# STRATEGIC INFORMATION – RAKAN MASJID KNOWLEDGE SHARING SYSTEM (RMKSS)

Ву

#### MUHAMMAD AIZUDDIN BIN PAIMAN

#### FINAL YEAR RESEARCH PROJECT REPORT

Submitted to the Business Information System Programme in Partial Fulfillment of the Requirements for the Degree

Bachelor of Bachelor of Technology (Hons)

(Business Information System)

Universiti Teknologi PETRONAS

Bandar Seri Iskandar

31750 Tronoh

Perak Darul Ridzuan

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# **CERTIFICATION OF APPROVAL**

# STRATEGIC INFORMATION – RAKAN MASJID KNOWLEDGE SHARING SYSTEM (RMKSS)

by

Muhammad Aizuddin bin Paiman

A project dissertation submitted to the
Business Information System Programme
Universiti Teknologi PETRONAS
in partial fulfillment of the requirement for the
Bachelor of Technology (Hons)
(Business Information System)

Approved:

Dr. Raja Ahmad Iskandar Raja Yaacob

**Project Supervisor** 

**UNIVERSITI TEKNOLOGI PETRONAS** 

TRONOH, PERAK

Sept 2011

# **CERTIFICATION OF ORIGINALITY**

This is to certify that I am responsible for the work submitted in this project, that the original work is my own except as specified in the references and acknowledgements, and that the original work contained herein have not been undertaken or done by unspecified sources or persons.

Muhammad Aizuddin bin Paiman

#### **ABSTRACT**

Rakan Masjid Knowledge Sharing System (RMKSS) is a web based platform for expert and beginner to share their knowledge that they gained by experiences and courses. This system promotes Knowledge Sharing culture among community such as an organization. For this research focus on a student body that manage hundred events annually and having a large number of registered members. Principal obstacles to all current work in knowledge sharing involve difficulties in achieving consensus regarding what knowledge representation mean, and also enumerating the context features and background knowledge required to ascribe meaning to a particular knowledge representation. By having this system an organization will have their own knowledge repository. User will have opportunity to seek knowledge from the expert and also share his/her knowledge to the other user. This research paper had shown a vision for which a knowledge-sharing activities would become a basis for the dynamics of Knowledge Management development program in organizations. Besides it also designed to take the advantage of ICT as a communication tool among members of the organizations.

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#### **CHAPTER 1**

### INTRODUCTION

# 1.1 Background

The definition of 'Knowledge Sharing' can be obtained by analyzing the meanings of the individual terms that comprise it. According to Sornlertlamvanich (2007), data is unorganized and unprocessed facts that static or in the other word is a set discrete fact about events. Information in the other hand was an aggregation of data that makes decision making process easier. Knowledge at the highest level is derived from information in the same way information is derived from data; it is a person's range of information.

According to Patti (2002) Knowledge is defined as "understanding gained through experience or study". It is "know-how" or a familiarly with how to do something that enables a person to perform a specialized task. It may accumulate:

- A fact is generally a statement representing truth about a subject matter or domain.
- A procedural rule is a rule that describes a sequence of actions.
- A heuristic is a rule of thumb based on years of experience.

Strategic is an adaptation or complex of adaptations (as of behavior, metabolism, or structure) that serves or appears to serve an important function in achieving evolutionary success.

Thus it can inferred that, from the meanings of these two words, that 'Strategic Information' means the process of centralization data in a technical context, usually in a workplace environment.

Though the field of Strategic Information is considerably broad, the scope of this report only encompasses on the Knowledge Sharing within an organization.

#### 1.2 Problem Statement

Organizing clubs or events are the best training base for students to ensure they have the added skills in themselves in order to meet the job market outside. Thus students are willingly to involve in any clubs or events in Universiti Teknologi PETRONAS (UTP).

The challenges come whenever the student does not have any skills or experiences to organize an event or unit in student society.

There are many documents related to the events, human resources management, letters and others hold by a person who is responsible to deal with. The problems occur whenever the person graduated or undergo their industrial training for a long period; new committees did not have their referential on how to deal with the documents and same goes to the standard operational procedure in a club/society/ the university management.

# 1.3 Objectives

There are two objectives that this project aims to achieve, namely:

- To develop a system that combines or provides centralization of information and documentations for a club or student bodies in UTP
- To create a forum that allows instant knowledge sharing.

# 1.4 Scope of study

The target users for this system are committees of Rakan Masjid UTP (RMUTP) which have 300 sub-committees in their events and departments. This system is expected to be enhancing time to time for the various usage of other organizations.

