

4th BE-ci 2017
International Conference on Business & Economics

**THE LINK BETWEEN COMPETITIVENESS AND
SUSTAINABILITY OF ENTERPRISES**

Raul Ambruş (a), Monica Izvercian (b), Larisa Ivascu (c)*, Alin Artene (d)

*Corresponding author

(a) Politehnica University of Timisoara, Faculty of Management in Production and Transportation, 14 Remus Street,
Timisoara, Romania, raul.ambrus@upt.ro

(b) Politehnica University of Timisoara, Faculty of Management in Production and Transportation, 14 Remus Street,
Timisoara, Romania, monica.izvercianu@upt.ro

(c) Politehnica University of Timisoara, Faculty of Management in Production and Transportation, 14 Remus Street,
Timisoara, Romania, larisa.ivascu@upt.ro

(d) Politehnica University of Timisoara, Faculty of Management in Production and Transportation, 14 Remus Street,
Timisoara, Romania, alin.artene@upt.ro

Abstract

Sustainability and competitiveness are directions addressed by national and international organizations. Sustainability implies the use of resources in a balanced manner so that the organization can carry on its activity for as long as possible. Competitiveness can be defined as the organizational capacity to be the best in the industry in which it operates. The link between the two concepts involves an analysis of specialized literature and organizational practices. The work needed to be performed to achieve these levels of competitiveness and sustainability are not clearly defined. Competitiveness and sustainability are two tangential directions that can or cannot be achieved by companies. Being sustainable contributes to achieving competitiveness. But being competitive does not mean that the company is also sustainable. This research aims to identify the link between competitiveness and sustainability in today's economy. Also the dimensions that contribute to the competitiveness of an enterprise and the directions of sustainable development are presented. Analysing the literature, different views that help shape a framework for competitiveness and sustainability of organizations are presented. The purpose of this paper is to identify the elements that contribute to sustainable development and the elements that contribute to organizational competitiveness, to present the link between the two concepts and to develop a theoretical framework for organizational competitiveness and sustainability.

© 2017 Published by Future Academy www.FutureAcademy.org.UK

Keywords: Sustainable development, national competitiveness, innovation, objective, economic growth, performance.



This is an Open Access article distributed under the terms of the Creative Commons Attribution-Noncommercial 4.0 Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. Introduction

Competitiveness and sustainability are two complex concepts discussed in the literature for a long time. These concepts can be debated globally, by country, industry or organization. This research evaluates these concepts at the level of the organizations and markets where they operate. There is a series of definitions and approaches to these researches, but there is no generally developed link or framework valid for all organizations (Ivascu & Cioca, 2014; Moraru, Băbuț, & Cioca, 2014). Sustainability refers to achieving a balance between resources used so that future generations have access to the same resources as they are today (Artene, Domil, Puscas, Domil, & Gencia, 2015). Sustainability implies three responsibilities: economic, social, and environmental. Achieving the balance between these responsibilities leads to the sustainability of an organization (the intersection of the three responsibilities). On the other hand, competitiveness leads to the notion of competition in the business environment. The concept expresses the ability of individuals, organizations, clusters, regions or economies to remain in national and / or international competition for higher financial results (Aiginger, 2006). For the company, competitiveness underlines its ability to increase profits in the markets it operates in, as organizations seek strategies to adapt to current business conditions and try to identify their competitiveness factors: marketing mix, positioning of the organization, technologies (Cioca, Ivascu, & Rus, 2014; Ghicajanu, Irimie, Marica, & Munteanu, 2014).

In this context, the two concepts raise the following questions: Being sustainable also leads to being competitive? Being competitive also involves the sustainability of the organization? In fact, what is the link between the two concepts? The use of resources in a balanced manner can influence competitiveness, but vice versa the use of innovative technologies and methods can lead to sustainable development of the company.

This paper aims to identify the link between the two concepts and to develop a theoretical framework for assessing organizational competitiveness and sustainability.

