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Article

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SUSTAINABLE DEVELOPMENT AS A SOURCE OF COMPETITIVE ADVANTAGE: AN EMPIRICAL RESEARCH STUDY IN MUSEUMS

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Abstract
Worldwide organisations are continually searching for new sources of competitive advantage. At the same time, they are under increasing pressure to carry out their activities so as not to harm the environment in addition to having a positive impact on society. Given these facts, our paper analyses whether, and under what conditions, sustainable development could be an opportunity rather than a threat for organisations. In particular, the research focuses on investigating a possible link between sustainable development and museums’ competitiveness. In order to achieve this goal, after an in-depth study of the literature, we distributed and collected surveys from 87 museums of different sizes, types, and importance from all Romanian development regions. Subsequently, we used Spearman’s correlation coefficient to test the statistical hypotheses. The findings indicate that both social and environmental pillars of sustainability have positive links with the economic performance of a museum. Our research highlights that not only private companies but also non-profit organisations, such as museums, can use sustainable development to improve their economic results and, in this way, to achieve higher levels of competitiveness. Therefore, the findings of this study are helpful for all organisations wishing to determine how sustainable development can be turned into a tool for enhancing competitiveness.

Keywords: competitiveness, strategy, economic performance, environment, social responsibility.

Jel Classification: M10; M14; O44; Q01
INTRODUCTION

For a long time, organisational development and leadership have only been considered in terms of efficiency, productivity, and profitability, with little or no attention being paid to social and ecological aspects. After 1987, however, more and more alarming signs appeared indicating that governing society only by means of economic rules is a major threat to the quality of life and welfare of future generations (Cristu 2017). In this context, the concept of sustainable development has been widely debated at a global level, and it has recently also been adopted at the organisational level (Norton et al. 2014). Starting from the fact that sustainable development of an organisation represents the process by which it achieves and maintains a balance between organisational economic development/prosperity, social equity, and the protection of the environment, companies worldwide are being pushed to identify solutions for accomplishing this requirement. Thus, many managers have been forced to develop strategies in order to make their organisations more socially responsible and environmentally sustainable, at the same time as ensuring they are economically competitive (Orlitzky et al. 2011), without even knowing if such strategies are feasible or effective.

1. SUSTAINABLE DEVELOPMENT OF AN ORGANISATION: OPPORTUNITY OR THREAT?

Given that even threats can be turned into strengths through an appropriate managerial approach, as well as the constant need of organisations to identify new sources of competitive advantage (Zdanyte and Neverauskas 2014), in recent years researchers have focused on studying sustainable development as a way of improving organisational performance. This has been a major challenge, especially since there is a rather tense relationship between an organisation’s sustainable development and competitiveness due to the fact that the practices used for economic development often cause negative effects on the natural and social environment (Rodriguez et al. 2002).

According to Ciegis et al. (2015), sustainable development requires a compromise between economic, social, and environmental objectives in order to ensure the wellbeing of both current and future generations. Therefore, sustainable development considers the long-term prosperity of an organisation through the implementation of socially responsible management strategies that have a minimal negative impact on the environment, to the detriment of immediate financial benefits. For this reason, the idea that environmental protection and social equity are factors that affect the financial performance of an organisation still prevails (Martínez-Ferrero and Frias-Aceituno 2015).

In this context, the coexistence of sustainable development and high organisational profitability is questionable, which is why few researchers have ventured to offer arguments in favour of companies being able to grow sustainably at the same time as being competitive. Among the most important contributions in this area are the following: Bilgin (2009) developed the PEARL model, through which sustainable development can be used by organisations as a strategy to gain a competitive edge; Duralia (2014) studied how organisations can gain competitive advantage by using sustainable marketing principles; Guimaraes et al. (2017) argued that ecological
sustainability and social responsibility are attributes of achieving a sustainable competitive advantage that, in turn, has a positive influence on organisational performance; and, last but not least, Morioka et al. (2017) addressed the issue of using sustainable business models as a way of placing sustainability goals at the heart of business decisions.

While there is an obvious direct link between the economic sustainability and competitiveness of an organisation, the social and environmental pillars of sustainable development appear to be the causes for some businesses facing difficulties in developing themselves in a sustainable way. Based on these considerations, the following sections of this article will outline the relationship between these two pillars and the performance of an organisation.

