

SUSTAINABLE COMPETITIVENESS - A STRATEGIC MANAGEMENT SHIFT OF BUSINESSES

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Abstract

The management of the modern organization is focused on overviews of the long-term economic performance it produces in a market-driven environment. Many businesses have succeeded in balancing profitability with sustainability by incorporating sustainability into their long-term strategic approaches: "How we act today, we will see the result in the future". They have done this by being aware of the effects that business sustainability has on organizational processes and performance.

According to empirical data, an organization can benefit from a competitive edge by balancing its relationship with the environment, particularly from the perspectives of economic efficiency, social equality, and environmental strategy. The link is complicated, though, and this study adds an overview of how these businesses apply their strategies in the quest for sustainable competitiveness. This study is a systematic review of the business sustainability literature and presents the world's most sustainable firms based on an examination of the annual rankings of the most sustainable corporations for the years 2020–2022 provided by Corporate Knights' rating. In conclusion, this paper will advance the area of management by encouraging managers and business owners to pay attention to aspects influencing organizational sustainability that go beyond the numbers in financial analysis.

Keywords: *sustainability, international competitiveness, sustainable competitiveness, corporate sustainability management, Corporate Knights' ranking.*

JEL: *Q01, O10, F23*

1. Introduction

In recent years, businesses have needed ideas and viewpoints on corporate strategy in the context of difficulties and novel situations. Shrivastava (1992, p. 18) invented the phrase "corporate self-renewal," which describes the process of changing and adapting to fresh market demands, realigning resources, processes, and products based on a relationship with the natural environment. Undoubtedly, the engagement and focus on corporate sustainability did not exist during the globalization era. Investors are becoming more interested in investing in businesses that build industry-wide best practices because resources are limited and there are a lot of needs, thus businesses need to focus more on sustainability. Businesses are essential to any environmental progress. They dominate much of the global economic activity, wield much of the global power (in the case of major multinational corporations), control most of the world's resources, technology, and innovation, and greatly affect people's decisions (Gray, 1994).

Given that sustainability affects everything from the environment and health to economic growth, it has elevated to the top of decision makers' priorities in the current global economic, political, and business context. Uncertainties have made the business world more complicated, and how firms handle these uncertainties will determine whether they survive. Therefore, scholars around the world have looked for a different strategy to manage an organization in such a complicated world (Kantabutra, S., & Ketprapakorn, N., 2020).

The aim of this study is clarifying the idea of business sustainability and its function in the context of organizational development. The study's goal is to analyze the list of businesses that Corporate Knights believes to be the most sustainable for the years 2020–2022.

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2. Literature review

Businesses are becoming increasingly aware of the need to address sustainability. But there is constant discussion about what sustainability means in a corporate context, and numerous definitions have been put out (Searcy, 2012). Stead and Stead (1994) emphasize this ability “to perceive the limits of the natural environment, the physical interconnection between organizations and the ecosystem, and the true long-term ecological implications of companies' strategic choices”.

The United Nations (UN), OECD, EU and other international as well as national institutions have introduced various approaches/principles/practices on business sustainability, from the Principles of Corporate Governance (1999) to the Guidelines for Multinational Enterprises (2000).

The concept of business sustainability has been shaped over time by a range of political, public and academic influences.

In table 1 below a series of approaches from the literature are selected, regarding business sustainability.

