Strategic CSR in food industry SMEs: identifying individual hot spots

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Abstract

It is common sense today that companies have to consider the needs of society and environment in their everyday business. There are, however, multiple ways to do so. This paper proposes an approach based in Strategic CSR and innovation management processes, namely responsible innovation, to enable SMEs to achieve an integration of societal and environmental considerations into their strategic and operational processes. Crucial issues in the process design include the involvement of internal and external stakeholders, where we suggest unlocking employees' tacit knowledge during the first stages of the process. We also provide insights into the results of a qualitative test of the first stage of the process, the hot spot identification, and discuss the implications of this first test for the further development of the concept.

Problem statement

It can be assumed common sense that global sustainability can be achieved only if companies engage in sustainable development (Johnson & Schaltegger, 2015; Schaltegger et al. 2011). Sustainability means the principle of the triple bottom line of economic, social and environmental performance (Carter & Rogers, 2008; Elkington, 1998). With the strong foundation of sustainability in stakeholder theory, and a focus on companies' moral obligations, there seems to be a lack of scientific attention to the strategic implications of sustainability, or corporate social responsibility (CSR), issues (Porter & Kramer, 2006). Recent exceptions in agricultural economics are Rankin et al. (2011) and Boland et al. (2015).

Although there are many sustainability tools available (Johnson & Schaltegger, 2015) it is still challenging for companies to develop a long-term strategy which takes into account societal needs in a systematic way. Rather, researchers observed many uncoordinated and reactive measures so that the efforts aren't efficient as they could be (Porter & Kramer, 2006; Schaper, 2002). Especially small and medium sized enterprises (SME) are in a difficult situation, because of their limited resources (Bradford & Fraser, 2008; Gadenne et al. 2009; Graafland et al. 2003; Johnson & Schaltegger, 2015). However, because of their overall economic relevance (Perry & Towers, 2009) and their being responsible for 70% of the global pollution (Revell et al. 2010) it is important that especially SMEs engage in sustainability management. Nevertheless, most of the existent sustainability management tools were developed for bigger enterprises, and are often not useful for SMEs (Ammenberg et al. 2003; Dwyer et al. 2009; Graafland et al., 2003; Johnson & Schaltegger, 2015; Perrini & Tencati, 2006). In addition to that, the adoption of sustainable initiatives depends on the context of the

company (Ross et al. 2015) and therefore an individual development of strategies, goals and measures is necessary. SMEs are very heterogeneous in terms of operations, supply chain structure, and governance, so general solutions are not useful (Ammenberg & Hjelm, 2003; Hillary, 2004; Jenkins, 2009). At the moment, the heterogeneity of SMEs is not sufficiently addressed by the extant general sustainability management tools (Johnson & Schaltegger, 2015).

Against this background we aim to develop a generalizable process to integrate societal needs into the management of SMEs with individual priorities and solutions. Given the above mentioned constraints of SMEs, we propose that such a process should be at best possible without any involvement of external advisors and should imply clear economic benefits to the company, since SMEs in particular have little organizational slack for philanthropic activities which do not pay off directly.

We identify two research streams which can be taken into account as a basis for the process to be developed. The first research stream relates to the potential of win-win-situations for companies and societies, as proposed, e.g., by Porter and Kramer (2006, 2011). The second research stream relates to recent developments in the innovation literature, namely responsible innovation (von Schomberg, 2013), but also embedded lead user approaches (Schweisfurth & Raasch, 2014). We see parallels to our research problem in the quest for a process to integrate sustainability issues into ongoing strategic and operational management tasks.

The research streams of Strategic CSR (SCSR) and Responsible Innovation (RI) both require actors to consider the societal impacts of their activities, while maintaining economic viability as the main driver (Pellé & Reber 2015). Despite claims for systematic approaches, a clear guideline of how to integrate sustainability issues into strategic management is missing. We will argue in this paper that to achieve this, companies need a typical structured management process. The approach we propose is related to the stage-gate-process of innovation management (Cooper, 1990; Macnaghten & Owen, 2011) and includes several distinct stages of identification, prioritization, definition of goals and measures, implementation as well as controlling, which are subject to a critical evaluation after each stage.

The remainder of the paper is organized as follows. First, we present the above sketched concepts of SCSR and RI in a brief literature review. We also present the specific challenges to SMEs in innovation management. Then, we discuss the implied requirements of both concepts for a process to integrate societal responsibility in SME management and end with an own proposal of such a process. Third, a first test of the approach in two food SMEs is presented and discussed. We conclude with some reflections on the further need to improve the proposed concept, and its broader implications for sustainable development.

Literature review

Strategic CSR and shared value

Sustainability and CSR have been more and more taken up in strategic management in the past two decades (Benn et al. 2014; Roy et al. 2013; Graafland et al. 2003). Porter and Kramer (2006) propose in their approach of SCSR the interdependence of society and companies based on the concepts of the value chain (Porter, 1985) and the diamond of (national) competitive advantage (Porter 1990). Based on these concepts, on the one hand, the unavoidable impact of internal primary and supporting activities on the society and environment should be identified (Inside-Out). On the other hand, the competitive context, including its social dimensions, must be analyzed as to its' impact on a company's opportunities (Outside-In). The approach specifically stresses the relevance of win-win-potentials for companies and society: "The essential test that should guide CSR is not whether a cause is worthy but whether it presents an opportunity to create shared value— that is, a meaningful benefit for society that is also valuable to the business" (Porter & Kramer 2006: 11).

