A communicative constructionist perspective on Corporate Social Responsibility

– using software for understanding and attributing meaning to CSR

Sina Prochno

Master thesis • 30 credits
Swedish University of Agricultural Sciences, SLU
Faculty of Natural Resources and Agricultural Sciences
Department of Urban and Rural Development
Environmental Communication and Management - Master's Programme
Uppsala 2021

A communicative constructionist perspective on Corporate Social Responsibility
– using software for understanding and attributing meaning to CSR

Sina Prochno

Supervisor:	Hanna Bergeå, Swedish University of Agricultural Sciences, Department of Urban and Rural Development; Division of Environmental Communication
Examiner:	Sara Holmgren, Swedish University of Agricultral Sciences, Department of Urban and Rural Development; Division of Environmental Communication
Assistant examiner:	Lotten Westberg, Swedish University of Agricultral Sciences, Department of Urban and Rural Development; Division of Environmental Communication

Credits:	30 credits
Level:	Second cycle, A2E
Course title:	Master thesis in Environmental science, A2E
Course code:	EX0897
Programme/education:	Environmental Communication and Management - Master's Programme
Course coordinating dept:	Department of Aquatic Sciences and Assessment
Place of publication:	Uppsala
Year of publication:	2021
Online publication:	https://stud.epsilon.slu.se
Keywords:	Corporate Social Responsibility, social representation theory, communication, management tools, sustainability

Swedish University of Agricultural Sciences
Faculty of Natural Resources and Agricultural Sciences
Department of Urban and Rural Development
Division of Environmental Communication

Publishing and archiving

Approved students' theses at SLU are published electronically. As a student, you have the copyright to your own work and need to approve the electronic publishing. If you check the box for **YES**, the full text (pdf file) and metadata will be visible and searchable online. If you check the box for **NO**, only the metadata and the abstract will be visible and searchable online. Nevertheless, when the document is uploaded it will still be archived as a digital file.
If you are more than one author you all need to agree on a decision. Read about SLU's publishing agreement here: https://www.slu.se/en/subweb/library/publish-and-analyse/register-and-publish/agreement-for-publishing/.

☒ YES, I/we hereby give permission to publish the present thesis in accordance with the SLU agreement regarding the transfer of the right to publish a work.

☐ NO, I/we do not give permission to publish the present work. The work will still be archived and its metadata and abstract will be visible and searchable.

Abstract

Today, companies increasingly have to address and communicate the impact that their activities and decisions have on the environment and society. This is reflected in particular in the concept of CSR, which is based on the fundamental idea of sustainable and future-oriented business. CSR encompasses cross-cutting tasks that require employees to work together across departments to develop strategic approaches and find common solutions. In order to meet the increasing demands for transparency and accountability, companies are introducing collaborative management tools such as software with which data on social, ecological or economic aspects can be collected, evaluated and processed for CSR reporting. The aim of this study is to provide insights into this under-researched area as well as to develop an understanding of what CSR means in a corporate context and what influence it has on internal communication between employees when working with software. Through a case study approach, this was addressed by examining the use of WeSustain's Enterprise Sustainability Management (ESM) software, which is implemented by multinational companies of different sizes for their CSR management. The results reveal that CSR is understood as a dynamic construct that continuously emerges, develops and changes in the interactions between the employees involved. Taking in a communicative-constructivist perspective, two functions of CSR become central, which result from an instrumental and constitutive approach to these issues when working with the ESM software. Furthermore, from the perspective of social representation theory, CSR management through software demonstrates that it creates an accessible framework in which interactions are facilitated and guided. It also provides functions through which meaning can be organised and shared. Accordingly, the study argues that constitutive communication processes play an important role in enabling employees to relate to CSR issues situationally and contextually and to perceive them as meaningful.

Table of contents

Abbreviations

CSR	Corporate Social Responsibility
ESM	Enterprise Sustainability Management
KPI	Key Performance Indicator

1. Introduction

1.1. Introduction & Background

In order to meet the central challenges of the 21st century, in addition to civil society commitment, laws and other incentives from authorities and governmental bodies, responsible companies can make a significant contribution to sustainable development through their actions and influence (BMAS, 2020; Schaltegger, 2012). Moreover, there is a growing awareness that economic success can only be achieved in the long term in an efficient and stable society (Krickhahn, 2014). Due to changing framework conditions, such as improved information and communication technology, a growing number of critical non-governmental organisations and thus possibly changing attitudes among consumers and the public, companies are increasingly concerned with corporate social responsibility (CSR) which is oriented towards the fundamental idea of sustainable and future-oriented business (Freeman et al., 2006). According to the definition of the European Commission (2016), companies have a responsibility for their impact on society and the environment and the company's contribution to sustainable development. Therefore, they integrate and apply appropriate precautions in the overall organisation, i.e., practice CSR management. In recent decades, CSR has undergone a process of change, which is shaped by the public's expectations of economic actors and leads to an institutional development of CSR (Wehmeier & Röttger, 2011).

With the aim of increasing transparency of environmental and social aspects of companies' business processes, various frameworks, measurement systems and indicators have been developed with which corporate activities can be measured in terms of their sustainability performance (Gupta et al., 2014). Additionally, companies are required to disclose their impacts on social and environmental factors as a part of international guidelines (Stawinoga, 2017). As Spangler et al. (2014) point out, this is reflected in the increasing use of digital technologies to manage corporate activities, which help to plan CSR strategies, implement measures or monitor activities. Using software as an information and communication tool, following Wagner et al. (2017), is an integral part of many

companies' CSR activities as in the context of their CSR reporting in order to provide information and enter into dialogue with them.

In the field of CSR, which requires the networking and cooperation of different actors in companies, software open up potential for strengthening internal communication and introducing change processes (ibid.). Concerning overarching sustainability issues, Norström et al. (2020) emphasise the need for co-production of solution-oriented and transferable knowledge, which requires cross-departmental collaboration in companies. In this regard, Huck-Sandhu (2016) adds that internal communication and employee involvement is a critical success factor for integrating the cross-cutting issue of CSR into corporate strategy and practice. Software can be assigned a central function in this endeavor (Spangler et al., 2014).

1.2. Problem discussion

A survey of companies conducted by Adelsberger et al. (2009) points to the potential of digital software for internal work processes, which leads to improving communication, more efficient networking and strengthening internal collaboration. This potential is important in relation to the cross-cutting issue of CSR, as academia and practice have long been concerned with the challenge of how CSR can be integrated into the core of the company, i.e., as part of all work areas and in support of employees (Heinrich & Schmidpeter, 2013). In this context, the question of what constitutes corporate social responsibility becomes relevant, which also drives the social discourse on corporate responsibility.

However, the benefits of software in the context of CSR management and internal communication have been little documented so far. In light of this, as argued by Weber & Bodemann (2018), software should be looked at more closely as a collaborative tool that enables an instrumental approach to CSR issues. In addition, the collaborative work processes in software and their constitutive function come into focus, which is why Christensen & Cornelissen (2013) emphasise the importance of considering CSR situationally and contextually.

As called for by Schoeneborn et al. (2019), it is therefore necessary to ask how interactions to integrate social or environmental aspects into corporate activities take place and how meaning is negotiated in the process. This is significant in determining the basis for actions and decisions that are essential for corporate responsibility. In this context, the employees of the company themselves come into focus, making relevant the question of what influence software work has on their understanding of CSR, how they communicate with each other and how they shape meaning attributed to corporate responsibility practices.

1.3. Aim & research question

The aim of this thesis is to explore how software functions as an instrumental and constitutive tool. In particular, it will be considered how using this tool shapes the interaction between employees and leads to constructive approaches to corporate responsibility. Applying social representation theory as a conceptual framework for my research, it becomes possible to explore how CSR is communicatively constructed through the use of digital tools such as software for CSR management (Moscovici, 1981; Rateau et al., 2011). Their function as regulators of social interactions is particularly taken into account when looking more closely at communication within a company and negotiation of meaning in CSR management.

With regard to these concerns, it is necessary to investigate the practices in the corporate world in which software is already being used. For this purpose, the focus of the study is placed on the concrete case of a software developed by the company WeSustain GmbH (hereinafter "WeSustain"), which is intended to support companies in the implementation of holistic CSR in their business practice. This study investigates how WeSustain's 'Enterprise Sustainability Management' (ESM) software is used for CSR management by different companies, considering the following research questions:

How do employees understand and attribute meaning to CSR when working with WeSustain's ESM software and how does this influence the internal communication between employees?

In addressing the research questions, insights are gained into the influence of software-based management tools on CSR management, which may be helpful regarding the overarching nature of CSR, the need for co-production of knowledge and the active involvement of employees (Wagner et al., 2017).

2. Theoretical framework

2.1. Conceptual framework of CSR

Various definitions of the term Corporate Social Responsibility (CSR) are used in science and practice (Carroll, 2016). Although there is no uniform definition, there is agreement that CSR stands for socially and ecologically responsible action by companies that is aligned with the principle of sustainable and future-oriented economic activity (Neves & Bento, 2005). In his book 'Social Responsibilities of the Businessman', Bowen, who is regarded as a founder of the idea of CSR, defined it as "obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society" (1953: 6). From a corporate perspective, a holistic and dynamic understanding of CSR is central, which includes three aspects of corporate action: the economic, ecological and social dimensions (Schneider & Schmidpeter, 2012). The division into dimensions can be found in the 'triple bottom line' approach coined by Elkington (2004), following the idea that sustainable development can only be achieved through the equal and simultaneous realisation of environmental, economic and social goals.

Carroll (1979), on the other hand, conceptualises CSR in terms of four categories of social responsibility - economic, legal, ethical and discretionary - which build on each other, as represented by a pyramid model. Carroll (1979) emphasises that his model is not a static snapshot of responsibilities, but rather a dynamic, adaptive framework whose content focuses on both the present and the future. The division into dimensions of corporate action as well as the conceptualisation of responsibilities provide a basis for describing, characterising and framing the aspects of corporate responsibility towards society in more detail (Carroll, 2016).

Simultaneously, in the course of continuous changes and increasing complexity of economy and society, it becomes understandable why definitions and concepts are continuously developing and newly created in the context of CSR (Dahlsrud, 2008). Carroll (2016) points to four strong drivers in this regard: the globalisation, institutionalisation, reconciliation with profitability, and academic proliferation. Carroll notes that one consequence of this, as numerous studies have also shown, is that both the understanding and applicability of CSR are characterised by wide

variations depending on the spatial, situational and organisational context. It is precisely the range of definitions and uses that makes it relevant in the context of this thesis to examine how CSR is understood in the context of working with software.

2.1.1. Stakeholder approach

Understood as a holistic corporate concept that integrates all sustainability dimensions, CSR encompasses the diversity of relationships between business and society (Christensen et al., 2013). In this thesis, CSR is closely linked to the consideration of employees as stakeholders, i.e., all persons or groups who are affected by the actions of the company or who can influence its activities (Freeman et al., 2006). The development of strategy approaches can be traced back to Freeman's stakeholder theory (1984), which deals with organisational management and business ethics such as morals and values in running an organisation. Building on this foundation, integrated approaches have been developed over the years to incorporate and address stakeholder views and concerns, e.g., on various environmental, social, corporate governance and economic issues, in the company's strategic decision-making processes (Andriof et al., 2017). This suggests that the strategic CSR approach influences the types and forms of stakeholder engagement to which employees belong (ibid.). According to Wagner et al. (2014), the multitude of social and environmental challenges that companies face requires an increased focus on the issue of responsibility and the role to be assigned to employees and their engagement.

2.2. CSR as a communicative construction

Following Schaltegger et al., CSR can be understood as an *"*ever-changing and dynamic corporate response to different societal challenges and information needs and the expectations of various stakeholders" (2007: 166). In viewing the employee relationship as interactive, mutually engaging and responsive, Schoeneborn et al. put the focus on communication as having a "constitutive role in creating, maintaining, and transforming CSR practices" (2019: 5). Consequently, communicative processes shape the meanings that are attributed to practices or that produce these practices in the first place (ibid.). Golob et al. justify their constitutive approach to CSR primarily by stating that "how one talks about CSR influences how CSR is practiced or that talking about CSR is actually CSR acting" (2013: 179).

Based on this, companies can be seen both as practical users of CSR and as those who construct CSR by developing strategies and defining their own approaches, boundaries and understandings (Schoeneborn et al., 2019). As already suggested within Berger and Luckmann's (1967) theory of social constructionism, social phenomena such as responsibility or sustainability can be understood as jointly constructed, based on shared meanings and agreed or accepted by most within society. In line with Berger & Luckmann, Knoblauch (2020) follows the idea of communicative constructionism, through which communication is recognised as an independent, embodied form of action. Through their communicative action, social actors thus "construct a material social reality that guides, limits and enables action" (ibid.: 13).

From this perspective, communication does not simply mean the transmission of interpretations or meaning, but rather, according to Weik (1995), represents a process in which reality is constituted and in which meaning is organised. This perspective, which Wagner et al. (2017) also adopt, brings forth another understanding of communication as a means of mutual understanding and shared negotiation of meaning.

This particularly applies for internal CSR communication, which is, according to Christensen & Cheney's (2011) approach, understood as a constitutive process in this study. In this process, actors explore, construct, negotiate and modify what it means to be a responsible organization. Taking the communicative constructionist viewpoint, CSR builds a field around certain issues that, according to Hoffman, "become important to the interests and goals of a particular collective of organisations" (1999: 352). This social construction of interests, meanings and goals, realised in interactions in CSR management when working with the software, is analysed within the framework of social representations theory, which will be presented below.

