

Università degli Studi di Padova

DEPARTMENT OF MANAGEMENT AND ENGINEERING

Ph.D. COURSE IN: Management Engineering and Real Estate Economics

34th doctoral cycle

**The Value Flow Perspective in
Business Models for Sustainability**
Challenges, drivers, barriers and learning practices

Coordinator: Ch.ma Prof. Anna Nosella
Supervisor: Ch.ma Prof. Valentina Casarino
Co-Supervisor: Ch.ma Prof. Cinzia Battistella

Ph.D. student: Nadia Preghenella

“The Earth is a fine place and worth fighting for.”

Ernest Hemingway

Abstract

The topics of the research are Business Model and Sustainability. The complete integration of sustainability in a company requires a business model change since the business value dimensions are no longer the same. In this regard, Business Model for Sustainability (BMfS) could be defined as "a model where sustainability concepts shape the driving force of the firm and its decision making". The adoption of a BMfS needs a change of mind-set and the reconfiguration of many elements, namely: knowledge management, collaborations, relationships and capabilities. This research is based on an in-depth bibliometric literature review to identify several research gaps and four research questions.

1. How is the context in which Business Model for Sustainability (BMfS) takes place? What specific BMfS type should a specific company adopt?
2. How is the value flow in a BMfS of a sustainable-born company created and implemented?
3. How do stakeholders contribute to the value flow of the business model for sustainability?
4. How does a company learn to implement sustainability? Which are the learning practices?

To answer the first research question, multiple case studies in small and medium enterprises was conducted. More specifically, the empirical investigation adopted a research design with seven case studies. The results display a varied typology of case studies, where business model components reveal sustainability challenges. The study contributes in continuing the discourse on BMfS, adopting the perspective of the challenges for SMEs and offers food for thought for managers of SMEs in comparing their own business with the identified business model types.

The second research question has been answered by investigating the value flow of business model in sustainable-born companies. Specifically, the aim of the work was to link the topic of BMfS to drivers and barriers in a single interpretative framework integrated with the value flow perspective. The research methodology was a multiple case study in five Italian B-corp companies, where firstly the phases, and then the organizational drivers and barriers, are explored. The phases were defined as awareness, people and processes, systemic vision, and relate them to the value flow: value intention, proposition, creation and delivering, underlying the different perceptions of sustainability as a goal, a tool, a standard and an integrated value.

The third research question has been studied by analysing how stakeholder groups engaged by the company contribute to the value flow of BMfS. The research methodology was a multiple case study in five Italian B-corporations. The contribution was a Stakeholder Value Flow Framework of BMfS that categorizes the stakeholders in the specific value flow dimension, namely: value intention, value proposition, value creation, value delivery, and value capture. The Stakeholder Value Flow Framework can be used to map from the company perspective the most significant relationships and to facilitate the stakeholder engagement.

Finally, to address the fourth research question sustainability was examined from an organisational learning perspective. To identify which organisational learning characteristics are used in BMfS, a multiple-case study was designed for sustainable companies operating in the food and beverage industry. The study found a wide variety of sustainable practices. It was also found that sustainable companies learn through social rather than reflective learning, in relationships with internal and external stakeholders, and by concrete actions to implement environmental and social impacts. The study is one of a few that explore sustainability organisational learning and contributes to categorising organisational learning characteristics that sustainable companies use to facilitate and support sustainability in the mid–long term.

Index

Index of Figures	11
Index of Tables	12
1 Introduction.....	13
1.1 Why Sustainability is relevant	13
1.2 The Concept of Sustainability	14
1.3 The Corporate Sustainability.....	16
1.4 The Business Model.....	18
1.5 The Business model for Sustainability.....	19
1.6 Research positioning, objectives and questions	20
1.7 The process of the research and the structure of the thesis	21
2 Exploring the topic of Business Models for Sustainability	25
2.1 Introduction.....	25
2.2 Definitions of Business Model.....	27
2.3 The Value Flow Perspective	32
2.4 Definitions of Business Model for Sustainability	34
2.5 Business Model for Sustainability characteristics.....	37
2.6 Business Model for Sustainability reviews gap	38
2.7 Literature review methodology	39
2.7.1 Selection of Publications.....	40
2.7.2 Steps in Co-Citation Analysis.....	43
2.7.3 Tools and Data Analysis	47
2.8 Findings from Factor Interpretation	50
2.8.1 BMfS elements and structure.....	50
2.8.2 Applications of BMfS	52
2.8.3 Different types of BMfS	53
2.8.4 BMfS transition process.....	54
2.8.5 Circularity as sustainability.....	55
2.8.6 Technical aspects of BMfS innovation.....	55
2.9 Findings from Multidimensional Scaling Interpretation.....	56
2.10 Findings from Papers with low/undefined Loadings.....	57

2.11	Findings from the Literature Outside the Core-set.....	58
2.12	A theoretical framework from the review	59
2.13	Future research directions.....	61
3	Research Gap and Research Questions.....	65
3.1	Context of Business Model for Sustainability: The Challenges	65
3.2	Research Gap of BMfS in the context of SMEs.....	68
3.3	The Conceptual Structure of BMfS: A Matter of Value	70
3.4	Research Gap on the Value Flow in BMfS	71
3.5	Stakeholder theory and Sustainability.....	74
3.6	Research Gap on BMfS and Stakeholders	75
3.7	Organisational Learning and BMfS	77
3.8	Research Gap on Learning in BMfS	79
3.9	Conclusion.....	80
4	Methodology.....	82
4.1	Methodology of RQ1: Challenges and Type of BMfS	82
4.1.1	Case selection.....	82
4.1.2	Data Collection	83
4.1.3	Data Analysis	84
4.2	Methodology of RQ2: Value Flow.....	86
4.2.1	Case Selection.....	87
4.2.2	Data Collection	90
4.2.3	Data Analysis	91
4.3	Methodology of RQ3: Stakeholders.....	92
4.3.1	Case selection.....	94
4.3.2	Data collection	96
4.3.3	Data analysis	96
4.4	Methodology of RQ4: Learning Practices	97
4.4.1	Case selection.....	97
4.4.2	Data collection	99
4.4.3	Data analysis	100
5	Challenges in Business Model for Sustainability	101
5.1	Introduction	101

5.2	Business Model Typology of Yacht Tourism SMEs	103
5.2.1	Business Model for Maintenance-Focused Marinas.....	107
5.2.2	Business Model for Dock Marinas	107
5.2.3	Business Model for Sport-Oriented Marinas	108
5.3	Challenges in Business Model Typology.....	109
5.3.1	Business Model for Maintenance-Focused Marinas.....	109
5.3.2	Business Model for Dock Marinas	109
5.3.3	Business Model for Sport-Oriented Marinas	110
5.4	Discussion	110
6	The value flow in Business model for sustainability.....	114
6.1	Introduction	114
6.2	Results: With-in Case Analysis.....	115
6.3	Phases of Business Model for Sustainability	117
6.4	Drivers of Business Model for Sustainability	119
6.5	Barriers of Business Model for Sustainability	121
6.6	The BMfS Value Flow Framework.....	123
7	Stakeholder Value Flow Framework of Business Models for Sustainability	126
7.1	Introduction	126
7.2	Value flow perspective and stakeholder contribution.....	128
7.2.1	Value flow perspective in Case A.....	130
7.2.2	Stakeholder contribution on the value flow of Case A	130
7.2.3	Value flow perspective in Case B	131
7.2.4	Stakeholder contribution on the value flow of Case B	131
7.2.5	Value flow perspective in Case C.....	132
7.2.6	Stakeholder contribution on the value flow of Case C	132
7.2.7	Value flow perspective in Case D.....	133
7.2.8	Stakeholder contribution on the value flow of Case D	133
7.2.9	Value flow perspective in Case E	134
7.2.10	Stakeholder contribution on the value flow of Case E	134
7.3	Cross case analysis and discussion	135
7.3.1	Stakeholder contribution perspective.....	135
7.3.2	Value flow perspective	137

8	Sustainable organizational learning in Business Model for Sustainability.....	139
8.1	Introduction	139
8.1.1	Learning orientation.....	141
8.1.2	Learning processes.....	142
8.1.3	Learning leadership.....	143
8.2	Results	143
8.2.1	Sustainable practices in learning orientation	143
8.2.2	Sustainable practices in learning processes	146
8.2.3	Sustainable practices in learning leadership	147
8.3	Final overview on results and discussion.....	147
9	Conclusions.....	149
9.1	Implications.....	149
9.1.1	Theoretical implications.....	149
9.1.2	Managerial implications.....	150
9.2	Limitations	152
9.3	Future research directions	153
10	References.....	155
11	Appendix.....	185

Index of Figures

Figure 1-1 Corporate sustainability framework (adapted from Lozano et al., 2018)	17
Figure 1-2 Research process	22
Figure 2-1 Three types of business model definitions (Geissdoerfer et al., 2018)	31
Figure 2-2 Value dimensions (Bocken et al., 2014)	33
Figure 2-3 Selected publications per year from 2003 to August 2019	39
Figure 2-4 Workflow for conducting science mapping with bibliometric methods	42
Figure 2-5 The systematic process of papers' selection	43
Figure 2-6 Steps in co-citation analysis (McCain, 1990)	44
Figure 2-7 Multidimensional Scaling map	57
Figure 2-8 Theoretical framework	60
Figure 3-1 The integral cycle of learning (single loop) (Edwards, 2009)	78
Figure 3-2 Link among value flow and the topics: context, type, architecture and managerial (learning) practices.....	81
Figure 4-1 The data analysis process	86
Figure 6-1 The proposed value flow framework of business model for sustainability	123
Figure 7-1 The Stakeholder Value Flow Framework.	136

Index of Tables

Table 1-1 Definitions of sustainability and sustainable development	15
Table 2-1 Definitions of business model (adapted from Geissdoerfer et al., 2018)	28
Table 2-2 Definitions of Business Model for Sustainability	35
Table 2-3 The core-set of articles	44
Table 2-4 Factors extracted through the principal component analysis	48
Table 2-5 Factor loadings of publications belonging to the core-set.....	48
Table 2-6 Future research questions	62
Table 3-1 Challenges for creating sustainable value in business model innovation; adapted from Evans et al. (2017).....	67
Table 3-2 Learning dimensions and skills (adaptation from Edwards 2009)	79
Table 4-1 Features of the case studies	84
Table 4-2 Information on interviews and respondents	91
Table 5-1 Analysis of the three dimensions of sustainability of the case studies.....	104
Table 5-2 Challenging aspects of the business model typology	110
Table 7-1 Synthesis of results	128
Table 8-1 Framework on organizational learning characteristics	139
Table 8-2 Multiple case study analysis on organizational learning characteristics and sustainable practices.....	144
Table 9-1 Managerial implications	152
Table 11-1 Phases of the value flow in the BMfS	185
Table 11-2 Drivers of the value flow in the BMfS	191
Table 11-3 Barriers of the value flow in the BMfS	199

1 Introduction

In this introductory chapter the main topics of the thesis will be presented, underlining their relevance. In particular, the concept of sustainability and the concept of business model will be presented and defined. Finally, the job placement will be classified in the context of the research and the research questions will be illustrated together with the performance of the work.

1.1 Why Sustainability is relevant

The 21st century has been defined as a critical period for both people and the planet. The global average temperature has risen by about 1 ° C since the industrial revolution, with significant growth starting largely since the mid-1970s (NAS, 2014). Furthermore, it is estimated that if current warming rates continue to rise, the temperature could increase by 1.5 ° C by 2030, causing irreversible damage to ecosystems (IPCC, 2018).

In addition to rising temperatures, we are seeing changes in precipitation patterns, species behaviour, ocean chemistry and the occurrence of extreme events. For example, in the past Australian summer, between 2019 and 2020, the country literally went "on fire" due to extreme drought conditions, causing the destruction of 18 million hectares of land, the destruction of over 6000 buildings, the loss of about 1 billion animals and the death of some people (UNEP, 2020). In addition to this, ecosystems are modified by a multitude of human-induced stressors (including resource extraction, habitat degradation and conversion), invasive species and pollution (NAS, 2014).

The ecosystems mentioned can be defined as interacting systems of living organisms (and non-living components) within an area that has a certain size. The organisms of an ecosystem interact with their physical environment, acquiring resources from it, influencing it through their behaviour and their products, and being influenced by it. They also interact with each other: they compete for resources, feed on each other (through grazing, predation or parasitism) and cooperate in mutualistic relationships. The set of organisms and their interactions with the physical environment determine a wide range of processes that underlie the functioning of the natural world. If we consider the human being as an organism immersed in an ecosystem, we understand how the well-being of the latter and the state of the natural environment are closely linked: the environment provides natural capital which, through production and consumption forms the basis of many of the material and non-material inputs for human well-being.

Ecosystems and their balance therefore support life on Earth and the human population, like that of other species, cannot continue to grow indefinitely on a planet with limited resources. The two main drivers of environmental change are in fact population and consumption (de Sherbenin et al., 2007). If in 2010 the global population had reached 6.9 billion people (and in 2020 the threshold of 7.8 billion was exceeded), the projections indicate that it will reach 9.7 billion by 2050 (UN World Population Prospect, 2019) with an inevitable increase in resource consumption. Despite the different perspectives with which we can refer to consumption (UNPD, 1998), this discussion considers an environmental approach that focuses on consumption in relation to the use of renewable and non-renewable natural resources. The unsustainable use of this natural capital depletes the earth's resources, and leads to what Hardin (1968) defined "the tragedy of the commons" which occurs when an excessive exploitation of these goods leads to their destruction. This destruction materializes when people behave as "free riders" and do not take into account the need to keep common goods as a source of benefits for all (Cantino, Giocosa and Cortese, 2019).

The exploitation of natural capital has often been motivated by aspirations to improve human well-being, but in recent history this has been in favour of other forms of capital such as financial, institutional (or social) and so-called reproducible capital. (Ehrlich, 2012; Costanza & Daly, 1992). And it is precisely in this context in which millions of people still live in poverty, fuelling inequalities within and between countries, that the United Nations in 2015 issued an action plan for the 5Ps: People, Planet, Prosperity, Peace and Partnership. The plan entitled "Transforming our world: The 2030 agenda for sustainable development" represents a call to action and aims to achieve 17 goals for sustainable development, involving the different parts of the world in a "win-win" cooperative relationship (United Nations, 2015).

1.2 The Concept of Sustainability

The concept of sustainable development is not new: it emerged in the 1960s with increasing ecological concerns and the fear of resource scarcity (Carson, 1962; Hardin, 1968). However, the concept of sustainability begins to take hold after the famous Brundtland Report appeared in 1987, where "sustainable development" is defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987, p. 43).

Over the years, numerous definitions have been given, over three hundred (Santillo, 2007), of "sustainability" and "sustainable development". The most representative definitions are reported in Table 1-1.

Furthermore, according to several authors, sustainable development includes some groups of definitions: ethical and idealistic, scientific and economic, environmental and ethical (Stoddart, 2011); despite the different perspectives, it has always been considered as a new form of awareness linked to both individual and collective responsibility towards the natural or social environment. (Dernbach, 2003). In recent times, sustainable development has emerged as a contemporary paradigm to address the issues described in paragraph 1.1 (Liao et al., 2013; Jabareen, 2006; Yigitcanlar, 2010). Therefore, being perceived as an improvement in the quality of life also from an ecological, cultural, political, institutional, social and economic point of view (Pickett et al., 2004; Wiese et al., 2012), it offers the opportunity to provide new mechanisms for building a better future (Liao et al., 2013; Jabareen, 2006; Yigitcanlar, 2010).

However, the challenges that sustainability aims to address are complex in nature, with deep interdependencies between ecological, social and economic factors. To address this complexity, research in the science of sustainability is moving towards the identification and management of the fields to be integrated (Kurucz et al., 2017). Lang et al. (2012) emphasize the need for transdisciplinary approaches that integrate science and social practice, while Mauser et al. (2013) identify three key dimensions of integration (international, sectoral and scientific) necessary to advance transdisciplinary research programs in sustainability.

Kurucz et al. (2017) summarized the previous notions by proposing an approach to sustainability which can be:

- multisectoral (involving governments, businesses and civil society),
- multilevel (from local to global),
- multidisciplinary (which makes available all the academic social and scientific knowledge relevant to the definition and solution of the problem).

Table 1-1 Definitions of sustainability and sustainable development

SOURCE	DEFINITION
WCED, 1987;	Sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development; and institutional change are all in harmony and enhance both the current and future potential to meet human needs and aspirations.
Munro e Holdgate 1991	Improve the quality of human life while living within the ability to sustain ecosystems
Costanza & Daly, 1992	

	Sustainability is a relationship between dynamic human economic systems and larger, but normally slower ecological systems, in which (a) human life can continue indefinitely, (b) human individuals can thrive, and (c) human cultures can develop
Dovers e Handmer, 1992	Sustainability is the ability of a human, natural or mixed system to resist or adapt to endogenous or exogenous changes indefinitely

1.3 The Corporate Sustainability

To date, on the basis of the WCED definition and on the influences from the strategic and management literature, a variety of definitions of “sustainability” have emerged in relation to organizations, enclosed under the term “corporate sustainability”. These definitions vary according to the degree to which they classify corporate sustainability as a primarily ecological concern, as a social responsibility or as a practice aimed at integrating corporate economic activities, including organizational concern for the natural and social environment. Some scholars also use the term "corporate social responsibility" (CSR - Corporate Social Responsibility) to describe the integration of these latter concerns (social, environmental and economic) engraved in culture, decision-making, strategy and operations of an organization (Berger, Cunningham & Drumwright, 2007). Corporate Social Responsibility was defined by the European Commission (2001) as: “a concept whereby companies integrate social and environmental problems in relations with their stakeholders on a voluntary basis”. From this first definition we can understand how Corporate Social Responsibility (CSR), is the set of not mandatory policies and practices implemented by the company in favor of its stakeholders (shareholders, employees, suppliers, local community, etc.) with the aim of creating benefits both for them and for the company itself with a view to a win-win approach.

Further recent studies on the corporate sustainability have identified internal organizational factors, such as top management support, human resource management, environmental training, employee empowerment, teamwork and reward systems, as important aspects for achieving corporate sustainability, declaring at the same time the very complexity of the concept and the need for organizational adaptation at different levels (Daily & Huang, 2001; Wilkinson, Hill, & Gollan, 2001). Other authors argue that more far-reaching changes in employee values and underlying assumptions are critical for organizations to truly achieve corporate sustainability (Crane, 2000; Purser, 1994).

To date, several authors (e.g., Dyllick & Hockerts, 2002; Baumgartner, 2009; Linnenluecke & Griffiths, 2012) argue that the term Corporate Sustainability is a concept

considered as a precondition for doing business, and how it is the desirable path for all organizations (Dunphy et al., 2003; Weymes, 2004).

An analogy with the concept of sustainable development defined by Dyllick and Hockerts (2002), places corporate sustainability as "meeting the needs of a company's direct and indirect stakeholders (such as shareholders, employees, customers, communities, etc.) without compromising the ability to also meet the needs of future stakeholders ". However, according to Lozano (2015), this definition has the advantage of being simple, powerful and captivating, but at the same time it has the disadvantage of being vague, with little emphasis on consumption, if the needs of tomorrow would be different from those of today and above all, without explicitly referring to stakeholder feedback. According to Siebenhüner and Arnold (2007), in order for a company to become more sustainability-oriented, it should make changes that also include the introduction of efficient advanced technologies, sustainability reporting schemes and providing sustainable products, services and product-service combinations.

A further definition provided by Lozano (2018, p. 9) says: "corporate sustainability is formed by corporate activities that proactively seek to contribute to the balance of sustainability, including today's economic, environmental and social dimensions, as well as their interrelationships over the time dimension (i.e. the short, medium and long term), addressing the company's activities such as production, strategy management, organizational systems, procurement, marketing, communication and governance together with its own stakeholders " (see Figure 1-1).

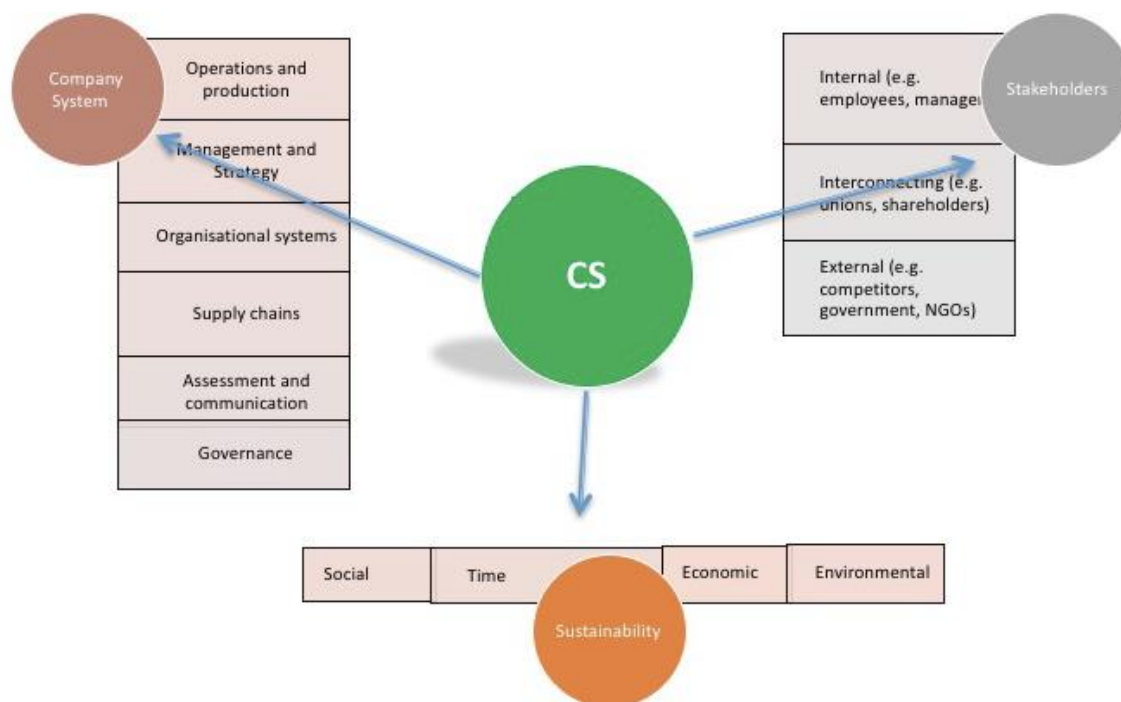


Figure 1-1 Corporate sustainability framework (adapted from Lozano et al., 2018)

In support of this, Rogers (1995) also argues that organizations can be viewed as complex social systems, with sets of interconnected units engaged in joint problem solving to add a common goal.

Finally, it can be argued that the cognitive confusion of the practical impediment in the implementation of corporate sustainability becomes a logical consequence, due both to the variety of definitions that often demonstrate a conceptual disagreement, and to a lack of clarity on the ways in which it is possible to better implement corporate sustainability in organizational practice. However, it is clear that achieving corporate sustainability is a journey that requires continuous adjustments and improvements to internal activities, structures, management and the way companies engage and empower stakeholders (including the environment) to contribute to sustainable societies in an effective way (Lozano, 2012).

1.4 The Business Model

"A business model describes the logic by which an organization creates, distributes and captures value" (Osterwalder, Pigneur & Tucci, 2005); in fact, the basic logic of a business activity can be summarized under the term "business model" (Karlusch, Sachsenhofer and Reinsberger, 2018). A company implements and plans its strategy through the design of the business model, which denotes and organizes the various activities; the aim of the strategy can be defined as wanting to create a competitive advantage that generates superior financial and sustainable returns (Slávik & Bednár, 2014). To do this, after an accurate analysis and understanding of the sector, the company must be able to position itself within it, shaping the choice of a business model and an underlying set of activities necessary for it to be supported (Casadesus-Masanell, 2014).

The most famous and used theoretical tool to date for business model mapping is the Business Model Canvas, which describes the business profile of a company and was invented by Alexander Osterwalder in his first work "Business model ontology" (2004). Subsequently, this concept was developed and improved with the support of an international community which led to the publication of the book "Business model generation" (2010) with Yves Pigneur; finally, the global popularity of the book and the reliability of the model have transformed the Business Model Canvas into an international guideline for the innovation of business models.

As noted by Joyce and Paquin (2016), it is an inside-out approach to business model innovation, which starts with the current elements of the business model and then explores potential changes (Joyce & Paquin, 2016). Indeed, "it provides practical tools to understand, design and implement a new business model or renew an old one", all summarized visually in

a single “piece of paper”. The Business Model Canvas is currently used globally by companies of all sizes to better outline their business model and connect it with the value proposition and other strategic tools and processes (Osterwalder & Pigneur, 2010).

1.5 The Business model for Sustainability

The search for sustainability by the organizations is not a retroactive addition to the business as in the case of corporate social responsibility practices, but is integrated into their business models (Alberti & Varon Garrido, 2017). Referred to as sustainable and innovative business models, these have generated a growing literature in recent years (Haigh & Hoffman, 2012; Hoffman, Badiane, & Haigh; 2012).

Traditionally, the concept of "business model" has always been linked to that of a tool available to companies to create or add value to products / services, before delivering them to the customer (Zott et al., 2011), articulating different value propositions, identifying a market, recognizing the value chain, positioning the company, combining assets to produce the offer and detailing the revenue mechanisms and cost structure (Chesbrough, 2010).

In the evolution of management theory, business models have come to be considered as a strategic source of competitive advantage that differentiates a company from others (McGrath, 2010). However, the generation of profit (central role of traditional business models) has been linked to the social and environmental problems of society (Dentchev et al., 2015).

Therefore, if the value created by companies for their customers must go beyond the financial domain, up to the non-financial one, the formulation of the new business model must be based on a systemic model; in this way the company can be considered as a social system (within an economic system) aimed at society and the environment (Upward and Jones, 2016).

According to Tolkamp et al. (2018), the creation of value must overcome the vision according to which the customer is the single stakeholder, to arrive at one that considers all the stakeholders as a whole, namely: customers, investors and shareholders, employees, suppliers and partners, the environment and society (Donaldson and Preston, 1995). According to the author, focusing on the interaction of all stakeholders in the business, from the point of view of sustainability, is the key to expanding the business model.

While the traditional business model is characterized by the creation, capture and supply of value (Bocken et al., 2014) in order to seize new market opportunities and income streams (Beltramello et al., 2013), the business model for sustainable development derives from the proposal to pursue economic value together with ecological and social value (Boons and Lüdeke Freund, 2013). Over time, the literature has presented different perspectives regarding business models for sustainability. However, it is still unclear how a company can achieve and

address sustainability (Boons and Lüdeke-Freund, 2013; Bocken et al., 2014), although new approaches periodically emerge that contribute to the evolution of the concept (Comin et al., 2019).

The research on business model for sustainability, therefore, includes different directions for the solution of ecological, social and economic problems. In this way, the spread of new technologies, innovations and forms of organization is favored (Boons and Lüdeke-Freund, 2013), which can contribute to the alignment of the business towards more sustainable practices (Comin et al., 2019). For further information on business model and business models for sustainability, see the next Chapter.

1.6 Research positioning, objectives and questions

The research is positioned in the area of Business Model and Sustainability. Sustainability has been included in institution and government programs as a fundamental element for the society of the future. The complete integration of sustainability in a company requires a business model change since the business value dimensions are no longer the same. In this regard, we speak of Business Model for Sustainability (BMfS), that could be defined as "a model where sustainability concepts shape the driving force of the firm and its decision making". The adoption of a BMfS needs a change of mind-set and the reconfiguration of many elements such as: knowledge management, collaborations, relationships and capabilities. Based on an in-depth bibliometric review of literature of BMfS, several research gaps are identified, for example: the lack of clarity on the context in which BMfS experimentation takes place; the scant analysis on the relation between companies' features and the adequate BMfS type to adopt; still missing in-depth analysis of the value flow in a BMfS and its components (e.g., value intention, value proposition, value creation, value delivery and value capture); lack of investigation on the learning practices needed to implement sustainability.

The value flow perspective is one of the theoretical perspectives in which traditional and sustainability-oriented business model concepts have been defined (Luedeke et al., 2020). Particularly, the steps of the value flow in a Business models for sustainability are: value intention (Barth et al., 2017), value proposition, value creation, value delivery and value capture (Bocken et al., 2013, Short et al., 2014, Bocken and Short, 2015).

In this research the following four research questions (RQs) are formulated and examined:

- **RQ1:** *How is the context in which Business Model for Sustainability (BMfS) takes place? What specific BMfS type should a specific company adopt?*

- *RQ2: How is the value flow in a BMfS of a sustainable-born company created and implemented?*
- *RQ3: How do stakeholders contribute to the value flow of the business model for sustainability?*
- *RQ4: How does a company learn to implement sustainability? Which are the learning practices?*

1.7 The process of the research and the structure of the thesis

The research process as well as the structure of the thesis are based on the research process follows the scheme below (Figure 1-2). First of all, the thesis focuses on the analysis of the context within which business models for sustainability can be tested and implemented. In particular, the challenges that characterize the context are highlighted, through the analysis of multiple case studies within the SMEs (Chapter 5). The context then determines the type of business model to be adopted (Chapter 5). The context and the type of business model for sustainability define the architecture of the model. Therefore, in Chapter 6, the phases, drivers and barriers that characterize the architecture of the business model for sustainability, represented as a flow of value, will be investigated. A key feature of business models for sustainability is stakeholder engagement. In other words, a business model must create value for a multitude of stakeholders and not just for the customer or final consumer, in order to be defined as a business model for sustainability. In this regard, Chapter 7 of the thesis investigates the contribution of stakeholders in the process of creating value in a business model for sustainability. Finally, the analysis shifts to the managerial practices that must be undertaken in order to move from strategy to activities. Specifically, in Chapter 8 learning practices are explored.

The thesis consists of 9 chapters. The Chapter 1 is the introduction where the following are discussed: the relevance and the motivation for this work, the research questions and objectives, the research process and the structure of the thesis. In Chapter 2 the literature is extensively described through a bibliometric analysis. Co-citation analysis and multidimensional scaling techniques were used to identify sub-topics within the literature. The Chapter 3 describes the research gaps and the resulting research questions emerging from the analysis of the literature. In the Chapter 4, the research methodology used for each of the research questions was described. In particular, case selection, data collection and data analysis were described.

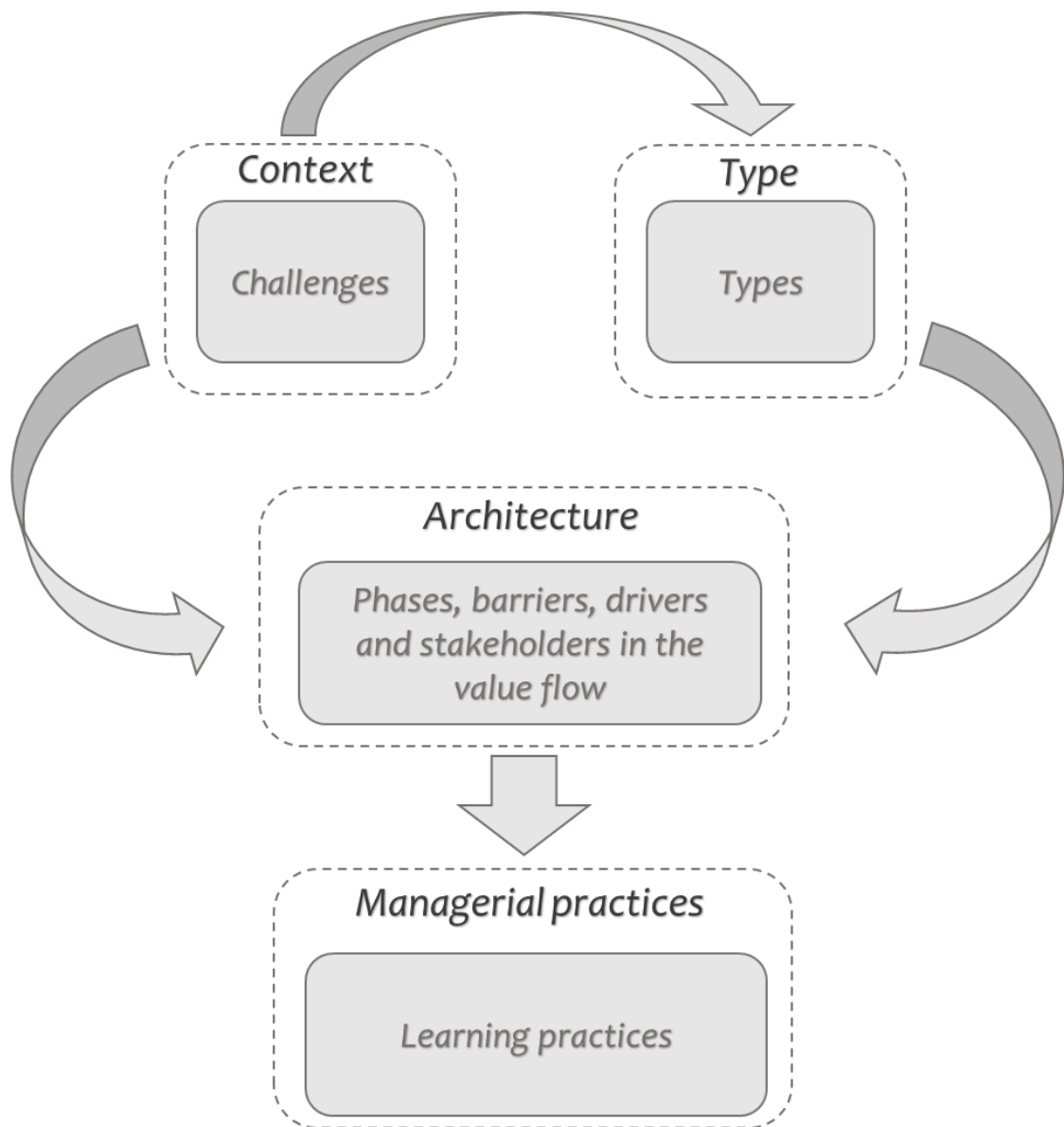


Figure 1-2 Research process

To answer the first research question in Chapter 5, multiple case studies in small and medium enterprises (SMEs) was conducted. The aim of the study was to uncover the challenges that SMEs face when seeking business model reconfiguration toward sustainability. More specifically, the empirical investigation adopted a case-study research design with seven European case studies in the context of yacht tourism. The results display a varied typology of case studies, where business model components reveal diverse expressions of facing sustainability challenges. The work research discusses reported findings with derived from a cross-case comparison among detected business models and outlines a list of propositions for business models for sustainability of SMEs. The study contributes in continuing the discourse

on business models for sustainability, adopting the perspective of the challenges for SMEs and offers food for thought for managers of SMEs in comparing their own business with the identified business model types.

The second research question has been answered in Chapter 6 by investigating the value flow of business model in sustainable-born companies (i.e. companies that start-upped and have been grown with a specific sustainability intention). Specifically, the aim of the work was to link the topic of Business Models for Sustainability to drivers and barriers in a single interpretative framework integrated with the value flow perspective. The research methodology was a multiple case study in five Italian B-corp companies, where firstly the phases, and then the organizational drivers and barriers, are explored. An interpretative framework consisting of three phases for describing a business model for sustainability is proposed. The phases were defined as awareness, people and processes, systemic vision, and relate them to the value flow: value intention, proposition, creation and delivering, underlying the different perceptions of sustainability as a goal, a tool, a standard and an integrated value.

The third research question has been studied in Chapter 7 by analysing how stakeholder groups engaged by the company contribute to the value flow of business models for sustainability. The research aimed to expand the knowledge on business models for sustainability by highlighting the most important contributions of stakeholders that are relevant from a value flow and sustainability perspective. The research methodology was a multiple case study in five Italian B-corporations. The contribution was a Stakeholder Value Flow Framework of business models for sustainability that categorizes the stakeholders in the specific value flow dimension, namely: value intention, value proposition, value creation, value delivery, and value capture. The framework can facilitate a systematic and deeper analysis of stakeholder contributions to the company business model. Moreover, the Stakeholder Value Flow Framework can be used to map from the company perspective the most significant relationships and to facilitate the stakeholder engagement.

Finally, to address the fourth research question in Chapter 8 sustainability was examined from an organisational learning perspective and was based on Edward's integral cycle of learning (Edward, 2009). An in-depth analysis of the literature was carried out, and a list of organisational learning characteristics, such as openness to new ideas and participative policymaking, were compiled. To identify which organisational learning characteristics are used for sustainability, a multiple-case study was designed for sustainable companies operating in the food and beverage industry. The study found a wide variety of sustainable practices, such as experimentation and information-sharing systems, related to learning processes, and learning leadership appears to be the least developed dimension. It was also found that sustainable companies learn through social rather than reflective learning, in relationships with

internal and external stakeholders, and by concrete actions to implement environmental and social impacts. The study is one of a few that explore sustainability organisational learning and contributes to categorising organisational learning characteristics that sustainable companies use to facilitate and support sustainability in the mid–long term.

2 Exploring the topic of Business Models for Sustainability

This chapter aims to investigate the state of the art on the topic of Business Models for Sustainability. The literature review screens 1744 papers with no temporal limitation and undertakes three stages of literature review analysis of a final set of 134 papers with a combination of systematic, bibliometric and multivariate techniques. The first output is the identification of six wide different but interconnected research streams of Business Models for Sustainability: namely, elements and structure; applications; different types of Business Model for Sustainability; transition process; circularity as sustainability; technical aspects of innovation. A theoretical framework that allows to understand the themes explored by the literature so far and gives an interpretation of the evolution of the literature has been produced. Finally, the analysis provides opportunities and research directions for future research. The originality lies in providing the first co-citation analysis of Business Models for Sustainability with a descriptive and critical study by identifying main research trends and relevant gaps in the literature and by providing future research directions. Some of the content described in this Chapter has been previously published in “Exploring business models for sustainability: A bibliographic investigation of the literature and future research directions.” in Business Strategy and the Environment.

2.1 Introduction

Company sustainability is attracting increasing interest of scholars and practitioners in the last years. Several internal and external motivations push companies to reappraise their role in society. On one hand, companies are aware of the fact that the economic value may not be the only most important output a company could generate (Hart & Milstein, 2003). On the other hand, companies are receiving external pressures for the environmental impact generation due to the accelerated economic development and the consequent growing demand for the resources needed for economic and industrial activities. In addition to this, global sustainable development depends also on companies' activities and decisions that are expected to be towards sustainability, as stated by the seventeen Sustainable Development Goals for 2030 proposed by the United Nations (United-Nations, 2015). Therefore, companies that plan to orient their business activities toward sustainability should adopt it incrementally in order not to risk that the corporate value proposition is inconsistent with the sustainable business strategy (Hall & Wagner, 2012; Kolk, 2016). Companies have to manage trade-offs as for example the one between profit and sustainable value (Brennan & Tennant, 2018; Bryson & Lombardi, 2009; Hahn et al., 2010), and consider all sustainability perspectives, namely the economic, the

environmental and the social one, according to the Triple Bottom Line (Elkington, 1998; Isil & Hernke, 2017).

A business model is an abstract representation of the value flow and the interactions between value elements of an organizational unit. It depicts "the content, structure, and governance of transactions designed so as to create value through the exploitation of business opportunities" (Amit & Zott, 2001; p. 511). In other words, a business model describes the essential value elements of organizations concerning with proposition, creation, delivering, and capturing value (Osterwalder & Pigneur, 2010). A simplified way of communicating in detail and within a short time frame the connection and function of these elements is essential in the success of any company (Chesbrough, 2010). To this aim, the concept of a business model is generated to facilitate the more efficient elucidation of complex business ideas. Through a business model, the business workflow is communicated to investors.

The process of incorporating strategies for sustainability requires a business model change since the business drivers are no longer the same: if the strategy changes but the business model remains the same, the innovation processes fails (Schaltegger et al., 2012). To obtain a sustainability-oriented strategy, companies need to propose sustainable value. This lead to a reconfiguration of value proposition and a consequent transition from a conventional business model to a Business model for Sustainability. Sustainable business model innovation could describe either a process of transformation from one business model to another or the creation of entirely new business models (Chesbrough, 2010; Osterwalder & Pigneur, 2010). Often this process is not expected or planned by the organization (Geissdoerfer et al., 2016). However, sustainable business model innovation is a critical success factor for companies that want to integrate sustainability in their strategies. The business model leads to business success and could be seen as a mediator between sustainability innovation and business cases for sustainability (Lüdeke-Freund, 2020).

This Chapter aims to review the state of the art on the topic of Business models for Sustainability. Despite the increasing number of papers paying attention to business models in the field of sustainability, there is a gap towards a comprehensive bibliometric review at the intersection of business models and sustainability, based on a rigorous methodology. Up to now, the vast majority of existing reviews on business models for sustainability used qualitative techniques and concentrate on specific domains related to sustainability. In this Chapter, we consider sustainability as a broad concept, including for example shared and blended value. The following paragraphs describes the concept of traditional Business Model and then the state of the art of Business Model for Sustainability.

2.2 Definitions of Business Model

The first business model concepts emerged at the end of the 20th century, motivated by the need to describe and analyze new forms of business (Schaltegger et al., 2016a). Indeed, during the e-commerce boom of the 1990s, the concept of a business model was originally used to communicate complex business ideas to potential investors in a short time (Zott et al., 2011). From there, the business model concept was developed to be seen both as a tool for systemic analysis, planning and communication of the configuration and implementation of one or more organizational units and the relevant parts of their environment in the face of organizational complexity. (Doleski, 2015; Knyphausen-Aufsess and Meinhardt, 2002), and as a strategic asset for competitive advantage and corporate performance (Afuah, 2004; Casadesus-Masanell and Ricart, 2010; Chesbrough, 2007; Hamel, 2000; Magretta, 2002).

Business models are still an important topic in managerial research (Kesting & Gunzel-Jensen, 2015) as they have attracted considerable attention for "their importance in the fundamental logic of every company" (Rauter, Jonker & Baumgartner, 2015). The result has been a large and expanding body of knowledge, with over 200 contributions in this thematic area since the 2000s (DaSilva & Trkman, 2014). Despite the growing number of articles published on this topic and the multiple definitions associated with it, the concept of business model still remains poorly defined and with a lack of consistency between them (DaSilva & Trkman, 2013; Shafer, Smith, & Linder, 2005; Zott et al., 2011). However, this is not surprising when one considers that the term "business model" is a multidimensional construct that cuts across different academic disciplines and functional areas, and cannot easily be captured in a single, all-encompassing definition (Pedersen et al., 2018). Some of the different definitions associated with the business model concept are reported in Table 2-1.

As shown in Figure 2-1, some of the definitions previously presented can be categorized within three groups to facilitate understanding of the term "business model" (Geissdoerfer, Vladimirova and Evans, 2018). The concept of business model is described as: an organizational system model (e.g. Baden-Fuller and Morgan, 2010; Knyphausen-Aufsess and Meinhardt, 2002),

- an abstract characteristic of an organizational unit, (for example Osterwalder and Pigneur, 2010; Teece, 2010),
- a reduced field of action that serves both to equate the individual elements belonging to the definitions of other authors or to obtain certain meanings (for example Doganova and Eyquem-Renault, 2009).
- Furthermore, from the definitions, it is possible to understand how some scholars compare business models to:

- market instruments (Doganova & Eyquem-Renault, 2009),
- managerial tools (Osterwalder & Pigneur, 2005)
- procedures, similar to "recipes" (Baden-Fuller and Morgan, 2010; Sabatier, Mangematin, & Rousselle, 2010).

Following in-depth discussions about what a business model is, researchers now broadly agree that business models are structural models for organizations (Amit & Zott, 2001) that can provide a holistic and systemic view of how companies manage and develop their business (Spieth, Schneckenberg, & Ricart, 2014; Zott et al., 2011).

Table 2-1 Definitions of business model (adapted from Geissdoerfer et al., 2018)

SOURCE	DEFINITION
Timmers, 1998	The business model is “an architecture of the product, service and information flows, including a description of the various business actors and their roles; a description of the potential benefits for the various business actors; a description of the sources of revenues” (p. 4)
Chesbrough and Rosenbloom, 2002	The business model is “the heuristic logic that connects technical potential with the realization of economic value” (p. 529). “The business model provides a coherent framework that takes technological characteristics and potentials as inputs and converts them through customers and markets into economic outputs” (p. 532).
Magretta, 2002	“[Business models] are, at heart, stories that explain how enterprises work [and answer the following questions,] Who is the customer? And what does the customer value? It also answers the fundamental question every manager must ask: How do we make money in this business? What is the underlying economic logic that explains how we can deliver value to the customers at an appropriate cost?” (p. 87)

<p>Knyphausen-Aufsess and Meinhardt, 2002</p>	<p>A business model is a simplified representation of a profit aimed venture, consisting of its essential elements and their interconnections.</p>
<p>Richardson, 2008</p>	<p>A business model is “a conceptual framework that helps to link the firm's strategy, or theory of how to compete, to its activities, or execution of the strategy. The business model framework can help to think strategically about the details of the way the firm does business.” (p. 135) “The three major components of the framework the value proposition, the value creation and delivery system, and value capture reflect the logic of strategic thinking about value. The essence of strategy is to create superior value for customers and capture a greater amount of that value than competitors.” (p. 138)</p>
<p>Doganova and Eyquem-Renault, 2009</p>	<p>“The business model is a narrative and calculative device that allows entrepreneurs to explore a market and plays a performative role by contributing to the construction of the techno-economic network of an innovation.” (p. 1559)</p>
<p>Baden-Fuller and Morgan, 2010</p>	<p>“business models have a multivalent character as models. They can be found as exemplar role models that might be copied or presented as nutshell descriptions of a business organisation: simplified, short-hand descriptions equivalent to scale models. We can think of them not only as capturing the characteristics of observed kinds in the world (within a taxonomy), but also as abstract ideal types (in a typology)” (p. 167)</p>
<p>Casadesus-Masanell and Ricart, 2010</p>	<p>“A business model is [...] a reflection of the firm's realized strategy” (p. 195).</p>

<p>Osterwalder and Pigneur; 2010</p>	<p>“A business model describes the rationale of how an organisation creates, delivers, and captures value.”(p. 14)</p>
<p>Teece, 2010</p>	<p>“A business model articulates the logic, the data and other evidence that support a value proposition for the customer, and a viable structure of revenues and costs for the enterprise delivering that value” (p. 179).</p>
<p>Zott and Amit, 2010</p>	<p>“we conceptualize a firm's business model as a system of interdependent activities that transcends the focal firm and spans its boundaries. The activity system enables the firm, in concert with its partners, to create value and also to appropriate a share of that value [and is defined by] design elements - content, structure and governance - that describe the architecture of an activity system; and design themes - novelty, lock-in, complementarities and efficiency e that describe the sources of the activity system's value creation.” (p. 216).</p>
<p>Geissdoerfer et al., 2016</p>	<p>“we describe business models as simplified representations of the elements e and interactions between these elements e that an organisational unit chooses in order to create, deliver, capture, and exchange value.” (p. 1218)</p>
<p>Wirtz et al., 2016</p>	<p>“A business model is a simplified and aggregated representation of the relevant activities of a company. It describes how marketable information, products and/or services are generated by means of a company's value-added component. In addition to the architecture of value creation, strategic as well as customer and market components are taken into consideration, in order to achieve the superordinate goal of generating, or rather, securing the competitive advantage. To fulfil this latter purpose, a current business model should always be</p>

	critically regarded from a dynamic perspective, thus within the consciousness that there may be the need for business model evolution or business model innovation, due to internal or external changes over time.” (p.41)
Massa et al., 2017	“a business model is a description of an organisation and how that organisation functions in achieving its goals (e.g., profitability, growth, social impact, ...).” (p. 73)

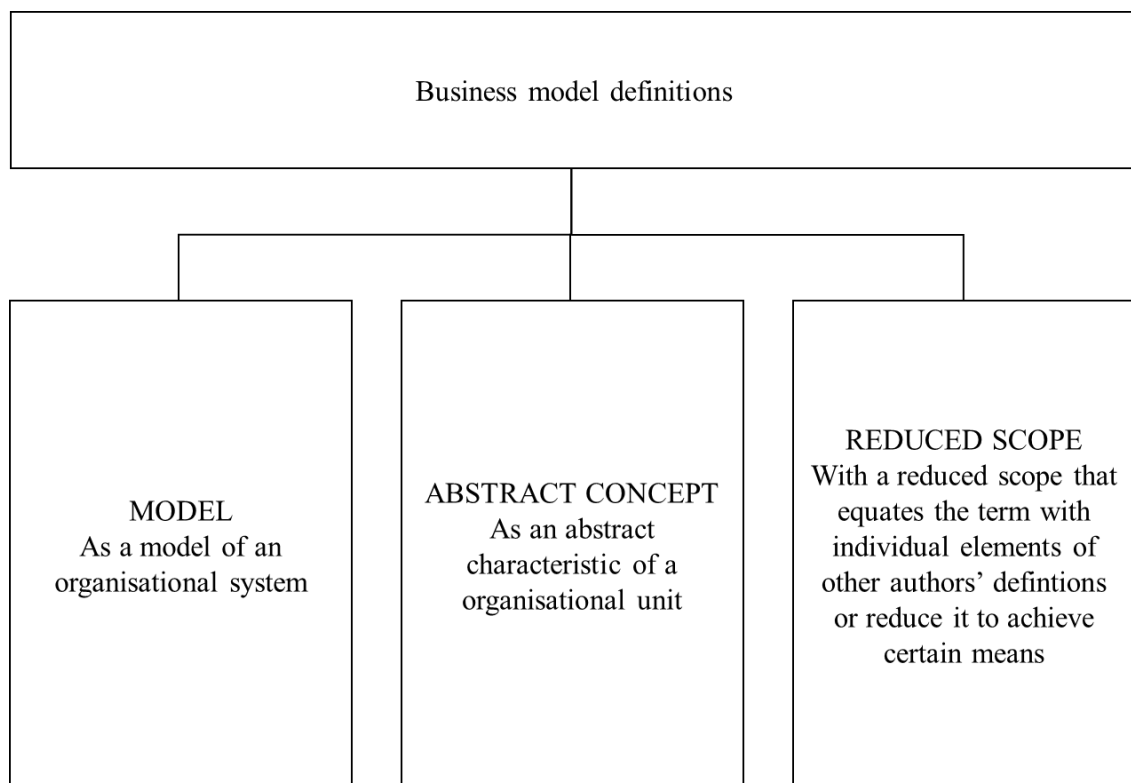


Figure 2-1 Three types of business model definitions (Geissdoerfer et al., 2018)

2.3 The Value Flow Perspective

In the literature it is possible to find different perspectives with which to look at business models. The concept of value recurs in most definitions (Geissdoerfer et al., 2018; Arenas, 2019) and, starting from this, four fundamental value dimensions of the business models emerge (Bocken et al., 2014; Boons & Lüdeke-Freund, 2013; Doganova & Eyquem-Renault, 2009; Osterwalder & Pigneur, 2005; Shafer et al., 2005):

- value proposition referring to the intrinsic value of the product / service offered by the company;
- value network referring to relations with the network, including customers, suppliers and other actors;
- value capture referring to the flows of costs and revenues;
- value creation and delivery in reference to the key activities, resources, channels, technology and models that create value, and the way in which this is then (re) distributed.

