

Transformational Leadership and Knowledge Management

A Practical Perspectives

Rofi Rofaida, Tjutju Yuniarsih and Disman Disman

Postgraduate School of Universitas Pendidikan Indonesia, Jl. Dr. Setiabudhi No. 229 Bandung, Indonesia
rofi.rofaida@upi.edu

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Abstract: Knowledge management becomes the competitive advantage of an organization especially for organizations that have core competence and core business on knowledge services, especially universities. The university should continuously respond to the development of science, technology, art, culture, and demands of society by improving the quality of university obligation in teaching, research, and community service. This study objective is to gain an overview of knowledge management practices at university. The results show that the practice of knowledge management at university is supported by information and communication technology (ICT) in the form of university's web service facility which enables all knowledge management practices to be implemented. Trying to implement a knowledge management system without technology support is very difficult. Technology facilitates and enables connection and communication. Leadership plays an essential role in the practice of knowledge management at universities. The essential role of leadership in knowledge management is in the form of commitment and the leader's mind set of knowledge management so that leadership will determine the form of knowledge management policy within the university.

1 INTRODUCTION

Knowledge, which is useful for human life, is a collection of information resulted from a number of data processed to form meaning by connecting one information with another information. In order to make this knowledge to be efficient and effective, it needs to be managed professionally through knowledge management.

In the last 8-10 years, knowledge management has been becoming very essential and growing rapidly especially for organizations, which core business is in the field of knowledge, such as university. The development is driven by the network economy, increased competition, mergers and acquisitions, and the rapid development of the Internet. The development of economic activities is very dynamic. People have enormous access to sources of information and a tremendous opportunity to gain learning and win the competition in business.

The development of knowledge management is influenced by several business factors such as increasingly fierce business competition and rapid development of innovation levels. In addition, organizational competition is based on the acquired knowledge along with the speed to gain new

knowledge and the need for long-term learning to improve organizational capacity. Knowledge management is strategic in nature. Knowledge management practices should be integrated with the vision, mission, and organizational strategy determined by the leadership within the organization.

2 LITERATURE REVIEW

2.1 Transformational Leadership

Some concepts of leadership have been raised from several references, namely: *Leadership as the ability to influence a group toward the achievement of goals. The source of this influence may be formal such as that provided by the possession of managerial rank in an organization. (Robbins, 2015). Leadership is a process whereby an individual influences a group of individuals to achieve a common goals (Northouse, 2013).*

Leadership is the ability of individuals to influence, motivate and enable other individuals within the organization to contribute to the achievement of organizational goals. Northouse (2013) identifies that there are four components in

leadership: leadership is a process, leadership involves influencing processes, leadership takes place within a group, leadership is accomplished to achieve goals, and a leader exerts all his energies along with other members to achieve the goals collectively. Transformational leadership has the power to influence the subordinates with a particular method to yield their trust, admiration, and respect which make the subordinates to be motivated to be able to carry out the task well. With transformational leadership, the followers give their trust, admiration, loyalty, and respect toward the leader, and they are motivated to do more than they are originally expected to do. Dimension of transformational leadership was initially described by: (1) idealized influence; (2). inspirational motivation, (3). intellectual stimulation, and (4). individual consideration.

Transformational leadership includes two elements: relational and change (transformation). Leading change is one of the most essential and difficult responsibilities of a leader (Yukl, 2010). Effective leadership is needed to revitalize and facilitate organizations to adapt to these changes while changing the environment. The leader's job is to inspire people to do things differently, endure uncertainty, and strive to achieve goals (Schafer, 2010). Transformational leadership is necessary because a transformational leader also teaches his followers to become leaders and encourages them to play an active role in the movement of change (Antonakis, 2012).

2.2 Knowledge Management

Knowledge can be categorized into two namely tacit knowledge and explicit knowledge. Tacit knowledge is intellectual capital inherent in its growth and development in the form of ideas, thoughts, beliefs, as a result of learning, experience and study of human life. It is the intellectual asset of a person in the form of words, printed documents, books, journals, papers, patents, which are real assets that are useful for human life. Explicit knowledge is a useful application of tacit knowledge in many aspects of human life. According to Liss (1999) Knowledge management is a formal, directed process of determining what information a company has that could benefit others and then devising ways to making it easily available to all concerned (Singh, 2008).

