KM Practice in Malaysia Community College: KMS to Support KM Framework

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Abstract

Knowledge Management (KM) is a new concept, especially in a community college environment, where knowledge has yet been captured, collaborated and managed systematically. Realizing the value and importance of KM approach, the researcher attempted to identify several goals to be achieved to provide for a viable KM framework that will support the current activities of knowledge transfer and sharing in a community college environment. Five different techniques were used including observation, small talk, interview, field notes & survey and experimental. Yet this study also covered the KMS development for CMS technology as stated in the framework. This study focuses how to create a framework that works for community colleges since they are looked upon as the lifelong learning and training center in the country. The finding has shown that the KMS (prototype) makes the KM framework visible and possible to be implemented in Malaysia community colleges. Coinciding community colleges act as agents for the Malaysian government to develop the local communities' socioeconomic through knowledge transfer and knowledge sharing and also as a part of the higher learning institution.

Keywords-Community College**,** KMS, knowledge transfer & sharing, lifelong learning, local community, socioeconomic

Introduction

In Malaysia, knowledge management has been identified to be a key factor in ensuring organizational success (Dielewicz, 2007). KM is a wide concept involving the processes of identifying and collecting relevant information and knowledge currently available, its classification and storage, timely dissemination and updating (Larrabure, 2007). APQC (formerly the American Productivity & Quality Council) defines knowledge management as a systematic approach that integrates people, processes, technology, and content to enable information and knowledge to be created and flow to the right people, at the right time, so that their work and decisions add value to the mission of the organization (Blankenship et al, 2009).

Background of Malaysia Community College

On July 5, 2000, the Cabinet had considered the No. 398/2225/00 Memorandum submitted by Minister of Education regarding the establishment and implementation of the concept of community colleges in each constituency. Community College of the Ministry of Education Malaysia will become an institution that provides training and skill requirements at all levels and provide opportunities for post-secondary education prior to labor market or continue their education to higher levels.

A total of 10 pilots Community College began operation in mid June 2001 and 2 more in December 2001. Until January 2012, a total of 74 Community Colleges has been operating in the country.

Community College as Socioeconomic Development Environment

Additionally the study focuses on the structural arrangements which enhance knowledge transfer in a community college. Therefore, a more detailed look has to be taken at the composition of community colleges. This composes issues such as, the way the researchers define and understand community colleges and their purpose, characteristics of alliances and their motivation to co-operate, along with the main features of the co-operation. Additionally, the main characteristics of physical as well as social structures are investigated. This contributes to the clarification of our understanding of the topic when talking about co-operation within community colleges.

Community Colleges and Their Purposes

The vision of community colleges is to become the lifelong learning center with the commitment to build a community of knowledgeable, educated, skilled and of noble character in line with the philosophy of education. The mission carried by is to create opportunities for lifelong learning to all levels of society, with emphasis on skills training, and development potential (Feliciano J. L, 2006).

Community college's objectives are to provide quality education with high tech and holistic approach by: 1) providing education and skill development trainings to all levels of society; 2) organizing and providing lifelong learning to become community knowledge (k-community); 3) organizing and providing specific skills' enhancement trainings (up-skilling), enhancement of skills training (re-skilling), and training attachments (attachment training) to the local workforce; 4) creating and organizing a network of strategic and strategic alliances with local communities and stakeholders (stakeholders); and 5) to provide facilities, services and systems and quality learning environment.

Knowledge Management and Community College

Knowledge management only really began to take off in the late 1990s. Malaysian government through its "Knowledge Economy Master Plan" had inspired government agencies as well as local companies to adopt knowledge management. There is very few Malaysian companies have initiated any knowledge management programs in Malaysia (Blankenship et al, 2009).

Government agencies are among the earliest organizations to initiated knowledge management approaches in Malaysia. Government Linked Companies (GLCs) are in advanced stage in term of knowledge management practices. Only few private companies have taken advanced approach in knowledge management initiatives.

As a government agency, community college seems still in the early stage of knowledge management initiative. Therefore the researchers stress why the knowledge management is important in community college environment. A businesses' ability to stay competitive in its market is one of the most important aspects in order to stay in business (Khalid, 2010). A competitive advantage largely results from innovation. Innovation often occurs when new

knowledge is created and new knowledge is created in the organizational learning process (Edlund & Fried, 2009). As mentioned before, the acquisition of new knowledge is among one of the processes of KM is therefore and thus KM is an important part of having a competitive edge (Blankenship et al, 2009).These researchers believed knowledge management critically need to be implemented in Community College especially to transfer of knowledge and expertise (Edlund & Fried, 2009).

