

THE AGE OF SUSTAINABLE BUSINESS MODELS

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Abstract: *Sustainability has become a key concept in the business world in the past decades. It represents a holistic approach that covers several topics such as environmental issues, social equity or economic development. Companies have understood the need of integrating sustainability in their business models. Business models are connected with their value propositions and show the way companies operate. The old business models are no longer possible. They were grounded only on an economic foundation. The new business models are increasingly sustainable business models that align the profit imperative with the social and environmental benefits. The aims of our paper are to define the concept of sustainable business model and to highlight its significance in the current business world. Our research is based on a literature review.*

Keywords: *business model, sustainability, sustainable development, company*

JEL Classification: M1

1. Introduction

In the past decades the word ‘sustainable’ has been widely used both in the business world and academic environment. Sustainability represents a typical subject of study for economists due to the fact that the scarcity of resources has always constituted a central concern for human society. Starting from the idea that population increased in geometrical ratio and food in arithmetical ratio, Thomas Robert Malthus considered in his book, *An Essay on the Principle of Population*, published in 1798, that this will lead to famine, misery and disease. He asserted that the increase of population is limited by the means of subsistence as “linear growth in food supply cannot make up for the skyrocketing needs of the exponentially growing population” (Friedrichs, 2014, p. 69). Later, Harold Hotelling launched the so-called “exhaustible resource economics”, warned on the world’s disappearing supplies of raw materials, such as minerals, oil and wood, and gave the example of regulating their exploitation. On the other hand, “it may seem that the exploitation of an exhaustible natural resource can never be too slow for the public good” (Hotelling, 1931, p. 138). In his view, there is “an optimum rate of exhaustion, in which the social cost of losing the resource is outweighed by the social benefit which it yields over the period of use” (Kuhlman and Farrington, 2010, p. 3442). On his turn, Robert Merton Solow suggested that “the market for exhaustible resources might be one of the places in the economy where some sort of organized indicative planning could play a constructive role” (Solow, 1974, p. 13).

Today, sustainability is a holistic approach that covers several topics such as environmental issues, social equity or economic development. As companies are “key contributors to economic, environmental and social well-being” (Schaltegger, Bennett and Burritt, 2006, p. 2), they have understood the need of integrating sustainability in their business models. Business models are connected with their value propositions and show the way companies operate. The old business models are no longer possible. They were grounded only on an economic foundation. The new business models are increasingly sustainable business models that align the profit imperative with the social and environmental benefits.

The aims of our paper are to define the concept of sustainable business model and to highlight its significance in the current business world. Our research is based on a literature review.

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2. Linking business models with sustainability

Since its emergence the concept of sustainability has changed its meaning. Its first European usage appeared in 1713 in the book *Sylvicultura Oeconomica* published by the German forester and scientist Hans Carl von Carlowitz.

The post-World War II period witnessed the advent of numerous and difficult economical, political, social and environmental problems. As the number of nations multiplied, the challenge of finding sustainable development paths became one of the most stringent for countries all over the world. In 1972, the United Nations organized the “Conference on the Human Environment” that clearly specified the rights of human family to a healthy environment (e.g., the right to safe water). In the same year, the Club of Rome published its report entitled *Limits to Growth* that explored the way exponential growth interacts with finite resources ([Meadows](#), [Meadows](#), [Randers](#) and Behrens III, 1972). Without any doubt the report succeeded in making people to pay a higher attention to sustainability.

Since the designing and printing of the “World Conservation Strategy: Living Resource Conservation for Sustainable Development” in 1980, sustainable development has become a fundamental issue on the global agenda of the United Nations. A generally definition of sustainable development was provided by the Brundtland Commission as follows: “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: the concept of ‘needs’, in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment’s ability to meet present and future needs” (World Commission on Environment and Development, 1987, p. 43).

For a relatively long period of time only the economic and environmental aspects of sustainable development prevailed in the literature. In recent years social concerns were incorporated into the works of sustainability (Boström, 2012; Davidson, 2009; Littig and Grießler, 2005). Social sustainability refers to “policies and institutions that have the overall effect on integrating diverse groups and cultural practices in a just and equitable fashion” (Polese and Stren, 2000, p. 229) and encompasses four universal principles (Figure no. 1). This is why nowadays it is said that sustainability is related to three mutually dependent goals: “a) to live in a way that is environmentally sustainable or viable over the long term; b) to live in a way that is economically sustainable, maintaining living standards over the long-term; and c) to live in a way that is socially sustainable, now and in the future” (Dillard, Dujon and King, 2009, p. 2). This means that there are three pillars of sustainability: society, economy and environment (Figure no. 2). Consequently, five axioms of sustainability have been identified, as follows:

1. Any society that continues to use critical resources unsustainably will collapse.
2. Population growth and/or growth in the rates of consumption of resources cannot be sustained.
3. To be sustainable, the use of renewable resources must proceed at a rate that is less than or equal to the rate of natural replenishment.
4. To be sustainable, the use of nonrenewable resources must proceed at a rate that is declining, and the rate of decline must be greater than or equal to the rate of depletion.
5. Sustainability requires that substances introduced into the environment from human activities be minimized and rendered harmless to biosphere functions. (Heinberg, 2010)

