

**WORKFLOW MANAGEMENT SYSTEM FOR STRATA TITLE
APPLICATION AT FEDERAL LANDS AND
MINES DEPARTMENT**

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DEDICATION

*Dedicated to my beloved husband, Azman bin Ayob and
sons Muhamad Aizat and Muhamad Syafiq, for their sacrifices and
understandings
my parents, brothers, sisters*

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ABSTRACT

Workflow is important. It is a valuable technology. It is a discipline, practice and concept. Workflow management system is a computer application which enables document processing to be done effectively. A number of workflow management systems have been developed. Although the importance of workflow management is widely accepted, it is not being utilized by most organizations, due to its lack of trustworthiness and appreciation. This study intends to promote a workflow in action particularly in the processing of strata title at FLMD. Members of the department especially the management can obtain the latest scenario of an activity through the system being introduced. Not only have that, the customer of FLMD had the opportunity of getting latest information on their application status. All these are the results of the study achieved during the requirements analysis. There is a need for a proper monitoring of procedures at all levels. All action should be transparent and all staff should be accountable at any time of their day in their work environment. In conclusion, the proposed prototype built eventually help staff and officers to collaborate better, which in turn improve employee performance and accountability in the department.

ABSTRAK

Aliran kerja adalah penting. Ia adalah satu teknologi yang berguna. Ia adalah satu disiplin, amalan dan konsep. Pengurusan sistem aliran kerja ialah satu aplikasi komputer yang boleh memproses dokumen secara berkesan. Walaupun kepentingannya diterima oleh umum, namun ia tidak diamalkan sepenuhnya akibat dari kurang kepercayaan dan penghargaan terhadap teknologi tersebut. Kajian ini bertujuan untuk meningkatkan penggunaan aliran kerja dalam tindakan terutama dalam pemrosesan Hakmilik Strata di Jabatan Tanah dan Galian, Wilayah Persekutuan, Kuala Lumpur. Setiap anggota jabatan tersebut terutamanya pihak pengurusan boleh memperolehi senario terkini mengenai aktiviti melalui sistem yang diperkenalkan. Selain daripada itu, pelanggan-pelanggan jabatan mempunyai peluang untuk mendapat maklumat terkini berkaitan kedudukan permohonan mereka. Semua ini adalah kesan dari kajian yang dilakukan pada peringkat analisis keperluan. Adalah tidak dinafikan tentang keperluan sesuatu kaedah pemantauan pada semua peringkat. Semua tindakan mestilah telus dan semua kakitangan mesti bertanggungjawab pada bila-bila masa ketika berada dipersekitaran bekerja. Secara keseluruhan, prototaip sistem cadangan dibangunkan, diharap akan dapat membantu pegawai dan kakitangan untuk bekerjasama dalam meningkatkan prestasi dan ketelusan kakitangan di jabatan ini.

TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
	TITLE	i
	DECLARATION STATEMENT	ii
	DEDICATION	iii
	ACKNOWLEDGEMENTS	iv
	ABSTRACT	v
	ABSTRAK	vi
	TABLE OF CONTENTS	vii
	LIST OF TABLES	xi
	LIST OF FIGURES	xii
	LIST OF ACRONYMS	xiv
	LIST OF APPENDICES	xv
CHAPTER	TITLE	PAGE
I	INTRODUCTION	
	1.1 Introduction	1
	1.2 Background of the Problem	3
	1.3 Statement of Purpose	6
	1.4 Problem Statement	6
	1.5 Research Objectives	7
	1.6 Limitation and Scope of Study	7

1.7	The Importance of Research	8
1.8	Chapter Summary	8

II LITERATURE REVIEW

2.1	Introduction	10
2.2	The Development of Strata Title	11
	2.2.1 The Concept of Strata Title	11
	2.2.2 The Importance of Strata Title	12
	2.2.3 The Strata Title Application Procedures	13
2.3	The Concept of Workflow Management	18
	2.3.1 Workflow System	19
	2.3.2 Types of Workflow	20
	2.3.2.1 Production Workflow	20
	2.3.2.2 Embedded Workflow	21
	2.3.2.3 Administrative Workflow	22
	2.3.2.4 Collaborative Workflow	22
	2.3.2.5 Ad-Hoc Workflow	22
2.4	Case Study of Success Story	23
	2.4.1 IS/IT	23
	2.4.2 The Transformation	23
	2.4.3 Value Creation	24
	2.4.3.1 Cost Savings	24
	2.4.3.2 Work Improvements	24
	2.4.4 Measure of Performance	25
2.5	Groupware Technology	26
	2.5.1 Communication: Electronic Mail and Messaging	26
	2.5.2 Collaboration: Shared Information	27
	2.5.3 Coordination: Workflow Automation	28
	2.5.4 The Importance of Groupware	28

