



(cc) BY-NC-ND

ISSN 1822-8038 (online) INTELEKTINĖ EKONOMIKA INTELLECTUAL ECONOMICS 2023, No. 17(1), p. 130–151

THE IMPORTANCE OF THE ORGANIZATIONAL LEARNING CONCEPT IN THE SUSTAINABLE MANAGEMENT OF ORGANIZATIONS

Sladjana ŽIVANOVIĆ

Faculty of Business Economics and Law, Adriatic University Bar, Montenegro https://orcid.org/0000-0002-6001-3685

Sandra DJUROVIĆ

Faculty of Business Economics and Law, Adriatic University Bar, Montenegro https://orcid.org/0000-0001-5874-9581

Nikola ABRAMOVIĆ

Faculty of Business Economics and Law, Adriatic University Bar, Montenegro https://orcid.org/0000-0002-7865-3592

Olga POBEREZHETS

Odesa I. I. Mechnikov National University, Odesa, Ukraine https://orcid.org/0000-0003-1535-9991

Viktoriia UDOVYCHENKO1

Taras Shevchenko National University of Kyiv, Kyiv, Ukraine https://orcid.org/0000-0003-4588-8149

DOI: 10.13165/IE-23-17-1-07

Abstract. The purpose of this research is to address the fact that the changes taking place in society in the socio-economic and environmental spheres determine the need for companies to adapt to these changes in order to survive, as well as contribute to the development of the entire community. The achievement of activities by companies can contribute to the sustainable development of society, which must, first of all, be sustainable in all four aspects: economy, environment, social relations, and management. All four aspects are almost equally important, but management is a process that permeates the other three aspects, and it is impossible to achieve positive results and goals in the three previous areas without it. The national culture, organizational culture, structure, leadership,

Corresponding author: Viktoriia Udovychenko, e-mail udovychenko.vv@knu.ua

learning and progressive goals of an enterprise lead it towards sustainable management and business. Human capital within such an organization provides the basis for creativity and innovative ventures. This approach of the organization, with a set of organizational values, beliefs and ways of behavior, influences socially responsible behavior and sustainable management and business. This paper provides an analysis of factors that influence sustainable management and business, such as national culture, organizational culture, organizational learning and leadership, and proposes a model of organizational culture that supports the process of organizational learning and enables the achievement of the ultimate goal: sustainability.

Keywords: sustainable business management, organizational learning, organizational culture, organization leadership.

JEL Codes: *D83*, *M15*, *O31*

1. Introduction

Contemporary society is characterized by a series of economic, technological, social, and environmental changes (Ahlstrom et al., 2020; Goworek et al., 2020). As part of society, businesses and organizations must follow these changes and adapt to them in order to survive and contribute to the development of the social community, which must, first of all, be sustainable, including in all four aspects of sustainability: economy, environment, social relations, and management. All four aspects are almost equally important. However, management is a process that pervades all three preceding aspects and is required to achieve positive results and meet the goals set in the preceding three areas. Good governance enables economic growth. Without adequate management, preserving a healthy environment and conserving natural resources are impossible. Relations in society are a product of the management process. Therefore, this paper will pay special attention to the management process and the factors that influence it and make it sustainable.

Managing a company is a complex process that requires, first of all, a lot of knowledge and skill from managers as well as a large amount of information and data, on the basis of which they, using the knowledge and skills they possess and taking into account the external factors of the environment and the internal factors of the organization, can make the best decisions (Goworek et al., 2020). The different areas and environments in which companies exist require the formation of appropriate organizational structures that will enable efficient management and the achievement of certain goals (Shrestha et al., 2019). Today, production companies – that is, industrial production – face specific challenges in terms of economic and environmental sustainability, and above all, the most important condition of sustainability must be met (Moshood et al., 2022). In modern business conditions, the development of science and technology creates the need for constant changes for organizations and individuals – i.e., there is a need for a flexible organizational structure in companies. Business and management problems in both society

and business are becoming more complex, and a large amount of knowledge is needed to solve them. This means that the principles of sustainable development must be respected through every activity of the management process: planning, organizing, leading, and controlling (Barbosa et al., 2020).

On the other hand, organizational culture and organizational learning also represent important influences on the management process (Tortorella et al., 2020). This arises through the process of creating common assumptions, beliefs, values, norms, and symbols and their acceptance by all or most employees (Novicevic, 2014). Thus, the process of creating an organizational culture is related to the collective solving of problems faced by members of a group or organization, and reveal the dependence of this process on national culture. The fact is that the organizational culture is founded on collaboration – teamwork – and all activities and values are shared; otherwise, the organizational culture is founded on the national culture on which it is founded and the heritage of shared values.

In order to successfully solve the mentioned problems, it is necessary to constantly invest in the knowledge of the individual as well as the organization to which they belong; the value of the organization consists of people, their knowledge, and their ability to use that knowledge. An organization's competitive advantage is realized by the ability to create and use knowledge; knowledge has a strategic role in the management of a modern organization. Therefore, in modern society and the management of modern business systems, the application of the concept of organizational learning is necessary.

It is vital to distinguish between organizational learning and organizational change. Those two concepts, although closely related, are clearly separated. Every learning implies change, but not every change implies learning, implying that organizations can change without learning anything. Every organizational change implies some change in the understanding and behavior of individuals and groups as well as business processes at the organizational level. However, only in the process of organizational learning does this change lead to the improvement of the key competencies of the organization, which enables it to adapt to its environment. It is understandable that responsible companies are at the heart of society (Novicevic, 2014). Companies that understand their connections to the communities in which they operate, as well as their environmental impact, are the ones that have the best chance of long-term success. At the same time, stakeholders' interest in the company's environmental performance is at its peak. It is increasingly recognized that good environmental performance is also effective for business (Sachs, 2015). All signs point to the fact that sustainable company management and sustainable business contribute to sustainable development. Considering that it is the only kind of development that is acceptable today, sustainable management requires a lot of attention and implementation in all organizational systems.

The remainder of this paper is organized as follows. Section 2 presents the methodological approach, Section 3 presents the literature review, Section 4 presents the research design, Section 5 provides the results, Section 6 outlines the discussion and Section 7 suggests the conclusions.