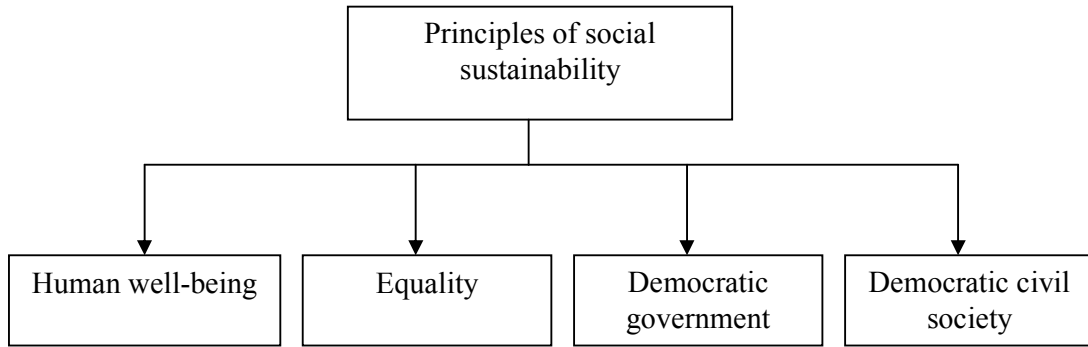


Figure no. 1. The four principles of social sustainability
Source: Magis and Shinn, 2000

Thus, the concept of sustainability has been defined as:

- “a state of affairs where the sum of natural and man-made resources remains at least constant for the foreseeable future, in order that the well-being of future generations does not decline” (Kuhlman and Farrington, 2010, p. 3442).
- “the conceptual framework within which the territorial, temporal, and personal aspects of development can be openly discussed” (Seghezzeo, 2009, p. 547).
- “a normative notion about the way how humans should act towards nature, and how they are responsible towards one another and future generations” (Baumgärtner and Quaas, 2009, p. 2).

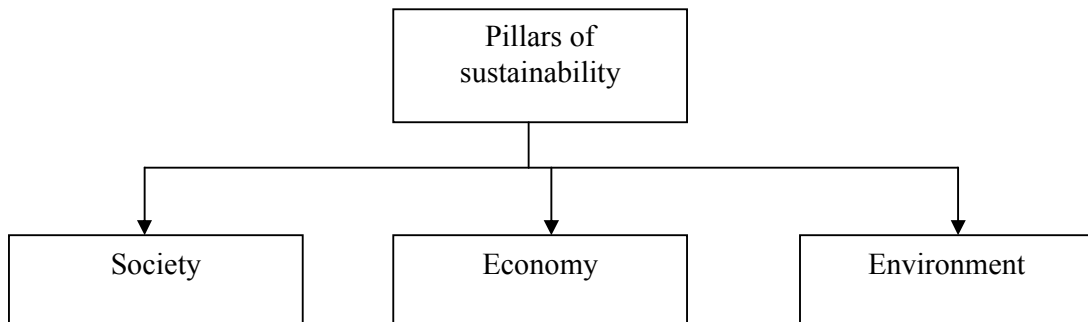


Figure no. 2. The three pillars of sustainability
Source: Strange and Bayley, 2008

These definitions show that sustainability is related to time, territory, people and resources, and emphasises the relationships between humans and nature. Thus, the following dimensions of sustainability have to be underlined:

- place, that contains three dimensions of space;
- permanence, as the fourth dimension (the time dimension);
- persons, as the fifth dimension (the human dimension) (Seghezzeo, 2009).

In spite of the fact that sustainability got prominence both at macro and micro-level, most companies worldwide has hardly begun to respond seriously to their environmental and social responsibilities in the 1970s and 1980s (Murphy and Bendell, 1999). Things changed at the end of 1990s when companies started to design and implement business models that mix their economic goals with environmental and social concerns.

There are many definitions of the concept of business model that give rise of a multitude of interpretations (Zott, Amit and Massa, 2010). A business model:

- “demonstrates how a business creates and delivers value to customers” and “outlines the architecture of revenues, costs and profits associated with the business enterprise delivering that value” (Teece, 2010, p. 173).
- “is the bundle of specific activities that are conducted to satisfy the perceived needs of the market, including the specification of the parties that conduct these activities (i.e., the focal firm and/or its partners), and how these activities are linked to each other” (Zott and Amit, 2010, p. 2).
- “is the logic of the firm, the way it operates and how it creates value for its stakeholders” (Casadesus-Masanell and Ricart, 2009, p. 7).

Basically, a business model indicates how a company operates and the manner of creating and delivering value to its various stakeholders.

A sustainable economy requires a fundamental change in the purpose of businesses. Thus, corporate sustainability is seen as “the result of management attempts to tackle challenges posed by the need for corporations to move towards the goal of sustainability” (Schaltegger, Bennett and Burritt, 2006, p. 2). As a result, a sustainable business model represents a business model that takes into account a broad range of stakeholders’ interests, including society and environment, and provides competitive advantage to a company by aligning profit with social and environmental objectives.

Sustainable business models are driven by eco-efficiency (e.g., cleaner production), creating value from waste (e.g., recycling) or visions for a new economy (e.g., blue economy). Sustainable business models archetypes have been classified in three groups as follows:

- technological, such as low carbon manufacturing;
- social, such as ethical/fair trade;
- organizational, such as social and biodiversity regeneration (Bocken, Short, Rana and Evans, 2014).

All the above mentioned sustainable business models are of a great importance in today’s business world. As the sustainability concept has increasingly shaped our society, more and more companies have understood the need of changing their old business models, based on economic foundation, with new business models, based on sustainability.

3. Conclusions

Sustainability constitutes a major subject both in the literature and in the business world that covers various issues. This is why companies around the world are fully aware of its significance.

The old approach of business model defines the way a company creates and delivers value to its customers. The new approach takes into account a broad range of stakeholders and is driven by the sustainability concept.

By entering the age of sustainability, companies have to increase their positive impact in society. Keeping their business models viable represents a continuous challenge for current companies. This means that they have to create and implement sustainable business models.

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