The value-based view defines the business model as a "representation of how a company creates and delivers value, for both the customer and the company" (Johnson, 2010), or as "the way organizations or individuals communicate, create, deliver and capture value from a value proposition "(Abdelkafi, 2012). Bocken et al. (2014), considering the value perspective and combining the studies by Richardson (2008) and Osterwalder & Pigneur (2005), propose a conceptual framework that includes (Figure 2-2):

- value creation and delivery which, according to the authors, is at the heart of any business model,
- value proposition which typically concerns the offer of products and services to generate an economic return;
- value capture which considers how to obtain revenues (from the supply of goods, services or information) to users and customers (Teece, 2010).



Figure 2-2 Value dimensions (Bocken et al., 2014)

As noted by Abdelkafi and Makhotin (2013a), however, the value flow perspective is not the only one. In addition to this it is possible to find another perspective focused on activities. The activity-based view describes the business model as the way in which assets and resources are used to do business and achieve growth (Baden-Fuller & Morgan, 2010). Another perspective, similar to that outlined for value, is the one that emerges by combining Osterwalder (2004) and Doganova and Eyquem-Renault (2009), which makes it possible to distinguish the elements of a generic concept of business model in:

- Value proposition: what value is incorporated in the product / service offered by the company;
- Supply chain: how upstream relationships with suppliers are structured and managed;
- Customer interface: how downstream relationships with customers are structured and managed;
- Financial model: costs and benefits of the first 3 three elements and their distribution among the stakeholders of the business model.

From an organizational point of view, considering Chesbrough (2010) and Osterwalder (2004), Joyce and Paquin (2016) distinguish three key aspects of business models:

1. How key components and functions, or parts, are integrated to provide customer value;
2. How these parts are interconnected within the organization, throughout its supply chain and stakeholder networks; And
3. How the organization generates value or creates profit, through those interconnections.

According to the authors, when an organization's business model is clearly understood it can provide a vision of the alignment between high-level strategies and underlying actions, supporting strategic competitiveness (Casadesus-Masanell and Ricart, 2010).

According to Schneider and Clauß (2019) it is also possible to distinguish two further conceptual perspectives on business models.

Firstly, elements-based perspective: i.e. the elements-based perspective assumes that a business model is a configuration of distinct elements (Aversa et al., 2015; Baden-Fuller & Haefliger, 2013). This research stream offers practical tools for business model design, such as the Business Model Canvas (Osterwalder & Pigneur, 2010). In this perspective, we find classifications in archetypes such as the business model navigator (Gassmann, Frankenberger, & Csik, 2013), or tools for measuring business models and the extent of their innovation (Clauss, 2017; Spieth & Schneider, 2016).

Secondly, activity system perspective, that is the perspective of the activity system, assumes that a business model is a system of interrelated and interdependent activities that allows a company to create value and competitive advantage (Casadesus-Masanell & Ricart, 2010; Zott & Amit, 2010). In this perspective, business models provide a holistic and systemic understanding of how activities for value creation are orchestrated (Massa and Tucci, 2014).

The business system perspective, as well as the organizational one, links business models to business strategy. It assumes that particular activities and their orchestration within a business model are consequences of fundamental strategic choices made by managers (Casadesus-Masanell & Ricart, 2010). Such choices include policy choices (for example, general lines of action), asset choices (for example, investments in tangible assets) and governance choices (for example, structural and general contractual arrangements). As a result of these choices and their strengthening effects, stable business systems emerge that represent the dominant operating logic of a company (Casadesus-Masanell & Ricart, 2010; Demil & Lecocq, 2010).

In conclusion, starting from Chesbrough and Rosenbloom (2002) and bringing together the different perspectives described, it can be said that the functions of the business model are:

- To articulate the value proposition;
- To identify a market segment;
- To define the structure of the value chain;
- To estimate the cost structure and profit potential of supply production;
- To describe the position of the company in the context of the value network;
- To formulate the competitive strategy.

2.4 Definitions of Business Model for Sustainability

A Business Model for Sustainability (BMfS) “incorporates sustainability as an integral part of the company's value proposition and value creation logic” (Abdelkafi & Täuscher, 2016; p. 75). BMfS goes “beyond delivering economic value and include a consideration of other forms of value for a broader range of stakeholders” (Bocken et al., 2013; p. 484), as for example

customers, investors and shareholders, employees, suppliers and partners, the environment and the society.

The literature on BMfS is recent and still fragmented (Lüdeke-Freund & Dembek, 2017). However, it is varied and rich in nuances. The BMfS was first defined as a “model where sustainability concepts shape the driving force of the firm and its decision making” (Stubbs & Cocklin, 2008; p. 103).¹ A few studies provide a collection of the definitions of the concept of BMfS (Boons & Lüdeke-Freund, 2013; Geissdoerfer et al., 2018; Schaltegger et al., 2016). Table 2-2 summarizes the most important definitions of BMfS.

Table 2-2 Definitions of Business Model for Sustainability

FONTE	DEFINIZIONE
Stubbs e Cocklin, 2008	A sustainable business model is “a model where sustainability concepts shape the driving force of the firm and its decision making [so that] the dominant neoclassical model of the firm is transformed, rather than supplemented, by social and environmental priorities.” (p. 103)
Lüdeke-Freund (2010)	The business model for sustainability “should create competitive advantage through superior customer value (strategic requirement) and contribute to a sustainable development of the company and society (normative requirement), where sufficiency, efficiency and consistency can be strategic and normative orientations for innovation.” (p.17)
Garetti and Taisch, 2012	Sustainable business models “have a global market perspective, taking into account the development of new industrialised countries as well as the need for more sustainable products and services.” (p. 88)
Schaltegger et al., 2012	Sustainable business models “create customer and social value by integrating social, environmental, and business activities” (p. 112)

¹ Few studies call the concept “business model for sustainable innovation” (Boons & Lüdeke-Freund, 2013; Boons et al., 2013) or “sustainable business model” (F. Birkin et al., 2009; N. Bocken et al., 2013; Upward & Jones, 2016; Wells, 2013). To solve the terminology issue, in this study the concept is called Business Model for Sustainability as agreed by most of the authors (Abdelkafi & Täuscher, 2016; Cosenz, Rodrigues, & Rosati, 2020; Evans et al., 2017; Roome & Louche, 2016; Schaltegger, Hansen, et al., 2016; Schaltegger et al., 2012; Schaltegger, Lüdeke-Freund, et al., 2016).

Bocken et al., 2013	<p>“Sustainable business models seek to go beyond delivering economic value and include a consideration of other forms of value for a broader range of stakeholders.” (p. 484)</p>
Wells, 2013	<p>A business model for sustainability “would assist in the achievement of sustainability [by] following major principles [...] for sustainability”, which Wells defines as 1) resource efficiency, 2) social relevance, 3) localisation and engagement, 4) longevity, 5) ethical sourcing, and 6) work enrichment. (p. 65)</p>
Boons e Lüdeke-Freund, 2013	<p>A sustainable business model is different from a conventional one through four propositions, “1. The value proposition provides measurable ecological and/or social value in concert with economic value [...] 2. The supply chain involves suppliers who take responsibility towards their own as well as the focal company's stakeholders [...] 3. The customer interface motivates customers to take responsibility for their consumption as well as for the focal company's stakeholders. [...] 4. The financial model reflects an appropriate distribution of economic costs and benefits among actors involved in the business model and accounts for the company's ecological and social impacts” (p. 13)</p>
Upward e Jones, 2015	<p>A (strongly) sustainable business model “is the definition by which an enterprise determines the appropriate inputs, resource flows, and value decisions and its role in ecosystems, [in a way that] sustainability measures [which] are those indicators that assess the outputs and effects of business model decisions [...] might be claimed as successfully sustainable.” (p. 98)</p>
Abdelkafi e Tauscher, 2016	<p>Sustainable business models, “incorporate sustainability as an integral part of the company's value proposition and value creation logic. As such, [Business models for Sustainability] provide value to the customer and to the natural environment and/or society.” (p. 75)</p>
Geissdoerfer et al., 2016	<p>“We define a sustainable business model as a simplified representation of the elements, the interrelation between these elements, and the interactions with its stakeholders that an organisational unit uses to create, deliver, capture, and exchange sustainable value for, and in collaboration with, a broad range of stakeholders.” (p. 1219)</p>

Schaltegger et al. 2016 [2]	“A business model for sustainability helps describing, analyzing, managing, and communicating (i) a company’s sustainable value proposition to its customers, and all other stakeholders, (ii) how it creates and delivers this value, (iii) and how it captures economic value while maintaining or regenerating natural, social, and economic capital beyond its organizational boundaries.”
Evans et al., 2017	Sustainable business models are described with five propositions, “1. Sustainable value incorporates economic, social and environmental benefits conceptualised as value forms. 2. Sustainable business models require a system of sustainable value flows among multiple stakeholders including the natural environment and society as primary stakeholders. 3. Sustainable business models require a value network with a new purpose, design and governance. 4. Sustainable business models require a systemic consideration of stakeholder interests and responsibilities for mutual value creation. 5. Internalizing externalities through product-service systems enables innovation towards sustainable business models.” (p. 5)

A complete definition of BMfS should consider the concept of both social and environmental value as suggested by Schaltegger et al. (2012), Bocken et al. (2013), Boons & Lüdeke-Freund (2013), Abdelkafi & Täuscher (2016), Geissdoerfer et al. (2016), Evans et al. (2017). The decision making logic of a BMfS should be based on sustainable development (Birkin et al., 2009a; Birkin et al., 2009b; Stubbs & Cocklin, 2008) and the profit generation should not to be the predominant issue (Bocken et al., 2014; Boons & Lüdeke-Freund, 2013; Dentchev et al., 2016; Evans et al., 2017; Geissdoerfer et al., 2016). It follows a proposal for a new BMfS definition:

“A Business Model for Sustainability (BMfS) is a business model that creates, delivers, and captures economic, social and environmental value. The decision making logic of a BMfS is not focused only on profit generation, but rather it considers society and environment as essential and most influential stakeholders”.

2.5 Business Model for Sustainability characteristics

Despite using different names to refer to the same concept, from the literature emerges that a BMfS integrates sustainability goals and principles into the value flow, especially in

value proposition, value creation, and value capture activities of companies (Boons & Lüdeke-Freund, 2013). The adoption of a BMfS could lead to growth opportunities for companies, cost reduction, and increase of competitive advantage (Bocken et al., 2014). For this reasons, BMfS is a solution to help companies meet their economic and sustainability goals simultaneously. Without any business model innovation towards BMfS, any sustainability innovation could take place successfully (Brozovic, 2020; Geissdoerfer et al., 2018; Nosratabadi et al., 2019).

According to Lozano (2018) a BMfS is characterised firstly by an input value, including material resources and energy, economic value, environmental value, and human resources; secondly, by an output value, including products and services, again environmental value, and human resources, and value added based on resource efficiency; finally, there are system elements which link the inputs and outputs and generate waste. Another relevant component are the stakeholders that could be internal, interconnecting or external. Therefore, in BMfS a key role is played by the stakeholder integration (Amankwah-Amoah et al., 2018; Hall & Wagner, 2012).

To sum up, the aim of a BMfS is to manage multi-stakeholders in a proactive way (Jonkutė & Staniškis, 2016) and to reduce the companies' damaging effects on the environment and society (Charles et al., 2017), by innovating and adopting a long-term perspective (Bansal & DesJardine, 2014; Lozano, 2008; Nosratabadi et al., 2019). Therefore, the essential characteristics of a BMfS are:

- the integration of sustainable value, namely economic, environmental and social, in business the value proposition, delivery and capture;
- the stakeholder engagement, integration, and management;
- a long-term business vision.

2.6 Business Model for Sustainability reviews gap

The topic of Business Model for Sustainability is relatively recent and the number of publications is rapidly grown in the last years as it is shown in Figure 2-3. From the literature (Lüdeke-Freund & Dembek, 2017) it emerges that there is still need of an in-depth review on the topic of BMfS. The gap identified in previous literature reviews is twofold. On one hand, recent literature reviews investigate a precise aspect of BMfS such as the operationalization (Comin et al., 2019), failure and success (Nosratabadi et al., 2019), competitiveness of firms (Di Tullio et al., 2018), and link to the circular economy (Centobelli et al., 2020) or focus on a specific industry, for instance the agri-food sector (Barth et al., 2017) and the fashion industry (Thorisdottir & Johannsdottir, 2019). On the other hand, reviews performed through bibliometric methods are still missing in literature, as systematic methodologies are the most

popular. Conversely, the aim of this research is to present a complete collection of the literature on BMfS and identify the main research streams that underlie this prolific field. Therefore, in this study the literature on BMfS is investigated through a co-citation analysis based on factor analysis and multidimensional scaling methods. An analysis carried out through bibliometric methods could reduce the bias and offer a higher level of objectivity (Van Raan, 1996) to the BMfS research field.

The literature review is supposed to answer the following research questions:

- What is the intellectual structure of the literature on BMfS?
- What are the main research streams that constitute the BMfS research field?
- What is the conceptual framework that depicts the literature and suggests future research directions?

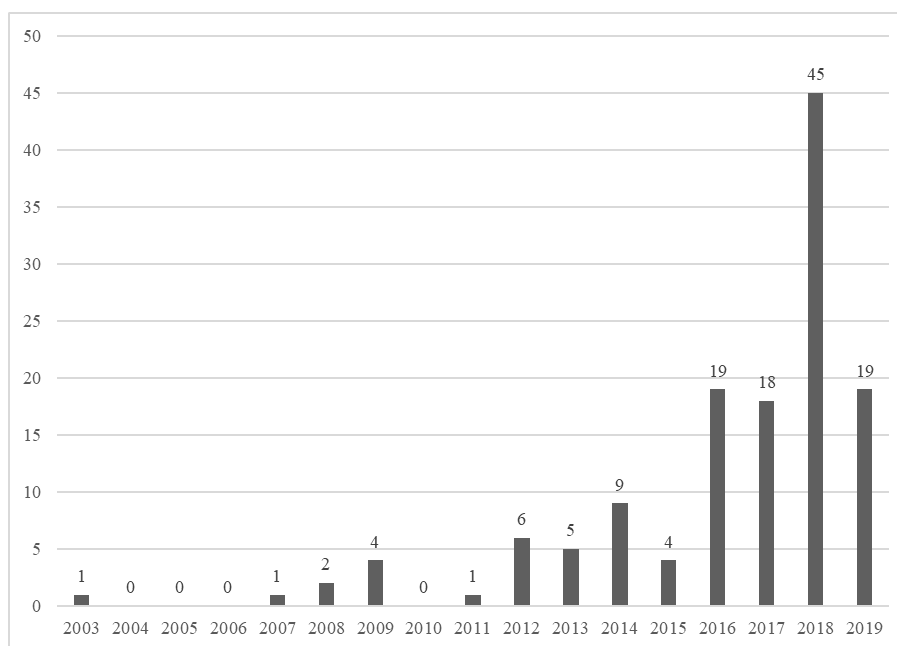


Figure 2-3 Selected publications per year from 2003 to August 2019

2.7 Literature review methodology

In this literature review, the state of the art and the evolution of Business Model for Sustainability field are examined. Bibliometrics can be defined as “the mathematical and statistical analysis of bibliographic records” (Pritchard, 1969) and are often employed to explore the underlying structure of a research field. The main advantage of a literature review performed through bibliometric techniques is the fact that it provides quantitative accuracy into the subjective evaluation of literature. Conversely, narrative literature reviews often lack rigor

due to the bias of the researchers (Tranfield et al., 2003). For this reason, bibliometric techniques are a more objective alternative to literature review and they have been already applied in several management studies (Agostini & Nosella, 2019; Fraccascia et al., 2018; Vogel & Güttel, 2013).

The research grounds on a co-citation analysis. Co-citation analysis is one of the most used and validated bibliometric method: the connection of documents or authors through co-citation is reliable (Zupic & Čater, 2015). Particularly, the analysis shows what the intellectual structure of literature is and which studies are the central, peripheral, or bridging researchers in this field (Zupic & Čater, 2015). For conducting the bibliometric literature review, the workflow shown in Figure 2-4 is followed (Zupic & Čater, 2015).

2.7.1 Selection of Publications

The preliminary phase of the analysis is a systematic review of the literature in order to create the publications' set. Papers that focus on Business Model for Sustainability are identified through keywords selected on the basis of the Triple Bottom Line (Elkington, 1998) approach to sustainability. Particularly, this study aims to consider also the research fields where sustainability is not so evident or appears in other forms. For this reason, also business model related to corporate social responsibility, shared value, and blended value are considered. Keywords solely related to the environment and the ecology are not used in order not to direct research only towards the environmental aspect of sustainability. Hence, four combinations of keywords are adopted, specifically: `sustainab* AND "business model*"`; `"corporate social responsibility" AND "business model*"`; `"shared value" AND "business model*"`; `"blended value" AND "business model*"`.

Two databases, namely Scopus and Web of Science, are employed. Publications are filtered as follows. As regards subject area, all the areas related to business and management are maintained (e.g. Business, Management and Accounting, Economics, Econometrics and Finance, Decision Sciences, etc.). The document type is set to: article, article in press, and review. Concerning language, only publications in English are considered. No temporal limits are used. After the removal of duplicates (both Scopus and Web of Science may contain the same study), a set of 1744 publications is obtained. Firstly, the 1744 articles are excluded through a first title and abstracts screening, making use of automatic keyword research tools.

The tool employed is an Excel table and searched words are for example a combination of the keywords: `"environment" or "green" and "soci" or "includi"`, that should appear at the same time according to the Triple Bottom Line (Elkington, 1998) principle. Automatic keyword research tools are useful specially to identify works investigating sustainability as a synonymous of `"resilience" or "duration"`. However, these automatic tools are used particularly

for inclusion criteria: before deciding whether to exclude a paper, its abstract is quickly read. After this preliminary exclusion phase, the output is a set of 667 articles, whose title and abstracts have been read. In this second step the exclusion criteria are mostly related to the topic of business model. Particularly, papers examining supply chain or operations as main topic are excluded, as well as those relating to non-company business model. During the selection phase, greater attention was paid to self-citations by the authors to prevent biased results. As a result, the set is reduced to 196 papers, that are fully read and excluded if not relevant to the research topic of BMfS, according to the previous exclusion criteria. The final set consists of 134 articles. The process of articles selection is explained in Figure 2-5.

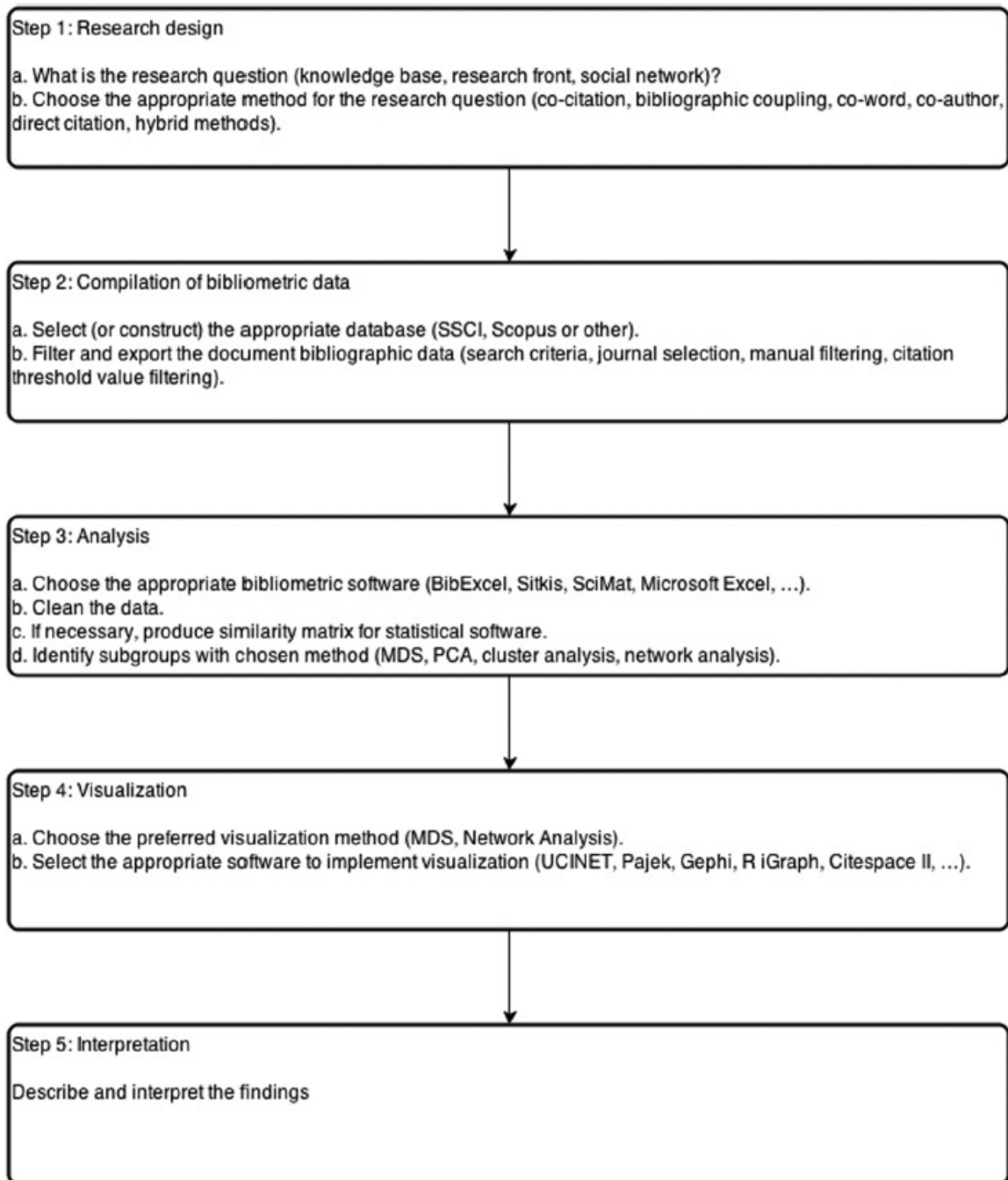


Figure 2-4 Workflow for conducting science mapping with bibliometric methods

2.7.2 Steps in Co-Citation Analysis

Different steps constitute the co-citation analysis process (McCain, 1990) shown in Figure 2-6. After the systematic review of the papers and the composition of the set of the articles, a citation matrix is created using the set of 134 articles. The matrix is useful to report the citation frequencies. Particularly, reference lists of the 134 articles are scanned to find citations. Through the citation matrix, co-citation frequencies are then retrieved. The initial set of 134 publications goes through some reductions. Although citing other studies belonging to the set, some articles are eliminated because that they do not receive any citations. Conversely, some articles are cited by others, but not simultaneously with any other study. In this way they do not contribute to the co-citation analysis and therefore they are excluded. Hence, the set is reduced to 82 publications listed in Table 2.3 and they form the definitive core-set literature on Business Model for Sustainability.

The next step is the compilation of the co-citation matrix with the publications belonging to the core-set. This last matrix has identically publications on the rows and columns (McCain, 1990). The co-citation matrix is then transformed into a matrix of Pearson's correlation coefficients.

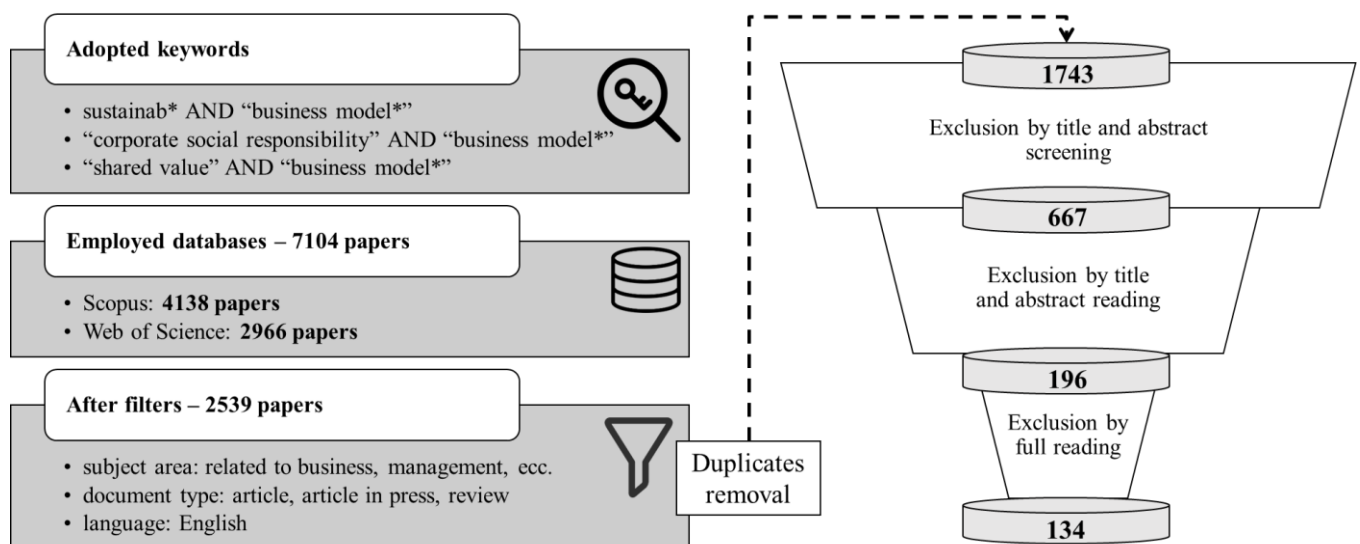


Figure 2-5 The systematic process of papers' selection

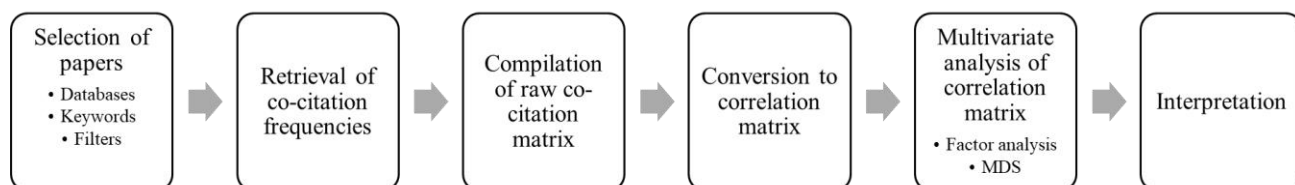


Figure 2-6 Steps in co-citation analysis (McCain, 1990)

Table 2-3 The core-set of articles

Author (Year)	# of citations	Typology	Methodology
Boons and Lüdeke-Freund (2013)	74	Literature review	-
Bocken et al. (2014)	71	Conceptual study	-
Stubbs and Cocklin (2008)	65	Empirical study	Case study
Schaltegger et al. (2012)	41	Conceptual study	-
Schaltegger et al. (2016) [1]	34	Editorial	-
Upward and Jones (2016)	33	Conceptual study	-
Joyce and Paquin (2016)	30	Conceptual study	-
Boons et al. (2013)	28	Conceptual study	-
Bocken et al. (2013)	26	Empirical study	Case study
Schaltegger et al. (2016) [2]	24	Conceptual study	-
Geissdoerfer et al. (2016)	20	Conceptual study	-
Rauter et al. (2017)	20	Empirical study	Case study
Evans et al. (2017)	19	Conceptual study	-
Abdelkafi and Täuscher (2016)	18	Conceptual study	-
Birkin et al. (2009) [1]	14	Empirical study	Survey
Birkin et al. (2009) [2]	14	Empirical study	Case study

França et al. (2017)	14	Conceptual study	-
Roome and Louche (2016)	14	Empirical study	Case study
Hart and Milstein (2003)	13	Conceptual study	-
Lüdeke-Freund and Dembek (2017)	13	Literature review	-
Baldassarre et al. (2017)	11	Conceptual study	-
Girotra and Netessine (2013)	11	Conceptual study	-
Kurucz et al. (2017)	10	Conceptual study	-
Jolink and Niesten (2015)	9	Conceptual study	-
Høgevold (2011)	8	Empirical study	Case study
Ritala et al. (2018)	8	Conceptual study	-
Geissdoerfer et al. (2018) [2]	7	Literature review	-
Morioka et al. (2018)	7	Empirical study	Case study
Høgevold and Svensson (2012)	6	Empirical study	Case study
Lewandowski (2016)	6	Literature review	-
Michelini and Fiorentino (2012)	6	Empirical study	Case study
Witjes and Lozano (2016)	6	Conceptual study	-
Dentchev et al. (2018)	5	Conceptual study	-
Kozłowski et al. (2018)	5	Empirical study	Action research
Todeschini et al. (2017)	5	Empirical study	Case study
Antikainen and Valkokari (2016)	4	Empirical study	Case study
Biloslavo et al. (2018)	4	Conceptual study	-
Høgevold et al. (2014)	4	Empirical study	Case study
Høgevold et al. (2015)	4	Empirical study	Case study
Manninen et al. (2018)	4	Empirical study	Case study
Mihalič et al. (2012)	4	Empirical study	Survey
Morioka et al. (2018)	4	Conceptual study	-
Yip and Bocken (2018)	4	Conceptual study	-

Brehmer et al. (2018)	3	Empirical study	Case study
Breuer et al. (2018)	3	Conceptual study	-
Buffa et al. (2018) (2018) [2]	3	Empirical study	Survey
Geissdoerfer et al. (2018) [1]	3	Empirical study	Case study
Inigo et al. (2017)	3	Empirical study	Case study
Long et al. (2018)	3	Empirical study	Case study
Ludeke-Freund et al. (2018)	3	Conceptual study	-
Neumeyer and Santos (2018)	3	Empirical study	Case study
Palomares-Aguirre et al. (2018)	3	Empirical study	Case study
Pedersen et al. (2018)	3	Empirical study	Survey
Sousa-Zomer and Cauchick-Miguel (2018)	3	Empirical study	Case study
Stubbs (2017)	3	Empirical study	Case study
Täuscher and Abdelkafi (2018)	3	Empirical study	Case study
Wells (2013)	3	Conceptual study	-
Baumgartner and Rauter (2017)	2	Conceptual study	-
Bolton and Hannon (2016)	2	Empirical study	Case study
Franceschelli et al. (2018)	2	Empirical study	Case study
Gallo et al. (2018)	2	Empirical study	Case study
Høgevoid et al. (2016)	2	Empirical study	Case study
Jhunhunwala (2014)	2	Empirical study	Case study
Oskam et al. (2018)	2	Empirical study	Case study
Pal and Gander (2018)	2	Empirical study	Case study
Piscicelli et al. (2018)	2	Empirical study	Case study
Tencati and Zsolnai (2012)	2	Conceptual study	-
Battistella et al. (2018)	1	Empirical study	Case study
Bocken et al. (2018)	1	Empirical study	Case study
Bohdanowicz and Zientara (2009)	1	Empirical study	Case study
Calabrese et al. (2018) [1]	1	Literature review	-
Davies and Chambers (2018)	1	Empirical study	Case study
Diaz Lopez et al. (2019)	1	Empirical study	Case study

Dixon and Clifford (2007)	1	Empirical study	Case study
Jonkutė and Staniškis (2016)	1	Conceptual study	-
Karlsson et al. (2018)	1	Empirical study	Action research
Olofsson et al. (2018)	1	Empirical study	Case study
Rajala et al. (Rajala et al., 2016)	1	Empirical study	Case study
Sousa-Zomer and Cauchick-Miguel (2019)	1	Empirical study	Case study
Spieth et al. (2019)	1	Empirical study	Case study
Svensson et al. (2016)	1	Empirical study	Survey
Wagner and Svensson (2014)	1	Empirical study	Case study

2.7.3 Tools and Data Analysis

Two multivariate techniques are employed to assess the intellectual structure of the research field, namely Factor Analysis and Multidimensional Scaling. This twofold analysis has been already applied and validated in management literature (Annarelli & Nonino, 2016; Nerur et al., 2008).

On one hand, Factor Analysis is a group of statistical techniques applied to simplify complex set of data (Kline, 2014). In this specific case, it is used to determine subsets of publications loading on the same factor and consequently investigating a similar topic (McCain, 1990). In this research, Principal Components Analysis with varimax rotation is accomplished. On the other hand, Multidimensional Scaling provides an intuitive visual representation of the similarity between articles (Hoffman & Holbrook, 1993; Ramos-Rodríguez & Ruíz-Navarro, 2004).

Table 2.4 shows the set of factors resulting from the factor analysis. A Scree Test is applied to decide how many extracted factors to consider. The factor analysis results in a six-factor solution. Through the six factors considered, the total variance explained is almost 80% (79.8%). Specific criteria are applied to factor loadings to link articles to the specific factor. More in detail, articles with all factor loadings lower than 0.4 are excluded, that is articles which do not load on any factor. Articles that have only one factor loading higher than 0.4 are linked to the corresponding factor. Finally, articles loading on more than one factor are maintained only if the difference between factor loadings is higher than 0.15. Articles are assigned to a factor considering both the factor analysis results and conceptual foundation as indicated by Hair et al. (1998). In this way, all articles relevant to the Business Model for Sustainability topic are maintained (Table 2.5).

Table 2-4 Factors extracted through the principal component analysis

Factor	Value	Percent	Cum %
1	44.519	54.3	54.3
2	8.269	10.1	64.4
3	3.867	4.7	73.2
4	3.329	4.1	73.2
5	3.004	3.7	76.8
6	2.428	3.0	79.8
7	1.992	2.4	82.2
8	1.567	1.9	84.1
9	1.444	1.8	85.9
10	1.357	1.7	87.5

Table 2-5 Factor loadings of publications belonging to the core-set

Author (Year)	Factor					
	1	2	3	4	5	6
Bocken et al. (2014)	0,880					
Boons and Lüdeke-Freund (2013)	0,879					
Stubbs and Cocklin (2008)	0,873					
Schaltegger et al. (2016) [1]	0,865					
Upward and Jones (2015)	0,834					
Schaltegger et al. (2012)	0,824					
Bocken et al. (2013)	0,791					
Hart and Milstein (2003)	0,788					
Abdelkafi and Täuscher (2015)	0,787					
Boons et al. (2013)	0,786					
Joyce and Paquin (2016)	0,785					
Rauter et al. (2017)	0,781					
Roome and Louche (2016)	0,775					
Wells (2013)	0,770					
Schaltegger et al. (2016) [2]	0,770					

Michellini and Fiorentino (2012)	0,761				
Geissdoerfer et al. (2016)	0,758				
França et al. (2017)	0,752				
Jolink and Niesten (2015)	0,747				
Girotra and Netessine (2013)	0,738				
Tencati and Zsolnai (2012)	0,721				
Birkin et al. (2009) [1]	0,714				
Birkin et al. (2009) [2]	0,705				
Pedersen et al. (2018)	0,694				
Kurucz et al. (2017)	0,674				
Karlsson et al. (2018)	0,665				
Baumgartner and Rauter (2017)	0,659				
Evans et al. (2017)	0,647				
Lüdeke-Freun and Dembek (2017)	0,612				
Spieth et al. (2019)	0,473				
Rajala et al. (2016)	0,422				
Sousa-Zomer and Cauchick-Miguel (2019)	-0,568				
Morioka et al. (2018)	-0,607				
Mihalič et al. (2012)	-0,696				
Jhunjhunwala (2014)	-0,834				
Svensson et al. (2016)	-0,837				
Høgevold et al. (2014)	-0,866				
Davies and Chambers (2018)		0,974			
Franceschelli et al. (2018)		0,952			
Høgevold et al. (2016)		0,797			
Pal and Gander (2018)		0,797			
Stubbs (2017)		0,777			
Sousa-Zomer and Cauchick-Miguel (2018)		0,761			
Buffa et al. (2018) [2]		0,691			
Neumeyer and Santos (2018)		0,669			
Palomares-Aguirre et al. (2018)		0,669			
Biloslavo et al. (2018)		0,577			
Olofsson et al. (2018)			0,929		

Long et al. (2018)				0,697		
Bocken et al. (2018)					-0,621	
Manninen et al. (2018)					-0,805	
Antikainen and Valkokari (2016)					-0,809	
Diaz Lopez et al. (2019)					-0,833	
Piscicelli et al. (2018)						-0,637
Bolton and Hannon (2016)						-0,767

Note. Only factor loadings higher than 0.4 are reported.

2.8 Findings from Factor Interpretation

For every factor a specific subfield of Business Model for Sustainability (BMfS) topic is identified. Particularly, six subfields are recognised, namely: BMfS elements and structure; applications of BMfS; different types of BMfS; BMfS transition process; circularity as sustainability; technical aspects of BMfS innovation.

2.8.1 BMfS elements and structure

Most of the publications (31 articles) load on the first factor, which identifies the subfield related to the BMfS structure and elements' definition. Particularly, the papers belonging to this subfield propose components, attributes, dimensions, requirements, drivers, and challenges to the theoretical BMfS structure and architecture definition.

A first group of authors focus on the concept of sustainable value as main element composing a BMfS, as well as challenges and drivers related to its structure. One of the groundbreaking theory on BMfS is the framework created by Hart and Milstein (Hart & Milstein, 2003), which links the sustainable value to the internal and external sustainability challenges and to the firm strategies: i.e., to develop the sustainable competencies of the future, to minimize waste and emissions from operations, to create a shared roadmap for meeting unmet needs, to integrate stakeholder views into business process. Moreover, Evans et al. (Evans et al., 2017) depict sustainable value forms, as well as the challenges of BMfS, namely respect of Triple Bottom Line (Elkington, 1998) approach, mind-set, resources, technology innovation, external relationships, methods, and tools. Finally, Bocken et al. (2013) develop a value mapping tool to support companies towards sustainable business modelling by understanding their three form of sustainable value (i.e. captured, destroyed and opportunity) for their four major stakeholder groups (environment, society, customer, and network actors). Regarding drivers, Rauter et al. (2017) in their work identify the leadership as a relevant driver in developing BMfS, as well as the legal regulation, the organisational culture, and the coherence

between corporate strategy and the business model. Conversely, Spieth et al. (2019) propose responsible efficiency, impact complementarities, shared values, and integration novelties as four BMfS value drivers.

A second group of authors investigates BMfS architecture in terms of attributes, elements, principles, or dimensions. One of the main pillar of conceptualization of BMfS architecture is the work of Stubbs & Cocklin (2008), which identifies BMfS cultural and structural attributes: for instance reduced consumption, sustainability mind-set, Triple Bottom Line (Elkington, 1998) reporting, closed loop systems. Secondly, Boons & Lüdeke-Freund (2013) define normative requirements to sustainably innovate the business model related to the following business model elements: value proposition, supply chain, customer interface, financial model. Regarding the BMfS architecture, Wells (2013) highlight resource efficiency, social relevance, longevity, localisation and engagement, ethical sourcing and work enrichment as principles of a BMfS. Moreover, the architecture is composed by supply chain, assets and value creation and capture, while BMfS components are product/service systems, open source innovation and a design for remanufacture and circular value systems. Abdelkafi and Tauscher (2016) approach the BMfS by a system perspective by considering the three business model dimensions: customer value proposition, value creation, and value capture. The authors show how value dimensions affects the business model and the business drivers as reputation and brand value, risk and cost reduction, and employer attractiveness. Upward and Jones (2016) define the Strongly Sustainable Business Model, that describes the business model elements of financial viability, as well as social benefits and environmental regeneration. The concepts behind a Strongly Sustainable Business Model are: stakeholders, governance, biomimicry, and industrial ecology.

A third group of authors approach the topic of BMfS elements and structure from a more functional point of view. To approach BMfS structure by a more practical perspective, BMfS archetypes are introduced by Bocken and colleagues (2014). They identify the main type of business model innovation and consequent archetype groupings. Firstly, the technological grouping with the archetypes: maximise material and energy efficiency, create value from waste, substitute with renewables and natural processes. Secondly, the social grouping includes the archetypes: deliver functionality rather than ownership, adopt a stewardship role, and encourage sufficiency. Finally, the social grouping comprehends: repurpose for society and environment and develop scale up solutions. Secondly, both the works of França et al. (2017) and Kurucz et al. (2017) refer to the Framework for Strategic Sustainable Development (FSSD). On one hand, the FSSD is combined with the Business Model Canvas in a new tool to sustainable business model innovation facilitating business scalability, risk avoidance, and sustainability success (França et al., 2017). On the other hand, a conceptual model of relational

leadership practices and capabilities is created by Kurucz et al. (2017) to measure the FSSD success. Finally, to design BMfS, the triple layered business model canvas is conceived by Joyce and Paquin (2016): starting from the business model canvas (Osterwalder & Pigneur, 2010), the authors add two layers to the model for the analysis of the business model by social and environmental perspectives.

To come up with a BMfS, there is the need of a process of transformation, that is explored by a fourth group of authors. Firstly, Schaltegger et al. (2012) investigate the different strategies, namely defensive, accommodative and proactive, to undertake a path towards corporate sustainability, each of which is characterized by different drivers: i.e., cost and risk reduction, sales and profit margin, reputation and brand value, attractiveness as employer, innovative capabilities. Secondly, Roome and Louche (2016) identified sustainability transformation process elements, as for instance events, beliefs, ideas and actions, and enabling factors (i.e., learning, participation, commitment, and change management). Finally, Schaltegger et al. (2016) create a framework to analyse the different way of market transformation through business model, by integrating the evolutionary processes (variation, selection, retention) with the forms of business model retention (growth, replication, merger and/or acquisition, and mimicry).

Despite some empirical works (Birkin et al., 2009a; Birkin et al., 2009b; Høgevold, 2011; Jolink & Niesten, 2015; Morioka et al., 2017; Ritala et al., 2018), the subfield contains mainly conceptual studies, four literature reviews on the topic (Boons & Lüdeke-Freund, 2013; Calabrese et al., 2018; Geissdoerfer et al., 2018; Lüdeke-Freund & Dembek, 2017), and two introductory papers to special issues on BMfS (Boons et al., 2013; Dentchev et al., 2018). Regarding the literature evolution of this subfield, one could observe that in the first phase authors are more focused on the BMfS structure elements (components, attributes, dimensions) and then on the BMfS transformation process elements (requirements, drivers, and challenges). Generally, it is possible to trace this field back to the development of theory, starting from the 2003 with very few works and with an increasing number of articles from 2012 onwards. The maximum number of articles on the subject is between 2016 and 2017.

2.8.2 Applications of BMfS

Six articles are included in this subfield, identified as a practice of BMfS.

First, two papers concentrate on applications regarding strategy. In particular, Høgevold et al. (2014) investigated eight BMfS adopting companies in different industries, highlighting the evolution of their corporate reasons (from intuitive to conscious), environmental actions (from basic to complex), social boundaries (from within- to beyond-organizational), economic effects (from cost-oriented to value-oriented), organizational

challenges (from myopic to holistic). Jhunjhunwala (2014) emphasize the importance of corporate social responsibility as part of corporate strategy. Through case studies the author identified the companies' transition from corporate narcissisms to altruism, from cost to benefits, and from cosmetic to strategic.

Secondly, the focus of application is the engagement of stakeholders. An additional visual framework is the Sustainable Value Exchange Matrix proposed by Morioka et al. (2018) useful to analyse BMFSs from a multi-stakeholder and a value exchange perspective. Conversely, Sousa-Zomer and Cauchick-Miguel (2019) investigate two product service system case studies and find the involved stakeholders, solved barriers, and derived benefits from the BMFS adoption.

Finally, the focus of application is on both the economic return and society. Actually, the authors adopt the Triple Bottom Line (Elkington, 1998) approach, which considers simultaneously economic, environmental and social dimensions. In particular, Mihalič et al. (2012) explore and create the hotel sustainability business model to study the sustainability of hotel firms according to the Triple Bottom Line principles. The authors found firms gave strong importance to profitability, customer satisfaction, and human resources, while environmental education, biodiversity, and partnerships with stakeholders are ignored. Svensson et al. (2016) develop a business sustainability framework based on the Triple Bottom Line logic. The framework is useful to assess and monitor company sustainable business practices in the marketplace and society.

All the articles loading on the second factor are empirical studies. Despite the heterogeneity of the studies, one could recognize that all the authors adopt a practical perspective. The three application focuses are consistent with the concept of BMfS and general business model, that is: first, strictly connected to the business strategy; second, extremely related to the stakeholders' engagement; third, focused on the economic return and society, as essential aspects to guarantee economic and social sustainability. As regards the field evolution, exploration from the practical point of view has developed starting from 2012.

2.8.3 Different types of BMfS

The set of ten articles loading on the third factor appear to be linked by as a collection of different types of BMfS.

A type of BMfS is B Corp model as evidenced in Stubbs (2017). Stubbs (2017) is the first to conceptualize the B Corp model as a BMfS, due to its main characteristics: socially and environmentally embedded mission, longer time horizons, and internalisation of social and environmental externalities.

Another type of BMfS is the hybrid model. Davies and Chambers (2018) promote the hybrid business model as a BMfS and identify the hybridity tensions that push the entrepreneurs to find a balance between the sustainability mission and the economic value.

Some authors consider the context as determining the type of BMfS, in particular the context of SMEs, the context of start-ups, and the context of entrepreneurship. In particular, Buffa et al. (2018) focuses on the BMfS applied by the SMEs, highlighting environmental management practices within three sets: communication and organisation; adoption of alternative heating solutions; improvement of energy efficiency. While Franceschelli et al. (2018) investigate the BMfS of a start-up by highlighting the key connection between innovation and sustainability inside the business model. Another study is the one of Neumeyer and Santos (2018), that investigate BMfS in entrepreneurship from the social network perspective, finding denser connection and different social clusters based on type of business model.

Another point of view for classifying BMfS types is the customers' point of view. In particular, Pal and Gander (2018) investigate the BMfS based on the logics on narrowing, slowing, and closing the loop of resources. The authors underline the lack of scalability and the incompatibility with fashion costumers value propositions as main obstacles to the change from conventional to BMfS in fashion industry. Conversely, Sousa-Zomer and Cauchick Miguel (2018) demonstrate that a close integration with costumers could mitigate acceptance, risk perception, and confidence in the adoption of product-service-system as a BMfS.

Finally, Høgevoid and colleagues (2016) analyse BMfS from the industry perspective. Actually, they explore the differences and the commonalities between BMfS applied in goods and service industries, according to the meta-level, the sources, and the stakeholders.

Articles which highly load on the third factor focus on specific applications of different types of BMfS. With respect to their conceptual foundation and methodology, most of the articles belonging to this subfield appear to be closer to the publications loading on the second factor. Indeed, almost all the articles are empirical studies. However, this subfield is positioned a little further in time (starting from 2016) and the maximum number of articles is in 2018.

2.8.4 BMfS transition process

The fourth factor includes two articles related to the transition process to a BMfS. Significant examples of this vision are the studies of Olofsson and colleagues (2018) and Long and colleagues (2018), where aspects of sustainability are strictly connected to the story of the companies they investigate. Both case studies analysed come from North Europe and belong to food and beverage industry (Long et al., 2018) and to electricity retail market (Olofsson et al., 2018). On one hand, Long et al. (2018) highlight key success factors and barriers to the

transition to BMfS. On the other hand, Olofsson et al. (2018) identify key events in the company history and relates them to BMfS transition elements.

Despite the low number of articles belonging to the same year (2018), this factor is considered because of its importance in explaining variance. Articles in this set could represent some potential research directions on the topic of BMfS that should be considered, i.e. the change process towards a BMfS.