1.1. Environmental sustainability and organisational competitiveness

Environmental sustainability is based on a series of general principles, for example, the use of renewable resources within their natural long-term regeneration capacity (Petrevska et al. 2016); limiting the use of non-renewable resources to the level at which they can be substituted for other resources; the emission of pollutants or hazardous substances into the environment should not exceed the environment’s capacity to assimilate them; and the negative effects of economic processes on the environment should be reversible (Moldan et al. 2012). At the same time, environmental sustainability uses the rule of the three R’s: reducing consumption of natural resources, re-utilising resources as much as possible, and recycling what can no longer be used in its current form (Brophy and Wylie 2013, 6). In addition, environmental sustainability incorporates actions/measures taken by an enterprise to promote a responsible attitude towards the environment. For instance, Orange Romania implemented a programme called ‘Bicycle with a Tie’, which aimed to educate its employees about environmental protection and the use of natural resources, as well as influencing the behaviour of its stakeholders.

Whereas an organisation’s compliance with the general principles of environmental sustainability is more difficult to monitor, it can be noted that the rule of the three R’s is a useful tool for companies wishing to grow sustainably since its direct and immediate benefit is cost reduction through resource savings. Minimising consumption in the production process results in better productivity, which leads to a higher level of competitiveness and improved organisational performance (Guimarães et al. 2017). Chitima (2015, 225) also states that the use of green practices offers an organisation competitive advantage by increasing public confidence, attracting new beneficiaries, and attracting financial resources. Another reason for the growing interest in running activities with minimal or no negative impact on the environment is that businesses in many sectors of activity can suffer major economic damage due to climate change, drought, fires, hurricanes, and floods (Radulescu et al. 2015). Thus, some companies have recently become aware that it is profitable to sacrifice certain current economic benefits in order to ensure slower but longer-lasting organisational growth.

In addition to the common good, businesses are also motivated to take measures to protect the environment because ‘being green’ is a good strategy for brand consolidation, with positive impacts on profitability (Brophy and Wylie 2013, 11).

In this regard, Bilgin (2009) shows that several companies, such as Bosch, BP, and GE, have used sustainable development theory as a differentiation tool (Bilgin 2009). Furthermore, Walsh (2017) has studied environmental sustainability strategies applied in the North American hotel industry and concludes that the main reason why these hotels used such strategies was not for cost reduction but to differentiate them from competitors by strengthening the brand as a result of creating an ‘eco’ image within the market.

1.2. Social sustainability and organisational competitiveness

Initially, social sustainability was defined at global and national levels, but after a short period of time, the concept started to be adopted and used by cities, communities, and, finally, different organisations (Haghi and Zabihi 2012). The features that a socially sustainable organisation should have can be extracted from different definitions associated with the concept (see Dempsey et al. 2011; Dyllick and Hockerts 2002; Friedman 2007; McKenzie 2004; Swarbrooke 2015, 497):

- Promoting a good quality of life for all members of the organisation by ensuring that their basic needs are met;
- Ensuring equal treatment among members of the organisation, which means that there is no discrimination between employees on the grounds of gender, age, social status, ethnicity, position held, etc.;
- Providing equal opportunities for employment;
- Providing fair opportunities and benefits for all members of the organisation, especially for the poorest and most vulnerable;
- Ensuring respect for human rights (of the employees, clients, and stakeholders of the organisation);
- Ensuring a fair distribution of wage income;
- Avoiding any form of exploitation of employees;
- Encouraging diversity and social inclusion by providing jobs for socially disadvantaged people;
- Creating safe working conditions for employees;
- Offering products/services that are safe to use;
- Promoting interconnection and social interaction within and outside the organisation;
- Adding value to the community by increasing the motivation and loyalty of employees and stakeholders, as well as by offering quality products and services that have the capacity to enhance the quality of life;
- Exerting a positive social impact by sponsoring and donating to various causes, or by conducting corporate social responsibility campaigns;
- Facilitating the access of disadvantaged people to public services (education, health, culture, communication, etc.); and
- Strengthening a positive image of the organisation within the community through its system of values.