#### **CHAPTER 2**

#### LITERATURE REVIEW AND THEORY

#### 2.1 Introduction

The organizations' achieving improved performance is not only dependent on the successful deployment of tangible assets and natural resources but also on the effective management of knowledge (Lee and Sukoco, 2007).

Strategic Information website is to be used as an assistance that can assists committees to do their task effectively and efficiently. The concepts will be used to develop this system are knowledge sharing and knowledge repository.

# 2.2 Knowledge Sharing

As technology for information access improves, people have more opportunities to share information. According to a research of 'Creating Knowledge Sharing Culture' by Gurteen (1999) states that today, the creation and application of new knowledge is essential to the survival of almost all businesses. There are many reasons why knowledge sharing is very important. Some of them are:

- "Intangible products ideas, processes, information are taking a growing share of global trade from the traditional, tangible goods of the manufacturing economy.
- "Increasingly the only sustainable competitive advantage is continuous innovation. In other words the application of new knowledge.
- "Increasing turnover of staff. People don't take a job for life any more. When someone leaves an organization their knowledge walks out of the door with them.
- "Our problem as an organization is that we don't know what we know". Large global
  or even small geographically dispersed organizations do not know what they know.
  Expertise learnt and applied in one part of the organization is not leveraged in
  another.

 "Accelerating change - technology, business and social. As things change so does our knowledge base erode - in some businesses, as much of 50% of what you knew 5 years ago is probably obsolete today.

Knowledge Sharing is not like sharing a cake - you do not come away with half a cake each. Knowledge Sharing is synergistic. In other words - you each enter into a conversation with a whole cake and each come away with an even bigger cake. Knowledge Sharing is also about more than just sharing. It is about "working together", "helping each other" and "collaboration". Sharing knowledge is not about giving people something, or getting something from them. That is only valid for information sharing. Sharing knowledge occurs when people are genuinely interested in helping one another develop new capacities for action; it is about creating learning processes (Senge, 1999).

There are three main hurdles that must be overcome in order to successfully implement a knowledge sharing initiative:

- Technology: The medium used to support knowledge sharing
- **Process**: The definition of a specific business process oriented goal (as opposed to the generalized "Knowledge Management System")
- Culture: Understanding the collective mindset of the organization. (Chin, 2005)

According to a research on 'How Culture Affects Information Sharing in an Organization' (Achterberg, 2001), a complete cultural overhaul may not be necessary to encourage information sharing. In fact, trying to take on that task at the same time you are trying to foster a sharing environment may be counterproductive to both efforts.

#### Change Management

Comprehensive change management requires a three-phase approach that takes human dynamics and human needs into account. Each type of organizational culture needs all three phases to institute a successful change management plan. However, depending on the organizational assessment results, one phase may receive more emphasis then the others. The main objective of each the three phase is:

- Promotion Envision the future environment with the information-sharing culture in place. Show the benefits to operating in a knowledge-sharing environment and allow the leadership to send encouraging, motivating messages. Create tension between the environment of today and that of the future being promoted. After the education and training phases are complete and the new behaviors are in place on a day-to- day basis, offer incentives to encourage continued practice.
- Education Present the theory behind the vision of the future being promoted to employees. Then the "why" questions can be answered with sound reasoning to build a foundation of understanding throughout the organization.
- Training Provide practical application of processes, technologies and environments. Allow participants to experience the new information-sharing environment in a "lab" setting where clarifying questions can be asked and issues addressed prior to integrating the new behavior into the everyday work routines. New human behaviors and practices are being instituted; therefore, the organization must provide the necessary support to ensure success.

## Creating Collaborative Environments

Define knowledge-sharing communities that affect the high-value business processes and target them for the first implementations of structured information sharing. By designing the optimum collaborative community for the organization's primary business needs, timely, accurate information will be delivered in context.

# Leadership Modeling Behavior

A significant indicator of successfully promoting organizational change is that the leadership models the desired behavior. In fact, the first implementation of an information-sharing environment should be among organizational leaders and from this group to the general work force. Modeling this behavior helps reinforce the commitment to changing a corporate behavior and shows the work force there will be no negative repercussions to sharing information.

### Knowledge Sharing Benchmark Comparisons

Capture analytics of information-sharing actions to create best practices for getting high-velocity work done. Then, benchmark your organization against others in your industry to determine how you compare to your competitors. This will allow you to analyze where the marketplace is pushing your competition rather than where you want to pull them to in the marketplace.

#### 2.3 Knowledge Repository

The term "knowledge repository" appears commonly in the literature of knowledge management, especially in association with commercially available knowledge management products. It refers to a system or system architecture that houses and manages a collection of corporate intellectual assets. An idealized example of knowledge repositories is the "Dynamic Knowledge Repositories" proposed by Engelbart and his group (described in Carroll, 2001). Engelbart advocates a bootstrapping process that will "make it easy for everyone to store, organize, access, and analyze the majority of human information online."