2.2.1. Social representation theory

The "webs of interrelated meanings" (Buijs, 2009: 74) that people attach to a subject, here CSR, are simultaneously socially and individually conceptualised. A central concern of social representations researchers is to investigate which specific systems of meaning exist in groups or societies, i.e., "how people perceive, think about, imagine and explain socially relevant phenomena, objects, and events" (Wagner, 1996: 248). Moscovici (1984) explains this in terms of two processes. First, 'anchoring' means relating new, unknown ideas to ordinary categories and placing them in a familiar context, e.g., by naming or classifying them. Second, the mechanism of 'objectification' turns an abstract idea into something almost concrete, e.g., by identifying or constructing representative facets for a new-concept or idea (ibid.).

As Moscovici stated, social representations are shaped through action and communication in society and thus constitute "a specific way of understanding and communicating what we already know" (1984: 17). The constitution of corporate responsibility is thus more than just a representation of reality, as it functions as a "system of interpretation" (Abric, 1994: 253) that regulates the relations between individuals and their physical and social environment. In their function as a guide for action, representations determine both behaviour and practice. Building on a "system of values, ideas, beliefs, and practices" (Sammut & Howarth, 2014: 1800), the specific approach to corporate responsibility can serve to guide individuals in their interactions. Following on from this, Jaspal & Breakwell (2014) point to the functional role of representations, as they are linked to communication and argumentation. From a functionalist perspective, they also contribute to group identity and establish shared patterns of interpretation (ibid.).

Nevertheless, complex issues such as the responsibility dimensions and the social and environmental consequences of corporate actions pose a challenge for the understanding and comprehensibility of the company's stakeholders (Heinrich & Schmidpeter, 2013). Following Wagner et al. (2017), the question becomes central how the abstract and conceptual can be made comprehensible and meaningful to employees. With the social representation approach as a basis, this question is particularly relevant for the subject of my study in order to investigate how companies deal with CSR issues and current challenges, how practices are inspired and meaning is attributed.

2.3. Business practice of CSR

Stöhr & Michel (2015) outline that companies can realise CSR in a variety of ways, for example, through social engagement, cooperation with non-profit organisations or setting climate targets. They describe related activities as taking place at different levels: in the company, along the value chain, at the company location or in the market. Companies are also supported by institutions and politics with various instruments, such as standards and labels (ibid.).

As a "business case" (Carroll & Shabana, 2010: 85), CSR was quickly adopted as a beneficial practice for both companies and society. Developing from a rather specific idea into a widely accepted and relevant business practice, CSR, as Lee (2008) points out, is increasingly becoming a central part of corporate strategy. Consequently, CSR is not only perceived as a business opportunity, but also becomes a reflection on stakeholder expectations to be considered (Freeman et al., 2006). From this perspective, Closon et al. (2015) note that business success, competitiveness and sustainability are interlinked. This study adopts Closon's perspective on CSR, according to which it is considered as an element of corporate

strategy that involves more or less all areas of the company and is not addressed as a stand-alone issue. In view of the involvement of stakeholders such as employees, internal communication within the company becomes important, as described below.

2.3.1. Internal communication on CSR

According to Huck-Sandhu (2016), internal communication is central to the integration of CSR as a cross-cutting issue in corporate practice and strategy, which is why it is an important concept in this study. Therefore, CSR communication can be assigned tasks that enable innovative methods of knowledge transfer and the joint development of solutions with employees as central actors (Wagner et al., 2017). Against this background, internal communication is regarded as essential for the interaction between employees, with the aim of improving organisational processes, generating knowledge and making information transparent (ibid.). In this context, Huck-Sandhu (2016) also refers to organisational goals such as motivation and identification which are promoted.

In order to facilitate work processes between employees with different backgrounds, interests and intentions, Morsing & Schultz propose an integrated form of CSR communication, which aims to "bring about mutual understanding" (2006: 328). Morsing & Schultz describe that this mutual understanding is made possible by communicating individual intentions in an understandable way, acknowledging differences between employees and promoting collaboration in an interactive way.

Given the continuous changes shaping companies and society and the increasing complexity of their CSR challenges, the question of how stakeholders such as employees be appropriately considered and involved is becoming more and more urgent (Gupta et al., 2020). Gupta et al. establish requirements for internal communication on CSR that focus on transparency of information and comprehensibility of actions and decisions. In this context, reference is made to the findings of Bowman et al. (2019), according to which forms of collaboration in companies have been fundamentally restructured within the scope of digitalisation and are increasingly characterised by decentralised structures and flat hierarchies, which will be explained in more detail in regard to CSR management tools.

2.3.2. CSR management tools

Following Stöhr & Michel (2015), central tasks of CSR management include planning, controlling and monitoring the impact of the company and its activities as a basis for transparent communication with stakeholders of the company. This

requires comprehensive data collection and evaluation, which, as Adelsberger et al. (2009) examine in their study, is increasingly carried out with the help of digital technologies. This can be justified by the fact that CSR requires comprehensive data collection and evaluation, which is increasingly carried out with the help of management tools. Given the large number of company locations and their diverse fields of activity, collaborative tools that can be accessed regardless of time and place (ibid.).

These management tools include software, which, as in other organisational areas, is also increasingly used in CSR management to increase efficiency and effectiveness in addressing CSR issues (Rost & Wille, 2017). This includes the organisation of internal processes around CSR, in that, as Rost and Wille point out, tools make it possible to distribute responsibilities transparently and plan measures together. In general, software enable complex data to be collected, viewed, analysed and used effectively (Spangler et al., 2014). This is particularly relevant for many companies in terms of preparing for CSR reporting, as standards such as the Global Reporting Initiative (GRI) or the Carbon Disclosure Project (CDP) place high demands on the availability and preparation of complex internal information (Du et al., 2010).

In this thesis, the focus is set on the ESM software from the company WeSustain. In corporate practice, WeSustain represents many companies from different sectors where the software application has been established in CSR management and their areas of responsibility for many years. More specifically, companies use the ESM software to plan and manage CSR in a modular and decentralised way and to implement it systematically (WeSustain, 2021). A key application area includes data collection and analysis as a basis for CSR reporting. Through a web-based platform, different company areas and locations are integrated, allowing CSR activities and processes to be controlled on the basis of collaborative structures. For this purpose, the users of the software have a common basis for use, which is made up of different modules, e.g., ‘Standards & Key Performance Indicators (KPIs)’, ‘Data Management’ or ‘Goals & Actions’ (ibid.). In these and other areas, work processes can be controlled, for example, by assigning roles and responsibilities to users. In addition, data evaluations and analyses can be prepared, such as through graphical representations, diagrams or reports.

In this thesis, CSR management tools such as the ESM software are understood as means for information and communication. This can be explained in terms of the joint management of organisational knowledge and know-how, for example, by documenting knowledge, which is up-to-date and easily accessible (Wagner et al., 2017). By providing transparency on activities and responsibilities in the company, Rost & Wille (2017) indicate that employees can get more involved, network across locations and exchange ideas.

3. Methodology

The following section on methodology explains how the study was designed and what steps were taken to achieve the objectives of the study. This includes the methods used to collect the empirical data and the tools used to select, process and analyse information on the research subject. Subsequently, the methodology of this work is critically reflected upon and discussed in terms of ethical considerations and credibility.

3.1 Case study design

The way to answer the research questions on which this study is based will be to apply the case study methodology. According to Merriam and Tisdell (2016), the case study methodology is usually conducive to investigating the how and why of contemporary phenomena and to addressing their meaning and understanding. A case can refer to many things, such as individuals or groups, organisations, activities or events that are "bounded or described within certain parameters, such as a specific place and time" (Creswell, 2014: 98). When examining contemporary phenomena, special attention is paid to context, especially when the "boundaries between phenomenon and context may not be clearly evident" (Yin, 2014: 16). The case study as a research design is often criticised for the fact that its approach makes it difficult to produce generalisable data (Flyvbjerg, 2006). This criticism is not necessarily decisive, as Yin argues, because the primary goal is rather analytical generalisation, to "expand and generalise theories" and no statistical generalisation to "extrapolate probabilities" (2014: 21).

3.1.1. Case selection

The research subject in this study is the application of a software solution for collaborative CSR management in companies. For this specific case, the 'Enterprise Sustainability Management' (ESM) software from the software development

company WeSustain, where I am employed as a working student, was selected. Prior knowledge and experience in dealing with the software, its logic and processes were considered advantageous in the research design. In addition, following Adams (2010), this facilitated the structuring of the complex field of study and the targeting of the research approach, e.g., by identifying and contacting the software users.

The ESM software from WeSustain is suitable for this study because, on the one hand, its application creates opportunities to manage corporate activities in the context of CSR in a decentralised manner (WeSustain, 2021). On the other hand, the application of the ESM software represents the digital transformation in the working world, through which software-based collaboration and its constitutive and instrumental functions can be examined. More information about WeSustain and the ESM software is provided in Appendix 1.

3.2. Method

Semi-structured qualitative interviews were chosen as the method for data collection in order to gain a deeper insight into the processes of the people's understanding and attributing meaning to CSR through using the ESM software. According to interpretative research, interviews are suitable for dealing with the understanding of human interactions (Crotty, 1998; Merriam & Tisdell, 2016). The primary aim of this approach is to understand human experience and social interactions, i.e., "how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences" (Merriam & Tisdell, 2016: 6). The interpretative research approach is expanded by social constructionism in terms of the idea that "meanings are constructed by human beings as they engage with the world" (Crotty, 1998: 43). Accordingly, the research project will be conducted within an interpretative framework, using qualitative methods of data collection and analysis to capture different dimensions of the phenomenon under study.

3.2.1. Semi-structured interviews

Semi-structured interviews are often used to explore a particular phenomenon and the meaning people attach to it (Adams, 2010). This is in line with the basic idea of this research, according to which respondents have a subjective understanding of the field in which they work and therefore "construct valuable knowledge" (Flick, 2009: 156). Based on the research question and the theoretical framework, the questions were summarised in an interview guideline, which served as a basis in

each interview. This approach is thus suitable for answering the research questions posed in this study, following Kvale (1996), as they aim to obtain detailed descriptions of specific situations and aspects of the participants' social environment. Accordingly, four thematic areas were established: (a) scope of tasks, personal understanding of CSR and role of CSR in the company; (b) use of the software; (c) internal working structures and (d) collaboration and communication in the working community. A translation of the original interview guide into English can be found in Appendix 2.

The interview questions were formulated openly to allow for an informal dialogue and consequently to gain comprehensive insights into the research subject (Flick, 2009). This made it possible to respond to the individual answers of the participants and to ask interpretive questions in order to clarify and verify certain statements (Adams, 2010). Before the actual data collection began, the developed interview guide was tested for comprehensibility and effectiveness in two test interviews to ensure that the questions could be answered smoothly. All in all, the extensive preparation and reflection phase was important to identify and correct possible sources of error in the content of the guide and, as suggested by Maxwell (2013), to increase the overall reliability of the information and findings obtained.

To collect the primary data, a total of seven semi-structured interviews were conducted between February and March 2021. They were conducted via video call and lasted between 30 and 50 minutes. All interviews were recorded with the consent of the interviewee and transcribed verbatim. The interviews were initially conducted in German, as this is the mother tongue of both the researcher and the interviewees and translated into English for the subsequent analysis.

3.2.2. Alternative research design

The research question of this study could also be addressed with other qualitative research methods. One method that could have provided complementary data would have been questionnaires addressed to a large number of users of the ESM software within the respective companies. A questionnaire would be suitable to obtain first-hand data on the interaction processes in CSR management and possibly elicit patterns from a larger total number of users, for example, how CSR is understood in different parts of the company that do not emerge from the qualitative interviews. However, quantitative surveys are questionable in terms of the research intention, as qualitative interviews are rather aimed at collecting data on individuals' intentions regarding their actions or their perceptions of certain situations (Adams, 2010), which is more in line with the focus of this research.

The chosen method deemed to be the most suitable because it allows deeper insights into the perceptions, experiences and views of the interviewees, which makes it possible to identify connections to the research subject and also to

introduce new ideas and capture unexpected aspects (Borchardt & Göthlich, 2009). By considering individual facets of the case and comparing different perspectives, a "meaningful picture of the phenomenon under investigation" (Yin, 2014: 67) can be provided.

3.3. Actor and data selection

With regard to the chosen method of data collection, this part of the methodology provides an overview and explains the procedure for selecting the interviewees and the data.

3.3.1. Choice of interviewees

The interviewees were selected based on their experience and knowledge of the phenomenon to be investigated in relation to their function and experience in using the ESM software (Merriam & Tisdell, 2016). As there is no public directory listing the contact details of companies' CSR departments and employees, the interviewees were specifically identified and selected through contacts from my working practice and conversations with colleagues. In order to identify suitable participants, the suggestion of Marriam and Tisdell was followed, according to which criteria should be selected that "explicitly present the purpose of the study and help identify information-rich cases" (2016: 97). Accordingly, potential interviewees should (a) work in a department of a company that deals with work and projects in the field of CSR and sustainability and (b) have integrated the ESM software as an integral part of their work.

The interviewees work in multinational companies that differ in terms of size, including number of employees, turnover, geographical distribution and industry affiliation. The variation between the interviewees or the companies they work for allows to identify possible contextual factors that could be decisive for the CSR approach and the work with the ESM software. While five of the interview partners work at a company location in Germany, one of the companies is based in Austria and the other in Switzerland. The companies belong to different economic sectors, such as energy services, pharmaceutical wholesale, steel processing or consumer goods, among others. Overall, the average experience in software application was 4,5 years. The majority of respondents have been involved in CSR management for an average of about 6 years. Coordinating CSR management with the software is an integral part of each participant's job. More information on the interviewees, their areas of responsibility and the respective companies can be found in Appendix 3.