As can be seen, the social pillar of sustainability is focused on people. At first glance, it could be thought that social sustainability requirements represent a threat towards the
economic performances of an organisation. However, socially sustainable enterprises have many benefits. For instance, according to Romanian law, companies employing young graduates without experience, disabled people, the elderly or unemployed, young people at risk of social exclusion, and pupils and students can receive a number of subsidies and tax incentives from the government (Cozma Ighian et al. 2017). Further, if we consider that in some geographical areas and in some fields there is a high level of competition between firms to attract and retain good quality employees, it becomes obvious that organisations providing better working conditions are those that will triumph in such competitive environments. On the other hand, exploitation of workers, violation of their rights, inappropriate pay, and discrimination are important factors behind high labour force fluctuations, with negative effects on the costs of recruiting, selecting, and training of new employees (Sabou et al. 2010). At the same time, a socially unsustainable organisation will also lose out because of its negative perception by various stakeholders. Finally, such an organisation will experience low levels of productivity due to the lack of employee engagement and motivation.

As is well known, people are an organisation’s most valuable resource given that the way in which all the other resources will be used depends on them (Avram et al. 2017). Under such circumstances, we can note that social sustainability is similar to quality management from the point of view of cost – benefit analysis. Thus, it may be true that sustainable enterprises require more financial effort, but the lack of such effort will lead to even higher losses. In consequence, the theory that envisions both the visible and invisible side of an iceberg, often used in quality management (Boca 2012), is perfectly valid for social sustainability. Based on these considerations, we can conclude that companies that have already implemented sustainable development principles have not acted in this way just to follow a particular fashion, but because they probably knew, from the very beginning, that the performance and long-term success of their business would be enhanced by adopting a responsible attitude towards society and the environment.

2. MUSEUMS AND COMPETITION

The competitiveness of museums can be defined as their ability to compete with similar organisations in a certain market. As stated by Kotler et al. (2008, 55), museums do not compete only with each other, but also with other institutions and organisations operating in the cultural and entertainment sector. Most often, the stakes of competition are represented by visitors, their free time, and their money. Cultural institutions from a geographical area may also compete for other benefits and resources, such as the approval of a certain number of posts in the organisational chart, the attraction of financial resources in the form of grants and non-reimbursable funds, the attraction of skilled human resources, volunteers, important collaborations and partnerships, and so on.

Given such fierce competition, many museums face financial issues and only just manage to justify their existence through the number of visitors they attract. Meanwhile, other museums encounter high flows of visitors and benefit from the financial and material support of the communities they belong to. Based on these aspects, even though the main purpose of museums is not to make money, it can be noted that using
appropriate strategies to increase competitiveness may help museums to attract the resources they need to fulfil their mission and goals successfully. Therefore, some museums have noticed this opportunity and have started to develop and apply business models such as those applied by private companies (Pop and Borza 2014).

However, as we have seen in the first part of this paper, many companies are constantly changing their business models in order to meet the current needs and demands of society (Pozega et al. 2014). If, in the past, the emphasis was placed on gaining as much profit as possible, at any price, nowadays companies are searching for long-term advantages more than short-term benefits, and thus their tendency is to do businesses in such a way as to have sustainable long-term profitability (Chelariu 2017). For this reason, we believe that successful museums will be those that not only limit themselves in regard to implementing traditional business models, but are also aware of the latest changes in economic practices and are willing to adapt their management models to new trends.

In fact, competitiveness is largely dependent on an organisation’s flexibility and speed of response time with regard to the changes in a business environment; in this sense, it is well known that leaders in any field of activity are those who first apply or develop new or improved models, concepts, products or strategies (Stoilkovska 2015). Thus, while research has tended to focus on studying the ways in which museums can increase their competitiveness through innovation (Della Corte et al. 2017), or by adopting a market-oriented and visitor-oriented approach (Camarero and Garido 2009), our study seeks to explore new sources of gaining competitive advantage for museums, namely, the possibility of enhancing the economic performance of museums by applying sustainable development principles. In this regard, we began our research from the following hypotheses:

- **H1**: There is a positive correlation between social sustainability and the economic performance of a museum;
- **H2**: There is a positive correlation between environmental sustainability and the economic performance of a museum;
- **H3**: There is a positive correlation between environmental sustainability and the financial autonomy of a museum.

