A Knowledge Management Behavior in Private Colleges

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ABSTRACT

The knowledge management (KM) is a method to manage the knowledge in and to gain the organization's competitive advantage. The KM enables the directors, lecturers, and administration staffs in private higher education to share the knowledge experiences, as well as to build something called 'contamination center', in which the members of the college can share ideas to the others, thus all members could be more creative and innovative. This study intends to examine the knowledge management behavior in Private Colleges at Region IV *(PTS Kopertis IV)*. The study is a survey, with the Private Colleges at Region IV which has been implemented the information system of education as the population. The sampling technique is purposive, with the respondents of full-time lecturers in five-selected Private Colleges at Region IV. Observation, interview, and questionnaire are used in data collection technique. The conclusion is that the five-selected Private Colleges at Region IV have been implementing the knowledge management effectively in knowledge creation, sharing, application, and protection.

Keywords: knowledge, knowledge management, knowledge sharing

1.   INTRODUCTION

UNDP, in its Human Development Report 2005, reports that Indonesia Human Development Index (HDI) is at the 110th rank from 177 countries all over the world. Nevertheless, the rank decreased from the prior years, in which in 1997 the Indonesia HDI was at 99th rank, it decreased to the 102nd and 111th in 2002 and 2004, respectively. In 2006, the results of a survey by a Sweden research institution, IMD World Competitiveness Year Book, states that in relation to the quality and productivity, Indonesian workforce stands at the 59th rank from 60 countries of the world (Tempo: 2007; 62).

The data from Labor Department also reveals that Indonesia is still low in the educational level of human resources (53 percent are elementary school or lower), in productivity (as indicated by unemployment of educated workforce and the minimal inventions or applied research results in science and technology), and in competitiveness. As a result, those conditions affect the economic performance. Hence, IMD-World Competitiveness Year Book discloses that, from the 60 countries, Indonesia economic performance stands at the 60th rank, or the lowest rank.

According to Hilmawan (2008), the conditions of colleges in Indonesia are as follow: (1) Colleges are still perceived as a source of knowledge, ethics, and wisdom values; (2) Professors and lecturers gain very small wages so that they need extra incomes from some other sources and activities, which misappropriate their time as an educator, and hence affect their educational services; (3) Private colleges are surrounded by diverse problems: they are operating in ineffective and inefficient ways, e.g., low attendance of lecturer, unemployment of graduates, and unresponsive curriculum to the requirements of job market; (4) The procedures of teaching-learning process do not meet the quality standards; and (5) The credibility of colleges has not satisfied the stakeholders or public at large.

According to a meeting on socialization of Private Colleges (PCs) at Region IV in 2009, there are several problems faced by the PCs at Region IV.

Those problems are low gross enrollment rate (West Java, 7.4%), high unemployment of graduates, insufficient academic rank (the number of professors is still under 1%), low academic titles of lecturers (master 40%, doctoral around 200), low productivity of lecturers (only approximately 0.08 papers per one million populations), various internal conflicts in private colleges, disorderliness of administration, and violations of implementation of teaching-learning process.

Based on the problems above, the research on knowledge management behavior modeling on PCs at Region IV is needed. The focus of this research is to describe and analyze the behaviors of knowledge management in PCs at Region IV.

2.   LITERATURE REVIEW

2.1.   Definition of Knowledge Management

There are several definitions of knowledge management from different experts. According to De Long and Fahey (2000), "The purpose of KM is to enhance organizational performance by explicitly designing and implementing tools, processes, systems, structures, and cultures to improve the creation, sharing and use of different types of knowledge (human, social, structural) that are critical for decision-making". Meanwhile, Sveiby (2001) suggests that knowledge management is a dynamic approach to managing critical business knowledge optimally in order to increase the values of a company's intangible assets. Moreover, Beijerse (2000) defines knowledge management as the management of information in an organization by directing strategies, structures, cultures and systems, and the capacity and attitude of humans by paying an attention to their knowledge. This is an achievement of organizational goals by generating productive knowledge factors.

Thus, it can be proposed that knowledge management is a knowledge-based management process, intended to create those facilities and environment that support the processes of creating, sharing, applying, and protecting knowledge in an organization.

