MANAGEMENT SCIENCE AND ENGINEERING

Vol. **5**, No. **1**, **2011**, pp. 59-70 www.cscanada.org

ISSN 1913-0341 [Print]
ISSN 1913-035X [Online]
www.cscanada.net

The Study of Barrier Factors in Knowledge Sharing:

A Case Study in Public University

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Abstract: This study explores the factors that inhibit the behavior of knowledge sharing among members of an organization; a public university in particular. Three factors were tested; lack of self-efficacy to represent individual factors, lack of information and communication technology (ICT) to represent technological factors and lack of organizational rewards to represent organizational factors. Correlation analysis was used to determine the relationships between these factors and knowledge sharing behaviors. Regression analysis was applied to determine the most dominant factor of all. Findings indicate negative relationships between knowledge sharing and barrier factors with organizational rewards being the most dominant.

Key words: Knowledge; Knowledge management; Knowledge sharing; Barrier factors; Public university

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^{*}Received 1 January 2011; accepted 26 January 2011.

1. INTRODUCTION

Knowledge sharing can be defined as a social interaction culture, involving the exchange of employee knowledge, experience and skills through whole department or organization. Knowledge sharing comprises a set of shared understandings related top providing employees access to relevant information and building and using knowledge networks within organizations (Hogel, Parboteeah & Munson, 2003). Knowledge sharing occurs at the individual and organizational levels. Knowledge sharing is about conversing among colleagues in order to get something done better, efficiently, and perfectly. For an organization, knowledge sharing is more in sharing their experience between senior to junior or top management with their sub ordinate to make sure that they can improve their performance and making that knowledge available to the business. A number of studies have demonstrated that knowledge sharing is essential because it enables organization to enhance innovation performance and reduce redundant learning efforts (Calantone, Cavusgil & Zhao 2002; Scarbrough, 2003). Malaysia is moving towards achieving Vision 2020 and it becomes the aspirations of the government to fulfill this aspiration. Government has outlined seven thrusts in the Knowledge-based Economy Master Plan in order to makes this vision become reality. One of the trusts towards achieving the Knowledge-based Economy in Malaysia where it becomes a must to Public Institution of Higher Education (PIHE) to develop the public sector into Knowledge-based Civil Service (Sirajuddin Suhaimee, Ahmad Zaki Abu Bakar & Rose Alinda Alias, 2006).

In order to fulfill these thrusts, recommended that it is essential to develop and implement Knowledge Management System (KMS) in Malaysian Government Agency including Malaysian PIHE (Sirajuddin et al, 2006). Knowledge management is a wide concept and under this concept it also related to knowledge sharing where it is vital in implementing the KMS. Sharing process basically not only involves with collecting data and information but also the expanded of the value of the knowledge when it is be shared. Knowledge sharing if it well managed by the organization it can improve the work quality and decision-making skills, problem solving skills, problem-solving efficiency and thus can give benefit to the organization itself (Syed-Ikhsan & Rowland, 2004; Yang, 2007). The objectives for this research paper are to examine the relationship between lack of self-efficacy, lack of Information communication Technology (ICT) and lack of reward systems in the implementation of knowledge sharing and to identify the most dominant barrier factor that affects knowledge sharing.

Knowledge hoarding can be the barrier of knowledge sharing where it can diminish the sharing of knowledge to become reality. It is important for the academic institution to encourage their staff to practice it so that knowledge sharing can become the culture in their organizations. As argued by Riege (2005), the availability and extent of the intellectual property protection make this issue of knowledge hoarding becomes obstacle for knowledge sharing activities. He also added that many people fear that they might receive unfair recognition and same goes to their intellectual property that might be stolen by others become the reason why they discourage knowledge sharing from happened. Knowledge management community mantra comprises 80% of knowledge management which are people and culture, and another 20% is the technology. Key component that attached people with culture mainly deals with encouraging knowledge sharing within the organization itself (Sirajuddin et al, 2006). It makes compulsory for the organization to really capture the needed of knowledge sharing because it is proven that it can attached the people with the culture of knowledge sharing indirectly.

