

THE BEST FACTORS FOR INFLUENCE KNOWLEDGE SHARING AMONG TEACHERS THROUGH WEBSITE TECHNOLOGY

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Abstract

The purpose of this research is to answer the question and know the problems of implementation the knowledge sharing in an educational organization, that is in the school. This paper is will be explain the the best factors for implementation of knowledge sharing among teachers through website technology. this paper using research methods is study literature review. This researcher is using some previous research, using theoretical frameworks model and using existing research into knowledge management, the model has been constructed by combining, synthesizing and refactoring the factors, which have the most important effects in knowledge sharing using web technologies for the teacher. Knowledge Sharing and Total Quality Management, Enabler in the Knowledge Sharing Process, Investigation of Knowledge Sharing for Teachers, Knowledge Sharing Technology Model, Knowledge Sharing through ICT for Teachers, and Investigating Factors for Knowledge Sharing Using Web Technologies. This research is propose the best factor for successful implementation knowledge sharing among teacher are Task and Policy of Ministry of Education, individual, organization and technology.

Keywords: *Knowledge Sharing, Total Quality Management, Web Technology.*

1. Introduction

Today is technology Era, where the user of technology in the world is growing rapidly. It is an influence from science developing. Information technology development will be influence positive and negative impacts. One of positive impact is the easier to get information and knowledge. With technology easier getting the information and knowledge can directly interaction although from long distance. And information technology can help people to get information or knowledge quickly to do daily activities, so with increasing knowledge of each individual can making the productive. The increasing of knowledge of each individual in an organization is in needed to supporting the organization development, both of private and government organizations. Impact of technology and science development makes a lot of the organization to implement the knowledge management system to developing the organization. Impact from this also influence in education system, the education system should change from the old to the modern system in information technology-based . One of the modern systems to implementation information technology is knowledge management system developing. So that implementation of knowledge management in any areas as advantage competitive.

One of implementation of knowledge management systems is in education area, which is at the school. Propose of knowledge management in schools is between teacher can share his knowledge to make increase teachers ' knowledge, so that by the increasing of teachers' knowledge so that the school is being developed. Implementation of knowledge management in schools is transfer the knowledge or share knowledge among of teachers in that school. Implementation of knowledge sharing in school organization by each teacher will share

knowledge and experience of teach to another teacher. There are many ways to implementation of knowledge sharing management for the purpose of share and distribute the knowledge from a person to others , that are make group discussions , presentations , and write well in blogs , websites , other online media as well as in book form . Knowledge sharing is a very important activity in an organization [1]. Through these activities, all staff of the organization can easily share best practices and experiences, creating a fresh new idea, and saves a lot of time to solve a problem [1]. With the knowledge sharing in schools can create ideas for the advancement of education. Implementation of knowledge management in schools, that the teachers can get new ideas to make new teaching method.

Implementation knowledge sharing that are distributed of knowledge through online media, can make the students can learn more effectively and easily. In the implementation of knowledge sharing through online media usually use a website or blog as a place to sharing and discuss of knowledge. To make the process of knowledge sharing successfully among teachers in schools that the school should provide a good service to support knowledge sharing. The services of knowledge better through the website or blog, but todays any individual or organization already has a website, it is not a problem . Today website is a primary requirement of an organization. Website of an organization use a communication device. Websites can also be a tool for knowledge sharing implementation through online in an organization. So, knowledge sharing easier to implementation between members of the organization without face-to- face at the same time . considering among members of the organization is busy , so that the implementation of knowledge sharing through website is very effective.

Research Problem Identification

Nowadays do knowledge sharing among people who have experience and don't have experience in an organization is difficult, because experience knowledge that is in needed in organization to improve the quality of the organization's members. The teachers and academics have a lot of theoretical knowledge and practical experience, which is one form of knowledge sharing in support of a good quality education service. In some cases in the educational environment in the school, the process of knowledge sharing between teachers or academics sometimes do not work well because there are some problems do share the experience of teaching in class through website . Knowledge sharing among teachers can be doing such as discussions with another teachers to discuss and share about the experience while teaching in the class. And also knowledge sharing can be done by writing in online media such as through a website that explains about the personal experiences of learning process in the class and knowledge update. A good knowledge sharing process between teachers is needed by the school to get a quality of education system. One of form the knowledge sharing are very supportive at today is knowledge sharing through online media. One of the online media who can do the knowledge sharing through the website. Thus, it takes the best factors that influence the success of the knowledge sharing process among teachers through the website so happens that effective knowledge sharing. To be able to answer these problems, the research question is formulated as follows:

