

MANAGING KNOWLEDGE AND INFORMATION IN THE SUSTAINABLE ORGANIZATION*GRECU Valentin**assistant professor, Ph.D., Faculty of Engineering / Department of Industrial Engineering and Management,
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Abstract: *Knowledge and information management are essential for the success of organizations and bring significant competitive advantages. There has been significant investments in setting up technological platforms that support business processes and increase the efficiency of operational structure in many organizations through an efficient management of knowledge and information. This research highlights the importance of using knowledge and information management in order to increase the competitiveness of organizations and to foster the transition towards the sustainable organization, as nowadays an organization that wants to be competitive needs to be sustainable.*

Key words: knowledge and information management; sustainable organization; competitive advantages

1. Introduction

Industrial systems cause and determine flows of material and energy in society and are therefore an important part of the human economy. Although industry is sometimes seen as a source of environmental degradation and social concerns, it is widely recognized that it is an essential part of development and wealth creation. Therefore, as an important social actor, industry must play a prominent role in creating a sustainable future [1].

There has been significant investments in setting up technological platforms that support business processes and increase the efficiency of operational structure in many organizations and therefore most organizations have reached a point where the use of tools to support the decision making process emerges as more important than ever [2].

This research highlights the importance of using knowledge and information management in order to increase the competitiveness of organizations and to foster the transition towards the sustainable organization, as nowadays an organization that wants to be competitive needs to be sustainable [3].

2. Understanding Knowledge and Information Management

Knowledge and Knowledge Management are essential to the success of enterprises. Nonaka and Takeguci [4] state that "In an economy where the only certainty is uncertainty, the one sure source of lasting competitive advantage is knowledge".

Starting from this premise it is imperative that Knowledge be leveraged properly through Knowledge Management practices in order to reach desired competitive levels for enterprises. In order to discuss about knowledge and information management, one should first understand the terms. Knowledge is a broad and abstract notion that has defined epistemological debate in western philosophy since the classical Greek era. The philosopher Plato was the first to propose a definition of the term in his work *Theaetetus Linguae Graecae*. He states that knowledge is "justified true belief" and presents three criteria that must be met by any statement for it to be considered knowledge: it should be true, justified and believed from an objective point of view. However, there are many that disagree with Plato and consider that these criteria are not sufficient.

According to Robert Nozick's a new criterion should be added: that knowledge "tracks the truth" [5]. Simon Blackburn adds to the definition of knowledge, saying that this is not enough and that people who meet these conditions through a "defect, flaw or failure do not possess knowledge" [6].

Although this fact has been known and discussed for a long amount of time by academicians and players on the manufacturing market, KM has achieved little penetration in practice. The main reason is that Knowledge, especially tacit, is difficult to quantify [7].

There are numerous books and studies [8, 9, 10] that present the importance of KM activities and also we as human beings have an innate sense to recognize and respect knowledgeable individuals, even though it is difficult to precisely calculate an exact amount of knowledge. So if for no other reason than these, enterprises must bring knowledge at the core of their undertakings.

Uncertainty forces us to guide our future events in different directions, but without knowing if the chosen direction is the safest. Uncertainty creates opportunity plans and strategies that may not work as expected, and this situation is generating risk. Uncertainty arises due to the amplitude of changes and identifying changes underlies the assessment of potential risks. To evaluate the risks specific to the business, identification must begin with the vectors of change.

3. Sustainable Businesses and Corporate Social Responsibility

The business sector is responsible for a significant proportion of the environmental footprint, in addition to having a major influence on wider social and economic sustainability issues, both nationally and internationally [11]. Therefore, it is crucial to improve the environmental and sustainability performance of businesses and organizations in order to achieve a more sustainable society.

One of the starting points of the field that is now known as corporate social responsibility (CSR) was the work of Bowen [12]. In this thesis, CSR is defined as a comprehensive set of policies, practices and programs that are integrated into business operations, supply chains, and decision-making processes throughout a company, with the aim of inculcating responsibility for current and past actions as well as future impacts [13]. In the same time, issues that tackle sustainability have a long issue as the most used interpretation of sustainable development was introduced by the Brundtland Commission's report in 1987: meeting the needs of the present without compromising the ability of future generations to meet their own needs.

According to Hockerts [14], from a corporate point of view, a strategy for corporate sustainability must meet the needs of the firm's stakeholders without compromising its ability to meet the needs of future stakeholders as well. The sustainable enterprise, as defined by Elkington [15] is a company that contributes to sustainable development by delivering economic, social and environmental benefits simultaneously – the so-called triple bottom line.