Table 1. Approaches to defining business sustainability

AUTHORS	DEFINITION
Dyllick, T., & Hockerts, K. (2002)	Business sustainability is the ability of an organization to satisfy the needs of both its immediate and long-term stakeholders without jeopardizing that ability.
Van Marrewijk, M., & Werre, M. (2003)	Corporate sustainability describes a company's voluntary initiatives that show how social and environmental concerns are taken into account in daily operations and relationships with stakeholders.
Székely, F., & Knirsch, M. (2005).	Economic, social, and environmental sustainability are the three pillars that must be balanced in order to list the ten various elements that must be supported in business: Economic growth, shareholder value, prestige, corporate reputation, customer relations, product quality, ethical business conduct, sustainable job creation, value creation for all stakeholders, and consideration to the needs of the underprivileged are just a few of the factors that must be considered.
Oprea, L. (2005)	Business sustainability has proven to be a possible source of competitive advantage. It is an opportunity rather than a burden.
Perrini, F., & Tencati, A. (2006).	Business sustainability is the ability of a firm to continue operating over a long period of time and depends on the sustainability of its relationships with stakeholders.
Kolk, A. (2008)	Business sustainability is broadly defined and includes ethical, environmental and/or social issues (sometimes this is also considered "corporate social responsibility" or the "triple ratio" (people, planet, profit)).
Markevich, A. (2009).	Business sustainability represents the integration of the company in 6 perspectives: 1. Compliance with regulations; 2. Moderation of the addition; 3. Value alignment; 4. Designing the entire system; 5. Business model innovation, and 6. Mission transformation.
Aras și Crowther (2009)	Business sustainability is approached from the perspective of the key dimensions of sustainability: internal (finances and organizational culture) external (social influence and environmental impact).
Medel-González, F., García-Ávila, L., Acosta-Beltrán, A., & Hernández, C. (2013)	Business sustainability is a multifaceted term that takes into account business strategies, financial results, customer happiness, stakeholder interests, internal processes, and the human element.
Montiel, I., & Delgado-Ceballos, J. (2014).	Business sustainability is a measure of a company's non-financial success.
Ng, A. C., & Rezaee, Z. (2015).	Business sustainability argues that a company should broaden its emphasis beyond increasing short-term shareholder profits to take into account how its operations will affect the interests of all stakeholders, including the community, society, and the environment.
Baumgartner, R. J., & Rauter, R. (2017).	The company's sustainable development refers to economic, environmental, and social growth that satisfies present demands without impeding the ability of future generations to do the same.
Herciu, M., & Ogorean, C. (2018).	Corporate sustainability (CS) is the process of incorporating economic, social, and environmental objectives into a company's (business) strategy while taking into consideration the needs and interests of stakeholders (present and future).
Ioannou, I., & Serafeim, G. (2019).	Sustainability combines a wide range of environmental, social and governance actions generating high levels of variation between industries, given that the same action may be associated with the advantage of differentiation in some industries,

AUTHORS	DEFINITION
	companies, economies.
Kantabutra, S., & Ketprapakorn, N. (2020)	Organizational culture, which comprises the goal and its values that foster an emotional commitment among the organization's members to achieving the vision, is taken into account by the writers in a cogent theory of corporate sustainability. In order to broaden the business sustainability perspective, they also promote five corporate sustainability practices: persistence, resilience development, moderation, geosocial development, and sharing.
Vidmar, D., Marolt, M., & Pucihar, A. (2021)	There are many chances for developing new value propositions and business models due to the digital transformation and sustainability in business. Nowadays, the total performance of businesses is already evaluated from a sustainability viewpoint, which encompasses not only social and environmental factors but also economic ones, at least for major businesses.
Höse, K., Süß, A., & Götze, U. (2022)	The company goals and the strategy that form the basis of the business model determine sustainability.

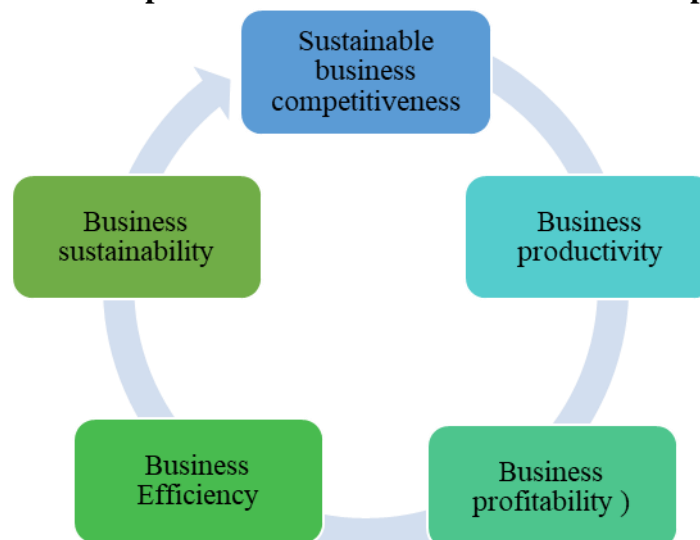
Sources: adapted by authors according literature review

Finally, the fact that scientists define corporate sustainability differently can be viewed as confusing, but it can also be seen as an advantage due to the novelty of the concept. From these approaches to the concept of corporate sustainability (Table 1), most researchers believe that the economic, social and environmental factors/goals/pillars of a company will satisfy future generations and be an efficient method. Another important conclusion after studying this concept is that corporate sustainability is a source of competitive advantage.