2. Problem Statement

Competitiveness and sustainability are two multidimensional and complex concepts that help to improve organizational results. Organizations develop different activities in order to become the best in the market / segment on which they operate. There are no well-defined activities that contribute to organizational competitiveness. The activities carried out are independent and implemented at the organizational level. Things are slightly different from a sustainability perspective because there is a developed Global Report Initiative (GRI) framework that integrates a series of indicators that can be evaluated to define sustainability. In fact, the question can be formulated as follows: What are the steps an organization must take to become competitive?

3. Research Questions

What are the activities that contribute to the competitiveness of businesses and what is the link between competitiveness and sustainability? In order to identify this link between the two concepts, this research aims to:

- Identify the elements that contribute to sustainable development
- Identify the elements that contribute to organizational competitiveness
- Systematize the link between the two directions based on previous identified elements
- Develop a theoretical framework for organizational competitiveness and sustainability.

4. Purpose of the Study

The aim of this research is to advance research into organizational sustainability and competitiveness by establishing the link between the two organizational concepts. For this purpose, the literature is researched and the development directions for the organizations are established.

5. Research Methods

This research makes a review of the specialized literature to identify the link between the two concepts: sustainability and competitiveness. Many times, the question arises whether the two concepts are mutually exclusive or whether there is any connection between them. The organizational level of competitiveness and sustainable development of the organization is further assessed. After this assessment, the link between the two organizational steps is established.

5.1. Organizational level of competitiveness

Competitiveness comes from the Latin word "competitor" which means involvement in the competition of the business environment on the contextual market. A common definition for this concept is that competitiveness involves competing in a global market where products, services, human resources, skills, ideas move freely across geographical boundaries (Aiginger, 2006; Waheeduzzaman, 2013; Saboniene, 2015). Rewording these interpretations it can be said that competitiveness is the ability to compete on the market related to organizational activity. The concept of competitiveness is met at the following levels: global / international, international cluster, national, regional, sector or organization (see Figure 1).

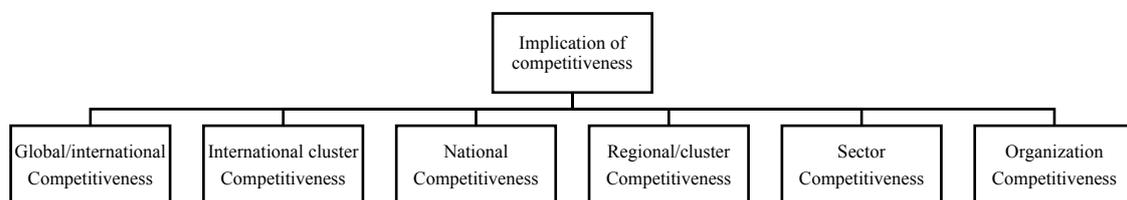


Figure 01. The levels of the competitiveness

From the perspective of competitiveness at the level of the organization, there are a number of definitions and interpretations in the literature. Some research show competitiveness with reference to the low-cost production principle (Buzzigoli & Viviani, 2009). In another perspective, Porter (1992) sees competitiveness as "... a function of dynamic progressiveness, innovation, and ability to change and

improve". In their research, Porter and Krugman present different views on the concept of competitiveness, but agree that the basic principle of competitiveness is efficiency (Sabonen, 2015).

Feurer and Chaharbaghi (1994) proposed a holistic definition of competitiveness, taking into account sustainability, saying that competitiveness is relative and not absolute. It depends on stakeholders, shareholders and financial strength. Depending on these dimensions and on the potential of people and technology, strategies adapted to the dynamics of the business environment are implemented. Competitiveness can be sustained only if an appropriate balance is maintained between these factors, even if sometimes there can be conflictual states. Stone and Ranchhod's (2006) research has highlighted that the concept of competitiveness is multidisciplinary and can be viewed from many perspectives: prices, strategy, management, history, and socio-cultural.