The knowledge repository provides two essential functions, one is to store and integrate knowledge and to accommodate various input/output functions to let users view and edit from existing knowledge structures.

#### 2.3.1 Portals as Knowledge Repositories

Tacit knowledge exists within project partners in either an internal or external form. Internal knowledge resides within the minds of individuals and is based on personal experiences. For example, a design engineer might remember that the last time he designed a boss for a crankshaft it was too thin and resulted in undesired vibrations and noise. The next time he faces a similar situation; he designs the boss to be thicker. External knowledge on the other hand resides in repositories. For example, the same design engineer might look for boss designs in standard design books and based on his calculations determines the thickness of the boss. It is obvious from above that internal knowledge is more effective than external knowledge. In an ideal situation all knowledge from the repository should be 'used' by the

project domain. However in practice less than 20% of tacit knowledge is reused within the project domain. Some of the main reasons for this include (Fruchter and Demian, 2002):

- Consortium members do not appreciate the importance of knowledge captured because of the additional overhead required to document their process and rationale and as a result of this knowledge is not captured.
- Even when knowledge is captured, it is limited to formal knowledge. Contextual or informal knowledge, such as the rationale behind design decisions or the interaction among project consortium members, is often lost, rendering the captured knowledge not reusable.
- There are no tested mechanisms, from both the technology and organizational viewpoints, for developing, applying, assessing, preserving, updating, transferring and transforming knowledge.

Since the advent of Internet technology and the development of portals, knowledge management has become an achievable task. Portals as the name suggests are gateways to a knowledge domain. User can access knowledge repositories, like the one shown in **FIGURE** 2.1, via Internet portals.

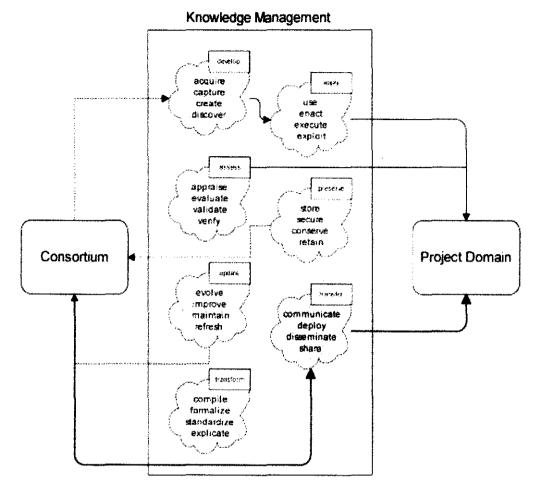


FIGURE 2.1 Scope of Knowledge Transfer

(Fruchter and Demian, 2002)

**TABLE 2.1** shows how portals can offer the required technology to create a knowledge repository and transfer knowledge (Fernandes, Raja and Austin 2005).

Portal modules	Knowledge areas	Characteristics
Forums	Store and transfer	Communicate
Online chat and SMS		Deploy
Document module		Disseminate
Publication basket		Share
Database		Store

TABLE 2.1 Relationship between portal technology and knowledge transfer

According to the research made by Fernandes, Raja and Austin in 2005 on 'Portals as a knowledge repository and transfer tool—VIZCon case study', it is evident at this point through experimentation and literature, that portal technology provides the best infrastructure to store, access and transfer knowledge. They have considered some of the portal modules that help store and transfer knowledge.

- Forums are part of portals where consortium members can post messages or questions that are added to 'threads' or 'topics' on a real time basis. Other members are notified about this via emails and can respond or post new messages at their leisure. As forums provide a medium for members to discuss about a message, they are also referred to as message boards. The main advantage of this is the ability of the portal to provide consortium members a platform to discuss on topics relevant to the project. As the message conversation is documented using a time line, this can form the basis of a document control system in ISO 9000 certified companies. In addition forums provide a sense of 'virtual place' that is lacking for the most part in a traditional email discussion list. With newer technology still evolving there is possibility to have real-time conversation via forums.
- Chat rooms provide a real time discussion medium for project partners. They allow
  multiple yet relevant project partners to log into a real time interface and exchange
  ideas, drawings and can converse with each other. Chat sessions can be planned and
  partners can meet and talk as in real meetings, thus reducing costs and time.
- Short message service (SMS) is a globally accepted wireless service that enables the transmission of alphanumeric messages between mobile subscribers and external systems such as electronic mail, paging, and voice-mail systems. Portals can offer SMS service, which enables partners to contact each other regardless of their location. For example, a site engineer in UK can SMS a query to design engineer in Germany and can get a response back to him within a short time.
- Document Repository is a collection of relevant documents that lists tacit knowledge about the project using textual, pictures and diagrammatic forms. Documents with short movie and audio clips can also be uploaded to the portal for additional knowledge transfer.

