

ORIGINAL ARTICLES

The Influence of Technology Utilization Toward Knowledge Management Implementation on Secondary Education Institution

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ABSTRACT

The purpose of the study is to analyze the influence of technology utilization toward knowledge management implementation on secondary education institution. The methodology used in the study is inferential statistic analysis; the measurement of correlation coefficient and t-test. The respondents used as the profession references are teachers, and the sampling technique used is random stratified sampling with 68 people as the respondents based on Slovin technique. The result of the study shows that of technology utilization has a significant and positive influence toward insight management implementation on the study object.

Key words: Technology utilization, knowledge management, education institution.

Introduction

One of the functions of education institution is to have a responsibility in increasing the capacity of education society. Beside for the honor task, on the other hand, education institution must have an adaption ability with various dynamics of advance current in order to increase its existence not to be lost of the modern era. This dynamic can be seen from the three aspects; subject dynamic (subject to teach), administrative dynamic, and management (Daulay, 2007).

These various dynamics are believed to be adopted by the education institution in order to gain its competitive superiority. Simply, it can be stated that the challenge faced by the formal education institution as the education facilitator, especially related to the occurrence of various changes such as a change from uptown society to downtown society, from local economics to global economics, from traditional culture to intercultural, from agrarian society to industry society, from industry society to informative society, from manufacturing business to thought creation business, and other various values change phenomenon, moral, ethics, and culture which frequently replace religion value to be more permissive.

These changes accelerations are under the various phenomenons. One of them is science and technology innovation existence which emerge frequently and produce culture shock, the basic opportunity and unexpected economic, politic reformation and unpredicted cultural social, reborn of universality and religion, even the existence of various new value and culture which are frequently different from cultural system and noticed value system.

To face various dynamics stuff, the education institution must have a will to increase its capacity; one of the capacity increases in the education institution is by implementing knowledge management. Many researches showed that one of the most important parts in implementing knowledge management is technology utilization.

This study is aimed to discuss the influence of technology utilization toward knowledge management implementation on formal education institution of secondary level located in Garut Regency, West Java Province, Indonesia.

Literature Review:

Information technology is a system of medium and infrastructure and method to gain, transfer, access, interpret, save, organize and use the data meaningfully. Therefore, the technology utilization provides many eases in managing information in the meaning of saving, retaking and information updating (Warsita, 2008). Technology support frequently becomes the requirement success knowledge management; technology's role is to make communication getting easier among employees unlimitedly by the distance and time differences.

Supporting knowledge current in order to get accessed fast and easily and facilitating inter-organization members corporation.

Chong and Yeow (2005) identified a knowledge management as a process to increase a skill and proficiency which are supported by information technology. According to Brink (2003), technology condition of knowledge can be defined as technology ability level in facilitating various knowledge activities.

The support of technology facilitation in organization has an important role in encouraging various knowledge activities in organization. The recent development of technology possibly makes an availability of one comfortable facility to save, search knowledge communication. The example of technology support in organization facilitation is by providing groupware, online database, intranet and virtual community. The development of technology is getting faster and cheaper and it stimulates organization to use technology in increasing organization performance. Organization can effectively and efficiently gain and use the technology to support organization activity (Wahjono, 2010). There are information technology functions in education. They can be divided into seven functions as follow: (a) knowledge store; (b) a learning aid; (c) education facility; (d) competence standard; (e) administration supporter; (f) school management aid; and (g) education infrastructure (Warsita, 2008)

The main purpose of technology in education is frequently called as learning/education technology is to solve a problem in learning of facilitate learning activity. Learning technology has a role as a software technology which forms systematic methods in solving learning problem and it's getting sophisticated and has a good response in education field widely (Warsita, 2008). By so, the practical application of learning technology I solving learning problem has a concrete form by the existence of learning source which facilitates the students in student activity.

Methodology:

Methodology used in this research is quantitative model analysis base by using statistic analysis such as correlation coefficient and t-test. Meanwhile, the respondents of the study are teachers as research object and the sampling technique used is stratified random sampling with 68 people according to Slovin technique. For the place of research as the research object used is five formal education institutions which are under one of the education foundation in Garut District, Indonesia. The variable operation used as follow on table 1.

Table 1: Variables Operatinalization.

Variable	Dimension	Indicator
Technology utilization (Brink, 2003)	1. Technology availability	a. The availability of Information technology tools
	2. The ease of Technology using	a. Service providing time b. Consultation service and fixing
	3. The ability of Technology using	a. Technology using experience b. Technology usage education
Knowledge Management (Munir, 2008)	1. Knowledge acquisition	a. Training plan b. Overseas joint c. Knowledge developing facility
	2. Distribution and Various Knowledge	a. Training result presentation b. Information openness c. Apprentice to Senior
	3. Knowledge Development and Utilization	a. Experimental opportunity b. Training result implementation c. Functional cross team
	4. Knowledge maintenance and storing	a. Training result documentation b. Activity documents c. Regulation and document handling procedure

Result And Discussion

According to the result of calculation by using Microsoft Excel software aids, a calculation of the influence of technology utilization variable toward knowledge management implementation served on Table 2.

