

KNOWLEDGE MANAGEMENT IN THE LIGHT OF KNOWLEDGE SUSTAINABILITY

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Abstract

In recent years, knowledge management has become one of the most interesting and challenging topics in economic life, and its scope of use is constantly expanding. Although many of the central points of knowledge management are not new to the academic world, the study of knowledge sustainability is considered a less researched area. With this study, the primary goal of the authors is to supplement the gaps found in the literature in the field of knowledge sustainability. The importance of the topics lies in the fact that business is currently living in a phase where competition is dominated by knowledge. In addition to the existence of these factors, it is important to recognize the inherent value of knowledge sustainability. This study is a theoretical overview, during which the authors investigate the issue of knowledge sustainability in addition to the role it plays in the life of knowledge management organizations. In the opinion of the authors, in addition to knowledge management, the sustainability of knowledge ensures significant savings and the continuous improvement of human performance in order to achieve a competitive advantage. In today's dynamic and competitive market, it is important for organizations to be able to manage their organizational knowledge.

Key words: knowledge management, knowledge sustainability, knowledge-oriented organizational culture, organizational knowledge

JEL Code: D80, D83

Introduction

In the current business environment, which has features such as globalization of markets, increased competition and a high rate of technological change, physical assets such as capital, land, raw materials do not create a sustainable competitive advantage. Today's organizations must build the basis of their sustainable competitive advantage on intangible assets and intellectual capital (Gilaninia, 2013). Similar to knowledge and knowledge management, organizational knowledge is also present in organizations from the beginning (Bratianu, 2015). Organizational knowledge is now seen as a tool that, although intangible, generates a competitive advantage for organizations. According to Grant (1996), competitive advantage

is achieved through continuous development, process innovation and product, and knowledge is the organizational resource that enables the organization to develop development and innovation activities. As a result, the ability of organizations to exploit their intangible assets has become more decisive than the ability to invest and manage their tangible assets. In this context, the organization must place great emphasis on the knowledge possessed by people, its acquisition and making it sustainable (Almedia, 2018). Knowledge has generated changes in the social space itself over the years and, as a result, in organizations as well. Intense competition between markets requires organizations to be able to effectively develop and manage their human and structural resources, which means an improvement in their financial capital. We are convinced that in today's globalized network economy, when knowledge is the most valuable strategic resource for maintaining a sustainable competitive advantage, the organizational implementation of knowledge management, as well as the appropriate technological background of organizations, do not mean guaranteed success from an organizational point of view. In addition to the existence of all these factors, it is important to recognize the inherent value of knowledge sustainability, the successful implementation of which requires the existence of both knowledge management processes and the appropriate technological background. This study is a theoretical overview, during which the authors, with the help of secondary data collection, investigate the issue of knowledge sustainability in addition to the role it plays in the life of knowledge management organizations.

1 Conceptual definition, elements and processes of knowledge management

Knowledge management as discipline and function is about cultivating a culture in which knowledge is created, acquired, transferred and applied for competitive advantage and to achieve higher innovation performance (Kianto et al., 2016). Within knowledge management, it is important to cover the environment and processes. The knowledge management environment refers to the components that support or cultivate knowledge flow. These components may include elements such as organizational structure, IT, and collaborative and knowledge-based culture. Knowledge management processes mean the flow of information and knowledge between the actors of the enterprise through practices such as knowledge acquisition and knowledge coding (Kianto et al., 2016).

As a whole, these processes consist of knowledge acquisition, knowledge creation, knowledge transfer, knowledge storage and knowledge application. (Razzaq et al., 2019).

However, the operational definition of these processes includes knowledge creation, knowledge sharing and knowledge utilization. Knowledge creation is a process in which new knowledge is created through the four sub-processes of the theory of organizational knowledge creation. The four processes are socialization, combination, externalization, and internalization. The antecedents of these processes are opportunity, motivation, ability, and perceived importance. Organizations must work on this history to ensure that knowledge is created. Knowledge sharing is the donation and collection of knowledge between different knowledge units of an organization. Employees are meant to convey and share their insights. Considering knowledge generation, knowledge sharing is a more significant factor, because knowledge lies in the employees and has no significance until the employees share it. Knowledge utilization is related to the individual entity's response to different types of knowledge within the organization. Considering the previous two factors, it can be said that knowledge utilization can be considered a more important process, because the created and shared knowledge has no significance until it is applied in practice (Shujahat et al., 2019).