### 3. METHODS

To test the statistical hypotheses, we distributed a questionnaire to all Romanian museums and collections that could be contacted by email during the period of October to November 2016. The survey was received by 186 museums and public collections with different management, out of which 87 completed the questionnaire. Even though the response rate was only 46.77%, the responses were sufficiently diverse in terms of museum type, profile, size and territorial distribution to ensure representativeness of the statistical population in the research. The first part of the survey included several items related to the museum’s sustainability and performance. The answer to these items required choosing a value from 1 to 5 on a Likert scale, where 1 represented total disagreement and 5 represented total agreement. In the second part, respondents were asked for general information about the characteristics of the museum they represented.
Social sustainability was measured by a set of 19 items referring to public accessibility of museum collections, cooperation of the museum with other specialised institutions, collaboration of the museum with the press, museum visibility both in the market in general and in the online environment, the extent to which a museum takes into account visitors’ suggestions, the extent to which a museum involves the local community in its activities, the accessibility of exhibitions and programmes developed by a museum and the extent to which they favour inclusion, volunteering opportunities offered by a museum, objectives regarding the attraction of new users and/or disadvantaged groups, diversity of the staff, and the participative/interactive nature of the educational programmes provided by a museum.

Environmental sustainability was quantified by seven items, out of which five concerned the measures taken by a museum to make more efficient use of electricity, heat, water, consumables and fuel, while two referred to the extent to which a museum uses renewable energy sources and promotes care for the environment through its exhibitions.

The museums’ economic performance was measured by 15 items relating to financial resources, diversification of a museum’s products and services, labour productivity, capital productivity, efficiency of using the exhibition area, efficiency of the website, efficiency of expenditure, degree of financial autonomy, and inventory turnover.

The statistical analysis of the collected data was performed in IBM SPSS 22.0. The internal consistency, reliability, and validity of items included in the questionnaire were tested using Cronbach’s alpha coefficient. Given that one response was excluded due to being incomplete, the analysis was carried out on a sample of 86 cases. For each scale Cronbach’s alpha coefficient was over 0.85, and we therefore concluded that the questionnaire had a good internal consistency.

Table 1. Results of normality tests: Kolmogorov-Smirnov and Shapiro-Wilk

<table>
<thead>
<tr>
<th>Variable</th>
<th>Kolmogorov-Smirnov</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social sustainability</td>
<td>.088</td>
<td>.099</td>
</tr>
<tr>
<td>Environmental sustainability</td>
<td>.147</td>
<td>.000</td>
</tr>
<tr>
<td>Economic performance</td>
<td>.098</td>
<td>.01</td>
</tr>
</tbody>
</table>

Normality of the data distribution was checked using Shapiro-Wilk and Kolmogorov-Smirnov tests. From Table 1, it can be seen that environmental sustainability had a p-value of less than 1% (p < .001), meaning that, in this case, the collected data had a distribution that differed significantly from that of the normal population. For this reason, we studied the relationships between the variables by using Spearman’s rho coefficient.

4. RESULTS

Table 2 shows that the economic performance of a museum is positive correlated with both environmental sustainability ($r_s=.498$, n=86, p<.001) and social sustainability ($r_s=.708$, n=86, p<.001).
Table 2. Spearman’s rho correlation coefficients between variables

<table>
<thead>
<tr>
<th></th>
<th>Environmental sustainability</th>
<th>Social sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic performance</td>
<td>Correlation Coefficient</td>
<td>.498</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>86</td>
</tr>
<tr>
<td>Social sustainability</td>
<td></td>
<td>.708</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>86</td>
</tr>
</tbody>
</table>

Since the p-value is lower than .001 in both cases, there is a probability of less than 1% that the correlation coefficients result from sampling errors (Opariu-Dan 2011, 24). We can also note that the strongest correlation emerges between social sustainability and economic performance. The link between the two variables can be highlighted by means of a scatter plot diagram (see Figure 1).

![Scatter plot diagram](image)

Figure 1. The relationship between social sustainability and economic performance

From Figure 1, it can be seen that most of the intersecting points between the two variables are within the confidence interval, illustrating that a linear relationship is present. Therefore, given these results, we can state with 99% confidence that there is a positive correlation between social sustainability and the economic performance of a museum, meaning that hypothesis 1 is confirmed.

By performing an in-depth analysis of all the items used for measuring the economic performance of museums, we discovered a strong, positive correlation between social sustainability and the diversification of services offered to visitors ($r_s=.607$, $n=86$, $p<.001$). In addition, we found moderate uphill relationships between social sustainability and the following items: (1) the ratio of earned income from ticket sales and the number of objects exhibited ($r_s=.584$, $n=86$, $p<.001$); (2) inventory turnover ($r_s=.518$, $n=86$, $p<.001$); (3) the ratio of unique online visitors and the number of articles published on a museum’s website ($r_s=.466$, $n=86$, $p<.001$); (4) the ratio of the annual...
number of visitors on a museum’s website and the average number of employees ($r_s=0.458$, $n=86$, $p<0.001$); (5) the ratio between the annual number of exhibitions and the average number of employees (labour productivity) ($r_s=0.454$, $n=86$, $p<0.001$); (6) the level of financial resources of a museum ($r_s=0.419$, $n=86$, $p<0.001$); (7) diversification of the products sold by a museum ($r_s=0.419$, $n=86$, $p<0.001$).

