



Assessing and Managing the Sustainability Performance of Business Models: Status Quo and Research Agenda

Lüdeke-Freund, Florian ; Dembek, Krzysztof; Rosati, Francesco

Published in:

Proceedings 5th International Online Conference on New Business Models

Publication date:

2020

Document Version

Publisher's PDF, also known as Version of record

[Link back to DTU Orbit](#)

Citation (APA):

Lüdeke-Freund, F., Dembek, K., & Rosati, F. (2020). Assessing and Managing the Sustainability Performance of Business Models: Status Quo and Research Agenda. In *Proceedings 5th International Online Conference on New Business Models* (pp. 457-462) <https://www.nbmconference.eu/dl/ProceedingsNBM2020conferentie.pdf>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Assessing and Managing the Sustainability Performance of Business Models

Status Quo and Research Agenda

Florian Lüdeke-Freund^{1,*}, Krzysztof Dembek², Francesco Rosati³

¹ESCP Business School, Berlin, Germany; ²Swinburne University of Technology, Melbourne, Australia; ³Technical University of Denmark (DTU), Lyngby, Denmark

*fluedeke-freund@escp.eu

Extended abstract

Background and research gap

Sustainable business models (also referred to as business models for sustainability) (SBMs) are about value creation with and for a company's stakeholders (Freudenreich et al. 2019). This deliberately normative approach to defining value creation builds on an extended notion of value, integrating various types of value created, such as ecological, social, and economic (Evans et al. 2017). So far, the SBM discourse has an obvious bias towards issues of business model development (Breuer et al. 2018; Press et al. 2019), including topics such as sustainable business model innovation (França et al. 2017; Geissdoerfer et al. 2018), business model evolution (Schaltegger et al. 2016a, 2016b), processes and tools (Geissdoerfer et al. 2016; Joyce and Paquin, 2016; Vladimirova 2019). The question of how to assess and finally manage the sustainability performance that is expected to result from SBM development has not gained a lot of attention and therefore represents a huge and critical research gap (Lüdeke-Freund & Dembek 2017).

Assessing and managing the sustainability performance of business models requires a clear delineation of the unit of analysis ('the business model'), as well as

frameworks, methods, and tools that are able to grasp this unit of analysis and its performance, created value, and impacts in relevant and useful terms (e.g., 'value created', 'environmental performance', 'social impact') (Lüdeke-Freund et al. 2017; Rauter et al. 2019). However, seemingly simple terms such as performance, value, or impact are neither clearly defined in this field of research, nor are they related to the notion of business model in any meaningful way. In this paper, we will focus on the conceptual groundwork that is needed to prepare the scientific debate on and practical implementation of SBM assessment and management. It is expected that this conceptual work will provide a framework to identify and consolidate relevant concepts and issues – such as 'What is an SBM?', 'What is business model and SBM performance?' – which is a prerequisite for dealing with this yet untapped field of research.

Our assumption is that the absence of comprehensive works on SBM assessment and management results from several interrelated and overlapping issues related to defining and conceptualizing SBMs. The breadth and inclusiveness of the SBM concept is beneficial when it comes to 'thinking big' and dealing with the 'big picture' of business and its relationships to the natural environment and society (see for example the strongly sustainable business model ontology developed by Upward & Jones 2016). But this breadth and inclusiveness turns into a fundamental problem when it comes to assessing and managing distinct qualities of business models (as indicated by the notion of 'sustainable' business model) or the effects they are assumed to have on the natural environment and society (as in business models 'for sustainability') (the implications for stakeholder value creation are discussed by Freudenreich et al. 2019):

- What do we (not) know about the assessment and corresponding management of the sustainability qualities and performance of business models?
- What do we need to know?
- Which theories and scientific methods will allow us to develop the required knowledge?

Research approach

This paper is meant (i) to develop an initial research framework for SBM assessment and management by (ii) reviewing the few works that are already dealing with this issue (literature review) and by (iii) critically discussing the status quo and gaps from which a research agenda shall be derived (conceptual framework

development and agenda setting). The development of the framework follows the basic steps of setting up assessment or accounting systems (Fig. 1), from defining the unit(s) or system(s) of analysis (defining SBMs), through identifying what and how to analyse (assessing SBMs), to deducing the need for certain management responses (managing SBMs). The review will build on two systematic literature reviews on SBM that the authors are currently performing. The foundation will be two databases covering hundreds of SBM papers from the past two decades. In addition, leading authors in related fields will be invited to join and add their special knowledge to selected aspects of our framework. Finally, based on outlining the basic framework and some of its details, research gaps and opportunities will be identified.