This implies that companies are not only required to mitigate existing adverse effects from business activities or might follow a path of good citizenship through philanthropic sponsoring, which is unrelated to the business (responsive CSR, in the words of Porter and Kramer). Rather, SCSR means to create shared value for the company and for society. As Porter and Kramer (2006: 11) put it, companies should "transform value chain activities to benefit society while reinforcing strategy", or pursue „strategic philanthropy that leverages capabilities to improve salient areas of competitive context".

From an organizational behavior perspective we argue that to develop into Strategic CSR, especially SMEs need to find a structured way to identify and prioritize potential win-win-situations, to set respective goals and derive measures.[1] While this might be a change management issue (Lozano et al. 2015), there are also processes available in innovation management which can be useful and probably more feasible for SMEs in this context, as we will describe in the following.

From classical innovation processes to Responsible Innovation

"An innovation is (…) any thought, behavior or thing that is new because it is qualitatively different from existing forms." (Barnett 1953: 7). Due to innovations' crucial role in business success, innovation management has since long taken an important role in management research. Further, there is not consistent of detailed definition of innovation. Generally, innovations can occur not only through new products, but also through technical operations, organizational structures, institutions,

[1] Porter and Kramer (2006: 15) acknowledge that "These transformations require more than a broadening of job definition; they require overcoming a number of long-standing prejudices."

etc. (Paech, 2007). Besides smaller, incremental innovations of extant solutions, there are radical innovations which represent "a non-constant, non-linear mode of change" and "lack an exact prediction and direction" (ibid.: 121).

Given the high degree of uncertainty associated with innovations, innovation management has dealt with ways to improve the innovation process and make success more likely. There is, on the one hand, a clear tendency towards structured, internal approaches, as Cooper's stage-gate model (1990). On the other hand, triggered by increased digitalization, recent approaches suggest to open the company and include external (Holmes & Smart, 2009) and internal, "embedded" lead users (Schweisfurth & Raasch, 2015) in open innovation processes (Chesbrough, 2003). We will just briefly describe the concepts in the following and then more extensively discuss the approach of responsible innovation.

Classical innovation process models

The stage-gate process proposed by Cooper (1990) is often used by companies to increase the effectivity and efficiency, to decrease risks and to systematically search for and evaluate problems in innovation processes. To this end, the innovation process, from first idea to market launch, is subdivided into a number of intermediate steps. After each stage, a "control gate" is implemented which ensures that pre-defined criteria are met or, if not, the process is stopped. Through the common goal of profitability, this structured innovation process aligns the creative elements of research and development with the overall strategy.

In the last decade the approach of Open Innovation (OI) evolved (Chesbrough, 2003; Enkel, Gassmann, & Chesbrough, 2009) and quickly became one of the most popular topics in innovation management (Huizingh 2011). Chesbrough (2006: 1) defines this new paradigm as follows: "Open innovation is the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively." The approach implies the use of a (more or less) open network of stakeholders is used to combine internal and external stakeholders' ideas for creating innovations (Chesbrough 2006; Enkel et al., 2009). In this way new markets can be entered and the needs of customer better satisfied (van der Vrande 2009). With respect to the choice and integration of stakeholders, lead users play a crucial role in OI processes.

Responsible Innovation

Because of the increasing challenges in the world, like global warming, economic crises and demographic changes the necessity of considering ecological or societal impacts of innovations already in the innovation process has been increasingly acknowledged (Blok & Lemmens 2015, European Commission 2013). According to the European Commission (2013) these challenges can

only be solved with a dialogue between science and the rest of society. In this context, different approaches have evolved. Beyond sustainable product design, eco-innovation (Jones et al. 2001) and "sustainable lead user" approaches (Fichter & Pfriem, 2004; Wagner, 2009), the notion of responsible innovation has been brought forward particularly by the European Commission and taken up by researchers. One of the most frequently used definitions of responsible innovation was proposed by von Schomberg (2013: 19):

"Responsible Research and Innovation is a transparent, interactive process by which societal actors and innovators become mutually responsive to each other with a view to the (ethical) acceptability, sustainability and societal desirability of the innovation process and its marketable products in order to allow proper embedding of scientific and technological advances in our society."

Another, more general, definition is proposed by Stilgoe et al. (2013: 1570):

"Responsible innovation means taking care of the future through collective stewardship of science and innovation in the present."

The concept, which is so far focused on technological innovations and research of universities, requires that throughout the innovation process all stakeholders, internal and external, work together to achieve a minimization of negative impacts and to bring the society in a better position. With this process the output is directly embedded in the society and matched with its' values, needs and requirements.

Blok and Lemmens (2015: 32) criticize the proposed approaches to responsible innovation to be based on an "uncritical, narrow and naïve" concept of innovation. They argue that the approach is incompatible with the main characteristics of innovation, uncertainty and information asymmetry. Therefore, they call for a radical transformation of the concept of innovation.

Another way of integrating sustainability issues into the innovation process is the use of or sustainable lead users (Fichter & Pfriem, 2004). Recently, approaches of embedded lead users are discussed (Schweisfurth & Raasch, 2015). Here, employees with specifically high use rates of the company's products are included in innovation processes, e.g., by means of design thinking. There are also attempts to use this approach particularly for developing sustainability-oriented innovations (Fichter & Pfriem, 2004). Whether the above-described approaches of classical as well as open innovation are useful and actually used also in SMEs, we first briefly review the literature on innovation in SMEs.