2.8.5 Circularity as sustainability

Four publications are related to the fifth factor. This set mainly consists of articles that see circularity as a synonym of sustainability. Examples of studies are the one of Antikainen and Valkokari (2016) who develop a framework for sustainable circular business model innovation and apply it to a start-up case studies. Another example of framework is the one of Manninen and colleagues (2018). Their framework evaluates the environmental value propositions of circular economy business models. Circularity means also resource-efficiency. This aspect is underlined by Diaz Lopez and colleagues (2019) who examine cases of implementation of resource-efficiency measures such as green supply chain management, cleaner production, and remanufacturing.

The research field of circular business model is closely linked to BMfS. However, all the studies in this set are mainly related to the environmental perspective of sustainability, giving less attention to the social ones. As regards, the temporal evolution, the articles cover the time frame that starts in 2016 but has the greatest development in 2018.

2.8.6 Technical aspects of BMfS innovation

The two papers belonging to the sixth factor deal with technical aspects of BMfS innovation. Particularly, Bolton and Hannon (2016) analyse two energy service company models from a business model innovation perspective. Authors show that business model innovation embedded in the socio-technical contexts, as well as a systems based approach, fosters the transition to a more sustainable energy system. Piscicelli and colleagues (2018) examine a BMfS based on the peer-to-peer sharing of underutilised assets facilitated by digital platforms. Their analysis highlights that the success of a platform could be more directly attributed to its business model design and execution than the types of user.

Although articles in this set are only two and not so similar in terms of conceptual foundation, the sixth factor is taken into consideration due to its importance in explaining variance. Some potential research directions on the topic of BMfS could emerge from articles in this sub-set.

2.9 Findings from Multidimensional Scaling Interpretation

Multidimensional Scaling (MDS) generates a map (Figure 2-7 where the lines on the map show where the six factors are) of publications with the most frequently co-cited in central position (McCain, 1990). Through the analysis of the paper location, the dimensions of the axes are derived. Particularly, the dimension interpretation occurs by examining both conceptual foundations of the studies and the position of the six publications' sets identified through the six factors. The studies close to the poles of the axes are examined by focusing mainly on their similarities and dissimilarities.

At first, it is possible to see clearly that the set of publications related to the subfield “BMfS elements and structure” is located in a central position on the MDS chart. The reason is the fact that papers belonging to the theory are the most cited ones, if one looks to the citation structure. Then, starting from the right side of the chart, along the x-axis, there are studies focused on barriers to the BMfS implementation. Particularly, the aim of the research of Long and colleagues (2018) is to recognise critical success factors and barriers for the evolution from a traditional business model to a BMfS. Another example is the study of Sousa-Zomer and Cauchick-Miguel (2019) on how a BMfS overcomes the barriers associated with business model implementation. The abovementioned studies question the success of BMfS implementation, Conversely, on the opposite left side of the x-axis, successful case studies of BMfS implementation are located. Some examples are provided. At first, literature offers an in-depth analysis of how the pay-per-use business model successful implementation contributes to sustainable consumption (Bocken, et al. 2018). Secondly, an exploration of the links between managerial thinking, organizational identity, and business ecosystems is provided by Rajala and colleagues (2016), which focus on the effective transition process to a BMfS. Finally, some scholars develop specific frameworks for the successful implementation or evaluation of circular economy business models (Antikainen & Valkokari, 2016; Manninen et al., 2018). All the above-mentioned studies start from the assumption that a BMfS is or could be implemented without any barrier.

Along the y-axis, focusing on the bottom of the MDS chart, there are publications investigating the field of BMfS through empirical analysis. Conversely, the studies related to the conceptual foundation of the topic are closer to the top of the chart. Most of publications located at the bottom of the chart belong to the set identified by the third factor, where there are cases of specific BMfS (Stubbs, 2017), as well as BMfS applied to a specific business categories as sustainable entrepreneurship (Davies & Chambers, 2018) or sustainable start-ups (Franceschelli et al., 2018).

On the multidimensional scaling map, the black curved lines highlight the six subfields of BMfS research topic. The first factor is consistent with the interpretation of its conceptual foundation, since most of the articles are grouped close to the centre of the chart. Articles from the other sets are relatively grouped together, except for the papers belonging to fourth set that are sparse. The reason might be the different business or industries they analyse.

2.10 Findings from Papers with low/undefined Loadings

The initial core-set of 82 papers is reduced to 55, due to the exclusion of publications with low or undefined factor loadings. However, some of the excluded papers investigate topics related to the streams of literature identified by the factors.

As regards “BMfS elements and structure” stream, Breuer and colleagues (2018) provide some relevant guiding principles and process criteria for the creation of BMfS. Furthermore, the research of Gallo and colleagues (2018) introduces the associative sustainability business model based upon partnership, association and collaboration.

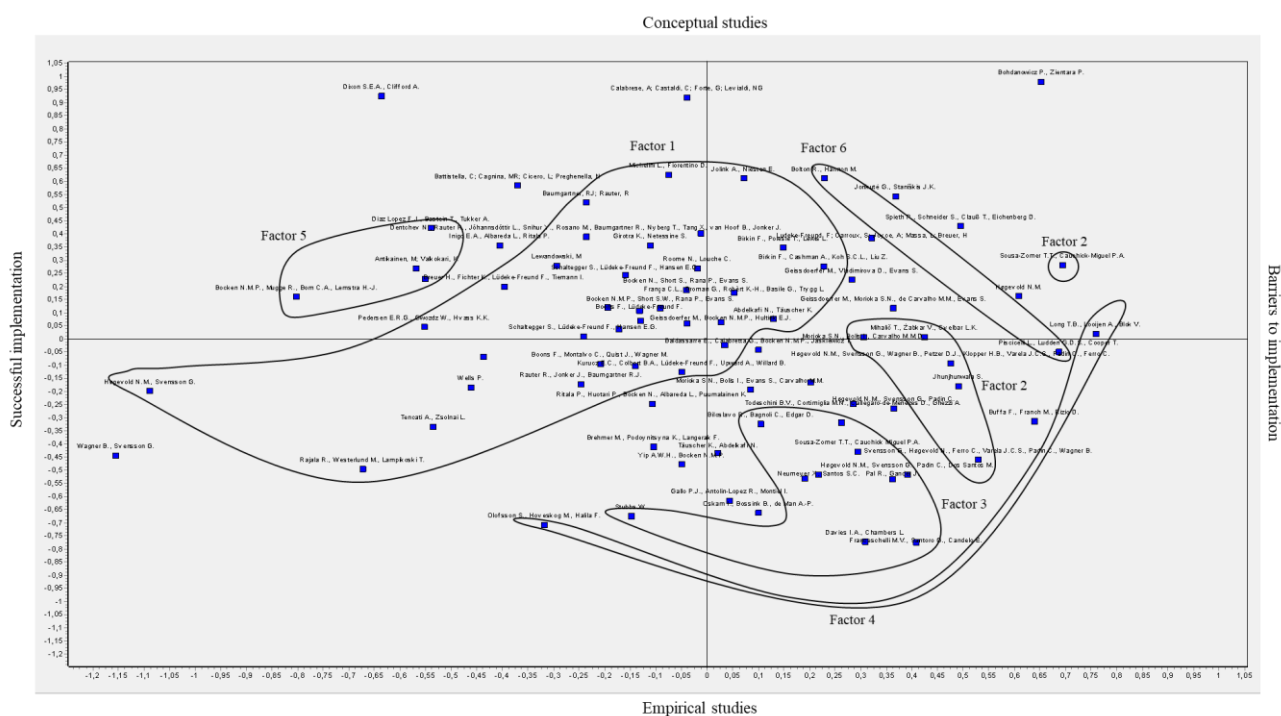


Figure 2-7 Multidimensional Scaling map

Additional applications of BMfS are developed both in services, especially bank industry (Yip & Bocken, 2018) and in manufacturing, particularly fashion entrepreneurial industry (Kozlowski et al., 2018).

Concerning different type of BMfS, a further contribution is a classification of the existing type of BMfS proposed by Lüdeke-Freund and colleagues (2018). Moreover, Calabrese and colleagues (2018) explore the emerging research field of BMfS innovation in service industry. Finally, a few studies explore the BMfS in the specific field of entrepreneurship (Dixon & Clifford, 2007; Täuscher & Abdelkafi, 2018; Todeschini et al., 2017) or SMEs (Battistella et al., 2018).

Finally, the research performed by Geissdoerfer et al. (2018) discusses the sustainability performance of the circular business models and circular supply chains and proposes a framework to integrate circular business models and circular supply chain management towards sustainable development.

2.11 Findings from the Literature Outside the Core-set

As stated before, 52 papers are excluded from the core-set. In any case, they are analysed to see if they belong to one of the identified subfields or if they reveal some other research direction.

At first, “BMfS elements and structure” stream is enriched by the study of Liu and colleagues (2014) which conceptually constructs a business model based on the service-dominant logic which integrates the product service system. This model is in compliance with the Triple Bottom Line (Elkington, 1998) principles.

Secondly, a few studies contribute to enrich the literature on “Applications of BMfS”. There are examples of frameworks basing on the product service system approach (Kristensen & Remmen, 2019; Yang & Evans, 2019), the so-called ecology of business models experimentation map (Bocken et al., 2019), as well as the sustainability-oriented service innovation tool (Calabrese et al., 2018) to foster BMfS innovation.

As regards “Different types of BMfS”, a few studies enlarge the literature on entrepreneurship (Agrawal & Gughani, 2014), hybrid companies (Alberti & Varon Garrido, 2017; Díaz-Correa & López-Navarro, 2018; Kolk & Lenfant, 2016), SMEs (Dubruc et al., 2017), and B corp (Stubbs, 2019). Another perspective is provided by Khmara and Kronenberg (2018), who investigate the BMfS based upon the degrowth paradigm. Finally, a few studies explore BMfS specifically in the tourism (Buffa et al., 2018; Coles et al., 2017; Jones et al., 2014) or in the fashion industry (Lueg et al., 2015).

2.12A theoretical framework from the review

The first output of the review is the identification of the six wide research streams of the literature, namely BMfS elements and structure; applications of BMfS; different types of BMfS; BMfS transition process; circularity as sustainability; technical aspects of BMfS innovation.

Furthermore, the review allowed to depict a theoretical framework mapping the research streams composing the literature; an interpretation of how the research streams emerge from the literature; their evolution and their connections (Figure 2-8).

The Factor 1 “BMfS elements and structure” collects studies on the components, attributes, dimensions, requirements, drivers, and challenges to the theoretical BMfS structure and architecture definition. Since, the Factor 1 includes several studies investigating BMfS from a more functional point of view (Bocken et al., 2014; França et al., 2017; Kurucz et al.; 2017), we can assume that to the Factor 2 “Applications of BMfS” originates from the Factor 1. Moreover, the Factor 1 contains an incipit for the development of topic related to the process of transformation (Schaltegger et al., 2012; Roome and Louche, 2016; Schaltegger et al., 2016), strictly related to the Factor 4 “BMfS transition process”. However, these topics still need to be explored, especially the Factor 4, to which a small number of papers belong. In Figure 2-8, in the box architecture, we see a connection between Factor 1 and Factor 2, underlining the assumption that Factor 2 comes up from Factor 1. The same for Factor 4, that probably originates from Factor 1, as well.

The Factor 3 “Different types of BMfS” is one of the most heterogeneous factors and it includes papers focusing on different types of BMfS, namely: The B Corp model, the hybrid model, and the circular model. Conversely, some authors consider the context as determining the type of BMfS, in particular the context of SMEs, the context of start-ups, and the context of entrepreneurship. Since, one of the BMfS types is the circular BMfS, based on the logics on narrowing, slowing, and closing the loop of resources (Geissdoerfer et al., 2018; Pal and Gander, 2018), one could suppose that the Factor 5 “circularity as sustainability” derive from the Factor 3. Moreover, as said before, some authors state that the BMfS type is determined by the context. Socio-technical and digital context are the topics of the papers belonging to the Factor 6 “Technical aspects of BMfS innovation. As consequence, one could infer that also the Factor 6 originated from the Factor 3.

All the connection is depicted in Figure 2-8. Firstly, one could say that the first relevant role is played by the context in the implementation of BMfS. This is confirmed by the papers belonging to the Factor 3 “Different types of BMfS” and the Factor 6 “Technical aspects of BMfS innovation”, which seems to derive from the Factor 3. The context determines several

type of BMfS (Factor 3), where the line of research concerning circularity (Factor 5) could have come from. It is expected that from the "Different types of BMfS" research stream, further independent streams may arise, which will have as their object of study the benefit corporations, hybrid organizations, start-ups or entrepreneurship.

The context and the type of BMfS together determine the architecture or structure of the business model, namely: elements, components and dimension, phases of creation (Factor 1). The research stream Factor 1 “BMfS elements and structure” already includes some study that adopt an applicative perspective (Factor 2) or focuses on the transition process to BMfS (Factor 4).

Finally, a further research stream that could derive from the literature on the BMfS architecture is the one studying the BMfS managerial practices. In fact, little literature has been produced in this regard. Therefore, this could be a clear direction for future research.

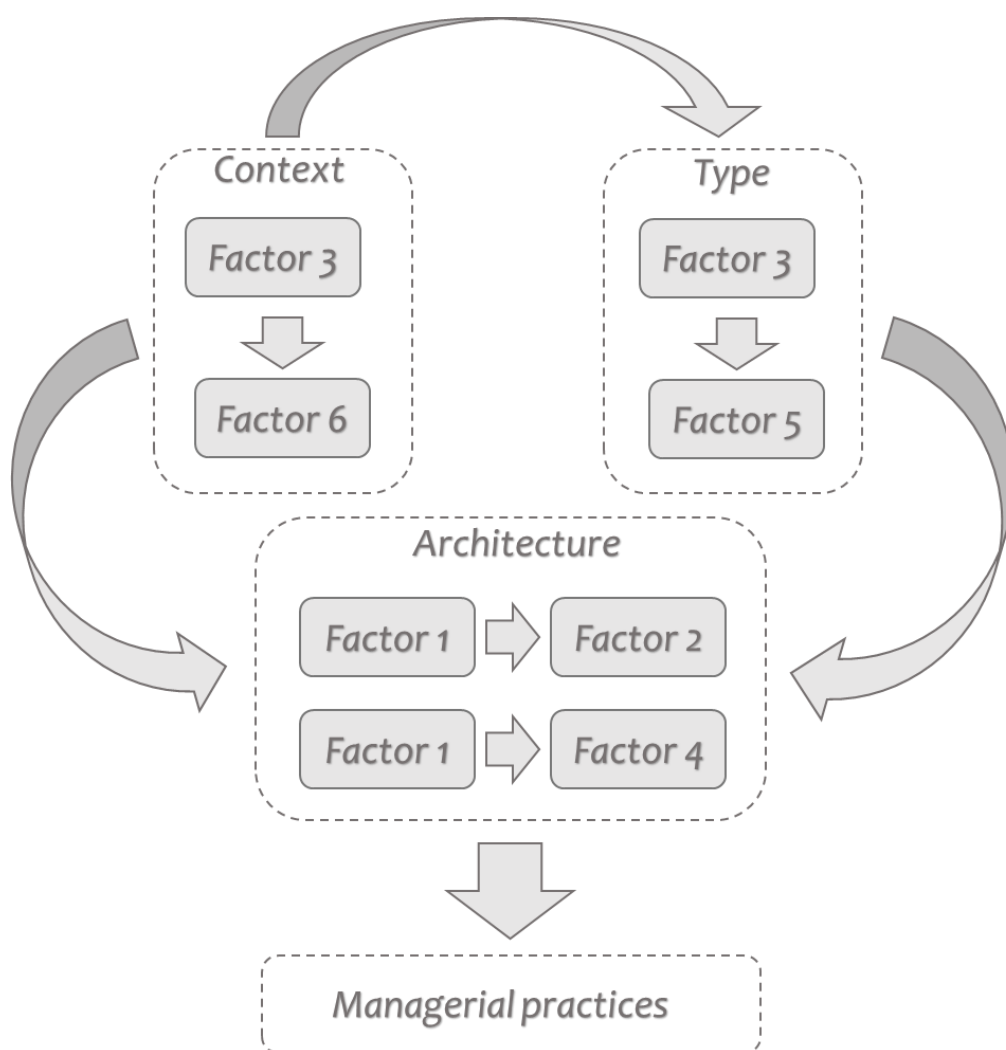


Figure 2-8 Theoretical framework

2.13 Future research directions

The research describes and analyses the state of the art on BMfS, both in terms of current situation and research directions. Particularly, the combination of a systematic literature review, bibliometric techniques and multivariate techniques allows to have an objective vision on the literature.

The six research streams emerge from the analysis of the papers' set identified by means of the factor analysis. In addition to this, the MDS is useful to recognize the different literature directions. The core of the literature is mainly related to the theory building on BMfS, while empirical studies are sparse and fragmented in terms of research object. Despite of this, the four emerging directions are:

1. conceptual studies, mainly focused on theoretical foundations and definition,
2. empirical studies based mainly on case study methodology,
3. studies focused on barriers to BMfS implementation,
4. successful cases of BMfS implementation.

The second result of the literature analysis is a consideration on the maturity of the research field. One could say that the topic of BMfS is in a full development phase. The number of publications is constantly increasing and new research fields are emerging. However, the research topic is still lacking of clear definition and consolidation. This emerges from the Multidimensional Scaling (MDS) graph: the relatively low proximity between articles belonging to the theoretical foundations set show that the academic literature has yet to reach a shared consensus about BMfS foundations and characteristics. Mainly empirical studies make authors deduce the theory. This is also confirmed by the high number of papers based on case study methodology compared to survey methodology.

From the findings, similarity emerges between the first factor and the research objects of papers belonging to the third and the fourth factors. This could be also confirmed by the dispersion of publications belonging to the fourth factor. It emerges that sustainability does not yet have a defined role in the business model. Indeed, only few studies see sustainability as key principle that is part of the value proposition of a company. Hence, literature is still far from reaching consensus on BMfS elements.

In the Table 2-6 the future research questions are reported.

Table 2-6 Future research questions

Future Research Question
1 <i>How is a BMfS conceptually structured? By which business model components?</i>
2 <i>How is the context in which BMfS takes place?</i>
3 <i>How is the process of transition from a traditional business model to a BMfS?</i>
4 <i>What are the BMfS impact and outcomes?</i>
5 <i>How does a company learn to implement a BMfS?</i>
6 <i>What specific BMfS type should a specific company adopt?</i>
7 <i>What are the drivers to embed sustainability within the business model?</i>
8 <i>How is a circular business model socially sustainable?</i>
9 <i>What are the technological drivers for BMfS innovation?</i>

As stated before, conceptual work is still needed to merge and adapt existing conceptual BMfS dimensions, elements and characteristics. There is lack of clarity and academic common vision on the BMfS construct itself. For this reasons, future studies should focus on the knowledge consolidation and a first research question (RQ) for future agenda could be:

Future RQ1: *How is a BMfS conceptually structured? By which business model components?*

Coming to unanimity on the structure of a business model for sustainability is relevant since it would allow to clearly identify which aspects or components are essential to consider a truly sustainable business model.

Moreover, clarity is still missing on the context in which BMfS takes place in terms of necessary environment conditions and transformation process steps. Especially, impacts and outcomes of BMfS should be considered. The paucity of studies adopting a survey methodology confirms that there is a lack of theory testing and validation. In addition to this, scant investigation is carried out on the organizational capabilities needed to implement a BMfS. Hence, the following research questions should be considered.

Future RQ2: *How is the context in which BMfS takes place?*

Mapping the context in which the development and implementation of a business model for sustainability is favourable is essential to ensure its replicability.

Future RQ3: *How is the process of transition from a traditional business model to a BMfS?*

It is relevant to understand the transformation process from a traditional business model to a business model for sustainability in order to favour the diffusion and transition to increasingly sustainable models.

Future RQ4: *What are the BMfS impact and outcomes?*

It is important to identify the impacts, in particular on society and the environment, as well as the positive results, resulting from the adoption of sustainable business models, in order to have an objective measurement of sustainability in the long term.

Future RQ5: *How does a company learn to implement a BMfS?*

Investigating the learning process is essential in order to make the adoption of a BMfS increasingly widespread, and replicable by the largest number of companies. In addition to the process, a mapping of learning practices would be relevant, in order to provide companies with guidelines to help them realize sustainability strategic objectives.

One could say that scant analysis is carried out on the relation between companies features, such as firm size, industries, kind of business and the adequate BMfS type to adopt. Thus, the deriving research question for future research is:

Future RQ6: *What specific BMfS type should a specific company adopt?*

Determining the specific type of model that a company could adopt based on its characteristics is relevant in order to facilitate the dissemination of business models. In particular, it might be useful to classify the main types of models with an indication of the business characteristics that make that model suitable or fitting. The company characteristics could be the number of employees of the company, the geographical position, the sector to which they belong.

As stated before, the sustainability role in a company business model is still undefined. Should it be part of the value proposition? Is it a driving force for competitive advantage? Is it only related to the company brand reputation and marketing? In literature there is not a comprehensive view of what are the drivers that push towards the integration of sustainability in the business model. As consequence, the following research question should be considered:

Future RQ7: *What are the drivers to embed sustainability within the business model?*

The drivers are relevant for understanding what enables the adoption of a BMfS or the transformation of an existing model into a sustainable model. There may be both external and internal drivers.

Concerning the topic of circularity, the social sustainability perspective of a circular business model is still little investigated. Future studies should focus on this social aspect, according to the following research question:

Future RQ8: *How is a circular business model socially sustainable?*

It is relevant to explore the pillar of social sustainability within circular business models to ensure the completeness of the concept. According to the Triple Bottom Line principle (Elkington, 1998) in fact, environmental sustainability alone is not enough to consider a truly sustainable business model. In the case of circular business models, the environmental sustainability aspect has certainly been more explored and defined than the perspective of social sustainability.

Finally, there is a lack of exploration about technical aspects for the BMfS innovation. At first, there is need of analysis on whether technology could be a driver for BMfS implementation and in which way. For this reason, a deriving research question should be:

Future RQ9: *What are the technological drivers for BMfS innovation?*

The innovation of a business model towards sustainability could be enabled by digitalization and technological development that favour greater efficiency and a consequent reduction in environmental impacts. Therefore, it is relevant to identify which are the enabling technological drivers.

This research contributes to the literature on BMfS by offering an objective overview on the current state of the art and a rich agenda for future research (see Table 2-6). Particularly, the research is an original combination of a systematic literature review, bibliometric methods, and multivariate techniques. The mapping of the BMfS literature is challenging because of its variety.

3 Research Gap and Research Questions

This Chapter intends to describe and investigate the research gaps that emerged from the analysis of the literature. Starting from the existing literature, the research gaps will be argued and discussed to arrive at the research questions, listed below:

- *RQ1: How is the context in which Business Model for Sustainability (BMfS) takes place? What specific BMfS type should a specific company adopt?*
- *RQ2: How is the value flow in a BMfS of a sustainable-born company created and implemented?*
- *RQ3: How do stakeholders contribute to the value flow of the business model for sustainability?*
- *RQ4: How does a company learn to implement sustainability? Which are the learning practices?*

3.1 Context of Business Model for Sustainability: The Challenges

According to Hart and Milstein (2003), a sustainable enterprise takes part in sustainable development by delivering at the same time economic, social, and environmental benefits. The triple bottom line (TBL) approach (Elkington, 1997; 2004) puts in evidence how firms must focus not just on the economic value they add but also on the environmental and social one. More in details, according to Evans and colleagues (2017), economic value forms include profit, return on investments, financial resilience, long-term viability, and business stability. Social value forms embed equality and diversity, well-being, community development, secure livelihood, labour standards, and health and safety. Environmental value forms finally consist of the use of renewable resources, low emissions, low waste, biodiversity, and pollution prevention.

Companies can shift from an unsustainable business model to a sustainable one based on innovation and on features such as: A set of ethic-based business principles; a strategic and sustainable management of natural resources; the sustainable production of natural, human, social, institutional, and cultural capital; a capacity to share these positive impacts in its supply chain (Elkington, 2004). Shifts into business models are acknowledged as a basic way to realize innovations for sustainability, whether they are based on small changes or radical innovations (Evans et al., 2017). However, as the natural environment and society are considered as primary stakeholders and BMfS require a system of sustainable value flows among multiple stakeholders (Evans et al., 2017), this needs a change of mind-set about business and the

reconfiguration of many elements such as knowledge management, collaborations, relationships, and capabilities (Adams et al., 2012). Moving to a new, BMfS is challenging for companies; these challenges differ along the three main components of the business model, namely value proposition, value creation and delivery system and value capture (Richardson, 2008).

The first challenge is related to the value proposition of the business model innovation, i.e., finding business purposes and offerings that can guarantee a long-term competitive advantage. The innovative idea can derive from different sustainability inspirations, such as the circular economy, the sharing economy, eco-efficiency, inclusive business, the base of a pyramid and product-service systems (Morioka et al., 2018). Despite the multiplicity of possible value propositions, they have in common the aim of creating value through the integration of economic, environmental, and social aspects, rather than prioritizing profit and devoting to the society at large rather than only to the company itself (Schaltegger, Lüdeke-Freund, & Hansen, 2016; Boons & Lüdeke-Freund, 2013). However, the integration of such facets is tough, for the reason that economic, environmental, and social aspects can be conflicting to manage together (Van Bommel, 2018) and since the focus on business logic still wins often against the focus on sustainability logic.

The second challenge is related to create value, i.e., developing a BMfS by means of specific practices, capabilities, and resources oriented to sustainability. In this line, a study by Bocken and colleagues (2014) opened the way to the conceptualization of a BMfS through the identification of eight business model archetypes. The archetypes describe solutions aimed at contributing to the development of BMfS, stressing the potential paths for BMfS innovation. The outlined archetypes are: Maximize material and energy efficiency; create value from waste; substitute with renewable and natural processes; deliver functionality rather than ownership; adopt a stewardship role; encourage sufficiency; re-purpose the business for society/the environment; develop scale-up solutions. These different archetypes represent different challenges in terms of value creation, involving practices, capabilities, and resources, such as organizational culture, corporate governance, operations, innovation and research and development, operations, supply chain and logistics, marketing and sales (Morioka et al., 2018).

The third challenge is related to capture value from a BMfS: Technological, organizational, and social innovation factors (Boons & Lüdeke-Freund, 2013) such as the use of renewable resources, flexible working and ethical trade (Bocken et al, 2014), help organizations to bridge the design-implementation gap of BMfS innovation by capturing value from different actors such as shareholders/investors, employees, customers, suppliers/partners,

society, environment, government and environment and also creating cascaded value for them (Morioka et al., 2018).

The three challenges above are summarized in Table 3-1, which displays the challenges of creating sustainable value in business model innovation by proposing an adaptation from Evans and colleagues (2017).

Table 3-1 Challenges for creating sustainable value in business model innovation; adapted from Evans et al. (2017)

	Sustainable Challenges	References
Value Proposition	triple bottom line integrating technology innovation with business model innovation	Bocken et al., 2014; Hart and Milstein 2003; Heyes et al., 2018; Joyce and Paquin, 2016; Schaltegger et al., 2012; Stubbs and Cocklin 2008; van Bommel, 2018; Wells, 2016; Yu and Hang, 2010; Zott et al., 2011
Value Creation	mindset resources business modelling methods and tools	Boons and Lüdeke-Freund, 2013; Björkdahl and Holmén, 2013; Chesbrough, 2010; Dentchev et al., 2018; Geissdoerfer et al., 2016; Girotra and Netessine, 2013; Halme and Korpela, 2014; Heyes et al., 2018; Lüdeke-Freund et al. 2018; Johnson et al., 2008; Joyce and Paquin, 2016; van Bommel, 2018; Yang et al., 2014; Yu and Hang 2010; Zott et al., 2011
Value Capture	external relationships	Boons and Lüdeke-Freund, 2013; Dembek et al., 2018; Stubbs and Cocklin, 2008; van Bommel, 2018; Vladimirova, 2012

These challenges are tougher if BMfS are innovated in SMEs because these companies suffer already from other constraints, such as lacking an efficacy base of knowledge, skills, and resources whereby they can operationalize sustainable or green business practices (Depken, & Zeman, 2017). Nowadays the adoption of a BMfS in SMEs may be very critical and challenging for SMEs having to overcome the obstacles due to their characteristics. In an article on environmental management practices for BMfS in SMEs in the hotel sector, Buffa and colleagues (2018) underline some elements to be taken into consideration in this process. Firstly, an SME cannot be considered as a “little big business” and therefore the strategic choices eligible for large firms may be unsuitable for an SME. Secondly, territorial inter-firms relationships are key factors in facing up to the complexity of the competitive environment. Finally, the velocity of the decision-making processes is the assurance of the flexibility in responding to market changes.

Finally, a discussion of sustainability efforts in the marketplace often concentrates around the manufacturing sector. However, the service industry is important because

“Services have a catalytic role in sustainable social and economic development and serve as a means of addressing poverty, upgrading welfare, and improving the universal availability of and access to basic amenities. It can be argued that pursuing a sustainable development strategy is predicated on both the development and nurturing of domestic services sectors as well as engagement in international trade in services” (ICTSD, 2016; p. 3).

Certainly, a restaurant, a bank or a consulting firm do not have the environmental impact of a coal mine or automotive plant. Still, there are many opportunities for service-based businesses to engage in sustainability initiatives to boost profits, strengthen the community, and protect the environment. Furthermore, much variability in the service industry represents a difficulty compared with the manufacturing industry as it is difficult to provide one-size-fits-all recommendations on how to make a business model more sustainable.

3.2 Research Gap of BMfS in the context of SMEs

The literature on BMfS in the context of SMEs lacks a well-structured development. Indeed, only a few articles have focused on small-sized companies so far. Among the short list, a pertinent example is from Kozlowski and colleagues (2018). The authors, through an empirical research, outlined the “reDesign canvas”, a tool thought for micro-sized companies of the fashion industry with the aim of enhancing sustainability. In their canvas, blocks such as “circular design and economies”, “innovative and sustainable business models”, “design and smart material selection”, and “sustainable supply chain” explicitly include elements of sustainable business modelling that could overspread other industries, by considering the peculiarities related to the reduced size of the company.

Differently, Gasbarro, Rizzi and Frey (2018), by examining sustainability within the case of institutional entrepreneurship, identified a direct relationship between the final customer and strategic partnerships as instruments to increase legitimacy within the normative and cultural-cognitive institutions and subsequently in the regulative institutions. Other studies, despite covering the sustainability issue in business models, either focus on just one pillar - e.g., economic sustainability (Tang, Murphree, & Breznitz, 2016); environmental sustainability (Buffa, Franch, & Rizio, 2018) - or go into specific contexts, such as start-ups. For instance, Bocken (2015) focused on the role that venture capitalists have on business model sustainability of start-ups according to the TBL, in particular in improving the balance of financial/social/environmental returns.

It follows that, from the literature review on BMfS, it emerges as a gap connected to the study of SMEs context in general and on SMEs of the service/tourism/yacht industry more specifically. Indeed, for what concerns BMfS in services, predominant research has rather explored the manufacturing industry. Nonetheless, the main types of services described in the literature are the electricity and gas distribution sector (e.g., Goyal, Sergi, & Kapoor, 2014; Funkhouser et al., 2015; Gsodam, Rauter, & Baumgartner, 2015; Hannon, Foxon, & Gale, 2015; Bolton & Hannon, 2016; Breuer & Lüdeke-Freund, 2017; Gaspari et al., 2017), the transport sector (e.g., Giannoutakis, 2012; Heinz & O'Connell, 2013; Corbo, 2017; Dreyer, 2017) and the healthcare sector (e.g., Esposito, Kapoor, & Goyal, 2012; Bonča & Tajnikar, 2015; Angeli & Jaiswal, 2016). The gap found in the literature is relevant both in terms of content, due to the small number of scientific articles retrieved, and in terms of methodology. Indeed, it seems that the empirical methodology in this area is still in its infancy. The research on BMfS in the context of service companies is still undergoing the process of theory building and it is foreseeable that this process will continue for some years. At last, only when it will reach a higher level of maturity, it could be tested through surveys.

Even research on sustainability in tourism business models seldom emerge in former literature and, when it happens, it focuses mainly on the hospitality context (Mihalič, Žabkar, & Knežević Cvelbar, 2012; Høgevold, Svensson, & Padin, 2015; Stylos & Vassiliadis, 2015; Melissen et al., 2016). The value proposition of tourism companies is analysed according to the application of the TBL of the BMfS, although they detect limited monitoring of the three dimensions at a time and highlight the difficulties that companies face in revising the business model from the perspective of value creation (Mihalič, Žabkar, & Knežević Cvelbar, 2012; Stylos & Vassiliadis, 2015; Melissen et al., 2016). Only Gretzel and colleagues (2015) has examined the role of technological innovation for value proposition, although in the context of tourism ecosystems. Other papers such as References (Jaafar & Maideen, 2012; Peric & Djurkin; Cannas, 2016; Zebryte & Jorquera, 2017), focused on the three pillars, although by highlighting the social aspects of sustainability specifically, with a great attention to the value created by sustainable tourism activities in the community. Capturing value through the development of key external relationships appears as an element for stimulating the progress towards a BMfS (Melissen et al., 2016; Yang, Cai, & Sliuzas, 2010; Broccardo, Culasso, & Truant, 2017). For instance, Høgevold, Svensson & Padin, 2015 showed a case study of a Scandinavian hotel chain and how it dealt with the TBL of the BMfS, where a network of stakeholders and sourcing were key elements of business model innovation. It follows that challenging elements of BMfS in tourism still need further research to detect possible directions for concrete sustainable implementation.

In conclusion, a consistent research gap on the context of BMfS has been detected from the literature review, as well as scholars calling for an in-depth examination of the interactions between existing business models and BMfS in practice Geissdoerfer and colleagues (2018), and by focusing on one sector/company specifically (Dentchev et al., 2018). Moreover, we were interested in adopting a different perspective from the previous studies, thus following the calls for new research by Reference Geissdoerfer and colleagues (2018), we chose to focus on context challenges for enterprises when adopting a BMfS. Specifically, the first research question can be stated as follows:

RQ1: How is the context in which Business Model for Sustainability (BMfS) takes place? What specific BMfS type should a specific company adopt?

3.3 The Conceptual Structure of BMfS: A Matter of Value

The term Business Model for Sustainability (BMfS) was firstly proposed in the seminal paper by Stubbs and Cocklin (2008) as a “new model of the firm where sustainability concepts play an integral role in shaping the mission or driving force of the firm and its decision making” (Stubbs & Cocklin, 2008, p. 104). Schaltegger et al. (2016, p. 6) propose the following definition of a BMfS: “A business model for sustainability helps describing, analysing, managing, and communicating (i) a company’s sustainable value proposition to its customers, and all other stakeholders, (ii) how it creates and delivers this value, (iii) and how it captures economic value while maintaining or regenerating natural, social, and economic capital beyond its organizational boundaries.”

An ideal type of BMfS is distinguished by structural and cultural characteristics, such as great trust and loyalty of human resources, diffusion of a sense of community within the organization, as well as commitment to evaluating and reporting on sustainability (Schaltegger et al., 2016). Research shows that companies that implement a BMfS have internally developed structural and cultural structures to be able to interface and collaborate in a sustainable way with the actors of the system of which the company is part (Stubbs & Cocklin, 2008).

The literature on BMfS focuses on the structure of these models and the culture that drive corporate sustainability (Stubbs & Cocklin, 2008). Corporate sustainability, considered in the three economic, social and environmental components (Elkington, 1998), requires a systemic and holistic approach, in line with the perspective offered by the analysis at the business model level. In particular, the analysis of the business model allowed to overcome the previous approach that looks only at ecology and sustainability at the level of functions and processes. Some examples of this type of sustainable innovation are sharing systems, based on

the product-service system logics (Hansen et al., 2009, Agrawal & Bellos, 2017), or closed-loop supply chains (Wells & Seitz, 2005). Within the research oriented to BMfS, some authors have focused on community-oriented business models with the intent to address social problems (Johnson, 2010; Seelos, 2014, Sánchez & Ricart, 2010). Generally speaking, the aspect that unites the different approaches is the company's orientation to create value not only from an economic point of view but also environmental and social ones, involving a wider circle of stakeholders (Bocken et al., 2014). This is the main distinction between business models for sustainability and business models oriented solely to profit growth and to appropriation of economic value (Schaltegger et al., 2016). It can also be noted that attention is growing towards the companies, organizations and markets that adopt BMfS considering the social and environmental spheres (Preghenella & Battistella, 2021).

A sustainable value proposition is the core of a BMfS (Baldassarre et al., 2017). Through a sustainable value proposition (product, service or both), a company offers economic, social and environmental value to the customer. To define this major element of a BMfS we can refer to the work of Patala et al. (2016): "We define sustainable value propositions as a promise on the economic, environmental and social benefits that a firm's offering delivers to customers and society at large, considering both short-term profits and long-term sustainability." (Patala et al., 2016, p. 144). In this regard, companies should take responsibility for production and consumption systems; share economic, social and environmental costs and benefits equally among the actors in the supply chain first, and then in the business system; carry out effective communication and awareness towards the customer, ensuring that he/she can relate closely with the other stakeholders. A multi-stakeholder value proposition through mapping tools presents opportunities and threats already discussed in the literature (Bocken et al., 2013). A BMfS expands the value proposition, which is no longer just conceived and designed for the customer, but is extended to a wider range of stakeholders, including the environment and society, employees, business partners, financial and social stakeholders (Freudenreich et al., 2020). Despite adopting a market-oriented and profit-oriented approach, a company that intends to contribute to sustainable development needs to create value that is no longer just economic and no longer just for customers and shareholders.

3.4 Research Gap on the Value Flow in BMfS

Business model innovation could describe either a process of transformation from one business model to another or the creation of entirely new business models (Chesbrough, 2007; Osterwalder & Pigneur, 2010). We talk about business model innovation when the company, on one hand, creates value for the customer in a new form, and on the other, captures value in

a different way. Examples of value creation are often linked to the use of the product or service and therefore to functionality and convenience for the customer; while examples of value capture are usually related to the financial aspect of the exchange of value like market access or the share paid by the buyer to the producer (Bowman & Ambrosini, 2000).

Geissdoerfer and colleagues (2018) identify four types of innovation towards business models for sustainability:

1. sustainable companies: a new company is founded that creates, adopts and continues to develop a BMfS over the years;
2. transformation of the current business model into a BMfS;
3. the current business model is diversified without revolutionize the existing business model and a “parallel” BMfS is added;
4. a BMfS is acquired: a BMfS is searched and identified to be added, which is then acquired and integrated into the company.

To obtain a BMfS, companies need to incorporate sustainable value into the business model. The sustainability of the business model leads to a new conception of the value proposition to be offered in the form of a service or product to its stakeholders. This reconfiguration of the value proposition must be undertaken by adopting a systemic and non-reductionist view of the business model, with particular attention to benefits and costs for all stakeholders (including society and the environment). Value is no longer just for the customer, but should be explicitly extended to all stakeholder groups (Bocken et al., 2013). The creation of value for all stakeholders can also be read through the concept of shared value (Porter & Kramer, 2011) and implies that both tangible and intangible value flows are identified in terms of relationships, exchanges and interactions and opportunities that lead to the creation of win-win relationships (Bocken et al., 2013).

Literature offers a wide range of tools that lead to Business Model for Sustainability. Some examples are the ones developed by Bocken et al. (2019), Breuer and Lüdeke-Freund (2014), Joyce et al. (2016) and Upward and Jones (2016). However, the models or frameworks that map phases, drivers and barriers in a BMfS, also considering the value flow perspective, are few in the literature.

Roome and Louche (2016) explored the process of creating new business models for sustainability through interactions between individuals and groups inside and outside companies. In particular, the authors have identified three elements that contribute to the transformation towards business models for sustainability which are: 1. The creation of networks and collaboration activities that lead to the creation of a new vision 2. The actual development of the corporate vision and concept through the network 3. The development of

an implementation structure within a reconfigured network. The authors then highlight a process of four phases, such as: 1. Identification, based on the search for problems, beliefs and assumptions to be questioned; 2. Translation of new concepts and development of new skills and knowledge; 3. Incorporation of the new knowledge and application in the new business model; 4. Sharing through communication and participation in the new network. However, they did not analyse any aspect related to the barriers, inertia or obstacles for the business model.

Long and colleagues (2018) investigate and identify critical success factors and barriers to the transition from traditional business models to business models for sustainability. Regarding the critical success factors, the authors identify collaboration, a clear business vision, continuous innovation, a sustainable foundation, profitability and random external events. As for the barriers, however, they are traced back to external events, agent principle issues and lack of support from actors. According to the authors, companies wishing to develop a business model for sustainability must make sustainability the pillar on which the company is founded. However, the authors identify phases emerging from the change management literature that are not related to the logic of the value of a BMfS. For example, one of the phases identified by the actors is the strategic/active phase, which is prior to the implementation of a BMfS.

Bocken and Geradts (2020) highlight the barriers and drivers encountered in the BMfS process. In particular, the authors focus on the dynamic skills necessary to innovate their business model and relate them to the design of the organization. According to the authors, in fact, organizational design affects the dynamic capabilities necessary for the business model, which are: sensing, seizing, and transforming (Teece et al., 1997). The authors analyse three levels of the organization, namely: institutional, strategic and operational. The most interesting aspect is that the authors identify logical and cause-effect relationships that link both the barriers and the drivers in the three levels. For example, one of the main institutional barriers is an excessive focus on maximizing shareholder value, put in place to avoid uncertainty and why companies should take a short-term view. Barriers at the institutional level lead to an excessive emphasis on functional strategy, exploitation of current business operations and short-term profitability which are reflected in further operational barriers. The drivers are also conceived by the authors in clear contrast with the barriers and connected by cause-effect logics in the three institutional, strategic and operational levels. However, the authors do not examine the business model process, so their work does not present any contribution on the phases.

In the literature, in the best of our knowledge, there is no model that describes the value flow in business model for sustainability and simultaneously considers and integrates the phases, drivers and barriers of this process. In particular, Roome and Louche (2016) find only the phases of the process and the external drivers that they call the “enabling factor”. The

authors do not explore the barriers to this process. On the other hand, Bocken and Geradts (2020) investigate the relationships between barriers and drivers and how they interface with dynamic capabilities, without however questioning the value flow of business model. The work by Long et al. (2018) is the one that comes closest to our study, as the authors investigate phases, drivers and barriers of the process. However, the authors do not consider the value flow perspective. To summarize, none of the previous studies present the three elements phases, drivers and barriers integrated into a single model. Furthermore, none of the aforementioned authors proposes a model for analysing the value flow within the business model and how this is affected by the sustainability.

Consequently, the research aim is to provide a framework that describes the value flow of the business model for sustainability, highlighting phases, drivers and barriers to sustainability integration.

Therefore, the research question is:

***RQ2:** How is the value flow in a Business Model for Sustainability of a sustainable-born company conceptually structured? By which business model components, drivers and barriers?*

3.5 Stakeholder theory and Sustainability

The term stakeholder first appeared in 1963 in opposition to the notion that shareholders are the only group that management must refer to (Parmar et al., 2010). A stakeholder can be defined as “any group or individual that can influence or be influenced by the achievement of the organization’s goals” (Freeman, 1984; p. 46), while for Dunham, Freeman, and Liedtka (2006; p. 25), it represents “a group that the company needs to exist, particularly customers, suppliers, employees, shareholders, and communities.”

Stakeholder theory proposes to adopt as a unit of analysis the relationships (unilateral, bilateral, or even multiparty) between a company and its stakeholders (Parmar et al., 2010). The stakeholder theory permits: 1) to resolve the needs of a broad group of stakeholders (Harrison, Bosse & Phillips, 2010); 2) to manage and shape the relationships to create as much value as possible to be then distributed to all stakeholders (Freeman, 1984); 3) to assess potential damages and benefits to broad groups and individuals (Phillips, 2003; Post, Preston & Sachs, 2002; Sisodia, Wolfe, & Sheth, 2007).

The conceptual link of stakeholder theory with sustainability emerges from some shared concepts such as:

1. the purpose of business that must go beyond maximizing short-term shareholder value;
2. the interconnection and conflict between ethical and business issues; and
3. the consideration of a long-term perspective that allows for the creation of stakeholder value now, without compromising the ability to create value in the long term (Hörisch et al., 2014).

Indeed, a sustainability challenge for companies is to relate with stakeholders on a multitude of contemporary social and ecological issues (Hörisch et al., 2014). This is stated also by the United Nations that include multi-stakeholder partnerships as one of the Sustainable Development Goals (United Nation, 2018).

Literature argues that stakeholder theory is useful to address sustainability issues. The relations with stakeholders are dynamic and could change depending on the approach to solving sustainability problems (Hall & Wagner, 2012; Mitchell, Agle, & Wood, 1997) and allow to share resources and knowledge to solve complex environmental and social problems (Fadeeva, 2005; Gray & Purdy, 2018). As suggested by Vildåsen and Havenvid (2018), the stakeholder relations lead to corporate sustainability through: 1) relations on a specific technical project; 2) the achievement and development of mutual sustainability long-term goals; 3) networking, in which a company systematically relate with the stakeholders in joint sustainability initiatives.

Although the literature recognizes the importance of stakeholders to implement corporate sustainability, there is a lack of investigation on the contribution of these stakeholders on the value flow of the business model. Traditional and sustainability-oriented business model concepts have been defined in various ways, from various theoretical perspectives, for example taking a stakeholder, activity, building block, or value flow perspective. The relation among company and its stakeholders is even stronger when it goes beyond the practice and becomes the foundation of the organizational sustainability strategy (Fobbe & Hilletoft, 2021) and the business model.

3.6 Research Gap on BMfS and Stakeholders

Traditionally, the business model has been viewed as a tool available to companies useful to describe the logic by which an organization creates, delivers, and captures value (Osterwalder & Pigneur, 2010). The firm-centric view of the business model has then been overcome by Zott and Amit (2010), who view it “as a system of interdependent activities that transcends the focal firm and spans its boundaries”. The system of activities allows the firm, in concert with its partners, to create value and also to appropriate a share of that value (Zott & Amit, 2010; p. 216). The same authors call this concept the “networked nature of value

creation”, claiming that “value creation through business models involves a more complex and interconnected set of relationships and activities among multiple actors” (Zott and Amit, 2010; p. 1031). These concepts broaden in the case of business models for sustainability. Indeed, business model for sustainability goes beyond the economic value and includes a consideration of positive value for a wider set of stakeholders (Bocken et al., 2013).

One of the definitions of a business model for sustainability sees it as a simplified representation of the elements, the interrelationship between these elements, and the relation with its stakeholders that a company uses to propose, create, deliver, capture sustainable value for, and in collaboration with, a wide range of stakeholders (Geissdoerfer, Bocken, & Hultink, 2016). Furthermore, the notion of business model for sustainability “builds on the business model concept and combines it with the important concepts of stakeholder management (Donaldson & Preston, 1995; Freeman, 1984; Post, Preston & Sachs, 2002), sustainable value creation (Short et al., 2012), a long-term perspective” (Geissdoerfer et al., 2016; p.2).

Since stakeholder theory is linked to the concept of sustainability (Hörisch, Freeman, & Schaltegger, 2014), it can be applied to business models for sustainability and can add several points to the discussion, as indicated by Freudenreich et al. (2020). On one hand, stakeholder theory recognizes that value creation is based on company relationships. Consequently, solid relationships with stakeholders make a business model work. On the other hand, the creation of value through the business model takes on multi-directional and multi-stakeholders characteristics oriented towards a common purpose of sustainability.

It is established by the literature that stakeholders are a central element in business models for sustainability (e.g., Bocken et al., 2013; Freudenreich et al., 2020; Kujala & Korhonen, 2017; Stubbs & Cocklin, 2008). Furthermore, some scholars have inserted stakeholder relation as part of their business model framework.

Firstly, Stubbs and Cocklin (2008) conceptualized the business model from a systemic perspective, considering all stakeholders, including nature and society. Similarly, Lozano (2018) proposes and defines a framework for business model for sustainability by adopting a holistic and systemic view to integrate organizational approaches, business systems, stakeholders, and sustainability dimensions.

Starting from this systemic view, some authors have studied the individual dimensions of value flow associated with stakeholders. On one hand, Bocken et al. (2013) focused on the value proposition of the business model by including both an understanding of the different forms of value and the stakeholders the company must address. On the other hand, Freudenreich et al. (2020), focus on the multidirectional creation of value between the company and its stakeholders, around a common purpose through which stakeholders are engaged in the business model.

Despite the relevance of the topic, the literature does not specify how stakeholders contribute to all dimensions of the value flow of business models for sustainability. Thus, this research combines the whole value flow of business model and the stakeholder theory, to address the following research question:

***RQ3:** How do stakeholders contribute to the value flow of the business model for sustainability?*

3.7 Organisational Learning and BMfs

Over last years, enterprise commitment to sustainability-related activities is growing. Organizations try to include some sustainability aspects in their strategy and decision-making process with the aim of reaching competitive advantage and surpassing competitors (Johnson and Schaltegger, 2016; Janson et al., 2017; Ritala et al., 2018). To enclose sustainability elements in companies' business model, a well-designed learning process is necessary, as well as the identification of learning dimensions related to environmental and social issues. The key is that a management orientation supporting continual adaptability and learning leads to a better linkage between the three pillars of sustainability (Jamali, 2006), aiming at satisfying not only economic income, thus inserting sustainability aspects in a continuous learning approach to strategy. As consequence of this, a higher propensity for learning guarantees better equipped organizations ready for meeting the challenge of triple bottom line integration (Jamali, 2006). Literature states that a positive association has been observed between organizational learning dimensions and firm performance (Zhou et al., 2015). Even though, a company chooses to deepen different aspects of sustainability learning characteristics, a combination is even better than one single characteristic (Zhou et al., 2015).