2.6	Technology Usage	30
2.6.1	Internet	30
2.6.2	The World Wide Web	31
2.6.3	Intranet	32
2.6.4	The Database Management System	33
2.6.5	The ColdFusion Web Application Server	34
2.6.6	Prototyping	35
2.6.7	Object Oriented System Development	37
2.7	Overview of FLMD	38
2.7.1	History	38
2.7.2	Objectives	38
2.7.3	Mission Statement	38
2.8	Chapter Summary	39

III RESEARCH METHODOLOGY

3.1	Introduction	40
3.2	Operational Framework	40
3.2.1	Research Proposal	41
3.2.2	Preliminary Study	41
3.2.2.1	Interviews Application	43
3.2.3	Literature Review	43
3.2.4	Analysis and Data Collection	43
3.2.5	System Design and Prototype Development	44
3.2.5.1	Object Oriented Analysis	44
3.2.5.2	Object Oriented Design	45
3.2.5.3	Implementation and System Testing	47

3.2.6	Prototype Testing, User Feedback and System Correction	47 47
3.2.7	Report Writing	
3.3	Instrumentation	47
3.4	Chapter Summary	48

IV REQUIREMENTS ANALYSIS

4.1	Introduction	49
4.2	Background of Current System	49
4.3	The Workflow of Strata Title Application	50
4.3.1	The AS-IS Workflow Description	51
4.3.2	The TO-BE Workflow Description	51
4.4	Survey on the Requirements of Online Workflow Management System of Strata Title	52
4.5	Collecting and Analyzing the Data of the Questionnaire	52
4.5.1	System Requirements	53
4.5.1.1	Online Checklist of Application	54
4.5.1.2	Usage of Online Tracking of Actions	54
4.5.1.3	Usage of Electronic Filing	54
4.5.1.4	Message Sending via E-Mail	55
4.5.1.5	Capturing of Applicant Particulars Electronically	55
4.5.1.6	Electronic Preparation of Letters	55
4.5.1.7	Electronic Sending of Notices	55
4.5.1.8	Electronic Sending of Application	56

4.5.2	System Characteristics	56
4.5.2.1	Usage of User-ID and Password	57
4.5.2.2	Usage of Files and Lot Number As Reference Number	57
4.5.2.3	Sending of Acknowledgement of Receipt Via E-Mail	57
4.5.2.4	Online Status of Action	57
4.5.2.5	Display List of Activity	58
4.5.2.6	Display the Applicant Particulars	58
4.5.2.7	Electronic Production of Letter of Approval/Rejection	59
4.5.2.8	Report on Summary of Action	59
4.5.2.9	Requirements of Training	59
4.5.3	Analysis of Results of the Survey	59
4.6	The problem in the Workflow of Strata Title Application	60
4.7	The Proposed Solution	61
4.8	Chapter Summary	62

V SYSTEM DESIGN AND DEVELOPMENT

5.1	Introduction	63
5.2	Object Oriented System Analysis	63
5.2.1	Identifying Use Case	64
5.2.2	Interaction Diagram	64
5.2.3	Identifying Classes	69
5.2.4	Conclusion of System Analysis Phase	70
5.3	Object Oriented System Design	70
5.3.1	Design of an Optimum Class	70
5.3.2	Design of Access Layer	70