Knowledge management manages knowledge. Managing means to design, organize, coordinate knowledge to be utilized within the organization (Huang Lin, 2012). Through knowledge management, some types of knowledge can be

codified and stored formally. In this case, technology has an essential role to store knowledge and facilitate communication, culture, and value that make knowledge management essential. Sveiby (1997) categorizes four forms of knowledge conversion that provide essential value to knowledge as a competitive advantage:

- Embodied to embodied knowledge
It is the process of sharing experiences and expertise through the socialization process. The method utilized is observation, imitation and practice.
- Embodied to represented knowledge
This is the process of translating embodied knowledge into represented concept through spoken words.
- Represented to represented knowledge
Represented to represented knowledge produces many combinations. Different embodied knowledge will be combined through analysis, categorization and other processes, with the help of various forms of media so that knowledge becomes rich in both form and usability. This form of conversion occurs in educational institutions, including universities.
- Represented to embodied knowledge
This is the highest form of knowledge conversion. A person accepts knowledge, then trusts and uses that knowledge.

Another theory of knowledge conversion is proposed by Nonaka and Takeuchi (1995) which states that there are four types of conversion processes: Socialization, Externalization, Combination, and Internalization. The process of activity and resource development in an organization is the embodiment of SECI (Socialization, externalization, combination, internalization).

The process of knowledge creation is an iterative process of interaction of tacit knowledge and explicit knowledge such interaction will lead to new knowledge. According to Nonaka and Takeuchi (1995), knowledge cycle has four components:

- Socialization is a face-to-face activity between individuals in sharing knowledge. There is a process of tacit knowledge and explicit knowledge.
- Externalization is the process of creating tacit knowledge an explicit knowledge. Present knowledge into easy-to-understand form for example form of writing.
- Combination is a blend of explicit with another explicit to make knowledge easier to understand, such as reports.

- Internalization is the process of applying explicit knowledge to generate new knowledge or application to action / real practice.

The form of knowledge conversion that occurs in university is represented to represented knowledge. Universities are organizations where knowledge is created and utilized continuously and sustainably. Creation of knowledge within an organization is achieved through an understanding of the process of transforming existing tacit knowledge into easily communicated and easily documented knowledge, and through the design of social processes by transferring the tacit knowledge into explicit knowledge. One of the knowledge that university needs to have is how to manage the existing academic information system. Trying to implement a knowledge management system without technology support is very difficult. However, the technology itself will not make the knowledge management system work properly. Technology facilitates and allows for connection and communication but the technology itself does not make knowledge management happen. In conclusion, ICT or technology facilitates knowledge management.

Technology support can be divided into two, namely:

- Transfer and exchange system related to technology support in database, document exchange and video storage
- Data analysis and performance support related to technological support in converting from data to knowledge, decision creating, and data analysis for corporate intelligence

To succeed, it is imperative for a company to create an environment where knowledge sharing is conducted well. Technology can support this habit but can't replace it.

3 METHODOLOGY

The research was conducted at Universitas Pendidikan Indonesia, which is one of the universities owned by the Indonesian government. The method utilized in this research was survey method with "one shoot" / cross sectional observation. The data collection method were interviews, questionnaires, literature study, and Focus Group Discussion. The data were analyzed using descriptive analysis.

4 RESULTS AND DISCUSSION

In the Act No. 12 of 2012 on higher education, it is mentioned that higher education functions: (a) developing the ability and forming the character and civilization of dignified nation in order to educate the life of the nation, (b). develop an innovative, responsive, creative, skilled, competitive, and cooperative academic community through the implementation of University's missions (c). develop science and technology by taking into account and applying the humanities value. Law number 12 of 2012 on higher education defines quality assurance of higher education as a systemic activity to improve the quality of higher education on a planned and sustainable basis.

