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# Identifying Sustainable Business Models Through Sustainable Value Creation

### **Annabeth Aagaard**

## 1 Introduction

Over the last decade, research on sustainable businesses (SBs) and sustainable innovations has increased rapidly, as sustainability has become a new premise for doing business (Dryzek 2005; Birkin et al. 2009a, b). However, applying business model innovation (BMI) as a way to create sustainable value requires several alterations of our ways of understanding and evaluating businesses and their business models (BMs). Yet, in exploring the theoretical concepts of sustainable business models (SBMs), the starting point would have to be the original definitions of BMs.

BMs and BMI have been the focus of substantial attention from both academics and practitioners (e.g., Amit and Zott 2001; Chesbrough and Rosenbloom 2002; Christensen and Raynor 2003; Govindarajan and Trimble 2005; Markides 2008; Teece 2010; Ritter and Andersen 2014;

A. Aagaard (⋈) Aarhus University, Herning, Denmark e-mail: aaa@btech.au.dk

Foss and Saebi 2017) and have been the subject of a still growing number of academic and practitioner-oriented studies. The extensive stream of work on BMI has generated many important insights. However, our understanding of BMs remains fragmented, as stressed by Zott et al. (2011). One thing the authors in this field seem to agree on is that a BM is a model of the way in which a business does business (Taran 2011). However, while there is consensus on the meaning of "doing business," namely creating and delivering value so as to generate value and achieve a SB position, there is less agreement on the "model" part (Taran et al. 2013). Another key challenge of performing studies in BM and BMI relates to the issue addressed by David J. Teece, who states that "the concept of a business model lacks theoretical grounding in economics or in business studies" (Teece 2010, p. 174).

BMs appear in many different forms. They can be applied as a core unit of analysis extending beyond the business boundaries (e.g., Zott and Amit 2007). In addition, BMs may be viewed as a construct between strategy and implementation (Baden-Fuller and Morgan 2010). BMs can also be a means for commercializing new technologies (Chesbrough and Rosenbloom 2002; Chesbrough 2007, 2010) and as an intermediary between different innovation actors such as businesses, financiers, and research institutions, that is, actors who shape innovation networks (Doganova and Eyquem-Renault 2009). BMs can therefore be subject to innovation themselves or be a template for implementing managerial initiatives (Zott and Amit 2010). Furthermore, they can be used to depict current realities ("as is") or used for simulations to decide on a preferred future ("to be") (Osterwalder 2004; Chatterjee 2013), that is, as role exemplars (Baden-Fuller and Morgan 2010). Existing BMs can then be seen as a representation of strategic decisions, which have been implemented through tactical choices (Casadesus-Masanell and Ricart 2010), which may create self-enforcing "virtuous circles" in processes and resources, as stressed by Casadesus-Masanell and Ricart (2011).

BMs can also have a narrative role (Magretta 2002), serving as boundary objects (Doganova and Eyquem-Renault 2009) and as conventions (Verstraete and Jouison-Lafitte 2011) or theories of performative actions (Perkmann and Spicer 2010) in which stakeholders become motivated to participate in the joint realization of a venture. As such, the core idea of the

BM concept addresses many classic questions of strategic nature, such as market relevance (value proposition), what customers to serve and how to serve them, how to make a profit, and what technology to use (Magretta 2002; Sandberg 2002; Morris et al. 2005; Verstraete and Jouison-Lafitte 2011). Thus, in defining BMI we apply the following definition by Casadesus-Masanell and Zhu (2013, p. 464): "The search for new business logics of the firm and new ways to create and capture value for its stakeholders."

## 2 From Traditional to Sustainable Business Models

Baden-Fuller and Morgan (2010) underline that from a holistic and systemic concept, a BM perspective may be expected to contribute to a sustainable business model innovation (SBMI) agenda by opening up new approaches to overcoming internal and external barriers. Although there is a growing body of literature analyzing and discussing sustainability and sustainable development on the political and society levels (Dryzek 2005), the operationalization of the concept in relation to business and on the corporate level is still rather weak (Bansal 2005; Stubbs and Cocklin 2008; Zink et al. 2008; Carroll and Shabana 2010).

