

## The Impacts of Organizational Factors on Knowledge Sharing in Higher Learning Institutions (HLIs): Case at Universiti Kebangsaan Malaysia (UKM)

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### Abstract

The current scenario of increasing number of Higher Learning Institutions (HLIs) in Malaysia, provide us for a need to understand the importance of upgrading their institution knowlegde in order to serve as a reservoir of knowledge apart from mere providing knowledge to students. Much have been mentioned on knowledge sharing, but comprehensive research in the area of knowledge sharing between university faculty academicians, especially among pure sciencies and social sciences groups has been rather less discussed. Therefore, this study is aimed to identify the impacts of organizational factors on knowledge sharing in HLIs. This study is conducted through a set of survey instrument among acadmicians in Universiti Kebangsaan Malaysia (UKM). The findings of this study showed that the organizational factors on knowledge sharing, from the top management support and organizational culture are collectively agreed as important, while organizational rewards are slightly regarded as less important. This findings could provide us with a conclusion that the practice of the top management support and organizational culture in UKM is currently good and nurturing knowledge sharing among academicians, while the aspect of organizational rewards need to be enhanced further.

**Keyword:** knowledge sharing, orgaizational factors, academicians, Higher Learning Institutions (HLIs) , University Kebangsaan Malaysia

### 1. Introduction

Knowledge, defined in this study as a mix of experience, values, contextual information and expert insight (Davenport and Prusak, 1998), has been highlighted by many academicians and practitioners as the most important and competitive resource for organizational success (eg: Quinn et al., 1996; Albert and Bradley, 1997). Organizations might not survive in Knowledge Era without proper strategy to managing and leveraging value of their intellectual assets (Abell and Oxbrow, 2001). As a result, more organizations, both large and small, turn to knowledge management strategies to manage and leverage their organizational knowledge in full (Davenport et al, 1998).

However, there are several challenges in knowledge management attempt like maintaining, locating and applying knowledge in organization. The major challenge in knowledge management is to enhance knowledge creation and sharing (Grant, 1996; Davenport, 1997; Wasako and Faraj, 2000) since the success or failure of knowledge management always depends on this. Many believe that one way to make knowledge become more powerful for organizations is through knowledge sharing practices, so that individual knowledge can be transferred into organizational knowledge through the interaction and communication of individual co-workers, in project teams or between projects, and these knowledge sharing processes could assist in knowledge creation at higher levels (Nonaka, 1994). In other words, through knowledge sharing, an organization can transform the knowledge of individuals into organizational knowledge.

Previously, the study of knowledge sharing is dominated by business organizations where their ultimate goal for knowledge sharing is profit-motivated. However, the issue of knowledge sharing is equally important for a knowledge-based institution, such as a Higher learning institutions (HLI), where knowledge production, distribution and application are the main activity in the institution (Petrides and Nodine, 2003). With the increased number of HLI in Malaysia, there are a need for them to upgrade their institution knowlegde in order to differentiate among themselves to serve as a reservoir of knowledge and are no longer just providing knowledge to students. However, comprehensive research in the area of knowledge sharing between university faculty academicians especially in pure sciencies and social sciences

groups has been rather limited.

## 2. Objective of Study

This study is aimed:

1. to identify the impacts of management support in organizational factors on knowledge sharing in HLIs.
2. to identify the impacts of organizational rewards in organizational factors on knowledge sharing in HLIs.
3. to identify the impacts of organizational culture in organizational factors on knowledge sharing in HLIs.

## 3. Literature Review

The recognition of knowledge as the key resource in organizations affirms the need for processes that facilitate the creation, sharing and leveraging of individual and collective knowledge (Becerra-Fernandez and Sabherwal, 2001). Currently, it is popular belief that one way to make knowledge become more powerful for organizations is through knowledge sharing practices (Quinn et al, 1996; Klein, 2005), so that individual knowledge can become organizational knowledge. Organizational knowledge is developed through the interaction and communication of individual co-workers, in project teams or between projects, and this knowledge sharing process could assist in knowledge creation at a higher level (Nonaka, 1994; Nahapiet and Ghoshal, 1998).

For that reason, many turn to a knowledge management initiative to manage their knowledge. The effective management of knowledge in an organization depends on how well knowledge sharing occurs within it. Meaning, knowledge sharing is a crucial activity for knowledge management success (Wah, 1999; Cabrera and Cabrera, 2002; McDermott and O'Dell, 2001). That said, it is considered a very challenging process requiring the organization to implement certain knowledge strategies effectively to manage the process (Cho et al, 2007).

Sabherwal and Sabherwal (2005) view knowledge sharing as involving the transfer or dissemination of knowledge among individuals or groups as a basis for knowledge utilization to create competitive advantage for the firm. Lee (2001:324) has defined knowledge sharing as "activities of transferring or disseminating knowledge from one person, group, or organization to another", and Van den Hooff and de Ridder (2004) have further elaborated on this view, adding that knowledge sharing is a process where individuals mutually exchange their knowledge and jointly create new knowledge.

