

KNOWLEDGE MANAGEMENT IN A REGULATORY BODY IN THAILAND: INITIATING & ENHANCEMENT

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Abstract

Thailand is one of countries that has been adopted the use of nuclear technology in various application such as medically, agricultural, industrial and research applications for many decades. Recognizing this enormous potential in many applications, the Office of Atoms for Peace (OAP) as a regulatory body under the Ministry of Science and Technology, carries out a variety of activities to disseminate and promote youth, entrepreneurs and public awareness of the atomic energy in Thailand. In recent years, “Knowledge Management” (KM) is one of the key factors that contribute and enhancing the organization’s capability to safe, secure and efficient operation of nuclear activities and facilities and also for the regulatory processes as well. In this regards, the OAP is aware and recognize of the importance of studying and initiating nuclear knowledge management program in the regulatory body. This paper describes the initiating and enhancement of nuclear knowledge management project in OAP.

1. Organizational Background

Thailand is one of countries that has been adopted the use of nuclear technology, thus the need for a governmental body to control and regulate safe uses of it. This is the main responsibility of The Office of Atoms for Peace (OAP), a regulatory body, which is under the Ministry of Science and Technology. It is founded in 1961 as the Office of Atomic Energy for Peace (OAEP) before changing its name to the OAP on October 3, 2002 according to the act amending ministry, sub – ministry and department B.E. 2545 [3]. The OAP are responsible for licensing the use or possession of nuclear material, radioactive material as well as the utilization of atomic energy. In addition, the OAP is in charge of monitoring, assessing and inspecting the licensees to ensure that all operators are safely performed. There is a 24/7 network on radiation surveillance and emergency notification, all is for the usage of atomic energy in the safe and efficient manner. This is a place where all scientists, academic partners and staff work together under the same mission which is to regulate the use of atomic energy, the safe and to create public awareness on nuclear science and technology. This place is also a center for collaborations relating to nuclear energy both domestically and internationally [4].

2. History of Knowledge Management in Thailand

The world in the twenty-first century is moving towards a more complex and dynamic environment so the way that an organization successful practiced in the past may not be applicable in the future [6]. To improve public sector organizations to be high performance organizations, in past several years, public sector organizations in Thailand has been introduced to variously management concepts and tools which were initiated and developed in order to increase more effectiveness and efficient improvement in the public sector. “Knowledge Management” is one of the management applications that were introduced to the public sector in Thailand in very large scale.

“Knowledge Management” was first addressed in the Thai public sector formally in part III “Result-Based Management” section 11 of the Royal Decree on Criteria and Procedures for Good Governance, B.E. 2546 (2003) as follow;

“The government agency, for result-based management under this Royal Decree, shall make itself to be global learning organization. For this purpose, the government agency shall acknowledge and analyze information in all aspects and shall then apply analytical result to its administration for correct, quick, and suitable service. The Government agency shall also promote and develop capability, vision, attitude and co-learning of its official” [5]

Knowledge management is also inserted as one criterion in other mandatory management tools, e.g., quality assurance of universities, the National Economic and Social Development Plan, and the Public Sector Management Quality Award (PMQA)¹. Presently, most government agencies are initiating and implementing knowledge management in their organizations, especially in hospitals, universities, other government agencies in the central administrative system, and state enterprise [2].

3. Initiating of Knowledge Management Project in a Regulatory Body in Thailand

Since 2005, the OAP is aware and recognize of the important of studying and initiating knowledge management in the organization regarding to the introduction and suggestion about the knowledge management application and action plan initiation in Thai public section by the Office of the Public Sector Development Commission (OPDC). In 2006, the OAP has been initiating a knowledge management project that called “Nuclear Science and Technology Knowledge-Base Development”. The project was an activity plan during 2006–2016 which aim to promote and disseminate about nuclear knowledge such as nuclear application, safety, regulation, inspection to people all around Thailand such as schoolchildren, teacher, local people, community leaders, media, entrepreneurs, through various form of activities such as nuclear exhibitions, nuclear youth camp, nuclear knowledge caravan, local seminar, nuclear knowledge corners. In this regard, the target population in every activity can learn directly from the OAP’s scientists. Since the project initiation, the activities have been conducted in more than 40 provinces all around Thailand as shown in Figure 1.