3.4. Data analysis

The interviews were transcribed verbatim, without taking into account pauses or emotional expressions, which could be meaningful for other analyses from, for example, a psychological point of view (Kvale, 1996). After the transcription, the interviews were read in their entirety in preparation for the data analysis. Subsequently, based on the theoretical framework, they were classified into themes and then into subcategories as described in the qualitative content analysis (Mayring, 2000; 2007). All data material is in German. In the part of the results and analysis, the quotations were translated into English. An overview of the original quotations is provided in Appendix 4.

In the data analysis, the focus is on the different understandings and perceptions of CSR when working with the ESM software. Accordingly, the data were not classified according to their frequency or in terms of the largest number of respondents. Following Crotty (1998), this can be explained by the interpretative focus of the study, according to which the phenomenon under investigation is to be represented and illustrated through the experiences and perspectives of software users from different companies. Thus, the intention is not to produce a result that can be generalised with regard to other management tools, but as suggested by Schögel & Tomcszak (2009), to provide a comprehensive description and analysis of the concrete situation and contexts in which understanding and attribution of meaning take place.

3.4.1. Qualitative content analysis

The data collected in the interviews were analysed by applying qualitative content analysis according to Mayring (2000, 2007). This evaluation method has the advantage that it is oriented towards the linguistic material and enables rule-based and theory-guided procedures, as described as follows (ibid., 2000).

The research question and its theoretical framework set the direction of the analysis, which focuses on the formation of categories by means of "coding" (Mayring, 2010: 13). In creating the categories, Gläser & Laudel's (2010) suggestion was followed by combining deductive and inductive procedures. Accordingly, categories were first deductively derived from theory by conducting a theoretical analysis of the research subject (Mayring, 2000). By coding the data material, the categories were adapted and new categories were also inductively generated.

In the first step of the content analysis, the interviews were worked through and text modules were identified that contained information on the corresponding categories. This was followed by paraphrasing, in which the text modules were rewritten in concise grammatical short forms limited only to the content, e.g.,

“findings call for greater engagement with issues " and "software triggers to look at the topics in more detail in terms of content". This is followed by generalisation, i.e., the paraphrases obtained in this way are formulated more generally at a predefined level of abstraction, e.g., "call by findings" and " trigger to consider topics in detail". In the last step, the reduction takes place. The generalised statements are thus broken down to the essentials and summarised by paraphrases scattered throughout the text to form new statements in the form of a complex system of categories, e.g., "stimulation by topics and insights".

Within this process, clear guidelines, as suggested by Mayring (2007), strengthen the interpretability and transferability of the results. According to Patton (2015), results of the interviews can be compared and comprehensible and reliable findings can be created, which in turn compares an interpretation of the results towards the research questions. Subsequently, the resulting relationships and structures can be operationalised with the help of the theoretical framework and analysed considering contextual factors (Mayring, 2007).

3.5. Ethical considerations

The following section specifically addresses ethical concerns that will be considered when conducting ths study. The aim of this section is to discuss the need for explicit guidelines during the research process in relation to the research subject and the role of the researcher.

3.5.1. Informed consent & voluntary participation

In line with Kvale (1996), the application of ethical standards in conducting the research first ensured that the participation of the interviewees was voluntary and that they gave their informed consent. In the first contact with the interviewees via email, they were explicitly informed about the purpose of the study and the anonymised use of the data. At the beginning of each interview, the intention of the study was again clarified in detail and the opportunity was given to ask questions or raise objections. In addition, consent was obtained for the recording of the interviews.

3.5.2. Confidentiality & use of data material

To ensure the confidentiality of their data, all participating stakeholders were anonymised (Patton, 2015). In addition, as Kvale (1996) points out, ethical

guidelines must be given special consideration in the collection and use of data material. Only the researcher could access and edit the interview recordings, transcripts and other documents. It was ensured that the recordings and transcripts were stored securely and that the recordings were deleted when they were no longer needed.

The question of whether WeSustain as a company name should be anonymised in the research was a key point of discussion regarding the sensitivity or confidentiality of data and information. It was unanimously decided between the author of the thesis and WeSustain's directors to call WeSustain by its name, while ensuring that no sensitive, personal data, such as that of the employees, is published. At the same time, interested readers will be able to obtain more background information on WeSustain through further research. These considerations underline the need to remain in a neutral position as an author and to be able to reflect critically on these concerns.

3.5.3. Researcher bias & credibility

As emphasised by Patton (2015), subjectivity of the researcher must be given special consideration throughout the research process. As the idea for this research project was originally developed on the basis of my own experience as a working student, some bias is possible. As a working student, I am involved in project management and support companies in the implementation of their CSR management within the framework of the software. According to this, not only the context of the material to be studied is considered, but also the context in which the researcher herself is situated (Whittemore et al., 2001). Under the conditions of research, this seems to be of particular importance, since I act in a kind of dual role, on the one hand as a working student and on the other hand as a researcher. This bond possibly leads to certain presuppositions and subjectivity (Crotty, 1998).

In particular, it is critical to discuss whether I subconsciously intended positive outcomes during my research because of my employment at WeSustain. This could be related to the fact that I am an employee and in that sense dependent on my employer, i.e., it may be that I subconsciously intend to promote WeSustain's software and secure its reputation. The critical attitude and transparent reflection in the research process contribute significantly to generating value-free and objective scientific results. In qualitative research, as Merriam & Tisdell (2016) explain, it is therefore necessary for the researcher to engage in a process of self-reflection on the research subject at the beginning and during the study. Accordingly, I continuously reflected on my own assumptions that might influence the research process and the interpretation of the results through diary entries and notes I made during and after the interviews.

At the same time, knowledge, experience and familiarity with the software solution and CSR management can be an advantage, as a certain prior knowledge and practical experience are available. These circumstances played a role in both the data collection and the evaluation, in that my prior knowledge was incorporated into the interview situation, its evaluation and interpretation. Meinefeld (2000) points out that it is not possible to enter a research field without prior assumptions and to form categories during the evaluation purely from the interviewee's point of view. Understanding prior knowledge as the "basis of all research" (ibid.: 272) simultaneously underlines the need to be open about certain assumptions or beliefs to others. Thus, as Whittemore et al. (2011) emphasise, credibility requires the researcher's ability to continuously reflect on their own actions, perceptions and interpretations in relation to the emerging knowledge.

4. Results & Analysis

In the following, the results of the study are presented, based on the categories identified by the qualitative content analysis. The results are presented in three parts following the structure of the interview guide and the theoretical framework. Accordingly, the description of the results creates a foundation for the discussion part of the research and provides foundation for answering the research questions.

4.1. CSR in practice and theory

The first part focuses on the interviewees' CSR understanding from a practical and theoretical perspective, covering the areas of responsibility, the personal understanding of CSR as well as from a corporate perspective.

4.1.1. Cross-cutting tasks in CSR management

In order to understand the implementation of CSR in the respective company and the scope of tasks of the interviewees, CSR is described as follows in terms of its cross-cutting tasks. When describing the areas of responsibility in which the respondents are involved, it can be noted that these generally encompass the CSR management of the respective company, although the focus varies slightly. All interviewees have in common that they are administrators of the ESM software and thus are responsible for general work processes as well as user administration. Accordingly, they have experience in using the software for their CSR management, which was also one of the selection criteria for taking part in the interviews.

The interviewees highlight that various social, ecological and economic aspects are addressed as part of their activities in the field of CSR. It becomes apparent that activities are not only realised in many ways, as listed by the interviewees, such as reporting, stakeholder communication, environmental or supply chain

management. In addition, they also take place at different contexts such as in the cultivation of a raw material, in the supply chain, on site in the company or in sales.

Basically, all interviewees share the impression that they are confronted with issues from different corporate sectors in their area of responsibility. This is particularly evident in the fact that they are engaged in overlapping projects and topics, such as technology and innovation, supply chain transparency, human rights, CO_2 and climate, nature and species conservation, mobility or human resources. One interviewee describes this impression as follows: "(...) it has a cross-sectional function where the threads come together, and we work with different departments to serve the relevant requirements" (Interviewee 1, Appendix 4: 1.1.). One interviewee calls for an integration of corporate divisions by emphasising the "administrative character" (Interviewee 4, Appendix 4: 1.2.) of his area of responsibility. Another interviewee uses the symbol of a "spider in the web" (Interviewee 2, Appendix 4: 1.3.), pointing to the networking of the corporate divisions on overarching issues. Based on the fact that CSR affects all areas of the company, it seems important to point out the necessary guidance for the successful implementation of projects.

The pattern that emerges clearly from the interviews is that issues of sustainable business require thinking across departmental and disciplinary boundaries. This is consistent with what practitioners and scholars emphasise when they talk about interdisciplinary approaches and the need for people from different disciplines to work together toward a common goal (Nordström et al., 2020). From the interviewee's perspective, CSR can be understood as a form of the guiding principle that requires efficient collaboration and internal communication between these areas, which can also be reinforced by Huck-Sandhu (2016). However, facilitating requirements and concerns in the CSR field raises the question of how CSR is actually understood and what significance it has for the interviewees and for the company.

4.1.2. Personal understanding of CSR

In elaborating their personal understanding of CSR, the interviewees point to different and partly overlapping definitions and concepts of CSR whose diversity and complexity is characteristic for CSR practice and sciences (Neves & Bento, 2005). At the same time, the interviewees state that CSR is anchored in the idea of sustainable and future-oriented business, which is also strongly indicated by referring to waste reduction, CO_2 reduction, use of clean energy, water conservation, use of sustainable materials, production of sustainable products and introduction of sustainable policies for business travel. In the context of their distinct understanding of the term, it is important to mention that the majority of

interviewees have an academic education or a professional career in the field of sustainability and business. It can therefore be assumed that, in addition to personal interests, academic or professional backgrounds also play a role in determining individual understanding of CSR. It should be noted that education or profession may lead to less personal, but more objective, reasoned understandings (Krickhahn, 2014).

According to the interviewees' statements on the scope of their tasks, it is apparent that they are involved in the process of change in the economic sector as part of their professional activities, for example by responding to new policies and guidelines, committing to new, environmentally friendly measures, or facilitating claims between climate protection and profitability of a company. In addition, it can be argued that the interviewees position and engage themselves as individuals in social discourse on CSR through "[achieving] something on the job and to be able to give back with initiated measures" (Interviewee 4, Appendix 4: 1.4.). Here, an interface between work requirements, i.e., the fulfilment of tasks, and personal interest and aspiration becomes apparent.

Moreover, through their engagement with projects and issues, the interviewees' understanding can be described as simultaneously changing and adapting to daily experiences. As one interviewee emphasises: "(...) of course it has an influence on how I understand CSR when I deal with such different topics and departments" (Interviewee 6, Appendix 4: 1.5.). This statement can be linked to the cross-cutting function of CSR, following Schoeneborn et al. (2019), that relates to how social or environmental issues are understood contextually and situationally and how they are addressed. As indicated by the interviewees, the comprehensive nature of CSR shows the need for a joint commitment and involvement of employees from different parts of the company to deal with such contexts and situations (Huck-Sandhu, 2016). In order to analyse these overarching functions of CSR in more detail, the question of how CSR is understood from a corporate perspective will be pursued.

4.1.3. CSR from a corporate perspective

From a corporate perspective, the interviewees describe that CSR reflects a cross-cutting character, as already mentioned in connection with their areas of responsibility. To be more precise, it is apparent that CSR topics and established goals are addressed across departments in order to ultimately be able to implement them throughout the company. The interviewees associate this with the fact that companies increasingly tend to think in the long term, for example through resource efficiency, attractiveness as an employer or image improvement. These given examples by the interviewees indicate that CSR can also open up new opportunities,

e.g., creating jobs, product innovations or resource savings. As can be seen from the interviews, CSR is of interest to companies in the form of economic potential and financial interests, which can be supported by Stöhr & Michel (2015), who describe these potentials and interests as essential and thoroughly positive drivers for the topic.

Following the interviewees' explanation, there is another decisive reason to address CSR strategically and make it a subject to the use of management tools. This is related to the fact that CSR is a "(...) field of tension which emerges between nature conservation, climate change and finances, in which decisions have to be well justified" (Interviewee 5, Appendix 4: 1.6.). In view of this diversity of interests and tensions between them, the interviewees emphasise a need for organised, inclusive structures to adequately address them, for example, through transparent information transfer, opportunities for communication and participation and regular meetings involving all stakeholders. At the same time, they suggest that CSR can not be reduced to a single discipline or task. They propose instead that its complex nature calls for, among others, holistic thinking, shared understanding and dynamic action in response to the challenges arising from societal discourse around sustainability.

In the course of this, the interviewees move away from a general or transferable concept of corporate responsibility, as each company is confronted with different challenges. In global consumer goods production, for example, human rights aspects in the supply chain may be the focus of the CSR work, while the local energy supply company primarily strives to establish more climate-friendly energy production. Similar to what May (2011) suggests, companies are thus dealing with questions about what issues are specifically important for the company and its divisions and what human rights or resource conservation actually mean in the corporate context.