Problem Statement

According to Abdullah R., Selamat M.H., Jaafar A., Abdullah S. & Sura S. (2008), since KM is a new field in the Higher Learning Institutions (HLI), resources in HLI may not be able to sustain for a long period too. For instance, if a member of the community wants to acquire knowledge and skills, what role can be played by the community, being one institution of higher learning and agent of socioeconomic development of society? As a center for lifelong learning and skill, if the system available to the public is limited, especially outside the operating hours of community colleges, how can the goals achieved? If facilities were available to the community, what knowledge has been structured and how is it being managed? Should knowledge is managed well, how should it be maintained to apply back to other community members or to different situations? All these questions reveal the core question of why knowledge should be managed, controlled and carefully maintained, especially in an environment of community colleges.

Research Question

This study is conducted based on two questions: 1. What KM theoretical model can be suggested for the knowledge transfers and sharing within community college environment? 2. What is the possible web technology for KMS to support KM framework in community college?

Objective of Research

The researchers have four objectives to be achieved from this study. First, the researchers did the investigation on the conditions which maintain the transfer of knowledge within community college environment. To be able to perform this study significantly, an important task was performed to get to know the domain's specific issues and the CC's process. Second objective is to find certain enablers of knowledge transfer which can be seen as valid, not

only in the specific circumstances of community colleges, but also when it comes to casual knowledge transfer in organizations independent from training institutes. This was necessary to understand the specific language, the use of the systems, as well as the organization and the corporate culture. Thirdly, we aim that Theoretical model could be suggested as approach to the knowledge management initiative for improving knowledge transfer within community college environment in the future. To be able to choose an appropriate model, it is necessary to understand the requirements and getting all the CC members and the local community informed and involved as early as possible. Last but not least, to come out with the best web technology to develop a knowledge management system (KMS) as proposed system or prototype to be used in this research then will be extended as formal KMS for Malaysia community college.

Significance of Research

A proper system can be developed for the KM implementation in community college environment and can be standardized based on the valid data and the proposed model.

Scope of Research

This research will be conducted in Malaysia, more specifically in the community college and the community in Malaysia. The samples of this research will be carried out on community college and the community of their respective services.

Hypotheses

H1: There is a significant relationship between People and KM Hierarchical Framework Attribute (Process, Technology & techniques).

Literature Review

One ambition of knowledge management within organizations is to share the knowledge available among the members and thus to increase the productivity and the potential of everyone involved. In the literature reviewed, knowledge transfer is defined as a communication process with information processing activities (Parent R., Roy M. & St-Jacques D.,2007). For the purpose of this study, a framework has been designed to the related work.

Studied Frameworks of KM Practice

A. Enablers extracted from the Success KMS Model derived Delone and McLean's IS Success Model by Joel L Feliciano (2006)

Joel L has discussed the enablers of the success of a KMS model. Enabler mean something that causes something else is likely to occur, or more effective. He stressed technical and organizational factors that make some of the functions of the KMS. For technical enabler, he said, there were several more enablers for driving under the knowledgeable workers to interact with the KMS such as scalable, the ability of a system to measure from the local level to organization levels. Uniqueness of the system must be measured to meet the needs of the organization also the model touched on taxonomy of knowledge.

Then adaptable, the system should be able to incorporate new technologies discussed about the blog and mobile usage. Next, transparency, the system must be transparent to the worker. Furthermore, dependable to get the confidence of worker to use the system frequently, the interface of the system or the crucial aspect is to get the worker's contribution. Moreover, personalization, the KMS should make compatible to review the knowledge exists on a particular subject, providing a platform for smart system to have the power to recommend other destinations of knowledge sources.

Another part is organizational enablers. Resource allocation – time allocate and monetary resources. Then sharing - policies and culture, corporate culture plays an important role in determining if k-worker is going to share knowledge or not. Evaluation, also a part of enabler, such as annual evaluation, will help the evaluation of k-worker and the organization to determine how much the system is being used and how much they help. The next is training – crucial to knowledge generation and KM in general. Lastly, Business alignments – the process of the organization need to be matched by the system, as well as the strategic plan for the organization.

B. KM framework for Higher Learning Institution by M. A Ismail and C. L. Yang (2006)

The framework explained about the external environment of the social environment, an environment of globalization and technological environment needed to provide inputs necessary for Knowledge Distribution and segregation.

Hence implement the KM strategy - in order to motivate or encourage academics to share and contribute in the Higher Learning. Furthermore, tacit and explicit knowledge from the Knowledge assets are distributed among the members of the academic through KM processes with the help of technology such as Internet and Intranet.

"Strategic Planning" - a method that includes the vision, scope and purpose of KM initiatives. It is based on the end of the circulation of knowledge and the segregation. Furthermore, the required knowledge captured into meaningful information through tacit and explicit then will be used as input for the proposed KM system known as the "Knowledge Portal for Higher Learning Institution." Knowledge stored in the Knowledge Portal will then be circulated and distributed globally in the academic at the Institute of Higher Learning by the issue of globalization of knowledge compiled on the environment.

