Truly Sustainable Strategies

Defining business strategies that positively contribute to relevant sustainability challenges in the food sector

Abstract

This research aims to concretize the concept of truly sustainable strategies. Looking at literature and practice of sustainability strategies, it becomes apparent that the definitions and interpretations of the concept highly differ in their underlying understanding of business sustainability (BST). Due to the dominance of financial success in value creation, businesses fail to address societal needs which leads to a disconnect between business activities and the state of the planet. Dyllick and Muff (2016) develop a typology, which distinguishes different levels of BST in order to explore the reason for the disconnect. Accordingly, true business sustainability is characterized by a shift to an outside-in perspective, so that relevant societal challenges are taken as a starting point for strategy development. However, it has to be further specified how such an outside-in perspective can be operationalized in a specific sector and how it impacts the business strategy development process, e.g. how a business can identify relevant challenges and how a strategic fit between societal relevance and core competencies can actually be created. Further, elements that constitute truly sustainable strategies have not been defined, yet. Therefore, this conceptual research aims to specify the outside-in perspective by clarifying what strategic approaches look like that enable companies to make significant contributions to relevant sustainability challenges in the food sector. By integrating insights from a systematic literature analysis and explorative interviews, relevant sustainability challenges in the food sector will be defined. Further, truly sustainable strategies will be characterized by developing a clear set of criteria and facilitators for their development. The results will be integrated into a systematic and holistic framework of truly sustainability strategy. The final conceptualization will be done by integrating the empirical insights of the expert interviews with the insights of the literature analysis.

Keywords: business sustainability, sustainability strategies, business contributions to societal challenges, conceptual research
INTRODUCTION AND BACKGROUND

The imperative and urgency of a transition towards a sustainable society and economy becomes apparent by looking at the environmental and societal challenges humanity is facing. The year 2017 was the second hottest year on record accompanied with record-breaking weather extremes, like wildfires, floods and hurricanes destroying huge areas of land and affecting millions of people’s life (Copernicus Climate Change Service, 2018). The ecological impacts of global economic activities already exceed critical thresholds (Steffen et al., 2015), leading to irreversible and abrupt environmental changes as well as huge social issues, such as extreme poverty, hunger and lack of access to sanitation or fresh drinking water for a large proportion of world’s population (Oxfam International, 2015). According to the Global Risk Report 2018, environmental risks continue to be under the top five risks for the next 10 years (WEF, 2018). Especially the agricultural and global food system is highly challenged and distressed by these environmental risks, such as extreme weather patterns and biodiversity loss, while population growth, political conflicts and changing consumer preferences exacerbate the situation. Today, almost 850 million people are suffering from chronic hunger (FAO, 2015), while at the same time 1.9 billion people are overweight and one third of all food production worldwide gets lost or wasted (Lipinski et al., 2013). Additionally, the food sector has an immense ecological impact: In order to produce current amounts of calories, almost 40% of landmass and 70% of freshwater is used. Furthermore, 30% of all greenhouse gases worldwide are emitted by the food sector (World Resources Institute, 2013). Consequently, the challenge is to increase food production and ensure healthy nutrition for a growing population, while at the same time keep food production within the environmental planetary boundaries. Thus, food production and consumption cannot continue in the same way as it is today. Shifting the food and agricultural sector towards a sustainable development pathway requires changes both in politics, society and business. In particular business plays an important role in successfully coping with sustainability challenges. However, current sustainability activities of business as well as the pace of organizational change are not enough to tackle the intensifying crisis. Transformational changes in all parts of the value chain – production and processing companies, logistics, retailers as well as consumers – are needed to transform current development into a sustainable one (AlphaBeta, 2016; TruCost, 2016). Profound rethinking of the way business is managed as well as new strategic approaches are needed to enable companies to make significant contributions to sustainable development and to facilitate a sustainable transformation.

The Sustainable Development Goals (SDGs) formulate concrete goals for the needed sustainable transformation and build a ‘new north star for companies’ (United Nations, 2015).
“The SDGs provide us with a new lens through which to translate global needs and ambitions into business solutions” (WBCSD, 2017, Guide to SDGs). SDG number 2 explicitly aims at challenges related to the food system and points to the need to “end hunger, achieve food security and improved nutrition and promote sustainable agriculture” by 2030. Additionally, other SDGs, like the goal for sustainable consumption and production patterns, are related to the food sector. In fact, in the food and agriculture system, business can support the achievement of one quarter of the 169 SDG targets (AlphaBeta, 2016). This shows the high importance of business for achieving the SDGs, which is also explicitly pointed out in the Post-2015 declaration (United Nations, 2015, p.29).

In addition to the high relevance of the private sector to enable a sustainable development, incorporating the SDGs into the business’ strategy is also beneficial for companies for several reasons, like risk reduction, innovation or growth opportunities. Reducing food waste in the value chain, promoting dietary switch or fostering sustainable agriculture are some examples of big market opportunities for business (AlphaBeta, 2016). Further, more and more customers value sustainable products or services and expect companies to act in an environmentally and socially responsible manner. A study shows that 90% of citizens believe that the private sector is important to reach the SDGs and 78% prefer goods and services of companies that had signed up to the SDGs (PwC, 2015). The demand for sustainable products and responsible behavior of companies is especially rising among the ‘millennials’. They are expecting that businesses increase their contributions to society’s biggest challenges and are willing to pay a premium for sustainable products (Nielsen, 2015). Contributing to the alleviation of sustainability challenges also helps to reduce the distrust of society companies are facing (Gallup, 2017). Overall, addressing the SDGs provides market opportunities for business of US$2.3 trillion annually in the food and agriculture system in 2030 (AlphaBeta, 2016). Hence, the relevance and importance of business for achieving sustainable development in the food sector is tremendous, both for business and the society.

More and more companies realize the potential to create value by sustainability activities and increasingly engage in sustainability practices. Studies show that 93% of the Fortune 250 companies are publishing a sustainability report of which 43% explicitly connect their sustainability activities to the SDGs (KPMG, 2017). The requirement to show a company’s contributions to the global goals will increase, which intensifies the need to use the SDGs for strategy development (Corporate Citizenship, 2015). Furthermore, the importance of sustainability increases and almost half of companies surveyed in a study (49%) rank sustainability among the top five corporate goals compared to around 30% in the previous year.
(BSR; GlobeScan, 2016). Besides the increased attention of sustainability on the business side, references to corporate sustainability and sustainability strategies have increased exponentially in academic publications in recent years (Montiel & Delgado-Ceballos, 2014). Thus, the engagement, attention and popularity of sustainability on a business level has greatly increased in practice and research.