2. Literature review

The concept of sustainability becomes a key concept for the survival of life and the progress of humanity. The reasons for this are the increasing use of resources, the energy crisis, environmental pollution, population growth, and economic and political inequality in the world. Now, the concept of sustainable development has a central place in science, society, and the media. Even though it is one of the most common concepts today, it is still very often characterized by the unknown.

Initially, the concept of sustainable development primarily referred to the problems of environmental protection in less developed countries. Today, sustainable development is a global concept, which, according to Sachs (2015), represents an attempt to understand the interactions of three complex systems: the world economy, global society, and the physical environment of our planet. At the core of the idea of sustainable development is the improvement of the quality of life, which would be achieved by balancing economic growth and development, environmental protection, and social factors.

There is still no single definition of sustainable development, but the most frequently cited definition was created by the World Commission on Environment and Development (UN, 1987).

Meanwhile, sustainability strategies have become key in achieving a balance between the preservation of the planet's natural potential and resources and their use (Galpin et al., 2015). Therefore, creating an organizational infrastructure that promotes a culture of sustainable development may be associated with some strategic risks in implementing green innovations to achieve sustainable development goals (Cavaleri & Shabana, 2018).

The need for raw materials, which are a source of food, energy and building materials, has been present throughout history, and the exhaustion and exploitation of natural resources has been considered a recurrent problem faced by humanity since ancient times. Now, when society has reached an advanced level of scientific and technological progress, this historical problem is perhaps at its most alarming (Wang et al., 2019).

With the constant growth and advancement of humanity, the exploitation of natural resources, primarily wood, coal, forests and topsoil, has progressed. These resources have been defiled to such an extent that an increasing impact on both households and companies is evident. Given that sustainable development represents the provision of basic social, economic and environmental opportunities for humans as individuals within society, such a form of development is only achievable in the event of a change in the current pattern of behavior in production and consumption, so that the lives of future generations can proceed normally and unhindered (Saaty, 1980).

After the World Summit in Rio, the World Summit on Sustainable Development was held in Johannesburg in 2002. The participants of the conference presented the same vision as 10 years ago, only with an undoubtedly greater appeal and further ambitions for improving the global environment and encouraging the best possible implementation of Agenda 21. In 2012, the Rio+ 20 United Nations conference held in Brazil focused on the green economy within sustainable development and the institutional framework for sustainable development. One of the most suitable ways to successfully implement sustain-

able development around the world is the transition to a green economy. This concept of sustainability has been met with much approval as well as disagreement, so the question is often raised as to whether the green economy is actually an obligation.

The world economy has enormous proportions and is still proliferating (by 3%–4% per year). Income distribution within and among countries is very uneven. The world is divided into the enormously rich and the extremely poor: at least one billion people live in extreme poverty and struggle for survival every day. The lives of the poorest are constantly threatened due to insufficient nutrition, the lack of a roof over their heads, a lack of clean drinking water and the absence of health care.

The global economy is creating an ecological crisis. Therefore, humanity today has two possible alternatives; two paths it can take. One possibility is that it continues on a path that fundamentally changes the climate on Earth, that the world economy continues to use mostly fossil fuels as it does now, and many other things proceed in their current manner. Sachs calls this scenario at this time "business as usual" (Paunković, 2014). If humanity chooses to continue down the path it is now on, it will face serious dangers and consequences.

Another possibility is a fundamental change in the way humanity moves, in order to quickly adopt new technologies (e.g., replacement of electricity production in thermal power plants with solar energy, use of wind energy, biomass energy, efficient use of water to avoid its depletion, etc.). This second possibility – that is, an alternative path, the goal of which is not only economic growth, but also social inclusion and ecological sustainability – is the path of sustainable development.

By comparing these two paths, the following can be concluded: if the usual way of production and consumption is continued, progress would certainly still be achieved in various areas. Science and technology would continue to improve, poverty would decrease in many parts of the world, and the rich would become even richer. However, progress will reach its peak, and the negative consequences of harming the environment will over time outweigh the aforementioned positive tendencies. Then, social and ecological disasters will follow, and all of the progress achieved will be worth nothing. If, on the other hand, humanity follows the path of sustainable development, finds alternatives to fossil fuels, uses green technologies and finds ways not to destroy the physical environment, some of these solutions will most likely be more expensive. An example of this might be buildings that use less energy for heating, the construction of which may be more expensive due to the use of specific materials and insulation techniques. Likewise, battery-powered electric vehicles remain much more expensive than conventional internal combustion engines that consume large amounts of gasoline. However, these costs do not even come close to being comparable to the costs that may arise from the social and environmental catastrophes that will undoubtedly occur if we continue with existing ways of production and consumption.

All of this makes it necessary to also carry out organizational changes aimed at sustainable management. Implementing organizational change based on the link between sustainability and organizational learning helps to meet the organization's own needs (Marsick & Watkins, 2003). One of the components of this direction is the development

of a culture of organizational learning, including an environmental culture. However, all changes must occur at every level of learning, both organizational and environmental.

3. Methodological approach

Modern business and management problems are becoming more complex, and a large amount of knowledge is needed to solve them, which conditions the need to introduce the concept of organizational learning in companies. It is necessary that these changes in people's consciousness cause a change in their behavior in order to produce some positive consequences for the organization. Only in the process of organizational learning does change lead to the improvement of the organization's key competencies, which enables it to adapt to its environment. One of the key requirements that the environment sets today is sustainable business and sustainable management (Sachs, 2015).

The subject of this paper is the impact of organizational learning on the sustainable management of companies. Research indicates the need to apply the concept of organizational learning as a process of acquiring and using knowledge that should provide an organization with flexibility and better performance for its sustainable management. Learning is a process that requires the interest of participants in accepting and acquiring knowledge and skills, taking into account many factors within the organization itself - that is, the company, as well as external factors, such as national culture. Research into organizational structure and cultural factors as internal factors and national culture as an essential external factor will also take place in this paper. An important task is the discovery and scientific explanation of other factors that influence sustainable management - i.e., factors such as national culture, organizational culture, structure, and leadership, which influence the very process of acquiring knowledge and organizational learning in companies and enable employees to act as agents of learning and the application of new knowledge, with the aim of sustainable business. Sustainable enterprise management should be based on generally accepted principles of sustainable development, which must be integrated into the enterprise management process. In order to achieve their integration, many factors must be taken into account, such as the competencies of managers themselves, which can be influenced, but also factors such as national culture, which is almost impossible to influence. It is possible to explain the mutual relationships between the application of the concept of organizational learning and the sustainable management of companies (enterprises) based on previous research (UN, 1987).