Publication Basket is similar to the concept of a shopping cart as in a real supermarket.
 The portal allows project partners to 'shop' from the document repository and assemble a list of documents they require for their tasks.

In addition to this flexibility, ease of development, less complexity in development are additional boons in the use of portal technology in this area.

#### **CHAPTER 3**

## **METHODOLOGY**

# 3.1 Modified Waterfall Development Model

The modified Waterfall Development Model (Royce, 1970) was selected as the blueprint for the development of the web-portal. The features of this model are adapted from traditional waterfall development model. The model contains seven primary phases, as shown in **FIGURE 3.1**. The primary characteristic of this model is that users are granted the flexibility to move up and down the waterfall process as necessary, especially to perform changes in previous steps.

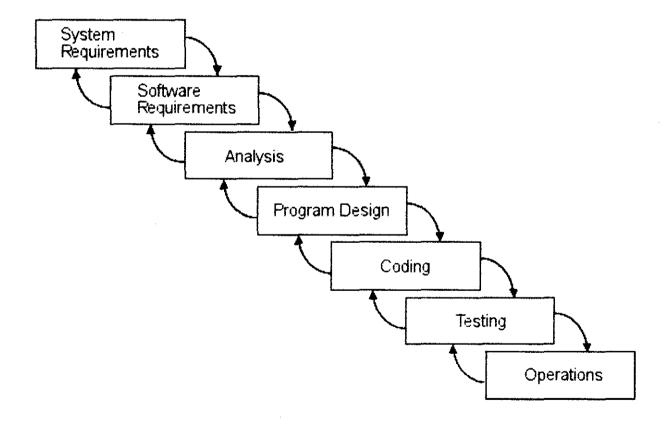


FIGURE 3.1 Modified Waterfall Development Model

(Royce, 1970)

# 3.2 Project Activities

### 3.2.1 System Requirements

The majority of the system requirement phase will revolve around identifying system requirements. The requirements will be collected from the user itself and also throughout the surveys and interviews among the expertise and also the new committees.

# 3.2.2 Software Requirement

Software requirement will be determined by the developer to ensure its suit with the information technology environment at their place. For the moment software that required are:

- 1. Visual Basic.net
- 2. Microsoft Access 2010
- 3. Joomla CMS
- 4. Apache Server

#### 3.2.3 Analysis

The analysis phase will primarily consist of interpreting and providing context to the data and information gathered during the first two phases. Through proper organization, system and user requirements can be prioritized accordingly.

# 3.2.4 Program Design

At this stage system architecture and functionalities according to the requirement will be developed and present it to the user.

At this stage, there are several task have to accomplish. Design and plan the structure of the web portal and database structure.

# **3.2.5** Coding

An initial system version is created with basic system functionalities using predetermined languages. Task to accomplish at this stage are:

- Build website design and user interface using Visual Basic.net
- Build comments database for each modules and integrate MS Access sql into VB.net language

# 3.2.6 System Testing

This phase will be conducted to identify any bugs or errors in the initial system. System testing will be carried out to ascertain any technical flaws. User testing will provide feedback regarding users experience with the initial system.

# 3.2.7 Operations

The operations phase revolves around the implementation and integration of the most current system build. All changes during the system testing will be rectified and deploy in the current system.

# 3.3 Tools Required

In order to develop this system variety of tools will be used. There are hardware and software tools determined to develop this system.

#### 3.3.1 Hardware

• Personal Computer (PC)

There are minimum requirement of PC specification. The latest technology can give the opportunity to developer to work effectively and efficiently.

#### 3.3.2 Software

Several software we decided to use according to the system that will develop after this. The software selected according to the budget given to develop this system.

Below are the software used to develop this system:

- Apache Web Development Server Platform (XAMP)(Student Edition)
- Microsoft Access 2010
- Visual Basic.net (Student Edition)
- Joomla CMS (Open source)

#### **CHAPTER 4**

#### RESULT AND DISCUSSION

# 4.1 Information Gathering

### 4.1.1 Survey

There are several question had been decided to be asked to respondents in order to know and do verify their current problem in organization.

A survey had been done for a week that involved members of RMUTP itself and also committees of event under the supervision of RMUTP and also non-members of RMUTP. They were randomly selected. Eventually there are only 85 respondents that come from various backgrounds.

First question had been asked is about which group that they are belong to.

