# A PRACTICE OF KNOWLEDGE SHARING: A CASE STUDY IN A PUBLIC SERVICE ORGANIZATION

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#### Abstract

This case study, which was done at a selected public service organization in Selangor, measure the extent knowledge sharing aims to practiced at the organization. This study is also aimed at investigating the relationship between cultural factors (organizational culture, immediate supervisor, employee attitude and work group support) with knowledge sharing effectiveness. The specific objectives of the study were to: (1) determine the organizational level of performance in knowledge sharing, (2) determine the relationship between organizational culture, immediate supervisor, employee attitude and work group support with the effectiveness of knowledge sharing, and (3) identify which cultural factors dimension that explain knowledge sharing. The questionnaire was pre-tested on 10 officers. A total of 104 respondents from three levels of position (director, manager and consultant officer) were selected. Descriptive statistics were used to explain the organization level of performance in knowledge sharing. Correlation analysis was used to explain the relationship between the four factors of knowledge sharing effectiveness. A multiple regression was adopted to the major predictors. Based on the research results, the organization needs to pay more attention on the organizational facilitation in order to improve its performance in knowledge sharing practiced. The findings also revealed that the four cultural factors have positive and linear relationship. However, among the four factors, the organizational culture has strong relationship and was a good predictor in explaining knowledge sharing.

## INTRODUCTION

One major trend with the implications for development is globalization. The world is fast becoming one interdependent global marketplace. With regard to this, the main contributor will be the knowledge and skills of the workforce, which will be the key competitive weapon for the 21<sup>st</sup> century. In today's changing world, knowledge becomes the major factor in creating competitive business advantage. According to Seng et al. (2002), the field of knowledge management has exploded in the industry since 1990s. It becomes the industry's "golden child". Of late, many companies have set up learning centers where employees can share information, and knowledge.

The transformation of modern world business from production-based economy to a knowledge-based economy has major implications to Malaysia. Malaysia established the Multimedia Super Corridor (MSC) to spearhead the country into the information technology era. The booming of Information and Communication Technology (ICT) serves both as an advantage and a challenge to Malaysia. The advantage is that it enables Malaysia to realize its dream of becoming a developed nation by the year 2020; and a total structural change of the country's industrialization plan.

#### STATEMENT OF THE PROBLEM

Knowledge can be said as the ultimate resource for organization to succeed and remain competitive. Liebowitz and Chen (2001) explain that many companies started realizing that knowledge sharing creates business opportunities that gave them a competitive edge by leading to accelerate learning and innovation.

According to McDermott and O'Dell (2001), culture is often seen as the key inhibitor of effective knowledge sharing. Sveiby and Simons (2002) have identified four cultural factors that have major influence in knowledge sharing namely, organizational culture, immediate supervisor, employee attitude, and work group support. The four cultural factors were found as the basis for collaborative climate that become one of the major factors influencing effectiveness in knowledge sharing.

On the other hand, Sveiby and Simons have related the four factors with age, education level and managerial role in order to see the collaborative climate in knowledge sharing. This study however, aims to see the relationship between the four cultural factors with the effectiveness of knowledge sharing.

Previous studies was done in knowledge sharing (McDermott and O'Dell, 2001; Urch-Druskat and Wolff, 2001; and Heuner at al., 1998) and culture (Lok and Crawford, 1999; and Sieloff, 1999), however detailed study of the relationship between knowledge sharing with cultural factors are still limited. Indeed, no such study has been conducted in Malaysia. Thus this study intends to find the trend in Malaysian context.

In detail, this study aims to answer the following research questions:

- (1) What is the organizational level of performance in knowledge sharing?
- (2) How do the cultural factors (organizational culture, immediate supervisor, employee attitude and work group support) relate to the effectiveness of knowledge sharing?
- (3) Which are the cultural factors' dimension that explain knowledge sharing?

## **METHODOLOGY**

The population of the study was 157 officers from different level of positions involved in knowledge sharing activities. From the population, the researcher only chose three levels of positions which were the director (7), manager (33) and consultant (93). For the consultant and manager's group, a proportionate sampling was used. The total number for these two group of respondents were 126. According to Krejcie and Morgan (1970), the appropriate sample size was 97. Therefore by using proportionate sampling, the respondents for manager was 25 and the consultant officer group was 72 respectively. Hence, the total number of respondents for this study was 104.

The questionnaire used was subdivided into three sections; respondents' profile, knowledge sharing effectiveness, and cultural factors that are related to the effectiveness of knowledge sharing. The questionnaire used a five point Likert scale. Respondents were asked to rate their response with "5" as "strongly Agree" and "1" as "Strongly Disagree". The measurement is an interval scale since it possesses all the properties of ordinal scale with one additional property (Coakes and Steed, 2003). The instrument for knowledge sharing effectiveness was adopted from Liebowitz and

Chen (2001) and for the cultural factors, the instrument was adopted from Sveiby and Simons (2002).