These specific challenges introduced by the interviewees raise the question of how responsibility for the impact of corporate activities on the environment and society is dealt with in the corporate context. This question forms the transition to insights how CSR management takes place in the context of ESM software application. The following section reveals insights into the research concern of the role of ESM software as an accessible framework for the co-construction of CSR.

4.2. Use of the ESM software

The second part of the results and their analysis is about the application of the software. It is first illustrated what it is used for and what influence it has on the working structures in CSR management. Following on from this, it is shown how CSR is understood, shaped and implemented when working with the software.

4.2.1. Software as a tool for regulatory compliance

In their description of the field of application of the ESM software, all interviewees state that it is primarily used to consolidate data and thus as a basis for reporting on sustainability-related key figures that are important for measuring the sustainability performance of the respective companies. From this point of view, CSR concerns are inevitably linked to compliance in terms of legal requirements and CSR reporting obligations, to "be able to provide information on key figures and trends" (Interviewee 5, Appendix 4: 2.1.) and to "ensure that the values are represented and checked for accuracy" (Interviewee 1, Appendix 4: 2.2.). In this respect, the interviewees describe the need for a supporting function such as that provided by the ESM software. This enables them and their colleagues to report on efforts, measures and progress in economic, environmental and social dimensions using clearly defined criteria and indicators.

In addition to compliance, the use of ESM software for respondents is also related to the fact that it is relevant for companies to maintain legitimacy and build trust with their stakeholders, such as business partners, suppliers, non-governmental organisations or consumers. According to the interviewees, companies are starting to rethink and set processes in motion by, for example, committing to international climate protection and communicating their activities and goals. Through their commitment to annual reporting, the interviewees emphasise the close connection of CSR with societal expectations, binding norms and routines, which Wehmeier & Röttger (2011) already pointed out. In light of the "societal challenges (...) and expectations of various stakeholders" (Schaltegger et al., 2007: 166), the insights from the interviews reveal that strategic tools such as the software are used in a targeted manner, to understand expectations, grasp challenges, develop and implement CSR plans. How the targeted use of the ESM software affects the work in CSR management is explained in more detail in the next section.

4.2.2. Influence of the software on CSR management work

When explaining how they use the ESM software, the interviewees share the feeling that it is an effective tool for CSR management. They put this feeling in the context of internal working structures, as the software makes it possible to "coordinate processes, [to] collect the data more precisely" (Interviewee 1, Appendix 4: 2.3.) and also to "[shorten] paths from the source to processing" (Interviewee 6, Appendix 4: 2.4.). As the interviewee adds, these working structures consequently lead to "internal validation and confirmation [of data] becoming more systematic and structured" (Interviewee 6, Appendix 4: 2.5.). On the one hand, the interviewees' experience with the ESM software indicates that they generally consider the application to be effective in clarifying what needs to be done to address issues such as climate protection, resource conservation or human rights. At the same time, the application is described as efficient, for example regarding the involvement of certain people from certain areas of the company in order to cope with certain tasks and use time resources sensibly.

In their description of the resulting opportunities for collaboration, the interviewees point out that the logic of the ESM software as a technical framework and its predefined structures for the interaction of employees should be considered more closely. Generally, the software is understood as an instrument to support sustainable business practices by making information on social or ecological issues transparent in the form of indicators. As a result, it is possible to "record and map the processes happening in the first place" (Interviewee 2, Appendix 4: 2.6.) or, through "information gained (...) [to] open up insights into complicated social interrelationships that we would otherwise not understand at all" (Interviewee 6, Appendix 4: 2.7.). This understanding of interrelationships is created across departments by, for example, uniformly preparing key figures on CO_2 emissions according to standards such as the Greenhouse Gas Protocol and their calculations. The interviewees describe the use of standards that define social and environmental practices to be helpful and guiding. In addition, as already mentioned in connection with the software as a tool for regulatory compliance, the interviewees consider complying with guidelines to be a predefining factor for work processes in CSR management.

With a view to practical application and strategic orientation in the context of the ESM software, CSR can be understood as jointly constructed as demonstrated in the following. As the interviewees outline, CSR takes certain forms and representations, is drawn out in "common structures (...) that provide the framework for decisions" (Interviewee 3, Appendix 4: 2.8.) by creating a notion of abstract sustainability challenges. In line with the social representation theory, an essential process to understand this joint construction is ‘objectification’ (Jodelet, 2008; Höijer, 2011). As the interviewees state, this is exactly what is created with the help of the software, for example by "categorising and merging complex environmental

indicators on waste generation or water consumption (...) [and] modifying them into comprehensible figures, standards or guidelines" (Interviewee 1, Appendix 4: 2.9.). Accordingly, the data processed in the software forms the basis for aligning management processes by "capturing activities beyond verbal exchanges and mapping processes" (Interviewee 4, Appendix 4: 2.10.). Following the interviewee's explanation, applying the ESM software gives the ability to specify the abstract and materialise the complex, intangible corporate responsibility, by providing "the layout and form of the shape relative to the object of a representation" (Jodelet, 1986: 481). However, it emerges from the interviews, regarding the specific case of software as an instrument itself, that objectification can refer to more than, what Rateau et al. describe with "the way in which a new object, through communication about it, will be rapidly simplified, imaged, and diagrammed" (2011: 482). To understand in which ways the "figurative facet" (Banchs, 1984: 15) and logic of the software enable collaboration in CSR management, it is necessary to look at the processes of how the meaning of CSR is organised and shared, which will be done below.

4.2.3. Using software to understand, shape and implement CSR

The interviewees generally share the impression that working with the ESM software enables comprehensive, future-oriented CSR management. This management is thus described as comprehensive in terms of, for example, the comparison of data on CO_2 emissions between different sites or in a comparison in time of months or years. Another key feature that the interviewees attribute to the software is future orientation, according to which actions and decisions are based on current data on social or environmental factors. The quality and significance that the interviewees attribute to the data are particularly relevant when discussing measures and activities, as social and ecological aspects are increasingly being incorporated into corporate decision-making processes.

Consequently, the software, as a tool for data consolidation and analysis, becomes a "(...) safe, controlled source [and] fact-based and suitable for communication" (Interviewee 2, Appendix 4: 2.11.). In order to plan measures and align activities in the context of CSR, the interviewees stress that the software helps them to orientate themselves, in their daily tasks, if they coordinate the data collection and, moreover, by setting long-term goals such as achieving climate neutrality. In relation to the guiding function, reference can be made to Moscovici, according to whom a social representation is "a particular form of knowledge whose function is the elaboration of behaviour and communication between individuals" (1979: 17). This particular form of knowledge, which enable the interviewees and

their colleagues to analyse and evaluate the data in a certain way and used as a basis for decisions in CSR management, is investigated in more detail below.

One of the main goals of the analysis and evaluation of consolidated data, according to the interviewees, is to create tangible, concrete goals and measures in relation to social and environmental issues. As one interviewee mention, goals and measures in CSR management require an "evaluation of the activities or strategic control" (Interviewee 4, Appendix: 2.12) of the data. This is where the process of grasping and engaging with new topics related to CSR and integrating these in existing knowledge becomes relevant, which is referred to as 'anchoring' in social representations theory (Rateau et al., 2011). While objectification refers to the structure and material that makes corporate responsibility tangible in the first place, anchoring is linked to the functionality of the software (ibid.). This functionality, on the interviewees' account, is crucial to attribute meaning to the data by processing it into standards and disclosing it to meet requirements of CSR guidelines. In addition, several interviewees suggest that the ESM software serves as a knowledge platform by accumulating knowledge that is useful for addressing problems and developing new perspectives on economic activities. Above all, knowledge utilisation is relevant for dealing with unfamiliar situations that arise, for example, from the new Due Diligence Act, rising CO_2 prices, required environmental regulations or the demand for sustainability-relevant certifications.

The results presented above indicate the potential to establish common ground for understanding, shaping and implementing corporate responsibility in the context of using the ESM software. This is reflected in the statement of one interviewee in which the ability "to provide information [as] a shared base to hold on or to use it as a starting point for actions and decisions" (Interviewee 2, Appendix 4: 2.13.) is attributed to the software. Here, the "symbolic character of anchoring" (Banch, 1984: 15) plays an important role as it facilitates an understanding and identification of new CSR issues based on shared sustainability indicators, metrics and reporting formats.

In this context, several interviewees consider the ESM software as a means to improve internal communication on CSR by involving their colleagues in CSR management, e.g., by collecting data and implementing measures such as introducing questionnaires on participation in supply chain due diligence. Accordingly, one interviewee also emphasises: "in order to be able to work on cross-departmental issues such as supply chain management, everyone has to be brought on board, provided with the information basis so that a common line is followed" (Interviewee 5, Appendix 4: 2.14.). Although it seems possible to create a common information and definition basis, several interviewees report that colleagues differ significantly in terms of their professional background, knowledge and interests. This complicates, for example, to assess data collection, implement measures or hold joint discussions on sustainability issues. These individual

preconditions need therefore to be taken into account in internal communication on CSR.

From their experiences with the use of the ESM software, the impression of the interviewees stands out, according to which the users of the software are involved in the development and organisation of CSR in an uneven way. This is primarily justified by the fact that involvement is determined by clear structures and procedures in the software, e.g., through work processes, role allocation or assignment of certain responsibilities. Accordingly, special attention will be paid to the structures of collaboration within the software use, which is why the following section will first take a closer look at the users.

4.3. Collaboration with the ESM software

In the third part of the results and their analysis, the focus is on the collaboration with the ESM software, in particular the users and their preconditions as well as the individual involvement in CSR management.

4.3.1. Users of the software and their preconditions

In this section, the results of the research are presented, which reveal more detailed information about the users of the ESM software. This is considered important to elicit how their interactions affect the co-construction of CSR when working with the software. First, it should be taken into account that, according to the interviewees, only a small proportion of the employees of the respective companies work directly with the software. At the same time, the proportion of employees who deal with CSR topics in their daily work is significantly larger, as topics become more present, e.g., through company-wide climate protection measures or emerging challenges in supply chain management through the new Due Diligence Act.

From a technical perspective, the interviewees differentiate users primarily by their different roles, usage rights and access rights. In addition, the interviewees emphasise that users differ in their knowledge and understanding of CSR issues. The example is given that the user in his role as ‘data collector’ may feel it is only relevant to collect data while for another user, in his role as ‘manager’, evaluating and interpreting data is a priority. It is predominantly shown that, for example, the 'data collector' tends to have less knowledge of CSR, while the manager has specialist knowledge of sustainability issues. In this regard, one need to consider that the role that users take on in the software system is closely linked to their position and function in the working organisation. Therefore, the individual role,

here ‘data collector’ or ‘manager’ among many others in the software can be understood as an expectation in relation to task and function, because "to-do's can be communicated so much more transparently and often more clearly" (Interviewee 6, 3.1.) or "it's actually clear to colleagues what's coming up next" (Interviewee 3, 3.2.). Moreover, with the role assigned to the individual in the software structures, a specific view of the situation is also taken, as one interviewee describes: "While one only sees the numbers, for the other these show complex connections in the environmental field" (Interviewee 2, Appendix 4: 3.3.).

The interviewees point to individual backgrounds, interests, and values as crucial when it comes to understanding and attributing meaning to CSR issues, which can also be confirmed by literature such as by Wagner et al. (2017). The interviewees note that the majority of users have no technical background and rather little knowledge about CSR topics and the standards used. In addition, some users generally find it difficult to deal with the technical functions of the software. In comparison, there are rather few users who have in-depth knowledge of CSR topics, standards and guidelines, and who also have distinct skills to work constructively with the data collected. The interviewees add that those often hold a leading position at the same time and are familiar with the software through frequent use. Thus, when it comes to dealing constructively with the collected data and interpreting them within existing systems of meaning and rules, the users are characterised by different preconditions. Nevertheless, the interviewees point to the potential of their work with ESM software to possibly overcome practices associated with individual work position and role that "literally put people (…) in place, and they give or deny people the power to do things and to think of themselves in certain ways" (Nicolini, 2012: 6). To this end, the following section analyses the role of internal communication between employees, whether and in what way respondents consider it possible for their colleagues to understand and make sense of CSR.

4.3.2. Individual involvement in the CSR management

Following the presentation of the software users and their role in the work processes, this section addresses the way in which employees, both users and non-users, are involved in the company's CSR approach. First of all, in relation to the users of the software, the interviewees point out that the implementation of the software generally puts more focus on individual work performance compared to how it was done through previous work structures. Some interviewees perceived their work in CSR management before the implementation of the ESM software as rather unstructured and sometimes challenging to organise, e.g., working with different computer programs, calculating differently, and lacking transparency of information. Therefore, positive effects on individual work performance are

attributed to the use of the ESM software, as individuals can participate in shaping the common CSR platform and, for example, calculation bases are easier to understand and information is transparent.

In this context, some interviewees suggest that the use of the ESM software also has positive impacts on their colleagues' willingness to deal with CSR issues. This starts with "[having] someone look at the data and come back to it when talking about the sustainability performance of a particular area" (Interviewee 4, Appendix 4: 3.4.) A few interviewees highlight that even emergent conversations, for example about specific measurements such as on water consumption or surveys on the number of training sessions for employees within a department, may get employees more engaged because they are involved in measurements or surveys as part of their job. Within the software system, assigning roles to colleagues, transparently distributing tasks, and defining responsibilities is essential to fostering participation. While the ESM software enables people to engage with the issues raised, develop interest and help shape the company's approach to CSR, it should be noted that relatively few employees are involved in using the software.