Innovation processes in SMEs

Because of the high economic relevance of SMEs (Perry & Towers, 2009), and the fact, that they are often more efficient in R&D than MNEs (Vossen 1998), SMEs play a decisive role in innovation

development. Moreover they are “disproportionately responsible for significant innovations” (Vossen 1998: 91).

SMEs have some structural advantages, but also disadvantages with respect to innovation. First, because of their open, flexible and informal organizational structure and their network and relationships to the environment, they can response to changes of markets and customer needs fast (Scozzi et al. 2005; Barnett & Storey 2000). Furthermore low bureaucracy and short communication channels in SMEs are advantages for an efficient innovation process (Vasson 1998).

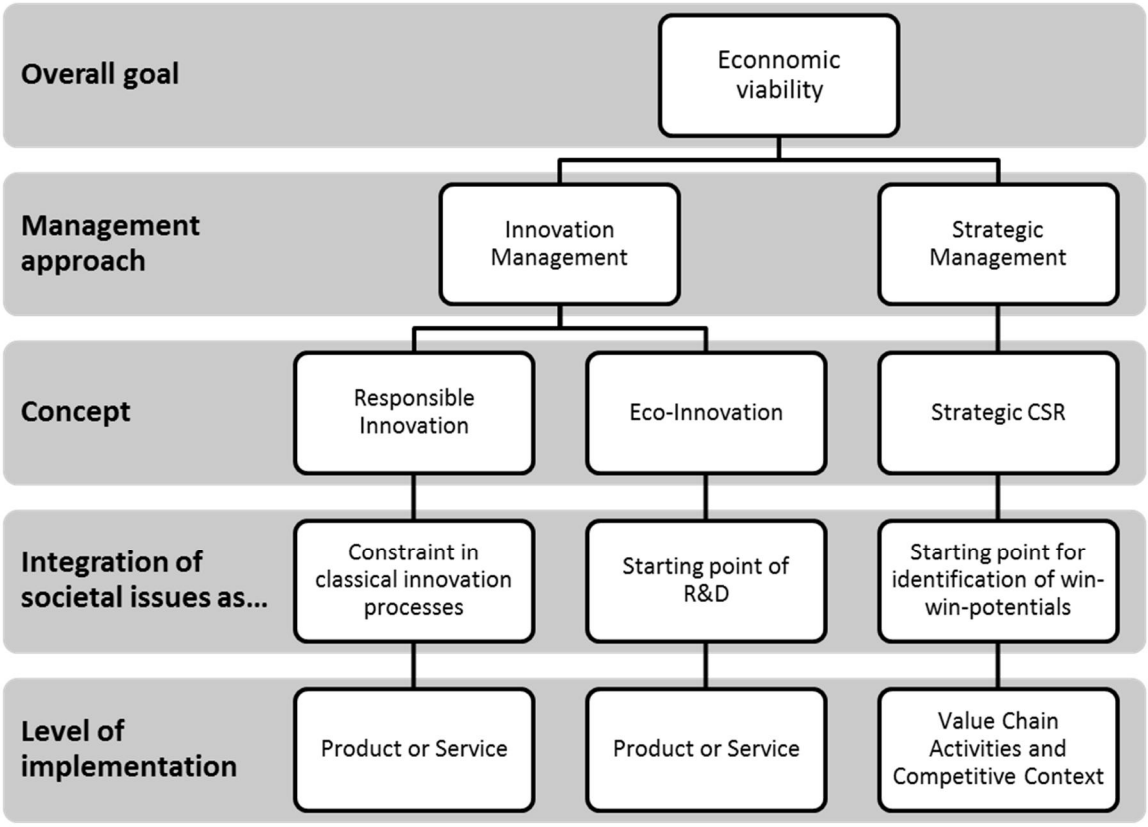
However, due to the often described informal nature of SME management, innovation strategies and structured innovation management, often do not exist in SMEs (Scozzi et al. 2005), although these are main determinants of innovation success (Rosenbusch et al 2011; Barnett and Storey 200). SMEs therefore often rather take a reactive and not a proactive attitude towards innovation (Scozzi et al. 2015). The missing structured approach leads to a lack of rational decisions which are connected to previous projects and strategies and control or supporting mechanisms and thus a lack of problem identification during the innovation process (Scozzi et al. 2005) – aspects which are mentioned as elementary in the innovation literature (Scozzi et al. 2005). Further, the lack of organizational memories is a big problem for future decisions in the innovation process (Scozzi et al. 2005). Moreover, SMEs are often characterized by the generalist knowledge of their employees. A lack of specialists can then also represent a barrier to innovation (Scozzi et al. 2005; Barnett & Storey 2000). In comparison to large enterprises, the person of the owner plays a very important role in the innovation process of SMEs. It is reported that most innovative ideas stem from the owner-managers and that the commitment and the support of such a leader are significant for the success of the innovation (Scozzi et al. 2015).

Since few years open innovation is no longer important only for MNEs. SMEs, especially medium-sized companies, use open innovation processes more frequently, since the approach enables them to overcome their resource limitations (van der Vrande 2009). In this way new markets can be entered and the needs of customer better satisfied. But the higher effectiveness of innovation processes knowledge generation is also a reason for an increasing involvement of SMEs in Open Innovation (van der Vrande 2009).