Table 2: The influence of technology utilization toward knowledge management implementation.

No	Item	Value
1	Correlation coefficient (r)	0.5616
2	Determinant factor (d)	0.3154
3	Epsilon (E)	0.6846
4	t count	5.5145
5	t table	1.6683
6	Influence level of Organizational Culture variable toward knowledge management implementation	significant

According to calculation result, it results coefficient value track 0.5616, this coefficient produced positive value, and it means that technology utilization has a positive influence toward knowledge management implementation. On the other side, it's identified that $T_{count} > T_{table}$ ($5.5145 > 1.6683$), so H_0 is denied, or on the other word, it can be stated that there is sufficient evidence to state that technology utilization has a **significant** and **positive** influence toward knowledge management implementation. Each value increment on technology utilization will increase knowledge management implementation variable value.

The calculation result showed that determinant factor produced 0.3154; it means that Organizational Culture is able to explain knowledge management implementation variable with 31.54%, meanwhile, the rest of 68.46% can be explained by another variable that is not involved in model. The correlation of variable structure is illustrated in Figure 1.

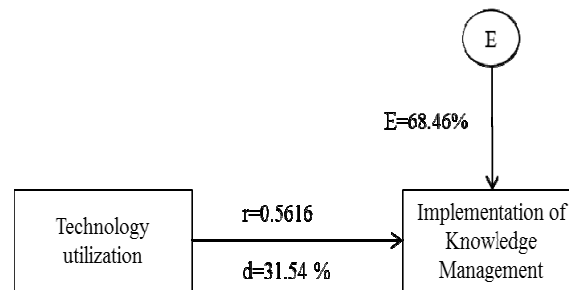


Fig. 1: The influence of Technology utilization toward knowledge management implementation.

Seviby (2001) stated that knowledge management is a practice for choosing knowledge implementation which based on the previous experience to make now or future decision in order to accelerate he development of organization affectivity. Meanwhile Sveiby insisted that knowledge management is an art of value creation from intangible assets. Furthermore, Bergerson on Sangkala (2007) explained that knowledge management is an approach which systematically manages intellectual assets and other information, so it can give the superiority to compete for the company. Knowledge management focuses on the exploitation and assets development on the organization with future point of view and organization goal.

Knowledge management is related to organization affectivity increase. The organization needs to concentrate on the knowledge management because it's believed that knowledge management can give contribution to vitality and success of organization. The attempts are to measure the intellectual capital and to assess knowledge management affectivity which can help organization to comprehend knowledge management widely.

According to Inference statistical analysis which assesses the correlation the influence of technology utilization toward knowledge management implementation results that the technology utilization is influencing positively and significantly toward knowledge management implementation. This is supported by Tobing statement. He stated that technology development has come into human activity aspects and it makes technology utilization is one of enabler of knowledge management. The development of technology with various applications makes the technology becomes the main basic of knowledge management set development (Tobing, 2007).

The result is same as the statement of Setiarso, et.al (2009), he stated that to increase human resource knowledge which is owned by the organization, therefore, technology has an important role as a supporter or facilitator in implementing knowledge management.

According to the observation result on research object, it can be seen that by using technology is an approach in providing access to various information and ability to discover, create, gain and spread the important knowledge for organization, and it can give an important contribution in implementing the strategy of knowledge management.

In knowledge management context, the main function of technology infrastructure is to facilitate knowledge sharing and to save explicit knowledge in digital format into organization knowledge repository. This knowledge repository can be accessed by intranet and internet. Meanwhile, for the transfer of tacit knowledge, it is more effective to do by personal interaction, if it's done by online, tacit knowledge must be converted first to be explicit knowledge on digital data format, then it can be shared by the medium and available network (Tobing, 2007).

Conclusion:

The study showed that technology utilization has a positive and significant influence toward knowledge management implementation of formal education institutions as the research object. The result is principally recommending strategic steps which are running by formal education institutions that is especially directing the superiority of education quality which is running by forming learning climate, especially to strengthen Islamic boarding culture in one organization of life. In one society learning system which realizes that the importance of standardization, information, technology, efficiency, professionalism, and makes a meaning and uses each moment in order to be able to have power use in accessing all data sources, on politic, economic, social culture, knowledge, technology and information dimension more attractively and aggressively.

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