A moderate linear positive correlation was also found between environmental sustainability and the economic performance of a museum ($r_s=0.498$, $n=86$, $p<0.001$). The analysis of inter-item connections revealed that environmental sustainability has a moderate relationship with the following items: (1) the ratio of earned income from ticket sales and the number of objects exhibited ($r_s=0.503$, $n=86$, $p<0.001$) and (2) the diversification of services offered to visitors ($r_s=0.410$, $n=86$, $p<0.001$). Further, there were weak uphill linear relationships between environmental sustainability and the following variables: (1) inventory turnover ($r_s=0.396$, $n=86$, $p<0.001$); (2) the level of financial resources of a museum ($r_s=0.275$, $n=86$, $p<0.001$); (3) the ratio between the annual number of exhibitions and the average number of employees ($r_s=0.223$, $n=86$, $p<0.001$); (4) the ratio of the annual number of visitors on a museum’s website and the average number of employees ($r_s=0.220$, $n=86$, $p<0.001$); (5) diversification of the products sold by a museum ($r_s=0.211$, $n=86$, $p<0.001$); and (6) the ratio of unique online visitors and the number of articles published on a museum’s website ($r_s=0.202$, $n=86$, $p<0.001$).

Considering these results, we can conclude that there is a positive moderate correlation between environmental sustainability and the economic performance of a museum, thus validating the second hypothesis.

Regarding the financial autonomy of a museum measured as the share of own income in total revenues, it was found that there is a positive but weak correlation between this factor and both the environmental sustainability ($r_s=0.340$, $n=86$, $p<0.001$), and social sustainability ($r_s=0.265$, $n=86$, $p<0.001$) of a museum. Therefore, the third hypothesis, presuming the existence of a positive correlation between environmental sustainability and the financial autonomy of a museum, is partially confirmed.

**CONCLUSION**

The purpose of this paper has been to analyse a new theory regarding the possibility of enhancing the competitive advantage of an organisation through the application of sustainable development principles in its activities. From the theoretical research, we can see that environmental and social sustainability can be used as instruments for increasing long-term organisational performance. In this sense, care for the environment can lead to cost reductions and higher productivity, but also to a positive perception of the company by its stakeholders, differentiation, and brand consolidation, with all these elements ensuring a higher level of competitiveness in the long run. Social responsibility can also represent a competitive advantage for companies due to the economic benefits they can attract from governments. In addition, socially sustainable enterprises may have lower staff fluctuations, and thus lower recruitment, selection, and training costs, as well as higher levels of public confidence and more motivated employees, than enterprises that choose the path of unsustainable development.

The aim of this empirical study has been to determine if not-for-profit organisations, such as museums, can have the same benefits as private companies by adopting a
sustainable development approach. Gathering data from 87 Romanian museums, this research has demonstrated that social sustainability has a strong and positive correlation with the economic performance of a museum. In particular, it was found that socially sustainable museums are more likely to have enough financial resources to fulfill their mission and goals. The special attention offered to social issues and people helps museums to increase their competitiveness by attracting a large number of visitors and increasing income levels, by recording a high inventory turnover, but also by increasing employees’ motivation which generates positive effects on their productivity.

In addition, the study has revealed that a positive correlation exists between environmental sustainability and the economic performance of a museum. The fact that environmentally friendly museums report higher levels of revenues earned from the sale of tickets is strong evidence supporting the results of previous research in relation to the fact that environmental sustainability is a tool for attracting customers and ensuring brand consolidation (Walsh 2017). Another important finding of this empirical research is the positive correlation between a museum’s financial autonomy and its environmental and social sustainability. This finding proves that the sustainable development of an organisation does not affect its financial performance. Moreover, even if this correlation is not very strong, its existence allows us to presume that ecologically and socially sustainable museums can have a higher share of their own income in total revenues when compared to unsustainable museums, which assures them of financial independence and a higher level of competitiveness.

REFERENCES