However, despite the increasing popularity of sustainability activities on the business level, sustainability activities of companies do not show in an improvement of the planet’s state. In contrast, the social, ecological and economic challenges get increasingly severe and companies fail to contribute to a sustainable development. This discrepancy between micro-level improvements and macro-level deterioration has been described as a *big disconnect* between business activities and the global state of the planet (Dyllick & Muff, 2016; Whiteman et al., 2013). This limited effectiveness and restricted impact of business activities is the starting point for this research. The aim is to reduce the disconnect between business actions and societal impacts by defining ‘truly’ sustainable strategies that enable companies to effectively contribute to sustainability challenges in the food sector.

2 PROBLEM ANALYSIS - CURRENT VIEWS AND NEGLECTED ISSUES

In the following subchapters the current state of research will be introduced and shortly analyzed in order to specify the research problem and identify further research needs. In particular, an overview of developments and current topics in the literature on *business sustainability* (chapter 2.1) and *sustainability strategies* (chapter 2.2) will be presented and shortcomings as well as challenges to be addressed will be outlined.

2.1 BUSINESS SUSTAINABILITY

In general, depending on the underlying understanding of business sustainability, different sustainability strategies emerge. Therefore, in order to enhance the understanding of sustainability strategies, it is important to have a closer look at different interpretations of the term ‘business sustainability’ as well as recent developments in this research field. Hence, in the following chapter, developments and different views on business sustainability will be outlined in order to identify challenges to be addressed which display the research problem and to further identify the starting point for the dissertation. The so-called ‘old view’ on business sustainability will be shortly illustrated in order to clarify basic characteristics of the ‘new view’. The latter displays the current state of research, which will be analyzed for further research needs. The denotation of ‘old’ and ‘new’ does not refer to a time-wise sequence of views, but indicates different levels of developments which exist simultaneously. Thus, the term
‘new’ indicates a higher stage of development and is used interchangeably to ‘more ambitious’ or ‘more far-reaching’ approaches. This ‘new view’ can be referred to the highest level of business sustainability (BST 3.0) of the typology by Dyllick and Muff (2016). The ambitious understanding of True Business Sustainability (TBST) displays the most recent and far-reaching approach and will serve as a basis for problem definition by analyzing it for challenges to be addressed. In contrast, the ‘old view’ refers to lower levels of business sustainability (e.g. BST 1.0 and BST 2.0). Table 1 summarizes the main differences, which will be elaborated in more detail in the following paragraphs.

Table 1: Characterizing the ‘old’ and ‘new’ view of business sustainability

<table>
<thead>
<tr>
<th>Old view</th>
<th>Inside-out (business case for sustainability)</th>
<th>Focus on business value and easy win-win opportunities, reducing negative impact on society</th>
</tr>
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<tbody>
<tr>
<td>New view</td>
<td>Outside-in (true business sustainability)</td>
<td>Starting out from and focusing on societal values, generating positive contributions to relevant societal challenges</td>
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(Source: own illustration)

For many years, the literature reflected on the why of sustainability and investigated the benefits of sustainability for business (e.g. Nidumolu et al., 2009; Orlitzky et al., 2003; Eccles et al., 2014; Bonini & Bové, 2014). This discussion refers to the classical business case of sustainability and focuses on business benefits from managing sustainability issues (Steger (Ed.), 2004). This ‘old view’ is criticized because the financial benefits for business often dominate the way sustainability activities are managed, which lead to self-serving sustainability activities, whereby companies treat sustainability as an add-on and fail to contribute to sustainable development (Agarwal et al., 2017; Nijhof & Jeurissen, 2010; Crane et al., 2014).

Therefore, researchers increasingly point to the importance to overcome the dominance of financial domain and to materializing advantages of sustainability activities for both business and society (e.g. Dyllick & Muff, 2016; Margolis & Walsh, 2003; Baumgartner & Rauter, 2017). Thus, the questions of how business sustainability activities benefit the society and how to enable business to use their core business activities to contribute to sustainable development are gaining more and more importance. The concept of TBST interprets the reason for sustainability activities as the creation of societal benefits and positive business contributions to relevant societal challenges. At the highest level of business sustainability (BST 3.0), companies aim at generating significant positive impact in societal areas (Dyllick and Muff, 2016).

When characterizing and distinguishing business sustainability approaches, the question about the output of sustainability activities is broadly discussed. Often the understanding of the values
created by sustainability activities is dominated by a triple-bottom line thinking, in which business should create values for people, planet and the business (Elkington, 1997). A more recently developed approach of creating shared value (CSV) incorporates the idea that business should focus on opportunities that create value for both business and the society (Porter & Kramer, 2011). However, emerging approaches criticize these ‘old views’ because trade-offs between the different goals might ultimately be solved by prioritizing financial profits over sustainability outcomes and the output of such sustainability activities does not necessarily contribute to solve societal challenges but predominantly aim to improve business value (Crane et al., 2014; Dyllick & Muff, 2016). These emerging views point to the importance to overcome an unbalanced value creation, which creates “islands of win-win projects in an ocean of unsolved environmental and social conflicts” and generate economically attractive but unsustainable solutions. Further, Crane et al. (2014) argue that “[w]hile CSV might be a good way of integrating various activities into one social strategy, it fails to deliver orientation for a responsible corporate-wide strategy” (ibid.). Besides this criticism, the need of value creation for the common good is formulated (Dyllick & Muff, 2016, p.166).

Furthermore, the ‘old’ and ‘new’ view can be differentiated by the type of contributions. More ambitious approaches point to the importance of managing the ‘upside’ (Esty & Winston, 2006) and creating ‘real’ win-win situations and effective contributions to sustainability challenges. “[T]he goal of sustainable development is […] not simply to do well in the economic dimension and then reduce the amount of harm done in the two other dimensions” (Jay & Gerard, 2015, p.18). In particular, a company should ask itself more far-reaching questions about how to effectively do ‘more good’. These are challenging questions, like “How can our products, services, and innovations heal the environment instead of destroying it?” (Lampikoski et al., 2014, p.102) or “What are the benefits and contributions of our products and services to society and the environment?” (Dyllick & Muff, 2016, p.166). These questions indicate a shift in the underlying understanding of business’ value creation “from seeking to minimize [the] negative impacts to understanding how [a business] can create a significant positive impact” (ibid.).