However, in order to generate knowledge from data and information, in addition to the existence of these factors, the personal characteristics characteristic of the individual are also needed, i.e. their abilities, experiences and unique approaches, with the help of which they are able to process the information and incorporate it into their own knowledge (Baksa-Báder, 2020). The field of knowledge management is made up of a total of four pillars. Management is primarily concerned with decision-making and the strategic alignment of knowledge management initiatives with business goals. The organization-related pillar emphasizes the strategic redesign and coordination of operational processes and procedures in order to ensure that the knowledge management initiative is successful throughout the organization.

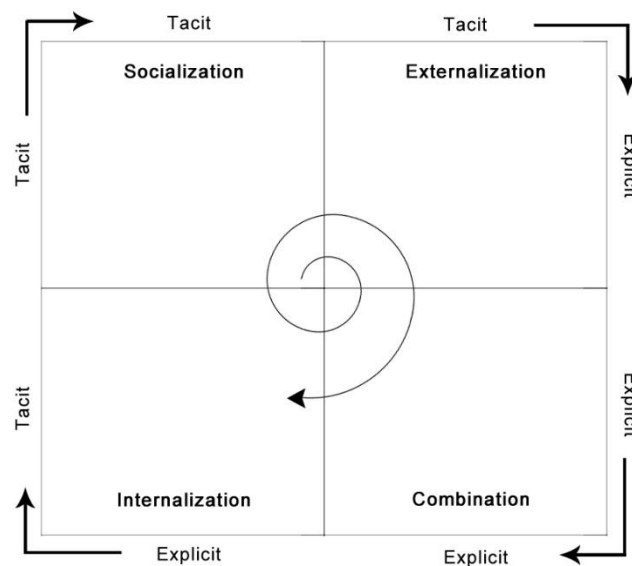
The technological pillar records the importance of the underlying technological infrastructure, which supports the presence of knowledge management within the organization. Finally, in this context, the learning pillar can be described as newly acquired knowledge through learning, education or experience, emphasizing the fact that the organization should address approaches that facilitate knowledge management, such as enhancing internal communication, promoting cross-functional teams, and a learning community (Calitz-Cullen, 2017).

2 Knowledge creation in the life of organizations

Taking into account the definition of the concept of knowledge creation, the authors consider the definition formulated by Nonaka et al. as a starting point, which reads as follows: *"Organizational knowledge creation is the process of making available and amplifying the knowledge created by individuals, as well as crystallizing and connecting it with the organization's knowledge system."* (Nonaka et al., 2006, p. 1179). During the development of organizational knowledge-based theories, Nonaka and his colleagues defined the basic components of a general knowledge-creating organization. In a knowledge-creating organization, knowledge is created through dynamic interactions with the environment. The knowledge vision stems from the strategic management of the organization and gives direction to the knowledge creation process. If an organization's strategy can change with the development of the situation and the uncertainty about the future decreases, then the knowledge vision, due to its own nature, does not change so easily. Knowledge vision is extremely important in the process of knowledge creation, as it inspires the intellectual passion of the organization's members, thus encouraging them to create knowledge (Bratianu et al., 2007).

