An Pilot Study on Knowledge Sharing in Shared Services Companies

Angela Lee Siew Hoong+, Tong Ming Lim and Justin Lim Renn Aun
Sunway University, 5, Jalan Universiti, Bandar Sunway, Selangor, 46150 Malaysia

Abstract. This research conducted a detailed analysis on a Knowledge Management System (KMS) in a shared services company. The aims of this research is to identify the problems of the KMS implementation, employees’ perception towards KMS and potential improvements to KMS in order to achieve the objectives of KMS in the company. A KMS is able to help a company to better manage knowledge and serve as a medium to facilitate collaborative communication among employees and knowledge sharing. Based on the analysis of the data compiled, visual presentations were generated and a number of problems and patterns were identified which had led to better understanding of the usage of KMS. These results are sources where improvements can be carried out to the existing system. Moreover, the result of this research also measures the performance of the KMS by comparing the findings of the survey against a Categorization Matrix of Performance Indicators adopted. As a result, it shows that the KMS requires certain areas of improvement in order for the system to be more widely used by the employees.

Keywords: Knowledge Management System, Knowledge Creation, Knowledge Sharing, Knowledge Conversion Model

1. Introduction

The fast and ever changing economy and the rapid advancement of technology have demanded these companies to be constantly evolving themselves to be competitive with global players. Advanced web-based software systems and technologies have become an important part of the organizational strategy nowadays. However, the key that keeps organizations always ahead of their competitors is to transform themselves into knowledge centric organizations. Successful knowledge creation and sharing has become the key asset for a successful organization. The new culture of organizations today is to nurture a Community of Practice (CoP) in the organizations that make full utilization of knowledge. Therefore, it is important to carry out a research undertaking on a case study company which has adopted a Knowledge Management System (KMS) to understand factors that succeed or fail the knowledge implementation effort in the company. In this research endeavor, a shared services company was chosen to take part in this exercise. This exercise intends to provide some rather interesting background information where difficulties and benefits learned by their employees in the implementation of a KMS system are documented and analyzed. This will be used as the formulation of problem statements for the next phase of research work.

2. Related Works

A KMS manages knowledge and facilitates knowledge sharing among employees in the companies. For companies that view knowledge as an important asset realizes that the company can take advantage from the benefits when KMS is used effectively among employees. Rifat O. Shannak (2009) described components that constitute a Knowledge Management System (KMS) and highlight how Knowledge Management System (KMS) performance could be measured. The research works conducted by Rifat O. Shannak (2009) and Thomas H. Davenport (1997) identified four categories of activities in a knowledge management project. They are creating knowledge repositories, improving knowledge access and transfer, enhancing knowledge environment and managing knowledge assets. Therefore, it is essential that a knowledge management fulfills these criteria as stated in these four categories. By creating knowledge repositories, the organization would have storage to capture and store their knowledge, documents and information. Therefore, with proper storing of all these information, employees in the company will be able to easily access to it. This second category of the activity is on improving knowledge access and transfer is about focusing on the knowledge

+ Angela Lee Siew Hoong . Tel.: + 0163522281
E-mail address: angelal@sunway.edu.my.
transfer between employees within a company. This is a complicated process as different people have different areas of knowledge. To find the perfect substitute to transfer knowledge is tedious. Therefore, in a company, it would be best to have a Community of Practice (CoP) where people with similar interest are group together. Another area that constitutes a Knowledge Management System (KMS) is the knowledge environment. An organization should enhance its knowledge environment if it wishes to nurture a knowledge creation and sharing environment for all its employees. A suitable environment provides the right ingredient so that they are more innovative and willing to share their knowledge. To ensure the use of KMS in a knowledge-sharing culture is a long term effort, employees must be receptive towards the culture sharing in a company. The last category which constitutes a Knowledge Management System (KMS) would be managing knowledge as an asset. Organizations should consider knowledge as an intangible asset which could be transformed into innovative ideas that could improve the company’s overall performance. As most companies are moving toward a knowledge-centric organization, proper knowledge management and use of knowledge is as important as any other organizational agendas.

