

<sup>1</sup>Cholpassorn  
Siththiwarongchai  
Chumpon Rodjam <sup>2</sup>  
Eakolarn  
Chotianusorn<sup>3</sup>  
Seree Woraphong<sup>4</sup>

## Knowledge Management with Information Technology Systems Towards an Intellectual Society



**Abstract:** - The purpose of this article is to present knowledge management through human resource management because human beings have a lot of potential in themselves. If the organization has guidelines, Correct and effective practices can enhance human beings to use knowledge. Existing talents are able to accomplish their work and fully dedicate themselves to the organization. Therefore, organizations must focus on learning management because learning management is the process of changing behavior to gain knowledge and lead to development in a better direction by managing it systematically. By bringing in information systems to manage effectively. Therefore, this article presents an analysis of concepts related to Elements in Knowledge Management, Knowledge management with information systems to create an intelligent society. To cause exchange, Knowledge, Attitudes and experiences because when human beings have exchanged and learned, It has been synthesized, Organize a new system to create knowledge to lead to society and store it systematically to create benefits from knowledge and put it into practice to create an intellectual society or a society of knowledge.

**Keywords:** Knowledge Management / Information Technology Systems / Intellectual society

### Introduction

Success or the ability to achieve the objectives of the organization is due to the ability to use the resources available in the organization efficiently and with high benefits. Human resources are one of the many factors that are critical to the success of an organization, including building an organization's image. Because human resources are the ones who create the products and services of the organization to the public. Proper human resource management can create growth for the organization very well because "humans" have a lot of potential in themselves. If the organization has guidelines, Correct and effective practices can empower "humans" to use knowledge, Existing talents are able to accomplish their work and fully dedicate themselves to the organization. However, the condition of the organization today is greatly affected by changes in the environment, including economic changes, economic changes, Society, This has a direct impact on the management of human resources in the organization. In order for an organization to be able to cope with these problems or survive, an organization must pay attention to things related to human resource management, especially the organization must have the perspective that "humans" are a very valuable resource of the organization that can create great benefits for the organization. Therefore, organizations must have knowledge management, It is an organizational policy that must be developed and promoted at all times (National Productivity Institute (2006: 10).

In today's society, knowledge management has brought about changes in management in both the economy, Society and Education. The need for organizational development in various fields results in each organization having to compete with each other with knowledge, Therefore, "knowledge management" is an important tool that helps to develop human resources to be able to utilize information that exists in individuals, Organizations and communities to develop their own potential and improve the quality of others.(Charoenkul, N., 2010: 13).

Knowledge management with information systems to become an intelligent society, organizations that use technology to help work will be able to create new knowledge. and the personnel in the organization themselves will continue to learn and develop themselves. For example, creating a web board so that employees can exchange knowledge at work, bringing new work-related knowledge to the website for employees to read every

<sup>1</sup>Suan Sunandha Rajabhat University, Thailand <sup>1-3</sup>

Mahidol University, Thailand <sup>4</sup>

cholpassorn.si@ssru.ac.th<sup>1</sup>, chumpon.ro@ssru.ac.th<sup>2</sup>,

eakolarn.ch@ssru.ac.th<sup>3</sup> and seree.wor@mahidol.ac.th<sup>4</sup>

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day, etc. If knowledge management is systematically **managed** in an organization, knowledge will be transferred between employees at all times (Khun Si, S.: 2015).

Therefore, organizations should use technology to help develop their organizations into an intelligent society to create an advantage in the rapidly changing competition. However, the successful implementation of technology in the development of the organization depends on the availability of many internal factors, including hardware, Software, Information and Information, Database, communication networking, complexity of work processes, Personnel working on information systems, and most importantly, users must have knowledge based on good change management so that users can accept and use technology to the fullest.

Therefore, article titled "Knowledge management with information technology systems

towards an intellectual society". The purpose of this study is to study the concept of knowledge management, including the meaning of knowledge management and an intellectual society. Objectives of Learning Management, Benefits of Knowledge Management, Components in Knowledge Management, Knowledge Management Process, Knowledge Management with Information Systems, Wisdom Society, The problem of obstacles in knowledge management, all of which will affect the development of human resources in the organization.

