Knowledge Administration Within Modern Business Structures

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Abstract

The research aims to develop a conceptual framework for analyzing the relationship of determination between the dimensions of the organization that characterize the elements of intellectual capital and each of the stages of the organization, taking into account the importance of an appropriate allocation of resources at the level of the organization in order to acquire the knowledge that the organization needs at the time when the respective knowledge is necessary to achieve its objectives. The study of establishing relationships between the dimensions that characterize an organization's intellectual capital and the stages of the knowledge acquisition process at the level of the organization involves analysis of the variety of relationships between potential organizational factors and one of the management processes. Any organization acts on the market in order to achieve its economic objectives. In recent years, the economy has moved from a resource-based approach to organization to a knowledge-based approach.

Key words: SMEs, management, knowledge, economy, procurement

J.E.L. classification: M11

1. Introduction

Any organization acts on the market in order to achieve its economic objectives. In recent years, the economy has moved from the resource-based approach to the organization (RBV) to the knowledge-based approach (KBV). Thus, organizations have moved from establishing objectives based on the physical resources they have to establishing objectives based on the knowledge they have. In this context, organizations have faced a new reality: the knowledge available to an organization are intangible assets of the organization, but which create added value for the company to a greater extent than physical resources would have created, and consequently must be managed just like the other resources of the organization, but taking into account their particularities. Thus, in the modern economy, a new branch appeared and developed, along with the other branches of management, namely knowledge management. The increasing importance of this branch of management is given by the increasing value created by the resource it manages. To be manageable, knowledge must be gained inside an organization, and in the framework of knowledge management, the process of knowledge acquisition assumes a central and important function.

These concepts serve as the foundation for this essay, which proposes an analysis of the influences that the traits of the elements that make up an organization's intellectual capital have on the organizational level process of knowledge acquisition. This analysis is crucial because it enables managers to determine which aspects of intellectual capital have the greatest impact on each stage of

the organizational knowledge acquisition process. This allows them to allocate resources more effectively and acquire the knowledge that the organization needs at the time. Economic realities put organizations in the situation where they have to deal with a very large volume of information, information that can be found in the age of globalization in various organizations, in various countries, and the competitive advantage of an organization today is given by the originality of the way it is used these knowledge. Another problem that affects organizations today is that of the huge amount of information that they have to deal with. Thus, Segarra-Cipres et al (2014) note that the organization's competitive advantage lies in the organization's ability to identify valuable external knowledge and integrate it into its own innovation process; the ability of companies to acquire and transfer knowledge is fundamental in knowledge management, and organizations must develop the capabilities that allow external knowledge to be assimilated, shared and incorporated into the innovation process. Thus, the rebirth of the analysis of the field of knowledge acquisition is not a coincidence, but rather the result of the explosion of the social media field and the pressure exerted on organizations by the economic crisis. In this context, Amir et al (2015) note the need to study the acquisition of knowledge from customers.

The research problem is relevant and necessary because, over time, the organizational acquisition of knowledge has been approached in the specialized literature from various perspectives: as part of human resources management, from the perspective of knowledge's significance in the organization, through the horizon of knowledge acquisition with the aid of expert systems, but I have not found in the specialized literature an approach to the influence of knowledge acquisition on organizational performance.

We also believe that future research can be conducted starting from a different approach to the structure of the elements of intellectual capital because there is no agreement on the definition of the components of intellectual capital, implicitly, and the structure of the elements of intellectual capital is not clearly identified.

2. Literature review

The most recent theories from specialized literature regard knowledge as an organization's most valuable resource, and the method by which an organization acquires knowledge is now thought to determine whether it succeeds or fails.