The following issues will be discussed in our paper:

- The business model concept has been defined in various ways, from *various theoretical perspectives*, for example taking a stakeholder, activity, building block, or value flow perspective. Which perspective(s) is (are) most suitable to provide the ground for assessment and management approaches?
- Resulting from this, various *boundary setting and scoping issues* emerge that directly translate into assessment and management problems. How to define the boundaries of a business model and to assign certain environmental or social impacts to it? How to define the scope or reach of a business model, and hence corresponding notions of responsibility, accountability, and governance – based on a value chain perspective, by distinguishing direct/owned and indirect/others' value-creating activities, or by some other scoping approaches?
- While most frameworks suggest locating business models on the organisational level, value-creating activities and their impacts occur on *multiple levels* at the same time, from individual to global, from nano to macro. What kinds of sustainability effects do result from business models on which levels? How to make use of the available range of sustainability assessment methods, ranging from individual to planetary levels?
- The latter point is amplified by the circumstance that *various stakeholders* have an interest in SBMs, hence, various users of sustainability assessment approaches and impacted groups must be considered. Which approaches are suitable for which group; for example, consumers (to support better choices), companies (to support their business and product

developers), external bodies overseeing companies' duties and performance (to provide sustainable value-creating incentives), and many more?

- Taking a systems and sustainability perspective requires dealing with various potential *units of analysis*: business model, activity, performance, output, outcome, impact, value-added, etc. Which concepts and corresponding are needed to develop sustainability assessment and management approaches for business models – which are already defined in a useful way?

Preliminary framework and outlook

The aforementioned issues may explain why comprehensive research and practical approaches are still missing. With this paper we aim to structure this critical research gap and to motivate future research contributing to closing it. The following illustration summarises our initial framework that will guide the development of the proposed research agenda.

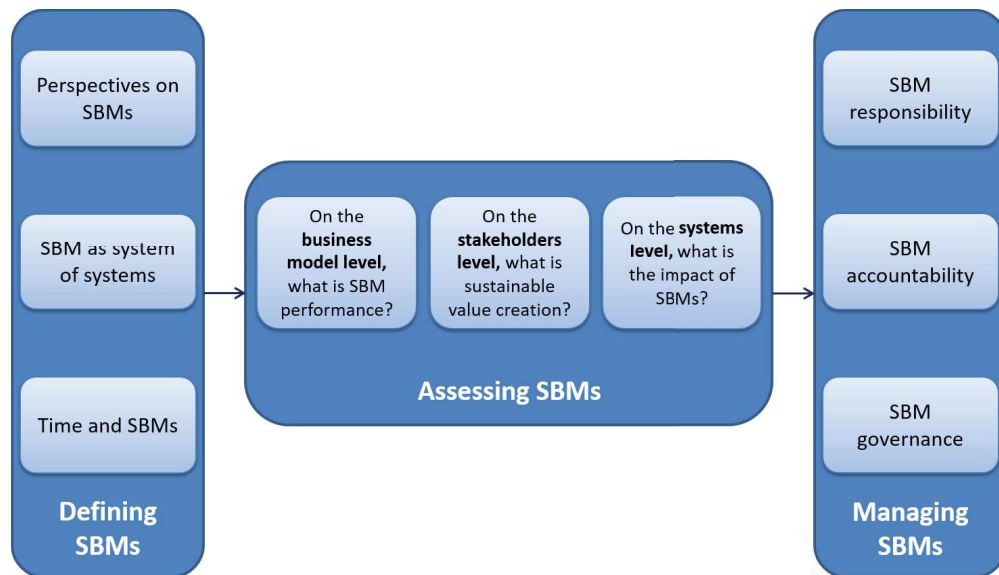


Figure 1. Initial framework guiding the development of a research agenda for SBM assessment and management.