Hence, the ‘new view’ points out that business should move away from minimizing harm or doing less bad towards actively creating more good. Environmental or societal initiatives that focus on the reduction of risk and cost or the improvement of reputation and revenues can be described as decreasing unsustainability rather than enabling sustainability (Hoffman, 2013). As long as companies continue to manage the ‘downside’ (Esty & Winston, 2006) by implementing measures to increase resource productivity or operational effectiveness, true sustainability is not enabled, neither on business nor on societal level.
Another important difference between inside-out and outside-in approaches of business sustainability is the different interpretation of the impact that is generated by sustainability activities. The high number of studies on the relationship between financial success and sustainability (Eccles et al., 2014; Orlitzky et al., 2003; Bonini & Görner, 2011) shows the widely distributed importance of financial impact of sustainability activities. However, emerging views of business sustainability question the focus on financial impacts. Further, in emerging sustainability concepts, like ‘sustainability-as-flourishing’ (Ehrenfeld, 2008), business is required to go beyond profit maximization but interpret profit as a means, not an end (Schaefer et al., 2015). Hence, the purpose of business is increasingly defined “as a concrete goal or objective for the firm that reaches beyond profit maximization” (Henderson & Steen, 2015, p.327). In research and practice, purpose-driven businesses are an increasing phenomenon that focuses on generating impacts for both business and the society (Henderson & Steen, 2015; Zedlmayer, 2015; Nielsen, 2015). Thus, the notion of the purpose of business activities increasingly shifts towards generating positive impact on the society.

To sum up the discussed characteristics of business sustainability approaches, the underlying business perspective can serve as a decisive dimension to distinguish different notions of business sustainability approaches. Dyllick and Muff (2016) conclude that the ‘old views’ with a sustainability understanding at the first or second level (BST 1.0 and BST 2.0) adopt an inside-out perspective. However, in order to enable true business sustainability, the authors propose a fundamental shift in the underlying perspective, moving away from primarily focus on business issues (inside-out perspective) towards translating external societal challenges into business opportunities and searching for business solutions to generate positive contributions to them (outside-in perspective). This implies that a business should start “out by reviewing pressing sustainability challenges that society faces, and then engages in developing new strategies and business models that overcome these” (Dyllick & Muff, 2016, p.166). Hence, strategic business goals are set based on societal needs and the sustainability challenges are taken as a starting point to develop new strategies to address them (Dyllick & Muff, 2016; GRI et al., 2015). For this, a firm needs to look for critical and relevant challenges in its external environment “that demand the resources and competencies it has at its disposal” (Dyllick & Muff, 2016, p.166). This requires a company to implement “a fundamentally different strategic approach” (Dyllick & Muff, 2016, p.170).

The outside-in perspective combines the characteristics of the ‘new’ view and describes business sustainability as generating positive business contributions to relevant societal. This
enables a balanced value creation for both business and society and the positive impact on society becomes the purpose of business activities.

So far, this literature overview outlined the developments of the most important topics to characterize business sustainability approaches. It was shown that there are several development stages of the understanding of business sustainability. There has been a shift from the business case for sustainability (‘old view’) to the notion that business positively contributes to societal challenges (‘new view’). Hence, emerging approaches interpret business sustainability as activities that address relevant external societal challenges and positively contributing to them. When a company operates truly sustainable, the underlying business perspective shifts from inside-out to outside-in.

**Challenges to be addressed**

The new notion of business sustainability approaches with the outside-in perspective are conceptual ideas, which need to be further concretized and specified. So far, it remains unclear how to operationalize the outside-in perspective and how it impacts business strategies. Hence, two main challenges can be identified in the new view of business sustainability approaches, which need to be further addressed and specified:

A) **Sector specific challenges and business contributions**

Dyllick and Muff (2016) state that critical and relevant challenges in the external business environment need to be identified in a first step, in order to operationalize the outside-in perspective (Dyllick & Muff, 2016, p.166). However, the relevant sustainability challenges differ highly in various sectors. Therefore, it has to be clarified how exactly the relevant societal challenges in a specific sector look like (e.g. in the food sector). Additionally, due to the lack of comprehensive and holistic definition of relevant societal challenges at different stages of the value chain, it remains unclear how exactly the business contributions and concrete strategies in a specific sector may look like. Consequently, clear guidance for business how to operationalize the outside-in perspective is missing.

B) **Impact on strategy development and on strategic focus**

In addition to the missing sector specification and lack of guidance how relevant societal challenges and business contributions in a sector (e.g. the food sector) may look like, the impact of an outside-in perspective on business strategy needs to be further defined. So far it is not elaborated in detail how companies can integrate an outside-in perspective in their strategy processes and how exactly the required “fundamentally different strategic approach” (Dyllick
& Muff, 2016, p. 170) may look like. After having solved the issue of defining relevant societal challenges in a specific sector (see A), business is confronted with the challenge to select a sustainability challenge (strategic focus). It remains unclear how business should select the societal issue to be addressed. In general, a company should focus on those issues where the greatest impact is possible - meaning that the addressed challenge needs to fit to the core competencies and capabilities - in order to ensure effectiveness (Agarwal et al., 2017). Likewise, Dyllick and Muff (2016) state that the challenge should “demand the resources and competencies it [a company] has at its disposal” (Dyllick & Muff, 2016, p.166, commented by the author). However, it has to be further defined how business can identify the relevant challenges and how to create a fit between societal relevance and core competencies, in order to address the relevant challenges most effectively.

After having provided an overview of the current state of business sustainability approaches and having identified the challenges to be addressed, the following subchapter deals with different approaches on sustainability strategies in more detail.

2.2 SUSTAINABILITY STRATEGIES

In this subchapter, general terms and definitions of sustainability strategies will be defined. Additionally, different strategy typologies will be presented and their underlying dimensions will be outlined. This aims at illustrating the current state of literature on sustainability strategies by showing how sustainability strategies are currently characterized and what topics are discussed in the research field. This current state will be analyzed for criticism and challenges to be addressed and further research needs, in order to define the research problem and to further specify the starting point for this dissertation.

The process of strategy formation and development can be divided into five fields of strategic management: initiating, positioning, value creation, change and performance measurement. The Strategic Management Navigator by Müller-Stewens and Lechner (2016) describes the different topics in these fields, which are relevant for developing business strategies. For the purpose of this literature overview, these fields of strategic management are slightly adopted and used to structure the discussion on sustainability strategy approaches as well as to analyze and identify characteristics of existing strategy typologies (see Table 2). In the initiating and positioning stage, the discussion on how to start the strategy development process is addressed. When initiating a strategy, different strategic behaviors can be distinguished based on the maturity level of selected challenges. Further, various levels of integration lead to different strategy types and help to characterize strategic approaches. In the value creation stage, the
question about what values are created for whom is addressed. Topics regarding the kinds of values and types of contribution characterize this stage. The topics of value creation were already addressed in the previous subchapter and will therefore not be covered in detail again. Finally, the change stage addresses topics related to the mode of value creation. Here, the main topics discussed in the literature are the level of action and participation as well as the type and degree of change.

