BORANG PENGESAHAN STATUS TESIS*

JUDUL: **UPGRADING ASSET MANAGEMENT SYSTEM**

SESI PENGAJIAN: **2007**

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UPGRADE ASSET MANAGEMENT SYSTEM

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

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
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2007

DECLARATION

I hereby declare that this project report entitled

UPGRADE ASSET MANAGEMENT SYSTEM

is written by me and is my own effort and that no part has been plagiarized

without citations

STUDENT : _____ Date: 9/11/2007

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DEDICATION

To my beloved parents, Mr. Fong Kam Wah and Mrs Leong Siew Fong, for their seems less expression of love and fully support…

To my supervisor, Pn. Zahriah binti Sahri, for making it all worthwhile…

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ABSTRACT

Asset Management System is one of the web applications where it provide services for user to manage IT assets at Infineon. The purpose of the system is to facilitate user to manage all the assets at Infineon. This is an existing system at Infineon. Users can store, edit, add and delete IT assets information. The main objective here is to keep all IT assets information into the system. This is the reason why the system needed to be upgraded. The methodology that will be use to implement this project is Software Development Life Cycle (SDLC) with Waterfall Model approach while for design will be the combination of Data Flow Diagram (DFD) and Unified Modeling Language (UML). Waterfall Model consists of 4 phases which are Requirement Analysis, Design, Implementation and Testing. The software that will be used through the development are Microsoft Office, Microsoft Visio, Microsoft Project and Macromedia Dreamweaver While the operating system is Windows XP Professional Service Pack 2. Besides, ASP (Active Server Page) will be used as the programming language, Access as the database, and Internet Information Services (IIS) as server. The hardware that will be used are personal computer and printer while Client-Server Architecture will be used as the system architecture.

ABSTRAK

Asset Management System merupakan salah satu aplikasi yang berorientasikan dimana ianya memberikan satu perkhidmatan kepada pengguna untuk menguruskan aset-aset IT yang terdapat dalam syarikat. Sistem ini adalah bertujuan untuk memudahkan pengguna untuk menguruskan maklumat-maklumat aset IT yang terdapat dalam syarikat. Ia merupakan sistem yang sedia ada di Infineon. Dengan menggunakan sistem ini, pengguna dapat menyimpan, mengubah, menambah dan memadam maklumat aset IT. Antara objektif yang ketara sistem ini adalah untuk menyimpan semua maklumat aset IT. Ini merupakan sebab sistem ini perlu ditingkatkan lagi. Metodologi yang digunakan untuk meningkatkan sistem ini adalah. Waterfall Model menggunakan kaedah Software Development Life Cycle (SDLC) manakala rekabentuknya pula adalah menggunakan kombinasi Data Flow Diagram (DFD) dan Unified Modelling Language (UML). Waterfall Model mengandungi 4 fasa iaitu Requirement Analysis, Design, Implementation and Testing. Perisian yang diperlukan untuk melaksanakan projek ini adalah Microsoft Office, Microsoft Visio, Microsoft Project dan Macromedia Dreamweaver manakala sistem pengoperasian adalah Windows XP Professional Service Pack 2. Selain itu, bahasa pengaturcaraan yang digunakan adalah ASP (Active Server Page), Access sebagai pengkalan data, dan Internet Information Services (IIS) sebagai pelayan. Perkakasan yang digunakan adalah Komputer peribadi dan pencetak. Senibina sistem pula yang digunakan adalah senibina klien-pelayan.

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INTRODUCTION

1.1 Project Background

Basically, the project is about upgrading AMS (Asset Management System) at Infineon. The project will be done by adding 4 modules to the system as an enhancement. The 4 modules are thin client registration module, thin client searching module, thin client editing module, and document generation module. Thin client is a CPU without any drives (CD/DVD ROM, floppy disk drive) in it. It has only the basic hardware (hard disk, motherboard, RAM) and network. This upgrade is due to inefficient information storage method used currently.

Asset Management System is an ASP application that assists IFMY (Infineon Malaysia) IT department to store and keep track on PC, Notebook and Printer details. This system already exists at Infineon. It is used by IT department. The system has security features that divided users into 4 level access rights which are Administrator, User, Vendor, and View. The additional modules to be proposed are thin client registration module, thin client searching module, thin client editing module and document generation module.

1.2 Problem Statements

The current thin client information is kept in excel files. As time goes by, more and more thin client was ordered and deploy in the plant. Therefore, a systematic system has to be build in order to keep this information.

During the delivery process, a form needs to be filled in order for user to sign. It is to prove that the users received their assets. The current form was done manually. All the while, it has caused unclear wording by the hand writing. Hence, redundancy occurs during registration to AMS.

Currently, the system does not have all the assets information at Infineon especially thin client. It has cause the potential risk of data loss and fall to the hand of culprits. Therefore, all the assets details must be kept in the system as the network at Infineon has its own security to protect the database.

1.3 Objectives

a. To manage new assets information which is Thin Client
b. To enhance the stock keeping process
c. To automate thin client document generation
d. To create backup for assets information.