The exceptional scientific value of the research in this paper is in the formation of an organizational model with suitable and measurable aspects of organizational culture, structure and leadership, which will enable the application of the concept of organizational learning and thus create conditions for sustainable management and business. Moreover, the contribution of this work and its results affect the theoretical and experiential knowledge of the application of the concept of organizational learning and its contribution to sustainable management and business, as well as indicating the necessity of comprehensive theoretical and practical research.

To measure the relevance of *organizational culture* and *organizational learning* to *sustainable business*, the aforementioned keywords and their usage over time were plotted on a chart using Google Ngram Viewer (https://books.google.com/ngrams) in the period from 1950 to 2020 (Figure 1).

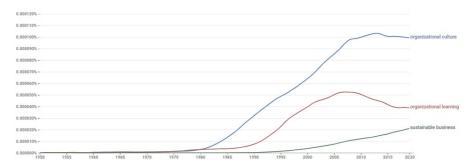


Figure 1. The frequency of the usage of the terms "organizational culture," "organizational learning," and "sustainable business" between 1950 and 2020 (Mehrabi et al., 2013).

A search for "organizational culture" and "organizational learning" showed that the number of publications increased moderately from 1980. A significant surge began in 2006 for "organizational learning", and from 2012 for "organizational culture", but since 2013 there has been a decline in both terms.

Observing the frequency of the term "sustainable business" on the graph, we can conclude that there was a slight increase from the mid-1990s until 2015, when it increased sharply, up to 0.000000161% in 2015. This is associated with the adoption of 17 Goals by the UN member states in 2015 as part of the Sustainable Development Agenda.

This paper aims to identify organizational factors and their impact on sustainable business management by applying the concept of organizational learning and sustainable management in the organizational cultures of companies. This research should prove that the application of the concept of organizational learning contributes to the acceptance of the principles of sustainability in organizations, and will be applied in the management process to make it more efficient and better – i.e., sustainable.

The social goal of the research is reflected in the fact that the work directly points to the importance of applying the concept of organizational learning and its impact on the sustainable management of companies.

In the research, data, information and their interpretations were collected. In order to prove the assertions of the study, a method of multi-criteria decision-making was used, which is based on the breakdown of a complex problem and which enables relationships between influential factors in complex problems to be identified relatively easily.

Using the method of theoretical analysis, the previous theoretical findings related to national and organizational culture and their mutual connection and the importance of a proper understanding of their relationship for business practice were followed and studied.

In the process of the research, during the collection of data, information and their interpretation, and in order to confirm the set hypotheses, the following research methods were used:

- The AHP (Analytic Hierarchy Process) method of multi-criteria decision-making.
- Theoretical analysis.
- Statistical methods.

The AHP is a multi-criteria decision-making method based on the breakdown of a complex problem into a hierarchy. It is very flexible because it allows researchers to find relationships between influential factors for complex problems with many criteria relatively easily, as well as to determine the dominance of one factor over another. In the case of this particular research, it was used to determine the most influential factor in the process of sustainable management, one of the problems faced by modern companies and organizations.

Using the theoretical analysis method, it is advisable to follow and study the previous theoretical findings related to: national and organizational culture and their mutual connection, the importance of a proper understanding of their relationship for business practice, as well as the influence of national culture on management theory and practice. This research aims to determine the causal relationships between the two cultures and management techniques, methods and concepts.

The problem of measuring consistency arises when using the AHP in a group context. In that case, the consistency of several decision-makers should be measured. One method used to determine group consistency is Spearman's rank correlation coefficient (S).

A separate part of the research was carried out using structured questionnaires (surveys), where the respondents contributed by choosing specific answers offered to questions. For the research, questionnaires were used to examine the value attitudes of individuals, which are a reflection of the national culture, and these were adapted to the research methodology (Marsick & Watkins, 2003). Questionnaires were also used to examine the organizational culture, structure, leadership and capacity of the organization to apply the concept of organizational learning. Questionnaires were adapted from that which was used by Marsik and Watkins to measure organizational learning in their research.

A separate part of the research was implemented using structured questionnaires (surveys), where respondents answered by choosing specific answers to the questions. Paunković and colleagues used questionnaires to survey values, attitudes, and personalities, which are reflections of national culture, and customized a research methodology (Marsick & Watkins, 2003). Also used in this study were: survey questionnaires for organizational culture, structure, leadership, and capacity implementation organizations; customized questionnaires to measure organizational teaching on each concept; and organizational learning questionnaires used in Marsik and Watkins (2003).

The goals of the research were: to determine the connection between national culture, organizational culture and structure; to find the dependence of organizational development and learning on the structure of the organization; and to prove the conditionality of the application of the concept of sustainability and sustainable management and organizational development and learning.

Therefore, the characteristics of an organization that is managed according to the principles of sustainability and in accordance with the concept of sustainable development should be shown, as well as the influential factors that contribute to sustainable management.

4. Research hypothesis

The hypothetical research framework in this study consisted of one general hypothesis and five special hypotheses.

Research hypothesis: The greater the organization's ability to learn and develop, the greater the possibility of sustainable management.

Special hypotheses:

Special hypothesis (H-1): The more employees in the organization are ready to accept the concept of organizational learning, the greater the possibility of organizational development.

Indicators:

- Statistical data obtained by processing the original questionnaire for examining organizational learning;
- Statistical data obtained by processing the questions that were extracted from each questionnaire, which refer to organizational development.

Special hypothesis (H-2): The more flexible the organizational structure, the more employees in the organization are ready to accept the process of organizational learning and application of new knowledge.

Indicators:

- Statistical data obtained by processing the original questionnaire for examining the organizational structure;
- Statistical data obtained by processing the original questionnaire for examining organizational learning.

Special hypothesis (H-3): The stronger and more homogeneous the organizational culture, the more pronounced its influence on organizational learning.

Indicators:

- Statistical data obtained by processing the original questionnaire for examining organizational culture;
- Statistical data obtained by processing the original questionnaire for examining organizational learning.

Special hypothesis (H-4): The better the knowledge of cultural dimensions, the easier it is to structure the organization.