The study conducted in 2005 that involves 17 public universities in Malaysia, shows that the existence of the knowledge sharing culture in Malaysian PIHE is still very low (Sirajuddin et al, 2006). It is stated that only 29.4% of the Malaysian PIHE staff have the positive culture in their routine work. They study also reveals that the awareness of the importance of knowledge sharing culture only exist in 5 public universities in Malaysia. All in all, knowledge sharing is still not adopted largely in higher education institution in Malaysia. Here we can see that there is a need for us to study the factors that may obstruct the implementation of knowledge sharing. The barrier factors should be identified and clearly understood before knowledge sharing is being practiced in that organization. This study intends to investigate these barrier factors in the process of understanding the obstacles in the KMS implementation.

2. PROBLEM STATEMENT

Basically there are three factors namely organizational factors, individual factors and technical factors. Organizational factors are factors not derived from the individual personally. It can be environmental or caused by another individual to stimulate the knowledge sharing attitude. Individual factors are factors derived from individually-driven considerations. That means that it comes from the person's internal being. Examples of internal factors are beliefs, perceptions, expectations, attitudes and feelings. Technical factor relates to the knowledge management technology, such as software and hardware used in the sharing activity (Ming-Yu Cheng, Jessica Sze-Yin Ho & Pei Mey Lau, 2005). Same goes to Riege (2005), he came up with the term, "the triad of knowledge-sharing barriers", in which the barriers to knowledge sharing are classified into the individual barriers, organizational barriers and technology barriers. At the individual level, some of the barriers identified by Riege (2005), are general lack of time to share knowledge, apprehension of fear for job security, low awareness on the benefits of knowledge sharing, dominance in sharing explicit knowledge over tacit knowledge, use of strong hierarchy/formal power, differences in experience level, lack of contact time and interaction, poor verbal and interpersonal skills, age differences, gender differences, lack of social network, difference in education levels, lack of trust in people, fear of not receiving recognition, lack of trust in knowledge source accuracy and cultural differences.

At the organizational level Riege (2005), outlined several major organizational barriers to knowledge sharing as unclear/missing integration between KM initiatives into company's goals, lack of leadership and managerial direction, shortage of formal and informal spaces, lack of transparent rewards and recognition system, unsupportive corporate culture, low priority on knowledge retention on experienced staffs, shortage of appropriate infrastructure, deficiency of company resources for adequate knowledge sharing practices, competition with business units/functional areas/subsidiaries, restricted communication and knowledge flows, restrictive work environment/layout of work area, hierarchical organization structure and size of business unit. Finally, among the technology barriers highlighted (Riege, 2005) are lack of integration of Information Technology (IT) systems/processes, lack of technical support, lack of maintenance of integrated IT systems, people's unrealistic expectation on IT, lack of compatibility between diverse IT systems/processes, restriction due to mismatch between need requirements and IT system, people's reluctance to use IT systems and lack of training for familiarization of IT systems and processes (Chen Wai Ling, Manjit S. Sandhu & Kamal Kishore Jain, 2008).

3. LITERATURE REVIEW

Lee (2001), define knowledge sharing as the activities that involve transferring knowledge whether tacit or implicit knowledge from one person, group or organization to another. Not only that through knowledge sharing organization can improve their efficiency, reduce training cost and reduce risks due uncertainty (Song, 2001). This is because through knowledge sharing, organization can reduce their budget in training and any others seminar because the organization only send a few people and they can share their knowledge with their colleagues. Other than that, knowledge sharing also can be defined as an individual shares their knowledge, information, ideas, suggestion and exchange with people in the organization itself (Bartol & Srivastava, 2003). According to Connelly and Kelloway (2003), knowledge sharing is a set of behavior that involves in exchange information assistance to others. There are some theories that have been used for researcher to predicting the factors influence knowledge sharing such as social cognitive theory and theory of reasoned action have been used for researcher in predicting the factors influence knowledge sharing. For example Bartol and Srivastava (2002), they used economic exchange theory to examine the monetary rewards role to encourage knowledge sharing in organizations.

Knowledge sharing is the opposite of hoarding, sharing usually comes about through the removal of barriers between people and departments, sometimes knowledge sharing called as knowledge transfer (Davenport & Prusak, 2000). Both scholars also believe that there are many factors which can prevent sharing from happening including lack of trust and also lack of time. In other hand, knowledge sharing could be define as the activities of how people work together, exchange their knowledge, enabling learning, and increasing their ability to achieve individual and organizational goals. The best knowledge sharing is

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that people seeking information within the group or team and their brightest people are generally the highest contributors (Mc Dermott & O'Dell, 2001). In this study, the decision makers, who consider knowledge sharing to be superior, compatible and uncomplicated means of achieving organizational objectives, express a high willingness to encourage knowledge sharing.