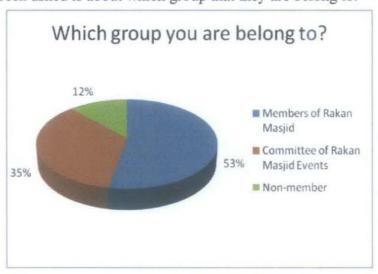


Diagram 4.1

They are 3 categories of respondents that answer the questionnaire. 53% or 45 respondents come from committee of RMUTP, 35% or 30 respondents from committee of RMUTP's events and 12% from other organization. This statistic shows the majority of respondents were from RMUTP organization itself, so that it will help us to screw in deep on what their requirements towards this system.

The second question had been triggered them about the importance of knowledge sharing in an organization. The question is: 'Do you believe Knowledge Sharing can drive to the effectiveness and efficiencies to complete the task?'



Diagram 4.2

80% or 68 respondents believe the knowledge sharing will drive to the effectiveness and efficiencies in completing their task. According to Halt (1992) Effectiveness means adequate to accomplish a purpose and efficiency is the power to accomplish something. Therefore knowledge sharing is important in an organization to ensure the effectiveness and efficiencies in completing their task.

The survey also triggered the needs of a system to allow the experts to share the knowledge rather than hoard it. The respond is positive. There are 89% of the respondents agree there is a need to have a system in their organization to promote knowledge sharing from the experts to the other committee.



Diagram 4.3

Then the next question had triggered either the respondents know where or who they can rely on in order to get the specimen of the related document for their task.

Majority of the respondents did not know and start from scratch in order to complete their task. This shows to us why the level of effectiveness and efficiencies become lower due to this situation. The other comment from RMUTP's supervisors had been collected that every semester they will run several big events and also mini events in organization, sadly there are repeating mistakes did by the committees.



Diagram 4.4

Beside that question about Standard Operational Procedure (SOP) also asked in the survey. This is because we want to see either the committees know that that have follow standard operational procedure in completing their task. From the respond there are only 35% that know about the SOP in their organization.

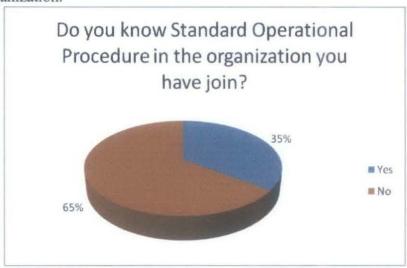


Diagram 4.5

According to Chin (2003) SOP lets you operationalize documents such as plans, regulation, compliance, and policies. SOP distils requirements contained in these documents into a format that can be used by staff members in their work environment.

Align with the organization concept, this survey included about the awareness of committees to the Line of Authority (LOA) that they should follow. 51% of the respondents did not know about the LOA in their organization.

According to Barron (2007) Line of Authority is power to give orders to subordinates. It contrasts with Staff Authority, which is the authority to advise but not command others. Line managers are responsible for attaining the organization's goals as efficiently as possible. Production and sales managers typically exercise line authority.

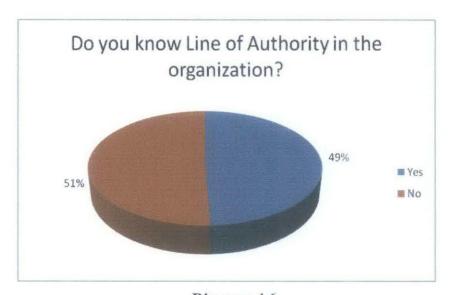


Diagram 4.6

According to Garavaglia (2009), one of the most important features for organizational success is making sure that the lines of authority are well delineated. Organizational charts within organization should be quite explicit and larger companies should also make sure that this is clearly understood by those working under the larger organizational umbrella.

Sadly we can see that LOA fails to be a clear delineation. This situation had made an organization have a buffer zone every term in order to allow their committees to adopt with the

LOA. For us success depends on a clear understanding of the authority structure within the organization.

Knowledge Sharing within an Organization
Knowledge Sharing is a process of transfer and share knowledge between the experts and others in order to meet the high level of effectiveness and efficiencies.
*Required
Which group you are belong to? *  Members of Rakan Masjid
Do you believe Knowledge Sharing can drive to the effectiveness and efficiencies to complete the task?  Yes  Does organization need a system that allow experts to share their knowledge?  Yes
Do you know where can you find the specimen of related documents of your organization?  Yes   Yes
Do you know Standard Operational Procedure in the organization you have join?  Yes   Yes
Do you know Line of Authority in the organization?
Yes 💌
Submit
Powered by Google Docs
Report Abuse - Terms of Service - Additional Terms

Figure 4.1 Survey form for user

#### 4.1.2 Interviewing

Several interview sessions had conducted to get all the information related with the documentations and information of RMUTP. It is important for the functionalities for RMKSS System. The information details had been retrieved from Mr. Hafizi Zakria (President of Rakan Masjid UTP) with the help of Mr. Sufiyan Rani as a secretary 1 and Ms. Ain Syafiqah as secretary 2 of RMUTP. They are working together to come out with the user requirement for the RMKSS System.

