KnE Social Sciences

Knowledge E
Engaging minds

Conference Paper

Phenomenon of Knowledge Management Implementation in an Organization

Heri Yuliyanto

Accounting Study Program, Vocational Program of Universitas Indonesia

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

Corresponding Author:
Heri Yuliyanto
heri.aqwam@gmail.com

OPEN ACCESS

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.
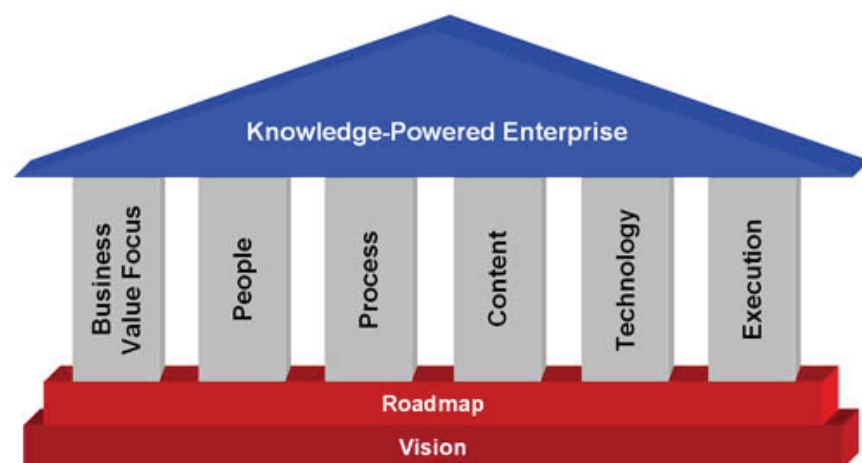

Figure 1: Critical success factor of implementation KM [4].

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.

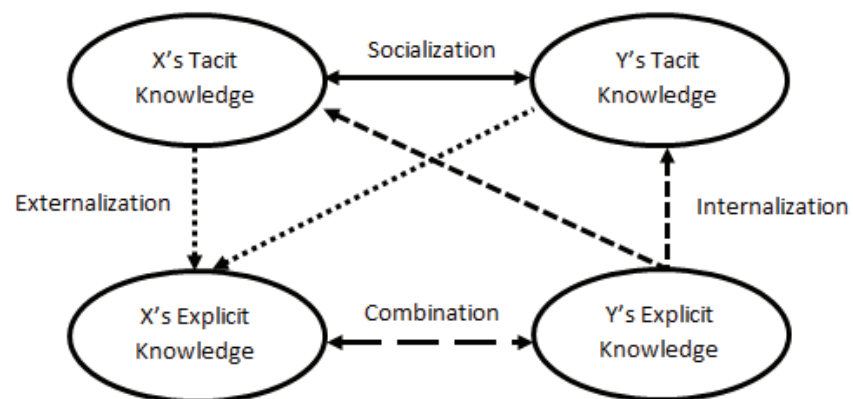The scenario for creating new knowledge can be explain in Figure 2.

Figure 2: Methods of new knowledge creating.

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.
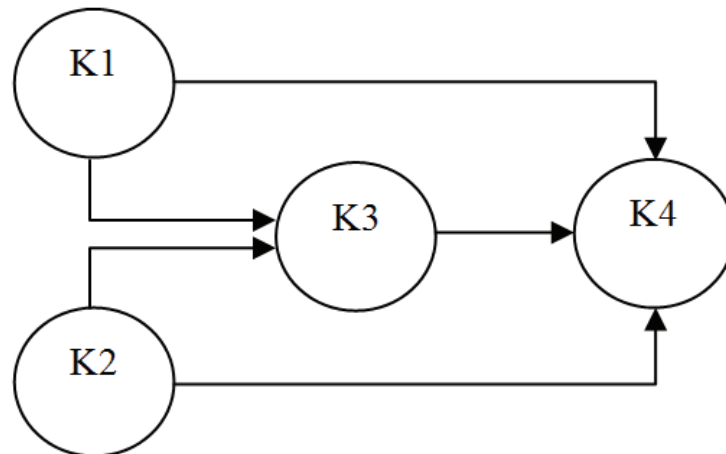

Figure 3: Research model.

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 1: Cronbach's alpha values.

Variable	# Indicator	Cronbach's Alpha
K1	1	-
K2	5	0.824
K3	7	0.881
K4	13	0.894

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: Matric component values.

Variable	Indicator Label	Matric component Value
K1	P	-
K2	X1	0,779
	X2	0,711
	X4	0,852
	Y18	0,698
	Y19	0,766
K3	Y2	0,701
	Y3	0,809
	Y4	0,849
	Y6	0,724
	Y7	0,821
	Y8	0,796
	Y9	0,676
K4	Y1	0,650
	Y12	0,690
	Y14	0,768
	Y15	0,699
	Y16	0,801
	Y17	0,674

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:

Table 3: Regression analysis result.

Model	R	F	Sig
K4 = K1, K2, K3	0,649	9,725	0.000
K3 = K1,K2	0,133	0.369	0,694

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 K3 = K1, K2 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 K4 = K1, K2, K3 which provide information that K1, K2, K3 and K4 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.

In this era, the key competencies (core competency) an organization built by combining the tacit and explicit knowledge [10]. Thus the competence of educational institutions 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 samples were only taken from a homogeneous institution, namely high education. Suggested 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.

References

[1] Jann Tjakraatmadja Hidayat dan Donald Crestofel Lantu (2006). Knowledge Management dalam Konteks Organisasi Pembelajar, Sekolah Bisnis dan Manajemen (SBM) Institut Teknologi Bandung

[2] Chris Collison and Geoff Parcell (2004). Learning to Fly: Practical Knowledge Management form Leading and Learning Organizations, Capstone Publishing Limited.Turban, Efraim dan Jay E. Aronson (2001). Decision Support System and Intelligent System, Sixth Edition, Prentice Hall International, Inc.

[3] Siti Rohajawati, Astrid Sugiana, Dana I. Sensuse, Yudho G. Sucahyo, & Sofian Lusa (2014). Identifying Components Knowledge Management for e-Health (Case Study:

Mental Hospital, Indonesia), 2014 2nd International Conference on Technology, Informatics, Management, Engineering & Environment Bandung, Indonesia, August 19–21, 2014

[4] Gooijer and J. De, "Designing a knowledge management performance framework," Journal of Knowledge Management, vol. 4. pp. 303–310, 2000.

[5] R. G. Smith, "Critical Success Factors: Pillars of Sustainable Knowledge Management," [Online]. Available: http://www.reidgsmith.com/Critical_Success_Factors. htm Last accessed: September 10, 2016

[6] Turban, Leidner, McLean, Wetherbe (2008), Information Technology For Management 6th Edition, John Wiley & Sons, Inc

[7] Sofiyanti Indriasari, Dana Indra Sensuse, and Elin Cahyaningsih, Factors Affecting Knowledge Sharing and Its Effect on Performance of Vocational Higher Education of Agriculture in Java,. ICACSIS 2015

[8] Uma Sakeran, (2003). Research Methods for Business: A Skill Building Approach. Fourth Edition, John Wiley & Sons, Inc

[9] Tanin Kaweevisultrakul and Peng Chan (2007). Impact of Cultural Barriers on Knowledge Management Implementation: Evidence from Thailand. Journal of American Academy of Business, Cambrige; Mar 2007; 11,1;ABI/INFOEM Global pg. 303.

[10] Efraim Turban and Jay E. Aronson (2001). Decision Support System and Intelligent System, Sixth Edition, Prentice Hall International, Inc.