3. Sustainable Competitiveness – as Business Strategy

Many companies are beginning to recognize the need to achieve long-term business sustainability (Turner, 2009). This is necessary not only for their own activities, but also for their company's entire network of supply and demand chains. Instead of being seen as a costly and cumbersome affair, corporate sustainability is now a competitive imperative (Mahler, 2007). Business sustainability competitiveness can be defined as “a company’s ability to synergistically combine all its resources to improve productivity, profitability, effectiveness and long-term sustainability” (Herciu & Ogean, 2018). In terms of sustainable corporate competitiveness, Herciu & Ogean (2018) developed a conceptual model. Figure 1: (Number of Total Corporate Assets) and Corporate Sustainability (Dow Jones Sustainability Index)”.

Figure 1. The conceptual model of sustainable business competitiveness



Source: Ogean, C., & Herciu, M. (2018). Corporate sustainability-from a fuzzy concept to a coherent reality. Studies in Business & Economics, 13(1).

According to Figure 1, the conceptual model of sustainable business competitiveness considers information at the firm level: revenue per employee, return on assets, total asset turnover, corporate social responsibility practices (Herciu & Ogrea, 2018), so that:

- Business productivity - Employees play an important role in achieving the sustainable competitiveness of the business, because through their satisfaction at work they will generate high levels of performance, implicitly profitability for the company. The more satisfied they are, the more productive and engaged they will be in carrying out their responsibilities. Respectively, this will be seen in sustainable business competitiveness.
- Business profitability – When we refer to profitability, we think of return on assets, financial performance of the firm, performance indicators.
- Business Efficiency – Business efficiency (Total Asset Turnover) results from the ability to estimate/forecast growth in assets as well as revenue.
- Business sustainability – One of the important current concerns of companies. Companies' strategies should adapt an organizational culture oriented towards social performance, sustainable financial performance. Among the most important sustainability measurement indicators is the Dow Jones Sustainability index (DJSI). To achieve their corporate sustainability objectives, many firms are working to create fresh and comprehensive sustainability measuring systems. There are currently no definitions or standards for sustainable development that are agreed worldwide. There are no globally accepted metrics for sustainable development to assist track development (United Nations Conference on Sustainable Development, 2012). Researchers have frequently relied on individual case studies because it is challenging to find trustworthy and precise metrics that can compare businesses on more complex aspects of a firm's sustainability performance.

4. The Most Sustainable Corporations – Sustainable Competitiveness Strategy (2020–2022)

Business sustainability performance can be determined with the help of indicators, which evaluate and control resource performance; communicate performance to both external and internal stakeholders; suggests improvement by identifying gaps that require intervention (Medel-González & al. 2013). Among the most important organizations measuring business sustainability/most sustainable companies there are: Corporate Knights Global 100, Forbes, S&P Global Corporate Sustainability Assessment (CSA), RobecoSAM (Robeco), Global Reporting Initiative (GRI), World Business Council for Development Sustainable (WBCSD), Sigma Project, etc., and among the most well-known business sustainability indices, as mentioned above, are the Dow Jones Sustainability Indices. According to this, this paper highlights the most sustainable corporations based on an analysis of the Corporate Knights Global 100 annual rankings, for the period 2020-2022.

Based on a thorough analysis of approximately 7,000 public firms with revenue over US\$1 billion, Corporate Knights' rating of the top 100 most sustainable companies in the world for 2022 is produced. It is the global sustainability index with the highest performance which has been around for more than a decade. This year (2022), the Corporate Knights methodology analyzed data for 23 key drivers performance and changed the overall scores to letter grades.

Corporate Knights in the period 2020-2022 collected data in over 25 countries so that it analyzed over 100 companies. The analysis of the most sustainable companies according to Corporate Knights Global 100 - by country shows the following (Figure 2):