By having all the details of the documents, it will surely easier for the developer to give out the output to the user. Due to the complicated of the compilation related documents occur it needs time and discussion to clear all document needed that would help to get the output of the system. For that reason, one of the method been used are through phone and email discussion. Further notification and explanation been cleared with the President of RMUTP. It is important to follow the guide from the expert because RMKSS System is targeted to achieve the objective of the project.

There are several main documents that will be the main references for committees. There are:

- Rakan Masjid UTP Standard Operational Procedure 2.0
- Sistem Tarbiyah Rakan Masjid UTP
- Cara-cara Komunikasi
- Memo Rakan Masjid UTP
- Surat Rasmi Rakan Masjid UTP
- Surat Maklum Balas Rakan Masjid UTP
- Format Minit Mesyuarat Rakan Masjid UTP
- Sistem Pemusatan Akaun Rakan Masjid UTP
- Baucer Pembayaran
- Borang Tuntutan Wang
- Aliran Kewangan Program Dalaman Rakan Masjid UTP
- Aliran Kewangan Program Perdana Rakan Masjid UTP
- Manual Laporan Kewangan Progra Rakan Masjid UTP
- Borang Sewaan Aset

- Peraturan Penggunaan Pusat Gerakan
- Borang Berkaitan Kewangan

From the interview also we can say that RMUTP have several big events which are:

- Khemah Ibadah
- Ramadhan Discovery
- Heart for Islam

# 4.2 Program Design

# 4.2.1 Context Diagram

This context diagram exposed to the user and developer that fundamental of RMKSS System are from various sources and existing of the user is to share their knowledge to the other committee by sharing them in a form of explicit knowledge into a knowledge repositories. The diagram will be explained the details:

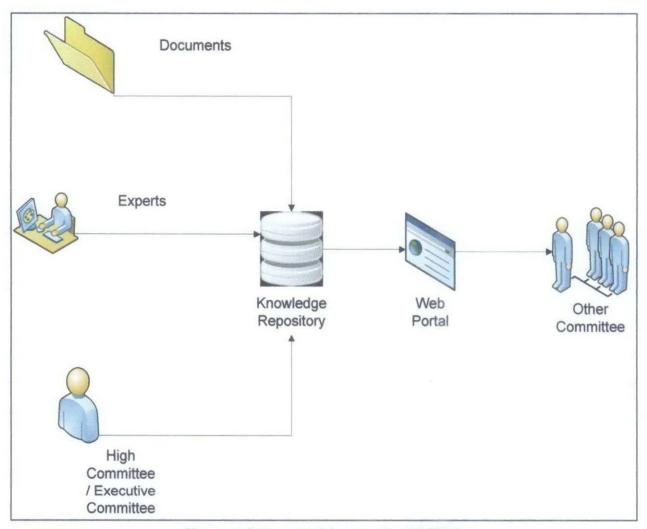


Figure 4.2 Context Diagram for RMKSS

# 4.2.2 Basic Flowchart

Basic flowchart for RMKSS shows to the user and developer on how the system will work whenever the user log in to the portal.

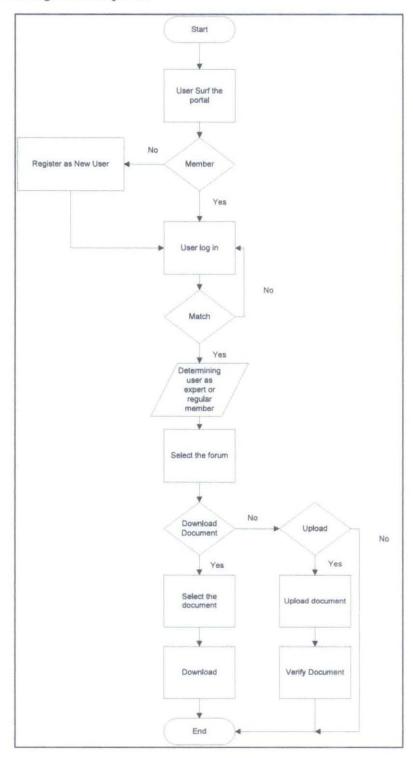


Figure 4.3 Basic flow chart for the portal

# 4.3 Prototype Design

Prototype design RMKSS had been developed by using open source content management system, Joomla 1.7 localhost for database server XAMPP. Using this two applications allow the developer to work effectively and efficiently towards eet the dateline given. Besides by using localhost server give the advantage to the developer to have as many system testing as they need.