Indicators:

- Statistical data obtained by processing the original questionnaire for examining organizational culture;
- Statistical data obtained by processing the original questionnaire for examining the organizational structure.

Special hypothesis (H-5): The more pronounced the willingness of employees in the

organization to learn and improve, the greater the possibility of achieving the sustainable development of the company.

Indicators:

- Statistical data obtained by processing the original questionnaire for examining organizational learning;
- Statistical data obtained by processing the questions that were extracted from each questionnaire, which refer to the sustainable development of the company.

Business strategy in a company with a strong organizational culture and training is a key source of competitive advantage. A sustainable competitive advantage is gained only by what the company knows and can do better than the competition.

5. Results

5.1. The role of organizational culture in managing an organization

Values, ideologies and beliefs were considered particularly important for understanding organizational culture, and were seen as reliable representations.

Robbins and Judge (2013, as cited in Wang et al., 2019) define organizational culture as a system of mutual values that are supported by the members of the organization, and on the basis of which a certain organization differs from others.

Robbins and Judge (2013, as cited in Wang et al., 2019) also point to the influence of organizational culture on the strategic decisions of top management, as well as on operational and everyday decisions in the organization. It determines the character of interpersonal relations in the organization, improves employee motivation, determines the leadership style that will be applied in the organization, reduces conflicts and facilitates coordination in the organization.

Many theorists have investigated the cause-effect relationship between organizational culture and organizational performance. Research has shown that culture is a key factor in organizational effectiveness. Essentially, four aspects of organizational culture contribute to organizational effectiveness: adaptability, consistency, involvement (participation) and mission (Marsick & Watkins, 2003). Three sub-dimensions can be found within these dimensions:

- Mission: strategic direction, goals, vision.
- Adaptability: ability to create changes, customer orientation and organizational learning ability.
- Inclusion (participation): empowerment, team orientation, opportunities for development.
- Consistency: basic values, agreement, coordination (integration).

These four dimensions of organizational culture have a positive impact and contribute to knowledge management in the organization. The influence of organizational culture on organizational learning can be found in the works of many theorists (Mehrabi et al., 2013).

Organizational culture arises in two ways. The first way is with the intention of the

members of the organization and their constant care regarding different aspects of culture. In this case, founders face two challenges when creating a culture. The first challenge relates to external adaptation, setting goals, defining the organization's mission, vision and strategy, as well as ways to realize them. No matter how stable an organization's culture is, it exists in a specific environment that is constantly influencing it. Therefore, it is necessary to develop mechanisms for adapting culture to the environment, which is the basis of its efficient functioning and sustainability. Adaptation sometimes requires changing the strategy and structure of the organization. The second challenge represents internal integration and the regulation of mutual relations in the organization.

Another way of creating organizational culture is when it arises by accident – that is, due to unavoidable circumstances in the organization's development.

5.2. The influence of organizational culture on sustainable business management

The efficiency of the divisiveness of companies is related to the guidelines and challenges for the implementation of an appropriate organizational culture that ensures sustainable business and management in practice (Parwita et al., 2021). Different cultural orientations and their impact on sustainability can be represented by a four-cell framework that includes four dimensions. The internal-external dimension shows whether the organization is focused on its internal dynamics, work organization and employees, or on the demands of its external environment. The control-flexibility dimension shows the tendency of the organization towards strict specialization, structuring, coordination and control or towards flexibility (Linnenluecke & Griffiths, 2010). As a result of these two dimensions, it is possible to form four different cultural quadrants. The organizational culture of rational purpose refers to centralized decision-making. Individuals are motivated by assurances that they will be rewarded for professional work that should lead to the desired organizational goals (Zammuto, 2005).

The question arises as to what constitutes a culture focused on sustainability and whether there is a connection between organizations emphasizing an organizational type of culture (characteristic of one or more of the four different types of culture) and adopting the principles of corporate sustainability. Essentially, each quadrant or cultural type represents a set of valued outcomes and a consistent management ideology regarding how to achieve those outcomes. Ideologies of managers (generally accepted management ideologies rooted in society) are introduced into organizations and form the ways in which people think and behave in them (Linnenluecke & Griffiths, 2010). Thus, it can be assumed that different types of organizational culture influence how employees perceive and implement corporate sustainability (Parwita et al., 2021).

Theories and ideologies that depict the internal process quadrant are characterized by their focus on economic performance and the general omission of the wider environment of the organization. The internal process quadrant corresponds to the ideology of scientific management, which is aimed at maximizing economic gain through rationalized production processes. Hierarchical structure and the imposition of rules and procedures are very effective under relatively stable conditions in the environment, and in such a stable environment, they enable the maximization of the production of goods and services (Jones et al., 2005). The internal process quadrant also coincides with the classification of closed rational systems models (Linnenluecke & Griffiths, 2010) that represent organizations as a means of achieving and improving organizational efficiency and economic performance. Putting formalization at the center of attention suggests that there are cognitive and motivational limitations in individuals that limit the choice and action of employees within the organization and limit the application of the concept of sustainability (Zammuto, 2005).

The major assumption behind this understanding of corporate sustainability is that the organization is moving towards maximizing production and services. In a hierarchical culture, efficiency is valued, and this culture is defined as the simplification of products, services and processes in order to achieve price reduction, product maximization and the pursuit of economic outcomes (Jones et al., 2005). From this point of view, it becomes imperative for the management of the organization to increase the consumption of the products that the company produces as well as the services it offers to increase profits. However, not every effective gain means that the organization takes environmental sustainability and the needs of the wider social community into account. Many studies have shown that the inclusion of the natural environment and ecology can improve the company's performance. Organizations that are tightly focused only on achieving economic outcomes may miss sustainability-related innovation and the business opportunities that sustainability creates.

Contrary to the internal process quadrant, theories and ideologies that are presented in the interpersonal relations quadrant place great emphasis on social interaction, interpersonal relations, employee development and the creation of a human work environment (Cameron & Quinn, 2006). Accordingly, it can be said that organizations dominated by a culture of interpersonal relations will place greater emphasis on internal staff development, learning and capacity-building for their pursuit of corporate sustainability (Parwita et al., 2021). Such organizations adopt a strong and clearly defined corporate ethical position regarding issues such as discrimination and business ethics (Cameron & Quinn, 2006).