According to Connelly and Kelloway (2003), a firm can successfully promote knowledge sharing culture not only directly incorporating knowledge in its business strategy, but knowledge sharing also by changing people attitudes and behaviors to make sure the implementation is consistent. Employees are motivated when they think that knowledge that they share with others can bring efforts and benefit to the organization. Employees who shared their knowledge also believed that by share their knowledge their colleagues also get benefit from that knowledge (Wasko & Faraj, 2005). In one research by Chen Wai Ling, Manjit and Kamal (2008), knowledge can easily be lost if the employees decide to look for others opportunities outside from the organization or retire. To make sure that the organization can achieve continuous growth in their companies by knowledge sharing in practices needs. Better and purposeful sharing of knowledge translates into acceleration in individual and organizational learning and innovation. So that organization needs to make sure that they can capture this competitive knowledge through effective knowledge sharing strategies. Higher learning institutions also become resources of knowledge and are no longer just providing knowledge to students. Information practices and learning strategies known as knowledge management are gaining acceptance in the field of education (Petrides & Nodine, 2003). One of the research by M.Sadiq Sohail and Salina Daud (2009), knowledge sharing is unavoidable challenging and an important concept in higher learning education. This fact come from several higher learning institutions, particularly in the developed world have receiving grant to implement it. Some comprehensive research of knowledge sharing between university faculty staff has been rather limited. This study aims to fill gap by focusing on examining the knowledge that exists with and within teaching staff in the process of knowledge sharing between individuals. That is reasons why knowledge sharing are important implementation that needs to be implement in the organization nowadays. Organization needs to be more competitive from their competitors.

Barrier Factors in Knowledge Sharing

Lack of knowledge self-efficacy

Knowledge self-efficacy is under individual factor, where most authors agree that knowledge sharing depends on individual characteristics, including experience, values, motivation, and beliefs. What is known about knowledge sharing stems mainly from studies focused on the individual who is the source of the knowledge (Chen Wai Ling, Manjit S. Sandhu & Kamal Kishore Jain, 2008). The underlying purpose is to utilize available knowledge to improve the group's performance (Alavi & Leidner, 1999; Salisbury, 2003). In other words, individuals share what they have learned and transferred what they knew to those who have the collective interest and who have found the knowledge useful. Lack of knowledge self-efficacy will cause employees fear to share knowledge with other co-workers as they are not clear on the objectives of sharing and the intent of senior management. They feel fear because they viewed knowledge sharing as reducing their position, power and status (Chen Wai Ling, Manjit S. Sandhu & Kamal Kishore Jain, 2008). Apart from that study by Ting Jer Yuen and Shaheen Majid (2006), identified that they also fear that others employees would outperform them, apprehension to be perceived as show-off and fear that they might give wrong information. Basically the co-workers not clear on the objectives that being intent by their senior management because many managers often struggle in the implementation of knowledge sharing strategies due to time constraints. Time restrictions cause people to focus on tasks that are more beneficial for themselves than others. Therefore, it is important to allow some informal time and space to allow employees to take time for knowledge generation and knowledge sharing. (Chen Wai Ling, Manjit S. Sandhu & Kamal Kishore Jain, 2008). Many employees will share their knowledge voluntarily if they perceive the process to be important to their work, if they feel encouraged to share or if they wish to support a certain colleague (Wheatley, 2000).

Lack of Information and Communication Technology, (ICT)

Information and communication technology use will affected the intensity and effectiveness of knowledge sharing through the open-network that largely depends on the friendliness of the information technology (IT) system that has been created (Ming-Yu Cheng, Jessica Sze-Yin Ho & Pei Mey Lau, 2005). However, ICT functions as a platform for knowledge sharing is by itself insufficient to encourage knowledge sharing as suggested by Hendricks (1999): "The role of ICT for knowledge sharing can only be fully understood if it is related to the motivation for knowledge sharing..." On top of the motivation for knowledge sharing, Brazelton and Gorry (2003), had also exposed the idea that technology alone may not effectively encourage knowledge sharing activities. Kim and Jarvenpaa (2008), had supported the importance of the existing relationship between communicating parties as a formula to shape technological-enabled-knowledge activities.