### **The Meaning of Knowledge Management and an Intellectual Society**

In learning theory, learning is the process of changing people's behavior, Thoughts, People can learn from hearing and touching, Reading, Use of technology, The learning of children and adults will be different, Children will learn by studying in the classroom, interrogation. Adults often learn with existing experiences, but learning is formed from the experiences presented by the instructor through the interaction between the instructor and the learner. The instructor will be the one who creates a psychological atmosphere conducive to learning to take place in any form such as sociability, Strictness or lack of discipline. These things will create learning conditions and situations for learners. Teachers must consider choosing a teaching style and creating interaction with learners to understand how to learn (Wikipedia, the free encyclopedia, 2014).

Lueprasitsakul, W. (2005: 28) defines "the process of knowledge management and employee learning" as follows: The knowledge management and learning process of employees is a systematic process to encourage all employees to seek and create new knowledge, as well as to develop their own knowledge during collaboration within the company in order to put that knowledge together and organize it efficiently and effectively to accumulate in all processes and methods of operation within the company. And in the midst of the process of patchwork and assembly, a synthesis of new knowledge is created through the pursuit of knowledge that is still lacking. Accumulate and increase knowledge into a unified and more complete body of knowledge.

Charoenwongsak, K. (2004) said that knowledge management is the processing and synthesis of knowledge and the classification and classification of information to lead to the interpretation and understanding of that information until it becomes knowledge. Collect, Processing and synthesizing information from various sources to create and develop new knowledge or to add existing knowledge about stories and things. These knowledge covers both the part of the implicit knowledge that is hidden in the employee's mind and embedded in the organization and the explicit knowledge that appears in the organization's records or reports when these two types of knowledge are organized into a system. People who are interested and want to access such knowledge will be able to draw out that knowledge and use it conveniently.

Supakan, S. (2004: 28-29) said that knowledge management is about how an organization extracts the value from people's intellectual property to make the most of it. An important point for initiatives regarding knowledge management is that knowledge that is considered valuable for an organization is often related to experience, attitudes and behaviors of most people.

Kowtrakul, S. (2001) has explained the meaning of learning is the process of experience that causes a relatively permanent change in behavior, in which this change in behavior is not temporary, the change in behavior is due to the experience that the person interacts with the environment or from practice.

For the "Wisdom Society" Here, it refers to a society that develops and uses ICT wisely using the practice of the Sufficiency Economy Philosophy, People at all levels are smart and information literate, can access and use

information with morality, ethics, Judgmental and knowledgeable, managed. ICT with Smart Governance to support the development of a sustainable and stable knowledge-based economy and innovation (RUCHAREKA, 2010).

In conclusion, from the definition of learning, The above definition can be summarized as the process of changing behavior to obtain knowledge, This will lead to development in a better direction by systematically managing and arranging exchanges, Knowledge, Attitude and work experience. By applying the information system, and once the learning has been exchanged, It has been synthesized, Organize a new system to create knowledge and store it systematically to create benefits from knowledge and put it into practice. It will continue to be an intellectual society.

### Objectives of Learning Management

**1. Organizational development** is able to achieve the goals set according to the vision, Strategy, such as service recipients are satisfied.

**2. Develop work processes** to be efficient, such as reducing errors, improving, develop processes to keep up with changing situations to be effective, such as improving productivity, reducing costs, and innovating, such as developing brainstorming and implementing new concepts.

**3. Develop people** so that personnel can learn, be agile in their work, and have job satisfaction (Padma Hankla, 2011).

### Benefits of Knowledge Management

The benefits of knowledge management within an organization can be summarized as follows (Sriniboon, W. (2007) (1) It can reduce work procedures, such as when there is a problem at work, Practitioners will be able to find solutions quickly by researching the results of knowledge management in that matter. The Internet can be used to do so (2) It saves workers from having to work through trial and error, and (3) It helps workers eliminate the problems they are facing. By learning solutions from people who have experienced before. (4) It helps those who seek knowledge to have a quick access to the knowledge they need. (5) The exchange of learning between practitioners is to create new innovation by learning from the knowledge embedded in the identity of those who have previous work experience. (6) Agencies do not have to waste time on research and development on certain matters, (7) It helps to create knowledge sources in the organization that can be quickly used and disseminated to other departments for further research. (8) It helps to shorten the time and distance of communication, and (9) the work culture of people in the organization changes from the previous to self-discipline, research, Lifelong learning, accepting and listening to other people's opinions, having the power to think creatively, Be diligent, patient, Have a sense of being a "giver" and have a democratic mind.

### Elements in knowledge management

In knowledge management, there are three important components : Man, Information Technology (IT), and Process (Cholitkul, S. (2011).