Theories and ideologies that explain the quadrant of the rational goal speak about the importance of the wider environment for the organization, and the need for rational planning and organizing in light of the demands of the environment. This quadrant is related to the ideology of the system of rationalism in which the focus is on planning, forecasting, controlling and designing the structure of the organization and the decision-making process, taking into account the requirements of the external environment. This is about the culture of open-rational systems in which work is organized in a rational way, taking into account the various requirements of the environment (Miletic et al., 2016).

Many organizations use human resources and environmental protection measures to reduce costs and increase efficiency. Investing in staff training can be expensive, but the result is compensation in added value through increased quality of products and services.

Employee training that improves technical knowledge also improves interpersonal skills. Teamwork is encouraged and relationships with interest groups outside the organization are developed in order to achieve business benefits. ISO 14000 systems are integrated into TQM and OH&S systems or into other systems with the aim of achieving greater efficiency in the company (Perović et al., 2015). The sale of the company's by-products (waste) is also encouraged, which improves cooperative relations with other members in the supply chain to reduce waste and preserve a healthy environment. The culture of organizations belonging to the fourth quadrant, open systems models, is most likely to enable and support sustainable business and organizational management. This culture emphasizes the importance of the external environment, which influences the behavior, structure and changes in the life cycle of the organization. The needs of the wider social community in which the company exists are also taken into account.

It can be concluded that organizations dominated by an open systems culture will place more emphasis on innovation that will contribute to environmental and social sustainability in their quest to achieve sustainable business. Companies must act responsibly towards their natural environment because they are part of the environment. Activities in the organization can have significant negative impacts on the natural environment through, for example, the emission of pollution or excessive exploitation of resources. In turn, the quality of the environment, as is already apparent, can affect the organization's activities through the effects of climate change. In order to achieve environmental sustainability, companies are challenged to control the pollution they produce, to carry out pollution prevention and to act within the carrying capacity of the natural environment by minimizing the use of natural resources and reducing their ecological footprint (Parwita et al., 2021).

Considering the relationship between the culture of the organization and the adoption of corporate sustainability, the integration approach implies: (1) that employees throughout the organization should be part of the same culture of one organization, and (2) that employees should share similar views on corporate sustainability (Karabasevic et al., 2016).

To achieve corporate sustainability, leaders will most likely need to abandon a purely economic paradigm in favor of a more balanced set of values concerning environmental and social responsibilities. This is because leaders must be able to design and implement change in an organization's culture focused on sustainability.

5.3. The impact of leadership on sustainable management

In modern business conditions, characterized by dynamic changes, organizations and society as a whole need good leaders. Leaders have the greatest influence on the performance of the organization, so any organization's success depends on its leader's skills and abilities. Many management theorists have dealt with leadership, which indicates the existence of a large number of definitions of this term (Paunković, 2014).

The leader creates the vision of the organization for the future and must know how to make the members of the organization believe in that vision and accept it as their own.

In addition, it is the leader who motivates, inspires and guides employees toward the achievement of organizational goals. The followers grant the leader the legitimate right to shape actions for the achievement of organizational or group goals on their behalf. The influence that the leader achieves, through the members of the organization, stems from the fact that the members of the organization see the world and interpret it through the leader's vision, so it is logical that the behavior of the employees is shaped by the vision and wishes of the leader.

The fundamental question that captures the attention of many researchers in the field of management and leadership is: what is it that makes leaders? That is, what separates them from other people who are not leaders, and even from managers? The main difference between leaders and managers is that managers do not have the ability to influence their subordinates', i.e., the employees they manage (Miletic et al., 2016). The manager's right to influence subordinates' activities stems only from their hierarchical position. The relationship of dependence between the subordinate and the manager exists, but unlike the relationship between the leader and the subordinate, it is not voluntary. Thus, the source of power is the basic difference between a leader and a manager. A manager's power is based on a formally defined role in a hierarchical structure, while a leader's power is based on their ability to move the attention of their followers, articulate a meaning of reality that is acceptable to them, and define effective collective action that employees will willingly accept. It is the leader who creates the vision and mobilizes employees to achieve it. This indicates the fact that the organization needs a manager in stable conditions, while in conditions of large turbulent changes the organization should be led by leaders.

According to some studies, there is an assumption that some people are "born leaders" – i.e., they have an innate talent for leadership. This means that leaders have some qualities that "ordinary people" do not. However, research has not yet revealed a single trait that only leaders have. Some qualities, such as self-confidence, intelligence and openness, are characteristic of leaders, but these qualities can also be possessed by others who are not leaders. Therefore, possessing certain characteristics is a necessity, but not a sole condition for someone to become a successful leader.

This suggests that the research may have gone in the wrong direction, and that instead of the personal characteristics of leaders, the skills and abilities of leaders that set them apart from other people should have been investigated (Azadi et al., 2013).

5.4. Organizational learning and its impact on sustainable management

In the 18th century, the basic resource was land and natural resources; in the 19th century, technology; the 20th century was characterized by finance as a basic resource; and in the 21st century, the basic resource and source of competitive advantage for organizations becomes knowledge. Advantage is no longer held by those companies and countries that have access to natural resources or those that have abundant financial resources. Those organizations that have the ability to acquire and use knowledge continuously are at an advantage. Only learning and knowledge enable organizations to gain sus-

tainable competitive advantage and sustainable business. Sustainable business requires the application of knowledge, skills and technology that brings economic profit to the company, preserves the environment and contributes to the development of the wider social community in which the organization is located (Miletic et al., 2015).

Contrary to former development theories and the understanding of wealth according to which it is measured by financial and physical capital, the concept of sustainable development and sustainable business is based on a new theory. At the center of this new theory is applied knowledge. The key determinant of the growth and development of organizations in modern business is the speed of creating innovations as well as the ability of companies to convert theoretical knowledge into new technologies that will contribute to sustainable business.

Organizational learning is a multidisciplinary concept; therefore, there is no single definition of this term. Some authors view organizational learning in various configurations: changes and adaptation to the environment, adaptation to the environment and transformation of the organization, the acquisition of new knowledge in the organization, adaptation to the environment and acquisition of knowledge, adaptation to the environment, or transformation and the acquisition of knowledge by employees. The latter depends on the degree of development of the organization, research, and the exploitation of knowledge, or the process of change in an individual and the shared opinion and activity that is influenced and embedded in the organization's institutions (Mehrabi et al., 2013).

