

The Development of Sustainable Business Models: Concept, Elements and Importance

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Abstract. Advances in technology, falling trade barriers, economies of scale and domestic market saturation are considered some of the key drivers behind globalisation. Globalising businesses require the management of complex solutions to coordinate resources and processes across functions and geographies. The importance of strong business models is therefore vital in view of increasing global competition. Aided by the development of sustainable business models, entrepreneurs and small firms can confidently participate in networks and capture value from networking relationships, regionally and internationally, to enhance their global presence. The aim of this research is to investigate the importance of development of sustainable business models for international companies. Results showed the development of sustainable business models are important in motivating corporate innovative measures for sustainability, and this is a driving force behind competitiveness.

Keywords: *sustainable business models (SBMs), elements, company, sustainability.*

Introduction

Relevance of the article

Sustainable business models are increasingly being recognised as a key component of a company's competitiveness in the global marketplace (Farinha et al., 2018). Sustainable Business models have gained significant ground and popularity in literature and practice due to increasing competitive pressures and sustainability concerns, quickly changing industry landscapes, and, correspondingly, the need to search for new ways to gain global presence (Massa et al., 2017). Sustainable business models matter to business and other forms of organisations, such as non-profits and social enterprises as they can be an important source of firm survival and competitive advantage. According to McGrath (2010), the business model concept offers strategists a novel way to consider their options in uncertain and fast-moving environments. It is also recognised that companies should be trailing multiple business models to remain competitive in the long-term as focusing on just one might put the future of the organisation at risk (Andries et al., 2013).

Level of problem investigation

Scholars have been researching environmental and societal issues since the 1960's, however, there is no established theoretical foundation in economics or business studies, and there is a lack of clarity, conceptual consensus, and consistency in the use of the term "sustainable business models" (Bocken, 2021), there is a lack of agreement on the definition, categorisation, and bounds of this concept (Nosratabadi, et l. 2019). However, the importance of developing sustainable models is recognised. A study by Schaltegger, Hansen, & Lüdeke-Freund (2016) found that companies that adopted sustainable practices tended to have better financial performance than their peers (Schaltegger et al., 2016). Additionally, a review of literature by De Jong, Karen and Susanne (2017) found that companies that engaged in sustainable practices had a lower cost of capital, and were more likely to attract and retain customers and employees. Researchers (Jolink, & Niesten, 2015) highlight that developing sustainable business models can have a positive impact on the competitiveness of international companies.

Scientific problem is how to develop sustainable business models.

Object of the article is the development of sustainable business models.

Aim of the article is to investigate the importance of development of sustainable business models for international companies.

Objectives of the article:

1. To examine concept and elements of sustainable business models.
2. To analyse the empirical level of research regarding the development of sustainable business models in international companies.

Methods of the article

The scientific research was carried out through the comparative analysis of scientific literature, synthesis.

1. Theoretical aspects of the development of sustainable business models

1.1. The concept of sustainable business models

The definition of a business model appears to vary between authors. However, while there is not a definitive definition, most agree that it intends to describe how a business works and how value is created and captured (Chesbrough, 2010). The concept of sustainable business models has been growing in popularity and is currently a major focus in the academic literature (Table 1).

Table 1

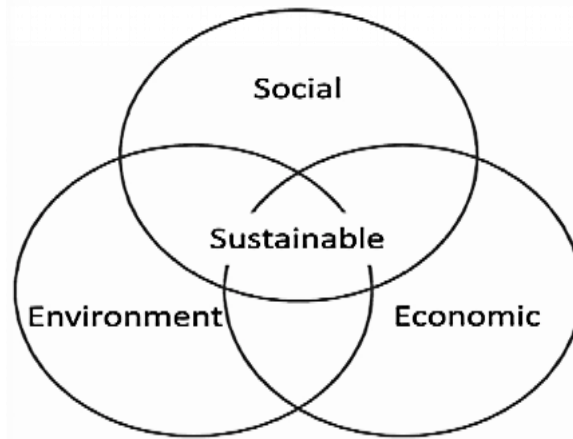
Concept and framework of sustainable business models