# 4.3.1 Login Form



Figure 4.4 Login Form - User needs to insert username and password

# 4.3.2 Homepage

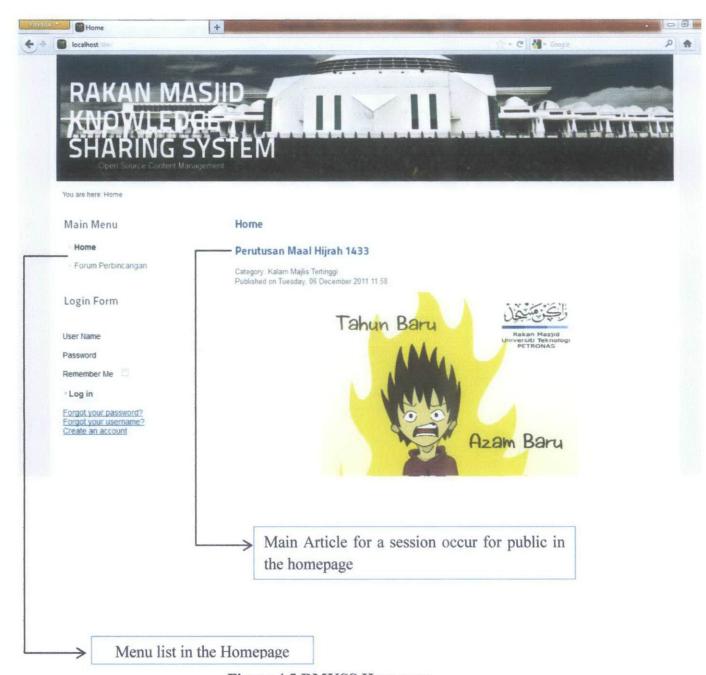


Figure 4.5 RMKSS Homepage

#### 4.3.3 Download sites

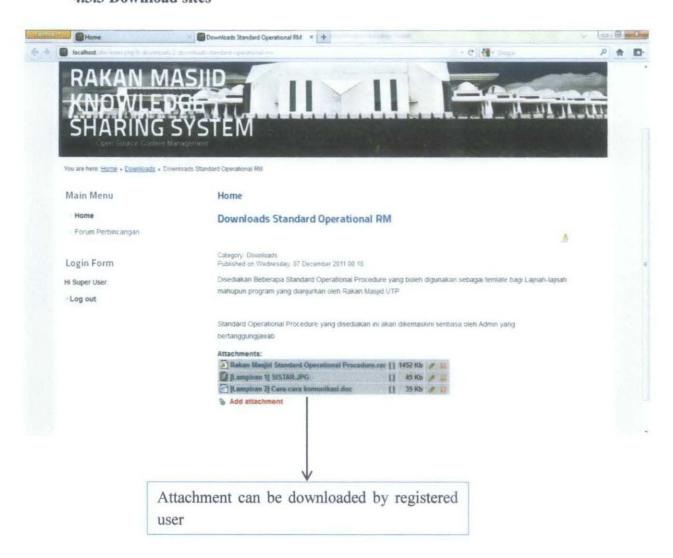


Figure 4.6 RMKSS Download site

#### 4.3.4 Forum

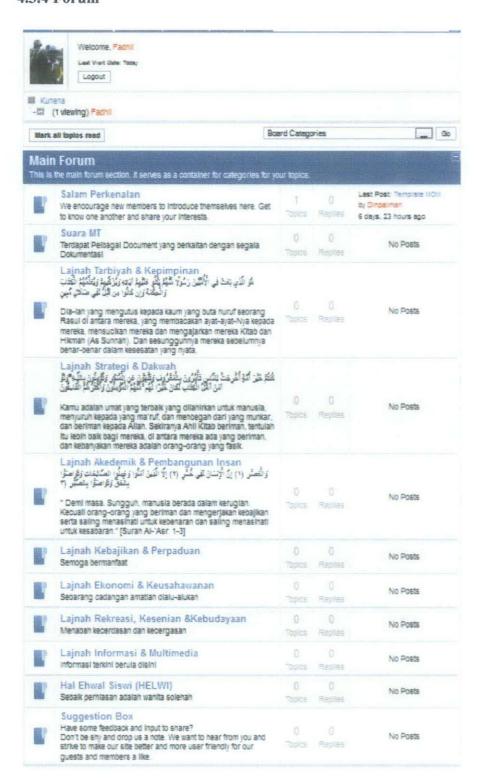


Figure 4.7 RMKSS Forum - Forum room divided according to the department in RMUTP

# 4.3.5 Creating New Topic



Figure 4.8 Creating New Topic

# 4.3.6 Replying The Existing Topic



Figure 4.9 Reply Topic

# 4.4 Prototype Comments

Throughout the system testing there are several comments that have been made by the future user of this system.