Furthermore, studying the concept of sustainability is challenged by the fact that it is a fragmented concept, and some researchers even question whether sustainability is a concept or a political discourse (Dryzek 2005) or an artifact (Faber et al. 2005). In the so-called Brundtland report, "Our Common Future" by World Commission on Environment and Development, sustainable development is defined as follows: "Sustainable development is the kind of development that meets the needs of the present without compromising the ability of future generations to meet their own needs." One attempt of how to transfer the general and rather vague Brundtland definition of sustainability into corporate level is presented by Dyllick and Hockerts (2002, p. 131), who define sustainable development as "meeting the needs of a firm's direct and indirect stakeholders without compromising its ability to meet the needs of future stakeholders as well." This explicit focus on stakeholder needs emphasizes the importance of businesses responding to their ecosystem

and the primary stakeholders such as shareholders, employees, and customers, but also secondary stakeholders such as non-governmental organizations (NGOs) in order to gain and maintain legitimacy and license to operate with regard to various sustainable issues (Zink et al. 2008; Lodsgård and Aagaard 2016).

The application of a long-term perspective to the needs of future stakeholders underlines the complexity of long-term management practices and SBMs combined with short-term requests from shareholders for increased profits, which is a key challenge that needs to be addressed at the corporate level (Poncelet 2001). The most common translation of sustainability into business on corporate level is the triple bottom line, which consists of three sustainable dimensions: people, planet, and profit (Elkington 1997) and is described as three equally important managerial principles of SBMs (Hansen et al. 2009; Bradbury-Huang 2010; Schaltegger and Wagner 2011). As this approach is both well established and applied in the Corporate Social Responsibility (CSR)-reporting of many international companies reporting to global reporting initiative (GRI), the same methodology will be applied in the frame designed to evaluate the level of sustainability of BMs and their value creation. The three evaluation criteria or dimensions are also referred to as people, planet, and profit and are explained as follows:

- *People*—the social dimension refers to equity for all human beings and their opportunities in gaining access to resources with regard to basic needs such as water, food, and development through improved living conditions such as health care and education (Bansal 2005).
- *Planet*—the environmental dimension refers to the ecosystem of the Earth and to reductions of human-created footprints and ecological imbalances in terms of pollution, the ozone layer, greenhouse gases, non-biodegradable waste, deforestation, overfishing, and so on.
- Profit—the profit dimension emphasizes that production of goods and services is a prerequisite to improve the living conditions globally (Bansal 2005).

With a focus on integrating sustainability into business systems, Charter and Clark (2007, p. 9) offer a definition of sustainable innovation embracing all of these three elements: "Sustainable innovation is a

process where sustainability considerations (environmental, social and financial) are integrated into company systems—business systems—from idea generation and development (R&D) and commercialization. This applies to products, services and technologies, as well as to new business and organizational models."

This definition is closely aligned with business strategies, where social and environmental issues are seen as commercially profitable options and as sources to increase future competitiveness. Nevertheless, as Charter and Clark's (2007) definition builds on Elkington's (1997) triple bottom line and the Brundtland (1987) definition, which are anchored in sustainable development, it is necessary to elaborate further on the differences and similarities between the concept of sustainable development and that of sustainable innovation. In the perspective of sustainable development, BMI is merged into sustainability and seen as means in pursuing sustainable objectives (Ferauge2013). The main question here is, therefore, "what can innovation do for sustainability?" In this context it is no longer enough for an innovation to be novel and original in its technical features—it has to be novel and original in terms of environmental or social sustainability as well (Phills et al. 2008). In the other perspective, sustainability is merged into innovation, where sustainable problems are seen as sources of inspiration for businesses in generating new innovations and business opportunities (Ferauge2013; Lodsgård and Aagaard 2017). This is summed up by Bocken et al. (2014, p. 44) in their definition of BMIs for sustainability: "Innovations that create significant positive and/or significantly reduced negative impacts for the environment and/or society, through changes in the way the organisation and its value-network create, deliver value and capture value (i.e., create economic value) or change their value propositions."