C. The Dynamic K Transfer Capacity Model by R. Parent, M. Roy and D.S Jacques (2007)

The attention of this framework is paid to the capacities or ‘‘assets’’ for knowledge transfer present in organizations. Attention should be focused on the capacities that must be present in organizations and social systems as a precondition for knowledge transfer to occur. Knowledge in this context is viewed not as an object to be transferred but as a by-product of interactions between individuals within a social system with varying knowledge transfer capacities.

In this DKTC model, the researchers begin with a clear definition of the problem to be addressed by the organization or network, coupled with a good picture of the knowledge presently possessed by the members of the system. The researchers must then establish what capacities the organization possesses and what it lacks. For knowledge transfer to succeed, the system must possess knowledge generation, dissemination, absorption, and adaptation and responsiveness capacities.

DKTC model is at helping the system identifies and facilitates the introduction of those capacities required for the system to succeed at knowledge transfer and value creation. So, the model is particularly-suited to analyze complex systems with multiple stakeholders as opposed to small scale knowledge transfer systems.

D. KM framework for Public Higher Learning Institution by R. Abdullah, S. Shahabudin, R. A. Alias and M. H Selamat (2008)

According to Abdullah, Sahibuddin, Alias and Selamat, they have proposed a KMS framework for HLI which includes six components: First, KMS Architecture consists of four layers: infrastructure layer, technology layer, protocol layer and repository layer. Each layer is a client that links to the system and can access the knowledge repositories through infrastructure layer (internet, intranet and extranet) provided.

Second, KMS Application and its Functionality. The KMS application consists of Knowledge Portal, Electronic Document Management System (EDMS), Workflow System and On-Line Analytical Processing (OLAP). It explains how the functionality of these applications supports the KMS.

Third, KMS Taxonomy and Process. It supports the four activities that are involved in KM process model in order to utilize the knowledge in organization. The processes are: acquiring knowledge, store, disseminating knowledge and use. The fourth, KMS Psychological - Explains the KMS soft issues on how motivations, awareness, reward play its role in supporting the development and implementation of KMS. It emphasizes on human factor in KMS.

Fifth, KMS Socio-culture, focused on KMS soft issues, which are strategy, belief, value and experience and how these issues give an impact on KMS. It emphasizes on culture and environment that encompass KMS.

Lastly, KMS Audit consists of measurement activities in order to maintain and ensure performance of a KMS according to its specification. It also benchmarks the KMS to maintain its quality and productivity, as well as to increase its return of investment.

E. KM Model for self-reliant communities by C. Chantarasombat and B. Srisa-ard (2009)

Knowledge Management model for self-reliant community discussed the enablers to make the framework of success deployed on the community. It contains five stages and 18 major activities. The activities included KM centre, KM team, measurement, mechanism of community leader to maintain the knowledge network and generate knowledge through learning by practice.

F. KMSOS2oD Framework by Modi Lakulu (2010)

KMSOS2oD framework aim to provide a mechanism to share the knowledge throughout the development processes from the planning phase until the maintenance phase in term of OSS tools, experience, best practice cases, research, documentation, source code, support and many others. This framework gives the opportunities and guidelines for CoP to share their knowledge and encourage people to use OSS in software development throughout the development phase.

Studied Frameworks of Knowledge Management System (KMS)

A. Weaving Weblogs into Knowledge Sharing and Dissemination Marydee Ojala (2004)

According to researcher, weblogs can be established within a workplace, a team, a department, or enterprise-wide. They usually reflect the voice of one person, but can be created with several bloggers participating. The role of the information professional with regards to knowledge management blogging can be that of support or creation. Academic, government, corporate and public librarians have used blogs to enhance their visibility to their constituents, promote information services, and raise awareness of internal and external knowledge. In fact, blogs enable information professionals to add significant value to organizational learning.

B. Using Weblogs for Knowledge Sharing and Learning in Information Spaces Ras E., Avram G., Waterson P.& Weibelzahl S. (2005)

The researchers identified problems relate to knowledge acquisition, learning issues, as well as to the users' motivation and trust. They introduce an approach meant to enhance the content of the experience base and improve learning from experiences within information spaces, namely weblogs that are maintained during daily work and serve as input for both an experience base and for an information element base. In order to enhance learning, a pedagogical information agent is envisaged for retrieving suitable experiences to be further enriched with additional information elements and produce micro-didactical learning arrangements. In addition they consider the relevance of motivation and trust issues. An empirical study demonstrated that using weblogs for such an approach is feasible.