In recent approaches, the concept of competitiveness maintains some previous interpretations to which other interpretations are added as a result of the dynamics of the business environment. In the research of Plumins, Sceulovs, & Gaile-Sarkane (2016), an analysis of the concept of competitiveness was carried out, using qualitative data analysis software (QDAS) - Nvivo software and it was found that this concept has over 800 derived words. Taking into account the evaluated definitions, it was observed that: "country" (mentioned 62), "ability" (57 times); "products" (56), 4th "firm" (45); "nations" (39); "international" (38); "markets" (37); "economic" (34); "level" (31); "services" (24), "factors (23)".

In another approach, organizational competitiveness is associated with the company's innovation capacity and technological adaptation. Without innovation and adaptation to new information technology, a company cannot quickly become competitive (Crouch, 2011; Izvercian, Radu, Ivascu, & Ardelean, 2014; Verboncu, Irimie, Zeininger, & Mihai, 2016).

By evaluating the above definitions, we can conclude that organizational competitiveness is influenced by the following factors:

- *Innovation* - using the innovative methods, techniques and technologies contributes to the differentiation of the organization from competitors and its competitiveness.
- *Ability to interact* - managers need to have the ability to interact with employees and competitors in the business environment.
- *Barriers to the business environment* - having the necessary skills to overcome barriers in the business environment contributes to the differentiation of the organization.
- *Marketing mix* - owning innovative products, priced according to customer wishes, distributed where the clients want and promoted appropriately contribute to the organizational advance.
- *Positioning* - company positioning contributes to competitiveness as a company placed in a developed region has the opportunity to access the most innovative and new technologies and tools. While a company positioned in a disadvantaged area does not have access to the same resources, so it may lose competition with the competitors of the industry in which it operates.
- *Human resources* - human resources is the central element of each organization. If it is ready and has the necessary skills, innovative processes and technologies can be implemented. In contrast, if the human resource has a low level of training compared to industry requirements, the organization's ability to grow may be slower.

- *Learning organization* - is a strong point in the organizations where the latest technologies have been implemented. If the learning capacity is reduced, these new opportunities cannot be used. Adaptation capacity is also an important pillar of this perspective.
- *History* - company history can be a factor that determines organizational competitiveness. If the company is on the market with a good position, the actions to be implemented are regarding maintaining and differentiating in the industry.
- *Customer Relationship* - is an important factor because each company has to respect its clients and the relationships with them. Otherwise, customers will be attracted to the competition, and so the company's financial results will be declining.
- *Competition* - is a factor contributing to motivating the organization to develop innovative and competitive activities.

Assessing these identified factors by the present research, one can conclude that competitiveness is affected by a number of multidisciplinary and interrelated factors. The systematization of the competitiveness concept is presented in Figure 02.

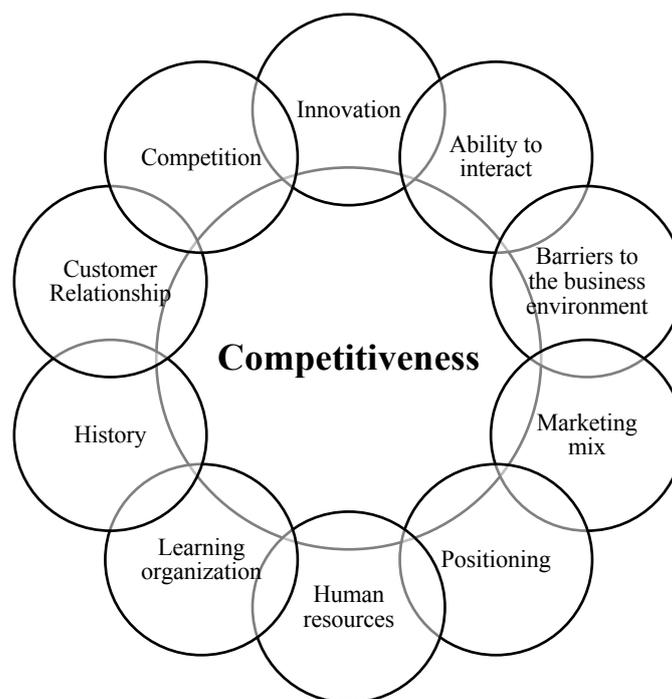


Figure 02. The determinants of organizational competitiveness

The diversity of these factors can be observed. Achieving an organizational mix of these factors contributes to the sustainable development of organizations.