3. Methodology

This section presents activities that were designed as part of the research works to solicit data as input to understand and answer questions of interest. Firstly, company documents are examined and studied. This was followed by a series of interview sessions. These interviews were conducted to further understand the background information and comments of the interviewees based on a set of questions given to them one week before the actual interview. These interviewees are chosen from all the departments. Each department has at least three (3) candidates. These candidates consist of junior, mid rank and senior staff member in the department. The interviews were recorded and an interview report was produced. Finally, a questionnaire survey was conducted. The design of the questionnaires was based on the data solicited from the initial document and interview outcomes. The survey is prepared and pilot tested with a small group of selected employees to ensure questions on the survey form are clear, ease to understand and concise before the actual data collection activity. In this paper, the focus is on the outcomes of the questionnaire survey result after data cleaning, data consolidation, and analysis work. The design of the questionnaire survey has been well examined and understood based on several successful instruments as described in works conducted by Chi-Lung LEE et al (2010), Chorng-Shyong Ong and Jung-Yu Lai (2004), Jen-Her Wu and Yu-Min Wang (2006), Rifat O. Shannak (2009), Seonwoo Kim et al. (2006) and Paul van den Brink (2001). The questionnaires are divided into four parts of 102 questions. The first part is simple dichotomy questions. These questions asked about employees’ perception and the usage of the system. The next part of the question asks the employees to rate themselves using Likert scale values of one to five. The next set of questions examines different aspects of the KMS such as the KMS quality, KMS content quality, KMS interface and so on. This provides a better understanding of the employees’ perception towards the existing KMS system.

4. Empirical Analysis

In this section, the findings from the questionnaire survey were thoroughly analyzed. The responses from the employees were collected and analyzed to discover findings on the employees’ perception of the KMS, willingness to share knowledge, perception of microblogging and other questions in different areas. Based on the questionnaire survey that was conducted, the survey had collected responses from 37 out of the 57 employees in the company. The response rate is 65%. Although it was quite time consuming in the process of collecting responses from the participants due to their busy work schedule and commitment. Figure 1 depicts the employees’ understanding and perception towards the existing KMS in the company.
The chart shows the types of KMS users in the company. From the respondents, 37 out of 57 responded to the survey and 32 of them actually use the KMS. Five respondents do not utilize the KMS at all. It was clear that some employees’ job don’t require them to use KMS at all. Majorities of 54% of the respondents are moderate users, 24% are light users and 8% are heavy users. It was hard to understand that IT Shared Services companies where most of the employees are knowledge workers but the biggest bulk of them are ‘moderate’ knowledge users. And heavy knowledge user is only 8%. Based on the chart, it can be seen that most employees do make use of the KMS to a certain level of extent. The KMS quality is another area that provides insight on how employees perceive the system. In terms of KMS quality, a number of questions were asked and analyzed. The outcomes of these questions are shown in Figure 2.

As the chart shows, most of the respondents chose ‘Agree’ to all the quality related questions. The numbers of positive responses are more than the negative responses. Therefore, it can be deemed that the quality of the KMS is quite good. However, the negative responses from some of the respondents that chose ‘disagree’ or ‘strongly disagree’ on the quality of the KMS should not be neglected and needs to be improved. KMS quality can be a rather serious factor that affect adoption and trust toward the use and confident to the system. Careful and detail study may be helpful in this aspect. Most of the respondents agree that the KMS content is useful to them. They agree that the KMS is important and helpful to their works; the system is accessible anytime and the recommended solutions in the KMS are useful. A total of 11 respondents chose ‘agree’ but more responses chose ‘disagree’ and ‘strongly disagree’. It is clear that the KMS’s search function needs improvements. In terms of the KMS interface, 14 respondents agree that the KMS interface is pleasant. Only a small number of respondents disagrees and strongly disagrees on the user-friendliness of the interface. This shows that the system is quite user-friendly. In term of functions, 10 respondents chose ‘agree’, 8 respondents chose ‘disagree’ and 2 respondents chose ‘strongly disagree’ that the system have all the functions and capabilities that they expected it to have.