The following figure shows the different approaches of innovation management and strategic management to include societal and environmental needs into management. Of course, the overview is not comprehensive. It shows, however, that all mentioned approaches acknowledge the overall goal of economic viability of the company, but take different paths to integrate societal and environmental issues. Based on the current definitions, we suggest that responsible innovation is an approach which conceptualizes societal issues as constraints which have to be taken into account in

the classical product or service innovation process. Eco-innovation, on the other hand, takes societal needs as the starting point for research and development. In Strategic CSR, as described above, societal issues are seen as the starting point for the identification of win-win potentials along the value chain and within the competitive context. Creating shared value here shall become the key driver of transformation. It is the particular goal of this contribution to develop a process for the comprehensive path of Strategic CSR, which addresses not only product or process innovations, but the whole company with all its' value chain activities and its' specific competitive context.

Figure 1: Potential paths towards integration of societal and environmental issues into management



Source: own representation

Based on these reflections, we will in the following discuss the requirements for a process of increasing SMEs' social responsibility, not as an end, but as a means for following their economic interests.

Propositions for a feasible path towards SCSR in SMEs

In the following we propose a generalized process to implement SCSR in a company, by taking into account knowledge from the above described innovation management approaches. First, we show the compatibility and common grounds on which RI and SCSR are founded, following a systematic

analysis of the requirements for RI based on Stilgoe et al. (2013). Then, we conceptualize an approach for reaching a responsible and strategic behavior of SMEs.

Basic requirements of Corporate Responsibility

The basic concept of responsible innovations is characterized by four basic requirements which are labelled differently in the literature but basically refer to the same phenomena. These are Anticipation, Reflexivity, Inclusion, and Responsiveness (Stilgoe et al. 2013). In the following we analyze how the RI and the SCSR views are compatible with respect to these requirements and discuss how these concepts can guide a process for implementing SCSR in a company, which is proposed in the next subsection.

Responsiveness and economic benefit from responsible behavior

The aim of a responsible integrative innovation process is to develop innovations with the least possible negative impacts on society. Therefore it is important to find out "how systems of innovation can be shaped so that they are as responsive as possible" (Stilgoe et al. 2013: 1572). Social needs should be taken into account during the innovation process, so that the developed innovations are embedded into society. For reaching that, various mechanisms can be used (Stilgoe et al. 2013).

Despite the primary motivation of mitigating harm from innovations, it is also acknowledged in the RI literature, that there may be win-win-situations: "Responsible innovation not only offers space for precaution, but for opportunity" (Owen et al. 2013: 39). To include ethical and societal issues in an innovation process may not be understood as a constraint of progress (von Schomberg 2013), so that the creativity and curiosity, which are basic requirements of innovations, are not prohibited (Owen et al. 2013).

Here, the RI literature touches the SCSR concept proposed by Porter and Kramer (2006), who explicitly distinguish between responsive and strategic CSR, where the latter is focused on creating shared value and deemed to be crucial for companies' competitiveness. A major distinction of the two approaches nevertheless seems to be the implied driving force of the concepts, where SCSR is driven by the prospect of economic benefit, and RI by the precautionary principle and the imperative of avoiding risks and negative impacts on society (see Figure 1).

Anticipation

As described above, the innovation process is characterized by uncertainty. The RI literature postulates that one part of this uncertainty, which is related to the social impacts of the innovation, should and can be minimized (Pellé & Reber 2015). To this end, potential undesirable and unintended ethical impacts have to be anticipated, described, analyzed, and assessed (Owen et al.

2013; Stilgoe et al. 2013; Owen et al. 2012). Sometimes negative impacts are not visible in the first steps of an innovation process, but can be anticipated only later (von Schomberg 2013; Owen et al. 2013; Stilgoe et al. 2013). Therefore anticipation requires foresight and a broad view, which in RI shall be ensured by the inclusion of stakeholders (see section "Inclusion"). Because safety is of high relevance, risks have to be analyzed throughout the innovation process to follow the precautionary principle (Owen et al. 2013; von Schomberg 2013). Additionally, von Schomberg (2013) proposes that for a broad societal view the desirable impacts be considered and priorities identified.

While RI particularly focusses on innovations, Porter and Kramer (2006) also acknowledge the effects of any value chain activity. They suggest in their SCSR concept that the whole value chain is considered to identify impacts on environment and society. This awareness of inside-out effects is the basis for companies to change their activities to create shared value. The strategic approach furthermore requires a prioritization of the issues, so that those with the highest potential for shared value should be chosen. However, Porter and Kramer (2006) do not explicitly address the question how the potential impacts and opportunities for creating shared value can be anticipated. They postulate that "Operating managers must understand the importance of the outside-in influence of competitive context, while people with responsibility for CSR initiatives must have a granular understanding of every activity in the value chain.", but do not provide a path to achieve this.

Reflexivity

Reflexivity "on the part of actors and institutions" means, that the process should be reflected in each step, at any time and by every actor (Stilgoe et al 2013: 1571). The underlying assessments, motivations and decisions, which were used to identify the negative impacts in a responsible innovation process should be at any time reconsidered (Pellé & Reber 2015; Owen 2012). This requires all actors to be aware of their own limitations (Stilgoe et al. 2013). They have to leave the habitual path to reach a broad, reflective view. The actors thereby take new roles, reflecting the whole process and are co-responsible for every outcome (von Schomberg 2013).

During the development of a corporate social responsibility strategy a continuous reflection about companies' operations and their impacts is crucial. Additionally, it is important to identify potentials for creating shared value – solutions, which have benefits for the society and the organization. So the responsible operations have to be strategic and have to fit into the business strategy. For these findings, a permanent reflexivity is noteworthy.