Organizational knowledge consists of tacit and explicit knowledge (Nonaka et al, 2000). Both tacit and explicit knowledge are important and complementary to each other (Hass and Hansen, 2007) and essential for knowledge creation. Unfortunately, few organizations handle explicit and tacit knowledge effectively (Bonner, 2000). Explicit knowledge without tacit insight quickly loses its value since it can be easily imitated by others so it needs to be shared with others so that new insights and learning will empower the knowledge. Tacit knowledge that cannot be codified and shared throughout the organization also has the potential to be lost when the person who holds it leaves the organization. Here, new knowledge or knowledge innovation is created through interactions between tacit and explicit knowledge and not from either tacit or explicit knowledge alone (Nonaka et al, 2000). So it is crucial to manage and share both kinds of knowledge accordingly since different knowledge brings different benefit to organizations (Hass and Hansen, 2007). This view brings a new perspective on the importance of different types of knowledge to different individuals, groups or units in organizations, making knowledge sharing activities critical to ensure that knowledge reaches those who need it.

However, knowledge sharing is not an easy process due to the fact that knowledge in organizations is often held by individuals, units or groups (collective forms) distributed (Argote and Ingram, 2000; Boland and Tenkasi, 1995; Hutchins, 1995; Weick and Roberts, 1993) all over the organization and sometimes across territorial borders. Furthermore, knowledge is recognised as being *socially-complex* (Sanchez and Heene, 1997; Nanda, 1996) since it is held by people and a personal relationship is needed in order to acquire it. It is regarded as *sticky* (Szulanski, 1996; Hippel, 1994) and *causally-ambiguous* (Sanchez and Heene, 1997) because it is embedded in a complex network of formal and informal relationships, thus making it difficult for organizations to share it effectively.

There are a number of factors leading towards the success of knowledge sharing, and so far researchers have underlined that its motivation as a function of reciprocity issues, relationships with recipients and rewards apart from attitudes to share knowledge, working culture, motivation to share, and opportunities to share (Ipe, 2003 & Heng, 2005). On another account, Kim and Lee (2005) found out that organizational culture, structure and information technology give impact to the knowledge sharing capabilities among employees. This supported findings from Gupta & Govindarajan (2000) that show group-based incentives strongly encourage knowledge sharing, while other researchers argue on tangible (monetary) rewards as well as intangible (non-monetary) rewards play identical important factors to motivate

knowledge sharing (McDermott & O'Dell, 2001; Gagne, 2009)

Management Support is an important organizational factor that could lead towards better sharing of knowledge. Cabrera & Cabrera (2002, 2005) and Hislop (2003) suggest that staffing, job design, performance appraisal, compensation systems, managerial styles and training all are related to management support that make up organizational factor for knowledge sharing. Furthermore, supports including participative decision making and trust from the top management found to be positively related to knowledge sharing (Park et al, 2004; Gagne, 2009).

Organizational Reward is another significant organizational factor that could lead towards enhanced sharing of knowledge. Roca & Gagne (2008) found out that need satisfaction was positively related to sharing of knowledge. This is strongly supported by Bartol & Srivastava (2002) that establish while rewards could be made partly contingent on knowledge sharing behaviors as in merit pay, rewards based on collective performance are also likely to be effective in creating a feeling of cooperation, ownership, and commitment among employees which include team-based rewards and companywide incentives (profit sharing, gainsharing, and employee stock options) that would be particularly instrumental in enhancing knowledge sharing within teams and across work units in organizations.

While organizational culture in sharing norms were found positively related to knowledge sharing behavior in organizations (Brown & Duguid, 2000; Chiu et al, 2006) it is also found that there is a positive link between opportunities to share which include organizational culture that encourage knowledge use and share. Bock & Kim (2002) establish that expectations to improve work relationships and to make a significant contribution to organizational performance were positively related to knowledge sharing attitudes and behaviors, and Park et al (2004) further found that a culture that encourage teamwork, employee support, and autonomy strongly encourage and motivate knowledge sharing.

#### 4. Methodology

This study is in the form of a descriptive study, on the perceptions of academicians in UKM regarding impacts of organizational factors on knowledge sharing in HLIs. According to Wiersma (1995) this method is appropriate to measure or evaluate the attitude, perception and achievement of a program. The descriptive form is also used at par with the requirement of the study to understand in its real phenomenon (Mohd Majid 1990). Thus, a survey instrument is developed for this study based on the literatures selected. According to Tuckman (1999), a questionnaire is an effective way to gain information from the respondents. All questions are in positive form and the respondents were required to state their perceptions according to the Likert scale.