As acknowledged by Örtenblad (2018), past studies have struggled in finding a common definition of learning organization, leading to the co-existence of at least four versions of learning organization definition, namely: learning at work, climate for learning, organizational learning and learning structure. In such multifaceted concept, the organization may be seen as a facilitator, as a learning unit or as an end process of learning, whereas some authors adopt an over-lapping view on its definition (e.g., Senge, 1990; Pedler et al., 1991; Watkins and Marsick, 1997).

Even learning processes include a multi-level perspective on skill development for their own nature. Progressing from the studies on experiential learning (e.g., Kolb, 1984; Mainemelis et al., 2002), Edwards (2005, 2009) represents the learning process "as a cycle of active physical engagement, conceptual reflection, cultural interpretation and social validation

that, through multiple iterations, can result in knowledge and insight in individuals and social collectives” (Edwards, 2009). Edwards names this model the integral cycle of learning, which took place within two dimensions: (I) individual vs relational and (II) abstract vs concrete experience (Figure 3-1). As a consequence, four types of learning may take place (Edwards, 2009), each characterized by different learning skills: (a) reflective learning, (b) behavioural learning, (c) social learning, (d) cultural learning. The following table illustrates such dimensions (Table 3-2).

On one hand the learning dimensions are self-explaining the learning classification, on the other hand academics struggle in detailing such dimensions in order to illuminate the concept of learning organization in the business practices. Over last twenty years of research indeed, several authors have investigated organizational learning dimensions in order to identify the dimensions in which organizational learning take place in companies (e.g., Watkins and Marsick, 1997; Moilanen, 2001, 2005; Garvin et al., 2008; Zhou et al., 2015).

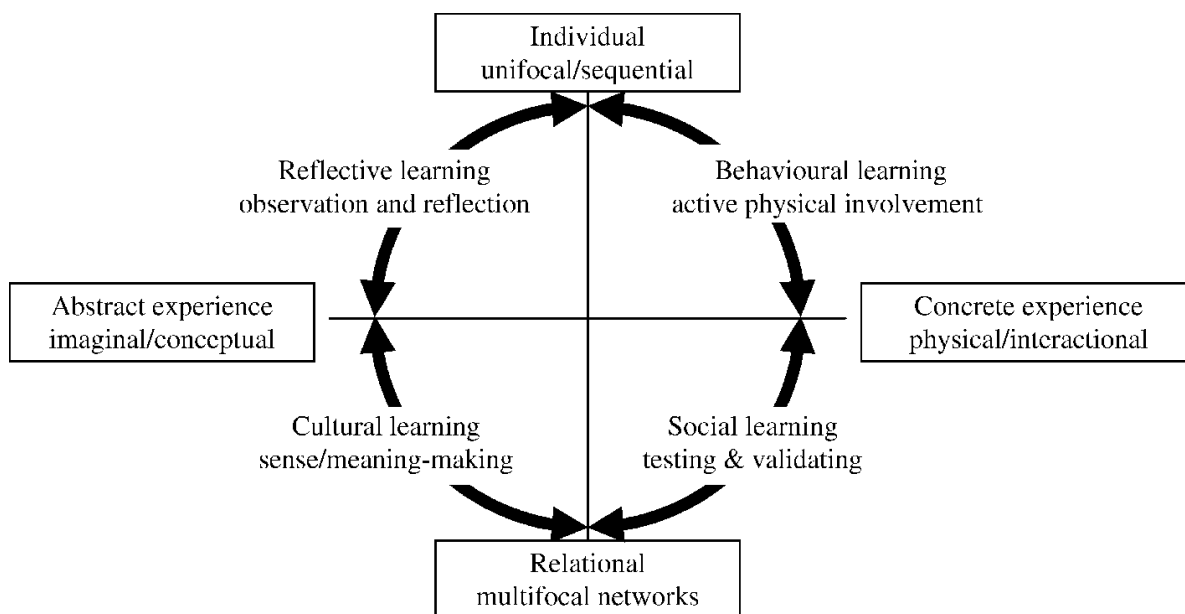


Figure 3-1 The integral cycle of learning (single loop) (Edwards, 2009)

Table 3-2 Learning dimensions and skills (adaptation from Edwards 2009)

Learning type	Learning dimensions	Learning skills
Reflective learning	Individual – Abstract experience	Observation and reflection
Behavioural learning	Individual – Concrete experience	Active physical involvement
Social learning	Relational – Concrete experience	Testing and validating
Cultural learning	Relational – Abstract experience	Sense-meaning/making

3.8 Research Gap on Learning in BMfS

The literature on how companies learn sustainability deals with both organisational learning and sustainability (e.g., Haugh and Talwar, 2010; Wilson and Beard, 2014). It propounds that organisations tend to adopt a short-term focus and act expediently in terms of decision making (Smith and Sharicz, 2011). However, it can be argued that effective learning for sustainability lies in organisational learning characteristics, such as employee participation, the learning climate, systematic employee development, constant experimentation, and learning reward systems (Jamali and Sidani, 2008). Sustainability has, thus, been attained by changing internal processes, organisational learning, and employee mind-sets (Pourdehnad and Smith, 2012). For instance, customisation can lead to a sustainable process and product innovation through organisational learning (Vos *et al.*, 2018). Specific training and development tools could be used to learn about sustainability, such as codes of conduct, impact measures, company visits, and employee volunteering opportunities (Haugh and Talwar, 2010). If integrated into a systematic business process (Jamali, 2006), organisational learning dimensions lead to consolidated sustainability learning. Nonetheless, as acknowledged by Wilson and Beard (2014), among others, academic research requires further investigation to understand how learning and sustainability practices function in companies.

Despite the acknowledgement of the will and the need for organizational learning for enhancing sustainability, a literature gap exists in how the concepts of learning organisation and sustainability may be combined in a constructive manner to understand the modes of learning sustainability. Moreover, although the literature indicates that sustainability learning could be facilitated by several practices, it is not known whether companies develop specific types of learning or cultivate multiple organisational learning dimensions. To help close the gap, the

focus of this research is sustainable organizational learning in sustainable companies, and the objective is to understand how companies learn to become sustainable. Therefore, the research question is the following:

RQ4: How does a company learn to implement sustainability? Which are the learning practices?

3.9 Conclusion

The perspective adopted throughout the research is the perspective of the flow of value within a business model for sustainability. Several authors have depicted the value flow in business models by considering value proposition, value creation and delivery, and value capture (Bocken et al., 2014; Short et al., 2014). To these Barth and colleagues (2017) added value intention. The dimensions we considered for analysing the value flow are consequently five and they are defined below.

1. Value intention. As described by Barth and colleagues (2017), it is the attitude of the entrepreneur to change, innovate towards sustainability, and create sustainable value.
2. Value proposition. It is, as defined by Patala et al. (2016; p. 144), “the promise on the economic, environmental and social benefits that a firm's offering delivers to customers and society at large, considering both short-term profits and long-term sustainability”.
3. Value creation. Value creation “begins to flesh out the organisation and architecture of the firm. It also specifies and describes the firm’s sources of competitive advantage, i.e., its resources and capabilities” (Richardson, 2008; p. 139).
4. Value delivery. It represents how the value is delivered to different stakeholders. It is the “logical next step and is most closely related with the customer. It is focused on customer relationships, customer segments and channels” (Bocken, Schuit, & Kraaijenhagen, 2018; p. 84).
5. Value capture. It includes different forms of benefits captured by different key stakeholders (Short et al., 2014).

The value flow is the common thread of this work. Each of the topics that make up the work: context, type, architecture and managerial practices (learning), was investigated from the point of view of value flow, as summarized in the Figure 3-2. In the figure it is possible to see which dimensions of the value flow are linked to the topics: context, type, architecture and managerial (learning) practices.

Value flow	CONTEXT: Challenges TYPES: Types of BMfS	CONTEXT: Stakeholder	ARCHITECTURE: Phases, Drivers, Barriers	PRACTICES: Learning practices
Value Intention		X	X	X
Value Creation	X	X	X	X
Value Delivery		X	X	
Value Proposition	X	X	X	
Value Capture	X	X		

Figure 3-2 Link among value flow and the topics: context, type, architecture and managerial (learning) practices.

4 Methodology

The following Chapter is on the methodology chosen for every step of the research. Particularly, the Chapter outlines how every part of the research linked to the corresponding research question was designed, how the samples of case studies were selected, and how the data were collected and finally analysed.

4.1 Methodology of RQ1: Challenges and Type of BMfS

In order to answer to the first research question

***RQ1:** How is the context in which Business Model for Sustainability (BMfS) takes place? What specific BMfS type should a specific company adopt?*

the research employed a multiple case study design for theory development (Voss, Tsiriktsis, & Frohlich, 2002). Multiple cases were selected because they were proper for observing the phenomena in their complexity and consequently allowed a holistic and contextualized analysis, where not-previously known events could be important for comprehension and explanations (Pettigrew, 1992; McCutcheon & Meredith, 1993; Yin, 2003). We used the case study research design with a purposive sampling strategy with a variance theory approach, as defined by Patton (2002) and Gioia (2012), selecting cases that highlight practices that are not yet clearly stated or yet to be investigated by the literature, for in-depth research.

4.1.1 Case selection

To observe and compare patterns and logics of BMfS in the tourism sector, a deliberate theoretical sampling was performed for data collection (Eisenhardt & Graebner, 2007). Key criteria established to select cases were:

1. being a yacht tourism enterprise (i.e., a marina)
2. being a SME (whose size was included in the parameters for micro or small enterprises according to the definition of European Union (European Commission Recommendation 2003/361)).

It was decided to focus on marinas given their specificity for the theme of sustainability. It was selected a sample of seven companies that was sufficiently heterogeneous in terms of location, juridical form, scope and main service activity. The main dimensions of differentiation were location and main activity. This has been done to ensure the presence of

maximum variability within the primary data. It must be acknowledged that the yacht tourism industry was previously analysed in order to detect the typology of enterprises operating in such business sector and the sample can be representative of the industry and country business specialization.

Table 4-1 shows evidence of the variation of criteria among the cases. Although anonymity may not be a desirable choice in case study reporting, it is justified when the aim of its use was the protection of the real cases in being recognized, as well as when the cases are illustrative for an ideal type (Yin, 2003). Both situations are present in our study. Indeed, we faced the need to protect information on business facts and strategies by sample SMEs, which are not subject to publicity as bigger companies. Moreover, the case studies are reported for their illustrative purpose in connection with the theoretical framework on BMfS challenges by Evans et al. (2017). Still, interviewees explicitly asked for case anonymity. With these premises, the case studies are presented in anonymity.

4.1.2 Data Collection

To maximize the validity and reliability (Wallendorf & Belk, 1989), multiple sources of data were used, with the double aim to increase the information basis and to diversify it, implementing an information triangulation. In particular, the source channels for data were both primary sources (semi-structured interviews) and secondary sources (publicly available data from press reviews, websites, and archival documents provided by informants). Informants were selected among the key roles for BMfS development, such as the company CEO, the person responsible for strategy, or the person responsible for sustainability. For each case, one interviewee was selected and a total of 7 face-to-face interviews were conducted. The collection of data required circa 21 non-consecutive days of on-site visits and the time-frame of the analysis was from December 2019 to March 2020.

To ensure coherence and consistency, and to guide the process of data gathering, an interview protocol was developed. This included both semi-structured and open-ended questions, in order to contextualize data collected to each specific area. Questions were formulated to investigate elements and managerial actions aimed at developing BMsfS and possible obstacles and challenges in their implementation. Therefore, the questions were organized in the following sections and related topics of discussion:

- Company main information and history, highlighting the main disruptive events, business strategy and innovation strategy;
- sustainability: Economic impact, social impact, and environmental impact;
- physical resources; human resources and competencies; financial resources;
- network and supply chain (suppliers, customers, partnerships, and stakeholders);

- activities and quality;
- point of view on challenges, obstacles and future developments.

Table 4-1 Features of the case studies

Cases	Location	Year of Foundation	Juridical Form	Firm Size (Employees; Turnover)	Scope (% Foreign Customers)	Main Activities
Case A	Italy	2003	Private	Small (10–49; € 2–10 m)	International (40%)	Repair and refit
Case B	Italy	1973	Private	Small (10–49; € 2–10 m)	International (55%)	Repair and refit
Case C	Spain	1983	Public	Micro (<10; € ≤2 m)	International (25%)	Berthing and mooring rent
Case D	Spain	1952	No-profit	Micro-Small (10–49; € ≤2 m)	Local	Nautical courses and sport activities
Case E	Portugal	1983	No-profit	Micro-Small (10–49; € ≤2 m)	International (50%)	Nautical courses and sport activities
Case F	Portugal	1978	Private	Small-Medium (50–249; € 2–10 m)	International (90%)	Repair and refit
Case G	Albania	2017	Private	Micro-Small (10–49; € ≤2 m)	International (25%)	Mooring rent

4.1.3 Data Analysis

Case analyses were conducted following the recommendations of several scholars (McCutcheon & Meredith, 1993; Yin, 2003; Eisenhardt, 1989; Miles & Huberman, 1994). Interview transcripts and archival data were analysed following a two-step procedure, involving a within-case analysis and a search for cross-case patterns (Voss, Tsikriktsis, & Frohlich, 2002; Eisenhardt, 1989) in terms of the main elements of sustainable business models and challenges. Figure 4-1 illustrates the data analysis process that is detailed afterwards.

A cross-case analysis was conducted in order to group SMEs according to recurrent patterns in their business models from the perspective of sustainability. A selection of variables based on the triple-layered business model canvas of Joyce and Paquin (2016) was examined throughout the case studies to trace either commonalities or differences among business

models, resulting into the identification of three types of business models. In particular, these variables were:

- Economic dimension: Technological innovation, the importance of technical skills, internationalization, networking, horizontal partnerships, vertical partnerships, facilities and infrastructures, quality orientation, customer relationship, marketing initiatives, use of social media;
- Environmental dimension: Clean energy production, environmental certificates, reuse-recycle initiatives, technological innovation for the environment, initiatives for environmental awareness and education;
- Social dimension: Social activities to schools, social activities to disabled or disadvantaged people, local community involvement, sponsorships.

The variables were expressions of the three dimensions of the TBL and, as such, useful to guide the analysis of sustainability challenges within the business models of the sample enterprises. The variables were detected within the primary and secondary sources of information for each case study at first and compared with each other.

We used then the challenges for creating sustainable value in business model innovation suggested by Evans et al. (2017) to compare and describe the three groups. Moreover, given the qualitative nature of the study, to perform it in a rigorous way, two researchers autonomously (based on documents, interviews and observation) evaluated the case and wrote their comments, and subsequently shared their opinions to obtain a convergent assessment. Gaps and conflicts were resolved by further reviewing the transcripts and by consultation with interviewees. Finally, informants reviewed and confirmed the case results to ensure the investigators' comprehension was correct. Such feedback from informants was essential to prevent observer bias and establish the credibility of the interpretation (Miles & Huberman, 1994).

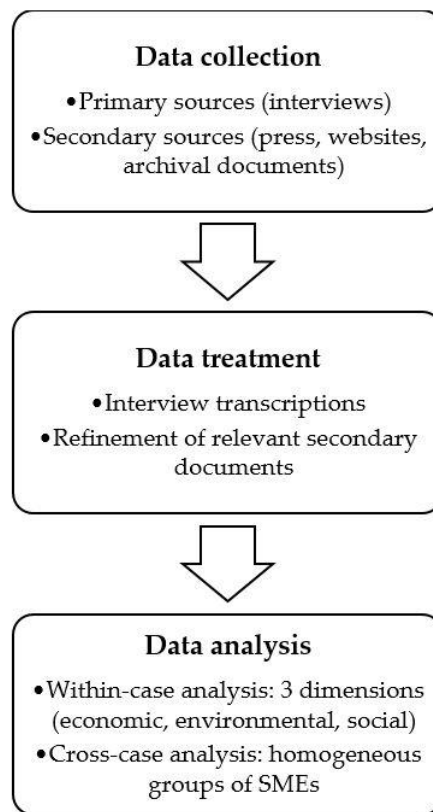


Figure 4-1 The data analysis process

4.2 Methodology of RQ2: Value Flow

The methodology chosen for the second research question

RQ2: How is the value flow in a BMfS of a sustainable-born company created and implemented?

is a qualitative analysis through multiple case studies designed for exploratory purposes (Yin, 2014).

This methodology was considered suitable according to the aim of the research question. Particularly, multiple case study methodology was chosen because it is adequate to investigate the adoption of a BMfS by a company that can be considered as a “recent” event (Eisenhardt, 1989). Moreover, this methodology is appropriate to answer to the above-mentioned research question and to understand deeply a real-life phenomenon and its contextual conditions (McCutcheon & Meredith, 1993; Yin, 2014). The qualitative research strategy is suitable when the aim of the research is theory exploration as suggested by Bell et al. (2018). Case study methodology allow to collect a wide range of data (Hartley, 1994) and

to identify crucial elements. Finally, it matches the research aim to study a phenomenon with a dynamic and process nature and in which events play an important role in building explanations (Pettigrew, 1992).

4.2.1 Case Selection

The first phase of the methodology was the selection of case studies. Cases were selected by means of theoretical sampling and deliberate selection (Eisenhardt & Graebner, 2007).

Successful case studies are chosen to highlight aspects not yet investigated by literature. The criteria used for the selection of cases are:

1. be a for-profit company; and
2. be a sustainable-born company, i.e. a company established with the explicit aim of proposing value in a triple form: economic, social, and environmental one and which integrates sustainability objectives into organizational strategy and practices.

To guarantee that selected organizations are addressing the selection criteria, B Corps were chosen as case studies. On one hand, B Corps are forms of companies for profit with traditional corporate characteristics. On the other hand, B Corps are socially obliged and committed to give to their social and environmental impact the same rigor they give to their financial returns (Marquis et al., 2011). In this way, B Corps integrate a “for-purpose” model link to the social logic with a for-profit model linked to the market logic (Stubbs, 2017). The cases are selected according to their characteristics of fit, distinctiveness and revelatory nature (Siggelkow, 2007).

We carried out the search for B Corp certified companies used as case studies through the directory of the official online site bcorporation.eu, containing a list of all European companies currently certified by B Lab. Starting from this, a collection was carried out some specific data of each company in order to make a careful selection of case studies. These data were found through some platforms available online that offer reporting services and corporate information (for example reportaziende.it); these reports have also been ascertained by cross-checking various data available via the web and, consequently, can be considered reliable.

With the final prospect of being able to generalize the results as much as possible, we selected five heterogeneous companies with reference to type of industry and year of foundation. Companies belong to the manufacturing sector and have similar dimensions in terms of employees to guarantee cases are comparable.

D-Orbit was born as a start-up in 2011 in Italy. The company's mission is to "provide end-to-end solutions to improve new and traditional space activities by optimizing operations in space and on the ground with exclusive, innovative and proprietary technologies". The company aims to influence how new entrants approach issues such as orbital clearance. The company received an award for being among the 100 most innovative and promising companies in the world at the Red Herring Top 100 Global Competition. D-Orbit's business approach goes beyond economic benefit: all the activities aim at producing a wider benefit for humanity. The products and services are designed to solve global challenges with a high social impact. The internal organization leverages the value of people and the positive relationships with all their stakeholders. D-Orbit was one of the first European companies to be registered as a Benefit Corporation, and the first certified space industry B-Corp worldwide.

Davines S.p.A. is an international brand that formulates, produces and distributes hair and cosmetic products in ninety countries around the world, drawing inspiration from the concept of "sustainable beauty" right from the start. The company was founded in 1983 in Italy as a small family-run laboratory, which dealt with the formulation and production of products both under the Davines brand and for third parties, intended for hairdressers and beauticians. In line with the meaning of sustainable beauty, the company has drawn up the Research Charter, a collection of guidelines respected by the research laboratory in the processes of supplying raw materials and formulating and creating products, with the intent to maximize product and process sustainability. The raw materials used in the creation of the products must be mainly of natural origin or eco-certified, obtained from processes that are as eco-sustainable as possible, derived from renewable sources, biodegradable and with low aquatic toxicity, in compliance with international eco-ethical standards in compliance with workers and the environment. In 2016 the company obtained the B Corporation Certification and in 2019 it also legally reaffirmed its commitment to sustainability by changing its statute to a Benefit Company.

The Carlo Reda and son's wool mill was founded in 1865. After the flood that destroyed all its factories in 1968, the company was reborn with the name Successori Reda. Successori Reda directly controls the entire production process, from the fleece to the finished fabric. Its products combine the Italian artisan tradition and technological innovation and are chosen by the most important international fashion houses, leading the company to export all over the world, while maintaining a strong link with their land. Successori Reda owns three farms in New Zealand and a plant in the hills of Italy where it produces all its fabrics, directly following the entire production chain from sheep farming to realization of the finished product, guaranteeing a high-quality fabric and totally Made in Italy production. Its products are the result of a vast heritage of values that involve a constant search for excellence, strong human

relationships with all its employees and attention and respect for the environment, which has allowed the company to obtain various certifications, including EMAS and B Corp.

Founded in 1979, Euro Company produces, selects, and markets dried fruit in the heart of Romagna region in Italy. With a revenue of over 110 million euros in 2019 and a constantly growing community (up to today about 350 employees) it has an almost total presence on the Italian market, offering vegetal food with the aim of minimizing the manipulation of raw material. The company's vision is to be the reference point for healthy and sustainable nutrition, focusing on health, the planet and respect for people, with the aim of influencing the entire food industry. The company management moves according to four pillars of the concept of "Ethical Quality": the control and traceability of the supply chain, the long-term partnership relationship with producers, fair remuneration and the sharing of equipment and know-how, which translate into high quality raw materials and guarantee of the best possible product for the consumer. Since 2018, Euro Company has also been a Benefit Company, committing itself to protect its Mission and to pursue - in addition to making a profit - a purpose of common benefit and since 2019 it has obtained the certification of the B Corp movement, the highest standard for the evaluation of impact.

Abafoods is an Italian company founded in 1995 expert in the production of organic and vegetable drinks which, and with the Isola Bio brand, is the leader in the Italian market for the alternative vegetable drinks to milk. It was acquired a few years ago by the Dutch multinational Ecotone, a leading company in the European market of organic and vegetable food. To date, Ecotone is the largest international food company to have become fully B Corp in all its divisions. It works in 7 countries, employs about 1,500 people and owns over 15 leading brands, which are 80% organic, 95% vegetable and all GMO-free. The company is recognized at European level for the rich variety of leading and proactive brands; many of them, in fact, are leaders of the organic market in their country and in their category. Finally, their motto is "Food for Biodiversity" and they focus transversally on organic, vegetable, fair trade products with nutritional benefits.

The five companies, although with characteristics and specialization in different contexts, share some common characteristics:

1. they have been engaged for several years in corporate sustainability efforts, they have passed the B impact assessment process and consequently obtained the B Corp certification,
2. they are organizations that have integrated corporate values into their vision that involve a constant pursuit of excellence and ethical quality by creating strong human relationships with all their employees and with the attention and respect for the environment.

3. In addition, they share the desire to influence the entire supply chain and the sector to which they belong, by sharing their sustainability best practices.

The Table 4-1 shows the main features of the selected case studies.

Table 4-1 Data of selected case studies

N	NAME	INDUSTRY	DESCRIPTION	YEAR OF FOUNDATION	N EMPLOYEES
1	D-Orbit	Space	Satellite production and removal service	2011	~ 75
2	Davines	Cosmetics	Hair care and skincare products	1983	~ 450
3	Successori Reda	Textile	Fine wool fabrics manufacturing	1865	~ 550
4	Euro Company	Food & beverage	Production of dried fruit	1979	~ 400
5	Abafoods	Food & beverage	Organic, plant-based drinks	1995	~ 200

4.2.2 Data Collection

To maximize data validity and reliability, multiple sources of data were used. In these way, more information was collected through different sources with the aim to minimize potential biases and to increase the amount of data (Yin, 2014). The data collection was carried out through both interviews and secondary sources, such as company press releases and internal reports, company web sites and social networks. By doing so, primary data have been checked and data triangulation provided (Patton, 2002).

A semi-structured interview protocol was created on the basis of the research framework. The people interviewed were chosen on the basis of their roles. In particular, human resources were selected who cover management or management roles or are closely involved in sustainability processes (see details in Table 4-2). The selected interviewees are members of the top management, HR managers, sustainability or impact managers in order to gain multiple perspective and to analyse the whole organization. Semi-structured interviews were conducted with at least two interviewees per company, for a total of 11 interviews (9 online and 2 in-person interviews) with an average duration of one hour. We formulated an interview protocol to act as a guideline for the data collection process and to ensure the consistency of the information collected (Yin, 2014). We asked the interviewees questions in order to investigate how organizations consider, innovate and manage corporate sustainability within their business models. In addition, we paid particular attention to the investigation of

the elements related to barriers and drivers. The first questions are related to the organization story with the aim to highlight the main turning points and consequent phases of the evolutionary and organizational process. Secondly, the interviewees should answer to the questions on the organization of the business model. Finally, the questions cover aspects related to the specific elements of the integration of sustainability, namely drivers, barriers.

Table 4-2 Information on interviews and respondents

COMPANY	ROLE	INTERVIEW DURATION
D-Orbit	Quality and Impact Manager	62 minutes
	Product Assurance Engineer	45 minutes
Davines	CEO	33 minutes
	HR Manager	75 minutes
	COO	64 minutes
Successori Reda	Sustainability Manager	81 minues
	Environmental Manager	39 minues
Euro Company	Marketing & Comunication Director	86 minutes
	HR Manager	60 minutes
Abafoods	Organizational Change Manager	45 minutes
	HR Manager	78 minutes

4.2.3 Data Analysis

The data analysis was conducted according to the recommendations of Eisenhardt (1989), Yin (2014), McCutcheon and Meredith (1993), Miles and Huberman (1994). All interviews were recorded and fully transcribed and all documents are synthesized. Finally, the interviewees have been asked to review and confirm if the data interpretation was correct. The feedback from the interviewees is essential to avoid bias by the observer (Miles & Huberman, 1994).

We then analysed the collected data. The data analysis was carried out in two phases, first by analysing the individual case studies through detailed descriptions (Pettigrew, 1992; Yin, 2014); then, looking at the cases as a whole through a cross-case analysis, highlighting elements of convergence and divergence (Benbasat et al., 1987; Eisenhardt, 1989; Yin, 2014). We interpreted each individual case study as a separate experiment. We first analysed the business model of each company using the business model Canvas tool (Osterwalder & Pigneur, 2010), then systematically mapped the data on the phases, drivers and barriers (See

Table 11-1, Table 11-2, and Table 11-3 in Appendix) that characterize the stages of the sustainability path. We aggregated data that contained the same concept into first-order categories, second-order categories, and aggregate dimensions (Charmaz, 2006; Corbin & Strauss, 2007; Gioia et al., 2013). The result was an interpretative framework to identify the value flow in business model for sustainability.

4.3 Methodology of RQ3: Stakeholders

To address the third research question

RQ3: How do stakeholders contribute to the value flow of the business model for sustainability?

the literature on business models for sustainability was furtherly investigated by considering the two main aspects of this discussion: the value flow in a business model for sustainability and the stakeholders.

The value is no longer a one-way flow between the company and its customers, but it is created by joint actions and formal and informal alliances with stakeholders who are both recipients and creators of value (Beattie & Smith, 2013; Freudenreich et al., 2020). Several authors have depicted the value flow in business models by considering value proposition, value creation and delivery, and value capture (Bocken et al., 2014; Short et al., 2014). To these Barth and colleagues (2017) added value intention. The dimensions we considered for analysing the value flow are consequently five and they are defined below.

6. Value intention. As described by Barth and colleagues (2017), it is the attitude of the entrepreneur to change, innovate towards sustainability, and create sustainable value.
7. Value proposition. It is, as defined by Patala et al. (2016; p. 144), “the promise on the economic, environmental and social benefits that a firm's offering delivers to customers and society at large, considering both short-term profits and long-term sustainability”.
8. Value creation. Value creation “begins to flesh out the organisation and architecture of the firm. It also specifies and describes the firm’s sources of competitive advantage, i.e., its resources and capabilities” (Richardson, 2008; p. 139).
9. Value delivery. It represents how the value is delivered to different stakeholders. It is the “logical next step and is most closely related with the customer. It is focused on customer relationships, customer segments and channels” (Bocken, Schuit, & Kraaijenhagen, 2018; p. 84).

10. Value capture. It includes different forms of benefits captured by different key stakeholders (Short et al., 2014).

Additionally, within the literature on business models for sustainability, we investigated the stakeholder groups and their categorizations. Following Hart and Milstein (2003), Rezaee (2016), Lozano (2018) and Oskam and colleagues (2018), we categorized stakeholders as internal and external to the organizations. We also identified the stakeholder groups as follow:

1. entrepreneur (Barth, Ulvenblad, & Ulvenblad, 2017; Dixon & Clifford, 2007);
2. employees (Bocken et al., 2014; Lozano, 2018);
3. customers (Alberti & Varon Garrido, 2017; Joyce & Paquin, 2016, Wagner & Svensson, 2014);
4. shareholders (Baldassarre et al., 2017; Chang et al., 2017);
5. government (Hart & Milstein, 2003; Yang et al., 2017);
6. society, such as: local communities and territory (Geissdoerfer et al., 2016; Joyce & Paquin, 2016), NGOs (Boons & Lüdeke-Freund, 2013), media (Chang et al., 2017; Clarkson, 1995), future generations (Stubbs & Cocklin, 2008; Upward & Jones, 2016);
7. other organizations/competitors (Melander & Pazirandeh, 2019; Morioka et al., 2017);
8. influence groups, such as: corporations, industrial entities, commercial entities, lobbies, external agencies, unions, civic institutions (Chang et al., 2017, Stubbs & Cocklin, 2008)
9. universities/research institutes (Bocken et al., 2013; Parmar et al., 2010)
10. natural environment (Lozano, 2018; Christ et al., 2018).

From this analysis, we derived and classified the stakeholders that contribute to the value flow in the business model for sustainability, building a conceptual framework organised as follows. In the rows, the internal stakeholders (i.e., entrepreneur, employees) and external stakeholders (i.e., customers, shareholders, government, society, other organizations/competitors, influence groups, universities/research institutes, natural environment) are reported. In the columns the described above dimensions of the value flow of a business model for sustainability are reported. The cells of the framework, which connect rows (stakeholder groups) and columns (value flow dimensions) represent stakeholder contribution to the value flow of the business model for sustainability. In particular, in the cells, we described how stakeholders contributed to a specific dimension of the value flow.

To explore the contribution of stakeholders to the value flow in business model for sustainability we chose a qualitative research design (Eisenhardt, 1989; Yin, 2014). The complexity of the business model for sustainability, the in-depth level of understanding we

tend to, and the relevance of the peculiarities related to the context have further pushed us towards the use of a qualitative research design (Creswell, 2013). We applied a multiple case study approach to achieve the required depth and to be able to compare results (Eisenhardt, 1989; Eisenhardt & Graebner, 2007). Our conceptualization is based on model descriptions (Cornelissen, 2016), so our inductive research design was helpful in bringing theory out of data (Eisenhardt, Graebner, & Sonenshein, 2016).

4.3.1 Case selection

To select information-rich cases, we adopted a targeted sampling strategy (Creswell, 2013; Eisenhardt, 1989). We started identifying potential cases by looking for companies that explicitly set themselves a sustainability mission. We consider a sustainable mission when it includes long-term environmental and social goals. We have also selected business organizations linked to profit and therefore excluded non-profit organizations or social cooperatives. Consequently, to guarantee that selected organizations respect all the selection criteria, we chose B Corps as case studies.

To create a homogeneous sample, we looked at companies of similar size. In terms of geographic location, we have only included companies with headquarter in Italy to ensure that there are no differences in terms of legal and political parameters.

In addition to our research, we sought further advice from community experts, with a focus on sustainable entrepreneurship. Since our aim was to identify the contributions of stakeholders in the value flow of individual companies, we decided to focus on a sample of medium-small and well-rooted companies in the territory. In total, we worked with five business cases. The cases selected and analysed are described below.

Company A was founded in the '60s in Northern Italy and operates in the industrial transport industry. It consists of more than 100 companies that deal exclusively with transport on behalf of third parties, core business and strategic key of the activity. Thus, company combines the advantages of large industrial fleets, such as capillarity, breadth and guaranteed service, with the advantages of small fleets, such as customer care, flexibility and attention to the goods transported. Company A has two logistics companies, two customs companies, one commercial company and one heavy vehicle rental company, all united by a central management. Company's main customers are large companies belonging to different sectors (e.g., food, packaging, processed products, etc.). Moreover, the company has 50 employees and 80 affiliated companies.

Company B was founded in 2012 in Northern Italy and operates in the wholesale/retail industry. The production activity of the company is entirely outsourced. In fact, in addition to the legal and operational headquarters (located in Italy) the company is also in China with a

strategic representative office, that ensures the production of high-quality garments for women, men and children, final customers of the company. In terms of geographical expansion, the company operates in 30 countries around the world. The export share has reached 50% of sales thanks to a selected network of wholesale stores. The company has 40 employees.

Company C was founded in 1989 in the South of Italy, and it operates in the natural cosmetics industry. So, it deals with R&D of natural solutions able to re-establish the well-being, balance and health of the skin and to improve the state of mind of the person.

The company group consists of three parts: the first deals with marketing, the second with extraction, production and research, and the third with agriculture and hospitality. In this way, the company has established an integrated local supply chain at "Km 0", directly following all the phases of the production cycle: certified organic cultivation; extraction of the organic active ingredients; research & innovation and quality control; production of natural and organic cosmetics; Private Label customisation (ingredients, texture, olfactory note, desired effect, design, organic certification). These choices favour the "Green Quality Concept", now a pillar of the company philosophy, which guarantees the highest standards of quality and sustainability of both the production process and the finished product. The company works in business to business market and has 65 employees.

Company D was founded in 1957. In 1985, the founder's sons continued with the business activity, that is production of turned components (metalworker industry) for the automotive, electromechanical and automation industry. Over the years, the company has expanded into new markets thanks to major investments in automatic lathes and improvements in its processes. Each product is tailor-made and manufactured in a constant relationship with the customer. Maximum customisation is aimed at optimising solutions in relation to different requirements. The company works in business to business and on order and has 45 employees.

Company E was founded in 1965 in the North-East of Italy and it operates luxury furniture industry. Having become much more international, the company now consists of two divisions: mono-brand shop fitting which deals with the furnishing of high-end retail shops; tailor-made interiors dedicated to special furnishing solutions, aimed in particular at the end customer. It was created through the acquisition of another company specialising in tailor-made furnishings. Thanks to the acquisition of a company in Michigan, company E also has a strategic production site for both the shop-fitting market and the HORECA sector in North America. The company has 45 employees and operates, as seen, in both business to consumer and business to business markets.

4.3.2 Data collection

Data collection took place both through semi-structured interviews and secondary data. After an initial series of interviews in 2020, we developed a first draft of stakeholder contributions and used external data sources for triangulation. The following year we held a second series of interviews with the same entrepreneurs and employees to confirm, adjust and complete our initial understanding. The double collection of data through interviews and external sources allowed to validate the results. As a unit of analysis, we focused on each company's individual business model. In the event that the company adopts multiple business models, we have focused on the main business model of the company oriented towards its sustainable mission.

We developed an interview protocol to act as a guideline for the data collection process and to ensure the consistency of the information collected (Yin, 2014). We asked the interviewees questions in order to investigate how stakeholders contribute to corporate sustainability. In addition, we paid particular attention to the contribution to the value flow within the business models for sustainability. The first questions are related to the company business models with the aim to highlight the main peculiarities. Secondly, the interviewees should answer to the questions on the dimensions of the value flow of the business model. Finally, the questions cover aspects related to the specific stakeholder contribution to the sustainability.

4.3.3 Data analysis

The data analysis was conducted according to the recommendations of Eisenhardt (1989), Yin (2014). All interviews were recorded and fully transcribed and all documents are synthesized. Finally, the interviewees have been asked to review and confirm if the data interpretation was correct. The feedback from the interviewees is essential to avoid bias by the observer.

We then analysed the collected data. The data analysis was carried out in two phases, first by analysing the individual case studies through detailed descriptions (Yin, 2014); then, looking at the cases as a whole through a cross-case analysis, highlighting elements of convergence and divergence (Benbasat et al., 1987; Eisenhardt, 1989; Yin, 2014). We interpreted each individual case study as a separate experiment. We first analysed the business model of each company using the business model Canvas tool (Osterwalder & Pigneur, 2010), then systematically mapped the data on the contribution of the stakeholders to the value flow that characterize the business model for sustainability.

4.4 Methodology of RQ4: Learning Practices

The following section explain the methodology adopted to answer to fourth research question

RQ4: How does a company learn to implement sustainability? Which are the learning practices?

The research was designed to gain knowledge on sustainable companies in terms of the above mentioned organizational learning characteristics. To this end multiple case study methodology was considered suitable for this study, for the very reason that it sets out to describe how sustainable companies adopt OL characteristics in learning sustainability. Such a methodology is descriptive, explanatory, and exploratory (Yin, 1993; Wilson and Beard, 2014). Although other studies such as that of Wilson and Beard (2014) used a single case study (i.e. Marks and Spencer) to outline the characteristics of a sustainable learning organization, a multiple case study approach is not uncommon in studies of this kind.

4.4.1 Case selection

The choice of the case companies was made on their fitness, distinctiveness and revelatory nature (Siggelkow, 2007; Yin, 2003). Specifically, it was decided to select three case studies that have certifications of sustainability to investigate the organisational learning characteristics in environments which are ready to cultivate and stimulate sustainability practices. The companies belong to the food and beverage sector, the second most active Italian sector in the adoption of sustainability practices, and adhere to the United Nations Global Compact Initiative. Within the sample companies, it was decided to interview team leaders in charge of corporate social responsibility (CSR) since they were aware of sustainability practices in the companies.

Case A is a joint-stock company that carries out activities of manufacturing, bottling, importing and selling beer, both in the national territory of Italy (mainly) and abroad, also by entering into production agreements under license and hiring sales representatives. All the brands are marketed in three different channels: GDO (large retail chains), Ho.Re.Ca (hotels, restaurants, cafes) and Special Customers (for example catering, Ho.Re.Ca. organized, cruise ships, export). The mission of case A is: "To develop the art of producing beer to the highest degree of perfection, regardless of immediate profit, so that our breweries and our products are recognized as quality models and, through these examples, guarantee a production of beer with a high level of quality". Sustainability in Case A started in 2016, when the company identified

through a benchmarking for sustainability, the most important and impacting areas of its activity from a sustainability point of view. By focusing on these areas the company wants to contribute to bringing positive changes in all areas involved in its business, in particular: contribute to the containment of climate change; ensure people have access to water; promote healthy lifestyles; improve workplace safety.

Case A begins its journey towards the evaluation of the environmental impact of its product through the use of the LCA tool. This journey brings the company to re-evaluate its approach to sustainability, integrating environmental and social sustainability into its business. Despite being new in many aspects, the strategy is based on the concept of "Contributing to a better society" to make beer production a more sustainable process. It is based on the belief that economic activities must promote approaches like the circular economy to produce improvement. The company has chosen to report priorities following the beer life cycle: Water, Energy and Emissions (the priority that has the greatest impact on the production process); Health and Safety (attention to the people who produce and market beer) and responsible consumption: (respect for consumers).

Case B produces and sells all over the world a high quality coffee, composed of nine types of pure Arabica. The blend is intended for the Ho.Re.Ca. (hotel, restaurant, cafe), for consumption at home, in the office and on-the-go. Today coffee is marketed in over 140 countries, in all 5 continents, and is served in around 100,000 public establishments. Each of these companies has its own stories and know-how and the holding company is committed to the constant search for possible and best synergies, also with a view to sustainability. The company vision is expressed by the following statement: "We want to be a reference point in the world of coffee culture and excellence. An innovative company that offers the best products and places of consumption and that, thanks to this grows and becomes a high-end leader." Case B places the creation of shared value for all stakeholders at the centre of its work and considers sustainability the very way of pursuing its mission, believing in two fundamental values of excellence and ethics.

Case B through economic, social and environmental sustainability, seeks to achieve the needs of the present without compromising the possibility for future generations to satisfy their own. The company objectives are: economic (pursuing economic sustainability through the concept of shared value creation with all stakeholders); environmental (pursuing environmental sustainability through the concept of respect which translates into the principles of not polluting, not wasting and using renewable resources) and social (pursuing social sustainability through the concept of growth, understood as knowledge and self-realization).

Case C is today the largest reality in the beverage industry in Italy, and one of the most important at international level, with mineral waters, non-alcoholic aperitifs, cold drinks and

teas. Its products are present in over 130 countries through branches and distributors spread across five continents. Case C, as the main producer of mineral water, has always been committed to the enhancement of this primary asset for the planet and works with responsibility to guarantee a quality future for this resource. Case C's mission is to "guarantee a quality future for water". Case C conducts its activities based on three fundamental pillars (healthier generations, communities at the centre, sustainability of the planet), which act in a coherent and synergistic way to achieve the ultimate goals of the company: improving the quality of life and contributing to creating a healthier future. The company, pursuing these objectives, also contributes to the creation and support of the 17 SDGs (Sustainable Development Goals) defined by the United Nations to guarantee the well-being of humanity and the planet. Case C carries on, through a commitment that starts from the inside to expand to institutions, local communities and consumers, various activities in the field of sustainability: the daily monitoring of the sources and the surrounding ecosystem, the efficiency of production systems for energy and water savings, eco-sustainable logistics plans, promotion of educational activities on the correct use of water and recirculation with new generations and scientific research projects for the protection of the resource. Taking care of water means for Case C in fact not only to protect the surrounding sources and ecosystems, but also to build an open and transparent dialogue with its reference public to disseminate information on this resource.

4.4.2 Data collection

Data collection took place throughout 2019 with the use of both primary and secondary sources. The primary sources of information consisted of three interviews with managers in the three companies. The interviews lasted approximately 2 hours each (one-time events) and the interviewees were the team leaders for CSR in their respective companies. One of the researchers met the interviewees individually and recorded the interviews. The interview was structured into three parts: the first one was general in scope (e.g., "Could you sum up the main facts of your company?"; "What are your main strategies?"); the second one was concerned with organisational learning (e.g., "Do you deliver any actions to prompt learning in the company?"); the third one with sustainability (e.g., "What are the main sustainability practices in the company?"; "How is sustainability achieved in the company?").

The secondary sources were case companies' materials, such as their business reports, sustainability reports, ethical codes, company websites and press releases. Useful information was judged to be that dealing with adopted sustainability practices. In such a way, it was possible to list and collect data on what is done by the examined companies to complement what was said by the managers during the interviews.

4.4.3 Data analysis

The data analysis was based on both interview transcripts and secondary sources. The analysis adopted a thematic coding of the collected information (Gibbs, 2007) with reference to the framework of analysis that comes up from a specific literature review. To address the aim of the study, a literature review was conducted in the field of organizational learning to identify how companies learn sustainability. The framework will be explained in Chapter 8.

That is to say, the sustainability practices were analysed in terms of recognised organizational learning dimensions and characteristic. Each practice was matched with one or more organizational learning characteristics to position the practice within the organizational learning characteristics framework. The ordering of the organizational learning dimensions was also used to guide the description of the findings.

5 Challenges in Business Model for Sustainability

Despite the high number of active small and medium enterprises (SMEs) in all sectors, current studies have barely developed investigations on the sustainability of their business models so far. The aim of this Chapter was thus to bridge the gap between Business Models for Sustainability of SMEs in the service industry, to uncover the challenges that SMEs face when seeking business model reconfiguration toward sustainability. More specifically, the empirical investigation adopted a case study research design in the context of yacht tourism, as one business form among many within the tourism industry and thus within the broader category of the service industry. Interviews were conducted with seven European SMEs, whose business models were analysed through the lens of the triple bottom line and sustainability challenges in their business models. The results display a varied typology of case studies, where business model components reveal diverse expressions of facing sustainability challenges. The Chapter discusses reported findings with a cross-case comparison among detected business models and outlines a list of propositions for Business Models for Sustainability of SMEs. The Chapter contributes in continuing the discourse on Business Models for Sustainability, adopting the perspective of the challenges for SMEs and offers food for thought for managers of SMEs in comparing their own business with the identified business model types. Some of the content described in this Chapter has been previously published in “Sustainable Business Models of SMEs: Challenges in Yacht Tourism Sector” in Sustainability.

5.1 Introduction

Many international institutions and governments have included sustainability in their programs as a fundamental element of the society of the future (United Nations, 2015). In 2008, in its report on sustainable development, the OECD (Organisation for Economic Co-operation and Development) argued that at “the core of sustainable development is the need to consider ‘three pillars’ together: society, the economy and the environment. [...] Social well-being and economic well-being feed off each other, and the whole game depends on a healthy biosphere in which to exist” (OECD, 2008) (p. 27).

All companies, both large and small and medium-sized enterprises (SMEs), are affected by sustainability issues and they are calling into question the responsibility assumption for their business activities, as well as the interrelated impacts on the environment and society. Although SMEs, taken individually, are smaller and have less impact on the environment than larger businesses, they represent 99.8% of all business in Europe (European Commission, 2021) and about the 80% of all globally registered enterprises (Moore & Manning, 2009). According to

several scholars (Revell, Stokes, & Chen, 2010; Hörisch, Johnson, & Schaltegger, 2015; Jansson et al., 2017), SMEs collectively have a significant environmental and societal impact. Thus, SMEs should start adopting more sustainable behaviours and a long-term vision to design environmentally and organizationally sustainable processes (Shankar, K.M.; Kannan, D.; Kumar, 2017).

While empirical evidence suggests that environmental and social factors have progressively become strategic concerns for larger companies, which are increasingly integrating sustainability matters into their corporate strategies, several studies have shown that SMEs lag behind in commitment to sustainable practices (Jansson et al., 2017; Chassé & Boiral, 2017; Schmidt et al. 2018). As highlighted by some scholars, this is explained by a variety of elements often related to the typical features of SMEs, which prevent them from implementing environmental and sustainable strategies. Such characteristics include limited financial and human resources (Del Brio & Junquera, 2003; Santos, 2011), organizational structure and culture (Lepoutre & Heene, 2006; Johnson & Schaltegger, 2016), management capabilities, and a lack of understanding of the benefits (Hillary, 2004; MCEwen, 2013; Hsu, An-Yuan, & Wei, 2017). In addition, external barriers constrain SMEs, as for instance insufficient external drivers and incentives both from governments and from the marketplace, or the inadequacy and the complexity of formal environmental management tools, such as ISO 14001, are very expensive for SMEs (Johnson & Schaltegger, 2016). Nevertheless, Moore and Manring (2009) underline that the acceleration of technological innovation, the rapid markets change, the development and linkage of supply chain systems, and the spread of globalized communication networks, are going to gradually induce SMEs to introduce the practice of sustainable development.

Although research on Business Model for Sustainability (BMfS) is growing substantially in management studies and in the strategic and innovation management literature in recent years (Arevalo et al., 2011; Svensson & Wagner, 2001; Schaltegger, Lüdeke-Freund, & Hansen, 2016), how a BMfS works in the real world, and what determines their success or not in the market, is a field still little explored; especially in SMEs and in contexts other than the manufacturing industry and supply chain management, where many SMEs are involved (Buffa, Franch, & Rizio, 2018; Piscicelli, Ludden, & Cooper, 2018). This means that, despite the significant efforts to enhance the knowledge of BMfS, many areas remain weak. The aim of this Chapter was thus to contribute to bridging the gap on the knowledge of BMfS in SMEs in the service industry, and in tourism more specifically, highlighting the tensions that a SME could face when trying to reconfigure its business model toward sustainability.

The Chapter presents the main findings of the research study are discussed through the examination of the triple dimensionality of sustainability (i.e., economic, social, and

environmental) and its related challenges on the value flow of a business model (i.e., value proposition, value creation, and value capture).

5.2 Business Model Typology of Yacht Tourism SMEs

A within-case analysis was performed to highlight the three dimensions of sustainability in each case. Table 5-1 reports the results of the analysis in the case studies.

A cross-case analysis was conducted in order to group yacht tourism SMEs (i.e., marinas) according to recurrent patterns in their business models from the perspective of sustainability. Business Model for Sustainability have been interpreted through their three main components:

1. Value proposition, related to business offerings that guarantee competitive advantage in the long term;
2. Value creation through specific sustainable practices, capabilities and resources;
3. Value capture by using technologies, as well as organizational, and social innovation factors.

A selection of variables was examined throughout the case studies to trace either commonalities or differences among business models, resulting in the identification of three types of business models. The following paragraphs describe the three types of Business Model for Sustainability following the principles of the triple-layered business model of Joyce and Paquin (2016). Within each business model type, challenges on BMfS components (i.e., value proposition, value creation, and value capture) were detected and are described in the following section.