Inclusion

For a responsible innovation process, the participation of stakeholders perhaps is the most important requirement (Pellé & Reber 2015, Schomberg 2013). The process of research and development here shall be opened up to a collective dialogue and discussions. Thereby the different visions, values,

perspectives, questions and dilemmas can be integrated (Owen et al. 2013). Therefore broad range of stakeholders has to be integrated in the innovation process, so that everyone becomes co-responsible for the process and its' outcomes (von Schomberg 2013). In this way the possibility of a not responsible or not sustainable innovation decreases (Blok et al. 2015).

The integration of stakeholders is also important in the corporate social responsibility concept, namely the license-to-operate approach (Porter & Kramer 2006). This requirement promotes constructive dialogues with them, so the companies can identify and integrate their needs and issues of their stakeholder (Porter & Kramer 2006). However, Porter and Kramer (2006) also mention the downsides of stakeholder integration, which can lead to a complete renouncement of control. Furthermore, the dominance of some stakeholders is criticized: "The vehemence of a stakeholder group" does not "signify the importance of an issue- either to the company or to the world" (2006: 4). Further, stakeholders with their particular views can per definition not grasp the overall, namely the economic, situation of the company. Therefore the integration of stakeholders needs to be prepared thoughtfully and their requirements must not result in reactive and short-term decisions (Porter & Kramer 2006). An increasing number of MNEs interact already with stakeholders in sustainability issues (Ghisetti et al. 2015). In the food sector, a prominent example is the development of the ProPlanet label by the German retail group REWE, which was organized as a large-scale stakeholder process (CSCP). For SMEs, however, it is questionable whether NGOs would be ready to engage in such participatory approaches, given a questionable cost-benefit relation.

The degree of stakeholder inclusion proposed in the RI literature has also been criticized. Blok and Lemmens deem the approach as "liable to failure" (2015: 22). They argue that the different stakeholders have disparate objectives and different understandings of value creation. Further power is asymmetrically distributed leading to equally asymmetrical impacts on the innovation process. Another, also important argument is that through their involvement in the innovation process the innovation becomes semi-public in a very early stage and it is difficult to claim intellectual property for an innovation which has been subject to co-creation. Blok and Lemmens (2015: 24) criticize that the goal of companies to achieve competitive advantage through innovation is challenged by an open and transparent process as proposed in RI, since innovation is "exactly based on information asymmetries". Additionally, Rosenbusch et al. (2011) showed in their meta-analysis, that innovation projects with external partners are not as beneficial as internal innovation projects. In fact they revealed, only internal innovation processes led to improved performance of SMEs – external collaboration in their analysis has no effect. If SMEs want to work with external partners they should orient themselves towards smaller, not too powerful partners, to avoid dominance (Rosenbusch et al. 2011).

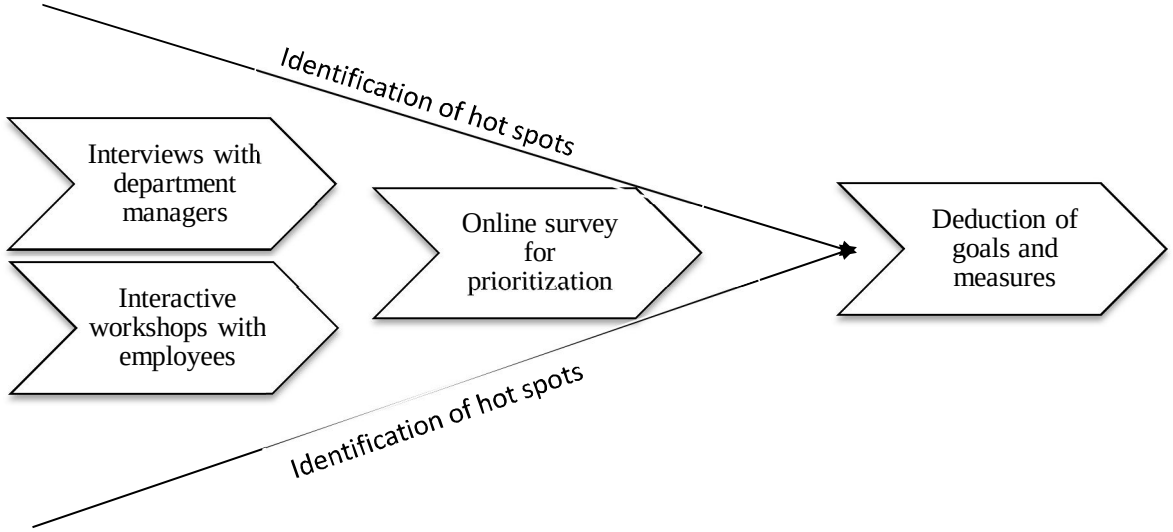
Against the background of the four requirements, their extensions and critiques, in the following we propose an approach which shall enable SMEs to integrate sustainability issues into their daily management processes.

Proposal of a process model for the implementation of SCSR in SMEs

Given the above mentioned constraints of SMEs, we propose that a process to integrate social responsibility into SME management should be at best possible without any involvement of external advisors and should imply clear economic benefits to the company, since SMEs in particular have little organizational slack for philanthropic activities which do not pay off directly. At the same time, it should fulfill the above-described requirements of responsiveness, anticipation, reflexivity and inclusion. In the following, we first briefly describe the overall process. Then, we discuss how it corresponds to the above defined requirements.

