi. Selain itu, dengan kaedah lama ini JPKN-KM menghadapi masalah untuk mencari, mengemaskini dan menyelia semua maklumat berdaftar. Kaedah pelabelan yang menggunakan pen marker dan pemadam pen dianggap tidak sistematik. Sistem ini mempunyai empat (4) fungsi utama iaitu pendaftaran pegawai aset, penjana label, pendaftaran aset dan penjana laporan. Pengguna sistem ini adalah pegawai teknologi maklumat yang akan menggunakan modul pendaftaran pegawai aset dan juruteknik yang akan menggunakan module pendaftaran, penjana laporan dan penjana label bagi aset alih. Sistem ini intranet; dimana sistem ini hanya boleh digunakan dalam pejabat tersebut sahaja. Bahasa pengaturcaraan yang digunakan ialah PHP, alat pemaju web adalah Panel Kawalan Xampp v3.2.1 dan pelayar tuan rumah tempatan Torch. Dengan pembangunan sistem ini diharapkan dapat memudahkan JPKN-KM menjana label dari maklumat aset berdaftar melalui KEW.PA-2 dan KEW.PA-3, membantu JPKN-KM untuk menjana laporan secara automatik dari maklumat berdaftar disamping memudahkan kakitangan JPKN-KM untuk mencari maklumat harta modal dan inventori yang berdaftar sekiranya ingin melakukan kemas kini.

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LIST OF ABBREVIATIONS

DFD	Data Flow Diagram
ERD	Entity Relationship Diagram
JPKN-KM	Jabatan Perkhidmatan Kota Marudu Sabah

CHAPTER 1

INTRODUCTION

1.1 Introduction

The title of this project is Capital Assets and Inventory Management System of JPKN Kota Marudu. JPKN stands for *Jabatan Perkhidmatan Komputer Negeri*. This system is developed for the use of *Jabatan Perkhidmatan Komputer Negeri Cawangan Kota Marudu* (JPKN-KM).

This chapter will introduce the system that is being developed and also explain the purpose of the development of the system. Besides that, this chapter also introduces the organization that will become the user of this system. This chapter contains problem background and problem statements that trigger the idea to develop this system.

The three (3) objectives of developing this system are stated in this chapter. The project scopes and organization of the project are also explained in this chapter.

1.2 Introduction to JPKN Kota Marudu Organization

Jabatan Perkhidmatan Komputer Negeri Cawangan Kota Marudu (JPKN-KM) started its operations on the 1st February 2008. JPKN-KM serves as a mini JPKN in North West Coast Region. JPKN-KM is located in the new building of Kota Marudu District Office, it acts as a central computer services for the North West Coast Region. JPKN-KM has six supervision departments, which are Kota Marudu District, Daerah

Kudat, Kota Belud District, Kecil Paitan District, Kecil Matunggung District and Kecil Banggi District.

JPKN-KM serves as the developer and coordinator of the computing system in terms of application systems, computers and networking maintenance, training and courses. JPKN-KM also provides consultancy services for ICT departments located in JPKN-KM supervision departments. Besides that JPKN-KM also has responsibility to supplies ICT equipment to the department under its supervision.

JPKN-KM is one of the six (6) organizations of *Jabatan Perkhidmatan Komputer Negeri Sabah (JPKN)*. JPKN is one of the public sector departments of Sabah state. JPKN Sabah was built by Sabah District Ministry on year 1976 under Financial Ministry and named as *Unit Perkhidmatan Komputer (UPK)*. It started its operations on the 1st January 1977. On 7th May 1992, the name of this department had changed from *Unit Perkhidmatan Komputer* to *Jabatan Perkhidmatan Komputer Negeri*. The establishment of this department is to provide services related to the field of computing to all ministries, departments and statutory bodies Sabah State Government.

1.3 Problem Background

From the discussions with Mr. Verus Lawrence the current Information Technology Officer of JPKN-KM, this department is still using forms to keep the capital assets and inventory information received from Headquarter (HQ) in Kota Kinabalu. The management of the assets information is not efficient since the information is registered manually in forms. The capital assets and inventory details were registered in forms called KEW.PA-2 and KEW.PA-3.