Study conducted by Hsiu-Fen Lin (2007), shows that ICT can only act as tools that help employees in receiving knowledge but not in donating the knowledge to others. This phenomenon may be explained by the fact that organizations exhibit a tendency for employees to use knowledge as their source of power for personal advantage rather than as an organizational resource (Syed-Ikhsan & Rowland, 2004). Knowledge thus cannot be distributed simply via online database or intranet. This finding might also be caused by the fact that investing in ICT alone is not enough to facilitate knowledge donating, because ICT can provide access to knowledge, but access is not the same as using or applying knowledge. That is, knowledge sharing involves social and human interaction, not simply ICT usage. Employees in public sector mainly complete paperwork for even trivial tasks such as filling out a fax or recording a public inquiry, thus this might hamper their productivity, generate frustration and create a tendency to perform only the minimum job requirements. From this situation they may perceive KM initiatives which used the ICT as extra work and resist efforts to build a culture of knowledge sharing (Yao, Kam & Chan, 2007).

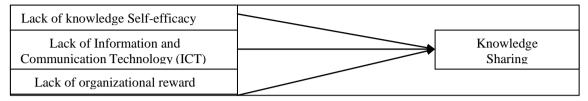
Lack of Organizational Reward

When it comes to the decision as to whether to share or not to share, monetary incentives and rewards are the key factors cited most frequently (Hendricks, 1999; Hahn & Subrami, 2000; Ruppel & Harrington, 2001; Bartol & Srivastava, 2002; Dignum & Dignum, 2003; Syed-Ikhsan & Rowland, 2004; Riege, 2005). As promoted by Ming-Yu Cheng, Jessica Sze-Yin Ho and Pei Mey Lau (2005), sharing of knowledge is a costly activity. Thus, unless the perceived benefits exceed the costs of sharing, the sharing process is hard to realize (Chua, 2003). Study that done to academics at private university in Malaysia show that academics are motivated to share if the incentives and reward mechanisms are encouraging to create a conducive knowledge sharing environment. Both the monetary as well as non-monetary incentives are crucial to generate the passion toward knowledge sharing. Promotion and other monetary rewards are fundamental factors. Besides, although it may not bring immediate monetary payoff or promotion as a return, if the university recognizes the effort of knowledge sharing as significant to the success of the institution, academics will also be motivated to participate in the sharing activities (Ming-Yu Cheng, Jessica Sze-Yin Ho & Pei Mey Lau, 2005).

Organizational rewards sometimes will give bad effect to the employees itself as it will give fears to those who sharing their knowledge with other as they might receive unfair recognition and accreditation, plus the risks of one's intellectual property being stolen, this become the reasons why they discourage knowledge-sharing activities (Riege, 2005). Perceptions of top management encouragement of knowledge sharing influence employee willingness to share knowledge. Some organization realizes that organizational rewards only secure temporary compliance. They failed to see how organizational rewards will give positive effect on long-term performance. It means that organization rewards only provide temporary incentives for knowledge sharing. Apart from focusing on organizational rewards they shift to give more focus on social interaction culture that can promote knowledge sharing activities more effectively (Hsiu-Fen Lin, 2007).

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Figure 1: Barrier Factors in Knowledge Sharing Information among Non Academic Staff in Uitm Kedah (Adapted From Hsiu-Fen Lin, 2007)



Through this framework, there strives to be a relationship between independent variable with dependent variable towards the barriers factors in knowledge sharing implementation. The dependent variable is knowledge sharing and the independent variable, are individual factors (self-efficacy), technology factors (IC T) and organization factors (organizational reward).

4. METHODS & MATERIALS

The purpose of this research study is hypothesis testing where these researches carry out and explain the relationship between independent variable and dependent variable. In this research, correlation study will be used as a type of investigation. This research also use cross sectional study where the data is gathered just once a period of days, weeks or month. This method was selected because of high degree of reliability, low cost and short timing (Sekaran, 2006). The population of this research is 259 which is the total population of non-academic staff. The sample size for this research is 156, using 60% as the percentage that represent the employees in each department. Sample is chosen based on stratified sampling technique, the good choice when differentiated information is needed regarding various strata within the population. The population was divided into strata according to the division / department.