Figure 2 provides a rough overview of the first steps of the proposed process, which are hot spot identification and deduction of goals and measures. Ideas generated in the hot spot identification phase shall be stepwise refined, until goals and measures can be deduced for a selected number of hot spots which have been prioritized. The proposal is laid out more in detail below by making reference to the above four requirements. To ensure a systematic and efficient procedure, we propose to follow a stage-gate-type process, which divides the overall task into different phases, followed by gates in which ideas are assessed with respect to pre-defined requirements.

Figure 2 Process of hot spot identification



Source: own representation

With respect to responsiveness, a fundamental difference of the approach we propose as compared to the RI-approach is that while RI is dedicated to make sure that in the usual innovation process, societal needs are taken into account, in our approach, the anticipated impacts of current activities are understood to also trigger the development of process or product innovations across the whole company to alter these impacts and to create shared value (see Figure 1). Furthermore, also external factors or outside-in-linkages shall be taken into account, to identify possibilities to shape the competitive context in a way which is beneficial for both company and society.

Despite legitimate doubts about the possibility to anticipate all future impacts of an innovation, which would contradict the widely accepted bounded rationality assumption (Blok & Lemmens, 2015), we acknowledge the need to identify and minimize negative impacts which are possible to anticipate.

Inclusion of stakeholders has been deemed crucial for responsible innovation processes. However, the goal of this work is to propose an approach to assess the present activities of a company with respect to win-win-potentials, which makes involvement of stakeholders in early phases of the process almost impossible. Van der Vrande (2009) showed that especially employees and customers can be involved in such open processes. We propose to use the tacit knowledge of employees, not only as "embedded lead users" (Schweisfurth & Raasch, 2015) of the end products, but also as experts of their activities. Cross-functional group discussions should be employed to facilitate creativity. This approach should enable the company to make use of a broader knowledge base and thus improve the capability to anticipate societal impacts of activities as well as social influences on the competitiveness. We propose that employees shall be encouraged to think about their own tasks but also about the further activities within the company and generate ideas about potential negative impacts on society and environment, but also about opportunities to fulfill upcoming societal needs by changing processes or products. To ensure systematic thinking, which is crucial in both innovation management (Stilgoe et al. 2013) and SCSR (Porter & Kramer 2006), Porters' schemes of the value chain and the diamond of competitiveness are used as depicted in Porter and Kramer (2006: 7, 8).

By looking also into the outside-in linkages, the participants of the employee workshops are encouraged to think about the current and future competitive context as well as societal requirements and needs the company is or will be confronted with. By bringing in also personal and not only job-related views, the needs of a broader societal group can be visualized, without a direct involvement of NGOs. Such societal groups should be, if at all, included in later stages and probably only after first cycles of the process have been accomplished and own experiences have been made with such interactive processes.

Taking up Porter and Kramer's (2006) reflection on prioritization, we argue that the prioritization should be made by the company alone, in light of the economic situation and views on competitiveness. Such a restriction is especially important to maintain the privacy of the business strategy and thus the competitive advantage. After this phase of identification, goals and measures to mitigate negative impacts and create shared value have to be developed. We suggest that this is best done within the individual functional departments, in a workshop which is moderated by the responsible manager or group leader. The final step before implementation then is the alignment of activities across functions. The department managers or group leaders have to discuss their respective goals and measures and potential trade-offs with other groups or departments, all in light of the impact on overall performance. In later stages, i.e., the development of measures to achieve company- and supply chain-wide sustainability orientation, we suggest to integrate at least key suppliers and customers (lead users).

To correspond to the requirement of reflexivity, a continuous exchange among department managers about impacts, trade-offs, win-win-situations and co-responsibility is required. For a strategic and long-term implementation all described steps should be repeated in a management cycle.

First attempts to implement the proposed approach

To test whether the proposed approach is feasible in SMEs and whether it contributes to integrating societal aspects into SME management, we use a participatory research approach, in that the researchers on the one hand introduce new processes into the company and on the other hand observe the impact of these processes on the company. In this section, we will present our observations with respect to the test-wise implementation of the process in two medium-sized mono-product food manufacturers in Northern Germany.

The research includes semi-structured qualitative interviews, workshops, and small-scale standardized surveys. The guidelines for the qualitative part were developed based on the SCSR concept proposed by Porter.

Given the need of a company-spanning approach (Asif et al., 2013; Harris & Crane, 2002; Porter & Kramer, 2006) we interviewed all function managers (purchasing, quality, research and development, marketing and sales, human resources, production, finance and organization) resulting in 7 interviews per company. The interview length varied between 70 and 180 minutes. Additionally, in each company one interactive workshop was conducted with one employee of each department. The duration was 3-3.5 hours. All interviews were recorded, transcribed and coded. The coding was

executed by different persons and in successive steps to reduce the data and identify meaningful categories.

In individual interviews with department managers and interactive employee workshops, the participants were first asked about their understanding of sustainability and sustainability management. To identify the social and environmental impacts systematically, a depiction of Porter's value chain was used (Porter & Kramer 2006: 7). Further, the employees and managers were asked about the needs of stakeholders and further external factors based on the diamond model (Porter & Kramer 2006: 8).

Overall, the approach yielded a high number of issues in both companies, which were reduced by means of qualitative content analysis (Schreier, 2014).