Although, according to the interviewees, the majority of employees are not directly involved in the use of the ESM software, they nevertheless play a central role in realising the CSR approach. The reason for this, as several interviewees point out, is that their colleagues are relevant in order to implement CSR measures and goals. More precisely, their colleagues are the ones "who have to take into account new requirements in their daily work" (Interviewee 1, Appendix 4: 3.5.). At the same time, top-down guidelines and requirements do not easily lead to the desired implementation in view of the diverse sustainability challenges in the employees' areas of responsibility, but also with regard to the different interests and concerns. Task-related demands that are made without consultation and that involve more work, such as filling out a due diligence questionnaire, may be rejected "if it is simply dictated what to do (...) without addressing concerns and not adequately preparing colleagues" (Interviewee 2, Appendix 4: 3.6.). For this reason, the interviewees share from their experience as co-responsible for the CSR management of the company that employees and their differences in terms of concerns, knowledge, skills and responsibilities should be adequately considered in the introduction of CSR.

In this respect, by using the ESM software in CSR management, the interviewees identify some opportunities to stimulate attitudinal and behavioural responses among employees. They report on various initiatives, such as newsletters, articles on the intranet or short presentations, to raise awareness of sustainability concerns among their colleagues and motivate them to get involved in environmental or social issues and projects. As a concrete example, one interviewee reports that he or she regularly summarises an overview of the main results of the data analysis in tables or graphs, including an annual data history or the comparison of performance between individual divisions. Some interviewees generally find it challenging to

motivate their colleagues to deal with the company's sustainability issues in addition to their work commitments, fixed working hours and usual routines.

However, opportunities to stimulate attitudinal and behavioural responses among employees is justified by the instrumental function of the software, which, according to one interviewee, enables "everyone to find themselves in what is being communicated" (Interviewee 2, Appendix 4: 3.7.). The ESM software can be used to promote understanding among those not directly involved in the discussion between experts by creating associations, metaphors and images. This is explained by the fact that "abstract ideas and goals such as CO_2 neutrality become tangible for colleagues [when] (...) CO_2 facts are visualized, related to specific areas and compared" (Interviewee 5, Appendix 4: 3.8.) or as Bauer & Gaskell (1999) already note, by transforming the abstract into something concrete. This is where the potential of ESM software is opened up, according to which its use not only makes it possible to give meaning to complex data, but also to enable employees to understand complex issues in a situational and contextual way. This potential will be further addressed in the next chapter by discussing the results.

5. Discussion

In this section, the findings of my study will be discussed and interpreted in light of the literature. By answering my research questions, the discussion serves to draw conclusions and to support the implications of the findings. Furthermore, I will explain possible limitations of this study and provide recommendations for further research.

5.1. Instrumental and constitutive functions of CSR

In order to answer the question of how employees understand and ascribe meaning to CSR when working with the ESM software and how this influences the internal communication between employees, it is relevant to look at the interactions in the context of the software use. In the following, I will take a closer look at the instrumental and constitutive functions underlying communication, according to which corporate social, environmental and economic responsibility is indicated, organised and shaped (Schoeneborn & Trittin, 2013).

Using the theory of social representations, it was shown that the instrumental use of the software has a significant impact on how companies specify and materialise complex, intangible corporate responsibility. Furthermore, the use implies how meaning is attributed through the processing of data in standards and how practices for reporting and compliance are stimulated. The mechanisms of objectification and anchoring, according to which "the unfamiliar is made familiar" (Moscovici, 1984: 24) and "relations between social actors [are regulated]" (Jodelet, 1986: 84), can be applied to the use of software today. As a management tool, it “enables the understanding and interpretation of the social environment” (Rateau et al., 2011: 479), namely by providing an entry point to respond to societal expectations and policy decisions, understand challenges and develop CSR plans. In addition to measuring e.g., ecological aspects in the form of environmental KPIs, it is a central concern to reformulate these issues and challenges into goals and measures that guide and regulate employees’ interactions in CSR management.

The software-generated approach to corporate responsibility is closely linked to planning, controlling and steering activities, which are considered important to align a company's processes with its strategic CSR goals. The strategic approach in the context of ESM software is related to proactively integrating socio-ecological concerns of society into the business model of companies and being successful in the long run. As Meyer & Waßmann (2011) already underline, using management tools such as the ESM software is particularly about training employees in terms of content and methodology and giving them the means with which they can implement CSR in their area of responsibility.

In the way CSR is considered constitutive in the results of this study, it is not only about acting according to rules and fulfilling guidelines, but also about symbolic aspirations or visions of a future state when users of the ESM software, for example, evaluate data collected on working conditions fair payment in the supply chain, and develop human rights due diligence plans and measures. In this context, embodied meanings and symbolic aspects, e.g., in the form of common codes of conduct, certifications or calculations, are central because, as Walmsley (2004) already pointed out, they promote abstract thinking. While the existing embodied meanings and symbolic aspects in the context of software use are, on the one hand, representations of CSR, they also produce ideas about it (ibid.). In this respect, according to Knoblauch (2020), they are constitutive for the recognition of shared reality, i.e., that employees share a common approach to CSR and its further development using the software.

From Christensen & Cheney's constitutive perspective (2011), CSR can even be described as a form of action through which practice itself is communicated. Accordingly, areas of responsibility and projects, such as a company's climate protection, can be understood as constructs that arise from and simultaneously consist of interactions, such as the discussion on CO_2 reduction measures based on data analyses and evaluations. For this reason, the instrumental perspective needs to be extended to understand the interactions in which employees explore, construct, and negotiate how, e.g., compliance with climate protection or human rights can be promoted in their own areas of responsibility. To understand the reciprocal processes of CSR communication and practice (Schoeneborn & Trittin, 2013), it is worth considering how employees co-construct the CSR approach in their work with the ESM software.

5.2. From the representation to practical application of CSR

Considering the CSR approach as co-constructed, the ESM software can be seen as a means for information and communication, which will be explained in this

section. As implied in consideration of the instrumental and constitutive functions, the means that the ESM software opens up for the employees of the respective companies function as an information resource. More specifically, they make the consequences of corporate actions on the environment and society transparent in numbers, units or figures (Gupta et al., 2014). They can also be seen as communication tools that facilitate dialogue on CSR, guide discussions on actions between employees and decision-making in CSR management. Taking into account these means and their embedding in organisational structures, CSR is considered formalised, as already indicated by Christensen et al. (2013) with the entanglement in policies and the anchoring in procedures. Established processes such as regular data collection and reporting also formalise the responsibilities of the employees themselves, e.g., by assigning roles and functions with which to direct their behaviour towards achieving organisational goals. This shows that the means provided by the software and embedded in the organisational structures "become important for the interests and goals of a particular collective of organisations" (Hoffman, 1999: 352).

Using the ESM software creates an accessible framework that is supportive and guiding for interactions in CSR management. The technical framework of the software and its predefined structures provide a basis for the practical use of the objects of representations (Höijer, 2011). Accordingly, the representative facets turn CSR into something concrete and tangible when using the ESM software, as has been demonstrated with the mechanism of objectification (Rateau et al., 2011). Furthermore, if CSR is presented in a clear and structured way in the layout and form of calculations, illustrations, diagrams or reports in the ESM software, it mirrors the instrumental function of CSR communication. Providing information that is accessible and can be used as a guide facilitates communication between employees on CSR issues so that they can jointly develop measures or create projects.

At the same time, the flexible, decentralised use of software and its non-physical components means that CSR is not tied to a specific area, location or area of responsibility. The way in which Morsing & Schultz relate to CSR as a kind of "moving target" (2006: 323) is reflected in the decentralised information management on CSR, in which employees increasingly collect and evaluate data themselves and implement measures. Simultaneously, the dynamic development of CSR, with regard to the new Due Diligence Act, requires organised, inclusive structures so that employees from different areas affected by it can work together and carry out monitoring along supply chains.

The flexible use is an essential purpose of the software, placing CSR in a familiar context, an employee's workspace or the company's production facility and thus engaging employees in knowledge management. The functionality is also important for attributing meaning to data by processing and disclosing it in standards, e.g., to meet the requirements of CSR guidelines. The given structures and representative

aspects are thus linked to common patterns of interpretation, as Jaspal & Breakwell (2014) demonstrate with the functional role of representations. A key role in capturing and presenting CSR, from the data collection to evaluation, is given by measurability, comparability and consistency, which is accompanied by the idea of strategic CSR management (Stöhr & Michel, 2015). These qualities are placed in a context of CSR as a field of tension between interests, intentions and opinions, as actions, measures and decisions can be justified in this way.

In addition to objectification, the functioning provided by the ESM software thus contributes to the “elaboration of behaviour and communication between individuals" (Moscovici, 1979: 17), resulting in specific and reasoned CSR approaches to requirements, such as in the context of new laws. As can be seen from the practice of the companies and the diversity of their projects and topics, CSR relies on the co-production of solution-oriented and transferable knowledge (Norström et al., 2020). Accordingly, the complexity in social, ecological and economic relationships is approached gradually by categorising data as metrics and modifying them into numbers, standards and guidelines, which is argued to be fact-based, certain and comprehensible.

However, while the "webs of interrelated meanings" (Buijs, 2009: 74) inherent in co-construction facilitate the understanding and identification of CSR issues, CSR practices based on ESM software use are not equally comprehensible and meaningful to all employees. The consequences of this for interactions in CSR management are outlined below.

5.3. Involving employees through internal communication on CSR

In order to discuss what implications the varying perspectives of employees on CSR have for internal communication, their different positions and responsibilities should first be considered. This study argues that processes in CSR management are shaped by roles and functions that individuals have when using ESM software. Therefore, engaging in a role in the existing work structure influences the possibilities of being able to understand the context of CSR in one's own work area and to consider CSR activities as meaningful (Nicolini, 2012). This could be concluded from the interviewees' broad understanding and personal relationship with CSR, which allows them to situate their role in the complexity of CSR processes. This suggests that the way someone relates to CSR issues or finds the activities meaningful may be related to one's area of responsibility, e.g., whether someone is solely responsible for data collection or acts as a manager and thus has more responsibility or the necessary background knowledge for this position. However, to be able to make more comprehensive conclusions about this, further

perspectives of the employees should be taken into account, in addition to those of the interviewees, which has already been pointed out in the alternative research methods (section 3.3.2.) under methodology.

As the experience of working with the ESM software has shown, it is important for the interviewees in their administrative role of CSR management to involve employees in the CSR process through the information and communication tools provided by the ESM software. According to this, communication measures through the publication of short reports, newsletters or blog entries on current topics are recognised as useful in order to initially promote the information transfer and transparency on CSR within the company. In doing so, it is important for them to familiarise their colleagues not only with the content, as Meyer & Waßmann (2011) suggest, but also with the means by which they can implement CSR in their area of responsibility.

In this context, the interviewees differentiate between the orientation framework for actions and decisions on the one hand and the contextual and situational meaning of CSR on the other. While working with the ESM software facilitates CSR management, it is not necessarily sufficient to make any insights into the company's sustainability issues meaningful for the individual. Given the different preconditions of users and employees and their different professional backgrounds, positions, knowledge or interests, it needs to be questioned whether providing the means through the ESM software is sufficient to involve employees in a joint process of shaping and organising CSR. In the same way that engagement through CSR communication practices is considered important, constitutive processes become relevant when working with ESM software to make CSR issues accessible, understandable and meaningful (Schoeneborn & Trittin, 2013). In other words, the interactions between CSR managers and employees thus become tasks through which the content of the CSR approach should be translated (ibid.). This provides incentives for further research regarding the possibilities of internal CSR communication between employees resulting from the use of ESM software to deal with CSR issues.

Insights into the use of ESM software are an essential contribution to viewing digital technologies such as management tools as dynamic and socially constructed rather than purely technical challenges to understanding and addressing CSR. It is important to note that this case study research provides useful but limited insights into the instrumental and constitutive approaches to CSR. At the same time, it provides incentives to conduct further research on the use of CSR management tools in terms of their influence on current CSR knowledge, practices or objects. Considering the ongoing development of measurement systems, frameworks, guidelines and indicators (Gupta et al., 2014) and their potential benefits, employees are ultimately to be considered and involved in order to implement CSR in a situationally and contextually oriented way.

6. Conclusion

Given the demand for transparency and the guidelines that need to be met, there is a need for strategic, collaborative approaches to address corporate responsibility issues. Opportunities to respond to these requirements for CSR management arise through the implementation of the ESM software as they emerge from this case study research. It was shown that CSR cannot be reduced to a tool or a function, but rather requires cross-departmental understanding and collaboration to strategically implement corporate goals.

These research findings on the influence of software on understanding and internal communication in CSR management contribute to fill gaps in the existing literature. Experience with using the ESM software demonstrates that it opens up the function of a source of information for the employees of the respective companies. In this way, it provides the means to make the consequences of a company's actions on the environment and society transparent as in figures, units or values. They can also be considered as communication tools that facilitate dialogue, guide discussions on actions between employees and decision-making in CSR management.

From this communicative-constructivist perspective, two functions of CSR turned out to be central, which result from an instrumental and constitutive approach to these issues through the work with the ESM software. From a management's point of view, CSR has an instrumental function in that it brings corporate divisions together, guides employee’s understanding and actions, allows information to be more understandable and accordingly, facilitates constructive work processes. In addition to the instrumental function, a constitutive perspective on CSR and its emergent, processual and dynamic character becomes important, according to which meaning is formed through joint interactions. In order to be able to react contextually and situationally to sustainability-related challenges, the embodied meanings and symbolic aspects in the software and actions coordinated with them become relevant.