	5.3.3 Design of View Layer	71
5.4	Implementation and System Testing (Coding)	72
	5.4.1 Coding of User Access Control	72
	5.4.2 Checklist Coding	73
	5.4.3 Checking Coding	73
5.5	Chapter Summary	74
VI	SYSTEM IMPLEMENTATION AND TESTING	
6.1	Introduction	75
6.2	Installation of ColdFusion Web Application Server	76
	6.2.1 How ColdFusion Server Works	76
6.3	Installation of MySQL Database	78
6.4	Coding and Implementation	80
	6.4.1 Development of User Interface	80
	6.4.2 Coding for Database	80
6.5	System Testing	81
	6.5.1 Further Testing	82
	6.5.2 User Satisfaction	82
6.6	Conclusion	84
VII	DISCUSSIONS AND CONCLUSIONS	
7.1	Introduction	86
7.2	Project Justification	86
7.3	Project Constraints	88
7.4	Further Project	88
7.5	Conclusion	88
	REFERENCES	90-92
	APPENDICES	93-153

LIST OF TABLES

TABLE	TITLE	PAGE
1.1	Strata title (subdivision of building/buildings) application status from the period of January 1985 - Mac 2001 at FLMD	4
1.2	Complaints made to Public Complaints Bureau from 2000 - 2002	4
6.1	Subdirectories of MySQL database	78
6.2	The location of install files subdirectories	79

LIST OF FIGURES

FIGURE	TITLE	PAGE
2.1	The Strata Title Application Procedure	14
2.2	A groupware model – communication, collaboration, and coordination	26
2.3	ColdFusion Development Platform	34
3.1	Operational framework	42
3.2	Object-Oriented System Development Lifecycle	45
4.1	Outcome of Study	53
5.1	Use Case Diagram for WfMSST	65
5.2	Sequence diagram of admin login to administrator panel	66
5.3	Sequence diagram of officer login to officer panel	67
5.4	Sequence diagram of clerk login to clerk panel	68
5.5	The Class Diagram of WfMSST	69
5.6	Database of the whole system	71
5.7	Overall operational view of WfMSST	72
6.1	ColdFusion Web Server Architecture	76
6.2	ColdFusion Web Server operation	77
6.3	User Interface of Cold Fusion Server	78
6.4	Main User Interface of WfMSST	80

LIST OF ACRONYMS

FLMD	-	Federal Lands and Mines Department
WfMS	-	Workflow Management System
DBMS	-	Database Management System
CFML	-	ColdFusion Markup Language
IIS	-	Internet Information Services
ICT	-	Information Communication and Technology
WfMSST	-	Workflow Management System Of Strata Title
OO	-	Object Oriented
STA	-	Strata Title Application
SPAKHS	-	<i>Sistem Pengurusan Aliran Kerja Hakmilik Strata</i>
OOSE	-	Object-oriented Software Engineering
SDLC	-	System Development Life Cycle
WWW	-	World Wide Web
UML	-	Unified Modeling Language
PWS	-	Personal Web Server

LIST OF APPENDICES

APPENDIX	TITLE	PAGE
A	Organization Structure of FLMD	93
B	The AS-IS Workflow of Strata Title	94
C	The TO-BE Workflow of Strata Title	97
D	Questionnaire Form	100
E	Results Analysis	105
F	Event Flows	106
G	Sequence Diagram	121
H	Table Description	127
I	Sample Codes of Programs	131
J	User Interface	139
K	User Satisfaction Interview Questions	150
L	Project Management Schedule	152

CHAPTER I

INTRODUCTION

1.1 Introduction

The state of the art of information technology is dynamic, constantly delivering new innovations and breakthroughs that offer better systems solution. This has opened new avenues and opportunities for government agencies to increase productivity and to enhance services. The computer usage within the Government follows specific trends. One noticeable trend is the use of networking, specifically LAN, to optimize resource and information sharing within an agency and the need of Internet usage. There is a growing dependence on using computers for daily operations to provide efficient and quality counter services. There is also the trend towards downsizing of computers. Many government agencies have acquired or plan to acquire smaller multi-user systems, which have high processing capabilities, easier and cheaper maintainance. It also marks the Government's success towards the implementation of Open Systems. Many government agencies are moving into image processing technologies for document handling and verification of images. These scenarios led the Federal Land and Mines Department (FLMD) to take opportunities to be equally competitive with the other government agencies in ICT.

A general consensus is emerging with regard to the instrumental role that good governance and public service institutions can play in the promotion of a transparent and accountable administration (Anyaku, 1998). Experience has shown that routine and bureaucratic public administration leads to obstacles and paralyses

initiatives of private enterprises and citizens. For decades, public service officials followed dogmas of the quiet past in doing government's work. Legal mandates or internal traditions built a morass of processes, which did little to serve the customer of public service products and services. Public service managers seemingly trapped in a labyrinth of outmoded ways of doing business simply asked for more money and people to keep operations afloat. The result was an escalation of expenditures for services delivered at minimal and often declining performance level.

