TESIS^ APPROVAL STATUS FORM

JUDUL: <u>AUTOMATED BUDGET MANAGEMENT SYSTEM.</u>

SESI PENGAJIAN: <u>2006</u>

Saya <u>MOHD ZAKI ZAMANI B. SHIRAT</u>
(HURUF BESAR)

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

1. Tesis adalah hakmilik Kolej Universiti Teknikal Kebangsaan Malaysia
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 dimana penyelidikan dijalankan

____✓____ TIDAK TERHAD

_____   _____
(TANDATANGAN PENULIS)   (TANDATANGAN PENYELIA)

Alamat tetap: <u>115 Taman Cahaya</u>   <u>SABRINA AHMAD</u>
<u>Jalan Hutan Kampung, 05350 Alor Setor.</u>
                                             Nama Penyelia

Tarikh : <u>23.11.2006</u>   Tarikh: <u>23/11/06</u>

Catatan: ** Jika tesis ini SULIT dan TERHAD, sila lampirkan surat daripada pihak berkuasa
^ Tesis dimaksudkan sebagai Laporan Projek Sarjana Muda (PSM)

AUTOMATED BUDGET MANAGEMENT SYSTEM

MOHD ZAKI ZAMANI BIN SHIRAT

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

FACULTY OF INFORMATION AND COMMUNICATIONS TECHNOLOGY

KOLEJ UNIVERSITI TEKNIKAL KEBANGSAAN MALAYSIA

2006

ACKNOWLEDGEMENTS

Alhamdulilah, praise to Allah s.w.t, I am very pleased and grateful of being able to finish my final project.First and foremost, I would also like to thank my beloved parents who have been giving me support and motivation throughout my project, En .Shirat b.Abdullah and Pn Salmiah bt Derani for the support., love and encouragement that they provide me through out my entire life and in particular for this project. I would like to express my gratitute to my supervisor, Pn Sabrina bt Ahmad, who expertise, understanding, and patience, added considerable to my success of completeing this thesis.I appreciate her vast knowledge and skill in many areas and her assistant in writing and completing this report.I also would like to thank my friends in and outside KUTKM for their exchanges of knowledge, skills, and venting of frustration while completing my final project, which helped enrich the experience.Although many people have contributed to this project and have helped to completed it, I take sole responsibility for errors.Wassalam.

ABSTRACT

The primary purpose of preparing this Projek Sarjana Muda II is to fulfil Bachelor of Computer Science (Software Development) in Kolej Universiti Teknikal Kebangsaan Malaysia. This thesis contains a complete analysis about Projek Sarjana Muda II. This thesis also discusses and describes all activities and processes of System development. This thesis is divided into four chapters; Introduction to Automated Budget Management System, Project Background, Problem Statements, Objectives, Scopes, Project Significant and Conclusion. The first chapter will go deeply into the objectives and scopes of the system and the second chapter describe about fact and finding, project methodology and project schedule. The third chapter is the analysis part. This chapter will describe all about the problem current system and problem solution. It also describes business flow, use case diagram and sequence diagram. Chapter four is for design; this part includes class diagram, user interface design and ERD for Automated Budget Management System. Then, Chapter five is for implementation process for ABMS likes business tier, installing PHP and version procedure and implementation status. For Chapter six is for testing phase. This chapter explain about test schedule, test strategy, test design and test case result. The last chapter is for project conclusion. This chapter describes about strength and weakness in Automated Budget Management System.

ABSTRAK

Tujuan menyiapkan projek Sarjana Muda II adalah untuk memenuhi keperluan Ijazah Sarjana Muda Sains Komputer (Pembangunan Perisian) di Kolej Universiti Teknikal Kebangsaan Malaysia. Kajian ini mengandungi analisis ysng lengkap berkenaan Projek Sarjana Muda II. Kajian ini juga membincangkan dan menghuraikan semua aktiviti dan proses dalam membangunkan sistem. Kajian ini dibahagikan kepada tujuh bab iaitu Pengenalan kepada Automated Budget Management System, Latarbelakang Projek, Masalah yang dihadapi, Objektif, Skop, Kepentingan projek dan kesimpulan. Bab yang pertama akan membincangkan lebih mendalam mengenai objektif dan skop projek.Bab yang kedua pula menghuraikan berkenaan fakta dan dari mana fakta itu diperolehi, metodologi projek dan jadual projek. Bab ketiga adalah mengenai analisis projek.Bab ini akan akan menghuraikan berkenaan masalah sistem yang sedia ada dan cara menyelesaikanya. Ia juga menghuraikan berkenaan *business flow, use case diagram and sequence diagram*. Bab keempat adalah mengenai Rekabentuk projek. Pada bahagian ini termasuklah seperti *class diagram, user interface design dan ERD* untuk Automated Budget Management System. Seterusnya , Bab kelima adalah untuk bahagian perlaksanaan projek antaranya seperti *business tier, installing PHP, version procedure and implementation status*. Bab keenan adalah mengenai pengujiann projek Bahagian ini akan menghuraikan berkenaan jadual percubaan ,strategi percubaan ,percubaan rekabentuk dan percubaan kes tertentu mengenai projek. Bab yang terakhir adalah untuk kesimpulan projek.Bahagian ini menghuraikan berkenaan kekuatan dan kelemahan Automated Budget Management System.