Consequently, the use of ESM software creates an accessible framework that facilitates and guides interactions in CSR management. The representative facets make CSR something concrete and tangible, as demonstrated by the mechanism of objectification emerging from social representation theory. Moreover, according to the mechanism of anchoring, the functionality inherent in software use plays a significant role in enabling an understanding and identification of new CSR issues based on common sustainability indicators, metrics and reporting formats.

This study also points to the importance of considering employees' individual backgrounds, such as their knowledge, interests or working positions when interacting in CSR management. This has an impact on the importance employees

attribute to CSR processes and whether they consider them meaningful, as can be noted from the experiences of the interviewees. This highlights the relevance of the constitutive function underlying CSR communication, through which employees are involved in negotiating meaning in their own area of responsibility. In this respect, the influence of the integrative functions of communication must be considered, such as meetings on current CSR issues or even spontaneous conversations among colleagues, for integrating the cross-cutting issue of CSR into corporate strategy and practice.

Furthermore, results of this study underline the need for research that addresses the influence of digital technologies and the instrumentalisation of CSR communication. With the increasing use of digital technologies accessed through management tools, sustainability concerns are becoming more integrated into companies' activities, but at the same time they are also becoming formalised and standardised. This calls into question what meaning employees ascribe to CSR in their daily work and whether this meets situational and contextual challenges.

References

Abric, J. C. (1994). *Pratiques sociales et représentations*. Paris: Presses Universitaires de France.

Adams, E. (2010). The joys and challenges of semi-structured interviewing. In *Community Practitioner*, *83*(7), 18-21.

Adelsberger, H., Drechsler, A, Bruckmann, T., Kalvelage, P., Kinne, S., Pellinger, J. & Trepper, T. (2009). *Einsatz von Social Software in Unternehmen: Studie über Umfang und Zweck der Nutzung,* ICB-Research Report. No. 33, Universität Duisburg-Essen: Institut für Informatik und Wirtschaftsinformatik (ICB).

Andriof, J., Waddock, S., Husted, B. & Rahman, S. S. (2017). *Unfolding stakeholder thinking: Theory, responsibility and engagement*. London, New York: Routledge.

Athanasopoulou, A. & Selsky, J. W. (2015). The social context of corporate social responsibility: Enriching research with multiple perspectives and multiple levels. In *Business & Society*, *54*(3), 322-364.

Banchs, M. A. (1984). *Concepto de Representaciones Sociales. Análisis Comparativo*. Caracas: Editorial Universidad Central de Venezuela.

Bauer, M. W. & Gaskell, G. (1999). Towards a paradigm for research on social representations. In *Journal for the theory of social behaviour*, *29*(2), 163-186.

Berger, P. L. & Luckmann, T. (1991). *The social construction of reality: A treatise in the sociology of knowledge*, No. 10, Penguin Books: London.

Borchardt, A. & Göthlich, S. E. (2009). Erkenntnisgewinnung durch Fallstudien. In *Methodik der empirischen Forschung*, Gabler Verlag: Wiesbaden, 33-48.

Bouwman, H., Nikou, S. & de Reuver, M. (2019). Digitalization, business models, and SMEs: How do business model innovation practices improve performance of digitalizing SMEs?,*Telecommunications Policy*, *43*(9), 1-8.

Bowen, H. (1953). *Social Responsibilities of the businessman.* Harper & Row: New York.

Buijs, A.E. (2009). *Public natures: social representations of nature and local practices.* PhD Thesis, University of Wageningen.

Bundesministerium für Arbeit und Soziales (BMAS) (2020). *Gesellschaftliche Verantwortung von Unternehmen*. 13th August 2020, Available at:

https://www.bmas.de/DE/Europa-und-die-Welt/International/Gesellschaftliche-Verantwortung-von-Unternehmen/gesellschaftliche-verantwortung-von-unternehmen.html;jsessionid=DB060B880B961813BA43247B3B5F2179.delivery1-master [2021-04-02]

Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. In *Academy of management review*, *4*(4), 497-505.

Carroll, A. B. & Shabana, K. M. (2010). The business case for corporate social responsibility: A review of concepts, research and practice. *International journal of management reviews*, *12*(1), 85-105.

Carroll, A. B. (2016). Carroll's pyramid of CSR: taking another look. In *International journal of corporate social responsibility*, *1*(1), 1-8.

Castelló, I., Morsing, M. & Schultz, F. (2013). Communicative dynamics and the Polyphony of Corporate Social Responsibility in the network society. In *J Bus Ethics, 118*(4), 683-694.

Christensen, LT. & Cheney, G. (2011). Interrogating the Communicative Dimensions of Corporate Social Responsibility. In Ihlen, Ø., Bartlett, JL., May, S., (Hrsg). *The Handbook of Communication and Corporate Social Responsibility,* Wiley Blackwell: Malden, 491–504.

Christensen, L. T., Morsing, M. & Thyssen, O. (2013). CSR as aspirational talk. In *Organization*, *20*(3), 372-393.

Craig, R. T. (1999). Communication theory as a field. *Communication theory*, *9*(2), 119-161.

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Thousand Oaks, CA: Sage Publications.

Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, Fourth International Student Edition*. Ch 1. London: Sage Publications.

Closon, C., Leys, C. & Hellemans, C. (2015). Perceptions of corporate social responsibility, organizational commitment and job satisfaction. In *Management Research: The Journal of the Iberoamerican Academy of Management,* 13, 31–54.

Dahlsrud, A. (2008). How corporate social responsibility is defined: An analysis of 37 definitions. In *Corporate Social Responsibility and Environmental Management,* 15, 1-13.

Du, S., Bhattacharya, C.B. & Sen, S. (2010). Maximizing business returns to corporate social responsibility (CSR): The role of CSR communication. In *International journal of management reviews*, 12(1), 8–19.

Elkington, J. (2004). Enter the triple bottom line. In *The triple bottom line: Does it all Add up*, *11*(12), 1-16.

European Commission (2016). *Corporate Social Responsibility*. Retrieved February 17, 2016, Available at:

http://ec.europa.eu/growth/industry/corporate-socialresponsibility/index_en.htm [2021-03-05]
Flick, U. (2009). *An Introduction to Qualitative Research*, 4th ed., Thousand Oaks, CA: Sage Publications.
Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative inquiry*, *12*(2), 219-245.
Freeman, R. E. (1984). *Strategic Management*. *A stakeholder Approach*. Boston: Pitman.
Freeman, R. E., Velamuri, S. R. & Moriarty, B. (2006). Company stakeholder responsibility: A new approach to CSR. In *Business Roundtable Institute for Corporate Ethics*, *19*, 4-16.
Genç, R. (2017). *The Importance of Communication in Sustainability & Sustainable Strategies*. 14th Global Conference on Sustainable Manufacturing, GCSM 3-5 October 2016, Istanbul: Turkish-German University (TAU).
Gelbmann, U. & Baumgartner, R. J. (2012). Strategische Implementierung von CSR in KMU. In *Corporate Social Responsibility*, Berlin, Heidelberg: Springer, 285-298. Available: https://www.researchgate.net/publication/301173934_Strategische_Implementierung_von_CSR_in_KMU [2021-03-16]
Golob, U., Podnar, K., Elving, W. J., Nielsen, A. E., Thomsen, C. & Schultz, F. (2013). CSR communication: quo vadis? In *Corporate Communications: An International Journal*, 176-192.
Gupta, A., Boas, I. & Oosterveer, P. (2020). Transparency in global sustainability governance: to what effect? In *Journal of Environmental Policy & Planning*, *22*(1), 84-97.
Hasnaoui, A. & Freeman, I. (2010). Diffusion and implementation of corporate Social Responsibility: the role of information and communication technologies, In *Management Avenir*, (9), 386-406.
Heinrich, P. & Schmidpeter, R. (2013). Wirkungsvolle CSR-Kommunikation – Grundlagen. In Heinrich, P. (Hrsg). *CSR und Kommunikation. Unternehmerische Verantwortung überzeugend vermitteln*. Berlin, Heidelberg: Springer, 1–25.
Hoffman, A. J. (1999). Institutional evolution and change: Environmentalism and the U.S. chemical industry. *Acad. Manag. J.*, *42*, 351–371.
Höijer, B. (2011). Social Representation Theory, In *Nordicom Review, 32*, 3–16.
Huck-Sandhu, S. (2016). Interne Kommunikation im Wandel: Entwicklungslinien, Status Quo und Ansatzpunkte für die Forschung. In *Interne Kommunikation im Wandel*, Wiesbaden: Springer, 1-19.
Knoblauch, H. (2019). *The communicative construction of reality*. London, New York: Routledge.
Krickhahn, T. (2014). Reflexionen zur Theorie und Praxis von CSR. In

Dobersalske, K., Seeger, N., Willing, H. (Hrsg.) *Verantwortliches Wirtschaften*, Baden-Baden: Nomos, 187- 212.

Kvale, S. (1996). *Interviews: an introduction to qualitative research interviewing*, Thousand Oaks, CA: Sage Publications.

Jaspal, R. & Breakwell, G. M. (2014). *Identity process theory: Identity, social action and social change.* Cambridge, U.K.: Cambridge University Press.

Jodelet, D. (1986). La representación social: fenómenos, concepto y teoría. In *Psicología Social II. Pensamiento y vida Social. Psicología Social y Problemas Sociales*. Edited by Serge Moscovici. Barcelona: Ediciones Paidós.

Lee, M.-D. P. (2008). A review of the theories of corporate social responsibility: Its evolutionary path and the road ahead. In *International Journal of Management Reviews,* 10, 53–73.

Maon, F., Lindgreen, A. & Swaen, V. (2008). Designing and Implementing Corporate Social Responsibility- An Integrative Framework Grounded in Theory and Practice. In *Journal of business ethics*, vol. 87, no. S1, 71-89.

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach,* 3rd ed., Thousand Oaks, CA: Sage Publications.

May, S. (2011). Organizational communication and corporate social responsibility. In *The handbook of communication and corporate social responsibility*, 87-109.

Mayring, P. (2000). Qualitative content analysis. In *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research, 1*(2), Art. 20. Available at: http://www.qualitative-research.net/fqs-texte/2-00/2-00mayring-e.htm [2021-04-01]

Mayring, P. (2007). *Qualitative Inhaltsanalyse - Grundlagen und Techniken*, 9. Aufl., Stuttgart: UTB Verlag.

Meinefeld, W. (2000). Hypothese und Vorwissen in der qualitativen Sozialforschung. In Flick, U., v. Kardorff, E., Steinke, I., *Qualitative Forschung. Ein Handbuch*. Reinbek bei Hamburg: Rowohlt, 265–275.

Merriam, S. B. & Tisdell, E. J. (2016). *Qualitative research: A guide to design and Implementation,* 4th ed., San Francisco, CA: Jossey-Bass.

Meyer, M. & Waßmann, J. (2011). *Strategische Corporate Social Responsibility*. *Research Papers on Marketing Strategy,* Würzburg: Lehrstuhl für BWL und Marketing.

Morsing, M., & Schultz, M. (2006). Corporate social responsibility communication: Stakeholder information, response and involvement strategies. In *Business ethics: A European review*, *15*(4), 323-338.

Moscovici, S. (1979). *El Psicoanálisis, su Imagen y su Público*. Buenos Aires: Editorial Huemul S.A..

Moscovici, S. (1981). On social representations. In *Social cognition: Perspectives*

on everyday understanding, *8*(12), 181-209.
Moscovici, S. (1984). Notes towards a description of social representations. In *European Journal of social psychology*, *18*(3), 211-250.
Neves, J. & Bento, L. (2005). Traditional values and the pressures of transformation. In *Corporate social responsibility across Europe*, 303-314.
Nicolini, D. (2012). *Practice Theory, Work, and Organization*. *An Introduction,* Oxford, U.K.: Oxford University Press.
Nielsen, A. E., & Thomsen, C. (2018). Reviewing corporate social responsibility communication: a legitimacy perspective. In *Corporate Communications: An International Journal*, *23*(4), 492-511.
Norström, A.V., Cvitanovic, C., Löf, M.F., West, S., Wyborn, C., Balvanera, P., Bednarek, A. T., Biggs, R., de Bremond, A., Campbell, B. M., Canadell, J. G., Carpenter, S. R., Folke, C., Fulton, E. A., Gaffney, O., Gelcich, S., Jouffray, J.-B., Leach, M., Le Tissier, M., Martín-López, B., Louder, E., Loutre, M.F., Meadow, A. M., Nagendra, H., Payne, D., Peterson, G. D., Reyers, B., Scholes, R., Speranza, C. I., Spierenberg, M., Stafford-Smith, M., Tengö, M., vam der Hel, S., van Putten, I. & Österblom, H. (2020). Principles for knowledge co-production in sustainability research. In *Nat Sustain* 3, 182–190.
Patton, M. Q. (2015). *Qualitative research and evaluation methods,* 4th ed., Thousand Oaks, CA: Sage Publications.
Rateau, P., Moliner, P., Guimelli, C. & Abric, J. C. (2011). Social representation theory. In *Handbook of theories of social psychology*, 2, 477-497.
Rost, Z. & Wille, R. C. (2017). Einsatz von Social Software in der Internen CSR Kommunikation: Ein Praxisleitfaden. In *CSR und Interne Kommunikation*, 277-292. Berlin, Heidelberg: Springer.
Sammut, G. & Howarth, C. (2014). Social Representations. In Teo, T. *Encyclopedia of Critical Psychology*, New York: Springer, 1799-1802.
Schaltegger, S., Herzig, C., Kleiber, O., Klinke, T. & Müller, J. (2007). *Nachhaltigkeitsmanagement in Unternehmen. Von der Idee zur Praxis: Managementansätze zur Umsetzung von Corporate Social Responsibility And Corporate Sustainability*. Berlin/Lüneburg: BMU, Econsense, CSM.
Schaltegger, S. (2012). Die Beziehung zwischen CSR und corporate sustainability. In *Corporate Social Responsibility*, Berlin, Heidelberg: Springer, 165-175.
Schneider, A. & Schmidpeter, R. (2012). *Corporate social responsibility*, Vol. 188, Berlin, Heidelberg: Springer.
Schoeneborn, D. & Trittin, H. (2013). Transcending transmission: Towards a Constitutive Perspective on CSR communication. In *Corporate Communications: An International Journal*, 175-197.
Schoeneborn, D., Morsing, M. & Crane, A. (2019). Formative Perspectives on the Relation Between CSR Communication and CSR Practices- Pathways for