**1. Man** in Knowledge Management People are the most important element because people are involved in Personal Knowledge Management (PKM). Therefore, you can manage everything by yourself for the most part, there may be some that need to be related to other people.

The personnel involved in the implementation of knowledge management or KM Team of an organization can be divided into two teams: Core Team or Permanent Team and Contemporary Team. The core team or permanent team is a working group that is responsible for the ongoing implementation of the organization's knowledge management. It consists of 3 personnel, namely the supervisor or knowledge manager (Knowledge Champion or Senior Manager or Chief Knowledge Management - CKO), who is the senior management of the organization. Leverage knowledge within the organization through the use of knowledge management projects. Responsible for creating a vision of what is possible, Design a framework that provides cost-effective results and be a facilitator, coordinate and organize all knowledge management activities of the organization. The second type of personnel is the Chief Information Officer (CIO), who is responsible for all the tasks of the organization, and the last party of the main team is representatives from the main work groups of the

organization. The temporary team is a committee from a specific group, Organizations must always keep in mind that the important people involved in the organization's knowledge management are the group of users of the organization's products and services, so they should have them as partners and jointly plan work for the organization.

In addition to both teams, the person who plays a key role in supporting an organization's knowledge management program is the Chief Executive Officer (CEO).

**2. Information Technology-IT** In the field of knowledge management, there is a lot of research that attempts to explain the relationship and role of information technology and knowledge management. Although the knowledge management process is a non-technological process, technology is expected to be one of the important tools to help knowledge management succeed. Therefore, most organizations have allocated budgets to use appropriate technology as a tool to help them manage their knowledge. Information technology related to and plays a role in knowledge management in an organization consists of communication technology, collaboration technology, and storage technology.

**2.1 Communication technology** It helps personnel to access various knowledge more easily, conveniently, as well as be able to communicate with experts in various fields. In order to search for information through the Internet, through the Internet, Intranet or social media

**2.2 Technology supports collaboration**, enabling efficient collaboration. Reduce the barrier of distance, for example, groupware programs or video conferencing systems, etc.

**2.3 Technology helps with storage.** It helps to store and manage various knowledge. Information technology contributes to coordinating, supporting and facilitating the 3 knowledge management processes as follows:

**2.3.1 The pursuit of knowledge** is the pursuit of knowledge, both tacit knowledge, skills, interpersonal interaction, highly experienced people will see the trend or direction of the need to use knowledge in various fields and then plan and implement the provision of that knowledge by relying on various types of information technology as a means of coordination and facilitation.

**2.3.2 Knowledge exchange and sharing** is the dissemination and dissemination of knowledge on various matters. In this regard, learning from experts will help operators manage novice knowledge through various forms of communication networks.

**2.3.3 Leveraging Knowledge**, learning is integrated into the organization, what is in the organization. Members of the organization can recognize and apply new situations at any time, both the exchange of knowledge and the utilization of knowledge will occur at the same time.

However, in the sense of IT, it does not only mean hardware or software devices, but nowadays it also includes the importance of people. Goals that people set or set in the use of technology The value of choosing technology as well as the evaluation criteria used to make decisions on the use of technology in various tasks.

**3. Knowledge Management Process Knowledge** management process is a process that can help develop knowledge or management. The knowledge that will occur within the organization is all. 7 Procedure

**3.1 Knowledge Identification** is a determination that our organization has a mission, what is the vision, what is the goal, and what do we need to achieve the goal? What knowledge do we have, in what form, and with whom do we reside?

**3.2 Knowledge Creation & Acquisition, such as the creation of new knowledge**, seeking outside knowledge, preserve old knowledge, get rid of knowledge that is no longer in use.

**3.3 Knowledge organization** is the construction of knowledge to prepare for the systematic collection of knowledge in the future.

**3.4 Knowledge Codification & Refinement**, such as updating documents to a standardized format, using the same language of communication, Complete the content of knowledge.

**3.5 Knowledge Dissemination & Access** is to make it easier and more convenient for users to access knowledge systematically, to distribute knowledge to others through appropriate communication channels.

**3.6 Knowledge Sharing** is the exchange of knowledge gained through various strategies, such as in the case of Explicit Knowledge. Knowledge Base, Knowledge repository or in the case of tacit knowledge. Group Activities, Learning community and mentoring system, job switching, Loan, Learning exchange platform, etc.

**3.7 Learning & Utilization** is the final stage of the knowledge management process. Learning should be made a part of the work and continue to circulate.