Table 2: Structuring sustainability strategy approaches and their criteria

<table>
<thead>
<tr>
<th>Initiating and Positioning</th>
<th>Value Creation</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>How to position the strategy?</td>
<td>What value is created for whom?</td>
<td>How value is created?</td>
</tr>
<tr>
<td>• Strategic behavior</td>
<td>• Values Created</td>
<td>• Level of action</td>
</tr>
<tr>
<td>• Depth of integration</td>
<td>• Type of contribution</td>
<td>• Level of participation</td>
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(Source: own illustration)

Initiating and Positioning - How to position the strategy?

Strategic behavior

The type of reaction to sustainability challenges is an important aspect when it comes to sustainability strategies. The typology of business strategies by Miles and Snow (1978) distinguishes two modes of strategic behavior, which lead to different strategy types: defensive or reactive strategies and proactive ones. The first type of strategies is initiated by forced responses to external pressures and characterized by a focus on risk avoidance and efficiency measures. In contrast, proactive strategies address a broad range of needs with innovative products, services or processes.

This distinction of strategic reactions can also be found in the context of sustainability. In general, sustainability strategies can be defined as “integrative strategies designed to provide long-term competitive advantages to organizations by taking advantage of external opportunities and minimize external threats” (Stead et al., 2004: 104). This shows two important dimensions of sustainability strategies: reactively managing risk and proactively managing opportunities. This distinction of strategy types according to ‘reducing risk’ (oriented towards today, reactive) and ‘managing chances’ (oriented towards tomorrow, proactive) can be found in various typologies (Hart & Milstein, 2003; Dyllick, 2003; Steger (Ed.), 2004). In practice, strategic behavior is often dominated by managing and reducing risks. Strategies that mainly address current and existing products or processes, are more defensive and reactive. According to the different maturity level of competitive fields by Dyllick et al. (1997), those reactive strategies address sustainability problems that are currently discussed and already gain public attention. However, in order to scale-up the impact of sustainability activities, companies
should proactively contribute to raising the awareness for an emerging or potential problem and to developing or influencing the regulating frame of an issue (Dyllick et al., 1997).

Thus, the strategic behavior can help to differentiate strategy types. The two dimensions ‘reactive’ and ‘proactive’ as well as the related orientation towards current respectively future challenges are important to characteristics of sustainability strategies. When strategies are oriented towards future challenges, sustainability issues are proactively managed and more far-reaching sustainability impact for both the company and the society can be generated.

**Depth of integration**

The question of how to integrate sustainability into company’s core business and how to embed sustainability into business strategy is increasingly discussed (Lüdeke-Freund et al., 2016; Epstein & Roy, 2001; Crews, 2010; Engert et al., 2016). Therefore, the level of sustainability integration into strategy development process is another dimension to characterize sustainability strategies.

Lüdeke-Freund et al. (2016) develop a typology to differentiate various degrees of sustainability integration. The authors distinguish between four levels of strategic integration of sustainability according to the relationship between business strategy and sustainability strategy:

i) At the lowest level of integration, sustainability is treated as an ‘add-on’ to the traditional business strategy and societal issues are treated as an administrative duty. At this low level of integration, sustainability strategies aim at selective improvements in existing products with short-term financial gains and primarily focus on easy-wins. This corresponds to the previously elaborated ‘old view’ of business sustainability approaches, in which financial aspects dominate the way sustainability is managed. The level of integration is also distinguished in the typology of sustainability-oriented innovation of Jay & Gerard (2015). Here, ‘sustainability-relevant’ innovations treat sustainability as an add-on or positive side effect.

ii) At higher stages of integration, sustainability ‘matches’ the business strategy (Lüdeke-Freund et al., 2016). Here, sustainability is integrated into the business strategy only if it represents an opportunity for short-term gains. This can be described as ‘sustainability-informed’ strategies (Jay & Gerard, 2015).

iii) The next level of integration can be described as ‘rethinking the purpose’ (Lüdeke-Freund et al., 2016). Here, the sustainability strategy ‘inspires’ the business strategy.

iv) Finally, sustainability ‘guides’ business activities. The implemented strategies at the highest level are fully integrated and aim at holistic improvements across the whole value
chain (Lüdeke-Freund et al., 2016). In those so-called ‘sustainability-driven’ innovations, sustainability is integrated as a core purpose and the innovation is explicitly directed towards solving a sustainability challenge (Jay & Gerard, 2015). Only after sustainability ‘guides’ strategy formulation and is integrated into all processes of the company across the value chain, business is able to make significant contributions to sustainable development (Baumgartner & Korhonen, 2010). As long as sustainability is not “at the heart of business [but rather a] nice to have add-on to business as usual” (Beckmann et al., 2014, p.26), the company is not able to make an effective contribution to sustainable development and the impact of strategies remains limited.

So far, research and practice agree that serious integration of sustainability into core business is scarce and there is a need to improve the strategic integration of sustainability management so that both businesses and sustainable development will benefit (Engert et al., 2016; Baumgartner & Rauter, 2017; Dyllick & Muff, 2016).

Value Creation - What value is created for whom?

Value creation is another important field in strategic management. Depending on the underlying understanding of the values created and the types of contributions, different strategies emerge. The basic characteristics of these dimensions have already been discussed in the previous chapter, when differentiating the ‘old’ and ‘new’ view of business sustainability approaches. Hence, a short overview is provided to recap the most important aspects and to apply them to the field of strategic management.

Values created

The previously provided definition of sustainability strategies “as integrative strategies designed to provide long-term competitive advantages to organizations by taking advantage of external opportunities and minimize external threats along all three dimensions of sustainability” (Stead et al., 2004: 104, emphasis by the author) shows that the focus is on managing risk and opportunities in order to generate financial values and competitive advantages for business by considering triple-bottom line aspects. However as shown before, emerging approaches point to the importance that strategies create shared values and positive contributions to the common good (Dyllick & Muff, 2016). Going beyond profit maximization and generating values for society is increasingly becoming important (Schaefer et al., 2015; Henderson & Steen, 2015; Zedlmayer, 2015).
Type of contribution

The type of contribution was also discussed, when introducing different business sustainability approaches. It was shown that researchers point to the importance to shift value creation from minimizing negative impacts towards generating positive impacts on societal challenges (Dyllick & Muff, 2016; Esty & Winston, 2006; Lampikoski et al., 2014).