5. RESULTS & DISCUSSION

5.1 Profile of Respondents

Table 1: Gender

Gender	Frequency	Percent
Male	101	64.7
Female	55	35.3
Total	156	100.0

Table 2: Age

Age (years)	Frequency	Percent	
21-25	17	10.9	
26-30	38	24.4	
31-35	40	25.6	
36-40	29	18.6	
41-45	13	8.3	
>46	19	12.2	
Total	156	100.0	

Table 3: Level of Education

Level of education	Frequency	Percent
PMR	12	7.7
SPM	50	32.1
STPM/Certificate	32	20.5
Diploma	39	25.0
Degree	19	12.2
Others	4	2.6
Total	156	100.0

Table 4: Marital Status

Status	Frequency	Percent
Single	32	20.5
Married	124	79.5
Total	156	100.0

Table 5: Work Experience

Work experience	Frequency	Percent	
1-5	45	28.8	
6-10	40	25.6	
11-15	47	30.1	
>20	24	15.4	
Total	169	100.0	

This section discussed about the profile of respondents is classified such as age, gender, marital status and level of education. Based on table 1, male dominated the survey with 101 (64.7%) respondents and followed by 55 female (35.3%). And in table 2, respondents are mostly aged between 31-35 years with 40 (25.6%) respondents follow by age of 26-30 years old which is 38 (24.4%) respondents, followed by age 36-40 years old which is 29 (18.6%) respondents, respondents above 46 years old represents 19 (12.2%) respondents, respondents from age 21-25 represents 17 (10.9%) and followed by age 41-45 years old with 13 (8.3%) respondents. Table 3 indicates that SPM (Sijil Pelajaran Malaysia) is the highest ranking of qualification with 50 (32.1%) respondents followed by Diploma; 39 (25%), respondents, STPM (Sijil Tinggi Pelajaran Malaysia) /Certificate with 32 (20.5%) respondents, Degree qualified respondents represent 12.2% followed by PMR (Penilaian Menengah Rendah) qualification with 12 respondents (7.7%) and the remaining 2.6% represent other qualifications. Based on table 4, most respondents are married with 124 (79.5%) respondents followed by 30 single respondents (20.5%). And table 5 showed that respondents working experience are mostly about 11-15 years 47 (30.1%), followed by 1-5 years with 45 respondents (28.8%). The third ranking is 6-10 years experience which is 40 respondents (25.6%) and 24 respondents with more than 20 years experience (15.4%).

5.2 Result of Findings

The Pearson Correlation matrix analysis obtained for the three intervals scaled variables shown in the findings are as below:

Lack of Knowledge Self-efficacy

H1: There is a significant relationship between lack of knowledge self-efficacy and knowledge sharing.

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Table 6 H1: There is a Significant Relationship between Lack of Knowledge Self-Efficacy and Knowledge Sharing.

	Knowledge Sharing	Lack of Knowledge Self- efficacy
Pearson Correlation	1	-0.381**
Sig. (2-tailed)		0.000
N	156	156

Correlation is significant at the 0.01 level (2-tailed)

Table 6 shows that there is a significant relationship between lack of knowledge self-efficacy and knowledge sharing where p< 0.01 (p= 0.000) and r= -0.381. Correlation represents a fairly weak negative relationship between these two variables. Negative value signifies that when one variable increases in value, the second variable will decrease in value. These results explained that, when there are more employees' with lack of knowledge self-efficacy there will be less knowledge sharing activity happened. So, the hypothesis was accepted. The hypothesis which is lack of knowledge self-efficacy have significant relationship with knowledge sharing of UiTM Kedah was accepted. The significant level was p<0.01 while the finding showed that r = -0.381. Negative relationship means that when employees itself have lack of knowledge self-efficacy, there will be less knowledge sharing activity happened or vice versa. Based on the findings, it can be determined that there is a correlation between lack of knowledge self-efficacy and knowledge sharing. The findings illustrate that lack of knowledge self-efficacy also create the certain level of uncertainty over the value that their possessed knowledge in which they do not know to whom their knowledge might benefit others (Chen Wai Ling, Manjit & Kamal, 2008). Study conducted by Hsiu-Fen Lin, (2007) expects that top management support positively influences employee's willingness to share knowledge with colleagues. In others words it means that individual share what they have learned and transferred what they knew to those who have collective interest and who have found the knowledge useful (Ming-Yu Cheng, Jessica Sze-Yin Ho & Pei Mey Lau, 2005).

Lack of Information and Communication Technology (ICT)

H2: There is a significant relationship between lack of Information and Communication Technology (ICT) and knowledge sharing.

