Phenomenon of Knowledge Management Implementation in an Organization

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Abstract

Knowledge management (KM) is a combination of people, processes and technology to manage the knowledge conducted continuously that produces creativity and innovations that help the company’s strategy in the global competition. This article discusses the concept and implementation of knowledge management within the company. Besides, it also discusses the relationship between the environmental organizations and the individual’s perception of the use of knowledge. It was found that the cognitive aspects of knowledge management and enterprise environments have insignificant influence on individuals to gain new knowledge. However, the cognitive aspects of knowledge management, the company and the individual activities to gain knowledge provide a significant influence on the use of knowledge to get the job done.

Keywords: knowledge management, cognitive, behavior, contextual

1. Introduction

Knowledge is a basic needs for any individual [1]. If someone does not develop his/her knowledge then the person can’t solve his/her problem. Complexity of problem will grow and change every day, so it requires knew knowledge to solve the new problem. Only people who are willing and able to learn to acquire new knowledge to be able to survive in the ever-changing nature. It is also valid for the company, company will not be able to survive and disperse if these individual are not willing and able to study for a new knowledge.

Alvin Tofler in his book The Third Wave (1980), divides human civilization into three changes, namely manual era, machine era and knowledge era. Currently we are in the era of knowledge, where science is very dominant in managing an organization. The competitive ability of an organization is determined by how the quality of the knowledge possessed could be realized in the form of products/services and activities of the organization’s business processes. Organizations that are able to manage his
knowledge (tacit and explicit) well and internalize the knowledge that in any activities of the organization will have an impact on efficient production process and produce a quality product or service.

According to Collison and Parcell in their book ‘Learning to Fly’ explains that the knowledge management includes three aspects, namely people, technology and processes [2]. Hence the success of knowledge management can not only base humans and technology, but also use these three components must be in balance.

The main factor of successful KM implementation is information technology that supported by the process of search, storage, and retrieval knowledge. Even though cultural factors are also very important, because sharing knowledge is needed to motivate and to improve willpower [3].

2. Problem Statement

As described in previous sections (Introduction), it can be concluded that many factors affect the successful implementation and utilizing knowledge management. Likewise, any type of organization with or industries have different characteristics. Therefore, the authors wanted to know some things related to the management and use of knowledge management in the education industry. There are two issues to be discussed in this article, namely:

1. How to influence the individual’s cognitive knowledge and activities/business organization of the activity of individuals to acquire new knowledge

2. Is the cognitive knowledge of KM, the activity of the organization, and individual activities to gain knowledge has a significant influence on the use of knowledge for completing the given problem or task.

3. Literature Study

Knowledge Management is an set of organizational tool that used to achieve its objectives and to innovate by creating, acquiring, integrating, and sharing of knowledge in the form of information, insight, idea, wisdom, thoughts, and experience of all members [4]. Many factors can be identified that supporting to implementation of knowledge management. R. G. Smith have been identified 6 pillars of sustainability knowledge management, namely business value focus, people, process, content, technology, and execution. For more detail of its can be explore as [5]:
1. Business value focus, address a compelling business need, opportunity, or core corporate value. This is essential for gaining management support and for maintaining momentum across the organization. Managers and individual contributors must see the value of supporting a KM program.

2. People which are able to change the work environment of people to one in which knowledge sharing is the norm

3. Process, Put in place clear processes so that stakeholders understand how they are expected to share and re-use information and knowledge and how they can get help.

4. Content, Visible management support and attention to managing the change in the work environment give a new knowledge management implementation a chance to succeed

5. Technology is the essential enabler. Without good technology, investments in the other areas will be wasted. Your KM program is not likely to be sustainable without technology that delivers the functionality needed by stakeholders. People are busy. They have neither the time nor the patience to fight with inadequate technology. Technology must be easy-to-use, integrated and secure

6. Execution, define and track metrics that make sense to both business managers and individual contributors. Focus your internal work on high-value activities that cannot be outsourced.

**Figure 1:** Critical success factor of implementation KM [4].
Along with the globalization in any fields, the problems faced by the company will be more complex. New knowledge is needed to solve the new problem. There are several scenarios for creating new knowledge, namely [6]:

1. **Socialization** mode refers to the conversion of tacit knowledge to new tacit knowledge through social interactions and shared experience.
2. **Combination** mode refers to the creation of new explicit knowledge by merging, categorizing, reclassifying, and synthesizing existing explicit knowledge.
3. **Externalization** refers to converting tacit knowledge to new explicit knowledge and
4. **Internalization** refers to the creation of new tacit knowledge from explicit knowledge.

The scenario for creating new knowledge can be explain in Figure 2.

![Figure 2: Methods of new knowledge creating.](image)

The raise of institution’s performance can be increased if the attitude of educators that use knowledge sharing is well taken care of. Attitudes can be formed from the knowledge gained from personal experiences, information, influential people in the organization, as well as group and its culture [7].

**4. Method and Model of Research**

This study uses primary data obtained by distributing a questionnaire. There are four (4) group questions in the questionnaire, namely: cognitive aspects of about knowledge management (K1), the activity of the organization to the creation of knowledge
(K2), the activity of the individual to create knowledge (K3) and the last is the utilization of knowledge management to solve problems or tasks assigned (K4). K1, K2 and K3 are categorized as independent variables and K4 as the dependent variable. For analysis processing, the model of this study can be described as Figure 1.