[Digitare qui]

Table 5-1 Analysis of the three dimensions of sustainability of the case studies

ID	Economic Dimension	Environmental Dimension	Social Dimension
A	The marina offers both nationals (60%) and foreign (40%) boat owners traditional shipbuilding and boat storage, as well as special areas in order to make the most of their free time and to relax. The company achieves success by creating strong relationships with suppliers that offer high-quality standards. Its main revenues depend on repair and refit services, followed by moorings' rents. Key resources consist of the strategic geographical position, green areas and expertise of artisans. Main investment is in the creation of commercial networks.	The functional value is the number of boats repaired and maintained as well as boat owners served. Services and facilities are certified according to European and international directives that have allowed the company to obtain the Blue Flag recognition for sustainability and the environment. The company is environmentally managed according to UNI EN ISO 14001.2015 certification. The company also installed a photovoltaic system, LED systems, and a charging point for electric vehicles.	The social value is guaranteed through activities in schools and training opportunities for university students. The company is involved in the promotion of one local prize aimed at awarding professionals dealing with sea economy.
B	The marina offers an all-inclusive after-navigation service to leisure boat owners, who are both nationals (45%) and foreigners (55%). The company aims at establishing a direct relationship with final customers, relying on word-of-mouth and on the use of social media. Its main revenues depend on repair and refit services, followed by moorings' rents. Key resources include repair and boat transport machinery, moorings, and boat dry storage venues. The marina is a partner of a regional network of marinas; the main cost is staff.	The functional value could be expressed in terms of moorings occupied and boat owners served. The production phase adopts innovative technologies, when available. The company accomplishes with environmental law and puts into practice waste management initiatives.	The social value is based on providing all-year work opportunities for local employees. Another initiative addressed to the local community is the dedicated provision of small-boat moorings to locals, despite minor revenues.
C	The marina proposes a safe and fully equipped freshwater marina close to an important tourist destination. Boat owners are present all year long in the marina and considered as part of the	The functional value could be expressed in terms of moorings occupied and event visitors. The marina site is a recovering of an old dumping site. The marina accomplishes with waste management,	The social value is based on representing a meeting point for the local community. The marina is involved in local events and provides spaces to local associations.

[Digitare qui]

	<p>family. Other customers are boat enthusiasts during nautical fairs and events. Both customer segments contribute to the main revenues. Key activities rely on rent of moorings, repairing, as well as event organization and training. Key resources are moorings and dry berth venues, repair machinery, event venues, and other facilities, such as restaurants. The main cost is maintenance and dredging of the area.</p>	<p>recycling, and disposal of dangerous waste, aiming at a future ISO certificate. The marina promotes a second-hand market for the reuse of nautical accessories.</p>	<p>Recreational boating is seen as an opportunity for local development.</p>
D	<p>The marina promotes nautical and water sports, establishing a relationship with local community mainly. Customers are athletes, sports practitioners and people interested in social aspects. A communication manager looks after social media and public profiles. Main revenues come from memberships and rent of moorings. Key activities are sports courses and maintenance of sports facilities, that are the main key resources. The marina is a partner of a national sectorial association, a national organization for social inclusion, and of several local associations.</p>	<p>The functional value could be expressed in terms of a number of members and moorings occupied. The marina is engaged in improving constantly systems for water reuse and optimization, as well as clean energy production and save.</p>	<p>The social value is to foster the ethical and social sustainability and awareness. The marina promotes sports activities to local associations of people with disabilities and free activities for children with no means. Local associations promote events within the marina spaces.</p>
E	<p>The main goal of the marina is to promote nautical activities for both nationals (50%) and foreigners (50%). The company provides training for adults, as well as repair and maintenance services for boats. Its main revenues depend on repair and refit services, followed by moorings' rents. Key resources include a strategic geographical position, a specialized management style and lower prices; The main cost is staff.</p>	<p>The company accomplishes with all applicable environmental regulations. It selectively collects daily garbage of paper, glass and oil (in appropriate oil containers). The waste is collected both in the port and in all facilities, ensuring subsequent recycling through authorized companies.</p>	<p>With regard to social value, the company supports nautical sports programs that are provided free of charge to young people up to 18 years old, usually on the basis of collaboration agreements with local schools and local authorities (e.g., parishes, municipalities).</p>
F	<p>The marina aims at delivering an "all-in-one-place" service to boat owners (90% foreigners)</p>	<p>The functional value could be expressed in terms of moorings occupied and boat owners served. The</p>	<p>The social value is based on providing all-year work opportunities for local</p>

[Digitare qui]

	<p>and maritime authorities. Customers are considered as friends and the company relies on good reputation and service quality for acquiring new clients. Its main revenues depend on key activities of repair and refit services. Key resources are concessions, moorings, repair and refit venues, own software to boat management. The marina is a partner of several marine-related companies, as well as a regional association for sea economy and a cluster of marinas; the main cost is staff.</p>	<p>company accomplishes with the highest environmental standards required by law and puts into practice a water recycling system.</p>	<p>employees. The marina continually collaborates with schools for training projects. The marina could be considered as a driver of the local tourism growth.</p>
G	<p>The marina offers a variety of facility services to yacht owners, who are mainly national (75%). The company is benefited by the infancy of national marina market. The company leverages mainly on the price strategy. Its main revenues consist of moorings' rents. Key resources include an attractive location and high standard facilities.</p>	<p>The functional value could be expressed in terms of moorings occupied. The company is engaged in activities like maintenance of local roads nearby business site and beach water cleaning. The company respects laws for the protection of the environment, sea and fauna.</p>	<p>With regard to social value, the marina is opened for visitors, students and tourists. The company implements a code of conduct for recruiting, training and maintaining a skilled workforce. The company supports neighboring schools with funds.</p>

5.2.1 Business Model for Maintenance-Focused Marinas

The first identified business model groups private enterprises having maintenance of leisure boats as the core activity. This group is characterized by a strong attitude towards technological innovation. Leisure boat owners represent the main customer segment and embodied at least at 50% of international clients. Customers are frequently moved towards the marinas via word-of-mouth and the relationship between customers and the marinas is tight and strong, based on reliance, on high-quality service standards, guaranteed by the provision of quality suppliers and expert workers. Key activities for this business model are repair and refit activities for leisure boats, followed by the rental of moorings and berths. Both kinds of activities concur with revenue production. The geographical position of marina venues represents a strategic resource for this group of companies. Other key resources are spaces dedicated to specific functions: Maintenance areas (i.e., repair and refit venues), berth areas (i.e., moorings, boat dry storage hangars), and leisure areas (i.e., restaurants, green areas). A particularly relevant resource for this business model is the expertise of artisans working to maintain, repair, and refit leisure boats, either as direct employees of the enterprises or outsourced local workers. Machinery, concessions, and software are considered additional important resources in the business model of maintenance-focused marinas. Main costs are due to the employment of qualified workers. Networking is a clue activity for these companies, which aim at establishing horizontal partnerships mainly, for instance by belonging to marina clusters or regional associations of sea economy.

From the environmental point of view, the marinas appear to be highly involved in environmental care. They accomplish environmental regulation and waste management. Further environmental-focused initiatives include the achievement of ISO certificates or the Blue Flag award, clean energy production (i.e., photovoltaic systems), and resource-saving systems (i.e., energy saving or water recycling systems).

From the social perspective, this business model is focused on all-year work opportunities for local employees and in the promotion of local development through tourist arrivals. Moreover, companies involve local schools and universities into didactic activities and training projects.

5.2.2 Business Model for Dock Marinas

In this business model, the main activity is the rental of moorings to national boat owners, with international customers representing only the 25% of total clients. Loyalty plays an essential role in the relationship with customers, based upon the retention of leisure boat owners over the years. Other key activities include hosting and organizing events, as well as the provision of leisure facilities, such as restaurants. It follows that key resources consist of moorings, berths, commercial spaces, and

[Digitare qui]

event-dedicated infrastructures. The main costs are due to the maintenance of mooring areas, followed by costs related to other venues. No developed partnerships are reported.

From the environmental point of view, the marinas are engaged in waste management and recycling. They are active in the care of the local environment surroundings, with initiatives aimed at the preservation of close areas and water bottoms.

From the social perspective, the activities of marinas are highly dedicated to the local community, promoting the marinas as meeting points for local people and visitors. Initiatives are developed for guaranteeing both skilled workforce and ethical behaviours. Sponsorships to local schools are carried out.

5.2.3 Business Model for Sport-Oriented Marinas

The third business model type groups no-profit companies, whose main focus is on the provision of facilities for sports activities, through the promotion and organization of sports courses and sports infrastructure. Customers are mainly national sport practitioners and leisure boat owners, interested in both sport and social opportunities. The relationship between customers and marinas is maintained directly, with additional support from communication-dedicated employees, for example by following the use of social media, although with a limited international scope. Key activities include the organization of sports courses, maintenance of sports infrastructure, and mooring rental. It follows that the main strategic resources are infrastructure facilities, including both mooring areas as well as sport and leisure spaces. The main costs are due to infrastructure maintenance and employment. Sport-oriented marinas appear as frequent developers of partnerships with sectorial and social associations. The latter relationship is strengthened by the joint organization and promotion of events within the marina spaces. Moreover, other partnerships are established with local authorities and schools.

Marinas accomplish waste management and recycling, including hazardous waste management. Systems of water reuse and optimization are developed and technologies aimed at energy saving and clean energy production are adopted.

From the social perspective, marinas are very active in developing social-oriented initiatives, such as the provision of free activities for children and young people with no means, usually realized through the joint collaboration with schools and local authorities. Moreover, marinas promote sports activities and events for disabled people and local associations.

5.3 Challenges in Business Model Typology

5.3.1 Business Model for Maintenance-Focused Marinas

The value proposition of this group of companies seeks an integration among the three components of the triple bottom line (i.e., economic, social, environmental), where technology innovation plays a key role in the business model. For instance, marinas are oriented towards energy efficiency and solar-power based energy innovation.

The value creation springs from the orientation towards quality, achieved through the selection of high-standard products and suppliers. Moreover, the expertise of qualified artisans supports the provision of top-quality services. Companies look for identification of such quality standards through the accomplishment of formalized indicators, such as ISO certificates or the Blue Flag award. Despite these efforts, companies in this group seem to lack a recognition of the importance of meticulous business modelling to improve the sustainability of their business.

Companies engage in extensive relationships with several stakeholders for capturing value aimed at both their own business and local development. Indeed, the cultivation of personal, direct, and strong relationships with customers is an activator for other tourism-related activities in the neighbourhoods. In addition, local communities take advantage of work and training opportunities.

5.3.2 Business Model for Dock Marinas

The value proposition of this business model lacks orientation towards the TBL. Economical aspects dominate both the social and the environmental attitudes, creating an unbalanced scenario. Indeed, environmental care is limited to basic initiatives and social features are restricted to a local scope. The role of technological innovation is almost absent in the business model and potential improvements by technologies are not minded in the business structure.

The design of value creation entails a traditional way of allocating resources, aimed at guaranteeing standard services for national customers. Few formalizations are referred to workforce management, although lack a structured mind-set towards sustainable business modelling. A revision of the business model through a sustainability-driven perspective could stimulate a different resource allocation, rephrasing business objectives towards a sustainable orientation in the long term.

External relationships aiming at activating value capture are limited to local contacts, and, as such, have a limited impact on the business model sustainability. Extension of stakeholder's engagement through interaction could support the sustainable development of the business model.

5.3.3 Business Model for Sport-Oriented Marinas

The value proposition of these marinas seeks an integration of the three dimensions of the TBL, although the social aspects are especially relevant for their business model. Given the fact that they are no-profit companies, it is implied that economic profit is not their primary goal: The financial balance is sufficient for satisfying their economic requirements. Nonetheless, interest in environmental improvements is recognized and put into practice with the support of technological innovation. In more detail, waste management systems and resource saving systems (e.g., energy saving, water reuse) are the basis of their environment-concerned efforts.

Within the value creation feature, marinas are reluctant to adopt formalized tools for business modelling and improvement. Revenues are balanced with maintenance costs: No other business formulas are employed apart from the generation of necessary funds to invest in infrastructure maintenance. From a sustainability perspective, the adoption of technological innovations for environmental care activities implies resource allocation processes, which are able to positively impact on both company business and the local community.

Value capture through external relationships is developed through a thick net of partnerships with local associations, authorities, and schools. Companies generate extra value aimed at external beneficiaries, children, and young people *in primis*. Different stakeholders of the entire value chain are involved and taken into consideration to support the sustainability of marinas' business model.

5.4 Discussion

Table 5-2 shows the challenging aspects that appear in the business model typology emerging from the research.

Table 5-2 Challenging aspects of the business model typology

	Sustainable Challenges	Business Model for Maintenance-Focused Marinas	Business Model for Dock Marinas	Business Model for Sport-Oriented Marinas
Value Proposition	<ul style="list-style-type: none"> ▪ Triple bottom line ▪ Integrating technology innovation with business model innovation 	<ul style="list-style-type: none"> ▪ TBL attempted, though unbalanced (economic priority) ▪ Technology innovation: A key role for business model innovation ▪ Technology innovation for 	<ul style="list-style-type: none"> ▪ TBL not envisaged and unbalanced (economic priority) ▪ Technology innovation: not determining business model innovation 	<ul style="list-style-type: none"> ▪ TBL attempted, though unbalanced (social priority) ▪ Technology innovation: Support for business model innovation ▪ Technology innovation for

		environmental purposes		environmental purposes
Value Creation	<ul style="list-style-type: none"> ▪ Mindset ▪ Resources ▪ Business modelling methods and tools 	<ul style="list-style-type: none"> ▪ BM mindset: To increase revenues by quality products and services ▪ Guiding light: Quality certificates (e.g., ISO, Blue Flag) 	<ul style="list-style-type: none"> ▪ BM mindset: to guarantee revenues through a loyal market ▪ Guiding light: Steady market share 	<ul style="list-style-type: none"> ▪ BM mindset: To balance costs with revenues ▪ Guiding light: The impact of societal benefits
		<ul style="list-style-type: none"> ▪ External relationships 	<ul style="list-style-type: none"> ▪ Dense and unvaried net of engaged stakeholders ▪ Network aim: Profit growth and local development ▪ Extra value for local community 	<ul style="list-style-type: none"> ▪ Limited net of engaged stakeholders ▪ Network aim: Profit stability ▪ Limited impact on local community

In regards to the value proposition, maintenance-focused marinas try to integrate TBL, even though they are oriented to economic aspects, which represent their main goal. Technology innovation plays a meaningful role in business model innovation, aiming for respect for the environment and pollution abatement. This emerging result recalls indeed the contribution of technological innovation in promoting smart tourism ecosystems as examined by Gretzel et al. (2015). On the contrary, dock marinas lack co-creation of profits, social, and environmental benefits. As a consequence, TBL proves not to be integrated and appears as unbalanced, with the economic aspect prevailing. This finding is similar to the ones of Mihalič and colleagues (2012), Stylos and Vassiliadis (2015), who detected difficulties in balancing the three dimensions of sustainability in the context of the hospitality sector, where the economic/financial dimension prevailed among the other dimensions. Moreover, the technology innovation is not influential for the business model innovation of this type. Sport-oriented marinas instead attempt to co-create profits and social benefits in an integrated way, though social aspects come first. Sport-oriented business model innovation is supported by the use of technologies, focused on environmental health. The results thus show that efforts to combine elements of the TBL perspective could lead to practical consequences in business model innovation towards sustainability, as outlined by Evans et al. (2017); although the challenging aspect strongly undermines the ability of the company in not favouring one aspect among the others. In this challenge, the adoption of technology innovation seems to be a clue determinant for concurring

[Digitare qui]

to define the value proposition from the perspective of sustainability. This allowed us to formulate the following propositions:

Proposition 1. *When defining a value proposition, a challenge for all SMEs is to balance the triple bottom line.*

Proposition 2. *When defining a value proposition, SMEs can integrate technology innovation with different degrees of importance depending on the business model.*

In regards to these propositions on the value proposition, they are in line with the previous literature because recent studies (Mihalič, Žabkar, & Knežević Cvelbar, 2012; Stylos & Vassiliadis, 2015; Melissen et al. 2016) recognized the difficulty of balancing TBL in the case of the hospitality sector. Nonetheless, we did not find authors that clearly state the adoption of technologies as a clue determinant of a BMfS in the case of tourism SMEs.

Concerning value creation, quality pushes maintenance-focused marinas to obtain revenues. Their main focus is the provision of high-quality products and services, guaranteed by the accomplishment of quality certificates and regulations. The mindset of dock marinas differs: They aim to merely preserve their market share through customer loyalty, in order to maintain profit stability. Conversely, the main goal of sport-oriented marinas is to balance costs and revenues, guided by assuring an impact on societal benefits. The challenge of creating value from their business models is faced with different shades of sustainable effects. Every business model type shows a diverse interpretation within the business model mindset and diverse guiding principles. This allowed us to formulate the following propositions:

Proposition 3. *When creating value, a challenge for SMEs is to fit their mind-set, resources, and methods with their specific business model.*

Proposition 3a. *When creating value, SMEs that have a business model for sport-oriented marinas are more prone to social priorities.*

In regards to these propositions on value creation, they are in line with previous literature on mind-set and value creation in the business model (Boons & Lüdeke-Freund, 2013; Evans et al., 2017; Morioka et al., 2018; Bocken et al., 2014; Stubbs & Cocklin, 2008). Nonetheless, apart from the study of Høgevoid, Svensson, and Padin (2015), in the case of a hotel chain, in the literature we found a paucity of examples the on empirical examination of the importance of aligning strategy and operations in the case of BMfS innovation. Social priorities in business models have been detected mostly in destination management and the hospitality sector so far (Jaafar & Maideen, 2012; Peric,

[Digitare qui]

& Djurkin, 2014; Cannas, 2016; Zebryte & Jorquera, 2017), neglecting their role in the case of other kinds of tourism SMEs.

Finally, even value capture responds to different mechanisms depending on each business model. Sustainable innovation factors through external relationships may indeed facilitate value capture from the perspective of sustainable business modelling (Boons & Lüdeke-Freund, 2013; Morioka et al., 2018; Bocken et al., 2014). Maintenance-focused marinas create a dense network of several stakeholders, which can significantly contribute to income growth. Local development may be achieved through the same relationships as well. Dock marinas confine themselves to the creation of a thin network of stakeholders. The unique purpose of this network is to increase profits. As a consequence, the local community can take advantage only in a limited way. The network of stakeholders created by sport-oriented marinas is dense and variegated. These marinas aim to jointly collaborate with a variety of stakeholders, creating extra-value dedicated not only to the local community but extended to external beneficiaries. The comparison among the three business model types shows different degrees in approaching BMsfS, where just the sport-oriented group seems to be able to cause both internal value capture and external cascade value, adhering to the model of Morioka (2018). This allows us to formulate the following proposition:

Proposition 4. *When capturing value, SMEs that have a business model for maintenance-focused or sport-oriented marinas are more prone to transfer value through external relationships.*

In regards to this proposition on value capture, it is in line with the recent study of Morioka et al. (2018), which highlights both the direct value capture and the cascaded value. Still, we did not find any studies of which business models are more oriented to transfer value in the context of tourism SMEs.

6 The value flow in Business model for sustainability

This Chapter aims to investigate the value flow of business model in sustainable-born companies (i.e. companies that start-upped and have been grown with a specific sustainability intention). Specifically, it links the topic of business model for sustainability to drivers and barriers in a single interpretative framework integrated with the value flow perspective. The research methodology is a multiple case study in five Italian B-corp companies, where firstly the phases, and then the organizational drivers and barriers are explored. An interpretative framework is proposed consisting of three phases of business model for sustainability. We define these phases as awareness, people and processes, systemic vision and relate them to the value flow: value intention, proposition, creation and delivering underlying the different perceptions of sustainability as a goal, a tool, a standard and an integrated value.

6.1 Introduction

Business model for sustainability (BMfS) is a solution that companies could implement to cope with sustainable development issues. Business model represents the elements and interactions that organisations choose to create, deliver and capture value (Amit & Zott, 2001; Chesbrough & Rosenbloom, 2002; Osterwalder & Pigneur, 2010). As a consequence, the BMfS regards the elements and the relationships to create, deliver, capture sustainable value (Geissdoerfer et al., 2016). BMfS is “a model where sustainability concepts shape the driving force of the firm and its decision making” (Stubbs & Cocklin, 2008; p. 103) that goes “beyond delivering economic value and include a consideration of other forms of value for a broader range of stakeholders” (Bocken et al., 2013, p. 484). Growth opportunities for companies, cost reduction, and increase of competitive advantage are the motivations that lead the BMfS adoption or transition (Bocken et al., 2014). The process of incorporating sustainability strategies requires a continuous business model change since the business drivers are no longer the same (Schaltegger et al., 2012). Empirical findings show that the path of adopting sustainability principles at strategic level is long, so companies should be committed to a process of business model transformation towards sustainability.

This Chapter aims to investigate the value flow in a BMfS for sustainable-born companies, i.e. companies starting by new the BMfS (e.g. not a transformation of an existing business model but a company that start-ups with a sustainable business model, i.e. it creates, implement and develop it), according to the following research question: how is the value flow in a Business Model for Sustainability of a sustainable-born company created and implemented? To answer to the research

[Digitare qui]

question, a literature review on BMfS is carried out with a focus on the main business model for sustainability frameworks and elements. Then a qualitative research strategy through multiple case studies is adopted. Firstly, the phases are examined in the value flow of BMfS. Secondly, the organizational drivers and barriers are explored.

6.2 Results: With-in Case Analysis

For each of the five case companies, we explored the integration of sustainability within their business models with particular attention to the value flow. When we refer to the “value flow” we mean the set of: value proposition, value creation, value delivery (Bocken et al., 2014; Boons & Lüdeke-Freund, 2013; Osterwalder & Pigneur, 2010) and value intention (Barth et al., 2017).

D-Orbit was born as a supplier of products and services for the space sector. It covers the entire cycle of a mission, from the design and development of the satellite platform to the disposal of the space junk. The company was founded with an intrinsic idea of sustainability in its mission. The value intention of founders was in fact to be “space sweepers”, immediately offering the customer a value proposition oriented towards waste management. The company extended the standard sustainability framework, usually applied to the Earth’s environment and inhabitants, to a whole new dimension: outer space. The company works a lot on the development of processes and people in value creation. In particular, the company sees the development of technologies and the optimization of processes as a driver towards innovation of the business model. Furthermore, the company strongly believes in the share of milestones, achievements and setbacks from the different teams. Finally, D-Orbit is strongly oriented to people’s wellbeing and carries out initiatives such as: improve the quality of life inside the company and organize full day activities to raise awareness and train collaborators. One of the most significant barriers for the company is the need for high investments. The company is very committed to involving the supply chain, especially suppliers.

Davines is a company that formulates, produces and distributes hair and cosmetic products, drawing inspiration, from the very beginning, on the concept of "sustainable beauty". The company was founded as a small family-run cosmetic laboratory, which dealt with the formulation and production of products for hairdressers and beauticians. Right from the start, the intention of founders was to create quality products that were scientifically developed with respect for people's health and the environment. The company has worked hard and still works on creating sustainable value, through a great commitment to research and development, which is the largest department within the company. The company carries out major communication initiatives with direct customers (business) so that they can deliver the value of their products to the final customer (consumer). Therefore, one of Davines's main drivers is to raise customer awareness of both the brand and the company's

[Digitare qui]

commitment to sustainability. In fact, the company is strongly committed to positively impacting society and the environment. A first barrier that Davines believes it is necessary to overcome is the change of people's mind-set. Furthermore, from the case study it emerged that an obstacle could be having a systemic and not reductionist vision of the company.

Successori Reda is a market leader in the textile sector. It produces merino wool fabrics and sustainable fabrics for men's clothing. The people interviewed stressed the importance of education, culture and passion for their work. These are the values that have distinguished the company and led it to make certain choices, including that of always pursuing the production of wool. The company is highly committed to the enhancement first of the people within the company and then of the entire supply chain, from farms to the final consumer. In fact, Successori Reda has invested in the delivery of value to the end customer through a strong communication of its values of ethics and transparency. Successori Reda has invested heavily in value creation, paying particular attention to raw materials and innovating the production process through huge industrial and technological investments. The company has identified the consistency of its choices as the main driver of sustainability integration. In fact, the company was born to produce wool and has always maintained this positioning in the market, specializing in the quality of this product. Therefore, we identified quality as a second driver: the company guarantees quality through numerous product and process certifications. One of the main barriers identified by the company is continuous innovation.

Euro Company was founded by an entrepreneur who wanted to start a business to solve food health problems through the production of dried fruit. Therefore, the value intention is to help people to follow a healthy lifestyle and to promote a culture of physical and spiritual well-being. As for the creation of value, the company is committed to investments in renewable energy, waste reduction and the development of more sustainable packaging. The company implement life cycle assessment to its products and processes. The company strongly believes in the well-being of people and in the creation of an ethical and stimulating environment in which human resources can be happy, confront, grow and fulfil themselves. One of the main drivers of the company is consistency and the will to create relationships of trust with both customers and suppliers, who share the same values as Euro Company. The main barrier that emerged from the case study is structural type mainly linked to the remodelling of processes. In addition, the company reports that it is difficult to constantly seek innovative solutions that have a real positive impact on the environment. A real path towards business model for sustainability requires great ability to see problems in their complexity and the search for compromises. The risk of greenwashing is very high.

Abafoods has been working in the organic beverage industry since its foundation. The raw materials come from land cultivated by an agricultural company which has the same registered office as Abafoods. Therefore, the company has full control over raw materials, which constitute the main

[Digitare qui]

part of value creation. The company bases its business model on ethical industrial practices of food products and not on mass production. The company has many certifications both as regards the origin of the origin of the raw materials, and as regards the ethical aspects (e.g., ISO 8200). The main driver of Abafoods is the desire to have a positive impact on the environment. In this regard, the company is strongly committed to respecting biodiversity and the moderate use of resources, through: the GMO-free control and guarantee of the organic seeds used, the direct processing of the land, respect for the natural biorhythms of the crops, systematic control over the harvest before the beverage production phase. One of the main difficulties and barriers encountered by the company is the communication and dissemination of sustainability values (that go beyond the aspects related to the production of organic products) to the costumers and throughout the supply chain.

6.3 Phases of Business Model for Sustainability

The cross-case analysis shows that the integration of sustainability can be divided into three fundamental phases. We grouped data that contained the same concept into first-order categories, second-order categories, and aggregate dimensions (See Table 11-1, Table 11-2, and Table 11-3 in Appendix). Therefore, the phases that we identify are: 1) A first phase of awareness, linked to the value intention in which sustainability is seen as an objective; 2) A second phase linked to processes and resources including human ones, which implies a value creation in which sustainability is seen as a standard to be achieved through certifications or the life cycle assessment of one's processes. In the second stage, the company could also see sustainability as a tool to demonstrate one's reputation towards customers; 3) A third phase of systemic vision linked to the value proposition in which sustainability is offered as a value to the customer.

The first phase: awareness. Firstly, there is a strong intention of companies to pursuing sustainability goals, to change the economic system and to promote culture, sustainability and ethics, being part of a bigger system. We found that sustainability is set as a primary objective in all the cases, intrinsic in the company philosophy from its establishment. Almost all the cases were founded from the outset with a sustainability idea of their owners. The most significant cases are certainly: D-Orbit, which was founded to remove space junk but also Davines, founded as a natural and homemade cosmetic production laboratory. All the companies are intended to change the economic system of capitalism and to be promoters of this change. Companies feel themselves part of a “bigger aim” and want to pursue a more sustainable path in a society. For example, Euro Company want to be a reference point for healthy and sustainable food, putting health, planet and respect for people at the heart of their business model, with the ultimate goal of influencing the entire food industry. To achieve these goals, companies promote culture, sustainability and ethics through their mission and

[Digitare qui]

activities. However, the choice is not imposed from the outside but it is an intention of the entrepreneur or the top management. As an explanatory example we report the words of the CEO of Davines: “There is no need for sustainability in my company. There is a need for sustainability in all companies and not just in companies. It is unthinkable that the profit of a company will be made at the expense of future generations and this happens when a multi-stakeholder logic is not adopted but only the interests of the shareholders are considered. We are convinced that the concept of traditional capitalism is broken.”

The second phase: people and processes. Secondly, companies pay attention to the sustainability standard, high level of performance and technology of resources and process in the value creation. Companies adopt some certifications as sustainability standards for raw materials. This is above all the case of: Davines which uses the fairtrade certification; Successori Reda which has several ISO certifications and is EMAS certified; and Abafoods which has numerous certifications for the organic supply chain. Almost all the companies use Life Cycle Assessment to evaluate their products and their production process and especially D-Orbit use specific sustainability criteria in choosing their suppliers. So, in this phase companies adopt sustainability standards both from the point of view of resources and processes and the technology is functional to the creation of sustainable value. All the cases stress the importance of quality and performance of the process and product to reach a sustainable value creation. In other words, the sustainable value creation is the result of a sustainable production process, characterized by high level of performance and technology.

In this second phase, sustainability could also be seen as a key tool to support the competitiveness and reputation of a company in the value delivery. Companies say they are chosen by conscious end-consumers, especially in case of Davines, Successori Reda and Abafoods. Generally speaking, we can say that all companies are chosen by clients for the aspects of sustainability. Therefore, sustainability is a useful tool for differentiate the company and gain competitive advantage. However, companies have defined guidelines for communicating with accuracy, truth and ethics. For example, Davines has the “Chart of marketing and ethical communication” to ensure that all our information material, produced internally or commissioned to external parties, is drawn up in an accurate, truthful and ethical manner. They are committed to a long path of sustainability and, consequently, customers recognize the reputation of the company. To sum up we found that companies build trusting relationships with their customers and they are committed to delivering sustainable value.

The third phase: systemic vision. Finally, sustainability becomes value and an integral part of companies' value proposition and the entire business model. In this final phase, companies are aware of their mission and have integrated sustainability aspects into their business model and they are ready to propose sustainable value to the clients. We found that a sustainable value proposition is based on

[Digitare qui]

the integration of sustainability in the business model. For example, D-Orbit has integrated the sustainability aspects in the way it does business, by selling a space junk removal service. To achieve this goal, companies follow the sustainability of the supply chain and the distribution system to guarantee a sustainable product. This is mainly the case of Abafoods and Successori Reda, who, for example, have acquired some of their raw material suppliers, both to support them and to have full control of raw materials. All the companies, have changed the processes of product development, product research and packaging and made more sustainable along the years. For example, Successori Reda modernized, renewed and made their production process more efficient through investments in technology. To create, deliver and propose a sustainable value, the companies have worked on the production process, supply chain, delivery system. For example, Davines revolutionizes the processes of product development, product research and packaging, and even the product communication, by creating their own Research Charter and Packaging Charter, to clearly define what kind of solutions can minimize the impact.

6.4 Drivers of Business Model for Sustainability

In this section we present the drivers that emerged from the cross-case analysis of the case studies.

In particular, we have found that what drives companies is mainly the high awareness of the issue of sustainable development combined with the awareness of the need for change. For example, some of the words we collected in the interview in Abafoods are: “We have understood that the world is not an inexhaustible resource and we must do something different.”. Moreover, education, culture and passion play an essential role as suggested by Successori Reda. This culture of sustainability should be natural in the company and therefore, it should be permeated. Permeation of the culture of sustainability in the company is guaranteed through easily accessible materials to allow the development of ideas. For example, in D-Orbit the materials, tools and skills are made accessible to all in order to develop ideas on sustainability.

D1: *The higher the people education, and awareness, the higher the development and the permeation of a sustainability culture.*

High involvement of entrepreneurs and management is fundamental to get business model for sustainability. For example, in Davines the company's top management has been involved from the very beginning, in a very active way, and this has certainly favoured. Moreover, the importance of sharing emerged in all the cases. The sharing of policies, language and sustainability objectives is

[Digitare qui]

guaranteed through participatory leadership and high involvement of people. Furthermore, we found that health and well-being objectives are the starting point to undertake a sustainability path, that is long and requires consistency in corporate decisions. We found that some companies renounce work assignments to be consistent with their mission and companies have shown little confidence in competitors' sustainability choices and short paths. For example, we reported the words of COO of Successori Reda: “When I see that the entire textile sector has become sustainable within six months, I ask myself some doubts. Ours has been a really long journey.”

D2: *The involvement and the consistency of the top management in corporate decisions lead to a long path of sustainability.*

We have found that companies place great importance on measuring processes in terms of impact. For example, Successori Reda measures the water and the energy they consume or the waste they produce. By measuring they were able to make decisions in order to reduce. They adopt high technology for increasing the efficiency and for reducing the process costs. Through the increase of skills, dialogue and cooperation, the companies strengthen the human capital. For example, in D-Orbit they did a survey of all employees and received more than 85% positive responses demonstrating that employees are happy working in the company. The increase of skills and the strengthening of the human capital improves the well-being of people and the company climate.

D3: *The higher the increase of skills, cooperation and well-being in the company, the higher the improvement of activities and processes efficiency.*

Companies have raised the importance of communicating their values to the direct client and up to the final customer. For example, Davines transmits their commitment to the hairdresser or beautician (direct client) and then the latter will communicate it to the final consumer through services and also through the sale of products. It is important that this communication with customers and stakeholders in internal and external relationships is ethical and transparent. Ethics and transparency contribute to the improvement of company reputation towards customers. Consequently, customers choose the company for quality, loyalty, sustainability and commitment. For example, Euro Company says that customers choose the company mainly for its history and our commitment as well Abafoods that says that its quality and sustainability certification system has allowed it to stand out and be the customer's first choice.

[Digitare qui]

D4: *The higher the ethical and transparent communication, the higher the attraction of customers.*

We found that companies strengthen the relevance of continuous innovation with the involvement of all management and people in the company. For example, in Davines the planning of future projects is established with the collaboration of all the managers of the various departments, so as to make them feel protagonists. Particularly, companies aim at continuous improvement and search for new sustainable solutions even outside the company perspective. The search for real solutions with the lowest possible impact is constant. This is implemented through the involvement of the supply chain for example. For example, for Abafoods it is essential that there is a process of continuous improvement at the base and the search for new solutions, which involve the supply chain, clients and institutions. Thus, the whole company and the supply chain is involved in sustainability through continuous improvement objectives. Moreover, companies want to spread the approach of sustainability to everyone, including competitors. For example, we reported the words that emerged from the interview in Euro Company: “We want as many companies as possible to follow us, including our competitors. The impact is achieved if we all work together. Soloists create no impact.” People interviewed see the business as a force, an engine to have an impact on society and environment.

D5: *The higher the continuous innovation towards sustainability, the higher the company positive impact on society and the environment.*

6.5 Barriers of Business Model for Sustainability

Companies encounter difficulty in changing people's mind-set and orientation towards growth and profit. For example, Abafoods says that the main barrier is the mentality of the people who experience the company as a way to earn money at all costs. So, one of the barriers is changing people's mind-set, which appears even more difficult if the awareness and sponsorship, and involvement of top management is lacking, as reported by Davines: “The lack of awareness and lack of sponsorship on the part of the owners and management may be reasons why a company is struggling to take the path of sustainability, perhaps it thinks it is more difficult than it actually is.”

B1: *The higher the top management commitment towards sustainability, the greater the extent of cultural change within the company.*

[Digitare qui]

The high involvement and enhancement of the entire supply chain is expensive and time consuming, because it requires because it requires control and change, that sometime is hard and challenging. Euro Company says: “We are against below cost because we believe it is at the expense of the weak link in the supply chain, in our case the supplier of the raw material. However, you need to invest time and money.” The involvement with departments (e.g. production) is not always easy. For example, in Successori Reda the production is a continuous process and interrupting it to change the way of working was difficult. In particular, companies find difficult to improve the way of working, to involve all departments and to comply with all the requirements for certifications.

B2: *The higher the involvement of all the departments and the compliance with all the requirements for certifications, the higher the sustainability within the company activities and processes.*

The involvement of the entire supply chain need great commitment of companies. For example, Davines is the promoter of the innovation process for suppliers, providing them with models, skills. They say: “Providing this service as a business is very demanding. We are also coordinators not only of ourselves but also of others.” Another example is Abafoods that says: “We try in many ways to spread a responsible culture as it a change that we are making and in which we believe a lot, but which is not always easy”. It is hard to difficult to have a systemic vision (non-reductionist) that allows to look at the entire supply chain without being able to measure everything.

B3: *The higher the involvement of the entire supply chain, and of all stakeholder, the higher the sustainability within the company business model.*

Finally, the continuous innovation is a challenge. In particular, companies have to deal with unsustainable products and maintain higher performance in order to have a competitive advantage. This is the case of Davines because the production of shampoos through fully sustainable components currently leads to a less performing product that not all customers are willing to buy. Moreover, the companies are aware of the need for a long path and continuous innovation and this could be demoralizing, as Successori Reda reported: “It can be problematic when you realize that everything you do will never be enough, but this obviously allows us to improve year after year.” It is difficult to continue to innovate in the direction of sustainability.

B4: *The higher the continuous innovation, the higher the sustainability within the company business model.*

6.6 The BMfS Value Flow Framework

In this section, we discuss current literature and existing theory on phases, drivers and barriers. We then introduce an interpretative framework (Figure 6-1) of value flow in business model for sustainability, which emerges from our findings and describes the process, including phases, drivers and barriers integrated with the value flow of the business model.

A first phase is the “awareness” in which companies have chosen to undertake a path of sustainability with will, consistency and awareness of their mission, overcoming a first cultural barrier. This phase could be similar to the so-called “internalizing” phase where clear sustainability policy, codes of conduct and goals are identified (Birkin et al., 2009). In this phase of awareness, it is expected also that sustainability leadership and conceptual education are integrated (Birkin et al., 2009). Additionally, a sustainability culture is an essential requirement to develop a business model for sustainability, contrary to what Birkin et al. (2009) stated which places culture within the last “innovating” phase. The “awareness” phase is close to the identifying phase of Roome and Louche (2016), where companies recognize their internal sustainability beliefs.

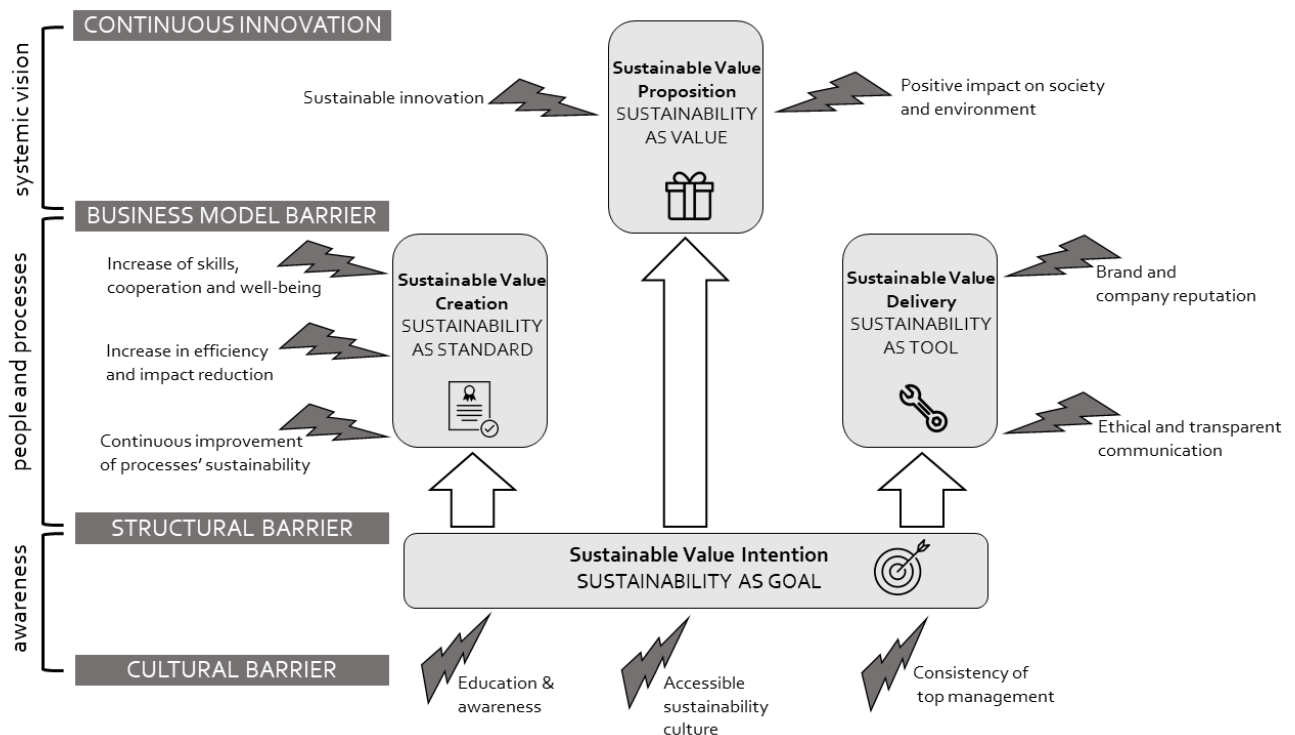


Figure 6-1 The proposed value flow framework of business model for sustainability

The second phase “people and processes” is entered by overcoming a structural barrier, improving production processes, strengthening human capital and relating to the customer in a transparent and ethical manner. This phase is close to the “internalizing” phase of Birkin et al. (2009), where they insert the understanding of the impact of the supply chain. However, in our “people and processes” phase we do not only consider only the understanding but also the implementation of solutions that make processes and operations more sustainable. The processes are not only those strictly linked to the sustainable value creation, but also to the sustainable value delivery, where sustainability is integrated in corporate brands and reputation, as suggest also by Birkin et al. (2009).

The third phase “systemic vision” implies to overcome a business model barrier that implies the adoption of a systemic and holistic view. It involves offering sustainable value to the customer while considering economic, social and environmental objectives at the same time. This phase requires innovation and could be close to the sustainability focused research and development strategy as suggest by Birkin et al. (2009) in their “integrating” phase. Our “systemic vision” phase could be similar to the “embedding” phase of Roome and Louche (2016) or the proactive or transformational phase of Long et al. (2018) where sustainability is integrated in the whole business model.

Unlike what Roome and Louche (2016) say, we do not consider the specific “sharing” and “translating concepts and new capacities to organisation” phase but we see these two as activities that crosses the various phases. Since our intent was to represent the value flow within the business model for sustainability, we do not consider phases in which sustainability is not present as the phases indicated by Long et al. (2018), namely: inactive, defensive or promotional phase.

The motivations or drivers that push towards BMfS are discussed below.

Under our driver “increase in efficiency and impact reduction”, some drivers coming from previous literature could be summarized, namely: the cost reduction, the risk reduction, sales and profit margin (Schaltegger et al., 2012; Gallo et al., 2018; Kiesnere & Baumgartner, 2019). However, the previous authors do not consider the continuous improvement of processes’ sustainability as a driver for more sustainable value creation. Additionally, in literature there are drivers related to the competitive environment such as the innovation and competition capabilities (Schaltegger et al., 2012; Gallo et al., 2018, Kiesnere & Baumgartner, 2019) that we consider separately. On one hand we have the sustainable innovation as a fundamental driver in the “systemic vision” phase for guaranteeing the sustainable value proposition. On the other hand, the increase of skills, cooperation and well-being is a driver for sustainable value creation in the “people and process” phase. Surely the guarantee of employee well-being can also lead to attractiveness from the employer perspective as suggested by previous authors (Schaltegger et al., 2012; Gallo et al., 2018).

The “brand reputation” driver collects the external drivers, as the customers' opinion, strictly connected to the market communication (Rauter et al., 2017), reputation and brand value (Schaltegger

[Digitare qui]

et al., 2012). Moreover, unlike previous researchers, we consider the “ethical and transparent communication” as a driver for guaranteeing the sustainable value delivery in a business model for sustainability.

The first barrier in the BMfS Value Flow Framework is cultural and this result is in line with the most of the literature. Indeed, often are recognized as barriers the internal organisational culture, the mind-set, and the way of thinking (Høgevold, 2011, Evans et al. 2017), while sometimes a barrier is the denial about business impact on society and environment (Kiesnere & Baumgartner, 2019).

The second barrier is structural because it is related for instance to the lack of resources or technologies (Evans et al. 2017, Battistella et al. 2018), lack of economic incentives, as well as legislative pressure (Laukkanen & Patala, 2014) for guaranteeing the sustainable value creation. Some authors identify the lack of communication and trust as a barrier (Kiesnere & Baumgartner, 2019) that could be also considered as structural according to the BMfS Value Flow Framework.

The previous literature does not consider a third barrier that may be due to the business model itself as many companies still struggle to adopt a systemic and holistic vision and to think in terms of business model for sustainability.

From our empirical analysis also emerged the need to continuously innovate the company with a view to sustainability. This is why we have considered continuous innovation as a final barrier in our BMfS Value Flow Framework.

7 Stakeholder Value Flow Framework of Business Models for Sustainability

This Chapter aims to investigate how stakeholder groups engaged by the company contribute to the value flow of business models for sustainability. The research aims to expand the knowledge on business models for sustainability by highlighting the most important contributions of stakeholders that are relevant from a value flow and sustainability perspective.

The research methodology is a multiple case study in five Italian B-corporations.

The Chapter contribution is a Stakeholder Value Flow Framework of business models for sustainability that categorizes the stakeholders in the specific value flow dimension, namely: value intention, value proposition, value creation, value delivery, and value capture.

The framework can facilitate a systematic and deeper analysis of stakeholder contributions to the company business model. Moreover, the Stakeholder Value Flow Framework can be used to map from the company perspective the most significant relationships and to facilitate the stakeholder engagement.

7.1 Introduction

Growing environmental and social problems combined with population growth and related consumption of resources, led the United Nations in 2018 to issue a plan that represents a call to action and aims to achieve 17 Sustainable Development Goals (United Nations, 2018). Sustainable development requires the integration of environmental and social issues into the decisions that determine economic and social development, both by the public and private sectors (WCED, 1987). Companies have a great power on the economy and life in general, therefore, sustainable development is not possible without sustainable business development (Schaltegger, Lüdeke-Freund, & Hansen, 2012). Since sustainable development requires moving towards a sustainable economy, involving entire systems is necessary to implement a significant change in the scope of the business (Bocken et al., 2014; Boons et al., 2013). Indeed, according to Stubbs (2019), sustainability is increasingly becoming a changing behaviour, and less a technical challenge, because the types of approaches to sustainable innovation are shifting from internally oriented, incremental and focused on efficiency to more radical and systemic ones (Adams et al., 2016).

Generally, research on traditional business model is focused on the relationship between the company and its customers and take less into account that all organizations depend on exchanges with other systems to survive (Scott, 1998). The interactions of companies with their external environment, including stakeholders, instead represent a fundamental characteristic of business models for

[Digitare qui]

sustainability (Velter et al., 2020). Following this perspective, companies need to consider not only the interests of customers, but may adopt a multi-stakeholder perspective at system level (e.g., Evans et al., 2017; Schaltegger, Hansen & Lüdeke-Freund, 2016) to create economic, social and ecological value. In fact, sustainability problems can be answered by reinforcing the participation by different people and organizations with their different competences and resources and therefore necessitates multi-stakeholder collaboration (Hörisch, Freeman, & Schaltegger, 2014).

This is even more true if we consider the value flow perspective of a business model. The concepts of traditional business model and sustainability have been defined and described through different theoretical perspectives: for instance, the activity perspective (Zott & Amit, 2010), the building block perspective (Osterwalder, 2010) or the value flow one (Bocken et al., 2013; Short et al., 2014,).

The research on traditional business model is focused on the creation of value for customers in exchange with economic value for company. This traditional view of value creation encourages a separation between stakeholders who receive value and those who contribute to create it. However, sustainable perspective requires removing this distinction and considering value creation as a joint effort between stakeholders and the company (Freudenreich et al., 2020).

Therefore, this Chapter takes in consideration all the stakeholders that are placed in the value flow with their multi-directional influences. The research examines the whole business model for sustainability from a stakeholder theory perspective. The stakeholder theory sees organizations at the centre of a network of stakeholders that can influence or be influenced by the organization's objectives (Freeman, 2010). Moreover, while current research focuses only on value creation, this paper takes in consideration the perspective of the entire value flow, consisting of: value intention, value proposition, value creation, value delivery, and value capture (Barth, Ulvenblad, & Ulvenblad, 2017; Bocken et al., 2014; Short et al., 2014). Thus, this Chapter combines the whole value flow of business model and the stakeholder theory, to address the following research question:

RQ3: *How do stakeholders contribute to the value flow of the business model for sustainability?*

This Chapter provides a Stakeholder Value Flow Framework of business models for sustainability derived from key characteristics of both business models for sustainability and stakeholder theory. The framework depicts the value flows among stakeholders in a business model for sustainability.

7.2 Value flow perspective and stakeholder contribution

In the following section the case studies are described by adopting a value flow perspective as summarised in Table 7-1.

