



The Importance of the Development of Managerial Competencies in the Conditions of Sustainability

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Keywords:

Competence;
Sustainability;
Sustainable competencies



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Abstract: *The paper concerns the importance of the development of managerial competencies for Sustainability. The importance is argued by dynamic changes in the environment of all management areas, for example, Revolution 4.0. The article provides the reader with information about the concept of sustainable development, presents the essence of the development of managerial competencies in the conditions of Sustainability and presents examples of competencies that favor the sustainable management of organizations based on the literature review. The authors indicated several key competencies from the Sustainability point of view, for example, leadership and strategy. The main contribution of the article to science is the need to conduct studies in the field of key competencies for sustainable development and to create a universal model for all managers who follow the principles of sustainable development in their work.*

1. INTRODUCTION

Dynamically changing environmental conditions in every field, caused by, for example, broadly understood digitization, automation and robotization, have their effects in the economic, ecological and social spheres (Głomb et al., 2019). Visible effects translate into consequences that are more and more noticeable both in the sphere of social and business life. These consequences can affect ordinary people as well as employees, managers and entire organizations. For example, the widely understood automation of workstations may affect the well-being and efficiency of employees, modern technologies may have a negative impact on the environment and thus on society. The solution to these problems turns out to be the concept of sustainable development. According to Jarosz et al. (2020), Revolution 4.0 is challenging for business practice and determines the need for competitive human capital, especially due to its competencies. Many authors indicate the importance of digital competencies in rapidly changing organizational and globalization conditions (Susskind, 2020; Kosała et al., 2019; Oberländer et al., 2019). The scientific literature focuses heavily on media and IT competencies, but there is still a research gap in sustainable competencies.

In recent years, the concept of sustainable development has become more and more important. The society adopts the goals and principles of sustainable development, as well as enterprises, state administration institutions and non-profit organizations. Adopting the principles of sustainable development is primarily associated with the introduction of new operating strategies. Many enterprises have the achievement of sustainable growth as their main goals.

The main goal of the paper is to present the concept of sustainable development in the light of organization management and to present the importance of acquiring and increasing competencies necessary in terms of Sustainability. The article presents the results of a literature review in the field of sustainable development. The article provides the reader with information about

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the concept of sustainable development, presents the essence of the development of managerial competencies in the conditions of Sustainability and presents examples of competencies that favor the sustainable management of organizations.

2. SUSTAINABLE DEVELOPMENT

It is widely recognized that the idea of sustainable development appeared as early as the 1960s as an attempt to answer the questions about the threats related to the dynamic development of the economy of western countries, the depletion of non-renewable natural resources, pollution of the natural environment, and the fast pace of population growth, deepening the separation between the prosperity of highly developed countries and the rest of the human population suffering from hunger and malnutrition, and the general unsteadiness, and in many cases decay of the ecosystem (Płachciak, 2011). Adopting the concept of sustainable development, according to various authors, is caused by “changes in the socio-economic climates of the nations of the world” (Okeniyi, 2020) or “crises in natural resources and energy on a global scale” (Wang et al., 2020).

As a result of literature research, Moore, Mascarenhas, Bain, & Straus (2017) claim that Sustainability is “one of the most significant translational research problems of our time”. There are many definitions of sustainable development in the literature that explain what its concept is. The contemporary approach to the definition of sustainable development means balance in ecosystems (ecological balance) and a balance between economic, ecological and social elements or aspects of economic development - economic, spatial and social order, taking into account the needs of future generations (Trzepacz, 2012). In other words, the concept of sustainable development is presented, among others, by the triad of sustainable development, which assumes maintaining a balance between three areas: economy, ecology and society.

Adamowicz (2006) examines the concept of sustainable development from three perspectives as:

- a socio-philosophical idea (assuming the need for changes in the human value system),
- modern direction of economic development (assuming new ways of organization and economic management),
- a newly emerging scientific discipline.

Over the years and as a result of numerous studies, the concept of sustainable development has been developed and is not only a starting point for environmental protection, but has primarily become a motivating factor for the creation of sustainable business models, the effect of which is profitability and innovation of services (Carboni et al., 2018). As Adamowicz (2006) claims the concept of Sustainability is very important for organization management. According to Jørgensen (2008), sustainable development has a significant effect on the operational level of modern companies. It is related, *inter alia*, with production processes and products and relates to quality, environment and health and safety.

Sustainable enterprises strive to ensure a better quality of life for the social and environmental conditions, including addressing 17 Global Sustainable Development Goals proposed by the United Nations. These goals are focused, among others on: health, poverty eradication, high-quality education, renewable energy, innovation, responsible resource management and climate action (United Nations, 2015). The key elements for the organization, both in the context of sustainable development and corporate social responsibility, are: organizational governance, protection of human rights, relations with employees and consumers, impact on the natural environment, fair market practices, as well as social commitment and continuous development.

3. SUSTAINABLE COMPETENCIES

In order to present the essence of sustainable competencies, a literature review has been made in this field. The following part of the paper is an overview of the research articles conducted in the field of sustainable competencies. The articles were selected by setting the period: 2000-2020. The articles were searched in the Google Scholar database based on the following keyword: sustainable competencies. This paper presents the most interesting, in the authors' opinion, sustainable competencies clusters.

The scientific articles review provides knowledge about sustainable managerial competencies. Sustainable competencies turn out to be very important from the point of view of project management in the world of sustainable development. Hassan (2020) propose a model of competencies for project managers to sustainable development projects:

- communication,
- leadership,
- development orientation,
- achievement orientation,
- motivation,
- teamwork,
- innovation,
- decision making.