Organizational knowledge encompasses all of the skills, knowledge and abilities that the company's employees and managers have, and is also the basis of how they run their business (Barbosa et al., 2020). The knowledge possessed by managers and employees contributes to the sustainable management of the organization. The end product of sustainable management is sustainable business. That is why organizational knowledge must constantly be used and increased. The technical side of organizational learning refers to information processing, which includes the process of collecting, processing, memorizing, disseminating and using information.

The social character of organizational learning implies a specific type of social interaction among the members of the organization. The consequence of that interaction can be knowledge that no individual member of the organization possesses. For organizational learning, it is very important that there is solidarity in the teamwork of employees and that creative managerial processes should not be separated.

In the research carried out in the organization, the above questions were asked, and the following data were obtained from 92 respondents. Table 1 provides information on responses to the question of whether the company encourages teamwork and cooperation. Teamwork is essential for organizational learning. Through teamwork, employees have a greater opportunity to acquire new knowledge and skills that contribute to sustainable business. Inter-functional teams are especially important because they consist of employees from different business functions.

1 /		
Answers		%
1.	Totally disagree	3%
2.	Partially disagree	13%
3.	I don't know	11%
4.	Partially agree	45%
5.	Totally agree	28%
In total		100%

Table 1. Responses to the prompt: "Collaboration and teamwork is encouraged in your company."

The next prompt related to the process of teamwork estimation concerning the creative managerial process and the measurement of organizational learning (Figure 2).

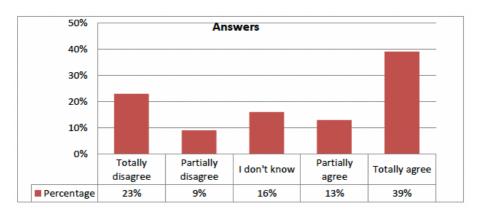


Figure 2. Responses to the prompt "Is a creative managerial process an accurate measurement of organizational learning?"

The analysis of the previous tests confirms the importance of the organizational culture of continuous learning in the sustainable management and operation of the company. Based on previous research, it is considered that organizational learning is a process that expands the repertoire of potential behaviors of the members of the organization as individuals, and of the organization as a collective. Through the process of organizational learning, the organization develops capabilities that it did not have before. Through organizational learning, new rules and principles are developed and applied in the organization that can contribute to sustainable business, and enable managers to manage the organization sustainably. New knowledge is needed for sustainable business and management. Organizational learning can only be achieved through teamwork and cooperation because, in fact, organizational knowledge is the knowledge that no one employee possesses individually, but that they all possess as a collective. It is necessary to distinguish between organizational learning and a learning organization. Organizational learning is a process, while the learning organization is both a condition and a conse-

quence of that process. A learning organization is one that develops organizational learning capabilities. Such an organization represents a favorable framework for learning and encourages and directs the efforts of all employees to learn. At the same time, a learning organization is created in the process of organizational learning.

Many factors such as organizational culture, national culture, and leadership influence the process of organizational learning. National culture shapes organizational culture and, through its dimensions, influences the organization's commitment to organizational learning. Organizational culture and its dimensions influence the way employees think. Based on the existing organizational culture, the organizational learning ability of a company can be predicted (Bocken et al., 2014).

Leadership is of great importance for organizational learning. Without leadership, there is no organizational learning. This is agreed upon by many authors (Mehrabi et al., 2013) who have investigated the influence of leadership on the elements and process of organizational learning. Leadership unites all other components that make up the content of organizational learning (structure, culture, organizational changes, communication, etc.). Leaders make it possible to build an organizational structure that enables organizational learning and cultural values that are oriented toward learning and international development (Laktionova et al., 2021).

5.5. Selection of the factors that have the biggest influence on sustainable management

Leaders are the ones who create the organizational culture and structure that supports the organizational learning process. That is why it is necessary that they are also aware of the dimensions of national culture. By knowing these dimensions, they will know which values are essential for the members of a particular social group, so it will be easier for them to manage organizations in that society and employees in organizations will be more satisfied.

Leadership brings together all other components that influence organizational learning: organizational structure and culture, organizational change, communication and motivation. The task of leaders is to ensure the construction of an organizational structure that will enable organizational learning. Leaders should establish cultural values of learning and development, build a culture of trust and tolerance for mistakes and establish communication channels that ensure organizational learning. For organizational learning, employees' autonomy is needed, for which the leadership is responsible (Arsawan et al., 2023).

An organization in which the concept of organizational learning is applied should be led by leaders who are committed to learning and who will motivate other managers and employees in the company with their energy to learn individually and collectively every day and acquire new knowledge that they will apply in business. Leaders must respect the autonomy of their collaborators and their ideas, and also their right to make mistakes. They must have the attitude that mistakes are inevitable and represent a chance to learn something new. Sustainable management can only be achieved by managers who take

employees' motivation, satisfaction and loyalty into account (Trachenko et al., 2021).

Applying the concept of organizational learning in an organization requires that its structure be designed in such a way that it can ensure that the process of generating and using new knowledge takes place smoothly to develop resilience (Nikolić, 2009). This means that there should be a minimum specialization of jobs and tasks in the organization. Only in such conditions employees can create and apply new knowledge (Fietz & Günther, 2021). In the presence of considerable specialization, employees are demotivated, while reducing the degree of specialization encourages learning, motivates employees and increases their satisfaction. The successful application of the concept of organizational learning implies as few hierarchical levels as possible, as this accelerates vertical communication and increases the degree of employee autonomy (Aristana et al., 2022).

6. Discussion

The concept of corporate sustainability or sustainable business has gained importance in recent years in both theory and practice within organizations. Modern business requires organizations to be more responsible and sustainable, as an imperative for an eco-friendly future and the basis for the joint work of the public and private sectors.

Because of their impact on the environment and society, companies are responsible for sustainable management and sustainable operations. Personal care for social and environmental impacts and their social and moral obligations should be ensured by the management of companies, which should include sustainability in strategic planning (Thaher & Jaaron, 2022). Companies must focus on the application of technologies and innovations that prevent the negative consequences of their production on the environment and help preserve a healthy environment in order to increase revenues and remain competitive. The growth and development of an organization always imply certain changes related to the application of new technologies, innovations, knowledge, and, not least, ways of thinking in the organization. This means that knowledge is the key resource of any organization, and the process of organizational learning contributes to the increase of total knowledge in an organization. The company's growth and development are the result of the process of organizational learning and the acceptance of new knowledge (Bhatnagar et al., 2022).