This study is conducted through a set of survey instrument among acadmicians in Universiti Kebangsaan Malaysia (UKM). The academicians are selected from 5 faculties, 2 faculties representing pure sciences group and another 3 faculties representing social sciences group in UKM. Thus, to determine the number of respondents, The Sample Size Determination Table by Krejcie and Morgan (1970) is adopted. The sample size for this study is 38 based on Krejcie and Morgan (1970)'s Sample Size Determination.

In this study, the validity of the questionnaire is determined by an expert. Reliability refers to the stability and consistency in the instrument in measuring a particular concept. A popular test in measuring the consistency of a concept is the Cronbach Alpha. The reliability value of the Cronbach Alpha is between 0.0 and 1.0. According to Mohd Majid (1990), the Cronbach Alpha value more than 0.60 is often applied as the reliability index in a particular research. Thus, in this study, researcher has determined the Cronbach Alpha value that is more than 0.60 as the reliability value for every section of the questionnaire being tested. Next, to decide on the reliability value for the questionnaire given, researcher had carried out a pilot study.

The pilot study was done to identify the weaknesses and the strength in the questionnaire provided. Thus, before the questionnaire was given, 10 academicians were selected to answer the questionnaire first. The outcome obtained shows that all 10 academicians understand the questions clearly. Then, by using the *Statistical Package for the Social Science* (SPSS) program version 21, it is confirmed that the Cronbach Alpha value for all the items of the questions obtained more than 0.6. Thus, the questionnaire constructed to carry out this study is deemed appropriate to be used.

#### 5. Findings and Discussions

This section illustrates the findings and discussions based on the respondents background, management support, organizational reward and organizational culture.

### 5.1 Findings and Discussions on Respondent Background

Table 1 below describe the background of respondents. The number of academicians from Pure Sciences comprises of 36.9 percent and Social Sciences academicians give a number of 63.1 percent. The respondents are majority from Senior Leturers (44.7 %) with 65% of all the respondents have been serving UKM for more than 11 years. 73.7 percent of the respondents are PhD holders who possess expertise and knowledge in their respective fields, with 34.2 percent of them experiencing conducting research between 6 to 10 years.

From the demographic data obtained, the field of expertise among UKM academicians are generally divided into two: pure sciences and social sciences. For the position related to their post, they are categorized under the post of Professor, Associate Professor, Senior Lecturer and Lecturer. From the data, Senior Lecturers and Associate Professors make the majority with experience of work between 12 to 20 years of service with 6 to 10 years experiences in research. All the above indicators show to us that these academicians are in the process of climbing up their career development, which make truly important for them to share knowledge and create networking in their expertise to increase their research, publication and teaching.

**Table 1:** Respondent Background

<i>n</i> = 38	Numbers	Percentages
<b>Name of institution</b>		
Faculty Science & Technology	2	5.3
Faculty Technology & Information Science	12	31.6
Faculty Economics & Management	5	13.2
Faculty Social Science & Humanities	14	36.8
Faculty Islamic Studies	5	13.2
<b>Position in this institution</b>		
Professor	3	7.9
Associate Professor	9	23.7
Senior Lecturer	17	44.7
Lecturer	9	23.7
<b>Years of working experience</b>		
1-5	8	21.1
6-10	5	13.2
11-20	18	47.4
21 & above	7	18.4
<b>Highest Educational Qualification</b>		
Doctoral Degree	28	73.7
Master's Degree	7	18.4
Bachelor Degree	3	7.9
<b>Years in Conducting Research Work</b>		
1 year & below	2	5.3
2 - 5 years	7	18.4
6 - 10 years	13	34.2
11 - 15 years	8	21.1
16 - 20 years	4	10.5
21 - 25 years	2	5.3
26 years & above	2	5.3

### 5.2 Findings and Discussions on Management Support

Table 2 below describe the Management Support of Knowledge Sharing. 92.1 percent of academicians agreed that top management thinks that encouraging knowledge sharing among academics is beneficial, followed by 89.5 percent academicians agreed that top management always support academics to share their knowledge with each other. Academicians also agreed that (78.9%) top management provides most of the necessary help to enable academics to share their knowledge, with another 76.3 percent of them recognized that top management is keen to see that academics are happy to share their knowledge with each other, and only 57.9 percent of academicians feel that top management

monitor knowledge sharing activities.

These finding shows that top management in UKM are very much encouraging knowledge sharing, always support academicians to share knowledge, provide most of the necessary facilities needed, and happy with the sharing practice. Therefore, the management of UKM need to nurture and maintain this situation in order to ensure knowledge sharing is implemented among the academicians. Apart from that, the top management should further monitor the knowledge sharing activities in the future. For instance, the monitor should comprise of an element of promotion criteria in their career development, and also can be a part of element in SPPP – *Sistem Penilaian Pengajaran dan Penyeliaan* (evaluation system on teaching and supervising).