Walking, Talking, and T(w)alking. In. *Business Society, 59*(1), 5–33.
Schögel, M. & Tomczak, T. (2009). Fallstudie. In *Empirische Mastertechniken*, Wiesbaden: Gabler Verlag, 79-105.
Spangler, W., Sroufe, R., Madia, M. & Singadivakkam, J. (2014). Sustainability Focused knowledge management in a global enterprise. In *Journal Computer Information Systems, 55*(1), 70–82.
Stawinoga, M. (2017). Die Richtlinie 2014/95/EU und die CSR-Richtlinie Umsetzungsgesetz. Eine normative Analyse des Transformationsprozesses sowie daraus resultierender Implikationen für die Rechnungslegungs-und Prüfungspraxis. In *uwf UmweltWirtschaftsForum, Sustainability Management Forum,* 25(3), Berlin, Heidelberg: Springer, 213-227.
Stöhr, P. & Michel, A. (2015). *Corporate social responsibility aus Sicht der Unternehmen.* Policy Brief EconomieSuisse*,* Zürich: SwissHoldings AG.
Wagner, W. (1996). The Social Representation Paradigm. In *The Japanese Journal Of Experimental Social Psychology,* 35, 247-255.
Wagner, W., Duveen, G., Farr, R., Jovchelovitch, S., Lorenzi-Cioldi, F., Marková, I. & Rose, D. (1999). Theory and method of social representations. In *Asian Journal of Social Psychology* 2, 95–125.
Wagner, R., Roschker, N. & Moutchnik, A. (2017). *CSR und Interne Kommunikation*. Berlin, Heidelberg: Springer.
Watson, V. (2014). Co-production and collaboration in planning–The difference. In *Planning Theory & Practice*, *15*(1), 62-76.
Walmsley, C. (2004). Social representations and the study of professional practice. In *International Journal of Qualitative Methods*, *3*(4), 40-55.
Weber, G. & Bodemann, M. (2018). *CSR und Nachhaltigkeitssoftware*. Berlin, Heidelberg: Springer.
Weik, K. E. (1995). *Sensemaking in organizations*, Vol. 3, Thousand Oaks, CA: Sage Publications.
Wehmeier, S. & Röttger, U. (2011). Zur Institutionalisierung gesellschaftlicher Erwartungshaltungen am Beispiel von CSR. Eine Kommunikationswissenschaftliche Skizze. In *Ebenen der Kommunikation*. Wiesbaden: VS Verlag für Sozialwissenschaften, 195-216.
WeSustain GmbH (2021). *Softwarelösungen für verantwortungsvolle Unternehmensführung*. Available at: https://www.wesustain.com [2021-03-21]
Whittemore, R., Chase, S. K. & Mandle, C. L. (2001). Validity in qualitative research. In *Qualitative health research*, *11*(4), 522-537.
Yin, R.K. (2014). *Case Study Research: Design and Methods*, Thousand Oaks, CA: Sage Publications.

Appendix 1 – Additional information about WeSustain

WeSustain was founded in 2010 by software and management experts and has expanded since then its product portfolio from from corporate sustainability, impact measurement to Environmental Social Governance (ESG) compliance to fulfil operator obligations and transparent audit processes along the supply chain (WeSustain, 2020). WeSustain's software solutions are used in small and medium-sized enterprises, large companies, the public sector, associations, initiatives, and private financial markets. In generell, WeSustain develops tools for sustainable corporate governance that support the measurement and evaluation of sustainability performance along social, ecological and economic aspects and which are intended to facilitate reporting (ibid.).

The following is an overview of the Enterprise Sustainability Software (ESM) features. Screenshots are included to illustrate these. Due to the wide range of functions, this overview is reduced to the essentials.

The menu overview is the starting point for working with ESM. From here, the user can access the individual areas.

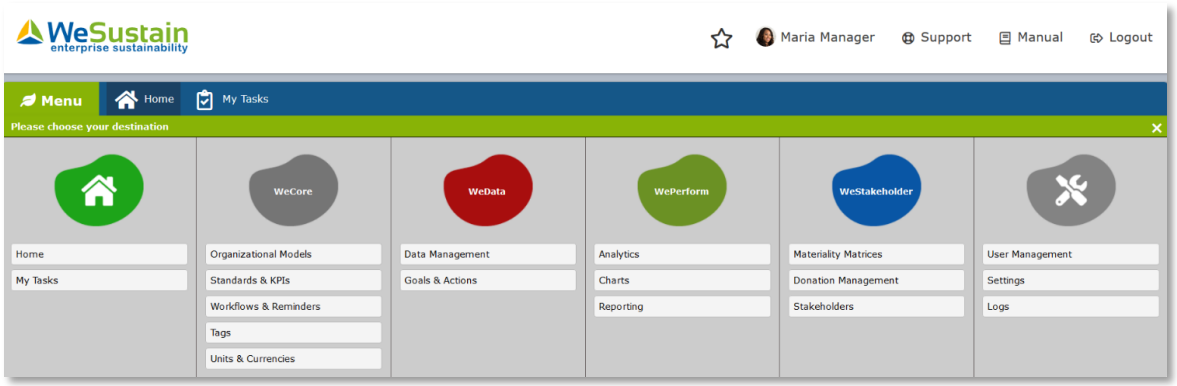

Figure 1. Menu overview

In the ‘Standards & KPIs’ module, the user can set which standards and targets need to be met in the next data collection period and which KPIs should be collected. KPIs is the term used for metrics used to measure or determine progress or degree of achievement against key objectives related to sustainability topics.

Thus, within the module, quantitative and qualitative KPIs on social, environmental and economic issues can be recorded. In addition to that, the most common standards, e.g., SDGs, GRI, UNPRI, GDPR, or ISO 26000, are provided within WeSustain's system and updated regularly. These serve as the basis for sustainability reporting as well as compliance with certain legal requirements.

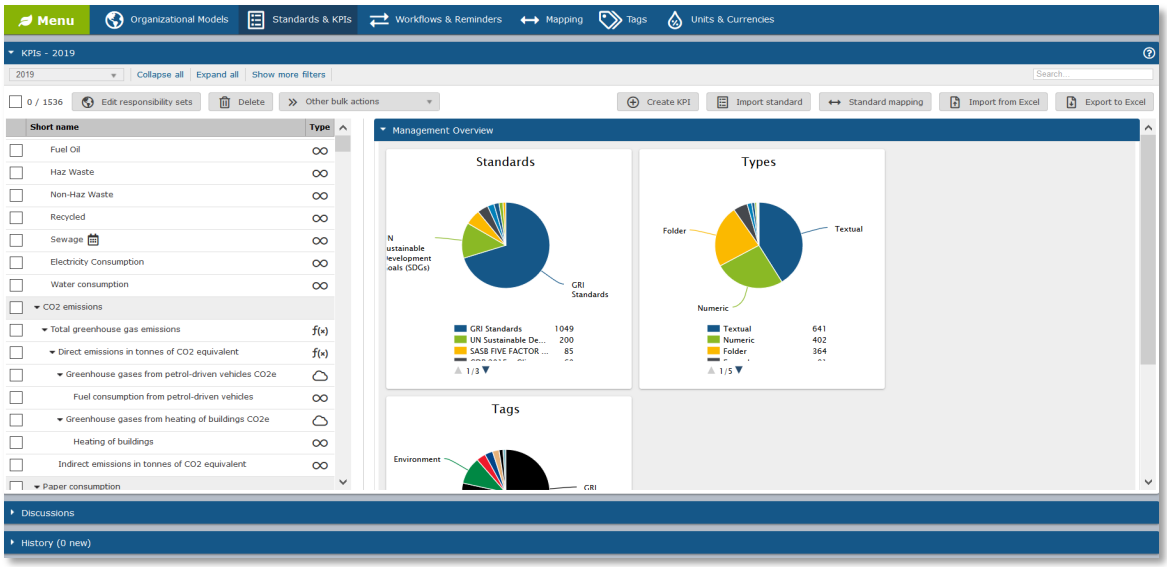

Figure 2. 'Standards & KPIs' module

Under 'Data Management', the data for the previously defined KPIs and sustainability standards can be entered and managed. For the data collection, it is possible to create responsibility sets. A responsibility set links the organisational model, KPIs and responsible persons. In addition, they are created to view and edit data in the 'Data Management' module. Furthermore, the data collection and consolidation include plausibility checks, workflows and questionnaires.

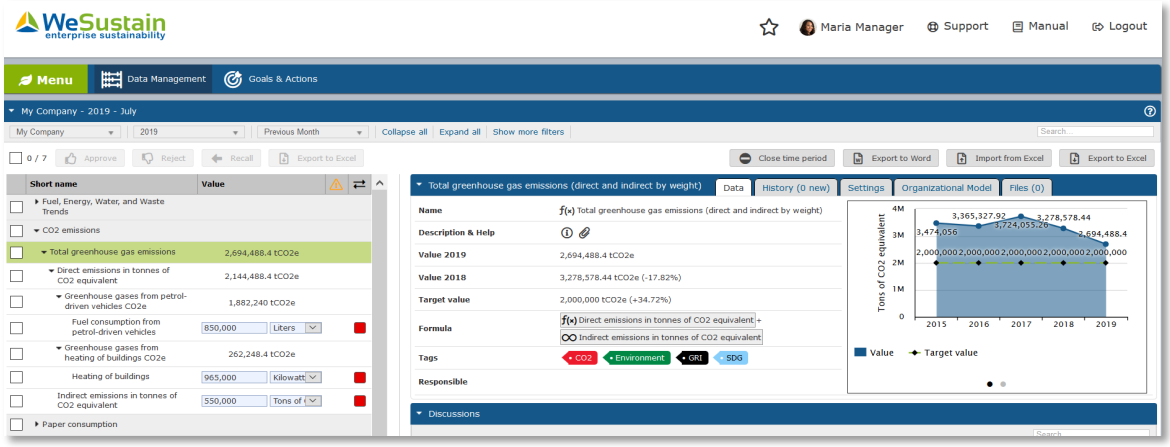

Figure 3. 'Data Management' module

In the ‘Goals & Measures’ module, users can define sustainability management goals and responsibilities. Additionally, they can comprehensively control and monitor the status of target achievement at any time. In addition to managing goals, improvement plans and projects can be planned.

In the ‘Charts’ module, the KPIs previously defined and entered under ‘Data Management’ can be displayed graphically using various chart types.

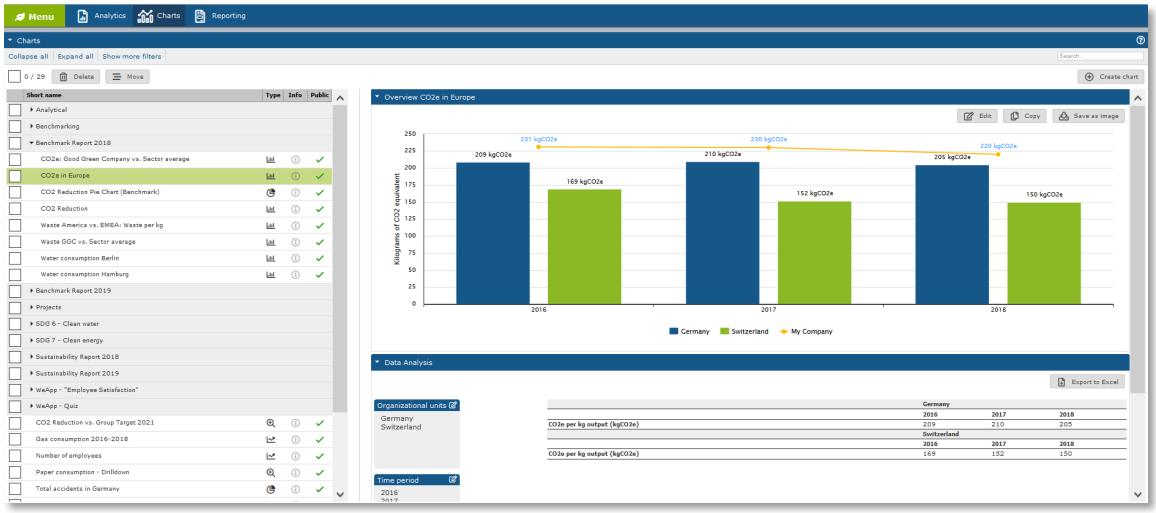

Figure 4. ‘Charts’ module

With the ‘Reporting’ module, users can create reports based on their performance indicators. This function can be used, for example, to create a sustainability report, as part of an audit or certification, to achieve a standard, or for presentations to stakeholders. Evaluations and analyses can be created quickly and easily using templates.