Table 7 H2: There is a Significant Relationship between Lack of Information and Communication Technology (ICT) and Knowledge Sharing.

	Knowledge Sharing	Lack of Information Communication Technology (ICT)
Pearson Correlation	1	-0.330(**)
Sig. (2-tailed)		0.000
N	156	156

Correlation is significant at the 0.01 level (2-tailed).

Table 7 shows there is a significant relationship between lack of knowledge self-efficacy and knowledge sharing where p< 0.01 (p= 0.000) and r= -0.330. Correlation represents a fairly weak negative relationship between these two variables. These results explained that, when there are many departments that lack of Information Communication Technology (ICT), there will be less knowledge sharing activity happened. The hypothesis which is Information and Communication Technology (ICT) will influence the practice of knowledge sharing in UiTM Kedah was accepted due to there is a significant relationship between Information and Communication Technology (ICT) and knowledge sharing. The significant level was p< 0.01 while the finding showed that r= -0.330. It means that when the organization was lack of Information and Communication Technology (ICT), there will be less knowledge sharing activity

happened or vice versa. Based on the findings, it can be determined that there is a correlation between lack of Information and Communication Technology (ICT) and knowledge sharing. The findings illustrate that the idea that ICT alone may not effectively encourage knowledge sharing practices (Brazelton & Gorry, 2003). Hendricks (1999) also agreed that ICT function as a platform by itself insufficient to encourage knowledge sharing. Information technology is considered as one of the decisive factors in knowledge sharing (Zahra Tohidinia & Mohamed Mosakhani, 2009). Study conducted by Javernpaa and Staples (2000), individuals strongly believed that the use of computer-based information systems and electronic media contributed to providing valuable information. The implementation of information technology within organizations, results in significant not only on the organization's business process and culture, but also on the motivation and performance of individual employees (Doherty & King, 2005).

Lack of Organizational Rewards

H3: There is a significant relationship between lack of organizational rewards and knowledge sharing.

Table 8 H3: There is a Significant Relationship between Lack of Organizational Rewards and Knowledge Sharing

	Knowledge Sharing	Lack of Organizational Rewards
Pearson Correlation	1	-0.448 (**)
Sig. (2-tailed)		0.000
N	156	156

Correlation is significant at the 0.01 level (2-tailed).

Table 8 shows there is a significant relationship between lack of organizational rewards and knowledge sharing where p< 0.01 (p= 0.000) and r= -0.448. Correlation that we got represented the fairly strong negative relationship between these two variables. Negative value that we got for the correlation means when one variable increases in value, the second variable will decreases in value. These results explained that when the organization reluctant to give rewards to their employees, there will be less knowledge sharing activity happened. So, the hypothesis was accepted. The hypothesis which is lack of organizational rewards will influence the practice of knowledge sharing in UiTM Kedah was accepted due to there is a significant relationship between lack of organizational rewards and knowledge sharing. The significant level was p<0.01 while the finding showed that r=-0.448. It means when organization was lack of organizational rewards, there will be less activity of knowledge sharing or vice versa. Based on the findings, it can be determined that there is a correlation between lack of organizational rewards and knowledge sharing. The findings illustrate that organization might have underestimated the "human factor" in their effort to improve KM practice and thus rewards and incentives for knowledge sharing remain informal and limited. Unlike employees in private enterprise, most civil servants are not strongly profit-motivated. Rather, their jobs are devoted to serving communities, citizens, and general public's (L.J Yoa, T.H.Y. Kam & S.H. Chan, 2007). Chiem (2001), emphasize that people who want to share will do so, money or no money because they believe in the sense of social good. Hsiu-Fen Lin, (2007) in her study expects that if employees believe they can receive organizational rewards by offering their knowledge, they would develop greater positive willingness to knowledge sharing.

Most dominant Barrier Factor - Regression Analysis

The result of this regression is an equation that represents prediction of a dependent variable from several independent variables. This analysis is used when independent variables are correlated with one another and with the dependent variables. The result of regressing the three variables against knowledge sharing can be seen in table 9 below. Table 9 was used to analyze which between three variables influence most the variance in knowledge sharing. The column Beta under *Standard Coefficients*, gives the highest number in the beta which is -0.386 for lack of organizational rewards, which is this independent variable, is significant at the 0.002 level. From the result, lack of organizational rewards was the most dominant barrier factors that affect knowledge sharing. Negative signs indicating that when the organization provides less organizational

rewards to the employees', knowledge sharing activity will be less happened. Thus, lower organizational rewards are associated with lower knowledge sharing activity.