The proposal of the Hassan model assumes that the set of the above competencies is suitable for maintaining a balance in the social, economic and environmental spheres.

Kar and Lillian (2018) present a wider range of competencies important for Sustainability. The authors provide a set of competencies required from graduates of management:

- system thinking,
- competencies for learning and developing,
- competencies for integrating business, environmental and social problems, perspectives and information,
- competencies to develop alternative business models, methods and trajectories that are more synthetic, dynamic, and pragmatic, to enable radical or systemic innovation,
- networking and social competencies,
- coalition and collaboration building competencies.

Furthermore, Kar and Lillian (2018) refer to Bickell (2013), who defined the core competencies for Sustainability:

1. Mindset:
 - a. Values, motivation and action
 - b. Awareness of core principles and themes
 - c. Communication and collaborative working
 - d. Systems and future thinking
 - e. Leadership
2. Strategy:
 - a. Business case and strategy
 - b. Change management
 - c. Innovation

3. Technical:
 - a. Technical Level 1
 - b. Technical Level 2

Key competencies of Sustainability were also developed by De Haan (2008). The author identifies the following competencies:

- for perspective-taking,
- for anticipation,
- for interdisciplinary knowledge acquisition,
- for dealing with incomplete and overly complicated information,
- for cooperation,
- to deal with individual decision-making dilemmas,
- for participation,
- for motivation,
- for reflecting,
- for moral action,
- for independent action,
- for supporting others.

The lists of generic sustainable competencies are studied by Eizaguirre et al. (2019) in three regions: Europe, Latin America and Central Asia. For Europe, there are competencies as: commitment to the conservation of the environment, ability to show awareness of equal opportunities and gender issues, ability to act with social responsibility and civic awareness, ability to act on the basis of ethical reasoning, commitment to safety, appreciation and respect for diversity and multiculturalism. For Latin America there are competencies as: commitment to their socio-cultural environment, commitment to preserving the environment, social responsibility and citizenship, regard and respect for diversity and multiculturalism and ethical commitment. And for central Asia there are competencies as: ability to follow a healthy lifestyle, tolerance and respect for others, ecological and environmental responsibility, patriotism and preservation of own cultural values and social responsibility.

The review of the texts also showed the trend of sustainable competencies in higher education. Wiek et al. (2011) have proposed a framework of key competencies in Sustainability. The authors indicated the followings clusters of sustainable competencies:

- systems-thinking competence – ability to recognize the complexity of sustainable systems (e.g. the sustainable development triad),
- anticipatory competence – ability to analyze the frameworks of Sustainability,
- normative competence – the ability to define, applying and negotiate Sustainability values and principles,
- strategic competence – the ability to implement the transformation toward sustainable development,
- interpersonal competence – the ability to influence people (e.g. motivate, participate) to study sustainable development and solve problems.

According to Vega-Marcote et al. (2015) literature research, education system should support improvement of specific competencies, which enable the adoption of appropriate behavior in conditions of sustainable development. In this regard, the authors refer to the set of competencies proposed by Wiek et al. (2011). Furthermore, Vega-Marcote et al. (2015) refer to model of

competencies development by the European Union. It presents the competencies and skills to “respond to complex demands and adequately carry out a variety of tasks, combining practical skills, knowledge, motivation, ethical values, attitudes, emotions and other social components and behaviors that come together to achieve efficient action” (EU, 1999; CRUE, 2000).

Like Vega-Marcote et al. (2015) also researched sustainable competencies in the education sector. Anderson (2015) refers to sustainable development in higher education and sustainable competencies. He also relies on key competencies proposed by Wiek et al. (2011) and claims that sustainable competencies are different from traditional ones due to addressing sustainable problems. Sustainable competencies in higher education were also considered by Baartman et al. (2007), Barth et al. (2010), Brundiens et al. (2010), Cebrián and Junyent (2015). The topic of sustainable competencies in higher education is also very important in the case of the modern organization because graduates will be future managers in the sustainable economy.

4. CONCLUSION

This paper presents the background and main assumptions of the concept of sustainable development. The main purpose was to review research articles about managerial competencies in the light of Sustainability. The review generally provides knowledge about the important role of sustainable competencies in the modern economy.

The analysis of the literature, based on the works of many authors from around the world, shows that sustainable competencies are important from the point of view of education or the implementation of sustainable projects. When interpreting sustainable competencies, one should bear in mind the complexity of the concept of sustainability: economy, environment and society.

Scientists call sustainable competencies differently, but according to the authors of this paper, the competencies relevant to the issues of sustainable development, based on the literature review, are as follows: leadership, strategy, cooperation, communication, integration, ability to develop in general.

The abovementioned competencies are very universal and important in every sector of the economy. They are also very important in terms of maintaining economic, environmental and social balance.

Based on the review of scientific articles, the authors can conclude that the issue of sustainable competencies is actual and very important from the perspective of the sciences on organization and management. Unfortunately, apart from a review of various sets of competencies in the field of sustainable development, there is no single model that would indicate a complete set of sustainable competencies and their indicators. It is recommended to conduct scientific research would enable the development of competency standards for managers who are leaders in Sustainability conditions.

ACKNOWLEDGMENT

This project has been financed by the Minister of Education and Science within the “Regional Initiative of Excellence” Programme for 2019-2022. Project no.: 021/RID/2018/19. Total financing: 11 897 131,40 PLN.

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