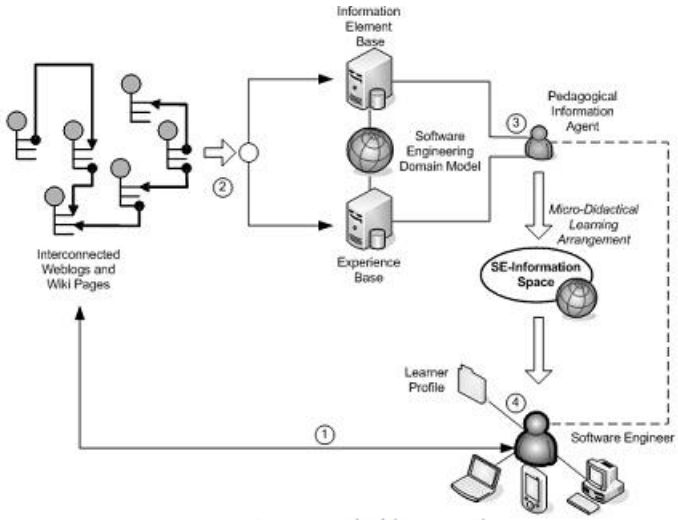

Figure 3: Framework of the Approach

Their purposed of empirical studies was to evaluate whether informal knowledge sharing using weblogs and wikis could be a content producing alternative for information elements and new experiences, hence reducing the effort involved. These studies comprised the monitoring of ten external weblogs, and the fostering of a Content Management System (CMS) including weblog and wiki facilities in a company Intranet. For the analysis of entries from already existing external weblogs, ten such weblogs focusing on Software Engineering, Knowledge Management and eLearning were selected.

C. Weblog success: Exploring The role of Technology by Helen S. Du & Christian Wagner (2006)

Their study explored weblog success from a technology perspective, i.e. from the impact of weblog-building technology (or blogging tool). Based on an examination of 126 highly successful weblogs tracked over a period of 3 months, the researchers categorized weblogs in terms of popularity rank and growth, and evaluated the relationship between weblog success (in terms of popularity) and technology use. The researchers' analysis indicates that weblog success is associated with the type of blogging tool used. They argue that technology characteristics affect the presentation and organization of weblog content, as well as the social interaction between bloggers, and in turn, affect weblog success or popularity improvement. Based on the analysis, they proposed a techno-social success model for weblogs. This model postulates that a weblog's success is mainly associated with its ability to provide value for its users and readers at the content, the technology, and the social levels. The researchers emphasize on Winer (www.scripting.com), a blogging pioneer, weblogs have the following characteristics: Personalized: Weblogs are designed for individual use (multi person weblog is also possible through collaboration, such as the ‘‘team blog’’ offered by www.blogger.com). Their style is personal and informal.

Web-based: Weblogs can be updated frequently. They are easy to maintain and accessible via a web browser. Community-supported: Weblogs can link to other weblogs and websites, enabling the linkage of ideas, and hence stimulating knowledge generation and sharing between bloggers.

Automated: Blogging tools help bloggers to present their words without the hassle of writing HTML code or program; instead, bloggers just need to concentrate on the content.

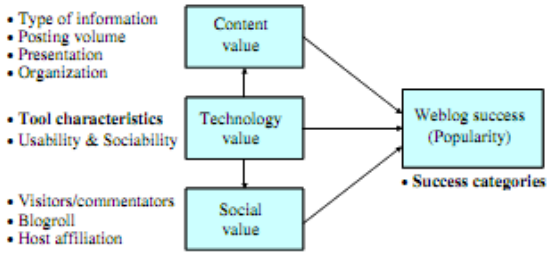

Figure 1: Weblog Success Model

D. Modelling Weblog Success: Case of Korea by J., Lee Y., Kim S. (2009)

The researchers explored weblog success factors in three categories: content creation, content features and content diffusion. During the process of content creation in weblogs, we argue that weblog service providers (WSPs) support bloggers' resource collection. The researchers also presume that the volume or the quality of posts in weblogs could be matter to gain visitors' attention when weblog content (i.e., post) is generated. During the process of content diffusion, we assume that use of blogging technologies (BTs) such as trackback or RSS would enhance content-sharing activities between weblogs. Based on the data from a sample of Korean individual weblogs, our analysis indicates that weblog success (in terms of the number of unique visitors per week) is related to the WSP's support level for content creation as well as content features.

