What is in a Business Case? Business Cases as a Tool in Use for Promoting Water Stewardship

Pedersen, Esben Rahbek Gjerdrum; Lauesen, Linne Marie; Rosati, Francesco

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**THEME 1**

Green Innovation & New Business Models

Beyond Circular Economy: Nature’s Lessons On A Holistic Socio-Industrial Design

Guilherme Azevedo

This study identifies some limits of current circular-economy thinking and envisages possible developments that could bring it even further, to a more holistic socio-industrial design. To examine the current progression towards more circular economic models, it focuses, in particular, on the management of undesired overflows (mostly waste, pollution, and dissipated energy). It draws from the industrial ecology literature and adopts a societal metabolism perspective to examine circularity and overflows at the levels of industrial complexes, societies, and ecosystems. It begins by reviewing how the contemporary quest for designing more sustainable industrial processes has generated a typological progression from systems pursuing linear efficiency towards those pursuing incremental and accumulated circular efficiency. This progression mirrors the evolution of natural ecosystems along three dimensions: from micro to macro, from open to close, and from simple to complex. However, although design rationales motivated by gains of efficiency can justify and propel the evolution from linear to circular-economy systems, they fall short of properly respond to complexities—including those of moral order—that lie beyond the usual realm of economic analyses. This paper proceeds therefore to inquire on further developments that could also: incorporate unaccounted economic externalities into the analyses, enlarge the language beyond the one of economic calculations, and develop design possibilities that are able to integrate economic, environmental, and social aspects into an integral and sole system. Possible examples of a holistic socio-industrial design are discussed and evaluated on their potential to eliminate undesired overflows or even subvert these into positive ones. Finally, the possible transition toward a holistic socio-industrial design is observed through lenses that go beyond the economic ones.

Crowdfunding for Sustainability – The Role of Value Orientation Frames in Guiding Individual Investment Behavior

Kristian Roed Nielsen

Crowdfunding (CF) has become a popular alternative source of finance for a variety of for- and non-profit ventures and projects. By enabling small incremental investments, typically through intermediary platforms like Indiegogo, CF increasingly allows non-professional investors to directly support their preferred project/venture. This development has been hailed by some as a form of finance that could significantly enable more sustainable innovation, contending that crowdfunders are driven by a different investment logic as compared to professional investors that focuses on the projects’ core values and legitimacy. CF has thus been welcomed as method for “riskier” sustainable ventures to gain early “seed investment”.

In seeking to empirically test this proposition, we propose to explore how a series of value framed campaign texts influence the potential of crowdfunders’ willingness to invest in a number of hypothetical crowdfunding campaigns. These value frames derived from the Value-Belief-Norm theory on environmentally significant behaviour. Using a novel survey-based experimental design that mimics existing CF platforms, the paper proposes to explore how the respective expressed value frames influence investment behaviour and ultimately conclude which most significantly impacts the individual investments. Contributing to the literature by firstly further exploring the guiding motivations for crowdfunder investments and secondly, the contention that crowdfunder investments correlate well with sustainability-oriented projects.

What is in a Business Case? Business Cases as a Tool in Use for Promoting Water Stewardship

Esben Rahbek Gjerdrum Pedersen
Linne Marie Lauesen
Francesco Rosati

This paper explores the role of business cases as a tool in use for decision-making processes on water management. The literature is rich on generic discussions of the business case for corporate sustainability, whereas there have been less efforts to examine the concrete use of business cases in everyday organisational life. Drawing on the practice-based management literature, it is concluded that the business case tool has a decisive influence on water management activities among European food companies. However, the analysis also show the business case tool are not set in stone but can be adapted and negotiated in a number of different ways to make change happen. Empirically, the analysis is based on interviews and survey data from a European study of water management within the food sector.
Bridging the gap between theory and implementation for new business models for sustainability

Annik Magerholm Fet
Haley Knudson
Sunniva Bratt Slette

The past few decades have seen an increase in both the scale and complexity of international business. Many firms are part of increasingly complex, international networks that pose various challenges for the firms, in terms of difficult logistics, interdependent business processes across different locations and cultural differences. In addition to these internal challenges, external pressure to consider the sustainability of supply chains is increasing: How does the economic performance of a firm compare to the environmental and social impact? How are the tensions between short-term profit and long-term sustainability needs mitigated? The need for functional national and international accountability and transparency of operations, to model the impact of a firm’s resource use and to mobilize private investment and finance for sustainable innovation have become especially critical. Sustainability accounting, impact investment and climate finance are fields increasingly influencing business credibility.

Innovation processes have to be managed while firms simultaneously manage their day-to-day operations and the efficient production of current products and services. Such difficulty is further exacerbated by the tensions between short-term profits, and long-term sustainability and shared value creation that promotes long-term competitiveness. Efficient operations and innovation are inherently contradictory processes. The development of long-term sustainability and shared value creation, in international firms requires current operational profitability. Companies therefore need internationally acknowledged guidelines and principles to lead them upon this difficult process, in addition to financial support targeting sustainable international business.

Sustainable business models may serve as this guideline. Although research on business models is generally extensive and literature on sustainable business models is growing, insight into the development and practical implementation of models that take into account the core issues of sustainability across life cycles, value chains and stakeholders is so far fragmented. Firms are faced with a multitude of social, economic and environmental aspects that must be considered within the company’s entire interacting system, across production, operation, use, recycling and disposal of materials and resources, and in relation to the environment and society surrounding them. Elevating the status of environmental and social aspects into the core mission or strategy of industrial firms requires a holistic approach to value creation. Additionally, the redefinition of the term “innovation” needs to reflect societal values and environmental needs.

To fill the gap between business model theory and the practical implementation of sustainable product, process and organizational innovation, long-term knowledge must be developed in close collaboration with companies and investors to contribute to a green shift in industry. In addition to the fragmented research approach and potentially high upfront costs to implement a sustainable strategy, industrial actors have a difficult time translating normative sustainable business model theory into their practical business models. Even when firms aim to implement sustainability processes, lack of experience can lead to unwanted changes. Both industrial actors and researchers have warned against “greenwashing” of processes, which can occur when inefficient market mechanisms and uninformed decision-making results in small and short-lived changes in environmental impact. This diminishes the very goal of sustainability.

The development of sustainable business models must therefore guide industry on how best to implement sustainability theory efficiently. In order to do so successfully, industrial partners and their stakeholders should be linked with academic researchers across varying disciplines to identify potential areas for improvement across social, environmental and economic dimensions, and mirror the holistic approach needed for implementation. This will allow actors to see the big picture regarding sustainability challenges and to clarify any managerial or economic uncertainty around them.

The physical integration of theory into company business models requires expertise. This is especially applicable to many Norwegian firms, since the majority are SMEs, and have limited resources for research and development. By conducting research rooted directly in the day-to-day functions of firms, bridging the gap between theory and effective implementation can be accomplished.