A number of researchers stress that disruptive circumstances through external stakeholder pressures often lead to the creation of radical sustainable innovations, while sustaining circumstances where, for example, customers are willing to accept minor product adjustment typically lead to incremental sustainable innovations (Christensen 1997; Steketee 2010). Research indicates that businesses recently have moved beyond ecoefficiency compliances and extended the focus to the adaption of disruptive innovative processes where businesses respond with new game-changing

BMs (Schaltegger and Wagner 2008; Loorbach et al. 2009; Boons et al. 2013). This evidence emphasizes the potentials for businesses in pursuing both incremental innovations though the perspective of eco-efficiency in products and processes and in pursuing more radical innovations though SBMIs.

## 3 Understanding the Concept of Sustainable Business Models

The definitions of SBMs and SBMI originate from different scientific areas. Looking into the literature on sustainable entrepreneurship and corporate sustainability management, the concept of SBMs is still used in a fuzzy way (Stubbs and Cocklin 2008; Lüdeke-Freund 2009; Schaltegger et al. 2012; Aagaard 2016, 2017). In addition, BM research often neglects to take a dynamic perspective to understand how firms' BMs evolve over time (Pereira Da Costa and Levie 2014). Thus, "the relationship between business model and time is little discussed... it is a snapshot and description at a specific moment in time" (Osterwalder et al. 2005, p. 15). This is a challenge when studying SBMs, as what is considered sustainable changes over time. Baden-Fuller and Morgan (2010) stress that from a holistic and systemic concept a BM perspective may be expected to contribute to a SBMI agenda by opening up new approaches to overcoming internal and external barriers.

Chou et al. (2015, p. 50) argue that sustainability is considered to be an integrated part of company value propositions and state that "Company policies and brand image are driven by value propositions. The company mission reflects the core business value and competitive strategy, and the sustainability vision implies the direction of social responsibility the company intends to pursue. These two factors should be linked in order to produce clear, sustainability-led value propositions." Birkin et al. (2009a, b) identified in their study on North European and Chinese businesses that societal and cultural demands of sustainable development evolve outside the economic sphere as drivers for BM change in businesses. Their findings reveal that as social and natural needs become institutionalized as concrete societal and cultural demands, BMs will change radically, as

businesses are expected to ensure adaptations in order to secure legitimacy, legality, and business success.

Earlier work reveals the first developments in mapping the concept of and movements toward SBMI. Lovins et al. (1999), for example, propose a four-step agenda to align business practice with environmental needs, which they labeled "Natural Capitalism." The four steps constitute increase of natural resources' productivity, imitation of biological production models, change of BMs, and reinvestment in natural capital. Important for our review and mapping of the concept is the fact that Lovins and colleagues see a fundamental change toward SBMs as crucial to realizing Natural Capitalism and business potentials in the future. Another interesting early contribution that emphasizes the same understanding of SBMI is Hart and Milstein's (1999) paper, which views sustainable development as a force of industrial renewal and progress. They conclude that "simply transplanting business models" (p. 29) from one economy to another will run counter to sustainable development. Common for these two classic articles is how they see changing BMs as a way to reduce negative social and ecological impacts as well as a way to achieve sustainable development.

More recent scientific contributions mapping the SBMI concept reveal a more elaborate understanding of the components involved. For example, Yunus et al. (2010) reason that for social businesses to evolve, a specific BM framework is needed that integrates a social profit equation. They present a number of key components, which go into explaining and developing a social BM (p. 319):

- 1. Social profit equation (social profit and environmental profit),
- 2. Value constellation (internal value chain and external value chain),
- 3. Value propositions (stakeholders and product/services), and
- 4. Economic profit equation (sales revenues, cost structure, and capital employed).

According to their concept, social businesses apply BMs that above all recover their full costs and pass profits on to customers, who benefit from low prices, adequate services, and better access to maximize the social profit equation. Yunus et al. (2010) refer to this as: "a no-loss, no-dividend,

self-sustaining business that offers goods or services and repays investments to its owners, but whose primary purpose is to serve society and improve the lot of the poor" (p. 311). Another interesting contribution in mapping SBMI addresses different typologies of SBMIs and comes from Boons and Lüdeke-Freund (2013). They define three different types of SBMs that create social value and maximize social profit while focusing on three different areas (pp. 14–15):

- *Technological innovation*: creating a fit between technology characteristics and (new) commercialization approaches that both can succeed on given and new markets
- Organizational innovation: implementing alternative paradigms that shape the culture, structure, and routines of organizations and thus change the way of doing business toward sustainable development
- *Social innovation*: helping to create and further develop markets for innovations with a social purpose