Today, our resources are no longer infinite and government performance is becoming more and more ardent to the public. The present is a place in which government must operate with dwindling resources and contend with a public frustrated with its efforts. Hence, government finds itself in a unique position of spearheading collaboration, initiating innovation and learning to reform public administration to meet challenges in the next millennium has to offer.

The question facing government is simply one of survival. The IT revolution has brought with it changing relationships between government as service provider and the citizen/customer. This relationship calls for a redefinition of their respective roles (Baljko, 1998; Lyons, 1998). Better education, fiscal imperatives, programmed review as a determined thrust to improve public service, the rise of information society and growing demand for efficient government have all contributed towards redefining the purpose of government and the methods by which it conducts business (Henry, 1998). This is given further impetus when there is a global movement towards an honest and just government.

It is common knowledge that governments are huge networks delivering public services. More often than not, there exists at the least some meager form of cooperation between such networks. Customers of government find that in order to secure services, multiple departments are involved and there is a need for them to physically join queues to obtain these services at various departments and agencies.

Osborne and Gaebler (1992) in their landmark book, *Reinventing Government*, stressed the need for governments that are catalytic. Government, they say, should inject competition into service delivery; focus on earning rather than

spending; shift from hierarchy to teamwork and participation; and focus on preventing rather than cure. By and large, it is accepted that IT is the key enabler of government transformation. But progress has been slow on how technology can achieve the new paradigm in governance.

The concept of E-Government is one of an internetworked government. It links new technology with legacy systems internally and in turn links such government information infrastructure externally with everything digital. The E-Government initiative is very much concerned with dramatically improving the internal workings of government. These processes and systems will be applied to both inter-agency and intra-agency services. The objective of inter-agency applications is to contribute towards a higher capability of governance through the use of IT and through the transformation of the inter-agency processes at the operations, supervisory and policy levels. The new systems address the improvement of communication and information-sharing capabilities, information capability management amongst agencies as well as core operational capabilities and functions of the agencies involved.

1.2 Background of the Problem

The Federal Lands and Mines Department is an agency responsible for the collection and maintenance, updating and distribution of information related to registration, revenue and administration of land particularly the administration of strata title.

The issuance of strata title is the most difficult process. There had been many cases of late delivery in issuing strata title as shown in Table 1.1 and complaints from various section to the Public Complaint Beareau in the Prime Minister Department as shown in Table 1.2.

Table 1.1: Strata title (subdivision of building/buildings) application status from the period of January 1985 - Mac 2001 at FLMD

No.	Processing Stages	Total Application	%	Total Parcel	%
1	Received application	1,708	100	90,373	100
2	Approved application	1,131	66.2	63,453	70.2
3	Rejected application	283	16.5	15,154	16.8
4	In process application	294	17.3	11,766	13
5	Application with strata title	1077	95.2	57,428	90.5
6	Application without strata title	631	4.8	32,945	9.5

Table 1.2: Complaints made to Public Complaints Bureau from 2000 – 2002

No.	Category	Total Cases
1	Delay / No Action	450
2	Unjust action	134
3	Lack of public facility	43
4	Enforcement failure	32
5	Consultation services	24
6	Poor counter services	24
7	Inproper procedure	18

Under the procedures laid down in the Strata Titles Act itself, there is a long and tortuous process. The steps to be followed are:

- (i) Application for approval made to the Land Administrator;
- (ii) Checking of plans and survey by the Director of Survey;
- (iii) Transmission of documents to the Director of Land and Mines;
- (iv) Approval obtained from the Director of Land and Mines;
- (v) Action taken by the Director of Survey after the approval subdivision;
- (vi) Issues of strata titles to individual parcels;
- (vii) Preparation of strata registers;
- (viii) Preparation of documents of strata title.

It can be seen from this that the process involves several different authorities, each of which have different responsibilities to carry out and that documentation must be passed back and forth between them as the application progresses. During this winding process, there are possibilities of untraced action. For the management, it will be normal to say that the file undertaken is missing in action. This is due to the unavailability of proper monitoring procedures.