1. What the best factor that may affect the success of a knowledge sharing among teacher through website?

Research Objectives

The purpose of this research is to answer the question and know the problems of implementation the knowledge sharing in an educational organization, that is the best factors affect the knowledge sharing among teachers at educational institutions that using website technology. This research author will be propose the best of factors of affect the knowledge

sharing among teacher through website that have been done by previous researchers. So that research can answer the problems and can be useful and implementation the knowledge sharing among teachers in education institutions. The results of this research can be a reference for next research in the factors of knowledge sharing, knowledge management and education.

Literature Review

This section will explain some of the literature review that describes of the knowledge, management knowledge management, knowledge sharing, and some previous research on knowledge sharing and education.

Knowledge

Definition of knowledge such as explain by Xiaohui Yang on his paper [2] Knowledge is defined (Oxford English Dictionary) variously as (i) expertise, and skills acquired by a person through experience or education; the theoretical or practical understanding of a subject, (ii) what is known in a particular field or in total; facts and information or (iii) awareness or familiarity gained by experience of a fact or situation [1][2]. Knowledge is an information have processed. Knowledge acquisition involves complex cognitive processes: perception, learning, communication, association and reasoning. The term knowledge is also used to mean the confident understanding of a subject with the ability to use it for a specific purpose [2]. Another definition knowledge is a fluid mix of framed experience, values, contextual information, expert insight, and intuition that provides an environment and framework for evaluating and incorporating new experiences and information [3]. Knowledge described in some kind according of classification and characteristics. Such as explain [4] knowledge has been categorized as individual, social, causal, conditional, relational and pragmatic (alavi and leidner 2001) and also as embodied, encoded, and procedural (venzin et al. 1998) [4].

Knowledge according of classification and characteristic are three kind :

1. Procedural or Declarative Knowledge

First if type knowledge described according Procedural and Declarative, definition of Procedural Knowledge is knowledge focuses on belief relating sequences of steps or action to desired or undesired outcome [4]. The example of procedural knowledge is the set of justified beliefs about the procedure that should be followed in a government organization in deciding on whom to award the contract for a particular area [4]. But, the Declarative knowledge or substantive knowledge is focuses on beliefs about relationships among variables [4]. Declarative knowledge can be started in the form of propositions, expected correlations, or formulas relating concepts represented as variable [4]. The example of declarative knowledge is all other things being equal [4].

2. Tacit or Explicit Knowledge

The second type of knowledge is tacit and explicit, tacit knowledge is personal, context-specific knowledge that is difficult to formalize, record, or articulate, it is stored in the heads of people [3]. The tacit knowledge consists of various components that developed through a process of trial and error encountered in practice, such as experience, ground truth and belief [3]. The explicit knowledge is that component of knowledge that can be codified and transmitted in a systematic and formal language [3], the typically refers to knowledge that has been expressed into words and numbers [4]. It usually memorizes in the form of words, facts, data, images, and other physical structures, represent as the books, documents, computer programs, patents, databases, web pages, advertising, product brochures, the calculation formula and other objective knowledge [5].

3. General or Specific Knowledge

Third type of knowledge is General and Specifics knowledge, General knowledge is possessed by large number of individuals and can be transferred easily across individuals [4]. The example is knowledge about the rule of baseball can be considered general [4]. The specific knowledge can also call idiosyncratic knowledge, specific knowledge is possessed by limited number of individual and expensive to transfer (Hayek 1945; Jensen and Meckling 1996; Sabherwal and Beccera-Fernandez 2005) [4].