### Knowledge Management Process

The knowledge management process is a process that helps organizations understand the steps that lead to the knowledge management process or the development of knowledge that will occur within the organization. (Amatyakong, R., 2014).

**1. Indication of knowledge**, such as considering that the vision, mission, what are goals and what do we need to know to achieve them, what knowledge do we have now, In what form, in whom?

**2. Creation and pursuit of knowledge**, such as the creation of new knowledge, seeking outside knowledge, preserve old knowledge, get rid of knowledge that is no longer usable.

**3. Organizing knowledge systematically** is the laying out of knowledge structures to prepare for the systematic collection of knowledge in the future.

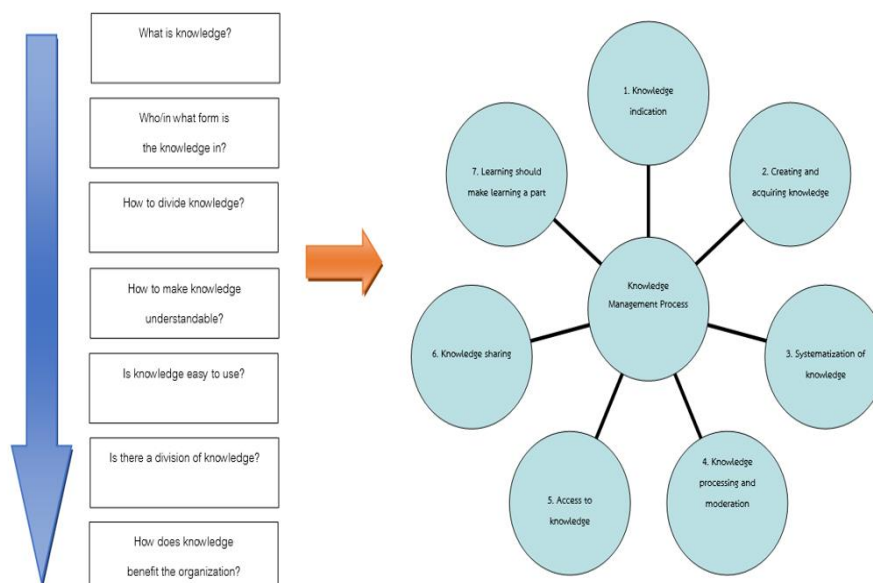
**4. Processing and moderation of knowledge**, such as standardizing document formats, Use the same language, improve the content completely.

**5. Access to knowledge** is to make it easy and convenient for users of that knowledge to access the knowledge they need, such as information technology (IT) systems, Web boards, public information boards, etc.

**6. Knowledge Sharing** It can be done in several ways, in the case of Explicit Knowledge, it may be documented, Knowledge base, information technology, or in the case of tacit knowledge, may be prepared as a cross-functional team system, Quality and Innovation Group Activities, Learning Community, Mentoring System, Job Swapping, Loan, Exchange Stage, Changing knowledge, etc.

**7. Learning should make learning a part of the work**, such as creating a learning system from creating knowledge. Apply knowledge, New learning and experiences will arise and continue to circulate.

Of the 7 stages of the knowledge management process mentioned above. It can be summarized as a model as shown in Figure 1 as follows:



**Figure 1** Knowledge Management Process Model

**Sources:** Adapted and developed from Amatyakong, R. (2014)

## Knowledge Management with Information Systems

Knowledge management is a method or process that helps to create, Collect, systematize, Disseminate, transfer and exchange existing knowledge in the organization for the benefit of both individuals and organizations by using information systems as a tool to facilitate knowledge management, which will result in better quality and efficiency of people's operations in the organization (ICT Knowledge Management, 2009).

**Information and Communication Technology and Knowledge Management** Information and communication technology refers to technology related to the integration of computer systems, telecommunication systems and other related knowledge for use in the procurement process. Storage, The information technology system can be said to be composed of two main fields of technology, namely computer technology and telecommunication technology.

In other words, information and communication technology is one of the key factors contributing to the success of knowledge management (National Productivity Institute, 2004). Advances in Information and Communication Technology In particular, the Internet and intranet are important driving forces that make knowledge exchange easier, in addition, modern database systems contribute to more efficient knowledge management. Namprasertchai, S. (2006), has classified information and communication technologies related to and their role in knowledge management into 3 forms:

1. **Communication Technology** makes it easier and more convenient for personnel to access knowledge, as well as to communicate with experts in various fields, search for information, and knowledge through intranets, extranets, or the Internet
2. **Collaboration Technology** enables effective collaboration. Reduce barriers in terms of distance, for example, groupware programs or screen sharing systems, etc.
3. **Storage technology helps** to store and manage various knowledge.