A first reflection of the results from the qualitative phase with the persons responsible for sustainability issues in the companies revealed that in both companies there are significant information asymmetries with respect to, e.g., quality management. For example, some employees mentioned doubts about the controllability of residues (pesticides) in certain inputs used, which the quality manager strongly rejected. Other issues had a questionable relation to sustainability and could have been seen as general management tasks. However, in this first phase, it was decided that no issues were dropped from the list, because a lack of information is also an issue which has to be handled. Thus, all entered the prioritization stage.

To prioritize the issues, we conducted a quantitative online-survey among all participants of the earlier qualitative stage. Further, it turned out by the type of issues that were raised that in one company some functions had been overlooked when setting up the list of potential participants. These persons were informed and then also invited to take part in the survey.

In the survey, participants were asked to evaluate all mentioned issues with respect to their perceived urgency and their opportunities and risks for the company. The urgency was evaluated by means of a ranking task, and opportunity and damage potential, respectively, was evaluated using a 5-point Likert scale from 1 = (small potential to increase performance/ to damage the company) to 5 = (high potential for performance/damage). The issues were grouped following the functional structure of the companies, and we controlled for individual differences in issue-related expertise by including a self-evaluation for each functional area.

Comparing results of the qualitative interviews and the standardized survey, we find that even when the same issues were mentioned, the prioritizations in the companies resulting from the standardized survey differed strongly from each other. Further, the frequency with which an issue was mentioned in the interviews was not always consistent with the rank in the prioritization. This highlights the difficulty of inferring from frequency of naming to relevance. Moreover, the

judgements of different persons were quite heterogeneous. Some participants evaluated an issue with high urgency, which others rated as not at all urgent. Both results show the importance of integrating every department because, only then, a holistic evaluation is guaranteed.

The prioritization study also showed that participants felt rather sure in their evaluations of, e.g., external influences, namely with respect to societal needs. However, the self-assessed expertise in the field of activities which were not their own, was quite low. Therefore, the department managers were asked to define three hot spots which they deemed most important. Given the small number of participants in the prioritization survey, and the low degree of expertise in many fields, the managers were not bound to its results.

Subsequently, the department managers should moderate workshops with all their employees to derive department-specific goals and measures to tackle these issues. To ensure a systematic process, a template was provided to name goals, indicators, target values and measures, as well as deadlines for accomplishment. Here, we stressed the necessity to also define short- and medium term targets, to have quick first successes. First experiences show that there are major difficulties for some employees, but also managers, not to focus on measures first, but to think about goals and indicators first. Therefore, the process took longer than expected.

Discussion of implications of the first test of the proposed process

In the following, we discuss the first attempt of implementation with regard to the previously described requirements and implications of innovation processes and SCSR (in SMEs), i.e., responsiveness, anticipation, inclusion, and reflexivity.

Using the tacit knowledge and the different perspectives of employees and managers from all functions, a wide range of impacts could be captured and made transparent to the whole company. The value chain framework supported the process being followed in a systematic and comprehensive way, to elicit, in a first step, a high number of potential aspects. Because of these numerous and especially company-specific identified issues, requirements of stakeholders and potential shared value, our approach seems to be successful for this kind of identification.

One problem, which appears in this anticipation process, is the amount of issues which are not directly connected to sustainability and strategic CSR but rather to the basic business management. Therefore, the interview guidelines have to be adapted to yield more specific results..

The integration of employees seems useful also in regard to the amount of identified issues, because a single person, for example a sustainability manager, couldn't identify so many impacts by himself, probably. Furthermore the two-step approach enabled us to gain insights into the divergent

evaluations of the issues by people with different backgrounds, and to achieve an overall supported set of selected impacts which should be dealt with priority.

One more advantage of the integration seems to be the positive influence of the inclusion on the motivation and engagement of employees towards this kind of sustainability management. Further, they started to think about sustainability and SCSR. Against the background that we aim to integrate sustainability and responsibility into the business culture and the business strategy long-term, this increasing involvement might be helpful (Morgan & Zeffane 2013).

The third dimension which is used for the evaluation is reflexivity. Again, because of the integration of different perspectives, a very intensive reflection process could be observed. However, it must be noted that even though employees can identify negative impacts, collect ideas and mention the needs of stakeholders, the discussion about win-win-situations, trade-offs and effects on performance seems to be too complex for most of them. Therefore it is better, that the department managers or leaders still discuss these aspects.

Overall it has been emphasized by participants that one person should have the responsibility and the control of the whole process. However, this person has to be trained intensively about SCSR as well as the value chain and the stakeholder- and competitive context concepts.

Because of the organizational structure of SMEs the implementation process, especially in the beginning, adds to the daily work of the project leader as well as all involved employees. Therefore the process should be as simplified as possible, so that motivation is not lost.

It can be summarized that the study underlines the heterogeneity of SMEs and the necessity of an individual approach towards the "wicked problem of sustainability" (Peterson, 2009). From the discussion above, we propose the following structure for a generalized process (Figure 3).