In order for knowledge to be created and verified based on the knowledge vision of the company, the organization needs a concrete concept, goal, or action standard that connects the vision with the knowledge-creating process of dialogue and practice. Such a conceptual standard is often called a management objective because it drives the knowledge creation process (Nonaka-Toyama, 2007). The synthesis of organizational knowledge creation is achieved through social interaction. Since knowledge is created through dynamic interaction, leadership in a knowledge-creating organization requires active commitment from all members of the organization (Nonaka-Toyama, 2007). The best-known knowledge dynamics model, which the authors consider as the initial basis of knowledge creation in their dissertation, is attributed to Nonaka, who developed an organizational knowledge creation model that integrates the process of individual and collective learning theories. The basic assumption of the model is that knowledge is created through the interaction of tacit and explicit knowledge, which is called "knowledge conversion". This type of interaction is a social process between individuals that is not specifically limited to the individual, since the individual as a worker is never isolated from social interactions (Saadaoui-Mekkaoui, 2015). The acronym SECI was formed from the combination of these four concepts, which serves as the basis for the name of the model (Jafari-Rezaeenour, 2010).

Fig. 1: SECI model



Source: Own translation and editing based on Nonaka (1994).

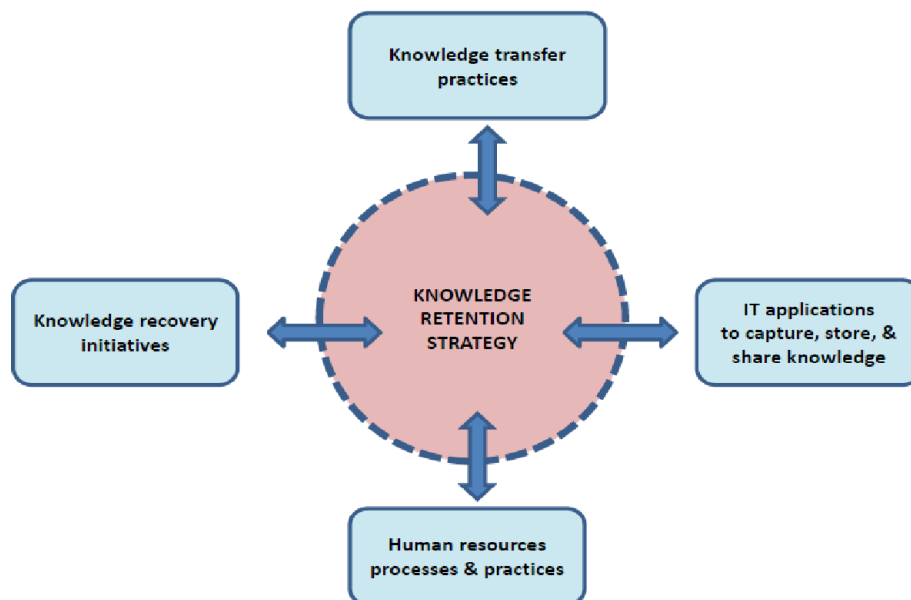
The model begins with the mode of socialization, in which the exchange of tacit knowledge takes place between individuals through shared experiences acquired during daily social interaction (Farnese et al., 2019). Externalization is the process of formalizing tacit knowledge in explicit terms. Dialogue and deductive and inductive techniques facilitate the expression of ideas or images in words, concepts, figurative and visual language (Ramírez et al., 2011). Explicit knowledge is then combined with other explicit knowledge within or between organizations in the combination mode, where they are combined, edited and processed in order to create a more complex and systematic explicit knowledge. The SECI model ends with the internalization mode, in which individuals absorb explicit knowledge, enriching their tacit knowledge base. Overall, these training activities allow people to integrate new knowledge into their own mental models and enrich their professional know-how, opening a new path towards new tacit knowledge generation. This kind of new knowledge is then circulated again, triggering further conversion processes (Farnese et al., 2019).

3 Knowledge retention in the life of organizations

Organizational knowledge retention is a critical component of knowledge management that organizations must deal with (Levallet-Chan, 2019). The most general definition of knowledge retention is presented by the classic definition of Walsh and Ungson (1991). The authors stated that knowledge retention consists of three activities: knowledge acquisition, knowledge storage and retrieval. However, in terms of the conceptual definition of knowledge retention, several

definitions have appeared in the literature. In 2017, Egeland stated that knowledge retention is a strategy and/or practice that is used to identify, acquire, and retain knowledge, information, skills, and relationships that are critical to the organization's current and future performance (Egeland, 2017). In 2004, DeLong proposed a framework that defined the mechanisms that are essential for a good knowledge retention strategy to work. DeLong's framework includes four areas that need to develop knowledge retention strategies, with a greater emphasis on knowledge retention than work within the organization (DeLong, 2004). Figure 2 illustrates for the reader the strategic action framework created by DeLong.