![Figure 3: Research model.](image)

5. Result

As mentioned earlier, this study uses primary data. Therefore do some testing to determine the quality (goodness) data that includes reliability and validity of the data [8]. According to Sakeran, to determine the reliability can be tested using Cronbach’s Alpha with the critical value of 0.6. Then proceed with the analysis of factors before analyzed by regression to see how North the influence of the independent variable (K1, K2, and K3) the dependent variable (K4).

<table>
<thead>
<tr>
<th>Variable</th>
<th># Indicator</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>K1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>K2</td>
<td>5</td>
<td>0.824</td>
</tr>
<tr>
<td>K3</td>
<td>7</td>
<td>0.881</td>
</tr>
<tr>
<td>K4</td>
<td>13</td>
<td>0.894</td>
</tr>
</tbody>
</table>

The reliability of test results can be summarized as Table 1. The larger the value of Cronbach’s Alpha then the data is, the better. Thus it can be said that K2, K3 and K4 have great reliability because the value of Cronbach’s Alpha are all greater than 0.8.
After reliability test done then proceed with the analysis factorial. This analysis was conducted to determine whether a feasible indicator to be analyzed by looking at the value of matrix components [8]. If the indicator is not eligible for analysis (matrix component value < 0.6) must be removed from the indicator variable.

### Table 2: Matrix component values.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator Label</th>
<th>Matrix Component Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>K1</td>
<td>P</td>
<td>-</td>
</tr>
<tr>
<td>K2</td>
<td>X1, X2, X4, Y18, Y19</td>
<td>0.779, 0.711, 0.852, 0.698, 0.766</td>
</tr>
<tr>
<td>K3</td>
<td>Y2, Y3, Y4, Y6, Y7, Y8, Y9</td>
<td>0.701, 0.809, 0.849, 0.724, 0.821, 0.796, 0.676</td>
</tr>
<tr>
<td>K4</td>
<td>Y1, Y12, Y14, Y15, Y16, Y17</td>
<td>0.650, 0.690, 0.768, 0.699, 0.801, 0.674</td>
</tr>
</tbody>
</table>

To test the effect of independent variables on the dependent variable is done by using the analysis of regression with regression model as follows:

1. K4 = K1, K3, K4: this model is used to see how they affect cognitive abilities, the company’s environmental conditions and activities of individuals to use knowledge to solve problems.

2. K3 = K1, K2: this model is used to determine whether the cognitive abilities of individuals and environmental organizations give significant influence on the activity of individuals to build knowledge.

From the results of the analysis of regression obtained the following results:
From the aforementioned table it can be concluded that the K1, K2, K3 and K4 significantly affect the percentage of influence by 65%, while 35% are influenced by other factor. The model of two unattractive analyzed for K1 and K2 does not have a significant effect on K3.

### 6. Discussion

According to Crish Collison in his learning to fly, knowledge management is a holistic models, in which there is a combination between processes, technology and people [2]. There are two kinds of knowledge, namely the explicit knowledge and tacit knowledge. Explicit knowledge is kind of knowledge that is easily documented, while tacit knowledge is something we know but can’t explain [9]. Tacit knowledge is difficult to be shared and transferred to others. Points of tacit knowledge that is on the head ‘head’ of each individual. Required more effort extra if you want to divide tacit knowledge with others, not as explicit knowledge that is relatively easier.

Science is a fundamental requirement [1], it is supported by the results of this study. From the results of model testing $K_3 = K_1$, $K_2$ obtained information that the cognitive abilities and the company’s environmental conditions do not significantly affect the activity or individual enterprises to seek new knowledge. If the individual had realized that knowledge is a fundamental requirement, it is in any way an individual will seek to acquire new knowledge. However, the process to obtain new knowledge will be faster if it is supported by the positive condition of the environment in which the individual resides.

According to Collins and Parcell, knowledge management includes three components, namely human, process and technology. This is in line with the results of model testing $K_4 = K_1$, $K_2$, $K_3$ which provide information that $K_1$, $K_2$, $K_3$ and $K_4$ significantly affect. This means cognitive, environmental companies in the form of corporate activity that helped create new knowledge and effort of individuals to acquire new knowledge provides a significant effect to use the knowledge possessed by individuals for completing the problem or work to be done.

### Table 3: Regression analysis result.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>$K_4 = K_1$, $K_2$, $K_3$</td>
<td>0.649</td>
<td>9.725</td>
<td>0.000</td>
</tr>
<tr>
<td>$K_3 = K_1$, $K_2$</td>
<td>0.133</td>
<td>0.369</td>
<td>0.694</td>
</tr>
</tbody>
</table>
In this era, the key competencies (core competency) an organization built by combi-
ning the tacit and explicit knowledge [10]. Thus the competence of educational insti-
tutions especially universities can be seen from what percentage of college graduates
in question are absorbed by the market and how many scientific papers are produced.
It could be achieved if knowledge management in the higher education executed
properly.

7. Conclusion

From this article it can be concluded that;

1. a person’s desire to gain knowledge could happen if people or individuals within
these organizations exist willing and able to change. Due to external factors
did not prove a significant impact on the activities of the individual to acquire
knowledge.

2. The use of knowledge in the organization is significantly affected by the variable–
variable. Therefore, the challenge and the opportunity for individuals to spur the
development of knowledge in universities.

This research is still many limitations, such as the number of samples and the sam-

dles were only taken from a homogeneous institution, namely high education. Sugges-
ted for further research done by taking samples from a variety of industries, such
as banking, manufacture, and others. Thus, it is expected to be obtained new findings
that will give development of knowledge management science.

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