Business and management problems in both society and business are becoming more complex, and a large amount of knowledge is needed to solve them. In order to successfully solve these problems, it is necessary to constantly invest in the knowledge of the individual as well as the organization to which they belong; the value of the organization consists of people, their knowledge, and their ability to use that knowledge. The competitive advantage of the organization is realized by its ability to create and use knowledge. Knowledge plays a strategic role in the management of a modern organization. Therefore, this key resource needs to be constantly increased, which is achieved through the process of organizational learning. Modern organizations are required to be more responsible. In order to achieve sustainable management and more responsible business, it is necessary to establish new social values. Those values are based on the knowledge,

creativity, and the capabilities of human resources. Establishing these values should lead to the transformation of traditional organizations into learning organizations. In order to establish and develop such values, companies need leadership that will create a culture that supports them and a structure that enables organizational learning. Sustainable management and business involve the application of new knowledge, techniques, technologies, and management skills that contribute to achieving the concept of sustainable development through its three fundamental aspects: economy, environment, and society (Hassel & Cedergren, 2021). The existence of organizational learning can contribute to the sustainable management of the organization and its sustainable business.

7. Conclusions

By ranking the factors that influence sustainable management and business with the help of the AHP method of multi-criteria decision-making based on a group decision, a group of the most influential factors can be singled out, in which organizational learning comes first, followed by national culture and leadership.

The results of the part of the research in which the value attitudes of employees were examined showed almost identical values among employees in both companies where the research was conducted. This was expected given that these employees are members of the same national culture and share the same values. This further means that their expectations are very similar and that leaders and managers must use the same techniques and methods in the process of management, the motivation of employees, and solving all other problems that may arise in the organization.

What is important, and what the second part of the research shows, is that leaders and managers must know the dimensions of their national culture, on the basis of which they will easily know what the fundamental values of their subordinates are and what they expect from them. Knowing employees' values and attitudes greatly facilitates the leadership and management process for leaders and makes it sustainable, primarily considering the social aspect of this concept. The results of the second part of the research, in which organizational culture, structure, organizational learning, and leadership were examined, differ significantly between the two companies. In the first company, an organizational culture prevails in which the end justifies the means and there is a strong competitive spirit, due to which there is often a lack of cooperation among employees. The organizational structure is strictly centralized, which slows down the process of organizational learning, and the leadership shows little interest in the needs of employees.

The second company shows loyalty to its employees, and there is strong cooperation among employees. A lower degree of decentralization of the organizational structure gives employees the opportunity to participate in making certain decisions related to the performance of work, and the leadership shows great interest in the needs of employees and encourages them to tolerate mistakes from which they learn. The organization itself constantly gathers information about new technologies and innovations and encourages the process of organizational learning. Based on the findings and the fact that many studies have shown that leadership creates organizational culture, it can be concluded that the

organizational culture in one of the companies is the responsibility of the leadership. This is because numerous studies have shown that it takes a more extended period of time to create and change an organizational culture. This means that with the goodwill and commitment of the management and leadership, the other company's organizational culture can be changed and, above all, improved.

The data obtained from the research were processed using two methods: regression analysis and the AHP method of multi-criteria decision-making. The same results were obtained in the manner previously explained in detail. The scientific contribution of the work is reflected in the fact that – based on previous research and data in the literature obtained on that basis and based on the results of the study – it proposes an organization model with an appropriate organizational culture, structure, and leadership that will support organizational learning and create conditions for sustainable business management. After all of the above, it is concluded that the hypotheses have been confirmed.

References

- Ahlstrom, D., Arregle, J.-L., Hitt, M. A., Qian, G., Ma, X., & Faems, D. (2020). Managing technological, sociopolitical, and institutional change in the new normal. *The Journal of Management Studies*, 57(3), 411–437. https://doi.org/10.1111/joms.12569
- 2. Aristana, I. N., Arsawan, I. W. E., & Rustiarini, N. W. (2022). Employee loyalty during slow-down of COVID-19: Do satisfaction and trust matter? *International Journal of Tourism Cities*, 8(1), 223–243. https://doi.org/10.1108/ijtc-03-2021-0036
- Arsawan, W. E., Koval, V., Suhartanto, D., Babachenko, L., Kapranova, L., & Suryantini, N. P. S. (2023). Invigorating supply chain performance in small medium enterprises: exploring knowledge sharing as moderator. *Business, Management and Economics Engineering*, 21(1), 1–18. https://doi.org/10.3846/bmee.2023.17740
- 4. Azadi, A., Farsani, M. E., Rizi, R. M., & Aroufzad, S. (2013). Relationship between organizational culture and organizational learning among employees in physical education organizations. *European Journal of Sports & Exercise Science*, 2, 12–16.
- Barbosa, M., Castañeda-Ayarza, J. A., & Lombardo Ferreira, D. H. (2020). Sustainable strategic management (GES): Sustainability in small business. *Journal of Cleaner Production*, 258, 120880. https://doi.org/10.1016/j.jclepro.2020.120880
- Bhatnagar, R., Keskin, D., Kirkels, A., Romme, A. G. L., & Huijben, J. C. C. M. (2022). Design principles for sustainability assessments in the business model innovation process. *Journal of Cleaner Production*, 377, 134313. https://doi.org/10.1016/j.jclepro.2022.134313
- 7. Bocken, N. M. P., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42–56. https://doi.org/10.1016/j.jclepro.2013.11.039
- 8. Cameron, K. S., & Quinn, R. E. (2006). *Diagnosing and changing organizational culture: Based on the competing values framework* (Rev. ed.). Addison-Wesley.
- 9. Cavaleri, S., & Shabana, K. (2018). Rethinking sustainability strategies. *Journal of Strategy and Management*, 11(1), 2–17. https://doi.org/10.1108/JSMA-08-2016-0050
- 10. Fietz, B., & Günther, E. (2021). Changing organizational culture to establish sustainability. Control Management Review, 65, 32-40. https://doi.org/10.1007/s12176-021-0379-4
- Galpin, T., Whittington, J. L., & Bell, G. (2015). Is your sustainability strategy sustainable? Creating a culture of sustainability. *Corporate Governance*, 15(1), 1–17. https://doi.org/10.1108/cg-01-2013-0004