Change - How value is created?

Level of action

When characterizing sustainability strategies, the level of action is a decisive dimension to differentiate various types. In general, strategies can aim at generating value or initiating change at organizational, sectoral, or societal/institutional level. Strategies directed towards the organizational level, like product or process improvements (e.g. Nidumolu et al., 2009) remain inside organizational boundaries. They are an important step towards a more sustainable future, however, they will not be sufficient to enable a sustainable development. In order to make significant contributions to tackle relevant sustainability challenges, institutional and social changes are required, which change the rules of a society, like cultural norms and mental models, regulations or tax incentives (Jay & Gerard, 2015). Such an engagement on a sectoral or societal/institutional system can significantly expand the impact for both business and the society (Dyllick & Muff, 2016; Hart & Milstein, 2003; Laszlo & Zhexembayeva, 2011). Accordingly, business strategies that aim at changes on the societal level can help to establish new industry standards and change the rules of the game. These strategies aim at defining new business models or next practice platforms (e.g. Nidumolu et al., 2009).

The higher the level of action, the degree of participation and involvement of different actors increases accordingly. This displays another dimension of sustainability strategies, which will be discussed in the following.

Level of participation

Collaborations and partnerships are becoming increasingly important in order to increase the outreach of sustainability activities. According to Adams et al. (2015), societal and institutional change is only possible by “doing new things with others” (Adams et al., 2015, p.6, emphasis by author). Empirical studies show that collaborations actually do lead to improved sustainability – particularly when it comes to social outcomes (Bjärstig, 2017). Especially for complex sustainability issues, collective commitments are increasingly important (Beckmann et al., 2014). Collaborating with different stakeholders helps to develop a better understanding
of common challenges and increases the ability to respond to various pressures of sustainable development (Sharma & Kearins, 2011). Additionally, sharing experiences and bundling resources create new spaces for economic and sustainable solutions (Dyllick & Muff, 2016). According to the twelve principles of a net positive approach by the Forum for the Future (2014), aspects like ‘working across the value chain’ and ‘engaging in wider partnerships and networks’ are important in order to generate net positive contributions in key areas. This shows that research and practice agree that collaborations and fruitful partnerships are becoming increasingly important for sustainability strategies.

**Type and degree of change**

Another dimension to characterize sustainability strategies is the type and degree of change. Jay and Gerard (2015) distinguish between sustaining and disrupting as well as incremental and radical innovations. Sustaining and incremental changes can be compared to ‘more and better’ of the same (Szekely & Strebel, 2013). This can lead to ‘optimizing-strategies’ in which existing structures are modified with the aim to sustain the status quo (Fichter & Arnold, 2003). Although this is a promising first step, different authors agree that these incremental changes will not be sufficient and appropriate to tackle the global sustainability challenges (Jay & Gerard, 2015; Geels et al., 2008; Boons et al., 2013). In contrast, disruptive innovations come up with completely new and different ideas and fundamentally transform existing behavior (Christensen et al., 2006). This enables ‘path-generating’ and ‘game-changing’ strategies that alter existing structures and break out of existing practices (Fichter & Arnold, 2003; Szekely & Strebel, 2013). Those disrupting, radical and transformational innovations as well as systemic approaches are required in order to overcome “self-defeating feedback loops (such as rebound effects) and enter scalable and self-sustaining ones” (Jay & Gerard, 2015). Furthermore, Jay and Gerard (2015) point out that “the innovation logic […] must change to become more systemic, dynamic and flexible, proactively leveraging contingencies and forming partnerships” (Jay & Gerard, 2015, emphasis by author). This points to previously discussed aspects of sustainability strategies, namely the strategic behavior as well as the degree of participation, and illustrates the complexity and interdependency of the different dimensions. Following table summarizes the analysis of the main dimensions of sustainability strategy approaches and outlines the characteristics.
In this literature overview, the main concepts of sustainability strategies and their underlying dimensions have been analyzed. It was shown that several dimensions to characterize strategic approaches have been distinguished (e.g. depth of strategic integration, type of contribution etc.) and ideas to increase the outreach of sustainability impact of strategies have been discussed (e.g. partnerships, different levels of action etc.). According to the analysis, more far-reaching sustainability strategies incorporate proactive strategic behavior and sustainability is deeply integrated into core business activities. Additionally, positive societal values are generated and radical changes on institutional level are jointly implemented.

Challenges to be addressed

However, two main issues can be identified which have not been discussed so far and which call for further research on characterizing truly sustainable strategies.

C) Criteria for defining sustainability levels of strategies

The analysis of existing literature gave an overview of the currently discussed dimensions of sustainability strategies to characterize strategic approaches. However, when analyzing strategy approaches there is the risk of labelling a strategy as sustainable, even though important characteristics, like the positive contribution to relevant societal issues, is missing. This is due to the fact that so far no unified set of criteria for truly sustainable strategies has been developed, which make it difficult to assess and distinguish between different sustainability levels of strategies and to define truly sustainable ones. Hence, a clear and holistic set of criteria that constitute truly sustainability strategies is missing, which allows to distinguish between different levels of sustainability. Additionally, in order to reduce complexity of the concept of truly sustainable strategies and to operationalize it on a practical level, there is the need to identify elementary criteria (‘must-haves’) that are decisive in order to label a strategy as truly sustainable.
D) **Systematic integration into a holistic framework**

After having addressed the issue of missing criteria that allow to assess the sustainability level of strategies and characterize truly sustainable strategies (see C)), the set of criteria needs to be systematized in order to ensure practicability. Current literature does not offer a holistic framework that integrates characteristics of truly sustainable strategies and allows for the development of truly sustainability strategies as well as the identification of avenues for improvements.

### 2.3 Problematization: The Need for Further Research on Truly Sustainable Strategies in the Food Sector

The previous two subchapters analyzed the current state of research on business sustainability as well as sustainability strategy approaches in order to identify further research needs. The following table summarizes the results of the analysis and specifies the research problem.