Authors	Definitions
Bocken, Short, Rana, & Evans (2014)	SBMs are important in driving and implementing corporate innovation for sustainability, can help embed sustainability into business purpose and processes, and serve as a key driver of competitive advantage.
Jones (2016)	Sustainability means the combination of economic, environmental and social components, therefore sustainable business models are models that are seen from the sustainability point of view on how to add the dimensions of sustainability.
Schaltegger, Hansen, & Lüdeke-Freund (2016)	Suggests that sustainable business model notion has the ability to provide a holistic perspective of a firm's activities, going beyond basic storytelling of how a firm does business.
Wagner (2018)	"Sustainable business model" (SBMs) business model frameworks are expected to be reshaped when changes are made to implement sustainability concerns at the strategic level and in processes. The definition of sustainable business models is presented using the most well acknowledged approach to sustainability.
Purvis, Mao, & Robinson (2019)	Sustainable Business Models is all about creating a business framework directed towards maintaining/protecting resources and causing no negative externalities when operating in a given context.
Hakkarainen (2021)	Sustainable business models are a more comprehensive way of understanding the focus of international competition.

Source: created by the authors.

It is assumed that changes that are made to implement sustainability issues at strategic level and in processes result in reshaping the business model frameworks. Taking into consideration the most recognised approach to sustainability (Triple Bottom Line), definition of sustainable business models is proposed. (Bocken et al., 2014; Jonker, 2012; Lüdeke-Freund, 2010).

Fig. 1 illustrates the three-pillar conception of (social, economic and environmental) sustainability.



Source: Purvis, B., Mao, Y., & Robinson, D. (2019). *Three pillars of sustainability: in search of conceptual origins*, p. 683.

Fig 1. Three pillars of sustainability: in search of conceptual origins

The three-pillar conception of sustainability commonly represented by three intersecting circles with overall sustainability at the centre. Dunphy (2019) states in order for firms to develop sustainable business models, they are to be committed to the development and protection of the society, environment and economy in which they operate.

1.2. The elements of sustainable business models

The elements of sustainable business models are business innovation, resilience, and technological advantage (Table 2).

Table 2

The elements of sustainable business models

Element	Explanation
Business innovation	Business model innovation is a hierarchical development through which firms investigate better approaches to characterise offers, make and get incentive for clients, providers, and partners (Gambardella, & McGahan 2010). A large amount of research claims that business model innovation is critical to firm survival, performance, and as a source of competitive advantage (Casadesus-Masanell, & Zhu, 2013).
Technological advantage	Customer experience is the ultimate differentiator in today's business competition. It is not just a question of the feel, look, or usability of a product, but of an entire spectrum of feelings, emotions, and physical and psychological responses. Technical product supremacy is thus not sufficient, because the value is in the experience. Such experience is created by business models. Competition in business is thus rapidly becoming competition between business models rather than competition between mere products (Talonon, & Hakkarainen, 2014).
Strategic resilience	A new business model is not all the time within the sphere of business dynamics. It demands work, it takes time, and it's high risk. However, maintaining an established company model is also a challenging and complex problem. It entails striking a balance between the needs and aspirations of different generations while also addressing a variety of social, environmental, and economic restrictions (Trusko et al., 2012). Any company that must survive needs strategic resilience. It refers to the ability of a company to develop itself before it is compelled to develop by performance issues. Strategic resilience is taking steps in times when the number of options is relatively broad.

Source: created by the authors.

For business survival it is important for firms to develop sustainable business models for their organisation, which includes business processes, operations and competencies. The elements of sustainable business models are business innovation, strategic resilience and technological

advantage. Therefore, the model must have these elements in order to adapt to the constantly changing environment.

2. Empirical investigation level of the development of sustainable business models

This chapter discusses the development of sustainable business models and how it is portrayed by other researchers. There have already been some studies carried out by various scientists and proven the importance of sustainable business models, though the research conducted is very abstract and only based on theoretical level.

Concepts of sustainable business models, analyses of SBM's elements, or case study presentations of empirical research. SBMs are business models that, from a long-term view, involve proactive management of value generation, both financial and nonfinancial, for a variety of stakeholders (Geissdoerfer, Vladimirova, & Evans, 2018). According to empirical studies, by Rudnicka (2016), the findings drew attention to sustainable business models as a system concept, which gives opportunity to satisfy present and future needs of all market participants. Sustainable business models must be improved and adjusted to the changing environment to act as the primary function, which is earning money and creating added value to sustain a competitive advantage. Adiguzel (2019), international business management in terms of sustainability, considering the effects of the cultural and social environment in understanding the management and the impact of the economy, other authors such as Bocken, (2021), in their research present the elements constituting an advantageous business model, and suggest how to achieve that competitive edge. In papers underlining the need to reevaluate the depth of the SBMs research, the collaborative/network concept emerged (Dreyer et al., 2017; Rossignoli, & Lionzo, 2018). Analyses that are restricted to the BMs of single enterprises are unable to capture this pertinent feature because many sustainability breakthroughs result from the collaboration of various players and organisations.