Table 7-1 Synthesis of results

		Value Intention	Value Proposition	Value Creation	Value Delivery	Value Capture
Internal stakeholders	Entrepreneur	Pursue purposes of common benefit by balancing the interests of all stakeholders (including society, the environment and the local area) to enable the organization to reach beyond generations.				
	Employees		Suggest sustainability innovations			Benefits from corporate welfare, family engagement, training related to sustainability and personal skills, company equity shares, reduced injury risk, team building initiatives and dedicated outdoor dining spaces.
External stakeholders	Suppliers/ partners			Adopt, manufacture, and patent sustainable materials and practices.	Promote sustainability projects and partnership in the communities in	Benefit from family engagement, greater safety during work hours,

				Share know-how.	which they operate to address social and environmental challenges.	less pollution
	Customers			Request and define product characteristics	Ask for in-depth information regarding the sustainability	
	Government		Change regulations	Change regulations		
	Society			Discuss both the sustainability trends of the sector and the measurement of environmental impacts along the production process		Benefit from generalized welfare (e.g., donations, sponsorships) and local development
	Other organizations /competitors				Promote and communicate the culture of sustainability (e.g. B-corporations network)	
	Influence groups			Enabling the production		
	Universities/ research institutes			Test products and R&D of innovative and sustainable solutions		

[Digitare qui]

	Natural environment			Offer quality row material		Benefit from, animal protection, low-impact cultivation, recycling and reuse of processing waste, separate waste collection, efficient energy consumption, production of energy from renewable sources and the reduction of emissions.
--	---------------------	--	--	----------------------------	--	--

7.2.1 Value flow perspective in Case A

In Case A, the value intention is dictated by the entrepreneur who wants to pursue common benefit purposes, by proposing as customer value a tailor-made service through a sustainable and inclusive logistics in the territory. Therefore, the value creation is based on new technologies and advanced biofuels (e.g., LNG, bioLNG and H2) that reduce vehicle emissions. The value created by the company is then delivered to the customer through partnerships. In addition, Case A distributes value through industry-related trade shows or events related to B-corporations. The value flow proposed, generated and delivered is then captured not only by the company, but also by other stakeholders. For example, employees benefit from a higher insurance policy than the minimum threshold, an extra budget from the welfare project, sustainability-related training, and family engagement initiatives. The drivers that are considered as partners of the company, benefit from less pollution during the transport, greater involvement of their families, and greater safety during work hours, because the company is committed to enforcing work hours and road rules. The society, as a stakeholder, benefits from economic sponsorships in favour of local teams and defibrillators available at each company location. The main benefit for the natural environment derives directly from the creation of value and is the reduction in emissions due to the use of alternative fuels.

7.2.2 Stakeholder contribution on the value flow of Case A

Various stakeholders contribute to the value flow of the business model of Case A. Employees, thanks to the awareness of the benefits obtained, contribute to the value proposition by suggesting sustainability innovations through a portal made available by the company. The affiliated

[Digitare qui]

drivers contribute to the value delivery because they become promoters of the project by participating in various interviews and encouraging colleagues to adopt a more sustainable transport. Other partners are key stakeholders for the value creation: 1) the agro-livestock cooperative, which built a plant that recovers all CO₂ in production: the remaining methane is then purified, cooled, and used to fuel the truck. 2) a company which built the first service station in Lombardy designed for self-service natural gas refueling for heavy vehicles and open to cars as well. However, the government contributes as a barrier to value proposition and value creation through regulatory changes.

Other stakeholder organizations are the members of the B-corporations network and contribute to the value delivery by promoting events to spread the culture of sustainability.

Some groups of influence contribute to the value creation. In particular, the Italian biogas consortium enables the value creation by allowing the annual production of 2000 tons of liquefied methane.

7.2.3 Value flow perspective in Case B

The value intention of Case B is dictated by the entrepreneur who wants to save wildlife and the natural environment by offering a quality product designed with entirely recyclable parts.

The value creation is possible thanks to the use of materials and components from qualified sources, with low environmental impact and respectful of social and ethical aspects. A key element in the value creation is the choice of suppliers, which are evaluated against social criteria, in addition to meeting economic and quality criteria. Value is delivered to customers through company-owned stores, e-commerce, retailers and pop-ups, or through participation in various events organized by the B-corporations' movement. Moreover, customers are reached through the main social networks. The value proposed, created and delivered is not only captured by the company, but also by other stakeholders. In particular, employees benefit from better corporate welfare; suppliers, located mainly in China, benefit from better working conditions imposed by the company policy. The society, especially disadvantaged communities and countries, benefit from donations made in collaboration with NGOs or other organizations, which include companies belonging to the B-corporation network. The natural environment benefits from reduced pollution and animal protection.

7.2.4 Stakeholder contribution on the value flow of Case B

Several stakeholders contribute to the value flow of the Case B business model. Suppliers contribute to the value creation by selecting, manufacturing, and patenting materials that meet the highest quality and environmental standards. Customers contribute to the value delivery by asking for more in-depth product information, for instance usage, impacts of microfibers, and innovative features of collections. Further stakeholders of the company are the media. The media contribute to

[Digitare qui]

the value creation by discussing with the company both the sustainability trends of the sector and the measurement of environmental impacts along the production process. The stakeholders we defined as other organisations contribute to the value delivery through communication activities and strategic brand consulting with a focus on corporate social responsibility strategies and economic, social and environmental sustainability. Other organizations as B corporations are stakeholders of Case C and contribute to the value delivery by organizing and promoting events to spread the culture of sustainability.

7.2.5 Value flow perspective in Case C

In Case C the value intention is dictated by the entrepreneur who wants to enhance the value of his territory by proposing lines of personalized natural cosmetics that respect the environment. The value proposition is then created through the control of the entire supply chain and the use of organic cultivation. Part of the value created comes from the choice of suppliers. Actually, the company turns only to suppliers belonging to the B-corporations network or to companies that have in place a process of change towards sustainability.

As regards the value delivery, customers are reached through industry events and demonstrations, or events organised by the B-corporations network. In addition to the value captured by the company related to the commissioned product, the company's employees benefit from an extra bonus. The company captures a portion of value related to increased tourism related to the company-owned wellness centre. In addition, the society benefits from sponsorships related to youth entrepreneurship initiatives and donations destined for schools, also with the help of local associations. The natural environment benefits from reduced land use and low-impact cultivation.

7.2.6 Stakeholder contribution on the value flow of Case C

Several stakeholders contribute to the value flow of Case C business model. Specifically, several stakeholders contribute to the value creation. For example, the suppliers or partners contribute to the value creation by providing sustainable packaging and resources. Secondly, the customers contribute to the value creation by requesting and defining product characteristics. Finally, the university tests the product efficacy, a key process of the company's activities and the value creation. As regards the other organizations that contribute to the value flow, there are all companies that join the B-corporations network. They contribute to the value delivery by promoting events to spread the culture of sustainability. In the case of C, the natural environment contributes to the value creation by offering quality raw materials.

7.2.7 Value flow perspective in Case D

In case D, the value intention is linked to intrinsic motivations of the entrepreneur to balance all interests and needs of all stakeholders in a responsible and sustainable way. The value proposition, which is not specifically linked to the value intention, is to offer the market turned metal parts and components such as handles, knobs, components and quick-release couplings. The company's value creation is possible thanks both to the use of the latest generation of numerical control machines, which make it possible to achieve minimum precision tolerances in the complex machining and finishing of products, and to a high level of expertise. Part of the creation of value also comes from the choice of suppliers, which is determined not only by the logic of price, but is based on the search for high quality products, technologically advanced and made with respect for man and the environment.

The value created is delivered to the customer through the company's website and trade fairs or B-corporations network events. The value proposed, created and delivered is captured not only by the company but also by other stakeholders. For example, employees benefit from continuous training courses with the aim of enhancing the individual within the work group. Training courses are not only related to work activities but also to improving personal health and safety in the workplace. There are awards in cash for achieving goals. In addition, employees are given 1% of the company's shares. Company pays attention to finding solutions that enable employees to make less physical effort and reduce the risk of manual handling of loads.

The company also provides concrete help to employees' families by allowing working parents to benefit from reduced fees to enrol their children in a nursery school of which the company is a founding partner.

The society, as a stakeholder, benefits from the development of the regional territory due to the company's choice to select regional suppliers and, where possible, those that respect sustainability principles. In addition to this, local associations benefit from the company's support, and from various support, dialogue and involvement initiatives. The environment benefits from the preservation of natural resources, reduced environmental impact (also due to 100% green energy supply) and reduced waste.

7.2.8 Stakeholder contribution on the value flow of Case D

Several stakeholders contribute to the value flow of case D business model. Suppliers contribute to value creation by providing know-how, raw materials and subsidiaries.

Customers also contribute to value creation by requesting and defining product characteristics. Universities and other organisations/competitors contribute to value creation by researching and developing innovative and sustainable solutions.

[Digitare qui]

The stakeholder other organisations/competitors, which include the organisations belonging to the B-corporation network, also contribute to value delivery by organising and promoting events together with the company to spread the culture of sustainability.

7.2.9 Value flow perspective in Case E

In the company E, the value intention is dictated by the entrepreneur who, considering himself to be the "temporary custodian of a common good", wants the company to continue over time, going beyond the generations.

The value proposition, which again is not specifically linked to the value intention, is to offer the market luxury furnishing parts for shops, restaurants and living spaces, taking care of all the phases: project estimate, realisation, delivery, installation and after-sales services of various kinds (maintenance, repair, and management of the replaced supply with recycling, reuse and dismantling services).

The creation of value for the company is possible thanks to partners (who take care of the carpentry and joinery, key processes for the business) that the company has helped to grow and with whom it has a common purpose. With these partners, the company has also shared technological investments and invested in training to increase its know-how on machines and systems. In addition to its partners, the company relies on monopoly suppliers with whom it does not have a high level of trust.

Value is delivered through social networks, trade fairs, and the company website (which is currently being modified to minimise energy consumption and emissions from browsing. In addition to these, there are B-corporation events. Different stakeholders capture value. Employees benefit from continuing education courses, family audit trails, smart working (even before the pandemic), team building initiatives, a green space built for lunch breaks, various company welfare initiatives.

The society benefits from various initiatives in support of the local area and schools in the company's municipality. The environment benefits from the recycling and reuse of processing waste, separate waste collection, efficient energy consumption, the production of energy from renewable sources and the reduction of emissions.

7.2.10 Stakeholder contribution on the value flow of Case E

Different stakeholders contribute to the value flow of E. Partners contribute to the creation of value by committing themselves to the issues of a responsible forest economy, promoting good management and valorisation of forests and their products. They also commit to the company's code of conduct. Furthermore, they contribute to the value delivery by promoting partnerships in the communities in which they operate and by actively addressing the social and environmental

[Digitare qui]

challenges they face. Clients contribute to the creation of value by developing the initial design together with the company's designers.

Other stakeholder organisations are members of the B-corporations network and participate in value delivery by promoting events to spread the culture of sustainability or by collaborating with the company on various initiatives.

7.3 Cross case analysis and discussion

This section discusses the results in light of the relationship of stakeholders with the company and suggests future research directions in the field of business models for sustainability. As stakeholder engagement is rising attention of companies seeking to increase their competitiveness by moving towards a business models for sustainability, this implies a rising importance of re-assessing their business models. This paper looked into both stakeholder and business model theory in order to develop Stakeholder Value Flow Framework (Figure 7-1). The framework is then applied to five case studies belonging to different industries, which consider sustainability having a key role in their strategy. The adoption of the value flow as a perspective in analysing the companies' business models led to the following results.

7.3.1 Stakeholder contribution perspective

From the analysis of the case studies, we are able to derive how stakeholders contribute to the sustainability of the business model.

All the companies analysed are deeply rooted in the territory in which the company operates or in which it has production plants. Therefore, the main objective of the entrepreneur is to be the spokesperson for the interests of all the stakeholders that interface with the company (including society and the environment), pursuing aims of common benefit. Among the companies analysed, Case A, Case C, Case D and Case E have a strong attachment to the territory and the community in which they operate, and the task of the entrepreneur is to strengthen this bond in order to allow his or her company to continue over time and beyond the generations. In the Case B the entrepreneur is motivated by more general purpose linked to the protection of fauna and the environment, most of which are exploited by competing companies.

Employees contribute to the sustainability of the business model by grasping the challenges that the entrepreneur proposes to them and becoming active in suggesting sustainable innovations. Moreover, the employees are aware of the benefits that are obtained thanks to the sustainability commitment undertaken by the companies.

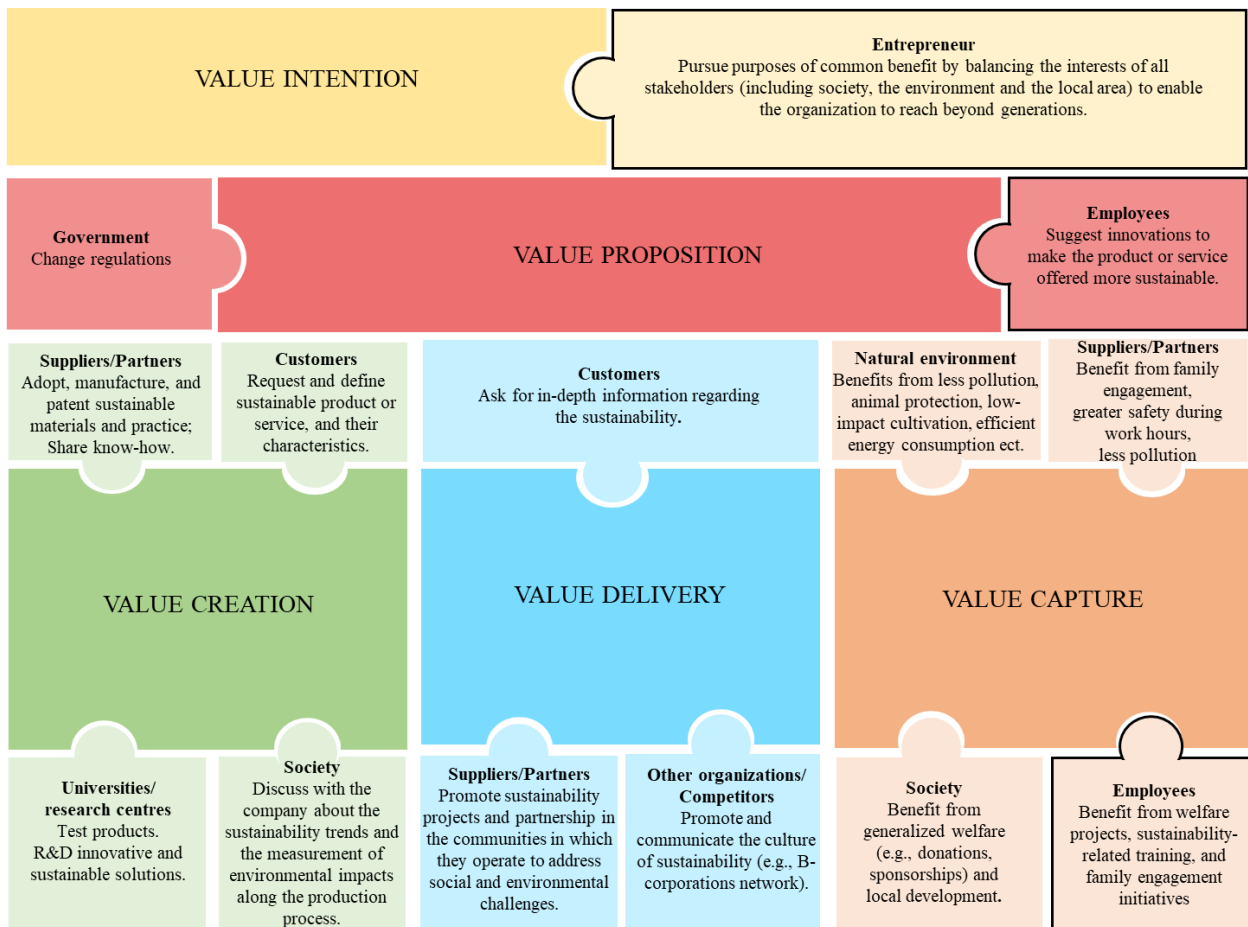


Figure 7-1 The Stakeholder Value Flow Framework.

Note: Internal stakeholders are marked with black borders

Suppliers and partners contribute to the sustainability of the business model by sharing their sustainability know-how, adopting, producing and patenting sustainable practices and materials to satisfy their customers (all cases). In the Case A and Case E, same stakeholders contribute to the sustainability of the client company by promoting sustainability projects and partnerships in the communities where they operate.

Customers contribute to the sustainability by exercising their power to choose the company from which to request their sustainable product or service. This is realized in the Case A, C, D, E by defining the characteristics of the product and service that the company will create. In addition to exercising their power of choice, the customers interface directly with the company to request more information about product sustainability (Case B).

We learn that the government makes a negative contribution in terms of industry regulations from Case A.

[Digitare qui]

The media contributes to sustainability by discussing industry sustainability trends with the company and measuring environmental impacts throughout the production process (Case B).

All case studies show that other organizations/competitors contribute to the sustainability of the business model by promoting and communicating the culture of sustainability. This is visible in the cases members of the B-corporations network.

In only one case study (Case A), influence groups contribute to sustainability by enabling the production of a key company resource. Universities and research centres in Case C contribute by testing and researching and developing innovative sustainable solutions. The natural environment contributes to sustainability by providing quality raw material to develop their products (Case C).

7.3.2 Value flow perspective

The value intention of the entrepreneur is key in the business model for sustainability because the he or she want to pursue purposes of common benefit to defend the environment (Case B and Case C) and resolve common social issues (Case C and Case E). Moreover, the entrepreneur would like to enable the organization to reach beyond generations (Case E).

The value proposition is the direct consequence of the value intention that takes the form of a promise to offer value not only to the customer but to a wider group of stakeholders. The stakeholder that contributes to the value proposition are the employees that could suggest innovations to make the product or service offered more sustainable. Moreover, the government could contribute to the value proposition by changing the regulations. This is true in Case A because it belongs to the transportation sector which is very sensitive to changes in regulations.

Value is created by a range of activities involving a number of stakeholders. The value creation is a multi-stakeholder issue, whose aim is to stimulate the balanced exploitation of natural resources at the local level and to limit the social and environmental impacts. The suppliers and partners strongly contribute to the value creation; they share the know-how and provide sustainable manufacture and resources and are selected through sustainability criteria in almost all the case studies. Moreover, the universities or research centres can play a role in creating sustainable value as they test the sustainability characteristics of the product and research and develop innovative and sustainable solutions (Case D). In the Case C, that is production to order, customers can contribute to the value creation through requests of sustainable product or service. A final stakeholder that impact on the value creation are the media, especially in the Case B that belongs to the retail industry. The media discuss with the company about the industry sustainability trends and the measurement of environmental impacts along the production process.

The value delivery mostly concerns the communication and dissemination activities of the company's sustainability initiatives. Therefore, other organizations as the members of the associations

[Digitare qui]

or networks, to which all the cases belong, affect the promotional activities of the product or service that increase consumer awareness towards the company's commitment to sustainable development. Moreover, the suppliers or partners in Case A and Case E have a role in the value delivery, because they promote the sustainability projects of the company. Finally, the customers ask for in-depth information regarding the sustainability of product and service. This is true especially in the Case B that belongs to the retail industry and has the ability to come into contact with end users.

The value capture involves other stakeholders, not only the company. The main stakeholders engaged in the value capture are the employees, benefitting from welfare projects, sustainability-related trainings, and family engagement initiatives. The society could capture value especially disadvantaged communities and countries, through donations by all the case studies. All the companies are committed to have a positive impact on society and the natural environment, so that they as stakeholders could partially capture the value deriving from the business activity.

8 Sustainable organizational learning in Business Model for Sustainability

*The aim of this Chapter is to extend the knowledge on sustainable organisational learning in sustainable companies. Sustainability is examined from an organisational learning perspective and was based on Edward's integral cycle of learning. An in-depth analysis of the literature was carried out and a list of OL characteristics, such as openness to new ideas and participative policymaking were compiled. To identify which OL characteristics are used for sustainability, a multiple case study was designed for sustainable companies operating in the food and beverage industry. The Chapter found a wide variety of sustainable practices, such as experimentation and information-sharing systems, related to learning processes, and learning leadership appears to be the least developed dimension. It was also found that sustainable companies learn through social rather than reflective learning, in relationships with internal and external stakeholders, and by concrete actions to implement environmental and social impacts. This Chapter is one of a few that explore sustainable organisational learning, and contributes to categorising organisational learning characteristics that sustainable companies use to facilitate and support sustainability in the mid-long term. Some of the content described in this Chapter has been previously published in "Sustainable organisational learning in sustainable companies." in *The Learning Organization*.*

8.1 Introduction

The literature review classifies a list of organizational learning characteristics, such as openness to new ideas, continuous training and development, and participative policy making, grouped by three dimensions, namely: learning orientation, learning process and learning leadership. The literature review results into the design of the framework for organizational learning characteristics, useful to analyse companies' practices. Table 8-1 illustrates the dimensions of organizational learning derived from the literature review with the identification of studies proposing such variables in their framework or scale. Hereafter, the details of each dimension are presented.

Table 8-1 Framework on organizational learning characteristics

Dimensions	Sub-dimensions	Characteristics	References
Learning orientation	Learning orientation – contextual	Learning culture	Jamali (2006); Wilson and Beard (2014)
		Learning approach to strategy	Moilanen (2001, 2005); Jamali (2006); Wilson and Beard (2014)

	Learning orientation - individual	Openness to new ideas	Damanpour (1991); Sinkula et al. (1997); Verona (1999); Moilanen (2001, 2005); Akgun et al. (2007); Garvin et al. (2008); Zhou et al. (2015)	
		Appreciation of differences	Garvin et al. (2008)	
		Time for reflection	Garvin et al. (2008)	
		Presence of creative tension	Jamali (2006)	
		Psychological safety	Baer and Frese (2003); Garvin et al. (2008) Zhou et al. (2015)	
	Learning orientation – collective/relational	Promotion of dialogue and inquiry	Marsick and Watkins (2003); Yang et al. (2004); Garvin et al. (2008); Wilson and Beard (2014); Tortorella et al. (2015)	
		Empower of team orientation and collective vision	Garvin (1993); McGill and Slocum (1993); Hult et al. (2003); Marsick and Watkins (2003); Yang et al. (2004); Jamali (2006) Tortorella et al. (2015); Zhou et al. (2015)	
	Learning processes	Learning processes – self-development (individual-focused)	Continuous training and development	Marsick and Watkins (2003); Yang et al. (2004); Bryan (2006); Jamali (2006); Hansson (2007); Garvin et al. (2008); Wilson and Beard (2014); Tortorella et al. (2015); Zhou et al. (2015)
			Reward flexibility	Wilson and Beard (2014)
		Learning processes – internal structure (structure-focused)	Experimentation	Hedberg (1981); Pedler et al. (1989); Senge (1990); Leonard-Barton (1992); Garvin (1993); Naman and Slevin (1993); Slocum et al. (1994); Goh (2001); Moilanen (2001, 2005); Jamali (2006); Garvin et al. (2008); Zhou et al. (2015)
Enabling flexible structure			Wilson and Beard (2014)	
Formative accounting control			Jamali (2006); Wilson and Beard (2014)	
Information collection			Day (1994); Slater and Narver (1995); Zahra and George (2002); Garvin et al. (2008); Zhou et al. (2015)	
Enabling information sharing systems			Huber (1991); Walsh and Ungson (1991); Simon (1991); Marsick and Watkins	

			(2003); Yang et al. (2004); Jerez-Gomez et al. (2005); Jamali (2006); Wilson and Beard (2014); Tortorella et al. (2015); Zhou et al. (2015)
	Learning processes – stakeholders’ engagement (network-focused)	Participative policy making	Jamali (2006); Wilson and Beard (2014)
		Connect the organization to its environment	Marsick and Watkins (2003); Yang et al. (2004); Jamali (2006); Garvin et al. (2008); Wilson and Beard (2014); Tortorella et al. (2015)
Learning leadership	Strategic leadership for learning	Provision of strategic leadership for learning	Sagie and Koslowsky (2000); Moilanen (2001); Marsick and Watkins (2003); Yang et al. (2004); Moilanen (2005); Jamali (2006); Antonacopoulou and Chiva (2007); Garvin et al. (2008); Tortorella et al. (2015); Zhou et al. (2015)

8.1.1 Learning orientation

Learning orientation is the dimension that entails all characteristics reflecting the build-up of a supportive learning environment. Former studies have identified a number of characteristics, which may be grouped according to their level of support, namely contextual, individual, and relational.

According to Moilanen (2001, 2005), Jamali (2006) and Wilson and Beard (2014), one aspect of learning orientation takes the form of a contextual level, showing characteristics of learning culture, which includes the values behind openness, experimentation, improvisation and continuous learning, and a learning approach to strategy, in order to develop knowledge to support business strategy.

Learning orientation may be referred to the individual level, including characteristics such as the openness to new ideas and the appreciation of differences (Damanpour, 1991; Sinkula et al., 1997; Verona, 1999; Moilanen, 2001, 2005; Akgun et al., 2007; Garvin et al., 2008; Zhou et al., 2015), which value both novelties and different opinion. Directly connected to these ones, it is the psychological safety (Baer and Frese, 2003; Garvin et al., 2008; Zhou et al., 2015), i.e. the organizational characteristic for which employees feel safe in doing mistakes, asking for explanations, and in talking about problems. Another feature of learning orientation at the individual level entails both the presence of creative tension (Jamali, 2006) and the time for reflection (Garvin et al., 2008), that is the time for reviewing the work and avoid the stress of overwork.

Finally, learning orientation is reflected into a collective and relational dimension by taking the form of promotion of dialogue and inquiry (Marsick and Watkins, 2003; Yang et al., 2004; Garvin et al., 2008; Wilson and Beard, 2014; Tortorella et al., 2015), as well as the empower of team orientation and collective vision (Garvin, 1993; McGill and Slocum, 1993; Hult et al., 2003; Marsick and Watkins, 2003; Yang et al., 2004; Jamali, 2006; Tortorella et al., 2015; Zhou et al., 2015), which respectively foster the exchange of ideas and views among individuals and the joint vision of a collaborative work place.

8.1.2 Learning processes

Learning processes group organizational learning characteristics according to the focus of the concrete business practices: (a) individual, (b) structure, and (c) network. In the first category, learning processes are focused on individuals' self-development through initiatives of continuous training and development, a characteristic that is raised by several studies of the framework above (Marsick and Watkins, 2003; Yang et al., 2004; Bryan, 2006; Jamali, 2006; Hansson, 2007; Garvin et al., 2008; Wilson and Beard, 2014; Tortorella et al., 2015; Zhou et al., 2015). This feature considers the provision of resources and facilities encouraging the self-development of employees and could be accompanied by the reward of flexibility, which reward learning as the provision of new ideas or the provision of financial support by the company (Wilson and Beard, 2014).

Learning processes are mainly driven by the focus on the internal structure of the organization. In this sense, they may take diverse forms such as the systematic collection of information (Day, 1994; Slater and Narver, 1995; Zahra and George, 2002; Garvin et al., 2008; Zhou et al., 2015) and the formative accounting control (Jamali, 2006; Wilson and Beard, 2014) in order to aid both learning and decision making. It follows that enabling information sharing systems with the support of the technology (Huber, 1991; Walsh and Ungson, 1991; Simon, 1991; Marsick and Watkins, 2003; Yang et al., 2004; Jerez-Gomez et al., 2005; Jamali, 2006; Wilson and Beard, 2014; Tortorella et al., 2015; Zhou et al., 2015) is functional to enhance processes of learning within the organization. Other characteristics are referred to experimentation (Hedberg, 1981; Pedler et al., 1989; Senge, 1990; Leonard-Barton, 1992; Garvin, 1993; Naman and Slevin, 1993; Slocum et al., 1994; Goh, 2001; Moilanen, 2001, 2005; Jamali, 2006; Garvin et al., 2008; Zhou et al., 2015), which reflect processes of creativity and generative learning, and adoption of flexible structure for the business organization (Wilson and Beard, 2014).

The third focus of learning processes is the network with characteristics referred to stakeholders' engagement. One mode could be the participative policy making through the involvement of all stakeholder (Jamali, 2006; Wilson and Beard, 2014). Another one is the establishment of a connection between the organization and its environment in order to make

[Digitare qui]

organization boundaries permeable and enabling learning from customers, suppliers, competitors, and local community more in general (Marsick and Watkins, 2003; Yang et al., 2004; Jamali, 2006; Garvin et al., 2008; Wilson and Beard, 2014; Tortorella et al., 2015).

8.1.3 Learning leadership

Researchers are unanimous in recognizing the relevance of leaders' support in prompting organizational learning (Sagie and Koslowsky, 2000; Moilanen, 2001; Marsick and Watkins, 2003; Yang et al., 2004; Jamali, 2006; Antonacopoulou and Chiva, 2007; Garvin et al., 2008; Tortorella et al., 2015; Zhou et al., 2015). Strategic leadership for learning is one of the three main blocks of learning dimensions and add to learning orientation and learning processes a support in reinforcing and encouraging all above described dimensions. It follows that the role of managers and directors is critical in order to provide conditions for enabling the learning organization.

8.2 Results

Thanks to the literature review, the framework on organizational learning characteristics has been outlined within the dimensions of learning orientation, learning processes and learning leadership. For each case study, all practices related to sustainability have been analysed and mapped according to the framework. The Table 8-2 collects the practices according to the connected dimension of organizational learning.

8.2.1 Sustainable practices in learning orientation

All three case studies develop sustainable practices in both contextual aspects of learning orientation, prompting both learning culture and a learning approach to strategy with specific reference to environmental-related issues. Nonetheless, the three case studies show different degrees of application of sustainability according to the characteristics of learning orientation at individual and collective level. Emerging practices at individual level are neglected in case A and with few applications in the other two cases, taking the direction of innovation and talent reward at the largest.

Collective learning orientation through promotion of dialogue and inquiry or empower of team orientation and collective vision has few examples, such as respectively the formalization of exchange moments among employees and the presence of programs for fostering the sense of belonging to the company by employees. Case C organises a hackathon for developing innovative solutions and boosting team building. Case A shows an example of promotion of dialogue among the organization and the employees by constantly using internal communication systems, useful even to report safety lacks or issues. In conclusion, results show that a scarce variety is present on both

[Digitare qui]

dimension of individual and collective learning orientation, while an extensive relevance is given to practices related to contextual learning orientation.

Table 8-2 Multiple case study analysis on organizational learning characteristics and sustainable practices

Dimensions	Characteristics	Sustainable practices	Cases		
Learning orientation	Learning culture	<ul style="list-style-type: none"> ◆ Continuous training activities including environmental and safety issues ◆ Empowerment of employees' talent and innovative solutions 	A	B B	C C
	Learning approach to strategy	<ul style="list-style-type: none"> ◆ Internal activities and partnership for research and development ◆ Development of efficient systems towards reduce, reuse and circular economy principles ◆ Corporate social responsibility initiatives ◆ Continuous improvement of production process 	A A A A	B B B	C C C C
	Openness to new ideas	<ul style="list-style-type: none"> ◆ Reward system for employees' talent ◆ Hackathon for innovative solutions ◆ Proposals for safety improvement by employees 		B	C C
	Appreciation of differences	<ul style="list-style-type: none"> ◆ Hackathon for innovative solutions ◆ Respect of human rights 		B	C
	Time for reflection	<ul style="list-style-type: none"> ◆ Work time dedicated to reflecting on new projects/proposals ◆ Hackathon for innovative solutions 		B	C C
	Presence of creative tension	<ul style="list-style-type: none"> ◆ Reward system for employees' talent ◆ Hackathon for innovative solutions 			C C
	Psychological safety	<ul style="list-style-type: none"> ◆ Respect of human rights 		B	
	Promotion of dialogue and inquiry	<ul style="list-style-type: none"> ◆ Continuous dialogue with/among employees ◆ Exchange moments among employees 	A	B	
	Empower of team orientation and collective vision	<ul style="list-style-type: none"> ◆ Inter-functional teams for innovation ◆ Programs for "sense-of-belonging" towards company 		B	C
	Learning processes	Continuous training and development	<ul style="list-style-type: none"> ◆ Training for professional development of employees ◆ Training on environmental policies and objectives to employees ◆ Training on safety measures to employees ◆ Development planner for employees' skill development 	A A	B B
Reward flexibility		<ul style="list-style-type: none"> ◆ Reward system for employees' talent ◆ Financial and social benefits to employees 		B	C

	Experimentation	<ul style="list-style-type: none"> ◆ Laboratories for research and development ◆ Hackathon for innovative solutions ◆ Inter-functional teams for innovation ◆ Packaging according to circular economy principles ◆ System development for energy/materials reuse ◆ Machine development for recycling waste packaging materials by customers 	A A A	B B B	C C C C C
	Enabling flexible structure	<ul style="list-style-type: none"> ◆ System development for energy/materials reuse ◆ System development for reducing resources used ◆ Continuous improvement of production process ◆ Plan for adapting to climate changes ◆ Reducing geographical distance between production and consume ◆ Development planner for employees' skill development ◆ Inter-functional teams for innovation 	A A A A	B B C C C	C C C C C C
	Formative accounting control	<ul style="list-style-type: none"> ◆ Supplier and Risk Management Systems ◆ Life Cycle Assessment System ◆ Energy manager ◆ Monitoring of customers 	A	B B B B	C C
	Information collection	<ul style="list-style-type: none"> ◆ Systems of monitoring and measurement (materials, production, risk, safety) ◆ Proposals for safety improvement by employees 	A	B B	C C
	Enabling information sharing systems	<ul style="list-style-type: none"> ◆ Systems of monitoring and measurement (materials, production, risk, safety) ◆ Foundation for research and results sharing ◆ Community relation process ◆ Exchange moments among employees ◆ Proposals for safety improvement by employees 	A A	B B B B	C C C
	Participative policy making	<ul style="list-style-type: none"> ◆ Research partnerships with universities and institutions ◆ Business partnerships with clusters and associations ◆ Proposals for safety improvement by employees ◆ Collaboration with institutions for public regulation 	A A	B B B B	C C
	Connect the organization to its environment	<ul style="list-style-type: none"> ◆ Responsible supply chain processes ◆ Responsible marketing ◆ Continuous training on environmental/social sustainability for other stakeholders ◆ Monitoring of external environmental sources impacted by production ◆ Responsible consume campaigns 	A A A A	B B B B B	C C C C C C

		<ul style="list-style-type: none"> ◆ Adoption of ethical code for stakeholders ◆ Energy from renewable sources ◆ Foundation for research and results sharing ◆ Participation to cultural and social associations ◆ Partnership for tourism and art promotion ◆ Award for quality and sustainability to suppliers ◆ Machine development for recycling waste packaging materials by customers ◆ Support to public institutions for infrastructure improvement ◆ Community relation process ◆ Product donation to local community 	A A	B B B B	C C C
Learning leadership	Provision of strategic leadership for learning	<ul style="list-style-type: none"> ◆ Training on environmental policies and objectives to managers 		B	

8.2.2 Sustainable practices in learning processes

Most of sustainable practices emerged from the case studies are related to learning processes with a focus on the internal structure and on network. Practices on self-development are mostly connected to training for both professional development and on environmental or safety issues. Examples of observed practices for employee self-development and training are respectively the engagement of a development planner and the application of 70:20:10 Model for Learning and Development. From the environmental sustainability perspective, case C organises specific training courses for truck drivers on safe and less-polluting driving. Work health and safety is one of the main focus of the cases. Value is given to human resources through the training, supported by the collaboration with specific corporate training schools. However, scarce examples of social sustainability are related to rewarding employees' flexibility for instance through financial and social benefits.

With regard to sustainability, a widest number of activities is focused on experimentation, such as research and development activities with a specific interest on circular economy principles and on the development of systems to reuse and recycle, mainly focused on the packaging activities. On one hand, enterprises adopt internal-structure practices such as the acquisition of only renewable energy sources, the switch to paper-less offices, weight-reduction systems, heat and water reuse systems, less-polluting machinery. On the other hand, examples of experimentation are observed from the consumer perspective, such as the creation of bio-origin packages in cases A and C and the development of less-polluting products in case A. All case studies practice sustainability by applying flexible structures in resource usage and in continuous improvement of the production process.

[Digitare qui]

All cases formalize and structure analysis systems from the formative accounting control, such as supplier and risk management systems and/or Life Cycle Assessment. Moreover, systems of monitoring and measurement of materials, production, risk, safety are present in all cases and contribute to enhance the characteristics of information collection and enabling of information sharing system. In case A, this sub-dimension also includes the formalization of sharing systems with/among employees. Examples of information sharing system are supplier management systems, sourcing risk management systems, environmental management system, and the engagement of an energy manager.

Finally, stakeholders' engagement takes a great variety of forms depending on the case studies. Participative policy making is rather reduced if compared to establishment of connection between the company and its environment. Indeed, in case A is limited to research partnership with universities and other research institutions, involved for either research or training activities. On the contrary, connections appear well-established and diverse in all cases. Case C relies on responsible and ethical practices mostly, by applying an ethical code with rights and duties for stakeholders. In the other cases, practices are addressed to environmental sustainability through training of stakeholders, monitoring of company impact on external environmental resources and the use of renewable energy sources. Additional references are connected to the involvement of institutions and community in their sustainable practices, rather than a focus on production and suppliers. In conclusion, the common point for stakeholders' engagement appears to be connected to corporate social responsibility related to marketing and supply chain especially. On one hand suppliers are selected and even awarded according to quality and sustainability criteria, on the other hand consumers are trained and monitored through sustainability campaigns and education programs.

8.2.3 Sustainable practices in learning leadership

From the analysis of the three case studies, only case B specific practices involve managers, i.e. training on environmental policies and objectives to managers. Interestingly, no other practices entail any distinctions between employees and managers and there is an absence of any other reference to leadership role in order to support sustainability.

8.3 Final overview on results and discussion

With reference to the framework by Edwards (2009), several differences emerge from the case studies. Despite the three companies have similar businesses, they adopt and develop sustainability through diverse modes and with different subjects, tools, and scopes.

[Digitare qui]

Case A builds its sustainable practices on social learning mainly with most of initiatives focusing on concrete and relational experiences. For instance, the company adopt system for reducing resources used and to reuse energy and materials. Even cultural learning clearly appears in the company's sustainable practices, as in the case of the ethical code for stakeholders, whereas reflective and behavioural learning are far less put into practice in sustainability implementation.

Case B covers all type of learning according to the typology by Edwards (2009). The company develops examples of sustainable practices in reflective, behavioural, social and cultural learning, showing both individual and relational, as well as both abstract and concrete practices. For instance, the empowerment of employees' talent contributes to enhance reflective learning, while proposals for safety improvement by employees reflects an individual and concrete learning mode, thus behavioural learning.

Case C shows an extended range of learning type reflected into the sustainable practices, namely behavioural, social and cultural learning. The presence of inter-functional teams for innovation could entail social learning mode mainly, where relational and concrete actions are characteristics of the teams' activity. The presence of a development planner for employees' skill development is indeed an example of an individual and concrete experience, which could be related to behavioural learning.

In conclusion, sustainable practices are well-developed by all case studies through social learning especially and by adopting concrete and relational experiences mainly. Still, cultural learning is well-diffused, as well as behavioural learning. Less development is detected in the reflective learning type within sustainable practices.

9 Conclusions

9.1 Implications

9.1.1 Theoretical implications

The research has academic implications because it continues the discourse on Business Model for Sustainability while taking a different perspective, the value flow perspective and different topics, namely: the context, the type, the architecture and managerial practice.

It is clear in the literature that the business model has an extremely important role in the integration of sustainability in companies. The authors have mostly focused on the structural features of BMfS. In particular, the topic of value flow of business model was not linked to the context, the type, the architecture and managerial practice.

On the contrary, this research firstly focused on the challenges faced by SMEs when they orient their business model toward sustainability. These challenges can have different natures, i.e., referring to strategy, innovation, capabilities and/or networks but they present similar characteristics if related to the type of business model. The only common feature was the difficulty in balancing the three dimensions of sustainability according to the Triple Bottom Line principle. Moreover, the thesis describes how the dimensions of value flow in BMfS can be merged concretely and discusses the challenges of a BMfS and finding business model types where challenges present similar characteristics.

Secondly, the thesis proposes a conceptual framework consisting of three phases linked to the value flow in the Business Model for Sustainability, namely: awareness, people and processes, systemic vision and we relate them to the value flow underlying the business model.

The authors who have so far dealt with the topic of the transition process towards a BMfS have not focused on who are the main actors of change within the organization. Relational leadership plays a key role in determining the transition to BMfS (Kurucz et al. 2017), as well as constant stakeholder engagement (Stubbs & Cocklin, 2008; Geissdoerfer et al., 2016). As said before, for sure the organizational culture and the mind-set play a key role in the adoption of BMfS. However, the question is open on who the key actors, the main change promoters or agents inside or outside the organization are.

A third contribution that reduces the knowledge gap on the Business Models for Sustainability and the Stakeholder Theory is the Stakeholder Value Flow Framework. The framework categorizes the stakeholders in the specific value flow step. In addition to considering the value proposition (Bocken et al., 2013) and the value creation (Freudenreich et al., 2020), the thesis adds the other

[Digitare qui]

dimension, namely: value intention, value delivery and value capture. To the research of Bocken et al. (2013), the research adds the consideration of stakeholders not only as value receivers, but as an active part of the focal company business model. Compared to the research of Freudenreich et al. (2020), the thesis specifies how stakeholders contribute to the sustainability of the business model, e.g. by providing sustainable resources and adopting ethical behaviour.

Finally, the contribution of this study is to expand the knowledge on sustainable organizational learning in sustainable companies. Through the analytical framework of learning dimensions and the case studies of certified sustainable companies, this thesis outlines the ways in which the concepts of organizational learning and sustainability intersect in the real business world. The case studies mainly focus on learning processes and social learning. Although the diffusion of sustainability practices is evident in all the companies, their approaches to learning differ according to their respective business experiences. Reflective learning is, for instance, seen in all cases as rather undeveloped. It is often argued that organisations focus mainly on short-term results (Smith and Sharicz, 2011). However, following the recommendation of Smith and Sharicz (2011), this research has embraced a long-term and comprehensive view, that values of shared leadership, self-managed teams, and learning should be instilled in an organisation. This study contributes to broadening Jamali's view (2006) that solid organizational learning dimensions guarantee a more adequate means to face sustainability challenges and provide insight into implementing a practical application of sustainability in the organizational learning context, as called for in Haugh and Talwar (2010) and Wilson and Beard (2014).

9.1.2 Managerial implications

The thesis has several managerial implications that are reported in the Table 9-1. Firstly, the different types of BMfS give hints to managers of SMEs that can recognize their company as adhering to a business model type and can take inspiration from the challenges related to BMfS.

Furthermore, the thesis proposes two frameworks that could be adopted and implemented in real corporate environments. Firstly, the Value Flow Framework can facilitate an analysis of the dimension of the flow linked to phases, drivers and barriers in BMfS. If a company integrates sustainability in the business model without having clear the sustainable value intention, it is not doing true sustainable innovation, but a sort of "blind sustainability". On the other hand, a company integrating sustainability only in the value delivery, it risks falling into greenwashing, because it is only doing misleading sustainable marketing or advertising, which we could call "fake sustainability". Instead, the integration of sustainability only in the part of value creation, is rather limited and unbalanced: either towards the optimization of processes and the reduction of waste (approach to environmental sustainability) or the company is implementing CSR initiatives, corporate

[Digitare qui]

welfare, charity (approach to social sustainability). However, it is a first step towards sustainable innovation, which we could call “latent sustainability”. Finally, if a company integrates sustainability only in the value proposition, it is still not adopting a systemic vision to look at its business model. It is an incomplete approach, which requires the presence of a value intention, as well as value creation and value delivery. It is an unbalanced approach, which we could call “unstable sustainability”.

Secondly, the Stakeholder Value Flow Framework can facilitate a systematic and deeper analysis of stakeholder contributions, coming largely from outside. Moreover, it can be used to map from the company point of view the most significant relationship and to help companies to inspire and facilitate the stakeholder engagement for business models for sustainability in the future. Coherently with the objectives of the study, the identification of stakeholder relationships with the business model could support both researchers and enterprises in mapping the value flow. From the managerial point of view, the research underlines those entrepreneurs and managers must consider not only the customer but also a wide range of stakeholders. These stakeholders contribute not only to value creation as most of the literature has indicated, but also to the other value dimensions of the business model for sustainability. Moreover, the research shows from a practical perspective that business models are open systems that do not depend exclusively on internal practices, activities and processes or internal stakeholders. For this reason, in addition to the engagement, managers and entrepreneurs must consider the alignment of stakeholders with the organization's objectives.

Finally, the research provides a systematic collection of sustainability practices within a theoretical framework in organizational learning. It thus contributes to the field of knowledge on organizational learning by analysing sustainability in the case studies. This allows to examine how sustainable companies have incorporated sustainability and helps us jointly address organizational learning and sustainability. Implications for practice and policies may address initiatives to support reflective learning, which appears to be the least developed facet among the companies. Practical implications target organisational self-assessment through both the framework of analysis and the collection of actual examples by sustainable companies.

All the frameworks could be the starting point for future research directions. The relationship between the company and its stakeholders can be explored by adding the time variable. Companies at the beginning of their sustainability stage might have different stakeholders with different contributions in value dimensions, compared to a more advanced stage of sustainability. In addition to this, other dimensions of value for business models for sustainability could be identified.

Table 9-1 Managerial implications

Contribution	Managerial implications
Challenges and Types	Managers of SMEs that can recognize their company as adhering to a business model type and can take inspiration from the challenges related to BMfS.
Value Flow Framework	Managers can use it to analysis the value flow dimensions in their in their BMfS.
Value Flow Framework	Managers can use it to analysis the phases, the drivers and the barriers of their BMfS.
Stakeholder Value Flow Framework	Managers can use it to systematically and deeply analyse the stakeholder contributions to the business model dimension.
Stakeholder Value Flow Framework	Managers can use it to map the most significant stakeholder relationships.
Stakeholder Value Flow Framework	Managers can use it to inspire and to facilitate the stakeholder engagement.
Systematic collection of learning practices	Managers can examine how sustainable companies have incorporated sustainability and could take inspiration to address company sustainability.

9.2 Limitations

The study was descriptive in aim and, as such, is subject to some limitations. First, the use of case study methodology, by its very nature, limits the possible generalisations of the results and produces context-dependent knowledge.

The limitation due to the explorative aim of the study is acknowledged. Thus, the limited set of cases could show industry-dependent features, which could not be generalized to an overall discussion on service companies. Nonetheless, given the theoretical gap detected by the literature review, the contributions of this research can be seen as a first step towards the development of further empirical studies on Business Model for Sustainability. Future research could indeed develop a cross-sectoral comparison in order to trace paths to support business model sustainability, either within the broadest context of subsectors of the service industry or among different industries of both manufacture and service. Promoting extensive research on the field of company business models could provide owners and managers new tools for understanding market dynamics and opportunities to improve their business. Academics could apply a multi-method research design to detect, test, and improve business model features of companies.

[Digitare qui]

As regards the framework of learning practices, it could have drawn from different past research than the ones proposed here. Companies may concretely develop additional sustainable initiatives without specifically intending to. Reporting sustainable initiatives, for instance, could exclude some routines and unstructured processes of the company.

To overcome such limitations, a future research agenda should contemplate the use of mixed methods that will deepen the development of sustainability practices from the organizational learning perspective. In such a way, it is possible to extend the understanding of the preliminary results presented in this study. Moreover, the theoretical framework could further develop and encompass specific organisational characteristics for sustainability. Finally, a key research objective could address the lack of structured development in strategic leadership in the learning of sustainability practices.

9.3 Future research directions

Although the thesis answers many of the research questions that emerged from the bibliometric analysis of the literature, there are still some open points that can be clear directions for future research. First, research on the challenges and types of business models can be extended to other contexts and other sectors, both manufacturing and services. The propositions on the challenges and dimensions of the business model can be tested through quantitative research, such as a survey.

Furthermore, the Value Flow Framework can be applied to other real case studies, tested and validated. In particular, the propositions on drivers and barriers can be tested through a quantitative study. Another interesting starting point could be the mapping of the drivers that enable innovation of the business model towards sustainability through technological development and digitalization.

The Stakeholder Value Flow Framework can also be applied to other real case studies, so as to be validated and tested. Moreover, future research could develop a tool that investigates the contribution of stakeholders by changing the perspective, that is, not by adopting the company-centric vision but by looking at the business model for sustainability from the point of view of the stakeholders. The goal would be to better analyse the value capture to understand in what terms stakeholders receive real value from sustainable business models.

Another direction of future research is a study on the quantitative measurement of both negative and positive impacts and results of a business model for sustainability. The research could develop sustainability performance indicators to be applied to the business model, so as to be able to determine also how much one business model is more sustainable than another.

A further future development of the research is the integration of the Value Flow Framework, the Stakeholder Value Flow Framework, and the collection of learning practices in a single tool in

[Digitare qui]

order to map at the same time the internal or external actors, and the learning practices that enable the process of transformation from traditional business model to model of business for sustainability.