Table 9: Coefficients^a

Model		Unstandardize	d Coefficients	Standardized Coefficients	t	Sig.
	,	В	Std. Error	Beta		
1	(Constant)	13.140	.809		16.243	.000
	Lack of knowledge self-efficacy	049	.050	113	990	.324
	Lack of organizational rewards	191	.061	386	-3.139	.002
	Lack of Information and Communication Technology	.022	.078	.031	.279	.781

a. Dependent Variable: Knowledge Sharing

6. CONCLUSION

Through this research, the relationship between self-efficacy factor, Information communication Technology (ICT) factors and reward systems factors in the implementation of knowledge sharing are obtained. The most dominant factor that affects knowledge sharing is lack of organization rewards and followed by lack of Information Communication Technology (ICT). This could mainly be because; organizational rewards are signified as a motivation for people to share knowledge. Rewards encourage the staffs to share (or not to share) information and knowledge and there is not a doubt that reward could be an initiating factor to more knowledge sharing and knowledge implementation. ICT plays a major role in making sure that knowledge sharing works, and the absence of a good system could hinder and demotivate eager knowledge champions. Institution must ensure that members of organization are given enough resources to work with (and work for).

REFERENCES

- Ahmad Norita & Daghfous Abdelkader (2009). *Knowledge Sharing Through Inter-Organizational Networks*, 153-164. Retrieved July 17, 2010 from http://www.emeraldinsight.com.
- Babbie & Earl R. (2004). The practice of Social Research (10th ed.). Australia: Thompson.
- Birgit Schyns & Karin Sanders (2005). *Exploring Gender Differences in Leaders' Occupational Self Efficiacy*, 513-521. Retrieved July 21, 2010 from http://www.emeraldinsight.com
- Chen Wai Ling, Manjit S. Sandhu & Kamal Kishore Jain, (2008). *Knowledge Sharing in an American Multinational Company based in Malaysia*. Retrieved July 15, 2010 from http://www/emeraldinsight.com.
- Chieh Peng Lin (2006). *To Share or Not to Share: Modeling Knowledge Sharing Using Exchange Ideology as a Moderator*, 457-471. Retrieved July 15, 2010 from http://www.emeraldinsight.com.
- Demola Obembe (2010). *Understanding Individual Action: When Employees Contravene Management Directives to Foster Knowledge Sharing*, 656-664. Retrieved July 17, 2010 from http://www/emeraldinsight.com.