Other streams of literature emphasize that the SBMI typology changes depending on the kind of partnerships (e.g., public-private and business/ NGO collaboration) that are required to create social value and maximize social profit (Kanter 1999; Chesbrough et al. 2006; Dahan et al. 2010; Lodsgård and Aagaard 2016). The ultimate holistic approach toward the sustainable business case is to combine economic-oriented value propositions with environmental- and social-oriented value propositions (Emerson 2003; Bocken et al. 2015). In understanding SBMs as a way to build linkages between actors that are necessary to successfully market a sustainable product or service (Boons and Mendoza 2010), various elements being open to multiple interpretations may be considered strengths rather than weaknesses. In other words, the so-called "fuzziness" of the concept of sustainability may actually be a useful quality in developing sustainable innovations (e.g., Tukker and Tischner 2006; Hansen et al. 2009; Boons et al. 2013), as what is considered sustainable will change over time.

In conceptualizing SBMs and SBMI, the acclaimed frameworks of Osterwalder et al. (2005) and Richardson (2008) as portrayed in Bocken et al. (2014, 2015) are applied. In the further interpretation by Bocken



Fig. 1.1 Business models' value creation framework. Source: Bocken et al. (2015, p. 71)

et al. (2014, 2015), BMs are explored through the sustainable value they generate and consist of three core elements: the value proposition, value creation and delivery, and value capture as illustrated in Fig. 1.1.

- Value proposition is concerned with the product and service offerings in generating economic return. In a sustainable business, the value proposition provides measurable ecological or social value together with economic value (Boons and Lüdeke-Freund 2013).
- Value creation emphasizes how businesses capture value by seizing new business opportunities, new markets, and new revenue streams (Teece 2010; Beltramello et al. 2013).
- Value capture relates to how a business earns its revenues from the provision of goods, services, or data/information to customers and users (Teece 2010).

## 4 Sustainable Value Creation in Sustainable Business Models

The concepts of value and value creation have been discussed extensively in literature on strategic management, organizational and partnership theory, and more recently in the discussion of how to realize financial goals in combination with social performances through sustainability and BMs. Contributions in the value field count Bowman and Ambrosini

(2000), Makadok (2001), and Makadok and Coff (2002), who discuss value creation as value capture derived from value in use and value in exchange from a classic economic perspective on an organizational level. Lepak et al. (2007) extend the concept beyond the classical economic perspective, applying the individual and society level as sources and targets of value creation and value capture in a more holistic perspective, which supports the idea of (sustainable/holistic) value creation through SBMs.

This implies that the concept of value in use is extended from customer perceptions as target users into a broader context where target users and subjective assessments are found among several stakeholders on all levels—individual, organizational, and society. Stakeholders and entities on all levels may benefit from the transformation of value in use into value in exchange, which means value beyond pure economic gains may be captured on more levels as well (Lepak et al. 2007) and value is defined as shared value on more levels (Porter and Kramer 2011). Thus, the value construct is reframed from the one-dimensional shareholder logic of profit maximization toward more stakeholders and levels of attention (Pedersen et al. 2016; Schaltegger et al. 2016; Upward and Jones 2016).

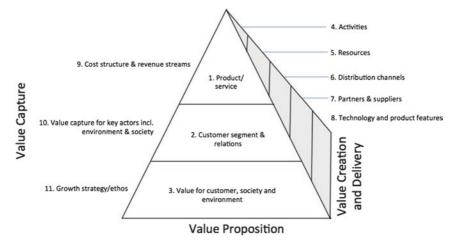
The concept of value is closely related to valuable resources, which are necessary for companies to develop, access, and bring into play in order to create value though exploitation of opportunities, and elimination of threats and to stay at the competitive forefront (Bowman and Ambrosini 2000). As such, Barney (1991)explains that resources are considered valuable if they are rare, imperfectly imitable, and imperfectly substitutable. In a classic economic perspective, resources are only considered valuable if they are exploited into products and services that are perceived as valuable by customers/end users. Thus, the value proposition of a company reveals the value to be created and the stakeholders it is created for (Upward and Jones 2016). In sustainable business thinking, value propositions go beyond these conventional product, service, and process considerations and are referred to as the triple bottom line logic (Bocken et al. 2015; Pedersen et al. 2016).