Sustainable businesses and green businesses are businesses that have no negative impact on global or local environment, the community, society and economy. Sustainable business is business trying to satisfy the triple approach of sustainability: its economic, social and environmental components [16]. Often, companies have progressive policies for environmental sustainability and human rights [17]. Generally, a business is considered to be green if it meets the following four criteria [18]:

- Incorporating sustainability in each of its business decisions.
- Provides environmental products and services that replace the demand for products and / or organic services.
- It is greener than traditional competition.
- Made a commitment to the principles of environmental sustainability in its business operations.

A sustainable business is any organization participating in ecological or green activities to ensure that all processes, products and production activities adequately address the current environmental concerns, while maintaining a profit. In other words, it is a business that "meets the needs of the present world without compromising the ability of future generations to meet their own needs" (WECD, 1987). It is the process of evaluating how to design products that take advantage of current environment and how well a company behaves when products are made from renewable resources [20].

4. Benefits of Knowledge and Information Management

The benefits of successfully implementing knowledge management are considerable, although implementing KIM presents many difficult challenges and requires a considerable amount of resources. In order to achieve increased effectiveness and efficiency in today's highly competitive market place, a company should manage its knowledge correctly. This can be attributed to the connection that exists between knowledge and key business processes [19].

Successful knowledge management implementations lead to:

- new products and services;
- reduced time to market;
- increased customer satisfaction;
- increased employee satisfaction and motivation;
- cost reduction;
- increased market share, etc.

As a conclusion on the importance and benefits of knowledge in general and knowledge management in particular, Nonaka & Takeguci [5] said it best: "In an economy where the only certainty is uncertainty, the one sure source of lasting competitive advantage is knowledge".

5. Research Methodology

The literature indicates that a good management of knowledge and information brings significant competitive advantages to any organization. As stated by Kiku and Lori [21], Knowledge Management means "acquiring knowledge from the organization or another source and turning it into explicit information that the employees can use to transform into their own knowledge allowing them to create and increase organizational knowledge" [21]. Other definitions present Knowledge Management as "the planning, organizing, motivating, and controlling of people, processes and systems in the organization to ensure that its knowledge-related assets are improved and effectively employed" [22].

As it is a relatively new concept it is difficult to find a universally accepted definition, as in the case of sustainability. However, this research attempts to identify how knowledge and information management is addressed in companies that operate in Romania and foresee the future trends in this field. This exploratory study aims to give us a better understanding of the potential users of information systems.

5.1 Research Objectives

The main objective of this research is to identify how knowledge and information management is addressed in companies that activate in Romania, to better understand their needs and habits in order to develop an information system for the transition to the sustainable organization that is suitable and easy to use. Secondary endpoints of the study are identification of awareness on knowledge and information management and identification of governance and leadership issues in companies that activate in Romania.

5.2 The Questionnaire

The questionnaire consists of 37 questions which were structured as follows: the first 5 questions are classification questions, collecting information about the respondents. The following 32 questions are structured into 5 major categories:

- Section 1: Governance and Leadership
- Section 2: Records Management
- Section 3: Access to Information
- Section 4: Compliance
- Section 5: Culture

The questionnaire that has been used was translated and adapted after the instrument developed by The National Archives [23].

6. Research results

The results of the questionnaire can't be presented entirely in this paper, but it is important to highlight its main findings. In the first sub-section of the questionnaire, entitled "Strategic Management", the respondents are asked if their organization manages to meet its own expectations regarding information management..



Figure 1 Meeting expectations regarding information management

As illustrated in figure 1, two thirds consider that the expectations are met totally or to a large extent, while only 7% consider that the expectations are met to a small extent. It is interesting to note that 5% of the respondents say that their organizations don't have any expectations, or plans, regarding information management. When asked about the existence of a knowledge and information management strategy, 56% answered that there is such a strategy in their organization, while 28% don't know and 16% answered negatively.

The next question, represented in figure 2, is linked with the existence of the KIM strategy, as it inquires if the KIM strategy is integrated into the corporate strategy of the organization. As the pie-chart shows, in 61% of cases, where there is a KIM strategy it is totally or partially integrated into the corporate strategy, but there are situations (7%) when there is a KIM strategy without being integrated into the corporate one. The following questions showed that knowledge and information management isn't given the deserved attention. Figure 3 confirms this hypothesis, showing that only half of the respondents said that managers totally or largely understand why and how KIM is critical to the organization. Having a considerable percentage of respondents that didn't know what to answer to this question stresses the idea that communication in the respect of knowledge and information management is recommended.