5.2. Sustainable development

Sustainable development is defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs“ (United Nations Economic Commission for Europe - Brundtland Commission, 1987). Sustainability is a multidisciplinary concept

that involves social, economic and environmental aspects. Much of the existing research focuses on economic and environmental issues (Hanieha, AbdElalbm, & Hasana, 2016). Economic responsibility is the framework for financial and management decisions. Environmental responsibility implies the human and process impact on the environment (Cioca et al., 2014; Ghicajanu et al., 2014). Social responsibility refers to interaction with society, interactions between institutions and individuals, human values, human resource development, human resource security, well-being and ethics (Seliger, 2012).

Sustainable engineering principles require product lifecycle analysis and the use of effective management tools to improve the current situation. Green / clean production is defined as the creation of manufactured products that use processes that minimize negative impacts on the environment, conserve energy and natural resources, are safe for employees, communities and consumers, and are economically healthy (Hanieha et al., 2016).

In the literature and in the developed reports there are dozens of performance indicators for the sustainable development of the organization (Artene et al., 2015). Among the activities that need to be developed for the sustainable development of the organization are those listed in Table 01.

Table 01. Activities related to the sustainable development of an organization

Responsibility	Dimension	Activity
Economic responsibility	Cost reduction	Cost reduction in production processes
	Integrated software	Using integrated software for loss reduction (of type ERP –Enterprise Resource Planning)
	Economic growth	Improving financial results
Social responsibility	Corporate social responsibility	Involvement in CSR activities
	Worker safety	Promoting a safe working environment for all employees
	Employee health	Employee health at the workplace
	Academies of Studies	Organizing courses in the organization to develop the human resource
	Communication	Communication at all organizational levels needs to be improved.
	New Practices	Employee involvement in the development of new practices
	Reducing inequalities	At work there is equality of opportunity.
Environmental responsibility	Clean technologies (green technologies)	Using technologies for which GHG emissions are low
	Greenhouse gas (GHG) reduction	Reduction of GHG for all activity
	Green Energy use	Use of renewable energies
	Water use	Use water in an optimal way for the organization
	Waste management	Waste reuse and its proper management
	Resources use	Reducing the use of natural resources

It is noted that on the one hand, sustainability emphasizes the balanced use of resources, care for the social environment and the taking of the most balanced financial decisions so that the organization develops over a long period of time. On the other hand, competitiveness leads to immediate, innovative

actions, different from those of competitors, in the hope of recording the best financial results without taking into account a long length of time.

In the following the link between the two presented and evaluated base concepts is shown.

6. Findings

Following the evaluation of the two concepts the following aspects can be concluded:

- A sustainable organization is not necessarily competitive. Being sustainable does not mean being the best (competitive) organization in the industry. It means that the organization has the ability to reduce its expenses, improve its costs, and use its behaviour in favour of the environment and society.
- A competitive organization is not necessarily sustainable. Organizational competitiveness does not lead to sustainable development. A company can be competitive for a while, then it's overtaken by another in the industry. While sustainability involves a long period of time and a long-lasting balance between the three responsibilities: economic, social, and environmental.
- A sustainable company can be competitive if it responds positively to the factors that shape this concept and applies the imperatives of sustainability over a long period of time.
- A competitive company can go towards sustainability by observing the principles contained in the annual reports (GRI).

Therefore, it can be concluded that the intersection of the two concepts develops an "ideal area" for the organization (see Figure 03). This ideal area is marked by the organization's ability to move towards sustainable development and to be competitive in the industry in which it operates.