In the literature, the topic of organizational knowledge acquisition has been discussed from various angles, including the managers' relationships with the political and business environments, company collaborations, knowledge acquisition from outside partners within joint-venture types of organizations, the interpretable and ambiguous legislative environment, and knowledge acquisition from internal partners. Pooncharoen (2016) states that the acquisition of knowledge cannot take place independently of other aspects of cognition (perception, understanding) and influences the adoption of decisions at the level of organizations. The activity of mapping the process of knowledge acquisition has an impact on the business process and contributes to our understanding of the knowledge acquisition process. In the same vein, Lundmark & Klofsten (2014) point out an issue with the connection between knowledge development and the advantages project managers anticipate from greater creativity. According to Bosancic (2016), there are two parts to the problem of terminology understanding: the philosophical aspect, which is an Aristotelian technique of learning, and the second part, which is a knowledge-based system process. The process that guides the knowledge generating process is known as knowledge acquisition. The effectiveness of the knowledge acquisition process is directly correlated with knowledge acquisition, according to Rusly et al. (2012). According to Morady (2013), there is a clear correlation between the organization's process for acquiring information and the clarity of its objectives. Luca (2010) asserts that there is a direct link between an organization's knowledge acquisition and management practices and its marketing performance. Learning is a complex process that includes all knowledge types and ways of acquisition, claim Hoe and McShane (2010). Nemani (2010) observed that there are several ways to acquire knowledge and that any company must create a framework for doing so. This framework should be viewed as a process that may be divided into smaller, more manageable stages.

Knowledge management and intellectual capital have their roots in contemporary management schools of thought, being vital resources for competitive advantage and organizational performance. In organizations, knowledge management typically describes what firms know in their area of interest, as well as how intellectual capital stocks are managed to produce value for the firm. Therefore, intellectual capital represents the resource of knowledge management (Azmawani and Siew, 2013). All the definitions in the specialized literature converge towards the idea that, in essence, knowledge management is based on the intellectual capital of the organization, on which all the functions of management manifest themselves, namely the functions of planning, management, coordination and control, in the conditions in which the raw material of the organization it represents its intellectual capital, with the mention that in this situation the relationship does not manifest itself in a single sense, but is a biunivocal relationship. Knowledge management and intellectual capital are considered to influence each other, and the relationships between the two constructs are of vital importance for organizational efficiency. Intellectual capital management and knowledge management could be combined to create additional value due to similarities and complementarities, and this is accomplished by matching knowledge management processes to the various components of intellectual capital. This connection exists because, when properly utilized and exploited, intellectual capital becomes the key component of competitiveness, success, and viability. However, knowledge management contributes significantly to the creation and utilization of intellectual capital (Aghamirian et al., 2015). Knowledge management focuses on the facilitation and management of knowledge-related activities and tends to create an environment that allows the growth of intellectual capital. Organizations need to understand how to set priorities and integrate objectives in managing intellectual capital with detailed management methods (Carolina et al., 2016). Knowledge management processes are meta-processes that cannot be uniformly observed as physical processes, and differ according to how they were created, their nature, how they are recorded, transmitted and how they are used, but knowledge management is not the same in two organizations. in the same socio-cultural conditions, due to the human factor that perceives differently and philosophizes differently, and which is at the center of knowledge management application (Al-Oudah and Asmahan, 2016). Intellectual capital has been defined over time in different ways, each of these definitions approaching the concept from a different perspective.

A conclusion of the definitions found in the specialized literature is that, within the organization, intellectual capital is an intangible asset, but which is the basis of the production of assets with a higher value than physical capital, although the latter is more visible in promoting company performance. Given that at the level of specialized literature we cannot discuss a consensus regarding the definition of knowledge management, we cannot consequently discuss a consensus regarding the definition of the knowledge acquisition process, nor a consensus regarding the measurement of knowledge management and implicitly the process of acquiring knowledge.

3. Research methodology

The chosen sampling method was random sampling combined with sampling with a certain purpose regarding the respondent subjects from SME organizations in the NE Romania development area. The data collection was carried out in the last two months of 2022 and the first quarter of 2023, and the survey methods used were the electronic survey using the Google-Forms application, but also the survey using the paper format. The targeted organizations operate in various fields of activity: industrial, services, agricultural and commercial. Among the returned questionnaires, a number of 182 were validated, the rest (approx. 10% registering a series of errors, respectively partial completions most of the time).

Structure of the sample of respondents:

When looking at the respondents' ages, we can see that 95% of them are under 40 years old, while 5% are between 44 and 57. This is understandable and accurate given that the study focused on SMEs and that, at the level of the N-E region, out of a total of 72% SMEs whose shareholders were under 38 years old, 11% of SMEs are founded by people up to 28 years old, according to reports from the National Trade Registry Office1. In terms of education, 62% of individuals polled hold university degrees, while 36% are enrolled in master's or doctorate programs.