The level of effectiveness in knowledge sharing was grouped into five categories (very good, good, moderate, low and very low). According to Liebowitz and Chen (2001), 'very good' performance indicated that the organization has done very well in knowledge sharing. An integrated system strategy provides a direction for knowledge sharing. Company culture also supports the behaviors of knowledge creation, inquiry, and sharing. Supporting technologies, tools, and equipment are provided to foster communication. A 'good' knowledge sharer means that the organization does well in knowledge sharing. Rating "moderately" knowledge sharer means that even though there are some knowledge sharing culture, there needs to be supporting technologies, flexible guides, maps, processes, and pathways for locating and sharing knowledge. A clearer knowledge sharing strategy needs to be put in place. To be ranked a 'low' or 'very low' level means the culture and environment in the organization resists knowledge sharing. Very little, if any, strategies, technologies, and communication channels for knowledge sharing are present in the organization.

This study will test on the following research hypotheses:

- Hal: There is a positive linear relationship between organizational culture and knowledge sharing.
- Ha2: There is a positive linear relationship between immediate supervisor and knowledge sharing.
- Ha3: There is a positive linear relationship between employee attitude and knowledge sharing.
- Ha4: There is a positive linear relationship between work group support and knowledge sharing.

The researcher conducted an exploratory data analysis (EDA) to check on the normality of the data. The data 'skewness' is within the acceptable range of between +2 to -2. The "Pearson Product Moment" was used to determine the relationship between independent variables and dependent variable. The strength of relationship was based on Guilford Rules of Thumb (1956), ranging from -1.0 to +1.0. A Multiple Regression was used in determining the important predictors of all the independent variables. This method was selected because the researcher wanted to test the predictability of the organizational culture, immediate supervisor, employee attitude and work group support as a group against the knowledge sharing. The importance parameters in the regression analysis were the 'r' and 'r-square'. The r-square provided the percentage of the variance in the dependent variable explained by the group of the independent variables.

## **FINDINGS**

Based on the research results, the organization needs to pay more attention on the organizational facilitation in order to improve its performance on knowledge sharing practiced. The findings also revealed that the four cultural factors have positive and linear relationship (see Table 2 for details). However, among the four factors, the organizational culture has strong relationship (r=.681, p=.0001) and was a good predictor in explaining knowledge sharing. Table 3 shows that the adjusted R square

of 0.507 implies that the two factors (organizational culture and employee attitude) explain about 51% of the variance in the knowledge sharing.

Table 1: Overall Organization Level of Performance in Knowledge Sharing

Criteria	Level	
About Communication Flow	Good	
About Knowledge Management Environment	Good	
About Organization Facilitation	Moderate	
About Measurement	Good	
Overall Score	Good	

Table 2: Correlation Coefficient between Cultural Factors and Knowledge Sharing (n=101)

Contributing Factors	r	p-value
Organizational Culture	.681	.0001
Immediate Supervisor	.571	.0001
Employee Attitude	.623	.0001
Work Group Support	.566	.0001

Correlation is significant at the .01 level (one-tailed)

Table 3: The Estimates of Model Coefficients

Variable	Unstandardized Coefficients (b)	Standardized Coefficients (B)	t p-
value	(1)	(2)	r
Constant .000	1.912	0.681	9.245
B1 (organizational culture) .000	.285	.478	5.115
B2 (employee attitude) .000	.179	.308	3.296
R = .719 F = 52.424	R Square = .517 Sig-F = .000	Adjusted R S	Square = .507

### DISCUSSION

As a conclusion, the organization is positioned as 'good' in knowledge sharing practices. According to Liebowitz and Chen (2001) a 'good' knowledge sharer indicates that the organization's integrated system strategy provides direction for knowledge sharing activities. Moreover, the culture of the organization supports the behaviors of knowledge creation, such as inquiry and sharing. Liebowitz and Chen also asserted that the availability of supporting technologies, tools and equipment in organization also foster communication flow in the organization. However, the study also shows that not all of the organization's facilitative environment were conducive for knowledge sharing. For example, inadequate key expertise limits, the organization's control on knowledge exchange and connection to other networks (other business units or customers). Moreover, it also affects the organization to systematically collect and store knowledge in the organization's repository.

These findings, thus, contributed to an understanding that the organizational culture is the most dominant factor towards knowledge sharing effectiveness. These finding are relatively consistent with previous studies by Chong et al. (2000), and Delong and Fehey as cited in Ardichvili et. al. (2003). This is because an organization which support and encourage knowledge sharing culture, will see its workers freely sharing knowledge without being asked. As indicated by McDermott and O'Dell (2001) an organization with a knowledge sharing culture, its people would normally share ideas and insights because they see it as natural, rather than something they are forced to do so.

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