Bocken (2021) in sustainable business model research focuses on understanding the role of multi-stakeholder collaboration and experimentation with a pivotal role for business (models) and investigating the interplay between micro, and macro actors in experiments. It was also found by Ramdani (2019) that changing business models encompasses modifying a single element, altering multiple elements simultaneously, and/or changing the interactions between elements in four areas of innovation: value proposition, operational value, human capital, and financial value. Table 3 shows and represents the findings of the studies conducted by various authors to conceptualise the concept and elements of sustainable business models.

Table 3

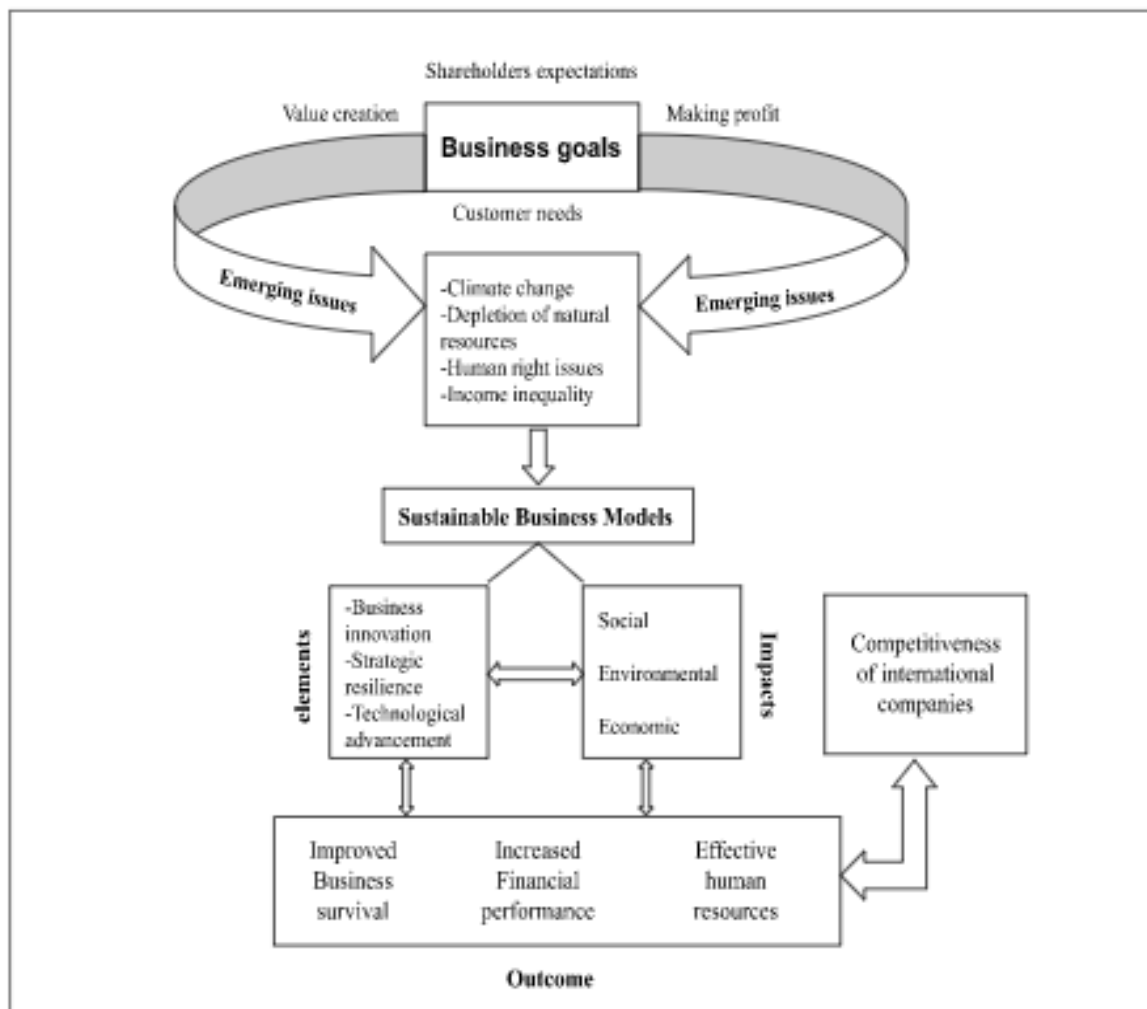
Analysis of research conducted on Sustainable Business Models