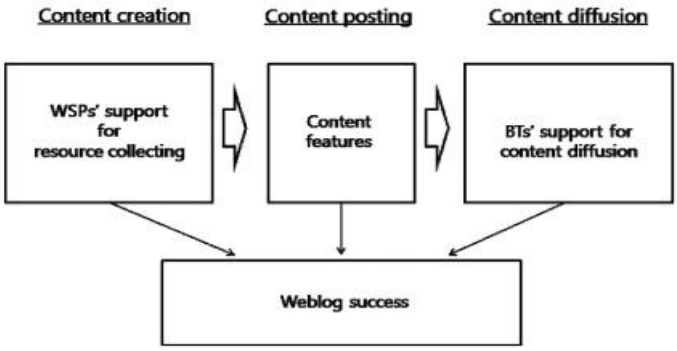

Figure 2: Activities Related to Weblog Contents and Weblog Success

E. Expectancy Theory Predictions of Blogging Intention and Conducts by Hsiu-Li Liao, Su-Houn Liu & Shih-Ming Pi (2010)

They stated that Expectancy theory was applied to construct a conceptual framework in this research and identify key factors that motivate bloggers to create and maintain his or her own Weblog. A questionnaire was distributed to 177 bloggers. The research findings suggested that bloggers with higher intrinsic and extrinsic motivation will have a higher degree of blogging intention. Intrinsic motivations are a more important indicator than the extrinsic motivations in predicting their blogging intention. There is no significant difference in their intrinsic motivation, extrinsic motivation, and blogging intention between bloggers of different gender, age, and time spent on the internet.

Methodology

For the study mainly four different techniques were used.

A. Observation

In the very first phase of the study the staffs who are involved in the academic field and management processes were observed. Observation was used to get into the organization and to get a first impression of the communication processes. Additionally, observing is an appropriate method to understand peoples' interaction with systems and the requirements they have Khalid, I. (2010).

B. Small Talk

The advantage of small talk is that it emerges out of the situation and – as there is no agenda – by chance may touch issues none of the participants would have thought about Lakulu M. (2010). Small talk was used to verify and clarify findings from the interviews and from the observations.

C. Interviews

Interviews were the basis for the study. Three different types of interviews were conducted. The first type of interviews was looking for the operation processes of CC as the whole organization. Interviewees for these first interviews were director, lecturers and supportive staffs.

The second type of interviews was addressing the individual assessment as local community representative according to the project, expectations of the system, and the Knowledge Management situation at CC. In total, five interviews with the local community representative were conducted.

Finally, interviews with the CC's alliances were conducted. The items that were used are similar to the interviews with local community representatives. In total, two interviews with the CC's alliances were conducted.

D. Field Notes

An important point of qualitative research is to capture the findings (Holfe M.& Pekar M.(2010); Lakulu M. (2010)). For the interviews, interview transcripts were taken and the templates for the communication processes as mentioned above where filled out. Issues that were recognized by small talk or observation were captured with the classical pen and paper method and later compiled it to a structured document. The interview transcripts, the communication descriptions, and this additional material are the basis of the following discussion.

E. Survey

Further questions of the interviews were addressing the Knowledge Management situation at CC. The questions were especially looking for the informal aspects of knowledge enabling. Therefore, the aspects like the CC's infrastructure layout, the communication culture, and mutual trust was addressed by the questions. The focus of the questions are to define the relationship among knowledge enablers (ten questions) and organization demographics (three questions) were used, gender, academic qualification and job designation. These are informal aspect for knowledge enabling and researchers believed the three questions are suitable to check whether the people in the KM Hierarchical framework are the crucial or the basis of this framework. This survey scooped to the CC's members by using online survey approach.

F. Experimental

Wikispaces were chosen based on a several reasons; firstly CCs are looking for the cheap technology yet useful. Secondly the social network is the trend of the internet using and same goes to open source technology. Lastly Wikispaces provide alot of functions that make people in CC environmenta ffordable and familiar with the technology embedded on the system. Wikispaces have a lot of functionality that connected to the well known social web such as Youtube, Myspace, Facebook, Blogspot and others. As CC is always involved the people from big city even small village, social web and open source, both technologies are favorites among them since they are free, free for money and also free for creativity. For overall the prototype system is confidently will be succeed and not impossible to be implemented as formal system for KMS in CC if we measure and consider the reasons above.

Result & Discussion

A. The Hierarchical KM Framework

The researchers found that the studied framework is suitable to be adopted in community college environment. However, to support the transfer and sharing knowledge in CC, the researchers must recognize the enablers and support the activities that will define the KM practice in CC. Therefore the researchers have recognized certain enablers for the KM framework for CC, being: the people, process and technology.

To realize the KM practice, supportive activities are needed. Here the researchers defined the training and education, and IT infrastructure and security, as the support activity for KM practice in CC. The people that had been defined included the CC staff, local community, alliance and also the CC KM team. The link among the CC staff, local community, and alliance to the CC's portal, CC's e-learning portal and CC's network (social websites) is defined as a process towards KM practices.

Another process towards KM practices in CC is the interaction within the KM team. Here, the KM team is also defined as an expert community. They will act progressively to maintain the KM practice in CC environment by using the approaches such as community of practices (CoPs), strategic communication and lesson learned from the topic discussed.