From left to right, the following three major areas need some more elaboration: How are SBMs framed conceptually – what is the scope of an SBM? How can sustainability assessment be operationalised – how to capture the scope of an SBM? Here, different levels and different sustainability effects must be consid-

ered – performance on the SBM level, sustainable value creation in relation the stakeholders of an SBM, and impacts on the systems level. Finally, what does the scope and sustainability effects imply for the responsibility, accountability, and governance of business? By aiming for rather comprehensive – and deliberately more complex – framework, our approach follows the notion of providing an ‘integrated’ framework for the assessment and management of SBMs (cf. Maas et al., 2016).

Our presentation at NBM 2020 will provide a more detailed version of our initial research framework. The paper will contribute to the specific goals of conversation at this track by providing a solid platform for discussion on methods and approaches to measurement, monitoring, and evaluation of SBM impact and performance. Further, we will provide analysis of the value-creating activities and their impacts on multiple levels and add to the conversation on the research-practice gap between theories of social impact and real-world managerial problems.

Keywords

Business model, sustainability impact, sustainability assessment, review, research agenda

References

Breuer, H., Fichter, K., Lüdeke-Freund, F. & Tiemann, I. (2018) Sustainability-oriented business model development: Principles, criteria, and tools. *International Journal of Entrepreneurial Venturing*. 10 (2), 256-286.

Evans, S., Vladimirova, D., Holgado, M., Van Fossen, K., Yang, M., Silva, E.A. & Barlow, C.Y. (2017) Business model innovation for sustainability: Towards a unified perspective for creation of sustainable business models. *Business Strategy and the Environment*. 26 (5), 597-608.

França, C. L., Broman, G., Robert, K. H., Basile, G., & Trygg, L. (2017). An approach to business model innovation and design for strategic sustainable development. *Journal of Cleaner Production*. 140, 155-166.

Freudenreich, B., Lüdeke-Freund, F. & Schaltegger, S. (2019) A stakeholder theory perspective on business models: Value creation for sustainability. *Journal of Business Ethics*. 1-16. DOI: 10.1007/s10551-019-04112-z.

Geissdoerfer, M., Bocken, N. M., & Hultink, E. J. (2016). Design thinking to enhance the sustainable business modelling process—A workshop based on a value mapping process. *Journal of Cleaner Production*. 135, 1218-1232.

Geissdoerfer, M., Vladimirova, D., & Evans, S. (2018). Sustainable business model innovation: A review. *Journal of Cleaner Production*. 198, 401-416.

Joyce, A., & Paquin, R. L. (2016). The triple layered business model canvas: A tool to design more sustainable business models. *Journal of Cleaner Production*. 135, 1474-1486.

Lüdeke-Freund, F. & Dembek, K. (2017) Sustainable business model research and practice: Emerging field or passing fancy?. *Journal of Cleaner Production*. 168, 1668-1678.

Lüdeke-Freund, F., Freudenreich, B., Schaltegger, S., Saviuc, I. & Stock, M. (2017) Sustainability-oriented business model assessment—A conceptual foundation. In *Analytics, innovation, and excellence-driven enterprise sustainability* (pp. 169-206). Palgrave Macmillan, New York.

Maas, K., Schaltegger, S. & Crutzen, N. (2016) Integrating corporate sustainability assessment, management accounting, control, and reporting. *Journal of Cleaner Production*. 136, 237-248.

Press, M., Robert, I., & Maillefert, M. (2019). The role of linked legitimacy in sustainable business model development. *Industrial Marketing Management*. DOI: 10.1016/j.indmarman.2019.05.009

Rauter, R., Globocnik, D., Perl-Vorbach, E. & Baumgartner, R.J. (2019) Open innovation and its effects on economic and sustainability innovation performance. *Journal of Innovation & Knowledge*. 4 (4), 226-233.

Schaltegger, S., Hansen, E.G. & Lüdeke-Freund, F. (2016a) Business models for sustainability: Origins, present research, and future avenues. *Organization & Environment*. 29 (1), 3-10.

Schaltegger, S., Lüdeke-Freund, F. & Hansen, E.G. (2016b) Business models for sustainability: A co-evolutionary analysis of sustainable entrepreneurship, innovation, and transformation. *Organization & Environment*. 29 (3), 264-289.

Upward, A. & Jones, P. (2016) An ontology for strongly sustainable business models: Defining an enterprise framework compatible with natural and social science. *Organization & Environment*. 29 (1), 97-123.

Vladimirova, D. (2019). Building Sustainable Value Propositions for Multiple Stakeholders: A Practical Tool. *Journal of Business Models*. 7 (1), 1-8.