KNOWLEDGE MANAGEMENT IN MILITARY ORGANIZATIONS. A SECI MODEL PERSPECTIVE

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Abstract: Knowledge management is a multidisciplinary domain that involves people, technology, and processes. From these three components results a series of social, technical, and other implications which influences the way knowledge is created, stored, and transmitted through organizations. One way to express these processes is through the SECI model, based on the two types of knowledge: tacit and explicit. The four dimensions of the SECI model – socialization, externalization, combination, and internalization, have particular features from organization to organization, based on the domain of activity, organizational culture and other cultural influences, type of management, processes and so on. Considering that military organization have an essential role in assuring global security and they heavily rely on knowledge, the study of knowledge management from the SECI model point of view is important as it can offer a better understating on this domain and improve it in the studied field of activity.

Keywords: knowledge management, knowledge transfer, tacit and tacit knowledge

1. Introduction

Knowledge management is not a new concept, as it was introduced in 1986 in a conference organized by the International Labour Organization of the United Nations and referred to as “Management of Knowledge”. Then, in 1987, the first book related to knowledge management appeared – “Managing Knowhow”, written by Sveiby and Lloyd [1]. Since then, more and more studies on this subject emerged.

Knowledge is important for organizations, fact that can be deduced also from Lewis Patt’s statement, former Hewlett-Packard director, according to which “if HP knew what HP knows, we would be three times more productive” [2]. More than that, knowledge is important for organizations because a lack of knowledge or its improper usage can bring various risks to sustainability in organizations [3]. One of the most important part of knowledge

management refers to knowledge transfer. According to Nonaka, there are two types of knowledge – tacit and explicit [4] that are created and transmitted according to four dimensions: socialization, externalization, combination, and internalization [5]. These dimensions are referred to as the knowledge spiral and visually represented by Nonaka and Takeuchi as it can be seen in Figure 1 [6].

Figure 1: The Knowledge Spiral

Because knowledge is often associated with power, military entities are concerned about obtaining and protecting them, as this domain heavily relates on knowledge of various types. Starting from this viewpoint, there was identified the utility regarding the study on the knowledge management aspects related to the previously mentioned dimensions in military organizations. This study can be valuable as it may offer some insights regarding the way knowledge is created and transferred in the military organization.

2. Socialization

Socialization is the process that links the creation of new tacit knowledge from the same tacit dimension of knowledge and implies observations, personal experience and social interactions. The most important knowledge management tools used to facilitate socialization in the military are the following: communities of practice, gamification, counselling, coaching and mentoring.

Communities of practice are groups of people who share a concern, a set of problems, or a passion about a topic and who deepen their knowledge and expertise in this area by interacting in an ongoing basis [7]. In the military, the communities of practice help the personnel to share the experience and knowledge accumulated during combat missions and military exercises, increasing the quality of the human component, shaping better organizational processes and establishing adequate requirements regarding the technologies that can be used for specific tasks.

Another mean that can facilitate the creation of tacit knowledge through personal experience is gamification. Considering the risks related to some specific tasks, military organizations use gamification through simulators, aiming skill development and knowledge acquisition.

A very spread method for tacit knowledge

transfer is through counselling, coaching and mentoring. Military organizations encourage this by its structure and hierarchy, as every commander has a deputy, not just at high levels, but also for lower positions. If the commander is more experienced, the deputy will be able to gain some knowledge before taking his place and if the deputy has more experience, the commander can benefit from his advices. In both cases, new knowledge is created by counselling, coaching and mentoring.

In the military organization, leadership is a very important component because it can encourage people's will to gain knowledge and adopt some desired values.

3. Externalization

Externalization is the process by which explicit knowledge is obtained from tacit knowledge. The most frequently used methods for knowledge creation through externalization are lessons learned and after actions reviews. Knowledge management entities specially created for this purpose or that have this in their area of responsibility use the two methods to make use of personalized tacit knowledge and preserve it inside the organization as explicit knowledge.