1.4 Scopes

a. Thin client registration module- This module enable user to register thin client. User will have to key in the important information of thin client in order to register. The information is asset number, department, thin client name serial number, owner, MAC address, location, and specifications. This module is meant for all administrators in IT Department only.

b. Thin client searching module- This module enable user to query thin client information. User has a few options on how to query the information. It is either by asset number, serial number, or department. This module is meant for all administrators, vendors and users in IT Department only.

c. Thin client updating module- This module enable user to edit (update and save) thin client information. User can update and save the information they are trying to edit by clicking a specific thin client from the list of queries. This module is meant for all administrators in IT Department only.

d. Thin client deleting/backup module- This module enable user to delete thin client information and backup thin client information at the same time. Backup module can also backup other deleted assets information as well. Backup will always work before information is deleted. This module is meant for all administrators in IT Department only.

e. Document generation module- This module enable user to generate document for asset delivery purposes. User can generate a document for delivery by just

clicking a link in the displayed table. The generated document will be a printable version. This module is meant for all administrators in IT Department only.

f. Backup mechanism- This mechanism help user to backup all information about that particular asset before it is deleted. It will always work after the "Delete" button is click and before the information is deleted.

g. Auto Indexing mechanism- This mechanism is triggered when a thin client information is registered. It helps to create an index number for documentation purpose. The index number will be treated as document number. The index number is randomized.

1.5 Project Significance

This project is important to store thin client information that are increasing in time. Thin clients can be located in the office and production line. With the upgraded system, user can locate the thin clients easily by just using the searching in the system. This will save time from scrolling the excel sheet to search for a particular information.

Everyday there are requests for new thin client user and thin client user termination. This will cause a constantly changing thin client ownership. Therefore, the system needs to have a module that can update the information of the new user and location of the workstation.

The most significance part of the system is the document generation form. It helps to digitalize the form that is used or asset delivery process. This will also maintain the data confidentiality.

1.6 Expected Output

At the end of this project, it is expected that this project will produce a platform that enables users to check the information of a thin client, edit the information, and maintain the information. Besides, this system is expected to enable users to generate document for delivery purpose.

1.7 Conclusion

In conclusion, this system will contribute an excellent job in record keeping and delivery process. It will be very helpful to the users. The security of confidential data will be protected and it reduces a lot of error making in record keeping. The next chapter to be developed is literature review and project methodology.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

This chapter is mainly about research and review on the existing system and explanation of the methodology use to implement this project. At the end of this chapter, there will be a list of software and hardware requirements and the project schedule and milestones. The resources that were found as a research basis will be summarized and explained in the second part of the chapter, facts and findings. This part will be divided into 3 significant topics which are domain, existing system, and technique. The third part will be the project methodology applied on this project. Later part will be the list of project requirements. It comprises of software, hardware and other requirements. The final part will be the project schedules and milestones.

2.2 Facts and findings (based on topic)

2.2.1 Domain

IT asset management (ITAM) is the set of business practices that join financial, contractual and inventory functions to support life cycle management and strategic decision making for the IT environment. Assets include all elements of software and hardware that are found in the business environment.

Software asset management applies to the business practices specific to software management, including software license management, configuration management, standardization of images and compliance to regulatory and legal restrictions such as copyright law, Sarbanes Oxley and software publisher contractual compliance. Legal software use in an organization is enforced by such compliance companies as Business Software Alliance, SIIA and FAST.

Software is referred to as entitlements so that SAM programs confirm the right to use or entitlement to that software by the user. Automation is used to facilitate this management. Microsoft maintains a list of SAM providers to help customers manage their software.

Hardware asset management entails the management of the physical components of computers and computer networks, from acquisition through disposal. Common business practices include request and approval process, procurement management, life cycle management, redeployment and disposal management.

The IT Asset Management function is the primary point of accountability for the life-cycle management of information technology assets throughout the organization. Included in this responsibility are development and maintenance of policies, standards, processes, systems and measurements that enable the organization to manage the IT Asset Portfolio with respect to risk, cost, control, IT Governance, compliance and business performance objectives as established by the business. IT Asset Management integrates the physical, technological, contractual and financial aspects of information technology assets to enable a holistic and proactive approach to achieving the objectives.

ITAM business practices have a common set of goals:

- Uncover savings through process improvement and support for strategic decision making
- Gain control of the inventory
- Increase accountability to insure compliance
- Enhance performance of assets and the life cycle management
- Risk reduction through standardization, proper documentation, loss detection

ITAM business practices are process-driven and matured through iterative and focused improvements. Most successful ITAM programs are invasive to the organization, involving everyone at some level, such as end users (educating on compliance), budget managers (redeployment as a choice), IT service departments (providing information on warranties), and finance (invoice reconciliation, updates for fixed asset inventories).

IT asset management generally uses automation to manage the discovery of assets, so inventory can be compared to ownership information. Full business management of IT assets requires a repository of multiple types of information about the