The used of form to register all the capital assets and inventory information increase the probability of some of the details to go missing. This is because by registering information in forms will make them more vulnerable to variety of problems like damage from natural disasters such as flood. This indicates that the capital asset and inventory information is not managed properly and systematically.

Besides that, many forms are used to keep the capital assets and inventory information; this will require large space in the office to store all the forms.

Besides that, JPKN-KM staffs also faced difficulty to search, update and supervise the capital assets and inventory information when forms is used to keep the assets information. It takes longer period of time for the JPKN-KM staffs to find which form is to be updated. The use of marker pen and correction pen in labeling the assets in JPKN-KM is inconvenience. With the establishment of this system the labeling process will become much easier, because through this system JPKN-KM staffs only need to print the capital assets and inventory label, this system will automatic generate label from the assets information that is registered in KEW.PA-2 and KEW.PA-3.

The data of each capital assets and inventory that has been registered is written manually by the JPKN-KM staffs in order to generate report, which is not systematic. JPKN-KM assets officer can easily print a report, when the Capital Assets and Inventory Management System of JPKN-KM being established. KEW.PA-4 and KEW.PA-5 are used to generate report, before this the report forms is manually fill in by the assets officer, through this system the form will automatically updated after the registration is save (KEW.PA-4 and KEW.PA-5).

1.4 Problem Statement

Based on the problem background, problem statements that were made are:

1.4.1 The Registration of Capital Assets and Inventory Information is not Systematic

The used of form to register the capital asset and inventory information is consider not systematic this is because the JPKN-KM staffs will not be able to manipulate the data that registered for other purpose, such as generating report by using the registered information. By computerizing the capital assets and inventory registration, the data registered will be managed properly. JPKN-KM should become

the example of the other departments under the JPKN-KM supervision towards information technology.

1.4.2 Require Large Space for Storing the Forms

The used of form to keep all the information require JPKN-KM to provide large file storage cabinet. This will require JPKN-KM to provide large space in office after 5 years JPKN-KM was operated. By developing the system JPKN-KM only needs to store all the capital assets and inventory information in one database system.

1.4.3 The Labeling Method for Capital Assets and Inventory is not Systematic

Marker pen and correction pen is used for labeling process. With the establishment of this system, JPKN-KM only needs to print the label and stick it to the capital assets and inventory. The label is generated from the information that registered in the system.

1.4.4 Difficult to Search, Update and Supervise the Capital Assets and Inventory Information

It is difficult to trace and update the capital assets and inventory that stored in files. It took longer period of time to find the specific form to be updated. With the establishment of this system the search and updating process will become easier and save more time.

1.4.5 High Potential for Capital Assets and Inventory Information go Missing

The form exposed to variety problems such as dropouts and damage from natural disasters. Through this system all the capital assets and inventory information will be safely stored in one database.

1.5 Objectives

1. To develop a function for the system to generate report automatically by using KEW.PA-4 and KEW.PA-5.
2. To facilitate the JPKN-KM to generate label from the registered assets information. The registered assets information is from KEW.PA-2 and KEW.PA-3.
3. To facilitate the JPKN-KM to search the capital assets and inventory registered information to be updated.

1.6 Relationship between Objectives and Problem Statement

The first objective is: To develop a function for the system to generate report automatically by using KEW.PA-4 and KEW.PA-5 will solve problem statement:

- The Registration of Capital Assets and Inventory Information is not Systematic.
- High Potential for Capital Assets and Inventory Information go Missing.
- Requires Large Space for Storing the Forms.

The second objective is: To facilitate JPKN-KM to generate label from the registered assets information. The registered assets information is from KEW.PA-2 and KEW.PA-3 will solve problem statement:

- The Labeling Method for Capital Assets and Inventory is not Systematic.

The third objective is: To facilitate the JPKN-KM to search the capital assets and inventory registered information to be updated will solve problem statement:

- Difficult to Search, Update and Supervise the Capital Assets and Inventory Information

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