Management Knowledge Management

Knowledge management is the processed of knowledge. Definition of knowledge management such as explain by Yu and Jianmei Zhao, Knowledge management is based on knowledge and intellectual activity as the core of the integrated management, which set the material process aside, take the process of intellectual activity as a study object, study the rules of intellectual activity and build management principles and the corresponding methods and systems hereby, and achieve a variety of enterprise management functions through the knowledge management process [5]. Another definition of knowledge management is knowledge management can be defined as performing the activities involved in discovering, capturing, sharing, and applying knowledge to enhance, in cost-effective fashion, the impact of knowledge management on the unit's goal achievement [4]. The knowledge management has 2 kind of broad aspect; it is knowledge management solution and knowledge management foundations [4]. Knowledge management solution is the specific nature; it is refer to ways in which specific aspect of knowledge management can be accomplished [4]. The knowledge management solutions include knowledge management processes and knowledge management system [4]. The knowledge foundation is broad organizational aspect that supports knowledge management in the short and long time [4]. The knowledge management foundation includes KM infrastructure, KM mechanisms and KM technologies [4].

Knowledge Sharing

The definition of Knowledge sharing is to enable knowledge workers in an enterprise such as knowledge salespeople, knowledge operators, knowledge directors or knowledge managers to share the knowledge of other people or of other parts of the system to solve their problems in work [6] [7]. Awad and Ghaziri [8] defined knowledge sharing as a process of transferring human knowledge about a process or a procedure to others, whether the parties are individuals or organizational unit [9]. [10] Defined knowledge sharing in their study as the process of exchanging knowledge by individuals which may lead to the creation of new knowledge, a process essential in translating the individual knowledge to organizational knowledge [11]. According to [12], knowledge sharing is the process of information transfer where through learning and sharing from fellow workers, the individual capabilities are developed [11]. Knowledge sharing one of important success factors to make good organization. With there is knowledge sharing in organization can make the employer easy to learning about his job and responsibility from his senior at an organization. Knowledge sharing can do by management an organization to share about the organization or company or school to new employer or teacher.

Factors for Knowledge Sharing

There some the success factor to make knowledge sharing success implementation in an organization, company, or school. As mentioned by Tao Li, Lifeng Hou, wei hu in their paper was there is two categorize factor, it is individual factor and organizational factor [13]. According [13] there factors for individual to influence the knowledge sharing are Responsibility, Achievement, Recognition, and Fame [13]. The factor for organizational is Affiliation, Trust, Reciprocity and Collaboration [13]. From the factors above, the achievement is the most influencing factor affecting teachers' knowledge sharing in the individual factor and the Affiliation and Collaboration have significant positive effects on knowledge sharing in organizational [13].

There another success factor to influence the knowledge sharing process, as in the Shu Hui Wee paper's [11] according [14] there 3 important enabler to make the knowledge sharing is successful, it is viewed the knowledge sharing process as enabled by "individual factors", "organizational factors" and the "technology factors". According [11] the definition of Enabler is the mechanism that facilitates knowledge sharing within the organization, and it can relate either to individuals and the whole organization, that is, there is individual enabler or there is organizational enabler.

The individual enablers have three factors [11] [14], it is trust, communication between employees and self-efficacy.

1. Trust

Trust has been defined as the belief and confidence in another individual that result from reliability, honesty and sincerity [15], and it plays an important role in the process of knowledge sharing [11]. One of the most important factors for both employers and employees to exercise knowledge sharing in the organization is to have and maintain trust [16][11]. Trust is very important thing when someone communicates with another.

2. Effective Communication

Effective communication is important within the organization to establish and conduct knowledge sharing [11]. Active communication can help the organization to develop a clearer vision of knowledge sharing expectations [11]. Effective communication between member of organization can make the organization easily know the problem in organization and can make as soon as the solution, it is one of important thing in the organization and relation with knowledge sharing.

3. Self-Efficacy

According [11] the definition of Knowledge self-efficacy is the self-perceived value of importance of shared knowledge to other group members [17], and is one of the factors that an employee would share information, knowledge or expertise with fellow employees [11]. Knowledge sharing and knowledge self-efficacy are important determinants for business performance [18] through the provision of tacit knowledge [19]. The self-efficacy is important thing when the teacher teaching in the class, because teaching is the knowledge sharing process.