**Table 4: Problematization: Research need for truly sustainable strategies in the food sector**

<table>
<thead>
<tr>
<th>New view</th>
<th>Challenges to be addressed</th>
<th>Research need and aim (revised view)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outside-in perspective:</strong>&lt;br&gt;Business positively contributes to relevant societal challenges.</td>
<td>A) Sector specific challenges and business contributions&lt;br&gt;Challenges highly differ in various sectors; <em>Business contributions and concrete strategies in a specific sector</em> remain unclear.</td>
<td>A*) Clarifying relevant <em>challenges</em> and business contributions as well as defining how strategies for specific challenges may look like.</td>
</tr>
<tr>
<td></td>
<td>B) Impact on strategy development and strategic focus&lt;br&gt;Not every company has the same competencies to contribute to specific challenge and limited resources display a need for prioritization; Not fully defined <em>how to identify the relevant challenges and how to create a fit between societal relevance and core competencies?</em></td>
<td>B*) Clarifying the <em>impact on business strategy</em> by defining how companies can select and address relevant societal issues and how a <em>strategic fit between societal relevance and core competencies</em> can be created.</td>
</tr>
<tr>
<td><strong>Strategy types for true business sustainability:</strong>&lt;br&gt;Different criteria for sustainability strategies and several approaches to increase the impact on society.</td>
<td>C) Criteria for defining sustainability levels of strategies&lt;br&gt;<em>No unified set of criteria</em> for truly sustainable strategies: Risk of labelling a strategy as sustainable, even though the positive contribution to relevant societal issues is missing.</td>
<td>C*) Develop a <em>clear set of criteria</em> for truly sustainable strategies that allows for an assessment of different levels of sustainability and define <em>elementary criteria</em> for truly sustainable strategies (<em>must-haves</em>).</td>
</tr>
<tr>
<td></td>
<td>D) Systematic integration into a strategy framework&lt;br&gt;Several ideas to develop sustainability strategies and to increase the sustainability impact but they are <em>not systematically integrated</em> into one holistic strategy framework.</td>
<td>D*) Develop a <em>systematic and holistic framework</em> for the development of truly sustainable strategies and indicate different sustainability strategy types.</td>
</tr>
</tbody>
</table>

(Source: own illustration)

In the first subchapter, an overview of current developments and important topics of business sustainability approaches was provided. This analysis showed that TBST (the ‘new view’) interprets business sustainability as generating positive business contributions to relevant societal challenges. However, the operationalization of the underlying outside-in perspective needs to be further defined.
A) So far, the conceptual idea of the outside-in perspective is not specified for a specific sector. Due to the fact that the sustainability challenges highly differ in various industries, sector specification is important. Currently, it remains unclear how relevant sustainability challenges and business contributions look like in a specific sector.

B) Furthermore, it was shown that it has to be further elaborated how business can identify and prioritize challenges and create a fit between societal relevance and their core competencies, in order to contribute most effectively to relevant challenges in their sector.

Consequently, this research project aims at addressing these challenges by concretizing and specifying the outside-in perspective. In order to do so,

A*) relevant challenges and business contributions will be defined and guidance for business will be developed to define strategies for relevant challenges in a specific sector. Due to the high relevance of the food sector for a sustainable development, it is chosen as the focus of the analysis.

B*) Further, the impact of an outside-in perspective on business strategies is clarified by defining how companies can select and address relevant societal issues and how a strategic fit between societal relevance and core competencies can be created.

In chapter 2.2, current strategy typologies were analyzed and their dimensions to characterize sustainability strategy were outlined. It was shown that there are already various ideas and criteria to define sustainability strategies, like joint engagement on an institutional level, radical and transformational changes or the positive societal contribution that is generated. However, the concrete characterization of truly sustainable strategies needs to be further specified.

C) When analyzing sustainability strategies, there is the risk of labelling a strategy as sustainable, even though it does not positively contribute to relevant societal challenges. Consequently, a unified set of criteria for truly sustainable strategies is missing. This makes it difficult to assess and distinguish between different sustainability levels of strategies and to identify truly sustainable ones.

D) Additionally, the current ideas to increase the level of sustainability impact as well as the criteria to characterize strategies are not systematically integrated into a holistic framework that supports the development of truly sustainable strategies or the identification of avenues for improvements.
Due to these challenges, this research project aims at further characterizing truly sustainable strategies by

C*) developing a clear set of criteria for truly sustainable strategies that allow for a distinction and assessment of different levels of sustainability. In order to ensure practicability, elementary criteria for truly sustainable strategies (‘must-haves’) have to be defined.

D*) Additionally, a systematic and holistic framework for the development of truly sustainable strategies as well as concrete strategy types will be developed.

To sum up, the overall aim of this research project is to reduce the disconnect between societal and business level by developing a strategic roadmap which guides companies towards significant contributions to relevant sustainability challenges. The results of the dissertation aim to generate insights into how businesses can operationalize an outside-in perspective and make significant contributions to societal challenges. The developed typology of truly sustainable strategies will help to characterize and assess the sustainability level of strategies and to indicate avenues for improvements.

On a practical level, the results of the dissertation will offer orientation and guidance for strategic management how to make significant contributions to sustainable development. The outside-in perspective will be practically operationalized so that business is supported in the identification of relevant societal challenges and the development of truly sustainable strategies. The typology of sustainability strategies can help businesses to assess their current level of sustainability and show ways to move towards higher levels. On a societal level, the outcome of the dissertation aims at enabling a sustainable development by supporting the achievement of the SDGs. In particular, concrete solutions to relevant sustainability challenges in the food sector shall be delivered which help to improve the state of the planet. On a theoretical level, the purpose of this dissertation is to develop a theoretical understanding of criteria and requirements of truly sustainable strategies and focus on the implications of an outside-in approach for strategy development, formulation and configuration. Besides, the dissertation should contribute to the discussion about the creation of ‘real’ win-win solutions and deepen the understanding of trade-offs inherent in sustainability issues. Finally, this research project seeks to clarify the meaning of balanced value creation of businesses and to contribute to a re-definition of business success.
3 RESEARCH QUESTIONS AND RELEVANCE

Based on the analysis of existing literature and identified needs for further research, the main research question can be defined as follows: **What do strategies look like that enable companies to make positive contributions to relevant sustainability challenges in the food sector?**

The main research question can be divided into two more specific questions. The *first research question and its sub-questions* relate to the conceptualization of business opportunities for societal value creation. This follows a back-casting approach, meaning that the future goals need to be defined first. The questions clarify relevant sustainability challenges and define how business contributions to these challenges should ideally look like. Further, the question about how companies can select the relevant challenges and how to create a fit between societal relevance and core competencies is addressed. The *second research question* helps to define and conceptualize truly sustainable strategies by shedding light on strategic implications of true business sustainability. The sub-questions address the different dimensions to characterize truly sustainable strategies and elaborate possibilities to increase the level and outreach of sustainability strategies. By combining the insights of the previous analysis, truly sustainable strategies for specific challenges in the food sector will be defined. Based on the developed strategy framework, practical implications will be discussed. The two research questions and their sup-questions are represented in the following figure.