10 References

- Abdelkafi, N., & Täuscher, K. (2016). Business Models for Sustainability From a System Dynamics Perspective. *Organization and Environment*, 29(1), 74–96. <https://doi.org/10.1177/1086026615592930>
- Adams, R., Bessant, J., Jeanrenaud, S., Overy, P., Denyer, D. *Innovating for Sustainability. A Systematic Review of the Body of Knowledge*; Network for Business Sustainability: London, ON, Canada, 2012.
- Adams, R., Jeanrenaud, S., Bessant, J., Denyer, D., & Overy, P. (2016). Sustainability- oriented innovation: A systematic review. *International Journal of Management Reviews*, 18(2), 180-205. <https://doi.org/10.1111/ijmr.12068>
- Agostini, L., & Nosella, A. (2019). Inter-organizational relationships involving SMEs: A bibliographic investigation into the state of the art. *Long Range Planning*, 52(1), 1–31. <https://doi.org/10.1016/j.lrp.2017.12.003>
- Agrawal, S., & Gugnani, R. (2014). Creating successful business model: Lessons for social entrepreneurship. *International Journal of Entrepreneurship and Innovation Management*, 18(5–6), 438–445. <https://doi.org/10.1504/IJEIM.2014.064720>
- Agrawal, V. V., & Bellos, I. (2017). The potential of servicizing as a green business model. *Management Science*, 63(5), 1545-1562. <https://doi.org/10.1287/mnsc.2015.2399>
- Akgun, A.E., Keskin, H., Byrne, J.C. & Aren, S. (2007). Emotional and learning capability and their impact on product innovativeness and firm performance, *Technovation*, 27(9), 501-513.
- Alberti, F. G., & Varon Garrido, M. A. (2017). Can profit and sustainability goals co-exist? New business models for hybrid firms. *Journal of Business Strategy*, 38(1), 3–13. <https://doi.org/10.1108/JBS-12-2015-0124>
- Amankwah-Amoah, J., Danso, A., & Adomako, S. (2018). Entrepreneurial orientation, environmental sustainability and new venture performance: does stakeholder integration matter? *Business Strategy and the Environment*, 28(1), 79–87. <https://doi.org/10.1002/bse.2191>
- Amit, R., & Zott, C. (2001). Value creation in e-business. *Strategic Management Journal*, 22(6–7), 493–520. <https://doi.org/10.1002/smj.187>
- Angeli, F., & Jaiswal, A.K. (2016). Business model innovation for inclusive health care delivery at the bottom of the pyramid. *Organization & Environment*, 29, 486–507. <https://doi.org/10.1177/1086026616647174>.

- Annarelli, A., & Nonino, F. (2016). Strategic and operational management of organizational resilience: Current state of research and future directions. *Omega (United Kingdom)*, 62, 1–18. <https://doi.org/10.1016/j.omega.2015.08.004>
- Antikainen, M., & Valkokari, K. (2016). A Framework for Sustainable Circular Business Model Innovation. *Technology Innovation Management Review*, 6(7), 5–12. <https://doi.org/10.22215/timreview1000>
- Antonacopoulou, E., & Chiva, R. (2007). The Social Complexity of Organizational Learning: The Dynamics of Learning and Organizing. *Management Learning*, 38(3), 277-295.
- Arevalo, J.A., Castelló, I., de Colle, S., Lenssen, G., Neumann, K., & Zollo, M. (2011). Introduction to the special issue: Integrating sustainability in business models. *Journal of Management & Development*, 30, 941–954, <https://doi.org/10.1108/02621711111182466>.
- Argote, L. (2011). Organizational learning research: Past, present and future, *Management Learning*, 42(4), 439-446.
- Baer, M. & Frese, M. (2003). Innovation is not enough: climates for initiative and psychological safety, process innovations, and firm performance, *Journal of Organizational Behavior*, 24(1), 45-68.
- Baldassarre, B., Calabretta, G., Bocken, N. M. P., & Jaskiewicz, T. (2017). Bridging sustainable business model innovation and user-driven innovation: A process for sustainable value proposition design. *Journal of Cleaner Production*, 147, 175–186. <https://doi.org/10.1016/j.jclepro.2017.01.081>
- Bansal, P., & DesJardine, M. (2014). Business sustainability: It is about time. *Strategic Organization*, 12(1), 70–78. <https://doi.org/10.1177/1476127013520265>
- Barth, H., Ulvenblad, P. O., & Ulvenblad, P. (2017). Towards a conceptual framework of sustainable business model innovation in the agri-food sector: A systematic literature review. *Sustainability (Switzerland)*, 9(9). <https://doi.org/10.3390/su9091620>
- Battistella, C., Cagnina, M. R., Cicero, L., & Preghenella, N. (2018). Sustainable business models of SMEs: Challenges in yacht tourism sector. *Sustainability (Switzerland)*, 10(10). <https://doi.org/10.3390/su10103437>
- Baumgartner, R. J. (2009). Organizational culture and leadership: Preconditions for the development of a sustainable corporation. *Sustainable development*, 17(2), 102-113. <https://doi.org/10.1002/sd.405>
- Baumgartner, R. J., & Rauter, R. (2017). Strategic perspectives of corporate sustainability management to develop a sustainable organization. *Journal of Cleaner Production*, 140, 81–92. <https://doi.org/10.1016/j.jclepro.2016.04.146>
- Beattie, V., & Smith, S.J. (2013). Value creation and business models: Refocusing the intellectual capital debate. *British Accounting Review*, 45 (4), 243–254.

<https://doi.org/10.1016/j.bar.2013.06.001>

- Bell, E., Bryman, A., & Harley, B. (2018). *Business research methods*. Oxford, England: Oxford University Press.
- Beltramello, A., Haie-Fayle, L. & Pilat, D. (2013), *Why New Business Models Matter for Green Growth*. OECD Publishing, Paris.
- Benbasat, I., Goldstein, D. K., & Mead, M. (1987). The case research strategy in studies of information systems. *MIS Quarterly*, 11, 368-386. <https://doi.org/10.2307/248684>
- Berger, I. E., Cunningham, P. H., & Drumwright, M. E. (2007). Mainstreaming corporate social responsibility: Developing markets for virtue. *California management review*, 49(4), 132-157.
- Biloslavo, R., Bagnoli, C., & Edgar, D. (2018). An eco-critical perspective on business models: The value triangle as an approach to closing the sustainability gap. *Journal of Cleaner Production*, 174, 746–762. <https://doi.org/10.1016/j.jclepro.2017.10.281>
- Birkin, F., Cashman, A., Koh, S. C. L., & Liu, Z. (2009). New sustainable business models in China. *Business Strategy and the Environment*, 18(1), 64–77. <https://doi.org/10.1002/bse.568>
- Birkin, F., Polesie, T., & Lewis, L. (2009). A new business model for sustainable development: an exploratory study using the theory of constraints in Nordic organizations. *Business Strategy and the Environment*, 18(5), 277-290. <https://doi.org/10.1002/bse.581>
- Björkdahl, J., & Holmén, M. (2013). Business model innovation—the challenges ahead. *International Journal of Product Development*, 18(3/4), 213-225.
- Bocken, N. (2015). Sustainable venture capital—catalyst for sustainable start-up success?. *Journal of cleaner production*, 108, 647-658. <https://doi.org/10.1016/j.jclepro.2015.05.079>.
- Bocken, N., & Geradts, T. H. (2020). Barriers and drivers to sustainable business model innovation: Organization design and dynamic capabilities. *Long Range Planning*, 53(4), 101950. <https://doi.org/10.1016/j.lrp.2019.101950>
- Bocken, N., Boons, F., & Baldassarre, B. (2019). Sustainable business model experimentation by understanding ecologies of business models. *Journal of Cleaner Production*, 208, 1498–1512. <https://doi.org/10.1016/j.jclepro.2018.10.159>
- Bocken, N., Mugge, R., Bom, C. A., & Lemstra, H. J. (2018). Pay-per-use business models as a driver for sustainable consumption: Evidence from the case of HOMIE. *Journal of Cleaner Production*, 198, 498–510. <https://doi.org/10.1016/j.jclepro.2018.07.043>
- Bocken, N., Schuit, C.S.C., & Kraaijenhagen, C. (2018). Experimenting with a circular business model: Lessons from eight cases. *Environmental Innovation and Societal Transitions*, 28, 79-95. <https://doi.org/10.1016/j.eist.2018.02.001>

- Bocken, N., Short, S., Rana, P., & Evans, S. (2013). A value mapping tool for sustainable business modelling. *Corporate Governance (Bingley)*, 13(5), 482–497.
<https://doi.org/10.1108/CG-06-2013-0078>
- Bocken, N., Short, S., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42–56.
<https://doi.org/10.1016/j.jclepro.2013.11.039>
- Bohdanowicz, P., & Zientara, P. (2009). Hotel Companies' Contribution to Improving the Quality of Life of Local Communities and the Well-Being of Their Employees. *Tourism and Hospitality Research*, 9(2), 147–158. <https://doi.org/10.1057/thr.2008.46>
- Bolton, R., & Hannon, M. (2016). Governing sustainability transitions through business model innovation: Towards a systems understanding. *Research Policy*, 45(9), 1731–1742.
<https://doi.org/10.1016/j.respol.2016.05.003>
- Bonča, P. D., & Tajnikar, M. (2015). Measuring the impact of innovations on efficiency in complex hospital settings. *The South East European Journal of Economics and Business*, 10(2).
- Boons, F., & Lüdeke-Freund, F. (2013). Business models for sustainable innovation: State-of-the-art and steps towards a research agenda. *Journal of Cleaner Production*, 45, 9–19.
<https://doi.org/10.1016/j.jclepro.2012.07.007>
- Boons, F., Montalvo, C., Quist, J., & Wagner, M. (2013). Sustainable innovation, business models and economic performance: An overview. *Journal of Cleaner Production*, 45, 1–8. <https://doi.org/10.1016/j.jclepro.2012.08.013>
- Bowman, C. and Ambrosini, V. (2000). Value creation versus value capture: towards a coherent definition of value in strategy. *British Journal of Management*, 11(1), 1-15.
<https://doi.org/10.1111/1467-8551.00147>
- Brehmer, M., Podoyntsyna, K., & Langerak, F. (2018). Sustainable business models as boundary-spanning systems of value transfers. *Journal of Cleaner Production*, 172, 4514–4531. <https://doi.org/10.1016/j.jclepro.2017.11.083>
- Brennan, G., & Tennant, M. (2018). Sustainable value and trade-offs: Exploring situational logics and power relations in a UK brewery's malt supply network business model. *Business Strategy and the Environment*, 27(5), 621–630.
<https://doi.org/10.1002/bse.2067>
- Brenner, S., & Cochran, P. (1991). The stakeholder theory of the firm: Implications for business and society theory and research. *IABS Proceedings 1991*, 449-467.
<https://doi.org/10.5840/iabsproc1991235>
- Breuer, H., & Lüdeke-Freund, F. (2014, June). Normative innovation for sustainable business models in value networks. In *The Proceedings of XXV ISPIM Conference-Innovation for Sustainable Economy and Society*, 8-11.

- 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. <https://doi.org/10.1504/IJEV.2018.092715>
- Broccardo, L., Culasso, F., & Truant, E. (2017). Unlocking value creation using an agritourism business model. *Sustainability*, 9(9), 1618. <https://doi.org/10.3390/su9091618>
- Brozovic, D. (2020). Business model based on strong sustainability: Insights from an empirical study. *Business Strategy and the Environment*, 29(2), 763–778. <https://doi.org/10.1002/bse.2440>
- Bryan, J. (2006). Training and Performance in Small Firms, *International Small Business Journal*, 24(6), 635-660.
- Bryson, J. R., & Lombardi, R. (2009). Balancing product and process sustainability against business profitability: Sustainability as a competitive strategy in the property development process. *Business Strategy and the Environment*, 18(2), 97–107. <https://doi.org/10.1002/bse.640>
- Buffa, F., Franch, M., & Rizio, D. (2018). Environmental management practices for sustainable business models in small and medium sized hotel enterprises. *Journal of Cleaner Production*, 194, 656–664. <https://doi.org/10.1016/j.jclepro.2018.05.143>
- Buffa, F., Franch, M., Martini, U., & Tamanini, A. (2018). Hotel profiles based on environmental management practices: Evidence from a study at an alpine destination. *Sustainability (Switzerland)*, 10(12). <https://doi.org/10.3390/su10124531>
- Calabrese, A., Castaldi, C., Forte, G., & Levialdi, N. G. (2018). Sustainability-oriented service innovation: An emerging research field. *Journal of Cleaner Production*, 193, 533–548. <https://doi.org/10.1016/j.jclepro.2018.05.073>
- Calabrese, A., Forte, G., & Ghiron, N. L. (2018). Fostering sustainability-oriented service innovation (SOSI) through business model renewal: The SOSI tool. *Journal of Cleaner Production*, 201, 783–791. <https://doi.org/10.1016/j.jclepro.2018.08.102>
- Cannas, R. (2016). The Sustainable Tourism Management of Cultural Heritage: the Case of the Rosas Mine in Sardinia. *Journal of Tourism, Culture and Territorial Development*, 7, 38–59, <https://doi.org/10.6092/issn.2036-5195/6331>.
- Cantino V., Giacosa E., Cortese D., (2019). A sustainable perspective in wine production for common-good management The case of Fontanafredda biological reserve. *British Food Journal* 121(2), 259-274.
- Carson, R., 1962. *Silent Spring*. Crest Book.
- Casadesus-Masanell, R. (2014). Strategy reading: Introduction to strategy. *Harvard Business Review*, 1-35.

- Centobelli, P., Cerchione, R., Chiaroni, D., Del Vecchio, P., & Urbinati, A. (2020). Designing business models in circular economy: A systematic literature review and research agenda. *Business Strategy and the Environment*, 29(4), 1734–1749.
<https://doi.org/10.1002/bse.2466>
- Chang R., Zuo J., Zhao Z., Zillante G., Xiao-Long Gan X., & Soebarto V. (2017). Evolving theories of sustainability and firms: History, future directions and implications for renewable energy research. *Renewable and Sustainable Energy Reviews*, 72, 48–56.
<https://doi.org/10.1016/j.rser.2017.01.029>
- Charles, O.H., Jr. Schmidheiny, S., & Watts, P. (2017). *Walking the Talk: The Business Case for Sustainable Development*. Abingdon, UK,: Routledge.
- Charmaz, K. (2006). *The grounded theory method: An explication and interpretation*. In R. Emerson (Ed.), *Contemporary field research*. Boston, MA: Little Brown.
- Chassé, S., & Boiral, O. (2017). Legitimizing corporate (un) sustainability: A case study of passive SMEs. *Organization & Environment*, 30(4), 324-345.
<https://doi.org/10.1177/1086026616672065>
- Chesbrough, H. (2007). Business model innovation: it's not just about technology anymore. *Strategy & leadership*, 35(6), 12-17.
- Chesbrough, H. (2010). Business model innovation: Opportunities and barriers. *Long Range Planning*, 43(2–3), 354–363. <https://doi.org/10.1016/j.lrp.2009.07.010>
- Chesbrough, H. W., & Rosenbloom, R. S. (2002). The role of the business model in capturing value from innovation: Evidence from Xerox Corporation's technology spin-off companies. *Industrial and Corporate Change*, 11(3), 529-555.
<https://doi.org/10.1093/icc/11.3.529>
- Christ, K.L., Burritt, R.L., Guthrie, J. & Evans, E. (2018). The potential for ‘boundary-spanning organisations’ in addressing the research-practice gap in sustainability accounting. *Sustainability Accounting, Management and Policy Journal*, 9(4), 552-568.
<https://doi.org/10.1108/SAMPJ-06-2017-0059>
- Clarkson, M.E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, 20(1), 92–117.
<https://doi.org/10.5465/amr.1995.9503271994>
- Coles, T., Warren, N., Borden, D. S., & Dinan, C. (2017). Business models among SMTEs: identifying attitudes to environmental costs and their implications for sustainable tourism. *Journal of Sustainable Tourism*, 25(4), 471–488.
<https://doi.org/10.1080/09669582.2016.1221414>
- Comin, L.C., Aguiar, C.C., Sehnem, S., Yusliza, M.-.-Y., Cazella, C.F. and Julkovski, D.J. (2019), "Sustainable business models: a literature review", *Benchmarking: An International Journal*, 27(7), 2028-2047.

- Corbin, J., & Strauss, A. (2007). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage.
- Corbo, L. (2017). In search of business model configurations that work: Lessons from the hybridization of Air Berlin and JetBlue. *Journal of Air Transport Management*, 64, 139-150. <https://doi.org/10.1016/j.jairtraman.2016.09.010>
- Cornelissen, J. P. (2016). Preserving theoretical divergence in management research: Why the explanatory potential of qualitative research should be harnessed rather than suppressed. *Journal of Management Studies*, 54, 368-383. <https://doi.org/10.1111/joms.12210>
- Cosenz, F., Rodrigues, V. P., & Rosati, F. (2020). Dynamic business modeling for sustainability: Exploring a system dynamics perspective to develop sustainable business models. *Business Strategy and the Environment*, 29(2), 651–664. <https://doi.org/10.1002/bse.2395>
- Costanza, R., & Daly, H. E. (1992). Natural capital and sustainable development. *Conservation biology*, 6(1), 37-46.
- Crane, A. (2000). Corporate greening as amoralization. *Organization Studies*, 21(4), 673-696.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: Sage.
- Daily, B. F., & Huang, S. (2001). Achieving sustainability through attention to human resource factors in environmental management. *International Journal of Operations & Production Management*, 21(12), 1539–1552.
- Damanpour, F. (1991), Organizational Innovation: A Meta-Analysis of Effects of Determinants and Moderators, *Academy of Management Journal*, 34(3), 555-590.
- Davies, I. A., & Chambers, L. (2018). Integrating hybridity and business model theory in sustainable entrepreneurship. *Journal of Cleaner Production*, 177, 378–386. <https://doi.org/10.1016/j.jclepro.2017.12.196>
- Day, G. (1994). Continuous Learning About Markets, *California Management Review*, 36(1), 9-31.
- de Sherbinin A, Carr D, Cassels S, and Jiang Leiwen (2007). Population and environment. *The Annual Review of Environmental Resources*, 32, 345 – 73.
- Del Brìo, J. A., & Junquera, B. (2003). A review of the literature on environmental innovation management in SMEs: implications for public policies. *Technovation*, 23(12), 939-948. [https://doi.org/10.1016/S0166-4972\(02\)00036-6](https://doi.org/10.1016/S0166-4972(02)00036-6)
- Dembek, K., York, J., & Singh, P. J. (2018). Creating value for multiple stakeholders: Sustainable business models at the Base of the Pyramid. *Journal of Cleaner production*, 196, 1600-1612. <https://doi.org/10.1016/j.jclepro.2018.06.046>
- Dentchev, N., Baumgartner, R., Dieleman, H., Jóhannsdóttir, L., Jonker, J., Nyberg, T., ... van Hoof, B. (2016). Embracing the variety of sustainable business models: Social

- entrepreneurship, corporate intrapreneurship, creativity, innovation, and other approaches to sustainability challenges. *Journal of Cleaner Production*, 113(4), 4–7. <https://doi.org/10.1016/j.jclepro.2015.10.130>
- Dentchev, N., Rauter, R., Jóhannsdóttir, L., Snihur, Y., Rosano, M., Baumgartner, R., ... Jonker, J. (2018). Embracing the variety of sustainable business models: A prolific field of research and a future research agenda. *Journal of Cleaner Production*, 194, 695–703. <https://doi.org/10.1016/j.jclepro.2018.05.156>
- Depken, D., & Zeman, C. (2018). Small business challenges and the triple bottom line, TBL: Needs assessment in a Midwest State, USA. *Technological Forecasting and Social Change*, 135, 44-50. <https://doi.org/10.1016/j.techfore.2017.05.032>
- Dernbach, J.C. (2003). Achieving sustainable development: the centrality and multiple facets of integrated decision making, *Indiana Journal of Global Legal Studies*, 10(1), 247-285.
- Di Tullio, P., Valentinetti, D., & Rea, M. A. (2018). The competitiveness of firms through the sustainable business model: A decade of research. *Industria*, 39(3), 357–386. <https://doi.org/10.1430/92510>
- Diaz Lopez, F. J., Bastain, T., & Tukker, A. (2019). Business Model Innovation for Resource-efficiency, Circularity and Cleaner Production: What 143 Cases Tell Us. *Ecological Economics*, 155(March 2017), 20–35. <https://doi.org/10.1016/j.ecolecon.2018.03.009>
- Díaz-Correa, J. E., & López-Navarro, M. A. (2018). Managing sustainable hybrid organisations: A case study in the agricultural sector. *Sustainability (Switzerland)*, 10(9). <https://doi.org/10.3390/su10093010>
- Dixon, S. E. A., & Clifford, A. (2007). Ecopreneurship - A new approach to managing the triple bottom line. *Journal of Organizational Change Management*, 20(3), 326–345. <https://doi.org/10.1108/09534810710740164>
- Donaldson, T., & Preston, L.E. (1995). The stakeholder theory of the corporation: concepts, evidence, and implications. *Academy of Management Review*, 20 (1), 65-91. <https://doi.org/10.2307/258887>
- Doppelt, B. (2003). *Leading change toward sustainability: A change-management guide for business, government and civil society*. Sheffield, UK: Greenleaf.
- Dovers, S.R. and Handmer, J.W. (1992). Uncertainty, sustainability and change, *Global Environmental Change*, 2(4), 262-276.
- Dreyer, B., Lüdeke-Freund, F., Hamann, R., & Faccar, K. (2017). Upsides and downsides of the sharing economy: Collaborative consumption business models' stakeholder value impacts and their relationship to context. *Technological Forecasting and Social Change*, 125, 87-104.
- Dubruc, N., Mekdessi, S., Khawaja, D., & Chartouny, D. (2017). Château Kefraya, a small-medium sized Lebanese winery with a socially responsible business model. *International*

- Journal of Entrepreneurship and Small Business*, 32(1–2), 28–46.
<https://doi.org/10.1504/IJESB.2017.085983>
- Dunham, L., Freeman, R. E., and Liedtka, J. (2006). Enhancing Stakeholder Practice: A Particularized Exploration of Community. *Business Ethics Quarterly*, 16(1), 23-42.
<https://doi.org/10.5840/beq20061611>
- Dunphy D, Griffiths A, Benn S. 2003. Organizational Change for Corporate Sustainability. Routledge: London.
- Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business strategy and the environment*, 11(2), 130-141.
- Edwards, M.G. (2005). The integral Holon: A Holonomic approach to organisational change and transformation, *Journal of Organizational Change Management*, 18(3), 269-288.
- Edwards, M.G. (2009), An integrative metatheory for organisational learning and sustainability in turbulent times, *The Learning Organization*, 16(3), 189-207.
- Ehrlich, P. R., Kareiva, P. M., & Daily, G. C. (2012). Securing natural capital and expanding equity to rescale civilization. *Nature*, 486(7401), 68-73.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of management review*, 14(4), 532-550. <https://doi.org/10.5465/amr.1989.4308385>
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50, 25-32.
<https://doi.org/10.5465/amj.2007.24160888>
- Eisenhardt, K. M., Graebner, M. E., & Sonenshein, S. (2016). Grand challenges and inductive methods: Rigor without rigor mortis. *Academy of Management Journal*, 59, 1113-1123.
<https://doi.org/10.5465/amj.2016.4004>
- Elkington, J. (1998). Partnerships from cannibals with forks: The triple bottom line of 21st-century business. *Environmental Quality Management*, 8(1), 37–51.
<https://doi.org/10.1002/tqem.3310080106>
- Elkington, J. *Cannibals with Forks—Triple Bottom Line of 21st Century Business*; New Society Publishers: Stoney Creek, CT, USA, 1997.
- Elkington, J. Enter the triple bottom line. In *The Triple Bottom Line: Does It All Add Up?* Henriques, A., Richardson, J., Eds.; Earthscan: London, UK, 2004; 1–16.
- Esposito, M., Kapoor, A., & Goyal, S. (2012). Enabling healthcare services for the rural and semi-urban segments in India: when shared value meets the bottom of the pyramid. *Corporate Governance: The international journal of business in society*.
<https://doi.org/10.1108/14720701211267847>
- European Commission (EC). (2001). Green Paper. Promoting a European Framework for Corporate Social Responsibility. http://europa.eu/rapid/press-release_DOC-01-9_en.pdf accessed on 28.9.2021

- European Commission. Annual Report on European SMEs. Available online: https://ec.europa.eu/growth/smes/business-friendly-environment/performance-review_en?pk_source=ec_newsroom&pk_medium=link&pk_campaign=spr17#annual-report (accessed on 3 August 2018).
- 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. <https://doi.org/10.1002/bse.1939>
- Fadeeva, Z. (2005). Promise of sustainability collaboration – potential fulfilled?. *Journal of Cleaner Production*, 13 (2), 165-174. [https://doi.org/10.1016/S0959-6526\(03\)00125-2](https://doi.org/10.1016/S0959-6526(03)00125-2)
- Fobbe, L., & Hilletoft, P. (2021). Stakeholder interaction for sustainability in seaports. Analysing the implementation and its linkages to overarching interaction efforts. *European Business Review*, Article-in-Press. <https://doi.org/10.1108/EBR-06-2020-0167>
- Fraccascia, L., Giannoccaro, I., & Albino, V. (2018). Resilience of complex systems: State of the art and directions for future research. *Complexity*, 2018. <https://doi.org/10.1155/2018/3421529>
- França, C. L., Broman, G., Robèrt, 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. <https://doi.org/10.1016/j.jclepro.2016.06.124>
- Franceschelli, M. V., Santoro, G., & Candelo, E. (2018). Business model innovation for sustainability: a food start-up case study. *British Food Journal*, 120(10), 2483–2494. <https://doi.org/10.1108/BFJ-01-2018-0049>
- Freeman, R. E. (2010). Managing for stakeholders: Trade-offs or value creation. *Journal of Business Ethics*, 96, 7–9. <https://doi.org/10.1007/s10551-011-0935-5>
- Freeman, R. E., & Gilbert, D. R., Jr. (1992). Business, ethics and society: A critical agenda. *Business & Society*, 31(1), 9-17. <https://doi.org/10.1177/000765039203100102>
- Freeman, R.E. (1984). Strategic management: A stakeholder approach. Pitman Publishing Inc. Boston.
- Freudenreich, B., Lüdeke-Freund, F. & Schaltegger, S. (2020). A Stakeholder Theory Perspective on Business Models: Value Creation for Sustainability. *Journal of Business Ethics*, 166, 3–18. <https://doi.org/10.1007/s10551-019-04112-z>
- Funkhouser, E., Blackburn, G., Magee, C., & Rai, V. (2015). Business model innovations for deploying distributed generation: The emerging landscape of community solar in the US. *Energy Research & Social Science*, 10, 90-101. <https://doi.org/10.1016/j.erss.2015.07.004>
- Gallo, P. J., Antolin-Lopez, R., & Montiel, I. (2018). Associative Sustainable Business Models: Cases in the bean-to-bar chocolate industry. *Journal of cleaner production*, 174, 905-

916. <https://doi.org/10.1016/j.jclepro.2017.11.021>
- Garvin, D. (1993), “Building a Learning Organization”, *Harvard Business Review*, Vol. 71 No. 4, pp. 78-91.
- Garvin, D.A., Edmondson, A.C. and Gino, F. (2008), “Is Yours a Learning Organization?”, *Harvard Business Review*, Vol. 86 No. 3, 109-116.
- Gasbarro, F., Rizzi, F., & Frey, M. (2018). Sustainable institutional entrepreneurship in practice: Insights from SMEs in the clean energy sector in Tuscany (Italy). *International Journal of Entrepreneurial Behavior & Research*. <https://doi.org/10.1108/IJEER-11-2015-0259>
- Gaspari, M., Lorenzoni, A., Frías, P., & Reneses, J. (2017). Integrated Energy Services for the industrial sector: An innovative model for sustainable electricity supply. *Utilities Policy*, 45, 118-127. <https://doi.org/10.1016/j.jup.2017.03.002>
- Geissdoerfer, M., Bocken, N. M. P., & 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. <https://doi.org/10.1016/j.jclepro.2016.07.020>
- Geissdoerfer, M., Morioka, S. N., de Carvalho, M. M., & Evans, S. (2018). Business models and supply chains for the circular economy. *Journal of Cleaner Production*, 190, 712–721. <https://doi.org/10.1016/j.jclepro.2018.04.159>
- Geissdoerfer, M., Vladimirova, D., & Evans, S. (2018). Sustainable business model innovation: A review. *Journal of Cleaner Production*, 198, 401–416. <https://doi.org/10.1016/j.jclepro.2018.06.240>
- Giannoutakis, K. N., & Li, F. (2012). Making a business case for intelligent transport systems: a holistic business model framework. *Transport Reviews*, 32(6), 781-804.
- Gibbs, G.R. (2007), “Thematic coding and categorizing”, *Analyzing qualitative data*, 703, 38-55.
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, 16, 15-31. <https://doi.org/10.1177/1094428112452151>
- Girotra, K., & Netessine, S. (2013). Business model innovation for sustainability. *Manufacturing and Service Operations Management*, 15(4), 537–544. <https://doi.org/10.1287/msom.2013.0451>
- Goh, S.C. (2001), The learning organization: an empirical test of a normative perspective, *International Journal of Organizational Theory & Behaviour*, 4(1), 329-355.
- Goyal, S., Sergi, B. S., & Kapoor, A. (2014). Understanding the key characteristics of an embedded business model for the base of the pyramid markets. *Economics & Sociology*, 7(4), 26. <https://doi.org/10.14254/2071-789X.2014/7-4/2>
- Gray, B. & Purdy, J. (2018). Collaborating for our future, in Gray, B. and Purdy, J. (Eds),

- Multistakeholder Partnerships for Solving Complex Problems, Oxford University Press, Oxford.
- Gretzel, U.; Werthner, H.; Koo, C.; Lamsfus, C. Conceptual foundations for understanding smart tourism ecosystems. *Comput. Hum. Behav.* **2015**, *50*, 558–563, <https://doi.org/10.1016/j.chb.2015.03.043>
- Griffiths, A., & Petrick, J. A. (2001). Corporate architectures for sustainability. *International Journal of Operations & Production Management*, *21*, 1573-1585. <https://doi.org/10.1108/01443570110410919>
- Gsodam, P., Rauter, R., & Baumgartner, R. J. (2015). The renewable energy debate: how Austrian electric utilities are changing their business models. *Energy, Sustainability and Society*, *5*(1), 1-12. <https://doi.org/10.1186/s13705-015-0056-6>
- Hahn, T., Figge, F., Pinkse, J., & Preuss, L. (2010). Trade-offs in corporate sustainability: you can't have your cake and eat it: Trade-Offs in Corporate Sustainability: You Can't Have Your Cake and Eat It. *Business Strategy and the Environment*, *19*(4), 217–229. <https://doi.org/10.1002/bse.v19:4>
- Haigh, N.; Hoffman, A.J. (2012) Hybrid organizations: The next chapter of sustainable business. *Organ. Dyn.*, *41*, 126–134.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (1998). *Multivariate Data Analysis (Vol. 5)*. Upper Saddle River, NJ: Prentice hall.
- Hall, J., & Wagner, M. (2012). Integrating sustainability into firms' processes: Performance effects and the moderating role of business models and innovation. *Business Strategy and the Environment*, *21*(3), 183–196. <https://doi.org/10.1002/bse.728>
- Halme, M., & Korpela, M. (2014). Responsible innovation toward sustainable development in small and medium-sized enterprises: A resource perspective. *Business Strategy and the Environment*, *23*(8), 547-566. <https://doi.org/10.1002/bse.1801>
- Hannon, M. J., Foxon, T. J., & Gale, W. F. (2015). 'Demand pull' government policies to support Product-Service System activity: the case of Energy Service Companies (ESCos) in the UK. *Journal of Cleaner Production*, *108*, 900-915. <https://doi.org/10.1016/j.jclepro.2015.05.082>.
- Hansen, E. G., Große-Dunker, F., & Reichwald, R. (2009). Sustainability innovation cube. A framework to evaluate sustainability-oriented innovations. *International Journal of Innovation Management*, *13*, 683-713. <https://doi.org/10.1142/S1363919609002479>
- Hansson, B. (2007), Company-based determinants of training and the impact of training on company performance, *Personnel Review*, *36*(1/2), 1-331.
- Hardin, G. (1968), "The tragedy of the commons", *Science*, *162*(1), 1243-1248.
- Harrison, J.S., Bosse, D.A. & Phillips, R.A. (2010). Managing for stakeholders, stakeholder utility functions & competitive advantage. *Strategic Management Journal*, *31*(1), 58-74. <https://doi.org/10.1002/smj.801>

- Hart, S. L., & Milstein, M. B. (2003). Creating sustainable value. *Academy of Management Executive*, 17(2), 56–69. <https://doi.org/10.5465/ame.2003.10025194>
- Hartley, J. F. (1994). Case studies in organizational research. *Qualitative methods in organizational research: A practical guide*, 208-229.
- Haugh, H.M. and Talwar, A. (2010), “How Do Corporations Embed Sustainability Across the Organization?” *Academy of Management Learning & Education*, Vol. 9 No. 3, pp. 384-396.
- Hedberg, R. (1981), *How Organizations Learn and Unlearn*, *Handbook of Organizational Design*, Oxford University Press, Oxford.
- Heinz, S., & O’Connell, J. F. (2013). Air transport in Africa: toward sustainable business models for African airlines. *Journal of Transport Geography*, 31, 72-83. <https://doi.org/10.1016/j.jtrangeo.2013.05.004>
- Heyes, G., Sharmina, M., Mendoza, J. M. F., Gallego-Schmid, A., & Azapagic, A. (2018). Developing and implementing circular economy business models in service-oriented technology companies. *Journal of Cleaner Production*, 177, 621-632. <https://doi.org/10.1016/j.jclepro.2017.12.168>
- Hillary, R. (2004). Environmental management systems and the smaller enterprise. *Journal of cleaner production*, 12(6), 561-569. <https://doi.org/10.1016/j.jclepro.2003.08.006>
- Hoffman, A. J., Badiane, K. K., & Haigh, N. (2012). *Hybrid organizations as agents of positive social change: Bridging the for-profit and non-profit divide* (pp. 152-174). Routledge.
- Hoffman, D. L., & Holbrook, M. B. (1993). The Intellectual Structure of Consumer Research: A Bibliometric Study of Author Cocitations in the *First 15 Years of the Journal of Consumer Research*. *Journal of Consumer Research*, 19(4), 505–517. <https://doi.org/10.1086/209319>
- Høgevold, N. M. (2011). A corporate effort towards a sustainable business model: A case study from the Norwegian furniture industry. *International Journal of Operations and Production Management*, 23(4), 392–400. <https://doi.org/10.1108/09555341111145771>
- Høgevold, N. M., & Svensson, G. (2012). A business sustainability model: A European case study. *Journal of Business and Industrial Marketing*, 27(2), 142–151. <https://doi.org/10.1108/08858621211197001>
- Høgevold, N. M., Svensson, G., & Padin, C. (2015). A sustainable business model in services: an assessment and validation. *International Journal of Quality and Service Sciences*, 7(1). Retrieved from <http://dx.doi.org/10.1108/17566691011026603%5Cnhttp://dx.doi.org/10.1108/09564231211260404%5Cnhttp://dx.doi.org/10.1108/10878570410699249>
- Høgevold, N. M., Svensson, G., Padin, C., & Santos, M. Dos. (2016). A comparison of sustainable business models between goods and service industries: similarities and

- differences. *International Journal of Business Excellence*, 10(1), 20.
<https://doi.org/10.1504/ijbex.2016.077616>
- Høgevold, N. M., Svensson, G., Wagner, B., Petzer, D. J., Klopper, H. B., Varela, J. C. S., ... Ferro, C. (2014). Sustainable business models: Corporate reasons, economic effects, social boundaries, environmental actions and organizational challenges in sustainable business practices. *Baltic Journal of Management*, 9(3), 357–380.
<https://doi.org/10.1108/BJM-09-2013-0147>
- Hörisch, J., Freeman, E., & Schaltegger, S. (2014). Applying stakeholder theory in sustainability management: Links, similarities, and a conceptual framework. *Organization & Environment*, 27(4), 1–19. <https://doi.org/10.1177/1086026614535786>
- Hörisch, J., Johnson, M. P., & Schaltegger, S. (2015). Implementation of sustainability management and company size: A knowledge-based view. *Business Strategy and the Environment*, 24(8), 765–779. <https://doi.org/10.1016/j.jclepro.2017.05.063>
- Hsu, C. H., Chang, A. Y., & Luo, W. (2017). Identifying key performance factors for sustainability development of SMEs—integrating QFD and fuzzy MADM methods. *Journal of Cleaner Production*, 161, 629–645.
<https://doi.org/10.1016/j.jclepro.2017.05.063>
- Huber, G.P. (1991). Organizational learning: the contributing processes and the literatures, *Organization Science*, 2(1), 88–115.
- Hult, G.T.M., Ketchen, D.J. and Nichols, E.L. (2003), Organizational learning as a strategic resource in supply management, *Journal of Operations Management*, 21(5), 541–556.
- ICTSD. *Services and Sustainable Development. A Conceptual Approach*; International Centre for Trade and Sustainable Development: Geneva, Switzerland, 2016.
- Inigo, E. A., Albareda, L., & Ritala, P. (2017). Business model innovation for sustainability: exploring evolutionary and radical approaches through dynamic capabilities. *Industry and Innovation*, 24(5), 515–542. <https://doi.org/10.1080/13662716.2017.1310034>
- IPCC, 2018: Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)].
- Isil, O., & Hernke, M. T. (2017). The Triple Bottom Line: A Critical Review from a Transdisciplinary Perspective. *Business Strategy and the Environment*, 26(8), 1235–1251. <https://doi.org/10.1002/bse.1982>

- Jaafar, M., & Maideen, S. A. (2012). Ecotourism-related products and activities, and the economic sustainability of small and medium island chalets. *Tourism Management*, 33(3), 683-691.
- Jabareen, Y. (2006), Sustainable urban forms: their typologies, models, and concepts, *Journal of Planning, Education and Research*, 26(1), 38-52.
- Jamali, D. (2006), Insights into triple bottom line integration from a learning organization perspective, *Business Process Management Journal*, 12(6), 809-821.
- Jamali, D. and Sidani, Y. (2008), Learning organizations: diagnosis and measurement in a developing country context: The case of Lebanon, *The Learning Organization*, 15(1), 58-74.
- Jansson, J., Nilsson, J., Modig, F. and Hed Vall, G. (2017), Commitment to Sustainability in Small and Medium-Sized Enterprises: The Influence of Strategic Orientations and Management Values, *Business Strategy and the Environment*, 26(1), 69-83.
- Jerez-Gomez, P., Cespedes-Lorente, J. and Valle-Cabrera, R. (2005), “Organizational learning capability: a proposal of measurement”, *Journal of Business Research*, 58, 715-725.
- Jhunjhunwala, S. (2014). Intertwining CSR with strategy - the way ahead. *Corporate Governance (Bingley)*, 14(2), 211–219. <https://doi.org/10.1108/CG-03-2011-0021>
- Johnson, M. (2010). *Seizing the White Space. Business Model Innovation for Growth and Renewal*. Boston: Harvard Business Press.
- Johnson, M. W., Christensen, C. M., & Kagermann, H. (2008). Reinventing your business model. *Harvard business review*, 86(12), 57-68.
- Johnson, M.P. and Schaltegger, S. (2016), Two Decades of Sustainability Management Tools for SMEs: How Far Have We Come?, *Journal of Small Business Management*, 54 (2), 481-505. <https://doi.org/10.1111/jsbm.12154>
- Jolink, A., & Niesten, E. (2015). Sustainable Development and Business Models of Entrepreneurs in the Organic Food Industry. *Business Strategy and the Environment*, 24(6), 386–401. <https://doi.org/10.1002/bse.1826>
- Jones, P., Hillier, D., & Comfort, D. (2014). Sustainability in the global hotel industry. *International Journal of Contemporary Hospitality Management*, 26(1), 5–17. <https://doi.org/10.1108/IJCHM-10-2012-0180>
- Jonkutė, G., & Staniškis, J. K. (2016). Realising sustainable consumption and production in companies: the SUSTainable and RESponsible COMPANY (SURESCOM) model. *Journal of Cleaner Production*, 138, 170–180. <https://doi.org/10.1016/j.jclepro.2016.03.176>
- 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. <https://doi.org/10.1016/j.jclepro.2016.06.067>

- Karlsson, N. P. E., Hoveskog, M., Halila, F., & Mattsson, M. (2018). Early phases of the business model innovation process for sustainability: Addressing the status quo of a Swedish biogas-producing farm cooperative. *Journal of Cleaner Production*, 172, 2759–2772. <https://doi.org/10.1016/j.jclepro.2017.11.136>
- Karlsruh, A., Sachsenhofer, W., & Reinsberger, K. (2018). Educating for the development of sustainable business models: Designing and delivering a course to foster creativity. *Journal of Cleaner Production*, 179, 169–179. <https://doi.org/10.1016/j.jclepro.2017.12.199>
- Key, S. (1999). Toward a new theory of the firm: a critique of stakeholder “theory”. *Management Decision*, 37(4), 317-328. <https://doi.org/10.1108/00251749910269366>
- Khmara, Y., & Kronenberg, J. (2018). Degrowth in business: An oxymoron or a viable business model for sustainability? *Journal of Cleaner Production*, 177, 721–731. <https://doi.org/10.1016/j.jclepro.2017.12.182>
- Kiesnere, A. L., & Baumgartner, R. J. (2019). Sustainability management in practice: organizational change for sustainability in smaller large-sized companies in Austria. *Sustainability*, 11(3), 572. <https://doi.org/10.3390/su11030572>
- Kline, P. (2014). *An easy guide to factor analysis*. London and New York: Routledge.
- Kolb, D.A. (1984), *EXPERIENTIAL LEARNING: Experience as the Source of Learning and Development*, Prentice Hall, Englewood Cliffs, NJ.
- Kolk, A. (2016). The social responsibility of international business: From ethics and the environment to CSR and sustainable development. *Journal of World Business*, 51(1), 23–34. <https://doi.org/10.1016/j.jwb.2015.08.010>
- Kolk, A., & Lenfant, F. (2016). Hybrid business models for peace and reconciliation. *Business Horizons*, 59(5), 503–524. <https://doi.org/10.1016/j.bushor.2016.03.014>
- Kozłowski, A., Searcy, C., & Bardecki, M. (2018). The reDesign canvas: Fashion design as a tool for sustainability. *Journal of Cleaner Production*, 183, 194–207. <https://doi.org/10.1016/j.jclepro.2018.02.014>
- Kristensen, H. S., & Remmen, A. (2019). A framework for sustainable value propositions in product-service systems. *Journal of Cleaner Production*, 223, 25–35. <https://doi.org/10.1016/j.jclepro.2019.03.074>
- Kujala, J., & Korhonen, A. (2017). Value-creating stakeholder relationships in the context of CSR, in Freeman, R.E., Kujala, J. and Sachs, S. (Eds), *Stakeholder Engagement: Clinical Research Cases*, Springer, Zurich, pp. 63-85.
- Kurucz, E. C., Colbert, B. A., Luedeke-Freund, F., Upward, A., & Willard, B. (2017). Relational leadership for strategic sustainability: Practices and capabilities to advance the design and assessment of sustainable business models. *Journal of Cleaner*

- Production*, 140, 189-204. <https://doi.org/10.1016/j.jclepro.2016.03.087>
- Lang, D. J., Wiek, A., Bergmann, M., Stauffacher, M., Martens, P., Moll, P., ... & Thomas, C. J. (2012). Transdisciplinary research in sustainability science: practice, principles, and challenges. *Sustainability science*, 7(1), 25-43.
- Laukkanen, M., & Patala, S. (2014). Analysing barriers to sustainable business model innovations: Innovation systems approach. *International Journal of Innovation Management*, 18(06), 1440010. <https://doi.org/10.1142/S1363919614400106>
- Leonard-Barton, D.A. (1992), "The factory as a learning laboratory", *MIT Sloan Management Review*, 34(1), 23-28.
- Lepoutre, J., & Heene, A. (2006). Investigating the impact of firm size on small business social responsibility: A critical review. *Journal of business ethics*, 67(3), 257-273. <https://doi.org/10.1007/s10551-006-9183-5>
- Lewandowski, M. (2016). Designing the business models for circular economy-towards the conceptual framework. *Sustainability (Switzerland)*, 8(1), 1-28. <https://doi.org/10.3390/su8010043>
- Liao, C., Chang, C., Su, C. and Chiueh, P. (2013), "Correlation between land-use change and greenhouse gas emissions in urban areas", *International Journal of Environmental Science and Technology*, 10(6), 1275-1286.
- Linnenluecke, M. K., & Griffiths, A. (2013). Firms and sustainability: Mapping the intellectual origins and structure of the corporate sustainability field. *Global environmental change*, 23(1), 382-391. [10.1016/j.gloenvcha.2012.07.007](https://doi.org/10.1016/j.gloenvcha.2012.07.007)
- Liu, C. H., Chen, M. C., Tu, Y. H., & Wang, C. C. (2014). Constructing a sustainable service business model: An S-D logic-based integrated product service system (IPSS). *International Journal of Physical Distribution and Logistics Management*, 44(1), 80-97. <https://doi.org/10.1108/IJPDLM-02-2013-0039>
- Long, T. B., Looijen, A., & Blok, V. (2018). Critical success factors for the transition to business models for sustainability in the food and beverage industry in the Netherlands. *Journal of cleaner production*, 175, 82-95. <https://doi.org/10.1016/j.jclepro.2017.11.067>
- Lozano, R. (2012). Are companies planning their organisational changes for corporate sustainability? An analysis of three case studies on resistance to change and their strategies to overcome it. *Corporate Social Responsibility and Environmental Management*, 20(5), 275-295. <https://doi.org/10.1002/csr.1290>
- Lozano, R. (2008). Envisioning sustainability three-dimensionally. *Journal of Cleaner Production*, 16(17), 1838-1846. <https://doi.org/10.1016/j.jclepro.2008.02.008>

- Lozano, R. (2015). A holistic perspective on corporate sustainability drivers. *Corporate social responsibility and environmental management*, 22(1), 32-44.
- Lozano, R. (2018). Sustainable business models: Providing a more holistic perspective. *Business Strategy and the Environment*, 27(8), 1159–1166.
<https://doi.org/10.1002/bse.2059>
- Lüdeke-Freund, F. (2010, October). Towards a conceptual framework of business models for sustainability. In *Knowledge Collaboration & Learning for Sustainable Innovation: 14th European Roundtable on Sustainable Consumption and Production (ERSCP) conference and the 6th Environmental Management for Sustainable Universities (EMSU) conference, Delft, The Netherlands, October 25-29, 2010*. Delft University of Technology; The Hague University of Applied Sciences; TNO.
- Lüdeke-Freund, F. (2020). Sustainable entrepreneurship, innovation, and business models: Integrative framework and propositions for future research. *Business Strategy and the Environment*, 29(2), 665–681. <https://doi.org/10.1002/bse.2396>
- Lüdeke-Freund, F., & Dembek, K. (2017). Sustainable business model research and practice: Emerging field or passing fancy? *Journal of Cleaner Production*, 168, 1668–1678.
<https://doi.org/10.1016/j.jclepro.2017.08.093>
- Lüdeke-Freund, F., Carroux, S., Joyce, A., Massa, L., & Breuer, H. (2018). The sustainable business model pattern taxonomy—45 patterns to support sustainability-oriented business model innovation. *Sustainable Production and Consumption*, 15, 145–162.
<https://doi.org/10.1016/j.spc.2018.06.004>
- Lueg, R., Pedersen, M. M., & Clemmensen, S. N. (2015). The Role of Corporate Sustainability in a Low-Cost Business Model - A Case Study in the Scandinavian Fashion Industry. *Business Strategy and the Environment*, 24(5), 344–359.
<https://doi.org/10.1002/bse.1825>
- Mainemelis, C., Boyatzis, R.E. and Kolb, D.A. (2002). Learning Styles and Adaptive Flexibility: Testing Experiential Learning Theory, *Management Learning*, 33(1), 5-33.
- Manninen, K., Koskela, S., Antikainen, R., Bocken, N., Dahlbo, H., & Aminoff, A. (2018). Do circular economy business models capture intended environmental value propositions? *Journal of Cleaner Production*, 171, 413–422.
<https://doi.org/10.1016/j.jclepro.2017.10.003>
- Marquis, C., Klaber, A., & Thomason, B., (2011). *B Lab: Building a New Sector of the Economy*. Boston: Harvard Business School Publishing.
- Marsick, V.J. and Watkins, K.E. (2003), Demonstrating the Value of an Organization's Learning Culture: The Dimensions of the Learning Organization Questionnaire, *Advances in Developing Human Resources*, 5(2), 132-151.

- Mauser, W., Klepper, G., Rice, M., Schmalzbauer, B. S., Hackmann, H., Leemans, R., & Moore, H. (2013). Transdisciplinary global change research: the co-creation of knowledge for sustainability. *Current opinion in environmental sustainability*, 5(3-4), 420-431.
- McCain, K. W. (1990). Mapping Authors in Intellectual Space: A Technical Overview. *Journal of the American Society for Information Science*, 41(6), 433–443.
- McCutcheon, D. M., & Meredith, J. R. (1993). Conducting case study research in operations management. *Journal of operations management*, 11(3), 239-256.
[https://doi.org/10.1016/0272-6963\(93\)90002-7](https://doi.org/10.1016/0272-6963(93)90002-7)
- McEwen, T. (2013). An examination of the barriers that impact the implementation of environmental sustainability practices in small businesses. *Journal of Business and Entrepreneurship*, 25(1), 117.
- McGill, M.E. and Slocum J.W. (1993). Unlearning the organization, *Organizational Dynamics*, 22(2), 67-79.
- McGrath, R.G. (2010), Business models: a discovery driven approach, *Long Range Planning*, 43(2-3), 247-261.
- Melander, L., & Pazirandeh, A. (2019). Collaboration beyond the supply network for green innovation: insight from 11 cases. *Supply Chain Management*, 24(4), 509-523.
<https://doi.org/10.1108/SCM-08-2018-0285>
- Melissen, F., Cavagnaro, E., Damen, M., & Düweke, A. (2016). Is the hotel industry prepared to face the challenge of sustainable development?. *Journal of Vacation Marketing*, 22(3), 227-238. <https://doi.org/10.1177/1356766715618997>
- Michelini, L., & Fiorentino, D. (2012). New business models for creating shared value. *Social Responsibility Journal*, 8(4), 561–577. <https://doi.org/10.1108/17471111211272129>
- Mihalič, T., Žabkar, V., & Cvelbar, L. K. (2012). A hotel sustainability business model: Evidence from Slovenia. *Journal of Sustainable Tourism*, 20(5), 701–719.
<https://doi.org/10.1080/09669582.2011.632092>
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.
- Mitchell, R.K., Agle, B.R., & Wood, D.J. (1997). Toward a theory of stakeholder identification and salience: defining the principle of who and what really counts. *Academy of Management Review*, 22(4), 853-886. <https://doi.org/10.2307/259247>
- Moilanen, R. (2001). Diagnostic tools for learning organizations, *The Learning Organization*, 8(1), 6-20.
- Moilanen, R. (2005). Diagnosing and measuring learning organizations, *The Learning Organization*, 12(1), 71-89.