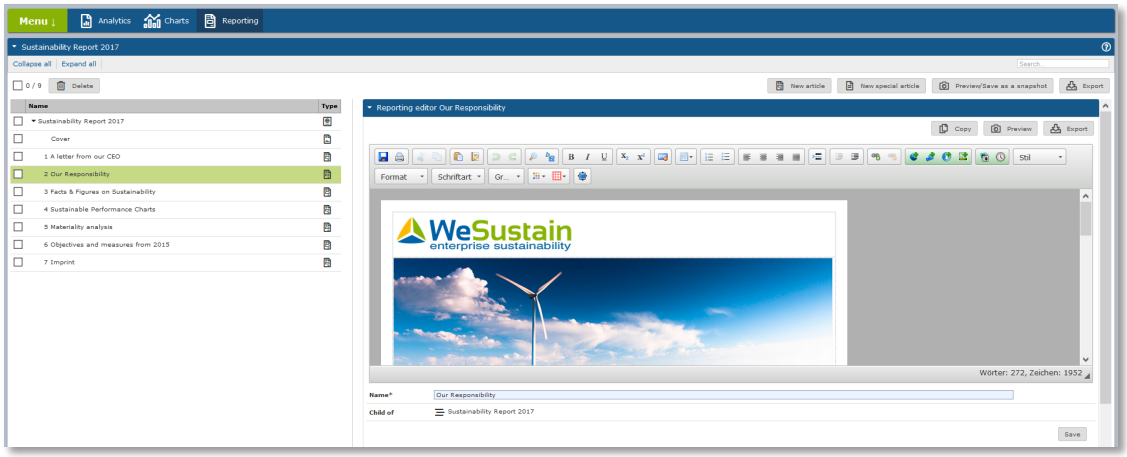

Figure 4. Reporting module

The ‘WeStakeholder’ module area enables efficient management of internal and external stakeholder relationships. Users can maintain extensive contact databases and keep track of all activities and documents. In this way, users create the basis for standardised and group-wide communication with key stakeholders.

Under ‘Materiality Matrices’, the importance of individual sustainability topics can be clearly mapped from the perspective of the company and from the perspective of stakeholders in a uniform coordinate system - a so-called matrix representation. The summary of the individual topics into thematic fields helps in the subsequent analysis and strategy development.

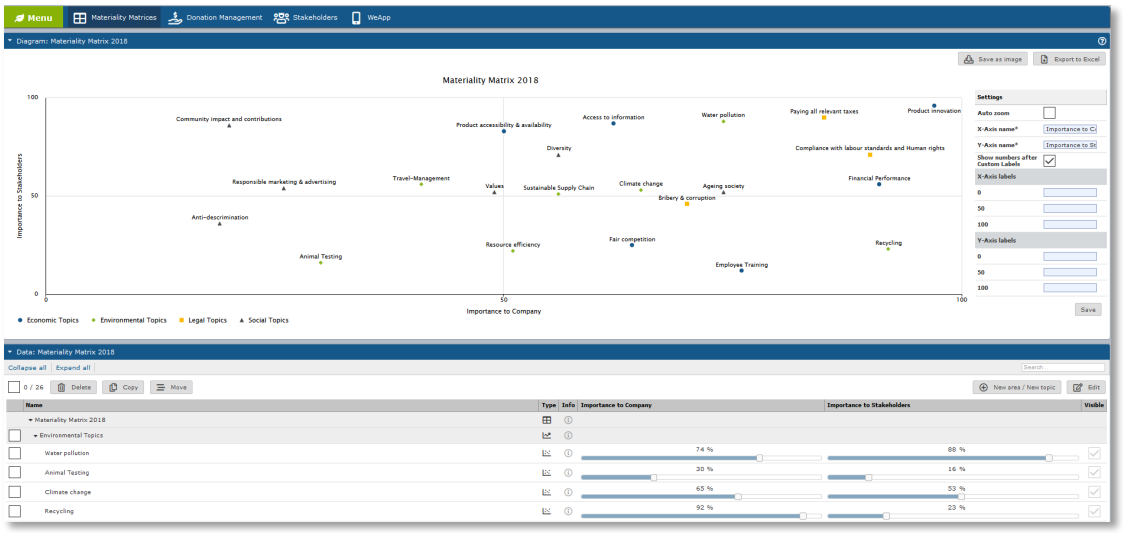

Figure 5. Materiality Matrices

References

WeSustain GmbH (2021). *Softwarelösungen für verantwortungsvolle Unternehmensführung*. Available at: https://www.wesustain.com [2021-04-01]

Appendix 2 – Interview guide

1. Scopes of tasks, personal understanding of CSR and role of CSR in the company

1.1 How long have you been employed in sustainability management at [*company name*]?
What are your tasks?

1.2 What do you personally associate with the term or concept CSR?

Explanatory question: This question is not about a general definition, but more about your personal view/understanding.

1.3 What role does CSR have for [*name of the company*]?

In the following section, I would like to ask you a few specific questions about the use of the software:

2. Use of the software

2.1 How long have you / [*name of company*] been working with the software?
Can you say why [*name of company*] chose the ESM software like the one from WeSustain?

Explanatory question: Can you differentiate more precisely the challenges you describe (data quality, lack of data clarity, resources such as time required) in CSR management?

2.2 What do you use the ESM software for?
Can you give an indication of how often or how long you use the software?

Explanatory question: What proportion of the total reporting is accounted for by the software?

What are you responsible for in the application of the software?
Explanatory question (if answer is unclear): Please give examples of this.

2.3 Which concrete topics / challenges in the sustainability context (such as supply chain or stakeholder management, or the recording of environmental environmental impacts) are addressed in the software?

Follow-up question: Does your approach involve a strategic approach? If so, can you describe this approach?

Before we continue with the third section, I would like to ask you if you might need a break?

In the third section I would like to look more specifically at the internal working structures:

3. Internal working structures

3.1 What is the general impact of the software on internal working practices? How would you describe the work processes?
Does the software, for example, lead to an increasingly structured and systematic approach?

Follow-up question: How is the time saved used? For example, is this time more invested in CSR activities or measures?
Who is responsible for the processes that take place?

3.2 Are measures implemented to support the employees? For example, is there internal support or internal training? training courses?

3.3 Is regular feedback on working with the software obtained in CSR management?
How do you respond to staff concerns, e.g., if there are communication difficulties or dissatisfaction is expressed about certain processes?

The fourth and last topic area is particularly about collaboration and communication with your colleagues:

4. Collaboration and communication in the working community

4.1 How would you describe the cooperation with your colleagues in the context

of the software?
Who uses the software?
Do all employees use the software or is it just used in a few departments?

How does the collaboration in the software complement the general collaboration in the CSR management?

If already working in CSR management before the introduction of the software:

4.1.1 From your point of view, is there anything that has changed positively or negatively with regard to teamwork as a result of the introduction of the software?
If yes, please describe this change and to what extent you would attribute it to the software.

4.2 In your view, does the software appeal more to employees' independence?

Follow-up question: Would you say that this will increase the motivation of colleagues to address challenges together as a team?

Does this give the feeling of having more influence in the CSR endeavor?

4.3 In your opinion, can all the colleagues who work with the software software to the same extent, e.g., in decision-making processes?

Follow-up question: Can every employee access information equally or are there structural differences? If so, what would you consider these differences to be?

Please leave out the distribution of roles in the software system and structural differences in your department.

Appendix 3 – Overview of the interviewees

	Area of responsibility	*Working for the company since (in years)*	*Number of countries in which the company is located*	*Turnover (last current status)*	*Employees (last current status)*	*Industry*	*Workplace of interviewee (company's location)*	*Software usage since (in years)*
Interviewee 1	Environmental protection and management	13	Betw. 10-20	Under 5 billion EUR (2019/20)	Betw. 5.000-10.000 (2019/20)	Energy and environmental services companies, energy supply	Austria	10 months
Interviewee 2	Technology, innovation and sustainability	6	Betw. 40-50	Betw. 20-30 billion EUR (2020)	Over 100.000 (2019/20)	Steel processing, Heavy industry	Germany	4
Interviewee 3	CSR and communication management	4	Betw. 20-30	Betw. 20-30 billion EUR (2018/19)	Betw. 30.000-40.000 (2019)	Pharmaceutical wholesale, pharmacies	Germany	6,5
Interviewee 4	Sustainability management	4	Betw. 10-20	Betw. 20-30 billion EUR (2019)	Betw. 30.000-40.000 (year unknown)	Pharmaceutical wholesale, pharmacies	Germany	5
Interviewee 5	Project assistance for communication and marketing	6	Betw. 5-10	Betw. 500-1000 Mio. CHF (2018)	Betw. 500-1.000 (2018)	Energy service, supply	Switzerland	6
Interviewee 6	Sustainability management	6	Betw. 40-50	Under 5 billion EUR (2019)	Betw. 10.000-20.000 (2019)	Intralogistics, mechanical engineering	Germany	4
Interviewee 7	Sustainability management	1, 5	Betw. 40-50	Under 5 billion EUR (2019)	Betw. 5.000-10.000 (2019)	Consumer goods	Germany	5

Appendix 4 – Original quotes

1 **CSR in practice and theory**

1.1. "(...) sie hat eine Querschnittsfunktion, bei der die Fäden zusammenlaufen, und wir arbeiten mit verschiedenen Abteilungen zusammen, um die jeweiligen Anforderungen zu bedienen" (Interviewee 1)

1.2. "Administrativer Charakter" (Interviewee 4)

1.3. "Spinne im Netz" (Interviewee 2)

1.4. „[etwas] im Job zu erreichen und mit initiierten Maßnahmen etwas zurückgeben zu können" (Interviewee 4).

1.5."(...) natürlich hat es einen Einfluss darauf, wie ich CSR verstehe, wenn ich mich mit so unterschiedlichen Themen und Abteilungen beschäftige" (Interviewee 6)

1.6. "(...) Spannungsfeld, das sich zwischen Naturschutz, Klimawandel und Finanzen auftut, in dem Entscheidungen gut begründet werden müssen" (Interviewee 5)

2 **Use of the WeSustain software**

2.1. "Informationen zu Kennzahlen und Trends liefern können" (Interviewee 5)

2.2. "Sicherstellen, dass die Werte dargestellt und auf Richtigkeit überprüft werden" (Interviewee 1)

2.3. "Prozesse zu koordinieren, [um] die Daten genauer zu erfassen (...)" (Interviewee 1)

2.4. "[Verkürzen] Wege von der Quelle zur Verarbeitung" (Interviewee 6)

2.5. "Die interne Validierung und Bestätigung [von Daten] wird systematischer und strukturierter" (Interviewee 6)

2.6. “Die ablaufenden Prozesse erfassen und abbilden" (Interviewee 2)

2.7. "Gewonnene Informationen (...) [eröffnen] Einblicke in komplizierte gesellschaftliche Zusammenhänge, die wir sonst gar nicht verstehen würden" (Interviewee 6)

2.8. "Gemeinsame Strukturen (...), die den Rahmen für Entscheidungen bilden" (Interviewee 3)

2.9. "Komplexe Umweltkennzahlen zum Abfallaufkommen oder Wasserverbrauch kategorisieren und zusammenführen (...) [und] in nachvollziehbare Zahlen, Standards oder Richtlinien umwandeln" (Interviewee 1)

2.10. "Erfassen von Aktivitäten jenseits des verbalen Austauschs und Abbilden von Prozessen" (Interviewee 4)

2.11. "(...) sichere, kontrollierte Quelle [und] faktenbasiert und für die Kommunikation geeignet" (Interviewee 2)

2.12. "Bewertung der Aktivitäten oder strategische Steuerung" (Interviewee 4)

2.13. "(…) Informationen [als] gemeinsame Basis zur Verfügung zu stellen, um daran festzuhalten oder sie als Ausgangspunkt für Handlungen und Entscheidungen zu nutzen" (Interviewee 2)

2.14. "(...) um abteilungsübergreifende Themen wie z.B. Supply Chain Management bearbeiten zu können, müssen alle mit ins Boot geholt und mit den Informationsgrundlagen versorgt werden, damit eine gemeinsame Linie verfolgt wird" (interviewee 5)

3 Collaboration with the WeSustain software

3.1. "To-Do's können so viel transparenter und oft auch klarer kommuniziert werden" (Interviewee 6)

3.2. "Für die Kollegen ist eigentlich klar, was als Nächstes ansteht" (Interviewee 3)

3.3. "Während der eine nur die Zahlen sieht, zeigen diese für den anderen komplexe Zusammenhänge im Umweltbereich" (Interviewee 2)

3.4. "[Jemanden haben], der sich die Daten ansieht und darauf zurückkommt, wenn man über die Nachhaltigkeitsleistung eines bestimmten Bereichs spricht" (Interviewee 4)

3.5. "Die neue Anforderungen in ihrer täglichen Arbeit berücksichtigen müssen" (Interviewee 1)

3.6. "Wenn einfach diktiert wird, was zu tun ist (...), ohne auf Bedenken einzugehen und die Kollegen nicht ausreichend vorzubereiten" (Interviewee 2)

3.7. "Jeder soll sich in dem, was kommuniziert wird, wiederfinden" (Interviewee 2)

3.8. „Abstrakte Ideen und Ziele wie CO_2-Neutralität werden für die Kollegen greifbar, [wenn] (...) CO_2-Fakten visualisiert, auf konkrete Bereiche bezogen und verglichen werden" (Interviewee 5)