DEDICATION

To my God, Allah SWT

To my beloved parents, En.Shirat b.Abdullah and Pn Salmiah bt Derani

To my supervisor, Pn Sabrina Bte Ahmad

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

DECLARATION

I hereby declare that this project report entitled

AUTOMATED BUDGET MANAGEMENT SYSTEM

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

STUDENT: _____ Date: 23.11.2006.

(MOHD ZAKI ZAMANI B.SHIRAT)

SUPERVISOR: _____ Date: 23/11/06

(PN.SABRINA BT AHMAD)

CHAPTER I

INTRODUCTION

1.1 Project Background

The purpose of The Automated Budget Management System (ABMS) is to capture, document, retain, compile and provide query capabilities of a collection of annual budget proposals submitted for consideration or reallocation.

The ABMS proposed for Sirim Berhad Human Resources (HR) department. The ABMS is designed especially for HR staff to planning and manage the budget. It also to view and display the latest financial budget and total of current budget

The ABMS will give the Human Resources department to manage the financial plan more efficient. It also to prepare space for user and other department staffs to submitted their proposal to HR by online or network. This system is needed because most of the staffs in Sirim Berhad used computer to fullfill their assignments. By using this system the staffs do not waste their time to go to Human Resources department. This system also allow user to get information about Human Resources department and know the rules and format to request the correct proposal by system.

1.2 Problem Statements

The idea of developing this Automated Budget Management System is to gather Sirim staff to make a big, cooperative, and useful system.

1. HR staffs used the manual system to manage their budget

    HR staffs mainly use the manual system like Microsoft Excel to manage their budget plan before computerized. It can waste their time to update the budget from time to time. After create the system the data automatically update the latest budget or information.

2. Manual systems lack of data store and security

    The manual system did not have database security to store the collection of data. The already user used paper to write proposal or request to Human Resources department. It perhaps can give a lot of problems to Human Resources staff to saving the correct data and often missing the real information. After create the system data automatically store in databases after user used the system.

3. Data entered into manual system did not provides automatic update

    The manual system didn't provide automatically updated information because the staffs need to calculate manually budget before insert and type the real value. After create the system the staff only needed click button update to verify the latest information.

1.3 Objectives

Main objectives of developing the Automated Budget Management System are: -

1. To automate the process of budget preparation to be more flexible and simple
2. To create a repository of information on business plan, target and performance in management budget
3. To plan and proposed the project plan through system
4. To plan and prepare the coming budget efficiently.

1.4 Scopes

1.4.1   User

The user for the ABMS is:

a.   Human Resources staff

b.   Admin staff Sirim Berhad

1.4.2   The project will focus on

1. Developed an application to manage budget management system

Assist on the preparation to management plan activities using web base. The basic of Automated Budget Management System (ABMS) is to supports budget accounting functions such as withdrawal, deposit; revise the financial account and manage the annual project using computation.

2. The application is used to change manual system to automate system.

The staffs Input data (manual key-in) and data automatically obtained from other systems to manage, complete requirement and follow the formatted before business accepted to the system.

3. To develop Online Customer Application

   Before the Automated Budget Management System (ABMS) the current system is used Microsoft Excel to manage their budget. Based on earlier discussion and survey, 100 % staffs were suggesting developing web base for manage the budget. The ABMS is developed using Web Interface for online customer application as an easy access .It also gives benefit for HR staff to prepare business plan activities, submit the application, performed budget calculation and tracking the application status.

4. System Utilities and Administration

   The system will make use of the LDAP Directory Services to manage user authentication and access control will be clearly defined for each user to ensure the system to be secured. Any new changes will be covered during the enhancement phase of the project (Enhancement Phase) once the core functional aspects of the three previous domains are fully operational to avoid the delay in the project schedule.