- Moore, S. B., & Manring, S. L. (2009). Strategy development in small and medium sized enterprises for sustainability and increased value creation. *Journal of cleaner production*, 17(2), 276-282. <https://doi.org/10.1016/j.jclepro.2008.06.004>
- Morioka, S. N., Bolis, I., & Carvalho, M. M. de. (2018). From an ideal dream towards reality analysis: Proposing Sustainable Value Exchange Matrix (SVEM) from systematic literature review on sustainable business models and face validation. *Journal of Cleaner Production*, 178, 76–88. <https://doi.org/10.1016/j.jclepro.2017.12.078>
- Morioka, S. N., Bolis, I., Evans, S., & Carvalho, M. M. (2017). Transforming sustainability challenges into competitive advantage: Multiple case studies kaleidoscope converging into sustainable business models. *Journal of Cleaner Production*, 167, 723–738. <https://doi.org/10.1016/j.jclepro.2017.08.118>
- Naman, J.L. and Slevin, D.P. (1993), “Entrepreneurship And The Concept Of Fit: A Model And Empirical Tests”, *Strategic Management Journal*, 14(2), 137-153.
- NAS (National Academy of Sciences) 2014. Climate Change: Evidence & Causes. Washington, DC: The National Academies Press.
- Nerur, S. P., Rasheed, A. A., & Natarajan, V. (2008). The intellectual structure of the strategic management field: An author co-citation analysis. *Strategic Management Journal*, 29(3), 319–336. <https://doi.org/10.1002/smj>
- Neumeayer, X., & Santos, S. C. (2018). Sustainable business models, venture typologies, and entrepreneurial ecosystems: A social network perspective. *Journal of Cleaner Production*, 172, 4565–4579. <https://doi.org/10.1016/j.jclepro.2017.08.216>
- Nosratabadi, S., Mosavi, A., Shamshirband, S., Zavadskas, E. K., Rakotonirainy, A., & Chau, K. W. (2019). Sustainable business models: A review. *Sustainability (Switzerland)*, 11(6), 1–30. <https://doi.org/10.3390/su11061663>
- OECD. Sustainable Development. Linking Economy, Society, Environment. Available online: https://www.oecd-ilibrary.org/environment/sustainable-development_9789264055742-en (accessed on 28 September 2021).
- Olofsson, S., Hoveskog, M., & Halila, F. (2018). Journey and impact of business model innovation: The case of a social enterprise in the Scandinavian electricity retail market. *Journal of Cleaner Production*, 175, 70–81. <https://doi.org/10.1016/j.jclepro.2017.11.081>
- Örtenblad, A. (2018), “What does ‘learning organization’ mean?”, *The Learning Organization*, 25(3), 150-158.
- Oskam, I., Bossink, B., & de Man, A.P. (2018). The interaction between network ties and business modeling: Case studies of sustainability-oriented innovations, *Journal of Cleaner Production*, 177, 2018, 555-566. <https://doi.org/10.1016/j.jclepro.2017.12.202>
- Osterwalder, A., & Pigneur, Y. (2010). *Business model generation: a handbook for visionaries*,

- game changers, and challengers*. John Wiley & Sons.
- Osterwalder, A., 2004. The Business Model Ontology. In: A Proposition in a Design Science Approach. Université de Lausanne, Lausanne.
- Osterwalder, A., Pigneur, Y., & Tucci, C. (2005). Clarifying business models: Origins, present, and future of the concept. *Communications of the Association for Information Systems*, 15, 2–40.
- Pal, R., & Gander, J. (2018). Modelling environmental value: An examination of sustainable business models within the fashion industry. *Journal of Cleaner Production*, 184, 251–263. <https://doi.org/10.1016/j.jclepro.2018.02.001>
- Palomares-Aguirre, I., Barnett, M., Layrissé, F., & Husted, B. W. (2018). Built to scale? How sustainable business models can better serve the base of the pyramid. *Journal of Cleaner Production*, 172, 4506–4513. <https://doi.org/10.1016/j.jclepro.2017.11.084>
- Parmar, B. L., Freeman, R. E., Harrison, J.S., Wicks, A. C., Purnell, L., & de Colle, S. (2010). Stakeholder Theory: The State of the Art. *Academy of Management Annals*, 4(1), 403–445. <https://doi.org/10.1080/19416520.2010.495581>
- Patala, S., Jalkala, A., Keränen, J., Väisänen, S., Tuominen, V., & Soukka, R. (2016). Sustainable value propositions: Framework and implications for technology suppliers. *Industrial Marketing Management*, 59, 144-156. <https://doi.org/10.1016/j.indmarman.2016.03.001>
- Patton, M. Q. (2002). Two decades of developments in qualitative inquiry: A personal, experiential perspective. *Qualitative social work*, 1(3), 261-283. <https://doi.org/10.1177/1473325002001003636>
- Patton, M.Q. *Qualitative Evaluation Methods*; Sage Publications: Beverly Hills, CA, USA, 2002.
- Pedersen, E. R. G., Gwozdz, W., & Hvass, K. K. (2018). Exploring the Relationship Between Business Model Innovation, Corporate Sustainability, and Organisational Values within the Fashion Industry. *Journal of Business Ethics*, 149(2), 267–284. <https://doi.org/10.1007/s10551-016-3044-7>
- Pedler, M., Boydell, T. and Burgoyne, J. (1989), “Towards the learning company”, *Management Education and Development*, Vol. 20 No. 1, pp. 1-8.
- Pedler, M., Burgoyne, J. and Boydell, T. (1991), *The Learning Company: A Strategy for Sustainable Development*, McGraw-Hill, London.
- Peric, M., & Djurkin, J. (2014). Systems thinking and alternative business model for responsible tourist destination. *Kybernetes: The International Journal of Systems & Cybernetics*, 43(3-4), 480-496. <https://doi.org/10.1108/K-07-2013-0132>
- Pettigrew, A. M. (1992). The character and significance of strategy process research. *Strategic*

- management journal*, 13(S2), 5-16.
- Phillips, R. (2003). Stakeholder theory & organizational ethics. Berrett-Koehler Publishers, San Francisco.
- Piscicelli, L., Ludden, G. D. S., & Cooper, T. (2018). What makes a sustainable business model successful? An empirical comparison of two peer-to-peer goods-sharing platforms. *Journal of Cleaner Production*, 172, 4580–4591.
<https://doi.org/10.1016/j.jclepro.2017.08.170>
- Porter, M., & Kramer, M. (2011). Creating shared value. *Harvard Business Review*, 89(1/2), 62-77.
- Post, J., Preston, L.E., & Sachs, S. (2002). Managing the extended enterprise: The new stakeholder view. *California Management Review*, 45(1), 6-28.
<https://doi.org/10.2307/41166151>
- Pourdehnad, J., and Smith, P.A. (2012), Sustainability, organizational learning, and lessons learned from aviation, *The Learning Organization*, 19(1), 77-86.
- Preghenella, N., & Battistella, C. (2021). Exploring business models for sustainability: A bibliographic investigation of the literature and future research directions. *Business Strategy and the Environment*. <https://doi.org/10.1002/bse.2760>
- Pritchard, A. (1969). Statistical bibliography or bibliometrics. *Journal of Documentation*, 25(4), 348–349.
- Purser, R. E. (1994). " Shallow" versus" Deep" Organizational Development and Environmental Sustainability. *Journal of Organizational Change Management*, 7, 4-4.
- Rabin, R. (2014), *Blended Learning for Leadership: The CCL Approach*, Center for Creative Leadership. Retrieved from: www.ccl.org/wp-content/uploads/2015/04/BlendedLearningLeadership.pdf.
- Rajala, R., Westerlund, M., & Lampikoski, T. (2016). Environmental sustainability in industrial manufacturing: Re-examining the greening of Interface's business model. *Journal of Cleaner Production*, 115, 52–61. <https://doi.org/10.1016/j.jclepro.2015.12.057>
- Ramos-Rodríguez, A. R., & Ruíz-Navarro, J. (2004). Changes in the intellectual structure of strategic management research: A bibliometric study of the Strategic Management Journal. *Strategic Management Journal*, 25(10), 981–1004.
- Rauter, R., Jonker, J., & Baumgartner, R. J. (2017). Going one's own way: drivers in developing business models for sustainability. *Journal of Cleaner Production*, 140, 144-154.
<https://doi.org/10.1016/j.jclepro.2015.04.104>
- Revell, A., Stokes, D., & Chen, H. (2010). Small businesses and the environment: turning over a new leaf?. *Business strategy and the environment*, 19(5), 273-288.
<https://doi.org/10.1002/bse.628>

- Rezaee, Z. (2016). Business sustainability research: A theoretical and integrated perspective. *Journal of Accounting Literature*, 36, 48-64. <https://doi.org/10.1016/j.acclit.2016.05.003>
- Richardson J., (2008). The business model: an integrative framework for strategy execution. *Strategic Change*, 17(5–6), 133-144. <https://doi.org/10.1002/jsc.821>
- Ritala, P., Huotari, P., Bocken, N., Albareda, L., & Puumalainen, K. (2018). Sustainable business model adoption among S&P 500 firms: A longitudinal content analysis study. *Journal of Cleaner Production*, 170, 216–226. <https://doi.org/10.1016/j.jclepro.2017.09.159>
- Rogers EM. 1995. *Diffusion of Innovations*, 4th ed. Free Press: New York.
- Roome, N., & Louche, C. (2016). Journeying toward business models for sustainability: A conceptual model found inside the black box of organisational transformation. *Organization & Environment*, 29(1), 11-35. 29). <https://doi.org/10.1177/1086026615595084>
- Sagie, A. and Koslowsky, M. (2000), *Participation and Empowerment in Organizations: Modeling, Effectiveness, and Applications*, Sage, Thousand Oaks, CA.
- Sánchez, P., & Ricart, J. (2010). Business model innovation and sources of value creation in low-income markets. *European Management Review*, 7, 138-154. <https://doi.org/10.1057/emr.2010.16>
- Santillo, D. (2007). Reclaiming the Definition of Sustainability (7 pp). *Environmental Science and Pollution Research International*, 14(1), 60.
- Santos, M. (2011). CSR in SMEs: strategies, practices, motivations and obstacles. *Social Responsibility Journal*. 7, 490–508, <https://doi.org/10.1108/17471111111154581>
- Schaltegger, S., Hansen, E. G., & Lüdeke-Freund, F. (2016). Business Models for Sustainability: Origins, Present Research, and Future Avenues. *Organization and Environment*, 29(1), 3–10. <https://doi.org/10.1177/1086026615599806>
- Schaltegger, S., Lüdeke-Freund, F., & Hansen, E. G. (2012). Business cases for sustainability: The role of business model innovation for corporate sustainability. *International Journal of Innovation and Sustainable Development*, 6(2), 95–119. <https://doi.org/10.1504/IJISD.2012.046944>
- Schaltegger, S., Lüdeke-Freund, F., & Hansen, E. G. (2016). Business Models for Sustainability: A Co-Evolutionary Analysis of Sustainable Entrepreneurship, Innovation, and Transformation. *Organization and Environment*, 29(3), 264–289. <https://doi.org/10.1177/1086026616633272>
- Schmidt, F. C., Zanini, R. R., Korzenowski, A. L., Schmidt Junior, R., & Xavier do Nascimento, K. B. (2018). Evaluation of sustainability practices in small and medium-sized manufacturing enterprises in Southern Brazil. *Sustainability*, 10(7), 2460.

- Schulz, A., Kraus, S., & Demartini, P. (2011). Sustainable management of SMEs: a new approach to improve business and society. *International Journal of Strategic Management*, 11(1), 44-58.
- Scott, W. (1998). Organizations: Rational, Natural and Open Systems. *Canadian Journal of Sociology*, 29(1).
- Seelos, C. (2014). Theorizing and strategizing with models: Generative models of social enterprises. *International Journal of Entrepreneurial Venturing*, 6, 6-21.
<http://dx.doi.org/10.2139/ssrn.1645200>
- Senge, P. (1990), *The Fifth Discipline: Art and Practice of the Learning Organization*, Doubleday, New York, NY.
- Shankar, K. M., Kannan, D., & Kumar, P. U. (2017). Analyzing sustainable manufacturing practices—A case study in Indian context. *Journal of cleaner production*, 164, 1332-1343. <https://doi.org/10.1016/j.jclepro.2017.05.097>
- Short, S.W., Bocken, N.M.P., Barlow, C.Y., & Chertow, M.R., (2014). From refining sugar to growing tomatoes. *Journal of Industrial Ecology*, 18(5), 603-618.
<https://doi.org/10.1111/jiec.12171>
- Short, S.W., Rana, P., Bocken, N.M.P., & Evans, S., (2012). Embedding Sustainability in Business Modelling through Multi-stakeholder Value Innovation, in: Emmanouilidis, C., Taisch, M., Kiritsis, D. (Eds.), *Advances in Production Management Systems. Competitive Manufacturing for Innovative Products and Services*. Springer, Berlin, Heidelberg, pp. 175– 183.
- Shrivastava, P. (1995). Ecocentric management for a risk society. *Academy of Management Review*, 20(1), 118-137. <https://doi.org/10.5465/amr.1995.9503271996>
- Siebenhüner, B., & Arnold, M. (2007). Organizational learning to manage sustainable development. *Business strategy and the environment*, 16(5), 339-353.
- Siggelkow, N. (2007). Persuasion with case studies. *Academy of management journal*, 50(1), 20-24. <https://doi.org/10.5465/amj.2007.24160882>
- Simon, H. A. (1991). Bounded rationality and organizational learning. *Organization science*, 2(1), 125-134.
- Sinkula, J.M., Baker, W.E. and Noordewier, T. (1997). A Framework for Market-Based Organizational Learning: Linking Values, Knowledge, and Behavior, *Journal of the Academy of Marketing Science*, 25(4), 305-318.
- Sisodia, R., Wolfe, D.B., & Sheth, J. (2007). *Firms of endearment: How world-class companies profit from passion & purpose*. Upper Saddle River, Wharton School Publishing, New York.

- Slater, S.F. and Narver, J.C. (1995). Market Orientation and the Learning Organization, *Journal of Marketing*, 59(3), 63-74.
- Slávik, Š., & Bednár, R. (2014). Analysis of business models. *Journal of Competitiveness*, 6(4), 19–40. <https://doi.org/10.7441/joc.2014.04.02>
- Slocum, J.W., McGill, M. and Lei, D.T. (1994). The New Learning Strategy: Anytime, Anything, Anywhere, *Organizational Dynamics*, 23(2), 33-47.
- Smith, P.A.C. and Sharicz, C. (2011). The shift needed for sustainability, *The Learning Organization*, 18(1), 73-86.
- Sousa-Zomer, T. T., & Cauchick Miguel, P. A. (2018). Sustainable business models as an innovation strategy in the water sector: An empirical investigation of a sustainable product-service system. *Journal of Cleaner Production*, 171, S119–S129. <https://doi.org/10.1016/j.jclepro.2016.07.063>
- Sousa-Zomer, T. T., & Cauchick-Miguel, P. A. (2019). Exploring business model innovation for sustainability: an investigation of two product-service systems. *Total Quality Management and Business Excellence*, 30(5–6), 594–612. <https://doi.org/10.1080/14783363.2017.1317588>
- Spieth, P., Schneider, S., Clauß, T., & Eichenberg, D. (2019). Value drivers of social businesses: A business model perspective. *Long Range Planning*, 52(3), 427–444. <https://doi.org/10.1016/j.lrp.2018.04.004>
- Stoddart, H. (2011), “A pocket guide to sustainable development governance”, Stakeholder Forum.
- Stormer, F. (2003). Making the shift: Moving from “Ethics Pays” to an inter-systems model of business. *Journal of Business Ethics*, 44, 279-289. <https://doi.org/10.1023/A:1023600820194>
- Strong, C. (1997). The problems of translating fair trade principles into consumer purchase behaviour, *Marketing Intelligence & Planning*, 15(1), 32-37.
- Stubbs, W. (2017). Characterising B Corps as a sustainable business model: An exploratory study of B Corps in Australia. *Journal of Cleaner Production*, 144, 299-312. <https://doi.org/10.1016/j.jclepro.2016.12.093>
- Stubbs, W. (2019). Strategies, practices, and tensions in managing business model innovation for sustainability: The case of an Australian B Corp. *Corporate Social Responsibility and Environmental Management*, 26(5), 1063-1072. <https://doi.org/10.1002/csr.1786>
- Stubbs, W., & Cocklin, C. (2008). Conceptualizing a “sustainability business model”. *Organization & environment*, 21(2), 103-127. <https://doi.org/10.1177/1086026608318042>

- Stylos, N., & Vassiliadis, C. (2015). Differences in sustainable management between four-and five-star hotels regarding the perceptions of three-pillar sustainability. *Journal of Hospitality Marketing & Management*, 24(8), 791-825.
<https://doi.org/10.1080/19368623.2015.955622>
- Svensson, G., & Wagner, B. (2011). Transformative business sustainability: Multi-layer model and network of e-footprint sources. *European Business Review*.
<https://doi.org/10.1108/09555341111145735>
- Svensson, G., Eriksson, D., & Padin, C. (2016). Triple bottom line extended: A bipolar approach of implementation, assessment and reporting of sustainable business models and sustainable business practices. *International Journal of Business Excellence*, 10(2), 139–151.
- Svensson, Göran, Høgevold, N., Ferro, C., Varela, J. C. S., Padin, C., & Wagner, B. (2016). A Triple Bottom Line Dominant Logic for Business Sustainability: Framework and Empirical Findings. *Journal of Business-to-Business Marketing*, 23(2), 153–188.
<https://doi.org/10.1080/1051712X.2016.1169119>
- Tang, L., Murphree, M., & Breznitz, D. (2016). Structured uncertainty: a pilot study on innovation in China's mobile phone handset industry. *The Journal of Technology Transfer*, 41(5), 1168-1194. <https://doi.org/10.1007/s10961-015-9432-9>.
- Täuscher, K., & Abdelkafi, N. (2018). Scalability and robustness of business models for sustainability: A simulation experiment. *Journal of Cleaner Production*, 170, 654–664.
<https://doi.org/10.1016/j.jclepro.2017.09.023>
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic management journal*, 18(7), 509-533. <https://doi.org/10.1002/>
- Tencati, A., & Zsolnai, L. (2012). Collaborative Enterprise and Sustainability: The Case of Slow Food. *Journal of Business Ethics*, 110(3), 345–354.
<https://doi.org/10.1007/s10551-011-1178-1>
- Thorisdottir, T. S., & Johannsdottir, L. (2019). Sustainability within fashion business models: A systematic literature review. *Sustainability (Switzerland)*, 11(8), 1–26.
<https://doi.org/10.3390/su11082233>
- Todeschini, B. V., Cortimiglia, M. N., Callegaro-de-Menezes, D., & Ghezzi, A. (2017). Innovative and sustainable business models in the fashion industry: Entrepreneurial drivers, opportunities, and challenges. *Business Horizons*, 60(6), 759–770.
<https://doi.org/10.1016/j.bushor.2017.07.003>
- Tolkamp, J., Huijben, J.C.C.M., Mourik, R.M., Verbong, G.P.J. and Bouwknecht, R. (2018), “User-centred sustainable business model design: the case of energy efficiency services in the Netherlands”, *Journal of Cleaner Production*, Vol. 182 No. 13, pp. 755-764.
- Tortorella, G.L., Marodin, G.A., Miorando, R. and Seidel, A. (2015), “The impact of contextual variables on learning organization in firms that are implementing lean: a study in

- Southern Brazil”, *The International Journal of Advanced Manufacturing Technology*, Vol. 78 No. 9-12, pp. 1879-1892.
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review. *British Journal of Management*, 14(3), 207–222. <https://doi.org/10.1111/1467-8551.00375>
- UN: World Population Prospect, 2019. https://population.un.org/wpp/graphs/1_Demographic%20Profiles/World.pdf
- UNDP. 1998. Human Development Report 1998: Consumption for Human Development. <http://www.hdr.undp.org/en/content/human-development-report-1998>.
- UNEP, 2020. Ten Impacts of the Australian Bushfires. Retrieved from. <https://www.unenvironment.org/news-and-stories/story/ten-impacts-australian-bushfires>.
- United Nations (UN) (2018). Sustainable development goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development.
- United-Nations. (2015). Resolution Adopted by the General Assembly on 25 September 2015. International Organization. <https://doi.org/10.1017/S0020818300013345>
- 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. <https://doi.org/10.1177/1086026615592933>
- van Bommel, K. (2018). Managing tensions in sustainable business models: Exploring instrumental and integrative strategies. *Journal of Cleaner Production*, 196, 829-841. <https://doi.org/10.1016/j.jclepro.2018.06.063>.
- Van Raan, A. F. J. (1996). Advanced bibliometric methods as quantitative core of peer review based evaluation and foresight exercises. *Scientometrics*, 36(3), 397–420. <https://doi.org/10.1007/BF02129602>
- Velter, M.G.E., Bitzer, V., Bocken, N.M.P., & Kemp R. (2020). Sustainable business model innovation: The role of boundary work for multi-stakeholder alignment. *Journal of Cleaner Production*, 247, 119497. <https://doi.org/10.1016/j.jclepro.2019.119497>
- Verona, G. (1999). A resource-based view of product development. *Academy of management review*, 24(1), 132-142.
- Vildåsen, S.S., & Havensvid, M.I. (2018). The role of interaction for corporate sustainability. *IMP Journal*, 12(1), 148-170. <https://doi.org/10.1108/IMP-05-2017-0016>
- Vladimirova, D. Transformation of Traditional Manufacturers towards Servitized Organisations. Ph.D. Thesis, Cranfield University, Bedford, UK, 2012.

- Vogel, R., & Güttel, W. H. (2013). The dynamic capability view in strategic management: A bibliometric review. *International Journal of Management Reviews*, 15(4), 426–446. <https://doi.org/10.1111/ijmr.12000>
- Vos, M.A., Raassens, N., van der Borgh, M. and Nijssen, E.J. (2018). Balancing modularity and solution space freedom: effects on organisational learning and sustainable innovation, *International Journal of Production Research*, 56(20), 6658-6677.
- Voss, C., Tsikriktsis, N., & Frohlich, M. (2002). Case research in operations management. *International journal of operations & production management*. <https://doi.org/10.1108/01443570210414329>
- Wagner, B., & Svensson, G. (2014). A framework to navigate sustainability in business networks: The transformative business sustainability (TBS) model. *European Business Review*, 26(4), 340–367. <https://doi.org/10.1108/EBR-12-2013-0146>
- Wallendorf, M.; Belk, R.W. Assessing trustworthiness in naturalistic consumer research. In *Interpretive Consumer Research*; Hirschman, E.C., Ed.; Association for Consumer Research: Provo, UT, USA, 1989; pp. 69–84.
- Walsh, J.P. & Ungson, G.R. (1991). Organizational Memory, *Academy of Management Review*, 16(1), 57-91.
- Watkins, K.E. & Marsick, V.J. (1997), *Dimensions of learning organization*, Partners for the Learning Organization, Warwick, RI.
- Wells, P. (2013). Sustainable business models and the automotive industry: A commentary. *IIMB Management Review*, 25(4), 228–239. <https://doi.org/10.1016/j.iimb.2013.07.001>
- Wells, P. (2016). Degrowth and techno-business model innovation: The case of Riversimple. *Journal of Cleaner Production*, 197, 1704-1710. <https://doi.org/10.1016/j.jclepro.2016.06.186>
- Wells, P., & Seitz, M. (2005). Business models and closed-loop supply chains: a typology. *Supply Chain Management: An International Journal*. <https://doi.org/10.1108/13598540510612712>
- Weymes, E. (2004). Management theory: Balancing individual freedom with organisational needs. *Journal of Corporate Citizenship*, (16), 85-98.
- Wiese, A., Kellner, J., Lietke, B., Toporowski, W. & Zielke, S. (2012). Sustainability in retailing – a summative content analysis, *International Journal of Retail & Distribution Management*, 40(4), 318-335
- Wilkinson, A., Hill, M., & Gollan, P. (2001). The sustainability debate. *International Journal of Operations & Production Management*.
- Wilson, J.P. & Beard, C. (2014). Constructing a sustainable learning organization: Marks and Spencer's first Plan A learning store, *The Learning Organization*, 21(2), 98-112.

- Witjes, S., & Lozano, R. (2016). Towards a more Circular Economy: Proposing a framework linking sustainable public procurement and sustainable business models. *Resources, Conservation and Recycling*, 112, 37–44.
<https://doi.org/10.1016/j.resconrec.2016.04.015>
- World Commission on Environment and Development. (1987). Report of the world commission on environment and development: Our common future. Oxford University Press, New York.
- Yang, B., Watkins, K.E. and Marsick, V.J. (2004). The Construct of the Learning Organization: Dimensions, Measurement, and Validation, *Human Resource Development Quarterly*, 15(1), 31-55.
- Yang, M., & Evans, S. (2019). Product-service system business model archetypes and sustainability. *Journal of Cleaner Production*, 220, 1156–1166.
<https://doi.org/10.1016/j.jclepro.2019.02.067>
- Yang, M., Evans, S., Vladimirova, D., & Rana, P. (2017). Value uncaptured perspective for sustainable business model innovation. *Journal of Cleaner Production*, 140, 1794–1804.
<https://doi.org/10.1016/j.jclepro.2016.07.102>
- Yang, M., Vladimirova, D., Rana, P., & Evans, S. (2014). Sustainable value analysis tool for value creation. *Asian Journal of Management Science and Applications*, 1(4), 312-332.
<https://doi.org/10.1504/AJMSA.2014.070649>
- Yang, Z., Cai, J., & Sliuzas, R. (2010). Agro-tourism enterprises as a form of multi-functional urban agriculture for peri-urban development in China. *Habitat International*, 34(4), 374-385. <https://doi.org/10.1016/j.habitatint.2009.11.002>.
- Yigitcanlar, T. (Ed.) (2010), Sustainable Urban and Regional Infrastructure Development, IGI-Global, Hersey, PA.
- Yin, R. (1993), *Applications of Case Study Research*, Sage Publishing, Newbury Park, CA.
- Yin, R. (2003), *Case study research design and methods. Applied Social Research Methods*, Sage Publishing, Newbury Park, CA.
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: Sage.
- Yip, A. W. H., & Bocken, N. M. P. (2018). Sustainable business model archetypes for the banking industry. *Journal of Cleaner Production*, 174, 150–169.
<https://doi.org/10.1016/j.jclepro.2017.10.190>
- Yu, D., & Hang, C. C. (2010). A Reflective Review of Disruptive Innovation Theory. *International Journal of Management Reviews*, 12(4), 435-452.
<https://doi.org/10.1111/j.1468-2370.2009.00272.x>.
- Zahra, S.A. & George, G. (2002). Absorptive Capacity: A Review, Reconceptualization, And Extension, *Academy of Management Review*, 27(1), 185-203.

- Zebryte, I., & Jorquera, H. (2017). Chilean tourism sector “B Corporations”: evidence of social entrepreneurship and innovation. *International Journal of Entrepreneurial Behavior & Research*, 23, 866–879. <https://doi.org/10.1108/IJEER-07-2017-0218>
- Zhou, W., Hu, H. & Shi, X. (2015). Does organizational learning lead to higher firm performance? An investigation of Chinese listing companies, *The Learning Organization*, 22(5), 271-288.
- Zott, C., & Amit, R. (2010). Business model design: An activity system perspective. *Long range planning*, 43(2-3), 216-226. <https://doi.org/10.1016/j.lrp.2009.07.004>
- Zott, C., Amit, R., & Massa, L. (2011). The business model: recent developments and future research. *Journal of Management*, 37(4), 1019-1042. <https://doi.org/10.1177/0149206311406265>
- Zupic, I., & Čater, T. (2015). Bibliometric Methods in Management and Organization. *Organizational Research Methods*, 18(3), 429–472. <https://doi.org/10.1177/1094428114562629>

11 Appendix

Table 11-1 Phases of the value flow in the BMfS

Sample statements	First-order categories	Second-order categories	Aggregate dimension
<ul style="list-style-type: none"> - “Our first aim is to help people to follow a healthy and natural lifestyle.” (Davines) - “Firstly, we want to promote a culture aimed at preserving the planet and wildlife, ensuring the prosperity of the environment and plantations, while at the same time guaranteeing equal social treatment to our employees of all levels.” (Successori Reda) - “We want to be a reference point for healthy and sustainable food, putting health, planet and respect for people at the heart of all we do, with the ultimate goal of influencing the entire food industry.” (Euro Company) - “We were born with an intrinsic idea of sustainability in our mission.” (D-Orbit) - Our company has been working for years and is an expert in the organic sector because we were born this way and we have always done it. (Abafoods) 	<ul style="list-style-type: none"> - Companies promote culture, sustainability and ethics - Companies were founded from the outset with an idea of sustainability 	<p>Sustainability as a primary objective, intrinsic and present from the beginning</p>	<p>Firstly, there is a strong intention of companies to pursuing sustainability goals, to change the economic system and to promote culture, sustainability and ethics, being part of a bigger system.</p>

<ul style="list-style-type: none"> - “The company feels at first the responsibility of having to promote change through sustainable innovation, respect for the environment and social progress in order to guarantee a future for future generations.” (Successori Reda) - “We want to be part of a movement for a regenerative economy.” (D-Orbit) - “There is no need for sustainability in my company. There is a need for sustainability in all companies and not just in companies. It is unthinkable that the profit of a company will be made at the expense of future generations and this happens when a multi-stakeholder logic is not adopted but only the interests of the shareholders are considered. We are convinced that the concept of traditional capitalism is broken.” (Davines) 	<ul style="list-style-type: none"> - Companies want to be promoters of change - Companies feel themselves part of a “bigger aim” that want to change the economic system - The choice is not imposed from the outside but it is an intention of the entrepreneur 	<p>Intention to change and to pursue a more sustainable path in a bigger society</p>	
<ul style="list-style-type: none"> - “In line with our purpose, the use of Fairtrade certified raw materials has been improved in order to increase our contribution to the disadvantaged people involved in the supply chain.” (Davines) - “We have many certifications both as regards the origin and provenance of raw materials and as regards the ethical aspects.” (Abafoods) - “We measure our environmental footprint, evaluating part of our products through the 	<ul style="list-style-type: none"> - Companies adopt some certifications as sustainability standards for raw materials - Companies use LCA (Life Cycle Assessment) to evaluate their products and their production process - Companies use sustainability criteria in choosing their suppliers 	<p>Companies adopt sustainability standards both from the point of view of resources and processes</p>	<p>Secondly, companies pay attention to the sustainability standard, high level of performance and technology of resources and process in the value creation.</p>

<p>"Life-Cycle Assessment" (LCA)." (Euro Company)</p> <ul style="list-style-type: none"> - "We require all our suppliers to carry out a specific non-polluting surface treatment." (D-Orbit) 			
<ul style="list-style-type: none"> - "We are developing all those technologies that will allow us to arrive then to the sustainability objective, to the vision, which is that of going to offer a targeted space transport and also a targeted space removal." (D-Orbit) - "We provide products, services and technology of superior value that will improve the performance and safety of the value we offer." (Successori Reda) - "From the beginning, we have focused on the creation of quality products that were scientifically developed to act and express the style and spirit that distinguish us." (Davines) 	<ul style="list-style-type: none"> - The technology is functional to the creation of sustainable value. - Companies stress the importance of quality and performance of the process and product. 	<p>The sustainable value creation is the result of a sustainable production process, characterized by high level of performance and technology.</p>	
<ul style="list-style-type: none"> - "Our products are chosen by the most important international fashion houses and by conscious end consumers." (Successori Reda) - "In recent years the company become a real point of reference for customers due to the sustainability that means quality." (Successori Reda) - "We have certainly increased customer interest. We communicate that our protocol is based on quality and ethics and I must say that when you 	<ul style="list-style-type: none"> - Conscious end consumers choose the companies. - Customers also choose companies for the aspects of sustainability. 	<p>Sustainability is a useful tool for differentiate and gain competitive advantage</p>	<p>Then, sustainability is seen as a key tool to support the competitiveness and reputation of a company in the value delivery.</p>

<p>talk about values with the person, you bring the level of discourse a little higher. Usually you are used to talking to customers and buyers about prices and discounts. Instead, now when we tell what we are doing and the path we have taken, people are ecstatic.” (Euro Company)</p>			
<ul style="list-style-type: none"> - “We have the Chart of marketing and ethical communication to ensure that all our information material, produced internally or commissioned to external parties, is drawn up in an accurate, truthful and ethical manner.” (Davines) - “The company is widely recognized by the community as an ethical company, with the second aim of transmitting its values to final consumers.” (Abafoods) - “Today I see that all textiles have become sustainable and I don't know how it managed to become so sustainable in six months, so I ask myself some doubts. Ours has been a really long journey.” (Successori Reda) - “We say ‘not just marketing but reality’! We aim to build trusting relationships with our customers” (Successori Reda) 	<ul style="list-style-type: none"> - Companies have defined guidelines for communicating with accuracy, truth and ethics - Customers recognize the reputation of the company - Companies communicate only after having made a long journey of sustainability - Companies build trusting relationships with their customers 	<p>Companies are committed to delivering sustainable value through relationships of trust</p>	
<ul style="list-style-type: none"> - “We have integrated all the sustainability aspects in the way we do business because our mission is to offer in-space servicing and transportation to enable 	<ul style="list-style-type: none"> - Aware of their mission, companies have integrated sustainability aspects into their business model 	<p>A sustainable value proposition is based on the integration of sustainability in the business model</p>	<p>Finally, sustainability becomes value and an integral part of companies' value proposition and the entire business model.</p>

<p>profitable business and human expansion in a sustainable space.” (D-Orbit)</p> <ul style="list-style-type: none"> - “Our production process, but even our business model is based on the creation of beauty sustainably. We offer to people a way to take care of themselves, of the environment in which they live and work, and of the things they love.” (Davines) - “We propose healthy and sustainable food to our clients, putting health, planet and respect for people at the heart of our business model, with the ultimate goal of influencing the entire food industry.” (Euro Company) 	<ul style="list-style-type: none"> - Companies propose sustainable value to the clients 		
<ul style="list-style-type: none"> - “To be sure of obtaining a sustainable product, we directly follow the entire production chain from sheep farming to the delivery of the finished product to the end user.” (Successori Reda) - “The processes of product development, product research and packaging, and even the product communication has been revolutionized by this type of approach, we have created our own Research Charter, our Packaging Charter, to clearly define what kind of solutions can allow us to minimize our impact.” (Davines) - “Once the sustainability objectives were defined, we modernized, renewed and made our production process more efficient, for example by reducing chemical 	<ul style="list-style-type: none"> - Companies follow the sustainability of the supply chain and the distribution system to guarantee a sustainable product - The processes of product development, product research and packaging have been changed and made more sustainable - Companies have to produce and deliver sustainable value 	<p>To create, deliver and propose a sustainable value, the companies have worked on the production process, supply chain, delivery system</p>	

[Digitare qui]

<p>agents. Moreover, we strongly work on the logistics and distribution system, as well as on the communication channel. We must produce but also sell in a sustainable way.” (Successori Reda)</p>			
---	--	--	--

Table 11-2 Drivers of the value flow in the BMfS

Sample statements	First-order categories	Second-order categories	Aggregate dimension
<ul style="list-style-type: none"> - “We have understood that the world is not an inexhaustible resource and we must do something different.” (Abafoods) - "Change is inevitable" is and has been our motto and at this particular moment we associate it with the need for further development towards sustainability.” (Successori Reda) - "I believe that all this is part of the education you received, the culture and passion you have for the work you do.” (Successori Reda) - “One first driver is the fact that a culture of this type has been created in the company. The idea of sustainability is our mantra, it is not an option, it is like the air we breathe. Culture is what makes the difference.” (Davines) 	<ul style="list-style-type: none"> - High awareness of the issue of sustainable development - Awareness of the need for change - Importance of education, culture and passion 	<p>Education and awareness of the issue of sustainable development and the need of change</p>	<p>Education and awareness are the basis for developing a sustainability culture that has to be accessible and to permeate the company</p>
<ul style="list-style-type: none"> - “This culture must be permeated in the company and must not be something like "ah ok now I have to work on sustainability” because this does not work". In short, it must be something that comes almost naturally to you so it must be within the corporate culture.” (D-Orbit) - “Within the company, we try to 	<ul style="list-style-type: none"> - Permeation and “naturalness” of the culture of sustainability in the company - Access to materials on the subject of sustainability to allow the development of ideas. 	<p>Permeation of the culture of sustainability in the company is guaranteed through easily accessible materials</p>	

<p>make materials, tools and skills available in order to give anyone access to the theme of sustainability and to develop his/her ideas, that are more than welcome.” (D-Orbit)</p>			
<ul style="list-style-type: none"> - “There is need of great involvement on my part (the CEO speaking) and on the part of the entrepreneur. The company's top management has been involved from the very beginning, in a very active way, and this has certainly favoured. Actually, if there is no strong will at the top it is impossible.” (Davines) - “According to me it is essential to share this sustainability policy correctly and constantly and be open to suggestions.” (D-Orbit) - “The first thing to create a culture is to make certain arguments and values evident, not relegate them to a function or a project, but to ensure that they are always talked about.” (Davines) - “I believe in participatory leadership, in the sense that I am not a centralizer, I think that everyone must have the maximum openness and willingness to move in their area on the basis of their skills, even if they clearly respond to me for what they do and of 	<ul style="list-style-type: none"> - High involvement of entrepreneurs and management - Sharing of policies, language and sustainability objectives - Participatory leadership and high involvement of people 	<p>Sustainability thinking starts from top and it is extended to all employees, thanks to the support of a participatory leadership</p>	<p>The top management must be highly involved and be consistent in corporate decisions that lead to a long path of sustainability</p>

<p>what comes out.” (Successori Reda)</p>			
<ul style="list-style-type: none"> - “The founder started with the theme of health, he began to question why societies tend to get sick with certain diseases and from there we began our journey.” (Euro Company) - “There has been a long way to get to where we are today, we have enhanced and developed everything we already did at the start: careful research of raw materials, certifications, strong growth in human and technological capital.” (Abafoods) - “We don't claim to be mainstream and to please everyone. We had the courage to follow our intuition.” (Davines) - “The choice of product was decisive for us: we wanted to specialize in wool and we have always pursued this decision. We could have chosen polyester to be able to go down with prices and costs.” (Successori Reda) - “If the customer only uses price as a criterion for choosing the supplier, we are not interested in working with that customer.” (Euro Company) - “When I see that the entire textile sector has become sustainable within six months, I ask myself some doubts. Ours 	<ul style="list-style-type: none"> - Health and well-being objectives for starting the sustainability path - Sustainability path with enhancement of existing sustainability elements - Renouncement of positions to be consistent in one's choices - Little confidence in competitors' "short path". 	<p>A sustainability path is long and requires consistency in corporate decisions.</p>	

<p>has been a really long journey.” (Successori Reda)</p>			
<ul style="list-style-type: none"> - “One of the first activities to do is to measure: for example, the water and the energy we consume, the waste we produce. By measuring we were able to make decisions in order to reduce.” (Successori Reda) - “The impact of production must be measurable in an objective and reliable way.” (Abafoods) - “We have invested and are investing as much as possible in machinery in order to reduce costs and increase production efficiency, reducing the impact of processes.” (Euro Company) 	<ul style="list-style-type: none"> - Importance of measure the impact of production - High technology for greater efficiency and reduction of process costs 	<p>High levels of technology can increase efficiency and decrease the impact of the production process that must first be measured</p>	<p>Activities and processes improve through the reduction of the impact of the production and through the increase of skills, cooperation and well-being in the company</p>
<ul style="list-style-type: none"> - “It is necessary to strengthen human capital, raise skills at the company level and increase the dialogue between the company parties, who must communicate in order to complete, help, stimulate and grow.” (Davines) - “We just did a survey of all employees and received more than 85% positive responses. This means that employees are happy working in the company.” (D-Orbit) - “We want to give the people of the company complete freedom to express themselves in the workplace.” (Abafoods) 	<ul style="list-style-type: none"> - Increase of skills and strengthening of human capital - Increase in dialogue and cooperation - Well-being of people and company climate 	<p>The increase of skills and the strengthening of the human capital improves the well-being of people and the company climate</p>	

<ul style="list-style-type: none"> - “We create a work environment where people can feel good even without welfare policies in the strict sense. This is conveyed through a great deal of attention to training, trust, the leadership model.” (Davines) 			
<ul style="list-style-type: none"> - “The consumer does not yet have a great culture from this point of view, which is why we are committed to transmitting and communicating our values.” (Abafoods) - “Our communication reaches the final consumer who is very attentive to the social and ecological impact.” (Successori Reda) - “Our commitment as a company must be transmitted to the hairdresser or beautician (direct client) and then the latter will communicate it and tell it to the final consumer through services and also the sale of products.” (Davines) - “We are committed to adopting behaviours inspired by the values of ethics and transparency both in relations within the company and in relations with our customers, suppliers and stakeholders in general.” (Euro Company) 	<ul style="list-style-type: none"> - Importance of communicating your values to the consumer - Importance of communication up to the final customer - Ethics and transparency in internal and external relationships 	<p>It is important that communication with customers and stakeholders is ethical and transparent</p>	<p>An ethical and transparent communication makes the customer choose the company for its reputation</p>
<ul style="list-style-type: none"> - “Creating virtuous relationships with both our distributors and our customers 	<ul style="list-style-type: none"> - Improvement of reputation towards customers 	<p>Customers choose the company for its reputation of loyal,</p>	

<p>has enhanced our reputation. Because the customer has recognized that our path is not instrumental, it is a profound choice of the way of doing business.” (Davines)</p> <ul style="list-style-type: none"> - “Customers trust us because we have always been consistent and really do what we say. We say “not just marketing, but reality”. (Successori Reda) - “Our quality and sustainability certification system has allowed us to stand out and be the customer's first choice.” (Abafoods) - “Customers choose us mainly for our history and our commitment.” (Euro Company) 	<ul style="list-style-type: none"> - Customers choose the company for quality, loyalty, sustainability and commitment 	<p>sustainable and committed</p>	
<ul style="list-style-type: none"> - “We are looking for continuous innovations and new ambitions. The planning of future projects is established with the collaboration of all the managers of the various departments, so as to make them feel protagonists.” (Davines) - “The birth of ideas is a continuous and imminent process for sustainable projects, there are moments in which we focus in particular, in which we try to get out of the routine and raise the bar a little, moments dedicated in particular to reviews and comparison. But most things, 	<ul style="list-style-type: none"> - Continuous innovation with the involvement of all management and people in the company - Responsibility and awareness of innovation and continuous improvement - Objectives of continuous improvement and search for new solutions even outside the company perspective (involvement of the supply chain) 	<p>The whole company is involved in sustainable innovation through continuous improvement objectives</p>	<p>Through continuous innovation towards sustainability, companies can have a positive impact on society and the environment</p>

<p>fortunately, happen in everyday life, because it is natural for people to think about it.” (Davines)</p> <ul style="list-style-type: none"> - “It is essential that there is a process of continuous improvement at the base and the search for new solutions, which involve the supply chain, clients and institutions.” (Abafoods) - “Companies must be responsible, aware of the choices that are made, aware of the limits and mistakes that are made, and yet they must try to do better and better.” (Euro Company) 			
<ul style="list-style-type: none"> - “We want as many companies as possible to follow us, including our competitors. The impact is achieved if we all work together. Soloists create no impact.” (Euro Company) - “Our success is such because it has an impact on the community and not just economic success. We are inspired by Patagonia and aim to be better for the world.” (Davines) - “For us there is this mantra of sustainability in which we recognize ourselves and see business as a force, a driving force for having an impact on society and people and this is part of our philosophy.” (Successori Reda) 	<ul style="list-style-type: none"> - Willingness to spread the approach of sustainability to everyone (competitors included) - Business as a force, an engine to have an impact on society and environment. - Search for real solutions with the lowest possible environmental impact 	<p>Business is a means of having a positive impact on society and the environment</p>	

[Digitare qui]

<ul style="list-style-type: none">- “One of our drivers was the minimization of the environmental impact, but now it is having a positive impact on the environment.” (Davines)- “In a world with so many challenges, we are convinced that companies must play an essential role in having a positive impact.” (Abafoods)			
---	--	--	--

Table 11-3 Barriers of the value flow in the BMfS

Sample statements	First-order categories	Second-order categories	Aggregate dimension
<ul style="list-style-type: none"> - “It is not easy to have changed and want to change the mind-set because we are programmed to think about success in terms of growth and profit, but other factors must also be considered.” (Davines) - “The main barrier is the mentality of the people who experience the company as a way to earn money at all costs.” (Abafoods) 	<ul style="list-style-type: none"> - Difficulty in changing people's mind-set and orientation towards growth and profit 	<p>One of the barriers is changing people's mind-set</p>	<p>Without the involvement of top management it is not possible to change the mentality and to overcome the cultural barrier</p>
<ul style="list-style-type: none"> - “The lack of awareness and lack of sponsorship on the part of the owners and management may be reasons why a company is struggling to take the path of sustainability, perhaps it thinks it is more difficult than it actually is.” (Davines) - “It is difficult for large companies, giants, to revolutionize the way they do business, change mentality and make everyone agree if the top management is not strongly involved.” (D-Orbit) 	<ul style="list-style-type: none"> - Lack of awareness and lack of sponsorship from ownership and management - Lack of involvement of top management 	<p>An approach to sustainability appears even more difficult if the awareness and sponsorship, and involvement of top management is lacking</p>	
<ul style="list-style-type: none"> - “We are against below cost because we believe it is at the expense of the weak link in the supply chain, in our case the supplier of the raw material. However, you need to invest time and money.” (Euro Company) 	<ul style="list-style-type: none"> - The high involvement and enhancement of the entire supply chain is expensive and time consuming 	<p>To control and to change the supply chain is hard and challenging.</p>	<p>There are structural barriers to overcome like the way of working, to involve all departments and to comply with all the requirements for certifications</p>

<ul style="list-style-type: none"> - “Another thing we do a lot is an incredible involvement of people along the supply chain, for example we really involve our farmers a lot. All our commitment is obviously time consuming.” (Successori Reda) - “We have always protected biodiversity through control upstream of the supply chain. Our effort costs money, but our approach will be the only one that will have a future.” (Abafoods) 			
<ul style="list-style-type: none"> - “From my point of view, it is sometimes difficult to convey and involve all departments because production is a continuous process and interrupting it to change the patterns is not easy. I must say that they are all very collaborative but certainly this remains a very complicated part to play.” (Successori Reda) - “It is certainly necessary to constantly evaluate and reshape activities and processes, be flexible and propose long-term solutions.” (Euro Company) - “Furthermore, then there is the whole part of the certifications that still requires a lot of work but above all constant work.” (Successori Reda) 	<ul style="list-style-type: none"> - Difficult involvement with departments (e.g. production) - Difficulty in changing the way of working - Difficulty in complying with certifications 	<p>It is difficult to improve the way of working, to involve all departments and to comply with all the requirements for certifications</p>	
<ul style="list-style-type: none"> - “We are promoters of the transformation process for suppliers, 	<ul style="list-style-type: none"> - Great commitment to the involvement 	<p>It is difficult to have a systemic vision that allows you to look at the</p>	<p>There is a barrier in terms of vision of the entire</p>

<p>we accompany them in the process, we provide them with models, skills. Providing this service as a business is very demanding. We are also coordinators not only of ourselves but also of others.” (Davines)</p> <ul style="list-style-type: none"> - “It is not possible to measure quantitatively especially if you want to have a systemic and non-reductionist view of the company.” (Davines) - “We try in many ways to spread a responsible culture as it is a change that we are making and above all in which we believe a lot, but which is not always easy.” (Abafoods) 	<p>of the entire supply chain</p> <ul style="list-style-type: none"> - Impossibility of measuring everything - To have a systemic and non-reductionist view of the company 	<p>entire supply chain without being able to measure everything</p>	<p>business model extended to all stakeholders</p>
<ul style="list-style-type: none"> - “A great challenge is to be able to have the same performance with a sustainable approach as products that are not sustainable.” (Davines) - “It can be problematic when you realize that everything you do will never be enough, but this obviously allows us to improve year after year.” (Successori Reda) 	<ul style="list-style-type: none"> - Continuous innovation to challenge with unsustainable products and competitors - Awareness of the need for a long path and continuous innovation could be demoralizing 	<p>It is difficult to continue to innovate in the direction of sustainability</p>	<p>A final barrier is the continuous innovation towards sustainability</p>