Then all these items are compiled in one system such as CMS. Using this technology as the platform for KM practice it will improve the KM practices' current situation to be more specific and systematic. Hence, a lot of CMS technologies can be applied and can be developed and deployed as CC's KM Portal.

Below is the diagram of the framework proposed by the researchers for the CC's KM Practices:

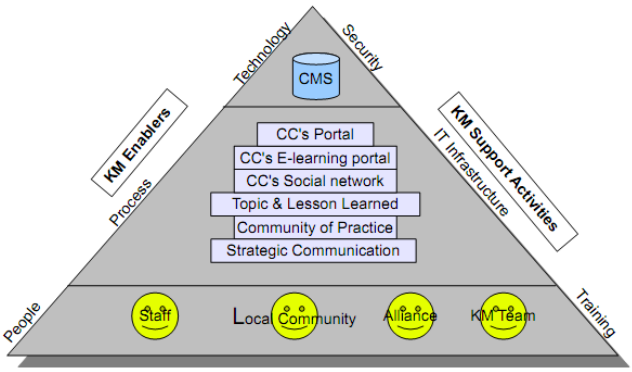

Figure 4: The Hierarchical KM Framework for Community College Environment (Yusrizal & Masstura, 2011)

B. Mean Summarize and Comparison

Table 1: The Mean Descriptive

	N	Minimum	Maximum	Mean	Std. Deviation
p1	83	1.00	5.00	4.0120	1.05338
p2	83	2.00	5.00	4.2530	.80915
p3	83	1.00	5.00	4.0361	1.00542
p4	83	2.00	5.00	4.3373	.80057
p5	83	2.00	5.00	4.4458	.66723
p6	83	2.00	5.00	4.2651	.79218
p7	83	1.00	5.00	4.5542	.80020
p8	83	2.00	5.00	4.5783	.69290
p9	83	2.00	5.00	4.4578	.72079
ty1	83	1.00	5.00	4.3614	.94937
ty2	83	2.00	5.00	4.4217	.70053
ty3	83	1.00	5.00	4.2410	.91851
ty4	83	1.00	5.00	4.1807	.95182
ty5	83	2.00	5.00	4.2651	.79218
ty6	83	2.00	5.00	4.2289	.81638
ty7	83	1.00	5.00	3.9880	1.00601
ty8	83	1.00	5.00	4.0843	.92664
ty9	83	1.00	5.00	3.8795	1.10870
te1	83	1.00	5.00	4.0241	1.01193
te2	83	1.00	5.00	4.0964	.94501
te3	83	1.00	5.00	4.0241	.98743
te4	83	1.00	5.00	4.1084	.98362
te5	83	1.00	5.00	4.1205	.93224
te6	83	1.00	5.00	4.0000	.98345
te7	83	1.00	5.00	3.9639	1.08434
te8	83	2.00	5.00	4.1446	.95729
te9	83	1.00	5.00	4.0361	.92980
Valid N (listwise)	83				

The table has shown very clearly that the items of questionnaire gave quite high mean result. This is can be concluded the respondents are positive with the proposed model for KM. Meaning that the KM could be working if the proposed model is been implemented sooner or later. The lowest rate for item is 3.9639 for item te7 (technique category) meanwhile the

highest mean rate is 4.5783, item p8 (process category). Item p1 to p9 are for process category. Item Ty1 to ty9 are under technology category. Last but not least item Te1 to Te9 are under technique category. Process, technology and technique are the elements of the proposed Hierarchical Framework for KM in CC. In total they were 27 items for the respondents' validation. Respondents are the people as stated in the model too.

C. Analysis of Variance

Table 2: The Summary of ANNOVA Test

Category	Item	Significance
Process	P1	0.11
	P2	0.01
	P3	0.08
	P4	0.02
	P5	0.09
	P6	0.02
	P7	0.10
	P8	0.04
	P9	0.08
Technology	Ty1	0.54
	Ty2	0.20
	Ty3	0.13
	Ty4	0.16
	Ty5	0.39
	Ty6	0.16
	Ty7	0.00
	Ty8	0.03
	Ty9	0.01
Technique	Te1	0.00
	Te2	0.00
	Te3	0.02

	Te4	0.01
	Te5	0.05
	Te6	0.03
	Te7	0.00
	Te8	0.07
	Te9	0.00

From the table we know that 12 items have not a significant different within group of people (staff, local community, alliance & KM team). The items are P1,P3,P5,P7,P9,Ty1,Ty2,Ty3,Ty4,Ty5,Ty6 and Te8. However, the rest of items have a significant different within group of people (staff, local community, alliance & KM team). Items P2, P4, P6, P8, Ty7, Ty8, Ty9, Te1, Te2, Te3, Te4, Te5, Te6, Te7 and Te9.