2.2.   Knowledge Management Process

According to WP2 Partners (2002), Knowledge Management Process consists of: Knowledge Generation, Knowledge Representation, Knowledge Storage, Knowledge Access and Transfer knowledge. There are 3 elements of a knowledge management process: (1) knowledge creation, (2) knowledge transfer/sharing, and (3) knowledge utilization (Dalkir, 2005) :

(1) *Knowledge Creation*. Knowledge creation, according to Nonaka and Takeuchi (1995) is, for example, a research of individual lecturers in a university. Knowledge creation can be facilitated by a job design, e.g., by assigning some tasks to working teams rather than individuals (Mohrman, 2003). Given the importance of the knowledge creation, it needs a research to comprehend how organizations can be grown and developed.

(2) *Knowledge Transfer/Sharing*. Gaining or creating knowledge is crucial for any organization to be competitive in a knowledge-based economy. However, the processes cannot ensure a success. For an organization to gain an optimal advantage from its employee's knowledge, their knowledge should be shared. Knowledge sharing consists of (Nonaka, 2007; Noe, 2003):

a. Socialization: a conversion from a tacit knowledge to another tacit knowledge or an employee's new idea (tacit) is socialized or tried to be utilized together with other employee's experience (tacit).
b. Externalization: a conversion from a tacit knowledge to explicit one, where the success of prior tacit knowledge is converged to an explicit knowledge or the knowledge undergoes crystallization so that it may be shared to others.
c. Combination.
d. Internalization: a conversion from an explicit knowledge to a tacit knowledge, that is the ready-to-use explicit knowledge is shared throughout the organization and converted to a tacit knowledge by all individuals to be utilized routinely and applied in their work.

(3) *Knowledge Utilization*. According to Saito et al. (2007), knowledge utilization can be defined as knowledge application, in forms of document management, groupware, and e-Learning.

According to Gold et al (in Hsu, 2006) and Nguyen, et al. (2009), there are four keys in a Knowledge Management process:
a. Knowledge Acquisition: collecting knowledge, searching new knowledge and generating new knowledge from existing one (redesigning knowledge).
b. Knowledge Conversion: a capability to detect knowledge to be more useful.
c. Knowledge Application: making effective saving and retrieval, and enabling the organization to quickly access the save the knowledge.
d. Knowledge Protection: designed to protect knowledge in an organization from being illegally accessed or from stealing.

Based on the description above, it can be said that, in general, a knowledge management process consists of knowledge creation, knowledge sharing, knowledge application and knowledge protection.

2.3.   Benefit of Knowledge Management

According to Suryadi (2007), the benefits of knowledge management implementation in organization are:
1. Collect—storage, update, and continuously improve the practical knowledge details from all professional and worker levels.
2. Access—develop the employee knowledge, record and storage; can be accessed easily anytime.

3. Sharing and empowerment—knowledge management can be shared easily.
4. Business opportunity—any similar business put an interest to buy the knowledge management of concerned business, as a standard benchmarking of method to employee and the operators.

The benefit gained by an organization applying knowledge management is shown in the figure below.
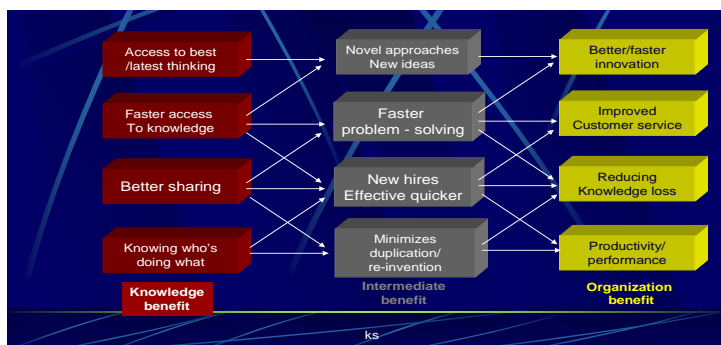

Figure. 1. The Advantages of Knowledge Management
Source: Suryadi, 2007

2.4.   Knowledge Management Modeling in Organization

There is a conceptual model of knowledge management that can be applied to an organization, by presenting six phases of knowledge learning (Lustri, 2007), as shown in Figure 2:
1. Creation of common meaning or vision of the objective of knowledge development
2. Provision of information
3. Induction of internal processing for the creation of individual learning
4. Conversion of individual knowledge into group learning
5. Sharing of knowledge to other organizational levels
6. Practical application of knowledge