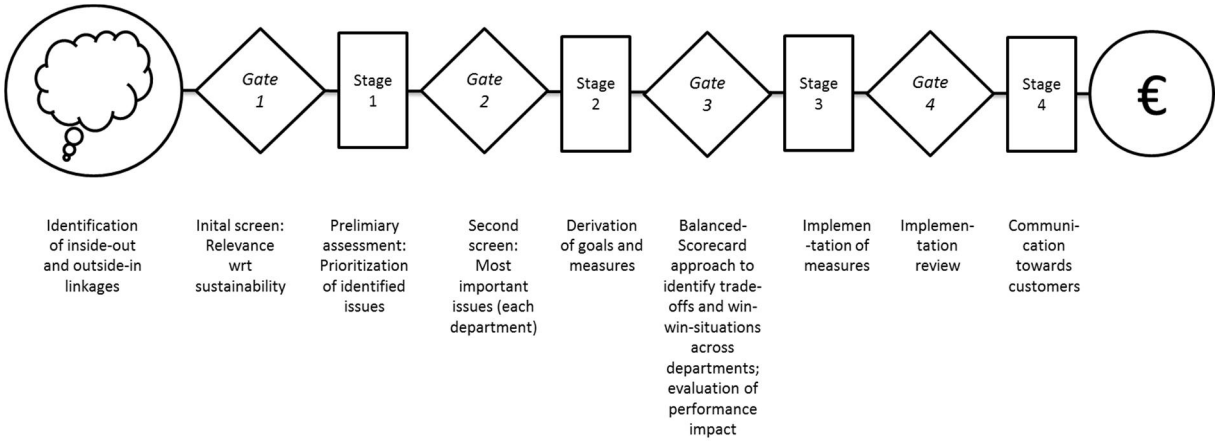
First, in interactive workshops, employees from all departments and hierarchical levels are encouraged to identify impacts from the company on society and environment. In the same workshops, participants shall also identify external influences on the company as well as the needs and requirements of stakeholders. This creative phase is followed by the first gate, which requires a prioritization of the collected issues based on urgency as well as potential to cause harm if not tackled and / or opportunity if tackled. This prioritization (hot spot identification) should be performed in a quantitative way, either within the workshops by means of point allocation, or by means of a survey which should be carried out among all participants of the first phase.

The next phase thus is entered by a reduced number of ideas, for which measures have to be developed. We suggest that the development of measures is carried out in the individual functional departments, and that group leaders should moderate a workshop among their employees. In these

workshops, all group members are confronted with the prioritized hot spots. Since it is crucial to align the measures to be taken with the overall strategy, group members are encouraged to think about which goals they could set to tackle the issues. Hot spot by hot spot, the employees shall thereby define goals based on the SMART-rule – specific, measurable, attractive, realistic and timely. Measurability requires defining indicators, and targets have to be set which are realistic and have a clear end in time. These goals and indicators shall then set the frame for the development of concrete measures which have to be taken. The output of this second creative phase is then subject to a next gate, in which department or group leaders gather to discuss proposed measures with respect to feasibility and potential trade-offs with other departments as well as effects on overall performance.

Only those measures which fulfill the criteria of complementarity and alignment with the overall strategy can enter into the implementation phase. Dependent on the department and the goals set, the requirements and needs of suppliers and customers can be integrated in the implementation process. Of course, companies can integrate further stakeholders. The next gate then is the review of implementation and the assessment of achievements as compared to initially set targets. Figure 3 summarizes the proposed process. The communication towards customers explicitly is only one possibility of capitalizing on the transformation of activities. Cost savings should be seen as at least as important.

Figure 3: Proposed approach for implementation of strategic CSR in SMEs



Source: own representation

In the next step, we will rework and develop in collaboration with both pilot companies, especially with regards to the reduction of complexity. Afterwards, this enhanced approach will be tested in five more companies of the food industry and continuously improved. The researchers will here play a more observant role, to identify barriers to implementation and further develop the process to be practicable without external help. Crucial issues to take into account for the further review of the

process is the time needed to conduct the analyses. This is important both from a motivational as well as from an economic point of view. Especially the workshops seem to be a tool which can be easily used in SMEs companies without spending many resources. However, the actual implementation of the developed measures requires on the one hand the commitment of the top management (Ramus & Steger 2002; Ramus 2002) and might also involve more extra-time in the beginning. It will be therefore crucial to develop measures which can be easily integrated into everyday tasks. Further, a strategy has to be developed for increasing the commitment of the management during this process.

Conclusion

In this paper, we break away from the implicit antagonism between classical traits of innovation and the approach of integrating stakeholders in the very beginning of an innovation process. Given the property rights issues incurred in the RI concept, we proposed a path for food SMEs to integrate the concept of sustainability into their everyday business. To our understanding, this means not necessarily a radical change of the innovation concept. Rather, it requires an extension of the goal function of the enterprise with respect to innovation. We suggested that the ecological and social aspects be integrated into the evaluation of innovations in early phases of a stage-gate type of process as proposed by Cooper (1990). However, given the confidentiality requirements of usual innovation processes, this could be done by unlocking the internal knowledge sources.

Although there are many tools available it is still challenging, especially for SMEs, to follow a long-term responsible strategy. Therefore we aim to develop an approach which shall enable SMEs to implement strategic and long-term responsible operations. Major requirements formulated initially for processes of responsible innovation, such as responsiveness, anticipation, inclusion and reflexivity are taken as criteria to develop and evaluate the process. We propose a structured, interactive bottom-up process with intense inclusion of employees. Other stakeholders like suppliers and customers will be involved in the later steps of the implementation process. The process is still under development, and the way towards a self-sustaining, continuous process seems to still be long. However, we deem the general set-up to be promising in encouraging SMEs which are not traditionally driven by “green” goals of the top management and whose deciders take a rather critical view on sustainability. High degrees of informality, which are characteristic for SMEs, however, might challenge the proposed, structured approach, which follows a stage-gate logic. Nevertheless, we suggest that the clear focus on economic benefit is an important argument for top management to support such processes.

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