All these procedures are done manually. They are slow, ineffective and inefficient. It takes too much time and resources. Undoubtedly, complaints made by the applicants are unable to be attended to immediately. Applicants are not notified by the authority of their application status (BPA, April 2003). They do not know what actually happens to their application if there are problems. These not only increase the public frustration and temper but also degrading the image and credibility of government servants. There are also cases where the application is rejected due to insufficient information given to the applicant prior to their application.

There is a mechanism in alerting the urgency of each action such as giving memorandum stating its urgency level to be improved but the problems still arise. Under the estimate made originally by the Director-General of Land and Mines, it should not have taken more than seven months for an application of strata title to be processed and approved. For strata titles to be issued under the Malaysian system,

there have been many examples of developments where strata titles have still not been issued after a much longer time than that. For example, in *Syed Azman and Syed Mohamed v Lian Seng (KL) Construction Co Sdn Bhd*, the purchaser had purchased a parcel from the defendant in 1971. The building had been completed in 1973. At the date of the hearing in 1992, the purchaser had still not received the strata title. In the Highland Towers' case, the buildings had been completed for 14 years and the strata titles still had not been issued. While these may be extreme cases, there are many more where the delay in issuing strata titles was a matter of years rather than months (Jamila Hussain, 1999).

Thus, with the problems mentioned above, a better solution should be thought of to improve procedures and services in order to excel in the public services especially on land related matters.

1.3 Statement of Purpose

This study is to propose a prototype intranet-based information system that improved and speed up strata title application procedures for effective management and communication efficiency at FLMD.

1.4 Problem Statement

The current process for strata title registration is too slow, too cumbersome and lacks transparency. The rapid and fast developments of high rise buildings need faster, easier and more efficient strata title registration process. The existing manual procedures, inadequate monitoring tools and lack of collaboration results in inconvenience to the customers, department and the government.

1.5 Research Objectives

The main objective is to design a local area networked information system that is able to achieve the following objectives:

- (i) To provide mechanism that is able to speed up the process of the strata title application at the Land Development Division, Strata Unit at FLMD;
- (ii) To provide the applicant with the right information prior to their application submission so as to minimize rejected application and to allow them to know the application status as and when required;
- (iii) To eliminate beauracray in the strata title application procedures.

1.6 Limitation and Scope of Study

The following are some of the limitation and scope of the study prior to the development of the proposed system.

- (i) This study will be done in the Strata Unit, Development Division of Federal Land and Mines Department (FLMD) and other related divisions within the agency;
- (ii) The project predominantly focuses on strata title application procedures according to Strata Title Act 1985;
- (iii) The workflow of the strata title application is using a intranet-based application and is implemented on a prototype basis;
- (iv) The prototype will be located at a suitable web server to be tested while accessing its impact.

1.7 The Importance of Research

Some of the importance of the research is:

- (i) Expediting the strata title application processes, which therefore help to reduce the rejection of application through the online facilities, made by the respective customer of the FLMD. Hence, immediate correspondence with the customer can be made possible with the introduction of online access to the system;
- (ii) Guaranteeing the future improvements in the strata title application as a one-stop agency and therefore provide confidence to the customer in getting ownership to their property;
- (iii) Updated information to management, government and the public through the workflow system. Thus provide fast and sound decision making for further development;
- (iv) Realizing the government vision 2020 towards a paperless society with the implementation of an intranet-based application. The trend today, which is towards the usage of the Internet technology promise customer satisfaction in the near future.

1.8 Chapter Summary

This report is organized into 7 main chapters. Chapter I provides a general introduction and a brief overview of the project including the project introduction, background, objectives, statement of purpose, problem statement, limitations and its importance. Chapter II discusses the literature background concerning WfMSST. This includes the concept of strata title, concept of workflow, and the suitable technology, success story oversea which uses workflow and brief description on the organizational background. Chapter III discusses the methodology of the research that is used during the development of the proposed system while Chapter IV presents and discusses about the requirement analysis of the proposed system and architecture of how the proposed system is constructed. Chapter V is the detail of the

development process of the proposed system. The testing of the proposed system, WfMSST is discussed under Chapter VI while the last chapter, Chapter VII presents the discussion on the overall system development including its advantages, limitation and recommendations and finally, to conclude this study.

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