- 12. Goworek, H., Oxborrow, L., Claxton, S., McLaren, A., Cooper, T., & Hill, H. (2020). Managing sustainability in the fashion business: Challenges in product development for clothing longevity in the UK. *Journal of Business Research*, 117, 629–641. https://doi.org/10.1016/j.jbusres.2018.07.021
- 13. Hassel, H., & Cedergren, A. (2021). Integrating risk assessment and business impact assessment in the public crisis management sector. *International Journal of Disaster Risk Reduction*, 56, 102136. https://doi.org/10.1016/j.ijdrr.2021.102136
- Jones, R. A., Jimmieson, N. L., & Griffiths, A. (2005). The impact of organizational culture and reshaping capabilities on change implementation success: The mediating role of readiness for change. *Journal of Management Studies*, 42(2), 361–386. https://doi.org/10.1111/j.1467-6486.2005.00500.x
- Karabasevic, D., Paunkovic, J., & Stanujkic, D. (2016). Ranking of companies according to the indicators of corporate social responsibility based on SWARA and ARAS methods. Serbian Journal of Management, 11(1), 43–53. https://doi.org/10.5937/sjm11-7877
- Laktionova, O., Koval, V., Savina, N., & Gechbaia, B. (2021). The models of matching financial development and human capital in national economy. *Bulletin of the Georgian National Acad*emy of Sciences, 15(2), 177–184.
- 17. Linnenluecke, M. K., & Griffiths, A. (2010). Corporate sustainability and organizational culture. *Journal of World Business*, 45(4), 357–366. https://doi.org/10.1016/j.jwb.2009.08.006
- 18. Marsick, V. J., & Watkins, K. E. (2003). Demonstrating the value of an organization's learning culture: The dimensions of the learning organization questionnaire. *Advances in Developing Human Resources*, 5(2), 132–151.
- 19. Mehrabi, D. J., Alemzadeh, M., Jadidi, M., & Mahdevar, N. (2013). Explaining the relation between Organizational culture and dimensions of the learning organization: Case study: Telecommunications company in Borujerd County. *Interdisciplinary Journal of Contemporary Research in Business*, 5(8), 133–147. https://journal-archieves36.webs.com/133-147dec.pdf
- 20. Miletic, S., Bogdanovic, D., & Paunkovic, J. (2015). Selection of the optimal model of integrated sustainable management system in the mining companies. *Mining and Metallurgy Engineering Bor*, no. 2, 181–204. https://doi.org/10.5937/mmeb1502181m
- Miletic, S., Bogdanovic, D., Paunkovic, D., & Mihajlovic, D. (2016). Application of multi criteria decision making process for assessment of sustainable business in mining companies. Reciklaza odrzivi razvoj, 9(1), 15–20. https://doi.org/10.5937/ror1601015m
- 22. Moshood, T. D., Nawanir, G., & Mahmud, F. (2022). Sustainability of biodegradable plastics: A review on social, economic, and environmental factors. *Critical Reviews in Biotechnology*, 42(6), 892–912. https://doi.org/10.1080/07388551.2021.1973954
- Nikolić, M. (2009). Decision-making methods. University of Novi Sad, Technical Faculty Mihailo Pupin, Zrenjanin.
- 24. Novicevic, R. (2014). *Human resource management*. Faculty of Business Economics and Law, Bar.
- Parwita, G. B. S., Arsawan, I. W. E., Koval, V., Hrinchenko, R., Bogdanova, N., & Tamosiuniene, R. (2021). Organizational innovation capability: Integrating human resource management practice, knowledge management, and individual creativity. *Intellectual Economics*, 15(2), 22–45. https://doi.org/10.13165/ie-21-15-2-02
- Paunković, J. (2014). Educational programs for sustainable societies using cross-cultural management method: A case study from Serbia. In W. W. Clark, II (ed.), Global Sustainable Communities Handbook (pp. 387–404). Elsevier. https://doi.org/10.1016/B978-0-12-397914-8.00016-3
- 27. Perović, M., Vukčević, M., & Majkić, S. (2015). With the "owner of the process" one gets rich culture of quality. Paper presented at the National Conference on Quality, FQ.

- 28. Saaty, T. L. (1980). The analytic hierarchy process. McGraw-Hill.
- Sachs, J. D. (2015). The age of sustainable development (Illustrated edition). Columbia University Press.
- 30. Shrestha, Y. R., Ben-Menahem, S. M., & von Krogh, G. (2019). Organizational decision-making structures in the age of artificial intelligence. *California Management Review*, *61*(4), 66–83. https://doi.org/10.1177/0008125619862257
- Thaher, Y. A. Y., & Jaaron, A. A. M. (2022). The impact of sustainability strategic planning and management on the organizational sustainable performance: A developing-country perspective. *Journal of Environmental Management*, 305, 114381. https://doi.org/10.1016/j.jenvman.2021.114381
- Tortorella, G. L., Cawley Vergara, A. M., Garza-Reyes, J. A., & Sawhney, R. (2020). Organizational learning paths based upon Industry 4.0 adoption: An empirical study with Brazilian manufacturers. *International Journal of Production Economics*, 219, 284–294. https://doi.org/10.1016/j.ijpe.2019.06.023
- Trachenko, L., Lazorenko, L., Maslennikov, Ye., Hrinchenko, Yu., Arsawan, I. W. E., & Koval, V. (2021). Optimization modeling of business processes of engineering service enterprises in the national economy. *Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu*, no. 4, 165– 171. https://doi.org/10.33271/nvngu/2021-4/165
- 34. UN. (1987). Our Common Future: Report of the World Commission on Environment and Development.

 https://sustainabledevelopment.un.org/content/documents/5987our-commonfuture.pdf
- 35. Wang, C., Ghadimi, P., Lim, M. K., & Tseng, M.-L. (2019). A literature review of sustainable consumption and production: A comparative analysis in developed and developing economies. *Journal of Cleaner Production*, 206, 741–754. https://doi.org/10.1016/j.jclepro.2018.09.172
- 36. Zammuto, R. F. (2005). Does Who You Ask Matter? Hierarchical Subcultures and Organizational Culture Assessments. University of Colorado at Denver.