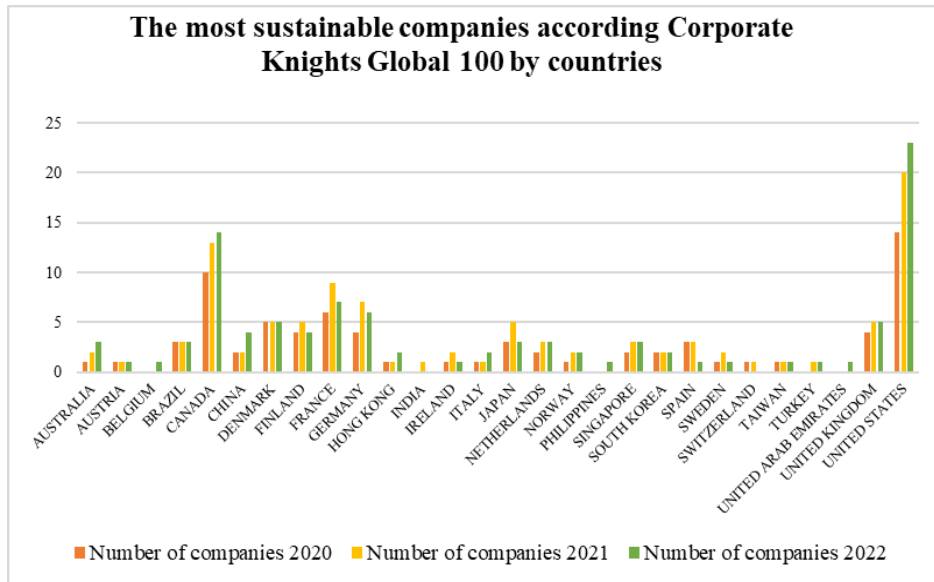


Figure 2. The most sustainable companies according to the Corporate Knights Global 100 - by country

Source: Adapted by the author after <https://www.corporateknights.com>

As we can see in the ranking, the most sustainable corporations are representative in the USA, Canada and Germany. In 2022, China, Australia, Hong Kong, Italy completed the list with some several sustainable companies. The companies from: Belgium, Philippine and United Arab Emirates are included for the first time in Corporate Knights Global 100 ranking. In conclusion, United States has the most Global 100 companies, with 23, followed by Canada, which has 13. Thirteen individuals hail from Asia-Pacific, forty-one from Europe or the United Kingdom, and three from South America.

At the same time, the Corporate Knights Global 100 Index continues to demonstrate that sustainability is good business and enables companies to outperform. Sustainable companies in 2020 represent 30 industries, 2021 they are represented by 37 different industries, while in 2022 represent 38 industries. The 2022 report also reorganized/reclassified the industries in other, more complex categories. Thus, what follows is a restructuring of the specific data for 2020 and 2021 according to the new methodology (Figure 3).

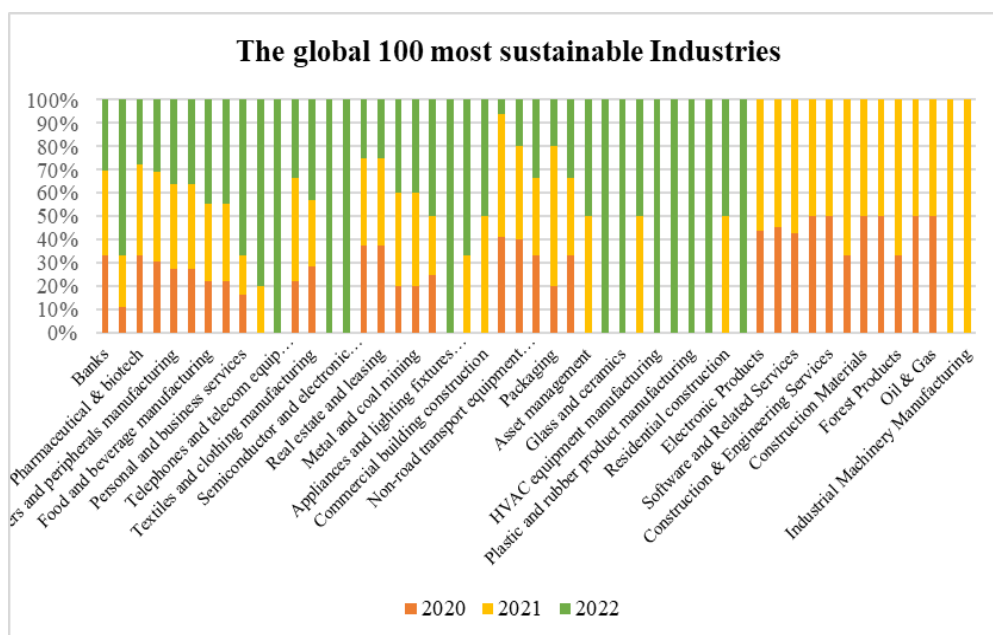


Figure 3. The most sustainable companies according to the Corporate Knights Global 100 - by industry

Source: Adapted by the author after <https://www.corporateknights.com>

Ten banks make up the largest single sector, while telecoms, chipmakers, computer manufacturers, and business service providers dominate sectoral representation.