Consequently, the optimal approach toward SBM is to combine economic-oriented value propositions with environmental- and social-oriented value propositions (Emerson 2003; Bocken et al. 2015). This is

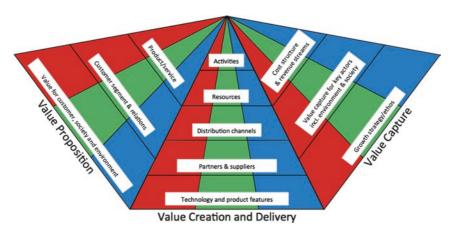
further underlined by Chou et al. (2015), who emphasize that sustainability is to be considered as an integrated part of a company's value propositions: "Company policies and brand image are driven by value propositions. The company mission reflects the core business value and competitive strategy, and the sustainability vision implies the direction of social responsibility the company intends to pursue. These two factors should be linked in order to produce clear, sustainability-led value propositions" (p. 50). For companies to define or redefine their value propositions in the context of environmental and social issues may provide them with new business opportunities and reduction of negative impacts on, for example, stakeholders with no voice of their own, such as the environment and marginalized groups and individuals (Bocken et al. 2014; Upward and Jones 2016). However, a business may also overlook value that is captured by unintended stakeholders and miss out on future value opportunities in its value propositions.

As discussed above, several authors have attempted to define the characteristics of sustainable value creation and the SBM concept. It appears from the literature review that the majority of the contributions in this scientific field take on a more macro, technological, or environmental approach toward the SBM and relate it to the advantages of the business, the customers, the society, or the world. For the conceptual BM framework (as presented in Fig. 1.1) to be applied in evaluating sustainability of BMs, we need to combine it with a set of evaluation criteria of sustainability. In the framework, the acclaimed, empirically applied (e.g. in CSR reporting), and previously mentioned criteria of Elkington (1997)—people/social, planet/environmental, and profit—are applied and the following conceptual evaluation framework is derived (Fig. 1.2).

In the SBM pyramid framework, sustainable value creation is defined as the resources, activities, and partnerships that companies apply and implement in order to realize their sustainable value propositions. Consequently, sustainable value capture is explained as a company's economic and non-economic value gains tightly linked to its sustainable value propositions. It is important in studying a company's sustainable value propositions and sustainable value creation to step inside the company's inner logics to explore which targets and levels of attention SBM



**Fig. 1.2** The SBM pyramid framework for evaluating sustainability of BMs. Source: Aagaard (2017)



**Fig. 1.3** Assessing the sustainability of the 11 dimensions of business models. Source: Aagaard (2017)

are aimed at and which specific activities are carried out in order to realize the company's SBM (Lodsgård and Aagaard 2017).

The SBM pyramid framework is depicted folded as well as unfolded to show all the 11 dimensions included in sustainable value propositions, sustainable value creation, and sustainable value capture in SBMs (Fig. 1.3).

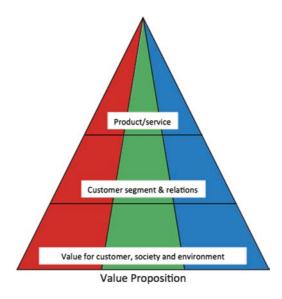
In the case example below, the framework for evaluating sustainability in BMs is applied in identifying and evaluating the actual level of sustainability of BMs across four case studies in different industrial contexts.

## 5 Case Example Using the SBM Pyramid Framework

In exploration of the framework, an empirical case of a company's BM is applied. The selected case is Grundfos Lifelink. The company Grundfos was founded in 1945 and is a traditional pump manufacturing company that employs around 18,500 people and has departments in 56 countries. Over the year, the company has tried to develop new BMs based on their core pump technology and competences, while including sustainability in the value propositions, value creation, and value capture of the product and service offerings related to the BM. The specific BM of Grundfos explored in this case example is Lifelink, which is widely known as a SBM and therefore selected as a case example. As a business Grundfos Lifelink produces water solutions that combine technology with professional service networks to support operations on the ground. Through partnerships across sectors Grundfos Lifelink develops, sells, and offers services for automatic water systems, primarily aimed at rural areas in developing countries.