Fig. 2: Strategic action framework



Source: Own translation and editing based on Egeland (2017).

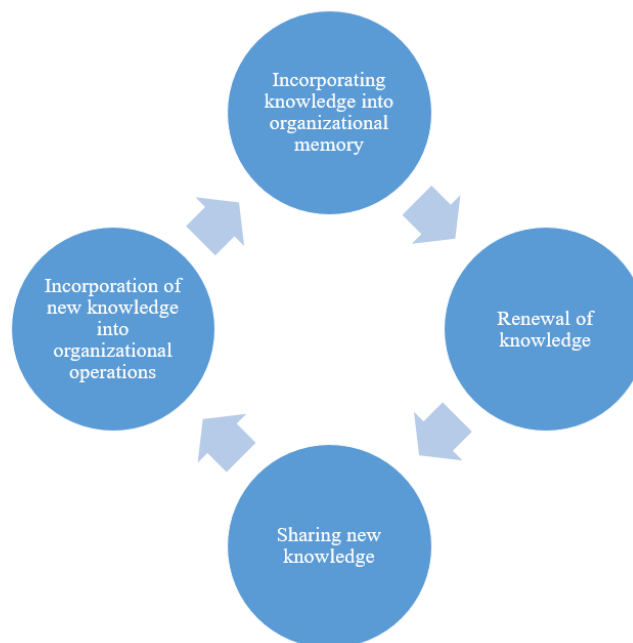
Human resource processes and practices are one of the areas that create an organizational infrastructure for knowledge retention. The second area of the strategy is the knowledge transfer practices, which include the practices necessary to implement the knowledge flow and highlight the need to adapt to the goal, the organization, and the people. The third area concerns the use of IT tools for storing and sharing knowledge. The fourth area describes how the knowledge recovery initiative needs to be implemented when the need to respond emerges (DeLong, 2004). Another proposed framework for the knowledge retention strategy is attributed to Liebowitz (2008), who defined four pillars for the implementation of knowledge retention, however, considering the field of knowledge retention, the authors prefer the action framework created by DeLong. The reason for this can be found in the fact that, in

our opinion, the motivation related to the feedback process is a key part of the knowledge retention strategy in addition to the knowledge transfer practices, i.e. knowledge recovery initiatives are needed on the part of both the management and the employees in order for the strategy to be successfully implemented.

4 Knowledge sustainability in the life of organizations

As mentioned earlier, in our opinion, the individual knowledge management processes and the area of knowledge sustainability are closely related. According to the authors' point of view, knowledge sustainability, in addition to the existence of knowledge management processes within the organization, means the continuous renewal of knowledge by involving the technologies used by organizations. As a result, long-term knowledge sustainability within the organization can only be achieved by applying appropriate IT technologies in addition to the existence of knowledge processes within the organization. The question may arise, through what process can knowledge become sustainable? In our opinion, the process of achieving knowledge sustainability consists of 4 steps, which are illustrated in Figure 3.

Fig. 3: Knowledge sustainability



Source: Own editing

In our opinion, the first step in making knowledge sustainable is the incorporation of knowledge into the organizational memory, starting from the process of knowledge preservation. The definition of organizational memory refers to a common knowledge base that