From the point of view of the industries that represent the most performing companies, during the years 2020-2022, the top 3 industries are: Banks (2020-11 companies; 2021-12 companies; 2022 – 10 companies), Electronic products or IT services except telecom and hosting (2020-7 companies 2021-9 companies; 2022 – 6 companies) and Pharmaceuticals and biotech (2020-6 companies; 2021-7 companies; 2022 – 5 companies).

Inequalities in society were still brought to light by the global pandemic in 2021, and the urgency of the climate problem was brought home by heat waves, wildfires, and floods. Environmental, social, and governance (ESG) challenges dominated business, government, and all facets of society last year. Many of the major publicly traded firms and almost 90% of all nations currently have some sort of net-zero aim. A total of US\$130 trillion in assets were committed to this objective during the UN climate summit in November. The most sustainable businesses are more energy and carbon productive as the "decade of action" to decarbonize the economy gets underway.

Table. 2 The global 100 most sustainable companies 2020-2022

RANK 2020	RANK 2021	RANK 2022	COMPANY	COUNTRY	INDUSTRY	SCORE
37	21	1	Vestas Wind Systems A/S	Denmark	Machinery manufacturing	Top company A+
2	24	2	Chr Hansen Holding A/S	Denmark	Food and beverage manufacturing	Above 75%
5	43	3	Autodesk Inc	United States	IT services except telecom and hosting	Above 75%
29	1	4	Schneider Electric SE	France	Industrial Conglomerates	Above 75%
36	40	5	City Developments Ltd	Singapore	Real estate and leasing	Above 75%
-	9	6	American Water Works Company Inc	United States	Water and sewage treatment	Above 75%
1	2	7	Orsted A/S	United States	Power generation	70–75%
-	12	8	Atlantica Sustainable Infrastructure PLC	United Kingdom	Power generation	70–75%
21	55	9	Dassault Systemes SE	France	IT services except telecom and hosting	70–75%
-	18	10	Brambles Ltd	Australia	Furniture and general manufacturing N.E.C.	70–75%
47	-	11	Sims Ltd	Australia	Smelters and steel making	70–75%
-	38	12	Johnson Controls International PLC	Ireland	HVAC equipment manufacturing	65–70%
40	93	13	Koninklijke KPN NV	Netherlands	Telecom providers	65–70%
22	6	14	McCormick & Company Inc	United States	Food and beverage manufacturing	65–70%
-	-	15	Schnitzer Steel Industries Inc	United States	Smelters and steel making	65–70%
-	45	16	Transcontinental Inc	United States	Plastic and rubber product manufacturing	65–70%
57	5	17	Stantec Inc	United	Personal and business	65–70%

RANK 2020	RANK 2021	RANK 2022	COMPANY	COUNTRY	INDUSTRY	SCORE
				States	services	
49	17	18	Cascades Inc	United States	Packaging	65–70%
-	-	19	Evoqua Water Technologies Corp	United States	Machinery manufacturing	65–70%
-	-	20	Beijing Enterprises Water Group Ltd	Hong Kong	Water and sewage treatment	65–70%

Source: Adapted by the author after <https://www.corporateknights.com>

This year the ranking comes with some amazing changes in the last 2 years. Top 3 companies (Chr Vestas Wind Systems A/S, Hansen Holding A/S and Autodesk Inc) went up from positions 21, 24 and 43 compared to last year (2021).

From 21th place last year, Vestas Wind Systems A/S tops this year's (2022) ranking, having risen significantly from 2020. Last year's winner, Schneider Electric SE, dropped to number 4. Orsted A/S also fell one place to No. 7. City Developments Ltd jumped from 40 to No. 5, while Dassault Systems SE rose to No. 9 from 55. Denmark's Vestas Wind Systems, the world's largest manufacturer of wind turbines, is leading the global energy transition.

“Sustainability in Everything We Do” is the company's updated and expanded worldwide sustainability plan, was launched in 2020. Prior to being the top wind turbine maker in the world, the firm led the globe in the production of hydraulic cranes, accounting for over a fifth of all installed wind generating capacity globally.