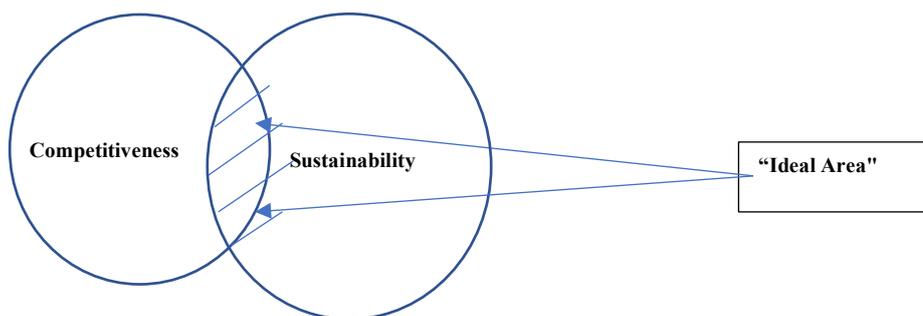


Figure 03. The link between competitiveness and sustainability

The theoretical framework for organizational competitiveness and sustainability includes the basic principles of sustainability, on the three responsibilities, between which there is a bidirectional relationship with the factors that contribute to the competitiveness of the companies. The whole process of organizational development is influenced by the positive and negative factors (financial crisis, foreign exchange rate, climate, etc.) of the business environment (dynamics of business environment) (see Figure 04).

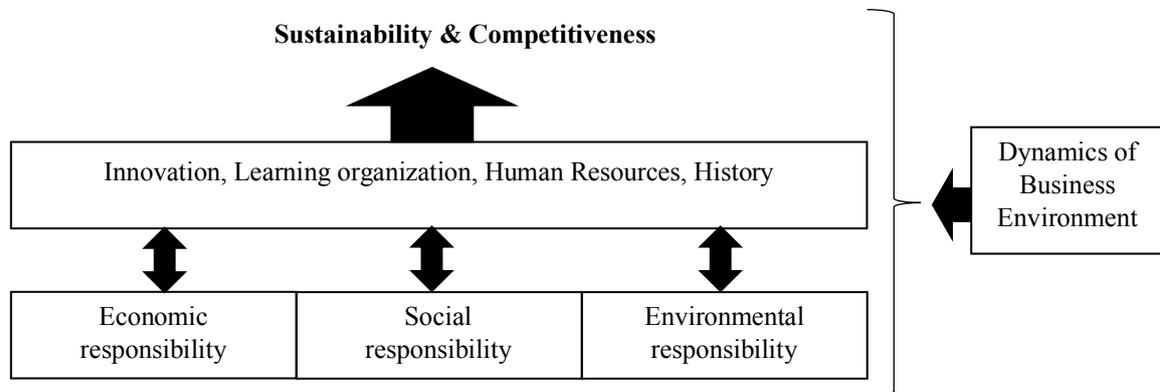


Figure 04. Theoretical framework for organizational competitiveness and sustainability

So this ideal area contributes to organizational competitiveness and sustainability, being the area where organizations are heading for sustainability and are competitive in the industry in which they operate.

7. Conclusion

Both competitiveness and sustainability are two complex, multidimensional concepts. As a result of the research there can be seen that there is no bidirectional connection between the two concepts. These do not include each other, because being sustainable does not necessarily mean being competitive. Perhaps an organization is sustainable, that is, it uses the concepts of a clean production, so the marketing mix is not the best in the industry, due to higher costs for the developed products.

It has been noticed that a number of factors contribute to the competitiveness of the organization, but these factors also need to be optimally used so that the results are maximal. Sustainability implies the balance between the three responsibilities: economic, social, and environmental. Using resources in a balanced manner contributes to the sustainable development of the organization.

It can be concluded that there is an "Ideal area" where the competitive company is heading for the sustainable direction.

References

- Aiginger, K. (2006). Competitiveness: from a dangerous obsession to welfare creating ability with positive externalities. *Journal of Industrial Trade and Competition*, 6, 63–66.
- Artene, A.E., Domil, A. E., Puscas, A., Domil, M., & Gencia, A. (2015). The Role of Accounting Information for a Sustainable Development within Farming Entities in Romania Case Study Banat Region. *25th International-Business-Information-Management-Association Conference* (Vol 1-6, pp. 1655–1665). Amsterdam, Netherlands.