Lessons learned are obtained after analysing past events and have the purpose to improve future actions. Through lessons learned, the military organization creates knowledge from the past experiences, either if they were positive or not. Another important aspect regarding lessons learned is that there are specialized structures for this purpose and they do research for every activity and then disseminate the achieved knowledge to all those interested by a certain subject. The role of lessons learned is very important as it is emphasized in AJP-01(E), as NATO considers that the last stage of a joint operation is to identify lessons [8].

After action reviews (AAR's) are conducted in order to provide insights about the strong and weak points observed after

an activity. Through AAR's, the tacit knowledge of the personnel involved in an activity at a certain moment is transferred into explicit knowledge, so that others may benefit from it. For example, AAR's have a significant importance for commanders, who can make better decisions regarding future similar activities. Also, AAR's can be very useful for the personnel that will be implied in activities that have already been carried out by others.

Both lessons learned and AAR's are done after military actions and have the purpose to emphasize the positive and negative aspects while in the background new knowledge is created based on past experiences.

4. Combination

By combination, explicit knowledge is created from explicit knowledge. In the military context, knowledge externalized through Lessons Learned processes is combined with other pieces of information, knowledge and expertise in order to produce military doctrines, manuals and other publications which standardize the way of conducting operations and doing business by military organizations [9]. The after-mentioned pieces of information can be produced by different types of studies, like statistics, case studies, research papers and so on. Military organizations make use of them in order to improve their knowledge base and become more efficient. The source of the research papers and other information that may conduct to new knowledge creation are not necessary produced inside the military organizations because individual or company-financed studies conducted in the civilian sector can also be used to develop military areas of research and create new knowledge.

Many sections operating in the military collects data about relevant aspects from specific activities and create statistics that are used to develop better SOP's – Standard Operating Procedures. For example, the section responsible for the security of the

networks can gather data about the cyber incidents and improve the regulations and procedures in order to better protect the stored data and information against unauthorized access.

From a technical perspective, a very important component that facilitates knowledge transfer in military organizations according to the combination dimension is represented by intranets. An intranet is a local, wide or inter-connected network used for communication, collaboration, information and knowledge sharing.

From a knowledge management perspective, technology is a central point for combination as storage and retrieval mechanisms are essential in the context of large volumes of knowledge and other related information and data.

5. Internalization

Internalization, the process of embodying explicit knowledge into tacit knowledge, is closely related to "learning by doing" [10]. To maximize the transfer of knowledge through internalization, knowledge management entities focus on education and training activities.

The knowledge transfer according to the internalization dimension is very common in the military organizations, as many activities, whether it refers to training or real missions, consist of a theoretical part and a practical part. This approach helps military personnel to develop their own understanding of procedures, manuals and other documents related to specific activities.

The transfer of knowledge through internalization is very important for the military organization because it facilitates the decision-making process. Having a solid theoretical background, military commanders can make better decisions and better understand their implications. This applies not just at strategic level, but also at tactical and individual level. For example, the theoretical knowledge about survival in

hostile environment can help soldiers to survive if they find themselves in this situation.

6. Conclusions

All the particularities of the SECI model dimensions from the military organizations contribute to the creation of a unique framework for knowledge transfer. This is given mostly by the multiple military branches and specializations, organizational culture, type of data, information and knowledge managed and not less important – by the type of management and leadership assumed.

The SECI model of knowledge transfer is widely studied and used to better understand how knowledge is transferred in organizations. Even if in military organizations information and knowledge is

managed based on the need-to-know principle, the SECI model can be used to research knowledge management-related aspects for this kind of closed or non-transparent organizations.

Considering that military organizations are very complex systems that connect social and technical sciences, the SECI model can be used to create better operational procedures and education and training techniques that can improve more and more the knowledge transfer process.

The study on knowledge transfer will be always important for organizations, including the military, because the way knowledge is transferred from generation to generation can ensure their sustainability over time.

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