*Figure 1: Research questions*

<table>
<thead>
<tr>
<th>What do strategies look like that enable companies to make positive contributions to relevant sustainability challenges in the food sector?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business contributions for societal value creation</strong></td>
</tr>
<tr>
<td><strong>RQ 1: What are relevant sustainability challenges and business contributions in the food sector?</strong></td>
</tr>
<tr>
<td>1. What are relevant sustainability challenges in the food sector?</td>
</tr>
<tr>
<td>2. How do business contributions to societal challenges in the food sector look like?</td>
</tr>
<tr>
<td>3. How can business select relevant and critical challenges?</td>
</tr>
<tr>
<td><strong>Strategies for true business sustainability</strong></td>
</tr>
<tr>
<td><strong>RQ 2: How do truly sustainable strategies look like for specific challenges in the food sector?</strong></td>
</tr>
<tr>
<td>1. What are dimensions to characterize truly sustainable strategies?</td>
</tr>
<tr>
<td>2. How can different levels of sustainability strategy types be distinguished and assessed?</td>
</tr>
<tr>
<td>3. What are practical implications of the developed strategy framework?</td>
</tr>
</tbody>
</table>

(Source: own illustration)
4 Research Approach and Methodology

In general, this research project operates at the interface of the societal and the business level. There is a growing stream of research that deals with this intersection and tries to understand and tackle societal challenges through management research (George et al., 2016). According to George et al. (2016), management scholars should join the debate and provide insights to tackle global challenges and enable changes for a better world. The contributions in this field can be divided into two broad streams: First, studies that investigate how global problems affect the business level. And second, studies that provide management insights on how societal problems can be tackled and show how management theory can be applied to address global challenges. (ibid) This research project can be assigned to the second research field as it searches for business insights on how management can be used as a tool to address societal challenges.

Furthermore, this research project follows a problem-oriented approach, which in contrast to the theory-oriented research does not aim to generate theoretical explanations for the status quo, but seeks to design new realities and outlines possibilities to get there. Thus, the research project does not aim at formulating a universal truth and generally valid descriptions, but seeks to create a normative and ideal destination for companies to aim for. (Ulrich, 1982) Hence, the research is explicitly normative.

This dissertation is based on a conceptual research approach, whereby existing concepts are enhanced, criticized or refined. New empirical insights do not have a causative role but serve as enhancement, refinement, clarification and illustration of the developed concepts (Dyllick, 2015). Hence, the research includes conceptual and empirical components. Explorative expert interviews with visionary thought-leaders will serve as an enrichment of conceptual findings. Thereby, the reciprocity and comparison of the normative and empirical perspective play an important role and will be conducted throughout the research process to identify possibilities to bridge the gap between them. Exploring the gap between the empirical state and the normative state of business sustainability activities supports the identification of new avenues for truly sustainable strategies as well as the applicability and relevance of the developed framework in practice.

The research process is organized in four steps. In a first step, a systematic literature analysis of both established and progressive concepts of sustainability strategies as well as challenges in the food sector will be conducted. The results of the analysis will be used to draft a first characterization of strategy types and process. In a third step, expert interviews and practical examples will be analyzed in order to enrich and concretize the developed framework. Finally,
the empirical insights will be used to enrich, refine and further develop the characteristics of truly sustainable strategies. By aggregating and integrating the empirical insights with the conceptual framework, the final conceptualization of truly sustainable strategies will be conducted.

5 PRELIMINARY FINDINGS

The findings so far can be clustered into three categories according to development process of truly sustainable strategies: Principles of true business sustainability, outside-in and inside-out. Figure 2 illustrates the process and different steps of developing truly sustainable strategies:

Figure 2: Developing truly sustainable strategies

In order to develop truly sustainable strategies, the principles of true business sustainability have to be clarified in a first step. A business needs to understand the concept and its implications for sustainability strategies (criteria for truly sustainable strategies). As a next step, the relevant sustainability challenges have to be identified (outside-in). In order to contribute to critical and relevant sustainability challenges in the company’s external environment, they have to be identified primarily. After having identified them, they need to be combined with the firm’s competencies (inside-out). In order generate positive contributions to sustainability challenges and create a strategic fit between societal relevance and core competencies of a firm, the duality between outside-in and inside-out is a decisive aspect. After having developed concrete measures and strategies to contribute to the identified sustainability challenges, they have to be checked and adjusted according to the principles of true business sustainability. A cycle of continuous improvement starts again. In the following, preliminary findings in the several steps will be explained in more detail.
A) Understanding the principles of true business sustainability

When translating the concept of true business sustainability (TBST) to the strategic level, two categories of criteria for truly sustainable strategies can be identified. *Outside criteria* describe the requirements of the strategy that need to be fulfilled on a societal level, whereas *inside criteria* refer to requirements that need to be met on a business level. These are the decisive criteria to label a strategy a truly sustainable one (‘must-haves’).

**Table 5: Criteria of truly sustainable strategies**

<table>
<thead>
<tr>
<th>Outside Criteria</th>
<th>Inside Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addressed challenge is relevant to society</td>
<td>Core competencies are used</td>
</tr>
<tr>
<td>System changes are initiated (transformative)</td>
<td>Sustainability is fully integrated and at the core of business activities (top business priority)</td>
</tr>
<tr>
<td>Societal values are created (positive contributions)</td>
<td>Radical innovations are triggered</td>
</tr>
</tbody>
</table>

These criteria were derived out of the analysis of different concepts of business sustainability, in particular the concept of TBST, and business strategy approaches as well as by applying the concept of TBST to different examples. Further research and the expert interviews will show, if these criteria are the most relevant or have to be modified.