Quality assurance is conducted through the establishment, implementation, evaluation, control, and improvement of higher education standards. There is an internal quality assurance conducted by each university and external guarantee conducted by accreditation. Within the internal quality assurance system, there is a knowledge management practice that tacit knowledge process is written in, so that it becomes explicit. Academic activities at the university are written clearly, neatly and structured so that all relevant parties can understand and operate it. To undertake quality assurance of education implementation, Universitas Pendidikan Indonesia has implemented knowledge management.

Leadership is the ability of individuals to influence, motivate and enable other individuals within the organization to contribute to the achievement of organizational goals. An essential role of leadership in knowledge management is in the form of a leader's commitment and mind set towards knowledge management so that leadership will determine the form of knowledge management policy within the organization. On the other hand, the form of knowledge management within the organization should consider the type of leadership that the organization wants in the future. In this context, knowledge management has an essential influence towards the type of leadership that the organization develops in the future. If the system is effective, a number of future leaders will be created.

The importance of leadership style to knowledge management activities found in the study of Analoui et al. (2013), that if the leadership of the knowledge management activities increases among subordinates, then going to use passive avoidant leadership (characterised by the behaviour of reactive) should definitely lose knowledge management activities. But this will only happen if the leadership is seen as a

necessary and sufficient to affect the activity of knowledge management.

The core value is an expression of the identity of the university. The task of a leader within the university is to transform the core values in the form of vision, mission, program and policy to provide high-profile identity and credibility. A study of the University of Twente in the Netherlands by Clarks (1999) illustrated the leadership evolution at the university for over 35 years to become a successful and innovative technology university using core values that were expressed into the university's identity. The core values are as follows:

- The two-core university: offers a combination of unusual courses in applied science and applied social sciences
- The university: creating a comfortable environment for learning
- The responsible university: having a strong commitment to regional development both economically and culturally
- The universities without frontier: academic activities apply international character in learning and research
- The focutilized university: providing in-depth study
- The flexible university: utilizing a variety of effective learning methods

The essential roles of transformational leaders within the university are as follows:

- Knowing well the value and culture of the organization
- Bringing all elements of the PT in formulating the vision and mission.
- Becoming example for core constituents (such as faculty, majors)
- Having the ability to increase the value of the institution, determine the strengths and weaknesses and establish a strategy without losing the value and positive organizational culture

In line with the direction of development, identity, and challenges in the future, the vision of the Universitas Pendidikan Indonesia vision is Leading and Outstanding. In the period of 2016-2020, this vision will be gradually focutilized to achieve pioneering and excellence in the field of education in the ASEAN region. The mission of Universitas Pendidikan Indonesia is as follows:

- Conducting education by fostering and developing the discipline of education and education of disciplines, as well as the disciplines of religion, social sciences, natural sciences, formal science, and applied sciences

proportionally to strengthen the disciplines of education and education disciplines;

- Conducting research to create and develop innovative educational theories and practices and other scholarship rooted in local wisdom;
- Developing an integrated Teacher Professional Education in academic and professional education for all levels of education; and
- Disseminating experiences and innovative findings in the disciplines of education, disciplinary education, religious science, humanities, social sciences, natural sciences, formal science, and applied sciences for the betterment of society. (www.upi.edu)

Transformational leadership prioritizes commitment to focus of the Universitas Pendidikan Indonesia, the identity of education. Commitment to Focus identifies the strengths and weaknesses of defining the right strategy. Strategies undertaken include improving coordination among university faculties and departments and focusing on quality rather than number of students. This strategy also invites pros and cons but ultimately can improve the university's image and public confidence. Leadership becomes a key factor in creating major changes to the organization. These changes include changes in the university's image. The vision builds on the history and core values of the university. Effective leaders must be able to synergize the traditions, values and organizational culture with the vision of the organization. Good vision indicators are: clear, focus, aspirational, motivational, shared, authentic, worthwhile, and measurable. The problem encountered in establishing a university mission is that the Mission is only made as a fulfillment of the accreditation requirements and not based on the analysis of the external and internal environment. In addition, strategies and work programs are not utilized as a means to achieve goals and missions. Mission must be written in the form of policy or regulation and implied in the form of the university's life and culture

The vision of the Universitas Pendidikan Indonesia to become a leading and outstanding university requires the university to continuously respond to the development of science, technology, art, culture, and the demands of society by improving the system of education. This is an absolute necessity because of the many challenges faced by all universities in Indonesia, including UPI is the impact of the globalization of the education and employment sectors, especially the ASEAN Economic Community, which began in 2015. The practice of knowledge management in Universitas Pendidikan

Indonesia is conducted to improve the quality of process in universities such as teaching, research, and community service. From the various information mentioned above it can be concluded that universities will be able to implement process in university well and smoothly if supported by information system.