D. Knowledge Management System (KMS) Prototype for CMS

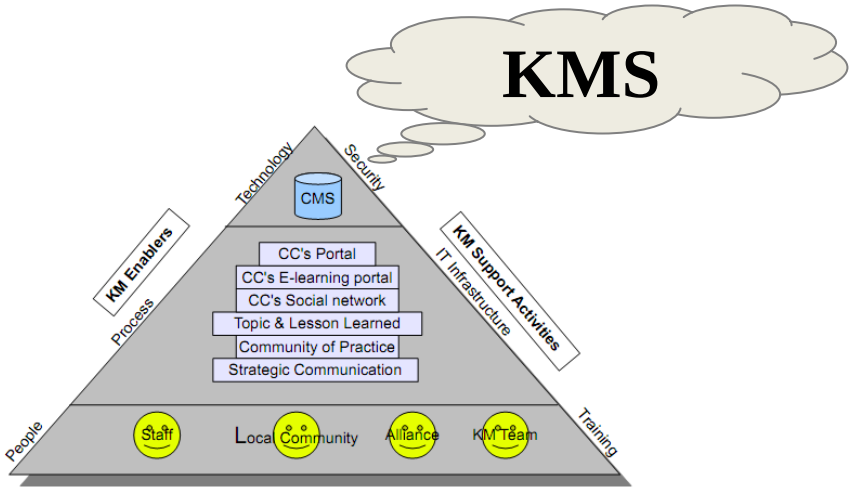

Figure 5: The Hierarchical KM Framework with KMS Support

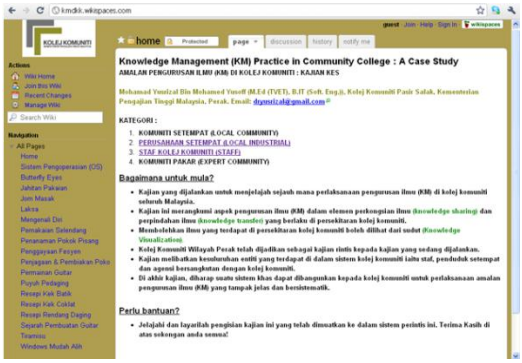

Figure 6: Screenshot of the KMS prototype by using visual wiki to represent the CMS for local community.

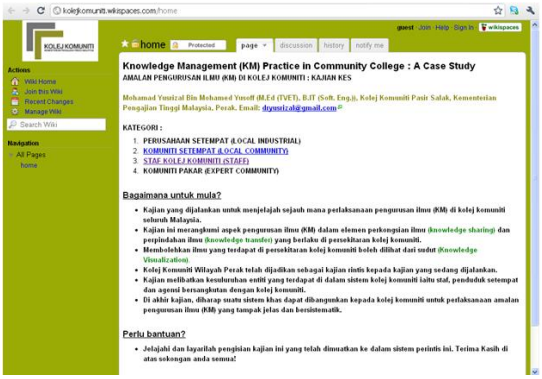

Figure 7: Screenshot of the KMS prototype by using visual wiki to represent the CMS for local SME.

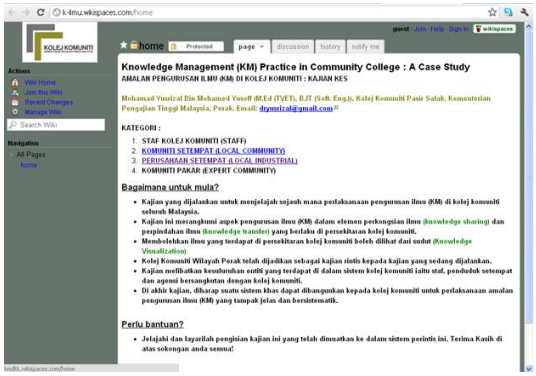

Figure 8: Screenshot of the KMS prototype by using visual wiki to represent the CMS for staff.

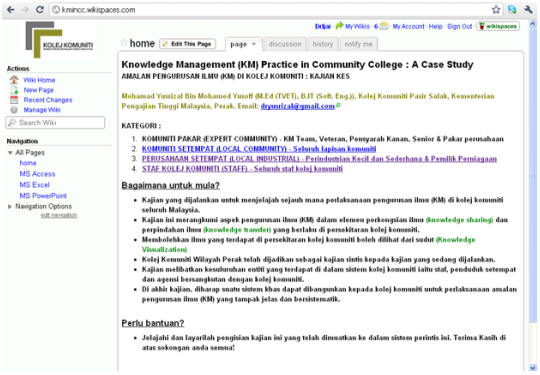

Figure 9: Screenshot of the KMS prototype by using visual wiki to represent the CMS for local expert community.