includes the knowledge and knowledge available to individuals, the purpose of which is to implement and support learning (Gergely, 2005). From the point of view of knowledge sustainability, the process of incorporating knowledge into organizational memory plays a key role, since organizational memory ensures the accessibility of collected knowledge and experiential knowledge for organizational members, making the relationships between past and present decisions transparent. Now that we have the knowledge, the next step in realizing knowledge sustainability is to develop and renew the knowledge built into the organizational memory. In the light of knowledge sustainability, the basis of knowledge development is the generation of the necessary knowledge by organizational members, including the development of ideas, models, capabilities, products, and processes. Furthermore, the importance of the field of knowledge renewal lies in the fact that in today's fast-paced world, due to the rapid obsolescence process, it is crucial to maintain and continuously improve the knowledge already acquired. However, in relation to this area, the constantly expanding large amount of information is extremely challenging. the next element of the cycle of knowledge sustainability created by the authors is knowledge sharing, which ensures the successful implementation of this process. However, the sharing of renewed knowledge among organizational members does not guarantee the continuity of the cycle of knowledge sustainability, because if the renewed knowledge is not applied, the chain is broken and knowledge sustainability is not realized. In order to avoid this, it is absolutely necessary to implement the shared renewed knowledge into organizational operations. The repetition of the entire process is ensured by the incorporation of new knowledge into the organizational memory, after which the process starts over, thus ensuring the organizational feasibility of long-term knowledge sustainability.

Conclusion

In order to transform knowledge into a valuable organizational tool, knowledge, experience and expertise must be formalized, distributed, shared and applied. Before any knowledge management initiative, the available internal and external knowledge, competences and expertise must be analysed. The goal is better management of existing knowledge in the organization, using all available resources and potential opportunities. Once the necessary external knowledge and expertise has been determined, a decision must be made on how to acquire it. Considering the knowledge development group, the goal is to manage the creation of new knowledge (new competences, products, processes, ideas), which knowledge management can support at both organizational and individual levels. After that, the main goal is to provide the necessary knowledge and expertise in a timely manner, where it is needed, in

which information and communication technologies provide great help. Knowledge must support business processes and be accessible to employees. Knowledge must support business processes and be accessible to employees. It is important that user satisfaction is at the center of knowledge management, and that the utilization of knowledge is part of everyday work. Finally, the organizational knowledge base must preserve valuable knowledge in order to avoid "corporate amnesia" in the event of employee departure, reorganization or technical problems (Gourova, 2010). Knowledge management ensures the proper flow of knowledge through two primary strategies: codification and personalization. The codification strategy is related to extracting and storing knowledge in an explicit form through the information and communication technology (ICT) structure, while the personalization strategy focuses on direct human interactions for the purpose of knowledge sharing (Shujahat et al., 2019). By itself, the organizational culture or IT background cannot create an effective knowledge management system. The company is made up of people who create, carry and use knowledge, as a result of which it is especially necessary to deal with the area of human resources (Bencsik, 2016). As a result, knowledge management focuses on the following four key elements:

- Knowledge management processes, such as acquiring, using, sharing or storing knowledge
- IT systems and organizational structures
- Organizational cultures, open atmosphere and trust
- People – collaboration and communication (Stadler, 2021).

The authors consider Stadler's logic as a starting point, who stated that for the creation and efficient operation of knowledge management systems, information alone is not enough, as an organizational culture that ensures an open atmosphere and trust, as well as information technology systems, are also necessary. Considering today's management dynamics, the burden of managing knowledge requires extraordinary focus, as most of the work is information-based. It is an indisputable fact that organizations compete on the basis of knowledge, as products and services are increasingly complex. As a result, the requirement of lifelong learning and knowledge management has become an unavoidable reality, as markets are increasingly competitive and the pace of innovation is increasing. The area of knowledge management is also indispensable, as early retirement and the increasing mobility of the workforce, as well as strategic changes, can lead to a loss of knowledge in certain areas. In the opinion of the authors, in addition to knowledge management (Omotayo, 2015), the sustainability of knowledge ensures significant savings and the continuous improvement of human performance in order to

achieve a competitive advantage. In today's dynamic and competitive market, it is important for organizations to be able to manage their organizational knowledge (Omotayo, 2015).

Acknowledgements

The research is supported by the Research Centre at Faculty of Business and Economics (No PE-GTK-GSKK A095000000-4) of University of Pannonia (Veszprém, Hungary).

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