Figure 2 KIM integrated into the corporate strategy

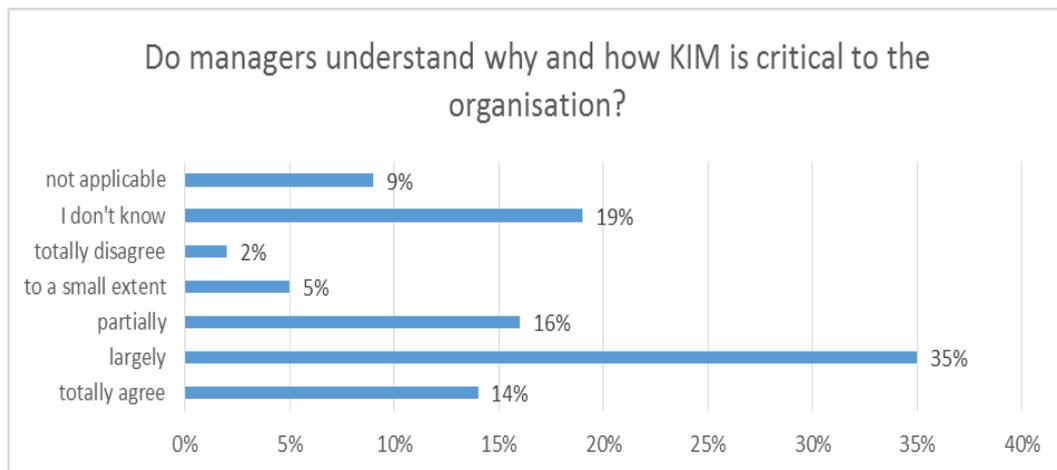


Figure 3 Understanding of KIM importance

Concerning the presence of a person responsible for knowledge and information management in the boards of the organizations, the study revealed that only 40% of the companies have such a designated person. The research also reveals that only 49% of the organizations know exactly which their information assets are and have them well organized. As demonstrated by the literature, knowledge and information are essential for the success of organizations and an important source of competitive advantage, but Romanian companies seem not to realize this at a large extent.

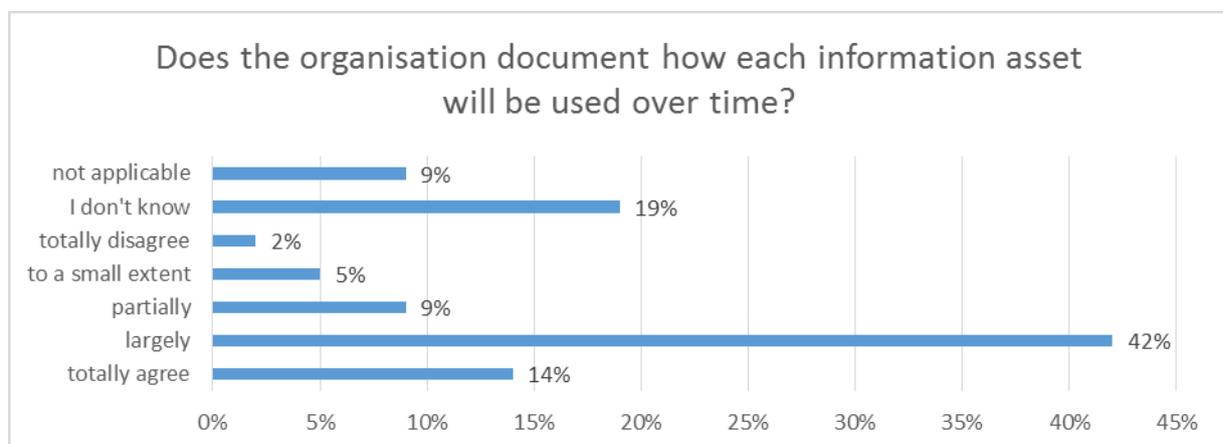


Figure 4 Documentation of information assets usage

The documentation of how each information asset will be used over time is present to a large or total extent only in 56% of companies, while the rest of the respondents either don't know if there is a documentation for such purpose (19%), or consider that the usage of information assets is partial, insufficient or not at all. It is notable that 9% of the respondents answered that this is not applicable in their organization, suggesting that their company didn't even consider analysing their own information assets (see figure 4).

7. Conclusions

Knowledge and information management is not given enough attention in companies that operate in Romania. Although the literature indicates a strong connection between correctly managing information and knowledge and the success of the organization in obtaining profits and creating competitive advantages, only half of the respondents of this research seem to be aware of this. The questionnaire offered an overview of how information and knowledge are addressed, and enabled us to identify a trend that has been presented in the previous chapters.

This research underlines the need for strategies, procedures and guidelines for managing information and knowledge in many of the companies that function in Romania. Thus, the information system for managing the transition towards the sustainable organization fits well in the picture drawn through this study. It combines the need of organizing and using the right information and knowledge with the need of becoming sustainable, offering flexibility and an important source of competitive advantage.

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