Socialization must be conducted well so that all parties will perform their duties in a timely manner. Training through meetings, seminars, workshops, evaluations and other forms is conducted routinely. System enhancements must be refined continuously. Realizing Knowledge Management with the use of information technology with internet-based information system / online.

Creating website for academic service system will be very helpful because:

- The related parties are numerous and scattered in various places (in various rooms / buildings or university).
- The developments are so fast that they require quick work. System in support of information technology will accelerate performance.
- Facilitate all stakeholders to communicate. Sharing knowledge can run quickly using email, Yahoo Messenger, G Talk or other applications.
- Large amount of data in one place can be accessed quickly by the parties concerned.
- Effective and efficient because many things can be done using information technology. A variety of complex calculation processes can be left on the computer.
- Cost efficiency

There is a UPI Web service facility that contains all ICT services in cyberspace. Publicly owned facilities include information on institutional profiles, academic facilities, new admissions information and Student Affairs and Alumni. In general, this facility serves to support the administrative sector (administration improvement) and the learning sector (instructional improvement).

Some examples of ICT-based knowledge management practices at Universitas Pendidikan Indonesia are:

4.1 On-Line Study Contract

The on-line study contract system for students is accessible via the <https://siak.upi.edu/contract> web address. This system is web-based so it can be accessed anywhere and anytime as long as the computer or smartphone utilized is connected to the internet. Online study contract / FKKB is a two-way interaction between students and academic advisors.

The study program informs the online lecture schedule (knowledge transfer and sharing). Students gain knowledge of courses and university schedules (knowledge acquisition). UPI stores knowledge in the form of secure software with the help of ICT (knowledge storage). Students can only enter into contracts and enter their username and password as protection. Through online study plan students and lecturers can communicate about the study plan (knowledge transfer and sharing). Through ICT, on-line study contracts allow students to consult on a study plan and ultimately undertake a course contract (knowledge application).

4.2 Integrated Online Learning System (SPOT)

The Integrated Online Learning System (SPOT) is an e-learning application designed to facilitate distance learning. This system can serve as a support tool (supplement) of (direct learning) which is generally utilized in faculty lectures at UPI. This app is accessed via <http://spot.upi.edu>.

Through SPOT, students get lecture material (knowledge acquisition). Through the ICT system UPI stores knowledge securely. Only students who have NIM as username and password and Dosen who have NIP as username and password can access the system (knowledge documentation and storage). Students take lecture materials and online tasks (knowledge retrieval). Lecturers send and distribute lecture materials (knowledge transfer and sharing). ICT systems provide the ease of doing face-to-face lectures (knowledge application).

4.3 Digital Library

The web address for digital library is: <http://digilib.upi.edu/> which contains all the digital content owned by the UPI library that can be accessed by all UPI academicians. UPI digital library site presents research information that has been done by UPI students, whether thesis, or dissertation. Website Digilib developed by the Directorate of Library.

The improvement of library services is conducted through updating the collection and increasing the ease of access to the sources of knowledge so as to facilitate the process of knowledge acquisition and knowledge retrieval. The UPI library also uses software to avoid plagiarism for students and lecturers. The process of socialization and training which is a form of knowledge transfer and knowledge

sharing has been implemented to all study programs within the Universitas Pendidikan Indonesia.

5 CONCLUSIONS

To undertake quality assurance of education implementation, Universitas Pendidikan Indonesia has implemented transformational leadership and knowledge management. The results show that the practice of knowledge management at Universitas Pendidikan Indonesia is supported by information and communication technology (ICT) in the form of the UPI Web service facility which enables all knowledge management practices to be implemented. An essential role of leadership in knowledge management is in the form of a leader's commitment and mind set towards knowledge management so that leadership will determine the form of knowledge management policy within the organization.

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