This shows that there are still rooms for improvement on the KMS. These improvements will satisfy the users’ needs. Hence, interface is a potential research area that researcher can work on. Figure 5 shows that the KMS functions are generally acceptable by the respondents in terms of the KMS functions for knowledge networking, sharing and creation. The three questions in this area received positive feedback as most of the respondents rated ‘agree’. Also the analysis shows that the respondents have not fully utilized all the KMS functions yet.
In term of user satisfaction, Figure 6 shows the satisfactory level of KMS users in terms of the KMS efficiency, effectiveness, ease of access, ease of download and knowledge reuse. It shows that majority are satisfied with the ease of access and ease of download whereas for the KMS efficiency and effectiveness, most of the respondents tend to remain neutral or ‘blank’. Figure 7 looked into the perceived KMS benefits. This area examines what are the user benefits from the KMS’s perspectives. Responses of the three questions were analyzed. The first question attempted to find out how KMS has helped the users in acquiring new knowledge and innovative ideas. The second question asked about how KMS has helped the users to manage knowledge and the last question examined how KMS has helped the users to accomplish task more efficiently.

Question on whether KMS has helped them in their work, 17 respondents agree to the first question, 19 respondents agree to the second question and 15 respondents agree to the third question. The question on whether there is any tacit conversational knowledge being externalized and transformed is still unanswered. Responses on the usage of the KMS are depicted in Figure 8. The questions on how the users actually use KMS to make decisions, record knowledge, communicate knowledge and information with colleagues, share general knowledge or sharing specific knowledge were asked. Responses show that very high participants chose ‘agree’ except on the use of KMS to make decisions. Therefore, most users use the KMS to record and maintain their knowledge. As for question on the future improvement of the KMS, responses show that future improvements and potential new system are required. Figure 9 shows that 22 respondents ‘agree’ to have more people actively involved in knowledge contribution would be more fun. The second most agreeable improvement would be on the KMS interface. The KMS interface should be improved to attract more users to participant actively. The next most agreeable improvement is on the current KMS functionalities. Most respondents agree that the system should provide more and better functions. In the survey, respondents also provided some comment on poor organization of the information in the system, search feature, the need to spend more time to learn KMS, and poor practice of deposit articles to fulfill their KPI has resulted in the poor content quality that deviate from knowledge sharing objective. These four issues that were raised by the respondents should be taken into consideration to improve on KMS.
5. Analysis and Evaluation

The research outcome shows that the system usage is still poor. The system is only used as a referencing system on policy, transactional document, procedures and other ‘new’ articles. The entire KMS implementation only fulfills the knowledge ‘Internalization’ of the knowledge conversion cycle where explicit knowledge is converted to tacit knowledge for individual consumption as described in Ikujiro Nonaka (1997), Gonzalo A. Aranda-Corral et al (2010), Manoj Parameswaran et al (2007). The information within the system is now very messy too. Searching for specific information is not easy as employees merely deposit information to fulfill their monthly quota. And the lack of motivation and commitment to use the system had caused the system’s content quality to drop drastically over years. In order to understand the current KMS performance well, the Categorization Matrix of Performance Indicators proposed by Rifat O. Shannak (2009) is used. The measurement of the matrix is done either by the log in the database or questionnaire surveys. In this research, survey instrument is used to collect responses from the employees. The categorization matrix is separated into three areas: **process**, **human** and **Information Technology (IT)**, where each area has its own domains and performance indicators. In the process area, one of the measurements is on the knowledge quality and the usefulness of knowledge in the KMS is measured. The responses indicated that the KMS content quality is very high. And knowledge provided by the KMS is helpful to their work. The analysis also shows that intrinsic rewards are preferred by the respondents. They value self improvement more than monetary motivation. On the human focus area, knowledge sharing attitude among employees is one of the performance indicators to measure. The respondents of the survey agree that the knowledge in the KMS is reusable. The analysis shows most employees use the KMS to record knowledge. However, decision making among employees is poor. The last focus area of the categorization matrix would be the Information Technology (IT). Analysis shows that 32 out of 37 respondents actually make use of the KMS. As for KMS interface, 14 out of the 37 respondents thinks that the interface. For some, the interface of the KMS still needs improvement.

6. Conclusion

In conclusion, based on the analysis and findings from the survey, the result shows that the current KMS overall performance is still quite good in terms of these three areas of the categorization matrix, process, human and Information Technology (IT). The KMS still fulfill most of the criteria. However, based on the staff perception towards the KMS, improvement still needs to be made especially on the search function to allow better search capabilities and also on the system interface. In addition, the quality of information shared also needs to be improved so that it could help out co-workers. Motivation from upper management and commitment of employees is needed to ensure information and knowledge shared is useful.

7. References