According [11] the organizational enablers have two factors such as top management support and organizational reward [14].

a. Top Management Support

The implementation organizational program will be successfully if have the strong support from all member of organization. But, the important support is from top management to make successful the organizational program. Also when the organization what implementation of knowledge sharing must have support from top management. In the school the top management is principal, when the school want to implementation the knowledge sharing between teachers, the principal must be support. According [11] he success of inculcating a conducive knowledge sharing culture in an organization depends highly on the support and

commitment of the top management [20] because employees act in accordance to the direction of the top management [21].

b. Organizational Reward

Organizational reward one of factors to make implementation of knowledge sharing successful, because when member of organization do something good such as share knowledge to another. It is meaning the member have good knowledge about organization, it is the organization must be him the reward for to motivation. According [11] Enhanced organizational resources and extra rewarding working environment would lead to higher information sharing initiatives [22]. Employees are encouraged to share their knowledge willingly with their colleagues when they have high expectations on the organizational benefits from knowledge sharing [14][11].

2. Research Methods

This paper research method is using the study literature review. This researcher is using some previous research, using theoretical frameworks model and using existing research into knowledge management, the model has been constructed by combining, synthesizing and refactoring the factors, which have the most important effects in knowledge sharing using web technologies for the teacher. In this paper using combine between Knowledge Sharing and Total Quality Management, Enabler in the Knowledge Sharing Process, Investigation of Knowledge Sharing for Teachers, Knowledge Sharing Technology Model, Knowledge Sharing through ICT for Teachers, and Investigating Factors for Knowledge Sharing Using Web Technologies. After study and analyzing of the finding and result will be undertaken to discover how the model could be improved to include more effecting factors for knowledge sharing between teachers using web technology.

3. Research Propose

Before proposing a framework CSFs Implementation knowledge sharing between teachers through website, the existing literature has about the factors influence knowledge sharing. In this paper will propose a framework according combination some existing literature, before propose a framework this research analyzing and re-factor of CSFs about knowledge sharing from combination some literature review. All most of researches in the literature, the factors influence the knowledge sharing such in [23] are individual factors, organizational factor, and technology factors. According from [23] the factors of influence knowledge sharing between teacher have five factors, it are task, individual, organizational, technology and policy of the Ministry of Education. The fifth is policy of ministry of education is only able for the knowledge sharing in education department and area, but not able all area. This paper will be proposed a framework success factors about knowledge sharing between teachers through website technology. The success factors the implementation of knowledge sharing between teachers through website technology there are four factors, it is combine from some research have done by researchers and literature review. The success factors for knowledge sharing between teachers through website technology are:

1. Task and Policy of Ministry of Education [23]

This task is a task that is given by a superior to a subordinate. In this case there must be a knowledge sharing assignments from superiors to subordinates till be work as well in an organization. In educational organizations such as school the superior of top management is principal. Task will not work as well among teachers with different schools if there are no instructions from the government. In this case the government is responsible in the education areas is the education ministry. So as to be able to implementation the knowledge sharing till

work as well among teachers should be have a policy from government, that is policy of Ministry of Education.

2. Individual

The success factor to implementation of knowledge sharing is the individual. The people will to share his knowledge must be have the motivation to share his knowledge according [24]. The individual factors very influence knowledge sharing implementation, because if the people don't share his knowledge the knowledge sharing don't work. Some the factors from individual influence to success the implementation of knowledge sharing between teachers through website technology are:

- Motivation

The member of organization will be do the knowledge sharing if have the motivation from organization such as give the score. This motivation have two thing expected from member of organization to something. According from [24] there two expected are Expected Reward and Reciprocal benefit, the meaning expected is The staff will share knowledge because he expect to obtain valuable outcomes. In this case is the teacher will share knowledge because expect value outcome, such as extra payment or increase of his knowledge with his share knowledge.

- Knowledge Self-Efficacy

The definition of knowledge self-Efficacy according [24] is the staff will share knowledge because he believe that he have valuable information that should be shared. Knowledge self-efficacy is the self-perceived value of importance of shared knowledge to other group members [17] [11]. In this case the teacher must have the knowledge self-Efficacy when they share knowledge to another teacher in organization.

- Trust

The definition of trust according [11] Trust has been defined as the belief and confidence in another individual that result from reliability, honesty and sincerity [15], and it plays an important role in the process of knowledge sharing. Another definition according [24] the degree of staff „s believe that other members are honest and have valuable and useful knowledge to share. In this case the teacher when share his knowledge must be trust. So, one of important factors knowledge sharing among teacher is trust.