Figure. 2. From Individual Knowledge to Organizational Knowledge
Source: Lustri, 2007

3.   METHODOLOGY

The population in this research is PCs at Region-IV, which have applied an educational information system.   The sample collection technique used is purposive sampling. The respondents are full time lecturers as the sample or pilot project in five-selected PCs at Region-IV.   The full-time lecturers in five-selected PCs at Region-IV are 1,858. Using a proportional simple random sampling, the amount of sample is 329 lecturers.
This research is descriptive survey.   The data collections used are observation, interview, and questionnaire, in which validity and reliability of the instruments have been tested.   Based on validity analysis, all of the items could be used as instrument. Therefore, all items can be used to measure the instrument of knowledge management.

4.   RESULT AND DISCUSSION

According to WP2 Partners (2002), knowledge management activities involve the effective management process, in which the activities carried out in accordance with the objectives, according to a set plan.   The knowledge management activities can be said to be effective, if managed properly.

Essentially, majority of the behaviors of knowledge management in the five-selected PCs at Region-IV were in good condition.   It means that majority of them have implemented knowledge management activities effectively.   The behaviors in creating, sharing, applying, and protecting their knowledge was in good condition.   To find out the behaviors of knowledge management in detail from the five-selected PCs at Region-IV, they were described by using a descriptive analysis (qualitative), broken down by sub-dimensions of knowledge management, namely knowledge creation, knowledge sharing, knowledge application and knowledge protection.

4.1.   Knowledge Creation

The descriptive analysis on Knowledge Creation and its sub-dimensions (acquire knowledge, creating knowledge, and redesigning knowledge) is summarized as follows:

Table.1. Average Responses of Respondents on Knowledge Creation

SUB DIMENSIONS	RESPONDENTS (%)			TOTAL
	SA/A	N	DA/SDA	
Acquire Knowledge	73.25	20.52	6.23	100
Creating Knowledge	73.05	21.68	5.27	100
Redesigning Knowledge	73.71	17.63	8.66	100
Average	73.34	19.94	6.72	100

Source: data processing from Questionnaire, 2011

Based on table 1, a majority of the respondents note that they agreed and strongly agreed upon knowledge creation.   Thus it could be said that the five-selected PCs at Region-IV have implemented knowledge creation activities effectively, which means that the knowledge creation has been programmed and implemented routinely.   In this way, they have implemented the activities to gain, create, and redesign knowledge effectively.   The activities to gain knowledge includes, among others, benchmarking/

comparative study and invitation of relevant competent experts. The results of this research is in accordance with Nonaka (2007), that in order to acquire knowledge of the organization, it can be done by listening to the voice of the customer, and get it from places or organizations.

The activities of creating knowledge were conducted by researches, conferences, and workshops. Moreover, knowledge redesign was conducted by a job redesign of outdate rules and by updating information and adapting it as necessary.

It could also be seen that there was still 19.94% respondents, which are categorized as "neutral/unsure". This was because there were still some lecturers who have not yet gained clear information on the activities that the conducted by university level, and some lecturers knew only the activities that their study program or faculty were conducting the activities, which were incidental in nature, as in a framework of curriculum development in individual departments.

4.2.   Knowledge Sharing

The descriptive analysis on Knowledge Sharing and its sub-dimensions (knowledge socialization, externalization, combination, and internalization) is summarized as follows:

Table. 2 Average Responses of Respondents on Knowledge Sharing

SUB DIMENSION	RESPONDENTS (%)			TOTAL
	SA/A	N	DA/SDA	
Socialization	60.73	25.59	13.68	100
Externalization	63.98	32.22	4.20	100
Combination	61.50	30.40	8.10	100
Internalization	54.37	20.52	6.23	100
Average	60.14	27.18	12.8	100

Source: data processing from Questionnaire, 2011

In table 2, it was shown that the greatest part of respondent's note that they agreed and strongly agreed upon knowledge sharing. Thus, it could be said five selected PCs at Region-IV have already implemented knowledge sharing activities effectively, which means that the activities have been programmed and implemented routinely. In this way, the five-selected PCs at Region-IV have implemented the activities of knowledge socialization, externalization, combination, and internalization effectively. The activities of knowledge sharing are: socialization through both formal and informal activities, such as training, joint exercise, coffee morning, joint recreation; Externalization through printing media, namely, scientific journals, scientific magazines, and electronic media; Combination through document sharing among working units and document distribution to each working unit; and Internalization through intranet and internet media.