### 5.1 Grundfos Lifelink Value Proposition

Grundfos Lifelink's value proposition consists of manufacturing and offering water solutions for developing countries and communities generally characterized by poor access to clean water and through collaborations with NGOs such as the Red Cross. The Lifelink products include AQtap (an intelligent water dispenser that is operated by smartcard), AQpure (an ultrafiltration-based water treatment system optimized for producing drinking water), and SQflex (an submersible solar energy—based pumping system). The value proposition of these water systems is clearly stated by the manager informant #1 "Our main mission and business is to provide reliable access to clean water in the developing world." The value proposition



**Fig. 1.4** Evaluating the sustainability level of Grundfos Lifelink's value proposition. Source: Aagaard (2017)

of Grundfos Lifelink addresses the *social dimension* (e.g., providing clean water to people in developing countries, who seldom have easy access), the *environmental dimension* (e.g., ensuring water quality by cleaning it through unique water cleaning techniques), and *the profit dimension* (emphasizes that the business aim of Lifelink is to generate a business (profits), while providing sustainable water solutions to people in need of clean water) (Fig. 1.4).

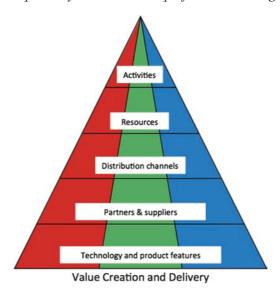
### 5.2 Grundfos Lifelink's Value Creation

Grundfos Lifelink products and services are primarily sold through development organizations that make water projects or to water supply companies working in Kenya or Africa. It creates value through a sustainable value chain approach, where NGOs play a central part. This is emphasized by manager informant #1 in the following statement: "NGOs have a role as a customer in reality. In an expanded customer relationships, where you can also go in and implement projects together, as we did with the Red Cross for example." The specific challenges of combining NGOs and social

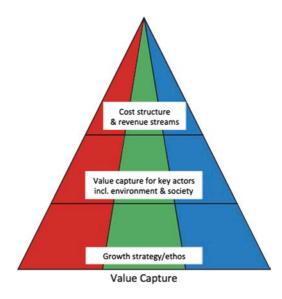
and profit dimensions in the value creations are stressed by manager informant #2: "We had the problem that when the projects involved the Red Cross, all the people expected that it was free... We are therefore about to establish a separate unit that we call 'trade-water,' which is actually a non-profit water company, but instead of donating hardware for free to the village, our new partnership with NGO, Water Missions International, ensures that we maintain ownership of the hardware, but establish the organization in charge of the daily operation of the project and ensures that they sell water credits for the project, etc." Developing Grundfos Lifelink has required new technologies, new partners, and new ways of making profits to ensure that the social, environmental, and profit dimensions were present at all five dimensions of value creation at Grundfos Lifelink (Fig. 1.5).

## 5.3 Value Capture of Grundfos Lifelink

Grundfos Lifelink is a new business for Grundfos and has in many ways altered the way Grundfos captures value, as revenue streams have not been the major focus, as stressed by manager informant #1: "As a businessman I should probably have closed the project down a long time ago, but



**Fig. 1.5** Evaluating the sustainability level of Grundfos Lifelink's value creation. Source: Aagaard (2017)



**Fig. 1.6** Evaluating the sustainability level of Grundfos Lifelink's value capture. Source: Aagaard (2017)

the vision behind is simply too big to do so." Sustainability is part of Grundfos growth strategy and part of the value captured by the key actors, as emphasized in this quote by manager informant#2: "Sustainability is a central part of our innovation internally, which was defined in 2011, when we made three guiding stars: 'Put stability first,' 'try new technologies,' and 'be there for/take care of a better world.' Grundfos has usually focused more on climate- or energy-based sustainable innovations and less on the social side. But with Grundfos LIFELINK we go more into the social sphere." Thus, value capture at Grundfos Lifelink incorporates the environmental, social, and profit dimensions (Fig. 1.6).