- Azlyn Ahmad Zawawi; Zaherawati Zakaria; Nur Zafifa Kamarunzaman; Nazni Noordin; Mohd Zool Hilmie Mohamed Sawal; Natrah Mat Junos; Nurul Shahida Ahmad Najid /Management Science and Engineering Vol.5 No.1, 2011
- Ding Zhikun & Ng Fungfai (2009). *Knowledge Sharing Among Architects in a Project Desgn Team*, 130-139. Retrieved from July 17, 2010 from http://www.emeraldinsight.com.
- Finnegan, D. & Willcocks, L. (2006). *Knowledge Sharing Issues in the Introduction of a New Technology*, 568-586. Retrieved July 15, 2010 from http://www.emeraldinsight.com.
- Gayatri & Smitha Ramachandran, (2008). *DSpace@IBSA: Knowledge Sharing in a Management Institute*,41-51. Retrieved July 15, 2010 from http://www.emeraldinsight.com.
- Hsiu-Fen Lin & Gwo-Guang Lee, (2005). Effects of Socio-Technical Factors on Organizational Intention to Encourage Knowledge Sharing, 42-51. Retrieved July 15, 2010 from http://www.emeraldinsight.com
- Hsiu-Fen Lin (2007). *Knowledge Sharing and Firm Innovation Capability: An Empirical Study*. Retrieved July 21, 2010 from http://www/eameraldinsight.com.
- Hutchings, K. & Michailova, S. (2006). *The Impact of Group Membership on Knowledge Sharing in Russia and China*, 21-31. Retrieved July 15, 2010 from http://www.emeraldinsight.com.
- Jacobs, E. & Roodt, G. (2007). *The Development of a Knowledge Sharing Construct to Predict Turnover Intentions*, 229-244. Retrieved July 15, 2010 from http://www.emeraldinsight.com.
- Jung Chi Pai (2005). *An Empirical Study of the Relationship Between Knowledge Sharing and IS/IT Strategic Planning (ISSP)*, 105-118. Retrieved July 15, 2010, from http://www.emeraldinsight.com.
- Kuang-Liang Liu, Chen-Chi Chnag & In-Lin Hu (2009). Exploring the Effects of Task Characteristics on Knowledge Sahring in Libraries, 455-465. Retrieved July 15, 2010 from http://www.emeraldinsight.com.
- Lam, A. & Paul, J. (2009). *Knowledge Sharing in Organizational Context: A Motivation-Based Perspective*, 51-63. Retrieved July 27, 2010 from http://www.emeraldinsight.com.
- L.J. Yao, T.H.Y. Kam & S.H. Chan (2006). *Knowledge Sharing in Asian Public Administration Sector: The Case of Hong Kong*. Retrieved July 14, 2010 from http://www/emeraldinsight.com.
- Ming-Yu Cheng, Jessica Sze-Yin Ho & Pei Mey Lau, (n.d) Knowledge Sharing in Academic Institutions: a Study of Multimedia University Malaysia. Retrieved July 21, 2010 from http://www/emeraldinsight.com.
- Peel, M. & Rowley, J. (2009). Information Sharing in Multi-Agency Working, 11-26. July 17, 2010 from http://www.emeraldinsight.com.
- Parirokh Mehri, Farhad Daneshgar & Fattahi Rahmatollah (2007). *Identifying Knowledge Sharing Requirements in Academic Libraries*, 107-120. July 15,2010 from http://www.emeraldinsight.com.
- Ren Shuhuai, Sheng Xingjun, Lin Haiqing & Cao Jialin (2008). From Information to Knowledge Commons Building a collaborative Knowledge Sharing Environment for Innovative Communities, 247-251. Retrieved July 15, 2010 from http://www.emeraldinsight.com.
- Rifat Kamas & Fusun Bulutlar (2009). *The Influence of Knowlegde Sharing on Innovation*, 306-314. Retrieved July 14, 2010 from http://www.emeraldinsight.com.
- Raja R.A Issa & Haddad, J. (2007). *Perceptions of the Impacts of Organization Technology on Knowledge Sharing in Construction*, 182-199. Retrieved July 17, 2010 from http://www.emeraldinsight.com.
- Sekaran, U. & Bougie, R. (2010). Research Methods for Business (5th ed.). John Wiley & Sons.

- Azlyn Ahmad Zawawi; Zaherawati Zakaria; Nur Zafifa Kamarunzaman; Nazni Noordin; Mohd Zool Hilmie Mohamed Sawal; Natrah Mat Junos; Nurul Shahida Ahmad Najid /Management Science and Engineering Vol.5 No.1, 2011
- Sirajuddin Suhaimee, Ahmad Zaki Abu Bakar & Rose Alinda Alias (2006). *Knowledge Sharing Culture in Malaysian Public Institution of Higher Education : An Overview*. Retrieved July 21, 2010 from http://www/emeraldinsight.com.
- Sohail Sadiq M. & Salina Daud (2009). *Knowledge Sharing in Higher Education Institutions: Perspectives from Malaysia*. Retrieved July 15, 2010 from http://www/emeraldinsight.com.
- Sondergaad, S., Kerr, M. & Clegg, C. (2007). *Sharing Knowledge: Contextualising Socio-Technical and Practice*, 423-433. Retrieved July 15, 2010 from http://www.emeraldinsight.com.
- Stoddart, L. (2001). *Managing Intranets to Encourage Knowledge Sharing: Opportunities and Constraints*, 19-28. Retrieved July 27, 2010 from http://www.emeraldinsight.com.
- Ting Jer Yuen & M. Shaheen Majid, (2006). *Knowledge Sharing Patterns of Undergraduate Students in Singapore*. Retrieved July 15, 2010 from http://www/emeraldinsight.com.
- Tobin, P & Snyman, R., (2007). *Once Upon a Time in Africa: A Case Study of storytelling for Knowledge Sharing*, 130-140. Retrieved July 15, 2010 from http://www.emeraldinsight.com.
- Zhikun Ding & Fungfai Ng, (2009). *Knowledge Sharing in Architectural Design Institutes: A Multiple –Case Study*, 267-283. Retrieved July 17, 2010 from http://www.emeraldinsight.com.