**Table 2:** Management Support

No.	Item	Strongly Agree	Less Agree	Agree
1.	In my faculty/school, top management thinks that encouraging knowledge sharing among academics is beneficial.	0(0.0)	3(7.9)	35(92.1)
2.	In my faculty/school, top management always support academics to share our knowledge with each other.	0(0.0)	4(10.5)	34(89.5)
3.	In my faculty/school, top management provides most of the necessary help to enable academics to share our knowledge.	0(0.0)	8(21.1)	30(78.9)
4.	In my faculty/school, top management is keen to see that academics are happy to share our knowledge with each other.	1(2.6)	8(21.1)	29(76.3)
5.	In my faculty/school, top management monitor knowledge sharing activities.	2(5.3)	14(36.8)	22(57.9)

### 5.3 Findings and Discussions on Organizational Reward

Table 3 below also describe the Organizational Reward of Knowledge Sharing in UKM. The academicians generally do not agree on receiving higher salary in return for more sharing of knowledge (18.4%). This equally echoed related to job promotions (23.7%), increased job security (28.9%), and receiving higher monetary bonus (21.1%). On the contrary, the respondents are highly agree on receiving acknowledgement and positive reputations for knowledge sharing (60.5%). This findings show that the academicians are lack of material rewards, but ample and satisfied with the non-material rewards. For the material aspect, UKM (top managements) need to take serious attention in order to inculcate knowledge sharing, as the material (money) rewards are very important among their main group of academicians responded who are in their family and life development period (associate professors and senior lecturers).

**Table 3:** Organizational Rewards

No.	Item	Strongly Agree	Less Agree	Agree
1.	I will receive a higher salary in return for sharing my knowledge.	20(52.6)	11(28.9)	7(18.4)
2.	I will receive increased promotion opportunities in return for sharing my knowledge.	18(47.4)	11(28.9)	9(23.7)
3.	I will increased job security in return for sharing my knowledge.	10(26.3)	17(44.7)	11(28.9)
4.	I will receive a higher bonus in return for sharing my knowledge.	20(52.6)	10(26.3)	8(21.1)
5.	I will receive acknowledgement and positive reputation for sharing my knowledge.	7(18.4)	8(21.1)	23(60.5)

### 5.4 Findings and Discussions on Organizational Culture

Table 4 below describe the Organizational Culture of Knowledge Sharing in UKM among the academicians. The academicians agree that the management encourage academics to involve in conferences workshops, seminars etc (89.5%). The academicians also perceive the management stresses the importance of knowledge to the success of the institution (81.6%), senior academics are encouraged to sharing with others especially with the young academicians (73.7%), goals and vision of the institution is clearly communicated to all academics (65.8%) and the interaction between different departments and research centres are encouraged (73.7%). This analysis shows that the top management always encourage academicians to involve in conferences by providing monetary support and other facilities. The academicians also found out that management stresses the importance of knowledge sharing through monthly meeting, online facilitation (like iFolio), and other new technological enhancements. The sharing between senior and young academicians are in good terms through mentoring programme, research teams and team-teaching. The academicians also agree that knowledge sharing between faculties are implemented through research collaboration, and even in specific research grant requirement, there are needs for the team to comprise of multi-disciplines across faculties.

**Table 4:** Organizational Culture

No.	Item	Strongly Agree	Less Agree	Agree
1.	In my faculty/school, the management encourage academics to involve in conferences workshops, seminars, etc.	1(2.6)	3(7.9)	34(89.5)
2.	In my faculty/school, the management stresses the importance of knowledge to the success of the institution.	1(2.6)	6(15.8)	31(81.6)
3.	In my faculty/school, senior academics are encouraged to sharing with others especially with the young academicians.	6(15.8)	4(10.5)	28(73.7)
4.	In my faculty/school, goals and vision of the institution is clearly communicated to all academics.	8(21.1)	5(13.2)	25(65.8)
5.	In my faculty/school, the interaction between different departments and research centres are encouraged.	4(10.5)	6(15.8)	28(73.7)

## 6. Conclusions

From the data elaborated, this study shows that knowledge sharing practices among academicians in UKM, from the "management support" and "organizational culture" aspects are at the satisfactory level. This portrays a good scenario in UKM to boost its ranking and reputations in order to make UKM more recognized, referred and respected. Knowledge sharing also could inculcate students understandings on the knowledge corpus towards shaping better minds, and building stronger characters. Nonetheless, the academicians themselves will become world class in their teachings, multi-discipline expertise in their researches as well as top quality in publications.

On the other hand, the knowledge sharing practices among academicians in UKM, from the "organization rewards" aspect are perceived to be still lacking. This could be handled positively if the management dare to provide appropriate and suitable monetary rewards among the academicians excel in knowledge sharing.

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