From the perspective of the respondents' field of activity, 71% of them work in the service field, an answer that coincides with the statistical reports available at national level2, 13% of the respondents work in the industrial field, 6% work in the commercial field, and 9% work in the field agricultural. From the perspective of the hierarchical level occupied within the organization, 36% of the respondents occupy top-manager positions, 27% occupy middle-management positions, and 36% are executive staff. This aspect is explained by the fact that most of the time, top-managers and middle-managers also carry out execution activities, but they are recommended with the official position, respectively that of managers. Among the 63% respondents with official positions of managers at the level of SMEs, 51% have less than 5 years in managerial activities, and 49% have less than 10 years of experience in management positions.

For the data analysis we used the SPSS software (Statistical Package for the Social Sciences) which offered us a wide range of statistical and analytical tools, helping us to interpret and communicate the results of the analyses.

4. Findings

1. Evaluation of the set of factors that define the organization's human capital in terms of their internal coherence. The organization's human capital is indicated by a Cronbach's Alpha factor value of 0.905. (Table no 1).

Table no 1. Internal consistency testing related to the set of variables characterizing the organization's human capital

| Items | Average | Mean standard deviation | Cronbac |
|---|---------|-------------------------------|---------|
| The influence of the organization's management on the process of organizational acquisition of knowledge | 4,24 | , 603 | 0,732 |
| The influence of the skills of the organization's employees on the organizational knowledge acquisition process | 4,31 | ,603 | 0,773 |
| The influence of teamwork on the process of organizational acquisition of knowledge | 4,27 | ,701 | 0,854 |
| The influence of the responsibilities and freedom of action of the organization's employees on the organizational knowledge acquisition process | 3,20 | ,746 | 0,792 |

Source: processing data obtained through SPSS program

When we examine the four variables that make up the organization's human capital, we find that the Cronbach Alpha index has high values (>0.650), which denotes that the scales have a high degree of internal consistency. This guarantees that the results that are returned are accurate.

2. Analysis of the internal consistency of the set of variables that characterize the structural capital of the organization. The structural capital of the organization is characterized by a Cronbach's Alpha factor value of 0.740 (Table no 2).

Table no 2. Internal consistency testing related to the set of variables characterizing the structural capital of the organization

| Items | Average | Mean standard deviation | Cronbac |
|--|---------|-------------------------------|---------|
| Business ideologies of the organization's impact on the method used to acquire organizational knowledge | 3,17 | ,929 | 0,775 |
| The impact of organizational infrastructure on the process for acquiring knowledge within the organization | 4,247 | ,5456 | 0,750 |
| Organizational culture and motivators' effects on the process of acquiring organizational knowledge | 4,20 | ,478 | 0,708 |
| Standardization and formalization's effects on how an organization acquires knowledge | 3,68 | ,646 | 0,771 |

Source: processing data obtained through SPSS program

Analyzing the four variables that define the organization's human capital, we observe high values of the Cronbach Alpha index (>0.650), which indicates an internal consistency of the scales.

3. Analysis of the internal consistency of the set of variables that characterize the relational capital of the organization. The relational capital of the organization is characterized by a Cronbach's Alpha factor value of 0.931 (Table no 3).

Table no 3. Testing the internal consistency related to the set of variables that characterizes the relational

capital of the organization

| Items | Average | Mean standard deviation | Cronbac |
|---|---------|-------------------------------|---------|
| The influence of the organization's brand on the organizational knowledge acquisition process | 3,54 | ,895 | 0,811 |
| The influence of network partners on the process of organizational acquisition of knowledge | 3,65 | ,772 | 0,771 |
| The influence of markets on the process of organizational acquisition of knowledge | 4,02 | ,650 | 0,854 |

Source: processing data obtained through SPSS program

Analyzing the three variables that define the relational capital of the organization, we observe high values of the Cronbach Alpha index (>0.70), which indicates an internal consistency of the scales.

4. Evaluation of the internal consistency of the group of factors that define the stages of the knowledge acquisition process at the organizational level. The Alpha Cronbach index for the organizational knowledge acquisition process is 0.880 (Table 4).