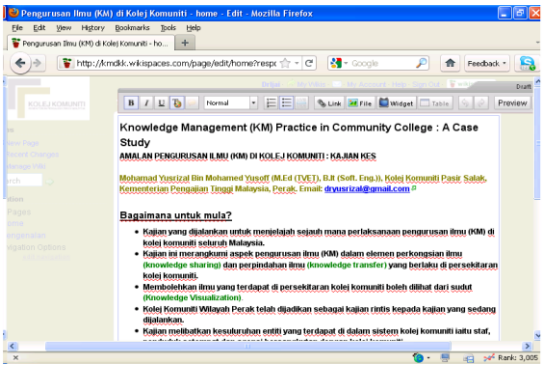

Figure 10: Edit features for the system users.

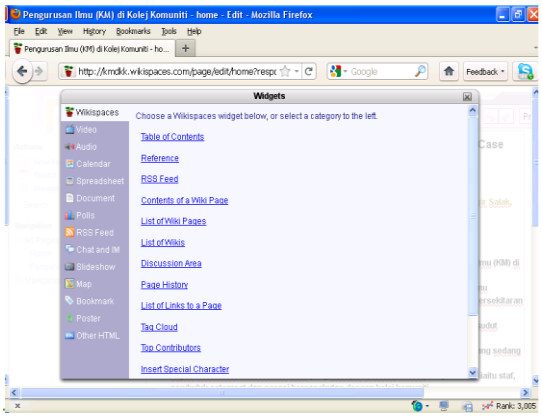

Figure 11: Widget to link or import from social network.

E. Participants Feedback

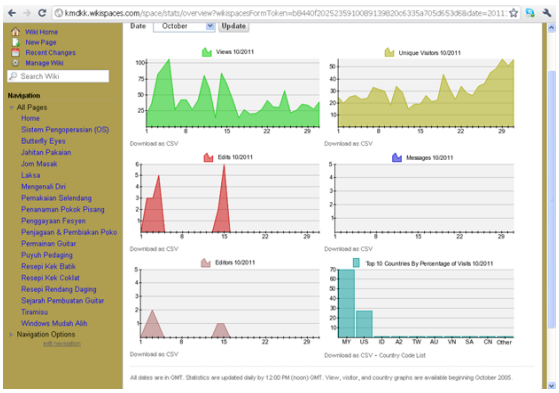

Figure 12. User statistic.

Participants used the content of the prototype for their own interest. Participants' feedback regarding the content of the prototype and its use was positive. Several positive feedback

comments were received from Participants enrolled in the prototype. One participant pointed out that "This tool is useful to me because you have a lot of important information in one place instead of searching through pages and pages to get what you want. It saves time and effort as well." Another Participant said that "Some of the things that I really liked were the fact that you were able to post screen shots giving a clear idea of what the steps were. I also loved the fact that it was possible to add comments in case a question arose." In addition to the use of these useful posts for assignments, it was interesting that the participants still requested more information and tips from the instructor regarding the project assignments.

Hence, a survey was conducted and a questionnaire is randomly distributed by using the online. The items were divided into four categories creation, organization, distribution and search. Researchers agreed these elements are crucial for the knowledge and information visualization for the KMS. The survey was responded by 83 candidates as target including the staffs, local communities and alliances. By using rating style, the researchers build the items based on 5 values. The value 2 corresponds to "very little" improvement, 3 to "moderate" and 4 to "high" improvement. The full scale reaches from 1 ("worse") to 5 ("very high"). The result has shown by the table 2.

Table 3: Summary of the survey analysis creation organization distribution search Level (Avarage)

	creation	organization	distribution	search
Level (Avarage)	4	4	3	3

Conclusion

Firstly, the researchers identify community colleges as the center to socioeconomic development with strong links to the government, coordinated by a management, which actively supports the technology and knowledge transfer and provides communities with facilities and services. They attract, mainly local communities, who expect benefits and synergies from the college community existence. These co-operations between community colleges and local community are depicted in different ways, through formal or informal linkages and through human resources based issues. Additionally, the social and physical structure influences the performance and the style of work in community colleges

Secondly, a CMS may be perceived as an effective media for transforming tacit knowledge not only for information technology but others fields of knowledge. To test the validity of the usefulness of using a CMS towards KMS was investigated in this research. Feedback from participants and analyzes of the data regarding the use of the prototype suggest that visual wiki can be an excellent tool that could be effectively used by people in community college when sharing and transferring to any knowledge. It provides an additional online two-way communication channel that is accessible to all Participants at any time they need to reference the contents of the prototype. To full fill the community college (CC) requirement of KM prototype can be a part of the KM system. Logically to control maybe over millions of Malaysia population of people to just use CMS as the KMS tool for community college's environment is such possible.

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