It can be seen that the technology used in the knowledge management of an organization consists of technology that can cover various processes. to manage as much knowledge as possible. Therefore, ICT plays an important role in knowledge management, especially the Internet, which is a technology that connects people around the world, making the process of knowledge transfer better. ICT also allows presentations to be selected in a variety of formats such as letters, Images, animations, audio, video, which makes learning easier. In addition, ICT helps to store and maintain various knowledge and information. It also reduces the cost of implementing the knowledge management process, so ICT is considered a tool to support and optimize the knowledge management process.

## Intellectual society

The use of information technology to develop into an intellectual society must be aimed at people-centered development by making people in society and organizations conscious, There is awareness, Participate in social and corporate responsibility, Recognition, Promoting Progress to Challenge and Motivation. By considering the selection of packing, Modify, Put the Right Man to the Right Job with suitability and fairness according to the Good Governance or Moral System. Social and organizational development through Knowledge Management (KM) to transfer and disseminate knowledge from one generation to another to produce wisdom, Creating Knowledge Access (KA) to develop people to be knowledgeable and intelligent with easy access. Knowledge Network (KN) For the dissemination of knowledge, Reducing the gap between job positions, status, The dignity and dignity of people in society and organizations, The development of the two main parts, both people and society or organizations, is the development path towards a society of wisdom (Indravudh, R., 2014).

## Problems of obstacles in knowledge management

In the knowledge management process, there is a procedure that represents a systematic management process that may affect the modification of various related factors. Such adjustments may cause problems and obstacles in knowledge management. so Organizations that want to have knowledge management should consider the problems and obstacles from knowledge management. It can be summarized as follows (Banla, J., 2010).

**Behavior modification and management**, personnel do not see the direct benefit that will happen to themselves. Personnel are less able to apply the knowledge gained from the exchange in their work, lack of continuity in their commitment to support and participate in activities or projects at both the management and worker levels, and lack of personnel participation in the organization. Knowledge management, which may not be surveyed for the needs of personnel, causes personnel not to feel a sense of commitment to participate, thus causing differences in people in the organization.

**Communication in the organization**, creating content and conveying to the target audience. This type of work requires a team of creative initiative and takes time to develop processes and tools. Tools used to collect knowledge gained from mutual learning exchanges that require technology to prepare, such as the creation of databases used to collect and extract knowledge, websites for disseminating knowledge and exchanging knowledge of personnel in the organization. In addition, the lack of a learning exchange network, There is a lack of evaluation and follow-up of learning outcomes in a concrete manner. Although there is a post-training assessment, it is not an assessment linked to the improvement of performance due to the use of the knowledge gained from the training, making it impossible to use the evaluation results to monitor learners' learning and review and improve the curriculum, lack of process in designing the curriculum, curriculum development, using the method of combining content without setting requirements on the learning needs of learners, causing learners to become bored because the content of the course does not match the needs, lack of training for working group members, making members responsible for formulating an action plan at each stage, lack of knowledge and skills in the work, which causes the action plan to lack efficiency and effectiveness, the time period for training or learning is often not conducive to attendance, so it is necessary to increase the number of training sessions.

**Measurement and Monitoring** Incomplete formulation of indicators due to the lack of leading indicators and only lagging indicators, which makes the working group unable to effectively control and monitor progress in achieving the goals, and lack of application of evaluation results to review and improve operations.

#### summarize

Knowledge management with information technology systems for an intellectual society is the process of changing behavior to obtain knowledge, This will lead to development in a better direction. By systematically managing and arranging exchanges, Knowledge, By applying information technology systems to create the most efficiency. Once the learning has been exchanged, It has been synthesized, Organize a new system to create knowledge and store it systematically to create benefits from knowledge and put it into practice. It will create an intellectually rich society or a society of learning. Therefore, the knowledge gained from learning and accumulation is an important machine used to drive and develop the organization. Therefore, modern organizations need to adapt to changes and push all personnel in the organization to be able to complete all aspects of the organization's core tasks and work together as a team. In order to develop an effective organization. which can survive in a world of rapid change in every aspect, Therefore, the organization must have "knowledge management" within the organization.

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