## 6 Concluding Remarks

Having a conceptual framework for SBMs is one thing; evaluating how sustainable the BMs actually are is quite another issue. In creating a SBM or in transforming an existing and non-sustainable business into a sustainable business, the SBM framework provides an overview of

which dimensions of the BM are sustainable and on which of the three P-dimensions (people, planet, profit). Illustrating the entire BM and evaluating all 11 dimensions on the three sustainability parameters also provide inspiration as to where a company's BM(s) may potentially develop and innovate to provide new and sustainable business opportunities through, for example, new customer segments, new resources, new partners and suppliers, or new technologies. The framework also makes it possible to compare BMs and their sustainability across industrial context and company sizes.

Furthermore, the framework can also determine the level of sustainability of any BM or BMI over time, as the people, planet, and profit evaluation criteria follow the level of corporate sustainability as expected by society at any given time. This is also visible in CSR reporting, which applies the same three sustainability criteria, as what is considered a "good" CSR report, and performance of companies today will change for tomorrow, as societal expectations rise to the level of the best performers, which stakeholders then compare to other companies' sustainability efforts. One further development of the SBM pyramid in assessment of the level of sustainability of BMs would be to include metrics, for example, 1-5 or low, medium and high levels of sustainability of each BM dimension. However, this is a challenging task as what is considered sustainable in one industry may be considered mainstream in another. And in a global context, what may be considered sustainable in one country for example, the developing countries, may not be considered sustainable in developed, western countries or vice versa. Thus, one should explore/apply the frameworks within the given (industrial and/or geographical) context and assess sustainability in the norm of the specific context. This could for example, include the best practices/high performers of the industry as representatives of the "high" levels of sustainability in the BM dimensions.

The chapter presents a three-dimensional SBM framework that can assist researchers and practitioners in understanding and mapping SBM/SBMI and evaluating the level of sustainability of all businesses and BMs across industrial contexts and dimensions and over time. SB and SBM practices can lead to a renewed vision of the function of a BM. The proposed framework provides users with the tools to describe, categorize, and compare their SB, SBM, and SBMI on a valid foundation.

This chapter has attempted to close the research gap of mapping and understanding SBs and SBMs as addressed earlier by Kanter (1999), Eppinger (2011), and Venn and Berg (2013). Another theoretical contribution of the chapter is the operationalization of the concept in relation to business and on a corporate level, as research in this area is still rather weak, as stressed by Bansal (2005), Stubbs and Cocklin (2008), Zink et al. (2008), and Carroll and Shabana (2010). With the presented literature overview, the evaluation parameters, and the presented SBM framework, a new theoretical tool is provided to improve our understanding and the theoretical and empirical discussion and evaluation of SBs and SBMs

This model is designed in such a way that it can be applied across companies and organizations of different sizes and industrial backgrounds to identify and illustrate the sustainability of a specific BM or BMI and its 11 different BM dimensions. The empirical contribution is therefore captured in the applicability of the framework across contexts as well as over time, while making sustainability in BMs much more tangible and detectable. The managerial implications of the chapter (1) provide managers with an overview to better understand and evaluate their BMs in relation to sustainability, (2) illustrate where existing and new BMs can be developed and innovated through the identified "unsustainable" dimensions of existing BMs or BM systems and ecosystems to gain potential competitive advantages through sustainability, and (3) enable managers to compare the level of sustainability of their BMs to competing BMs.

The research field of SBM and SBMI is still at a very early stage, which does present a limitation and challenge in the design of a framework for understanding and evaluating the level of sustainability of a BM or BMI. This is also why the framework is designed on the basis of one of the most empirically applied BM frameworks, the BM canvas. One could easily challenge whether the same dimensions are of equal interest in an SBM compared to a traditional and potentially unsustainable BM. However, in this study it is assumed that the same dimensions are of relevance in describing a (sustainable) BM. Another limitation of the present study relates to the fact that the presented framework has only been explored through one case company in this chapter and where the selected BM is sustainable.

However, the model has been explored across other case companies (Aagaard 2017) and showed that it is applicable across different industries, company sizes and levels of sustainability in the companies BMs. The present case example was applied to illustrate how sustainability of BM dimensions is exemplified and illustrated through actual sustainable activities. Thus, venues for further research lie in testing the framework through an elaborate and longitudinal case study to explore SBMI and the SBM framework across non-sustainable and sustainable businesses, over time, and across different national, organizational, and industrial contexts.

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