Table 4. Testing for internal consistency based on the variables that define the stages of the knowledge

acquisition process at the organizational level

| Items | Average | Mean standard deviation | Cronbac |
|---|---------|-------------------------------|---------|
| There are influences that manifest themselves on the knowledge acquisition stage through the purchase of know-how | 4,500 | ,5781 | 0,820 |
| There are influences that manifest themselves on the stage of knowledge assimilation through the implementation of acquired knowledge in procedures | 4,05 | ,561 | 0,702 |
| There are influences that manifest themselves on the stage of valorizing the acquired knowledge | 4,21 | ,479 | 0,764 |

Source: processing data obtained through SPSS program

The dimensions analyzed in the study show high values of the Alpha Crombach index, and therefore the test results can be considered consistent and consistent.

5. Analysis of the nature and intensity of the relationship between the management policy dimension that characterizes human capital as a component element of intellectual capital and the stages of the knowledge acquisition process at the level of the organization - Table no 5.

Table 5. Hierarchy of the stages of the organizational knowledge acquisition process according to the intensity of the link with the management policies of the organization

| Position | The stage of the knowledge acquisition process | Spearman coefficient value | The intensity of the influence |
|----------|--|----------------------------------|--------------------------------|
| 1. | Strategic search | 0,898** | Variation o |
| 2. | Buying know-how | 0,808** | Very strong |
| 3. | Employment of staff (experts) | 0,786** | Stuana |
| 4. | Valorization of acquired knowledge | 0,683** | Strong |

Source: processing data obtained through SPSS program

From the analysis of the Spearman coefficient, we find a direct and very strong influence of the organization's management policies on the strategic search stage, the value of this coefficient being 0.899**, included in the range [0.8–1.0]. This means that within the organization, in the proportion of 64%, the strategic search is all the more focused and intense as the management policies of the organization are more oriented towards the process of acquiring knowledge at the level of the organization. The purchase of know-how is another stage of the organizational knowledge acquisition process on which the organization's management policies have a direct and very strong influence, with a Spearman coefficient r=0.809**. This means that the acquisition of knowledge through the purchase of know-how depends directly on the management policies of the company in terms of knowledge management, in proportion of 61.5%. In the same note and in almost the same proportion (R²=62%), in the acquisition of knowledge by hiring experts at the organization level, it is in a direct and strong connection with the knowledge management policy at the organization level. The valorization of acquired knowledge, the most important stage of the knowledge acquisition process at the level of the organization is only strongly influenced by the management policies of the organization in a proportion of 55%, with a Sperarman coefficient of 0.684.

5. Conclusions

In recent years, it has been noted that society has moved from a resource-based economy to a knowledge-based economy; in this context, the leaders of the organizations must deal daily with large amounts of information, select and manage them in such a way as to quickly identify and assimilate the necessary knowledge, and adopt the most correct decisions in order to achieve the organization's objectives. Economic realities force organizations to deal with a huge amount of information that is available in the globalization era in many different organizations and countries, but the competitive advantage of an organization today is given by the creativity with which it uses this information. Another problem is the enormous amount of information that businesses today must manage. Understanding and assessing the efficacy of the management process is required in order to foresee the organization's performance because knowledge management is the cornerstone of an organization's success in a knowledge-based economy. It is crucial to evaluate the efficiency of the knowledge management systems in this situation. Since it is the major method of knowledge management and, thus, the main source of the knowledge needed to achieve the objectives of the company, a knowledge acquisition process metric must be defined.

Thus, with a confidence level of 99%, we can say that in small and medium-sized organizations in the north-eastern part of Romania, the dimensions of human capital as a component of intellectual capital directly and strongly influence all stages of the knowledge acquisition process at the level the organization, but the strongest influence is manifested on the stages of strategic search, acquisition of knowledge through the acquisition of know-how, acquisition of knowledge through the prism of bringing into the organization those experts who possess the knowledge that the organization needs and which it does not has, and a strong influence on the stage of valorization of acquired knowledge. In these conditions we can conclude that within an organization, the intensity of the organization's management policies have a strong influence on the knowledge acquisition process at the organization level.

The current state of the commercial world is a dyadic one. On the one hand, the economic and financial problems have made the corporate environment more perplexing. These frequent and quick changes also dictate how far companies advance. They must adjust to the adjustments required to

thrive in marketplaces that are becoming more and more dynamic and to deal with customers who expect new, sophisticated, individualized, and inventive products. At the same time, businesses must adapt their operations in accordance with the suppliers who, by consistently supplying novel items, drive advancement. As a result, an organization is under pressure from suppliers as well as from the perspective of its customers.