3. Organizational

Organizational factor is a factor that is very affects in the implementation of an activity or planning of organization. Organizational factor is one of main factor in all programs in an organization. Management in an organization is very important to achieve the goal of organization. Also in implementation of knowledge sharing in an organization . In implementation of knowledge sharing in the organization of top management support or leader in an organization is very influencing the implementation of knowledge sharing in the organization . In the implementation knowledge sharing in organization, the leader should be advocates for each member to do the knowledge sharing among the member of organization. With there is support from the organization can make the member of organization have the spirit and motivation to do knowledge sharing among member of organization . In this case the organization in the education field is school, while teachers are members of the organization. there are two factors that influence the successful implementation of knowledge sharing in the organization are :

- Top Management or Principal

According [11] of successful the knowledge sharing among member of organization must be have support from top management. Such as explain by [11] In order to successfully attain the strategic goals of the organization, top management must ensure that clear and complete information is properly communicated to managers, who are involved in decision making [25].

In this case the support from principal of the school to implementation of knowledge sharing among teachers is very important factors.

- Organization Reward

If the organization have the organization reward for do knowledge sharing, it is make the member of organization motivation to do knowledge sharing. In this case of teachers will be do share his knowledge if there some organization reward.

- Affiliation

The definition of Affiliation according [9] Affiliation is explained as the perception of a sense of togetherness among an organization's members. Affiliation may encourage knowledge sharing activities if two parties, the sender and the receiver, volunteer themselves to participate in the knowledge sharing activities [26] [9]. In this case of teachers have must be affiliation among another teachers to successful implementation of knowledge sharing.

- Technology

Nowadays, the technology is very important, technology use in any field in the organization. Now is a technology era. Any activity use technology to get the goal of the organization such as using technology to get information quickly and technology as advantage competitive in organization. The information and knowledge also very important as technology combine the technology and information very important in technology era. To adaption of this era much organization or company uses the technology to get knowledge and to get the goal. Knowledge of member organization is the important asset in organization. As to save it needed a technology to support that. One of the strategy to propose to save the knowledge from member organization, many organization implementations the knowledge management such as knowledge sharing, knowledge capture through technology. In this case technology is an important factor in implementation of knowledge sharing in organization. Such as explain by [24] When staff feel the technologies can be used in an easy way, it is more probable that they will present their knowledge. In this case when the teacher fell easy to use technology to share his knowledge, they will motivation to share his knowledge anytime and anywhere. So, to successful the implementation of knowledge sharing among teachers through website, the teacher must have knowledge about the website technology, perceived usefulness the website technology, and perceived easy to use of website technology.

There are three factors that influence the successful implementation of knowledge sharing in the technology are:

1. Knowledge Technology

According [24] The success of KM is commonly based on implementation of new IT-based systems. Staff codifying and sharing knowledge by a system are required to be familiar with using the system or there is assistance for users who are unfamiliar with IT [24]. In this case the successful implementation of knowledge sharing among another teachers is the teacher is knows about the technology and familiar with technology use. So, the teacher mush have knowledge technology such as in this case mush know website technology.

2. Perceived usefulness

Definition of Perceived usefulness is The degree to which staff believes that using particular system would be enhanced to share knowledge [24]. The teacher is believes that using the particular system, that is using the website technology would be enhanced to transfer and share knowledge among teachers.

3. Perceived ease of use

Definition of Perceived ease of use according [24] the degree to which staff believes that using particular system would be free of effort to share knowledge. In this case the teacher

believe that using the website technology would be free of effort to transfer and share his knowledge among another teachers.

4. Conclusion

Finally, the best factors to implementation of knowledge sharing among teachers through website technology are four the factors. First, Task and Policy of Ministry of Education, because of task and Policy, the member of organization must be obeying it. Because of that, the knowledge sharing will be work as well in the school among teachers. The second is individual factor, because to be work as well implementation of knowledge sharing among teachers in school must be motivation from his self. That is motivation from teachers to share his knowledge to another. The motivation of teacher to do knowledge sharing such as Expected reward, knowledge Self-Efficacy and Trust Third of factors is organization, because of organization must be support this program knowledge sharing to make the motivation to member of organization. So, the school must support to teachers through top management, organization reward, and affiliation among the teachers. Finally, the factor of successful implementation of knowledge sharing among teachers is teacher must be knows the technology will be used to support knowledge sharing. And teachers must be having knowledge technology when do knowledge sharing to another. The teachers also have the perceived usefulness and ease of use the technology when using the technology as the toll to do knowledge sharing..

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