These are few comments that been found out:

- Developer need to really understand that the main function of this portal not only to discuss about the work, but also updating the current issues around the globe.
- Increase the creativity of the interface might be okay.
- Developer could enhance the strength of RMKSS by having more information to the user.
   The idea is that to have pie chart, graph or anything related to make user understand easier on the way data be presented. Or else provide easy access information.

#### **CHAPTER 5**

#### CONCLUSION AND RECOMMENDATION

#### 5.1 Conclusion

This system had been developed in order to help the students whose have desired to contribute to any events or organization to have the main references to increase the effectiveness and efficiencies towards achieving organization's goals.

Sharing is more than access as it helps others make meaning and obtain understanding. The culture of sharing and distribution of knowledge within the organization is vital condition that can turn isolated information or experiences into something usable for the whole organization.

Attention should be given to good distribution of knowledge from individuals to groups or organizations and this should be done systematically and continuously.

For this project, forum become a main medium in order individuals can share their knowledge to the others.

Knowledge sharing technology should be applied and updated to enable effective disseminating of knowledge, and storing the institutional corporate memory.

#### 5.2 Recommendations

Organizations need to address the more fundamental underlying problem in their effort to undertake an organization wide Knowledge Sharing programme. Everyone in the organization should understand the concept of Knowledge Management in order for the organization to be able to conduct the knowledge sharing practice.

As for this project there are several recommendations that need the attention from the audience.

- This project should not belong to a single organization.
- The enhancement of the project to be able to use across organizations will be please.
- This system has to be known to all students whose spare their time for organization or any events in UTP.
- Please refer to the Knowledge Management gurus in order to have a real picture of Knowledge Management.

#### REFERENCES

Senge, P. et. al. (1994) The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organization

Anklam, Patti(2002). "Knowledge Management: The Collaboration Thread" Bulletin of American Society For IT

Maribeth Achterberg (2001), "How Culture Affects Information Sharing in an Organization" issues of dmDirect.com.

Lee, L.T. and Sukoco, B.M. (2007), "The effects of entrepreneurial orientation and knowledge management capability on organizational effectiveness in Taiwan: the moderating role of social capital", International Journal of Management, Vol. 24 No. 3, pp. 549-73.

Nonaka, I. and Takeuchi, H. (1995), The Knowledge-Creating Company, Oxford University Press, New York, NY.

Knowledge Management System, Virach Sornlertlamvanich

Barriers to Knowledge Sharing, posted to Gurteen Knowledge-log by David Gurteen on 13th January 2007.

Knowledge Sharing: The Facts and the Myths, Posted to paulchin.com-log by Paul Chin on 2nd August 2005

Dynamic Knowledge Repositories: Doug Engelbart, Described in Caroll Jul 2001

Demian P and Fruchter R, 2008. "CoMem: Design Knowledge Reuse from a Corporate Memory: How to Find and Understand Designs from Previous Design Projects in a Corporate Repository."

European Journal of Information Systems, Vol. 14, No. 5, pp. 498-499, 2005, Fernandes K, Raja V, Austin S. Portals as a Knowledge Repository and Transfer Knowledge Tools

Barron Business Terms, Vol (2007)

# **APPENDICES**

# Milestones for Final Year Project I

ID	Task	Week												
1D	ID I I I I I I I I I I I I I I I I I I	1	2	3	4	5	6	7	8	9	10	11	12	13
1	Title selection/Proposal													
2	Extended Proposal/Literature Review													
3	Submission of Extended Proposal						X							
4	Preparation for KS Portal													
5	Distributing the questionnaire forms to Sinar Harian													
6	Review feedback from questionnaire													
7	KS Portal: Proposal Defense and Progress Evaluation									X				
8	System and Software Analysis													
9	Interim Report Preparation													
10	Submission of Interim Report											Х		
11	Technical Report													
12	Final Submission													Х

# Milestones for Final Year Project II

ID	Task								W	eek				
וו	ID Task	1	2	3	4	5	6	7	8	9	10	11	12	13
1	Design Phase													
2	Design Strategy													
3	Design User Interface													
4	Development and Impementation Phase													
5	Progress Report													
6	System Construction									7				
7	System Integration													
8	Pre-Sedex													
9	Dissertation													
10	ViVA													
11	Final Dissertation and Technical report													