Knowledge management is an important component of organizational resource management in modern economic organizations. It focuses on the development, implementation and management of practices that promote the collection, storage, transfer and use of organizational knowledge for the benefit of increasing the effectiveness of the organization and its performance.

In the perspective of modern economic organizations, knowledge management plays an essential role in ensuring the long-term success of organizations. By developing and implementing knowledge management practices, modern economic organizations can:

- 1) To improve the decision-making process by providing relevant, accurate and timely information, knowledge management can support the decision-making process of the modern economic organization, thus ensuring that decisions are made based on data and sound arguments.
- 2) To optimize the efficiency of the organization by promoting an environment in which knowledge is shared and used effectively, knowledge management can increase the efficiency and productivity of the modern economic organization.
- 3) To improve collaboration and communication by facilitating the exchange of knowledge between departments and employees, knowledge management can improve collaboration and communication in the modern economic organization, which can lead to improved interpersonal relationships and increased performance.
- 4) To promote innovation by sharing and using knowledge within the modern economic organization, knowledge management can promote innovation and creativity in terms of products and services offered.

In conclusion, knowledge management is essential in the perspective of modern economic organizations, helping organizations to optimize their efficiency, improve decision-making, improve collaboration and communication, and promote innovation. By adopting knowledge management practices, modern business organizations can improve their performance and remain competitive in a constantly changing business environment.

This study had implications in multiple areas of activity:

- 1) From a managerial perspective, the research shows that the way the manager emphasizes one dimension or another of the organization's intellectual capital has strong influences on the process of organizational acquisition of knowledge, and implicitly on the costs with which the organization achieves its objectives. Also, managers can identify the intensity of influence of each of the elements of intellectual capital (human capital, structural capital, relational capital) on each of the stages of the organizational knowledge acquisition process. Managers can establish the company's policies and adjust the organization's structure and costs according to its objectives, so that they can face a very large volume of information, adopt the most correct decisions in an appropriate time.
- 2) From the academic perspective, starting from the fact that knowledge management as part of the management process contributes to the formation of the company's intellectual capital which in turn constitutes the foundation of the innovation process, it can be said that there is a need to study knowledge management as a discipline in university curricula.
- 3) The developers of economic policies, depending on the markets they want to penetrate, will be able to support one or another element of the intellectual capital structure at a given moment (eg: human capital when they want to strengthen organizations on the internal market or relational capital when they want to enter new markets).

A healthy organization today is the organization that lives with the changes and trends of the opposite direction, being obliged to improve its working methods, the way of managing resources, internal and external communication channels. In other words, a healthy organization is that organization that identifies creative solutions to internal and external pressures, so it is an intelligent organization.

The research addresses a vast field, the field of knowledge management, a field which invites indepth analyzes and investigations. In order to achieve the objectives of the research, it was pursued strictly to its thread, which inevitably led to some limitations of the research process, such as:

- ✓ the paper's original models describe the situation of the knowledge acquisition process at the organizational level in Romania's north-eastern development region as well as the theoretical framework created to enhance the knowledge acquisition process at the level.
- ✓ organizations; in this context, it is recommended to specialize at the level of each organization and adapt to their particularities
- ✓ also, a certain circumspection in the generalized approach to the research results is required
- ✓ as a result of the size of the sample used in the research process, as well as as a result of the limits imposed by the area and geographical location of the organizations
- ✓ non-acceptance or impassiveness of some potential respondents to actively participate in the research undertaken
- ✓ the tendency of some of the participants in the study to alter truths related to aspects of the research undertaken

Future research directions:

Without ignoring the limits of the research, it is easy to see the need to continue and expand it, starting from the fact that the current level of this research represents a solid starting point. Among the most important future research directions are:

- the generalization of research methodologies in other types of organizations (large enterprises, public institutions, etc.)
- highlighting the effect of the knowledge acquisition process on the quality of decisions adopted by managers at the level of organizations
- the research of knowledge losses during the stages of the knowledge acquisition process at the level of the organization, losses resulting from errors in understanding the organization's objectives, identifying the knowledge necessary for the organization, decrypting the acquired knowledge, the causes of these errors and the consequences on the organization's performance.

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