1.5 Project Significant

The Automated Budget Management System is to be developed for Human Resources staffs. Human Resources staffs as admin to update and key in the data into the system and other staffs as users to propose and submit the business plans. This system will give a lot of benefit for staff to prepare and plan the budget systematically.

The Automated Budget Management System is more interesting and easy to calculate staff salary and proposed the project using computerized. This system can improve the performance HR department and management faster and smooth. Create the Automat budget Management System (ABMS) the planning is more comfortable and easily for their staff. It is because the system will prepare the business plan format following the rules and the user only needs to fulfill and complete the form. If the proposal did not follow the instruction or requirement the system automatically pop up alert massage for user correct the errors.

The Automated Budget Management System (ABMS) is also to revised and update the Human Resources budget to check the latest information to maintain the project plan and business. The manual system process needed staff to calculate by manually step by step before get the latest information.

Finally The Automated Budget Management System is user friendly because it is interesting and the design is comfortable for all people.

1.6 Conclusion

This chapter describes introduction phases of the Automated Budget Management System (ABMS). The budget management needs more attention in financial business and planning. By building this system it is hoped that the staff improve their performance to manage faster and on target Sirim Berhad needs.

The next chapter, Literature Review and Project Methodology will be discussing topics such as budget, financial, request and many more. All of the source reference comes from multiple fields: Budget Management, Financial Budget and a few others. Besides topics mention above, the project methodology will also be discussed in detail.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

The literature study in the previous system could give more references in system development process. All the advantage in the previous system can be implemented in the system development. The characteristic of the previous system as module flow and process should be improves and enhance from the previous system.

The methodology that used in developing a project is the key of succeeding of finishing the project within time and able to satisfy users' requirements. Since there are many type of methodology, it is vital to select appropriate methodology that will be used. The method that will be used will determine speed of the project.

The main concept in this system is to improve budget management. Literature review in methodologies, strategies and project analysis should be done in order to gain more understanding on the project implementation study. It is important to establish solid principles first before design and constructing of the system.

2.2 Fact on Finding

There are some reasons that cause the development of the system to solve the existing problems. The sources for the finding in this topic can be found from internet, magazine and book. Then, the literature review can be complete through study, analysis and drawing conclusion from those sources.

2.2.1   Budget System

Upon examination of our practices for developing and approving the annual budget, and in consideration of imminent changes in the budgeting process, the Budget Advisory Committee approved the design of an Online System. This system was designed to assist budget managers and the administration in creation of and tracking budget expenditures. Close attention was paid to improving upon the inefficiencies and difficulties caused by the previous system such as lack of documentation, confusion, communication loss, etc. We believe the system is a step towards meeting the needs of all who take part in the Budgeting process. (Dean Lee University, 2004).

The Budget Planning System includes last year's budget, the current year's adopted budget, the current year's proposed budget and the next year's proposed budget. All of these budget fields are available on all active accounts on the chart of accounts. Automatic shifting of budget figures for a school district is a part of this system. Percentage increases can be applied to a specified group of accounts, to the entire chart of accounts or to a single account. A budget report generator permits the user to selectively compare budget figures to actual figures and one category of budget figures to another. There is an aid available to semi-automatically generate new budget figures using the object code in the account numbers and applying percentages against old budget figures. (EOY, 2006)

Nowadays, some people don't make thoughtful decision according to the value, goal, needed. They still confuse and too many problems try to figure out their decision. It is important to decide good decision to make sure that all plan and preparation are complete and succeed. Decision for creates action to plan, and action creates result to display. Making decision, planning today will be better for coming soon.

Most of the company doesn't know how to plan and manage their budget more interesting and comfortable. Planning and manage the budget is very important for each company. It also to make sure all planning and budget preparation is completed on time. Especially Human Resources or administrative for each company need to plan and manage their budget smartly.

Today, most of people use internet as medium to gathering information easier and faster. The internet is one of communication technology. The internet is a very effective way to get and share information especially for public and private sector. Based on the analysis and quotation, now many of the company have a lot of problem especially for manage their budget. The previous system always lack of documentation, confusion, communication loss and etc. They must start with plan and clearly understand needs follow the new technology. Especially the company should proposed to develop website for manage their budget. It is because many company of company manage and plan their financial budget-using web based on the technology. It is faster and easy to manage compares the old system such as Microsoft Excell and Access. By using the Automated Budget Management System, user will get more benefits and don't waste their time to plan and manage their budget.