Authors	Literature Origins	Main findings – Theoretical foundation
Adiguzel (2019), Bocken (2021)	Elements of Sustainable business models	The authors in their research present the elements constituting an advantageous business model, and suggest how to achieve that competitive edge. They argue that traditional innovation processes with funnelling front-end, stage-gate with affect decisions, and similar processes have inherent limitations in such an inclusive concept. They propose an alternative approach, driven by sustainable business models, which are business innovation, strategic resilience and technology.
Geissdoerfer, Vladimirova, & Evans, (2018), Rudnicka (2016)	Sustainable business model innovation	The findings drew attention to sustainable business models as a system concept, which gives opportunity to satisfy present and future needs of all market participants. Taking into account the criteria and the awareness of change that must occur both at the level of the organisation and its products, the paper gave a general outline of how to analyse if the process of transformation is possible and what the current state looks like.

Authors	Literature Origins	Main findings – Theoretical foundation
Ramdani, Binsaif, & Boukrami (2019)	Business model innovation: a review and research agenda	It was also found that sustainable business models encompass modifying a single element, altering multiple elements simultaneously, and changing the interactions between elements in four areas: value proposition, operational value, human capital, and financial value.
Dreyer, Lüdeke-Freund, Hamann, & Faccar (2017), Rossignoli, & Lionzo, (2018)	Business models for sustainability	Sustainable business models must be improved and adjusted to the changing environment to act as the primary function, which is increasing wealth and creating value, the paper gave a general outline of how to analyse business models for sustainability.

Source: created by the authors.

The findings drew attention to sustainable business models as a system concept, which gives opportunity to satisfy present and future needs of all market participants. Taking into account the criteria and the awareness of change. Sustainable Business Models must be improved and adjusted to the changing environment to act as the primary function, which is increasing wealth and creating value. According to empirical studies, a theoretical model on the development of sustainable business models is presented in Fig. 2.



Source: created by the authors in accordance with Bocken, N. (2021). Sustainable business models, p. 4, Boons, & Lüdeke-Freund. (2013). *Business models for sustainable innovation: State of the art and steps towards a research agenda*, p. 9.

Fig. 2. A conceptual model on the development of sustainable business models

Conventional businesses are established to make profit, create value, meet stakeholders expectations and solve customers needs. However, there are emerging environmental issues such as climate change, human rights issues, income inequality, depletion of natural resources and so on. SBMs have the potential to act as a driver for innovation, resilience and technological advancement as the SBMs lens gives the opportunity to take a holistic view on how business is done. As an ideal type, SBMs draw on economic, environmental and social aspects of sustainability in defining an organisation's purpose; use a triple bottom line approach in measuring performance; consider the needs of all stakeholders rather than giving priority to shareholders' expectations; treat nature as a stakeholder and promote environmental stewardship; and encompass a system, as well as a firm-level perspective. The adoption of sustainable business models will lead to business survival, competitive advantage and achievement of business goals.

Conclusions

1. After examining the concept and elements of sustainable business models, it was revealed that sustainable business models are about developing a framework in business, which is centered on the maintenance and protection of resources and also not causing any negative externalities on the environment and society where it is operating. Sustainable business models can be achieved through the development and improvement of social, economic, and environmental elements of a business.
2. After analysing the empirical level of research regarding the development of sustainable business models in companies, it was found the importance of the development of sustainable business models in companies. The conceptual model showed that SBMs allow for a holistic view on how business is done; involving concerns of multiple stakeholders; including sustainability metrics; and internalising environmental and societal concerns. This highlights a stark contrast compared to purely conventional profit oriented business models focused on profit generation, financial performance, shareholder value optimisation and a firm-centric motive. Nonetheless, sustainable business models as a prerequisite must be economically, socially, and environmentally sustainable.

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