- Buzzigoli, L., & Viviani A. (2009). Firm and System Competitiveness: Problems of Definition, Measurement and Analysis, in Firms and System Competitiveness in Italy. In A. Viviani (Ed.), Firenze University Press.
- Cioca, L.I., Ivascu, L., & Rus, S. (2014). Integrating Corporate Social Responsibility and Occupational Health and Safety to Facilitate the Development of the Organizations, 4th Review of Management and Economic Engineering. *The Management between Profit and Social Responsibility*, 2-7.
- Crouch, G. I. (2011). Destination Competitiveness: An Analysis of Determinant Attributes. *Journal of Travel Research*, 50(1), 27–45
- Feurer, R., Chaharbaghi, K. (1994). Defining Competitiveness: A Holistic Approach. *Management Decision Journal*, 32(2), 49–58.
- Ghicajanu, M., Irimie, S., Marica, L., & Munteanu, R. (2014). Criteria for Excellence in Business. *2nd Global Conference on Business, Economics, Management and Tourism*, 23, 445-452.
- Hanieha, A.A., AbdElallbm, S., & Hasana, A. (2016). Decision Support System for Industrial Social Performance, 13th Global Conference on Sustainable Manufacturing - Decoupling Growth from Resource Use. *Procedia CIRP*, 40, 329 – 334.
- Ivascu, L., & Cioca, L. I. (2014). Opportunity Risk: Integrated Approach to Risk Management for Creating Enterprise Opportunities, The 2nd International Conference on Psychology, Management and Social Science, Psychology, Management and Social Science. *Advances in Education Research*, 49, 77-80.
- Izvercian, M., Radu, A., Ivascu, L., & Ardelean, B.O. (2014). The Impact of Human Resources and Total Quality Management on the Enterprise. *Procedia Social and Behavioral Sciences*, 124, 27-33.
- Krugman, P. (1994). Competitiveness-a Dangerous Obsession. *Foreign Affairs*, 73(2), 28–44.
- Moraru, R. I., Băbuț, G. B., & Cioca, L. I. (2014). Rationale and criteria development for risk assessment tool selection in work environments. *Environmental Engineering and Management Journal*, 13(6), 1371-1376.
- Porter M. E. (1992). *Competitive Advantage: Creating and Sustaining Superior Performance* (Vol 10). London: PA Consulting Group.
- Plumins, M., Sceulovs, D., & Gaile-Sarkane, E. (2016). Competitiveness definitions' and concepts qualitative content analysis. Smart and Efficient Economy: Preparation for the Future Innovative Economy: 21st International Scientific Conference Economics and Management (ICEM 2016): Proceedings of Selected Papers (pp.379-386). Brno: Brno University of Technology.
- Saboniene, A. (2015). Lithuanian export competitiveness: comparison with other Baltic States. *Engineering Economics Journal*, 62(2).
- Seliger, G. (Ed.). (2012). Sustainable Manufacturing for Global Value Creation. *Sustainable Manufacturing Shaping Global Value Creation* (pp.3-8). Available from <https://www.springer.com/gp/book/9783642272899#>
- Stone, H. B. J., & Ranchhod, A. (2006). Competitive advantage of a nation in the global arena: a quantitative advancement to Porter's diamond applied to the UK, USA and BRIC nations. *Strategic Change*, 15(6), 283–284. <https://doi.org/10.1002/jsc.770>
- United Nations Economic Commission for Europe, Online website Available from http://www.unece.org/oes/nutshell/2004-2005/focus_sustainable_development.html (accessed 20 March 2017).
- Verboncu, I., Irimie, S., Zeininger, L., & Mihai, M. (2016). A Snapshot over Dynamics of Innovation in Romanian SMEs. *Proceedings of the 28th International Business Information Management Association (IBIMA)* (pp. 1400-1406). Seville, Spain.
- Waheeduzzaman, A. N. M. (2013). Competitiveness and convergence in G7 and emerging markets. *Competitiveness Review: An International Business Journal*, 21(2), 110-128. <https://doi.org/10.1108/10595421111117425>