The results are consistent with the opinion of Nonaka (2007); Mondy and Noe (2006) that knowledge sharing through socialization activities, undertaken with the aim to provide information, to exchange ideas, experiences and expertise, and can be done by means of formal and informal meetings. It also is in accordance with the opinion of Pariokh, et al (in Aulawi, 2009), which states that externalization is the process of converting tacit knowledge into explicit knowledge, through the process of documentation, such as ideas and or expertise into written form.

It could also be seen that the percentage of those respondents who stated as "neutral/unsure" was considerably high, 27.18%. In this case, several lecturers had not known clearly information on the activities of knowledge sharing that were conducted at the university level, and some lecturers knew only the activities were conducting by their study programs or faculty, which were incidental in nature, as in a framework of curriculum development in individual departments.

4.3. Knowledge Application

The descriptive analysis on Knowledge Application and its sub-dimensions (knowledge storage and accessing) is summarized as follows:

Table. 3. Average Responses of Respondents on Knowledge Application

SUB DIMENSIONS	RESPONDENTS (%)			TOTAL
	SA/A	N	DA/SDA	
Storage	57.98	34.12	7.88	100
Access	60.79	30.70	8.51	100
Average	59.39	32.41	8.20	100

Source: data processing from Questionnaire, 2011

It was shown in table 3 that a majority of the respondents notes that they agreed and strongly agreed upon knowledge creation. Thus, it could be said that the five-selected PCs at Region-IV have applied their knowledge effectively, which means that it has been programmed and implemented routinely. In that case, they have stored the knowledge effectively so that the organizational members of the PCs could easily access the knowledge. The knowledge application they conducted was stored in both hardcopy and softcopy. It should be remembered that the respondents who stated as "neutral/unsure" were considerably high (32.41%). The reason of this condition was that because there were still some lecturers who have not yet gained clear information on the data saving system (hardcopy and softcopy) conducted by the rector bureau (university level).

4.4. Knowledge Protection

The descriptive analysis on Knowledge Protection and its sub-dimensions (protection quality and intellectual property rights) is summarized as follows:

Table.4.   Average Responses of Respondents on Knowledge Protection.

SUB DIMENSIONS	RESPONDENTS (%)			TOTAL
	SA/A	N	DA/SDA	
Protection Quality	60.94	31.54	7.52	100
Intellectual Property Rights	62.61	30.09	7.30	100
Average	61.78	30.82	7.40	100

Source: data processing from Questionnaire, 2011

It was shown in table 4 that a majority of the respondents said that they agreed and strongly agreed upon knowledge protection implemented by the five-selected PCs at Region-IV. It could be said that they have implemented protection of their knowledge

effectively, through the quality of its protection, the availability of software and data that it can access only by the authorized parties and recorded in use, and easiness in receiving HAKI (copyrights). It should be remembered that those respondents who stated as "neutral/unsure" were considerably high (30.82%). The reason of this condition was there were still some lecturers who have not yet been active in conducting scientific writings, so that they have not fully known the activities of knowledge protection conducted in the university level.

5.   CONCLUSION

It could be concluded that, in general, the behavior of knowledge management in the five selected PCs at Region-IV is in good condition, which means that they have implemented the activities of knowledge management effectively. Their behaviors in creating knowledge, by gaining/obtaining, creating, and redesigning knowledge have been implemented effectively. Then, the knowledge sharing, by socialization, externalization, combination, and internalization, has been implemented effectively. Furthermore, the knowledge application through saving in forms of hardcopy and softcopy and data accessing has been implemented effectively. Subsequently, the PCs have provided protection to their knowledge effectively, from the aspects of its protection quality and easiness in receiving HAKI (copyrights).

6.   RECOMMENDATIONS

Based on the research result, the researcher proposes some recommendations to the five-selected PCs at Region-IV in general must be preserved and increase their KM activities by considering activities as follows:
1. Knowledge application by data storages and organize information systematical in such a way that the member of organization can easily access those data and information.
2. Knowledge protection by software availability and management of HAKI (copyrights) from the governmental institution.

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