Globally, the international company operates. In the United States and Canada alone, Vestas has erected 40,000 megawatts (MW) of onshore and offshore wind turbines while working with over 7,000 employees. In December, the Danish business started constructing the most potent offshore turbine in Europe off the coast of Scotland after landing a 235 MW order in Illinois.

According to these results, we find that at the microeconomic level we identify competitive companies that implicitly denote the competitiveness of the nation, the country as we can see in Figure 4.

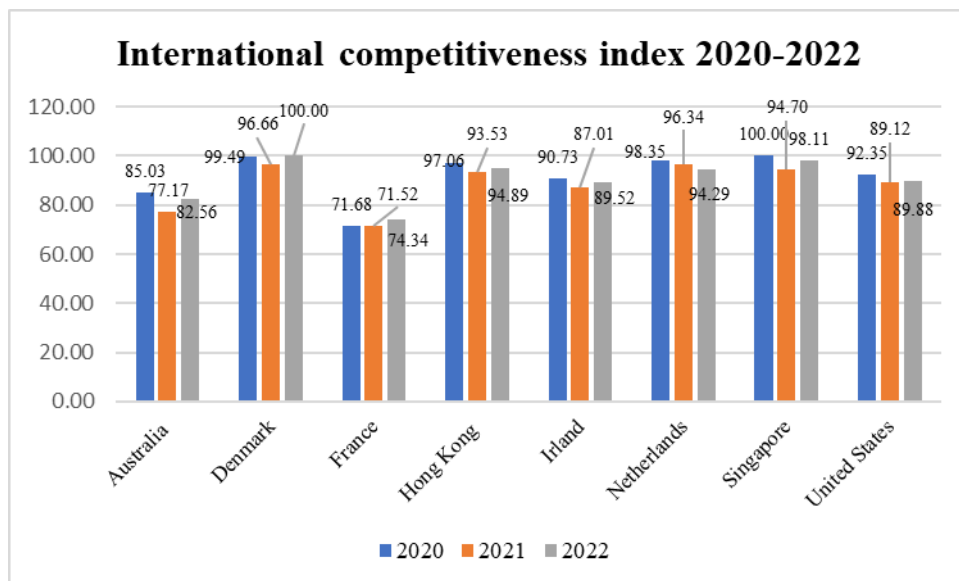


Figure 4. International competitiveness index 2020-2022

Source: <https://www.imd.org/centers/world-competitiveness-center/rankings/world-competitiveness/>

We observe the score of the selected countries as one that demonstrates the high level of well-being. We can see this from the competitiveness ranking offered by IMD that Denmark, the representative country in the top of sustainable companies is also in the top of the international ranking of competitiveness.

5. Conclusions

Several businesses have succeeded in combining profitability and sustainability by incorporating sustainability into their strategic approaches. They are aware of the impact that business sustainability has on organizational processes and performance.

For this process of integrating sustainability (with profitability) into the heart of the business to become effective, businesses must determine and employ the most appropriate methods while providing opportunities to achieve desired results over the long term (Ogrea & Herciu, 2020). Business sustainability is a socially, environmentally, and economically competitive advantage more than ever and is an important matter for executives and senior leaders to lead the company into the future responsibly, while leveraging the company's transparency and reputation.

Sustainable business competitiveness has become one of the most challenging endeavors that a manager should include in a management plan, a synergy between several defining components, it is also an evolution of existing management thinking and paradigm.

The analysis of the most sustainable companies according to Corporate Knights Global 100 - by country shows the following: from the total of 28 representative countries in the top Global 100, the USA, Canada and France have the most sustainable companies during 2020-2022. The USA dominates the ranking with 23 companies in 2022, Canada in the 2nd position in the top number of sustainable companies in 2022 had 14 companies, respectively France with 7 sustainable companies complete the top 3 ranking. We conclude that the Global 100 list continues to be dominated by companies from North America and Europe, that means also this two regions are more competitive.

Future research will analyze the competitiveness of sustainable businesses in more detail with the goal of identifying and explaining the development and implementation of strategies which these top companies follow in achieving their competitiveness. This research is based on these conclusions and preliminary findings and takes into account the fact that sustainability will increasingly become a fundamental measure of the success of organizations.

6. Acknowledgement

This work was supported by the project “The Development of Advanced and Applicative Research Competencies in the Logic of STEAM + Health”/POCU/993/6/13/153310, project co- financed by the European Social Fund through The Romanian Operational Programme Human Capital 2014-2020”.

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