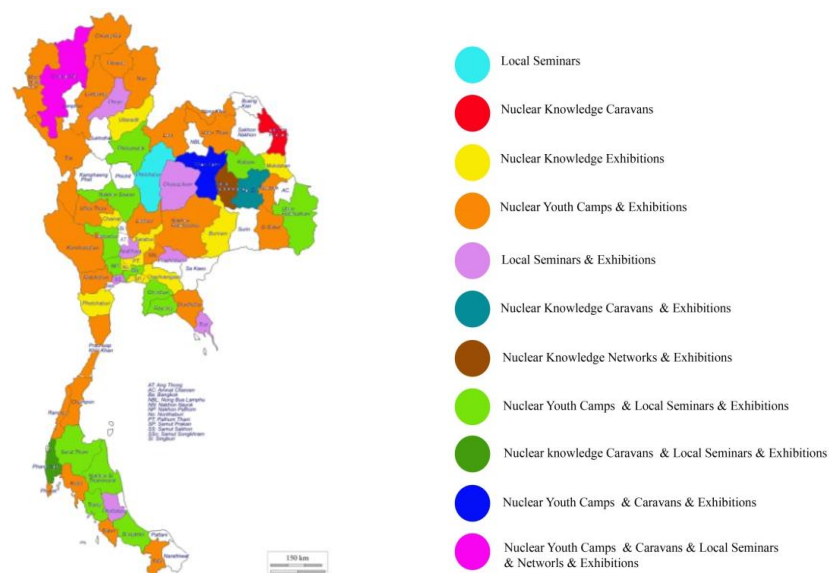


Figure 1. Activities map of “Nuclear Science and Technology Knowledge-Base Development” project

In parallel, 2012 – 2013, the high level executives of the OAP has been considered to improve the knowledge management project by established a knowledge management committee in order to develop an internal knowledge management plan and system. But because of the severally and rapidly changing of internal environment included the limitations of the traditional characteristics of the organization [2] such as cultural, structural, technological and human resource aspect [6] cause the project still remain in primarily and pending stage of the initiating.

4. Enhancement of Knowledge Management Project in a Regulatory Body in Thailand

During 2016 to 2017, OAP’s KM project specifies its maintaining knowledge goals, particularly of retiring experts and transferring this knowledge to the next generation [1]. The committee has been improved and updated the functional details and responsibilities and appointed in attempt to manage internal knowledge both tacit and explicit knowledge, systematically [1]. Several meetings were conducted and the committee identified by using 7 steps of OAP knowledge management process [1] as follows;

¹PMQA is a quality award in the Thai public sector, using the same criteria as the Malcolm Baldrige Award [2]

- **Knowledge Identification** - To make the OAP's knowledge assets visible, it is necessary to explore knowledge within the organization.
- **Knowledge Creation and Acquisition** - Knowledge creation is the knowledge created within the organization for example; new skills, ideas which can improve organizational processes. Knowledge acquisition is the required knowledge that obtained from external sources.
- **Knowledge Organization** - An organizational knowledge structure shall be mapped as a part of knowledge identification. Knowledge structure can be updated or extended as necessary. Knowledge organization based on knowledge structure is needed for a systematic knowledge retention in the future.
- **Knowledge Refinement** - It is the processes and mechanisms to select, filter, purify and optimize knowledge included in various storage media. It is the process required for continuous quality improvement of explicit knowledge management with ISO standards in document storage.
- **Knowledge Access** - The knowledge and experiences should be readily accessible to others and replicated if desired. This is to allow users to access to the knowledge desired easily and conveniently by using information technology management through web board.
- **Knowledge Sharing** - Knowledge can be shared by the organization with its staffs, between staffs of the organization as well as with people outside of the organization. Implicit and tacit knowledge transfer can be done by various means for example; formal classroom, on-the-job training, informal Communities of Practice, and mentoring.
- **Learning** - Organizations and staffs need to learn and internalize relevant knowledge experiences and actions through personal and group interactions within the organization.

Desired State of KM	Result
Work Process Improvement	• Work Instruction
Knowledge Staff	• Learning and Training
Knowledge-based Development	• Knowledge Asset

Table 1. Expectation of desired state and result of the OAP's KM project in the future [1]

5. Conclusion

Initiating knowledge management system in an organization might be difficult but initiating the management in a nuclear and radiation regulatory body organization in order to ensure the future effectiveness and competitiveness might be more difficult due to several major obstacles within the organization such as rapidly changing of the internal environment, cultural, structural, technological and human resource aspect. But because of awareness and recognition of the importance of knowledge management, the OAP will continually precipitate the organization into knowledge-based organization as soon as possible. The project is not only be useful for developing of enhancing organization capability and better work process but also including benefit for nuclear technicians and staff working in the core and secondary function of regulatory body [1] Moreover, the result of this project will be a very important part that can lead OAP to develop its own human resource management and development plan and formulate internal training programs for knowledge transfer and exchange between staffs so as to keep organizational knowledge developed and sustainable [1].

References

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