B) Identifying relevant challenges

So far, several global sustainability challenges in the food sector were identified and structured along the four system conditions of the food sector: social, environmental, political and economic boundary conditions. The results of this analysis are summarized in the table 6:

**Table 6: Sustainability challenges in the system conditions of the food sector**

<table>
<thead>
<tr>
<th>Social conditions: changing preferences and increasing demand for food</th>
<th>Environmental conditions: food sector as a creator and a victim of environmental challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population growth of 30% until 2050 (UN DESA, 2015)</td>
<td>Competing usage of crops, like biofuels, will increase the demand for calories produced but do not contribute to the world’s food supply (Institute on the Environment, 2013)</td>
</tr>
<tr>
<td>Consumption of more resource-intense food: demographic shift towards a larger middle class, diet in developing countries is converging with the western style (FAO, 2017; WEF, 2017)</td>
<td>Rapid urbanization causes and accelerates dietary transition</td>
</tr>
<tr>
<td>Increasing demand for green, safe, ‘free-from’ and ethical food products; at the same time demand for processed foods and fast-food rises, which increases the amount of salt, fat and sugar in the diets (health problems) (Frost &amp; Sullivan, 2015, 2016)</td>
<td></td>
</tr>
</tbody>
</table>
Sector uses 40% of landmass and 70% of freshwater withdrawal

Industry is responsible for 30% of all greenhouse gases worldwide and by 2050, it is expected to consume 70% of the tolerable greenhouse gas emissions that would be consistent with the goal of limiting global warming to two degrees (World Resources Institute, 2013)

Extreme weather events, natural disaster climate change and water crisis, deforestation, biodiversity loss, ecosystem degradation and resource scarcity (WEF, 2018, FAO, 2017)

**Political conditions: changes influence the availability of food**

- Trade agreements
- Political conflicts and wars as a major driver of food insecurity and malnutrition (FAO, 2017)

**Economic conditions: changes in market and new technologies**

- Digitalization, new technologies, price fluctuations and growing competition (Frost & Sullivan, 2015, 2016)

It becomes obvious that the whole food system is under stress. The table provides an overview of the changes in the system conditions of the food sector and illustrates the macroeconomic setting companies are operating in. However, this remains on a very general level and is not connected to the business level, yet. Hence, it has to be defined what concrete business opportunities arise out of those outside challenges. To illustrate the outside-in potential, a selection of outside-in opportunities along the life cycle of a food product is shown in figure 3:

**Figure 3: Outside-in opportunities in the food sector**

The selection of examples serves as an illustration and indicated the intended direction of research. In order to generalize the outside-in potential and to bring to macroeconomic challenges down to the company level, a framework is needed to catch the outside-in challenges companies are confronted with. This means that it has to be defined how a business can build its “radar” to catch outside opportunities. One important aspect to build the radar and cluster the outside potential are the actors that are affected by sustainability challenges and that bring the challenge to business’ attention: consumers, value chain actors, resource access, national
politics, and international politics. Hence, that stakeholder engagement an help to identify the relevant challenges. Further facilitators to set the outside-in “radar” are summarized in the following table:

Table 7: Facilitators for an outside-in perspective

<table>
<thead>
<tr>
<th>Outside facilitators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engage in stakeholder-dialogue</td>
</tr>
<tr>
<td>Define own position and highest leverage across value chain</td>
</tr>
<tr>
<td>Produce and share knowledge on societal challenges</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inside facilitators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop an innovative culture and sustainable mindset</td>
</tr>
<tr>
<td>Top-management commitment, willingness to change</td>
</tr>
<tr>
<td>Openness for emerging opportunities</td>
</tr>
<tr>
<td>Internal working group to identify challenges and trends</td>
</tr>
<tr>
<td>Empowerment of employees (bottom up)</td>
</tr>
<tr>
<td>Materiality assessment, impact assessment</td>
</tr>
</tbody>
</table>

These facilitators serve as an illustration of the current status quo of the findings. They are based on insights gained by the analysis of different shining examples as well as of the concept of TBST from a strategic point of view. Further research and the expert interviews will show how these facilitators have to be modified.

C) Create a fit between business’ competencies and societal challenges

In order to create a strategic fit between core competencies and relevant societal challenges, the distinction of two basic strategies is important: alone or together. Besides individual strategies of a single company, collaborations and shared solutions are becoming increasingly important in order to increase the speed and scale of impact. Industry strategies help to move the whole industry forward by, for instance, creating round tables or collaborating with actors up- and downstream the value chain. In contrast, political or institutional strategies aim for cross-industry collaborations (e.g. NGOs, science, political institutions) to jointly change the rules of the game. Both, individual and collaborative strategies (either industry or political) can fulfill the criteria of truly sustainable strategies. However, collaborative are the most promising to effectively contribute to challenges and to generate far-reaching impact and system changes. Figure 6 illustrates a selection of different strategy types on an individual, industry and political level. Depending on the concrete implementation they can qualify for truly sustainable strategies (needs to be checked if criteria of TBST are fulfilled).
In order to generate strategies that fulfill the criteria of TBST, several facilitators have been identified so far:

**Table 8: Inside-out facilitators for truly sustainable strategies**

<table>
<thead>
<tr>
<th>Facilitators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined space for joint engagement and participation (knowledge and resource sharing)</td>
</tr>
<tr>
<td>System thinking</td>
</tr>
<tr>
<td>Back-casting</td>
</tr>
<tr>
<td>Circular- and end-of-life-thinking</td>
</tr>
<tr>
<td>From product to function</td>
</tr>
<tr>
<td>Separation of innovation activities</td>
</tr>
</tbody>
</table>

**D) Check, report and adjust**

Finally, the developed strategy has to be check for the principles of true business sustainability. A company has to review if they are fulfilled and adjust if necessary. Then the cycle starts again (continuous improvement). The changes that are initiated can either be changes in the own company or changes that are induced in other company. Besides, there can be a direct or indirect impact on the sustainability challenges.

**Potential Contributions**

The preliminary findings help to concretize the concept of truly sustainable strategies by defining the general strategy process and shedding light on the various requirements at different stages in the process. The developed set of principles for truly sustainable strategies allows to characterize and assess truly sustainable ones. This enhances the theoretical understanding of requirements for truly sustainable strategies and their implications on strategic management. Additionally, the identified outside-in opportunities and facilitators of an outside-in approach
provide insights into relevant sustainability challenges in the food sector and address the question of how business can identify them. Finally, the illustration of strategy types as well as the facilitators for truly sustainable strategies provide insights into how a fit between core competencies and societal challenges can be created. These results are a first step to address the identified challenges and neglected issues in the current literature and provide first answers to the research questions.

**Outlook and Issues for Feedback**

The preliminary findings illustrate a first systematization of the results and indicate the intended direction of the research. This should serves as a basis for further discussion during the expert interviews. During the EURAM Doctoral Colloquium I would like to get feedback on these first results and discuss how I can improve them. Especially, I would like to work on how to generate new insights for a framework to indentify relevant societal challenges (outside-in) as well as defining strategy types (inside-out). I would also like to receive feedback on the general concept of my research (e.g. research questions and approach, problematization, relevance etc.) and discuss ways for improvement.
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