

Unlocking the Potential of Sustainability in SMEs within the Pharmaceutical Industry

The Role of Managers in Fostering Sustainability for Organizational Long-term Success

By

Edwin Ahlnäs Valerie Garcia

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Supervisor: Pauline Mattsson

Abstract

Sustainable development requires companies to do their part. Managers are central to the partaking of sustainability in their organizations, having responsibility towards internal and external stakeholders to ensure the organization's long-term survival while being mindful of other things than maximizing profit. SMEs face additional challenges than their multinational counterparts making it more difficult to enforce sustainability within their organizations. The pharmaceutical industry, being one of the most unsustainable industries, has yet to introduce sustainability as a source of creating value in a standardized way. Previous literature has shown that having a sustainable approach can have a positive impact in creating value for organizations. Focus is on managers and their role towards driving sustainability initiatives and improving companies' performance. Therefore, it is important to get an understanding of how managers in SMEs, within the pharmaceutical industry, are acting in order to foster such sustainable initiatives, making it the purpose of this research. Based on a qualitative single case study of an SME in the pharmaceutical industry, this research utilizes semi-structured interviews with managers to gather the needed information in order to better understand their sustainability approach. The findings provided additional understanding within the areas of sustainability practices, management, stakeholder engagement and communication, sustainability investment and profitability. Moreover, contribute to the field by offering practical guidance and examples for driving sustainability, fostering innovation, and creating a sustainable future.

Keywords: sustainability management, sustainability commodification, sustainable innovation, stakeholder engagement, stakeholder communication, strategic integration, core operations.

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Table of Contents

1. Introduction	1
1.1. Problematization	2
1.2. Case Study	3
1.3. Significance for Strategic Management	3
1.4. Purpose Statement and Research Question	4
2. Literature Review	5
2.1. Development of Sustainability in Companies	5
2.2. Approaching Value Creation Through Corporate Social Responsibility	6
2.3. Creating Shared Value vs Sustainable Value Creation	8
2.4. Managing Value Creation Sustainably	10
3. Methodology	12
3.1. Research Approach and Design	12
3.2. Choice of Case Company	13
3.3. Data Collection	14
3.4. Data Analysis	15
3.5. Validity and Reliability of the Study	17
3.6. Ethical consideration.	18
4. Red Glead Discovery (RGD) Case Study	20
4.1. Description of the Company	20
4.2. Empirical Findings	21
4.2.1. From Personal Interest to Corporate Mission	21
4.2.2. Making Sustainability a Commodity	23
4.2.3. Integration of Sustainability in Business Decisions	25
4.2.4. Not in the business of Planting Trees.	27
4.2.5. Incorporating Sustainability into Daily Operations	28
4.2.6. Not Only About Delivering Molecules	29
5. Discussion	31
5.1. Introduction of Sustainability practices	31
5.1.1. Innovation.	32
5.2. The Role of Stakeholders	33
5.2.1. External Stakeholder Management	33
5.2.2. Internal Stakeholder Engagement and Organizational Culture	
5.3. Approach to Sustainability in Management	35
5.3.1. Structured Approach	35
5.3.2. Connecting sustainability to the core business	36

5.3.3. Sustainability Investment in the long term	37
6. Conclusion	39
6.1. Summary of key findings	39
6.2. Contribution to the literature	40
Role of individuals in driving sustainable change	40
Communicating sustainability as a commodity	40
6.3. Practical Contributions	41
6.4. Limitations of the study and directions for future research	41
Limitations	41
Directions for future research	42
7. References	43
8. Appendix	54
Appendix A	54
Appendix B	56

1. Introduction

The private sector plays a crucial role in driving economic growth (Jamali & Mirshak, 2007; Chandler, 2020). Particularly, for-profit firms excel in effectively utilizing scarce resources and achieving the necessary scale to bring about significant positive change and improve living standards (Chandler, 2020). Consequently, societies that foster greater freedom for these companies tend to witness more innovation and advancement compared to societies that impose limitations (Chandler, 2020). It is important for corporations, as key contributors to economic growth, to fulfill their responsibility by acting in an equitable and sustainable manner (Jamali & Mirshak, 2007).

Sustainability and sustainable development are widely understood as "meeting the needs of the present without compromising the ability of future generations to meet their own needs." (WCED, 1987). As such, society has an obligation toward future generations to leave the planet in a similar state (Chandler, 2020). Acknowledging the influence that corporations have, it is impossible to have sustainable development without the sustainable development of corporations (Schaltegger, Lüdeke-Freund, Hansen, 2012). Although many for-profit corporations have acknowledged this and have made it central to their offering, many still view sustainable development in general and corporate sustainable development in particular as a cost that does not create value for corporations (Lampikoski, Westerlund, Rajala, and Möller, 2014; Nidumolu, Prahalad, Rangaswami, 2009). However, not only can greening help create value (Lampikoski et al., 2014), but corporations with time will be required to reshape their value chains as a result of the ongoing environmental changes (Howard-Grenville, Buckle, Hoskins, George, 2014).

Nevertheless, corporations demonstrate a clear understanding of their role and employ various measures to address sustainability concerns (Baumgartner & Rauter, 2017). Among these measures, Corporate Social Responsibility (CSR) stands out as a well-known concept. While CSR can potentially contribute to sustainable development by providing incentives for socially responsible actions, its impact remains limited (Moon, 2007). In essence, CSR often serves as a communication tool, employed to position the corporation and shape brand perception primarily through annual sustainability reports (Lindgreen & Swaen, 2010). However, as Min,

Desmoulins-Lebeault, and Esposito (2017) suggest, CSR could achieve much greater success if it is aligned with corporate strategy and integrated into daily activities.

Sustainability should be treated central to core operations, in which it is not viewed as something in the periphery of the organization as it is seen in CSR but rather opposite to it as Porter and Kramer claim. Nevertheless, it is an integral part of value proposition and value creation much like Chandler (2020) argues in his sustainable value creation framework. Yet while Chandler (2020) offers a strong argument, the practical aspect of introducing and implementing his principles leaves more to be asked. Lampikoski et al. (2014) introduce value-creation strategies for "green innovation games" that consider different underlying logical and organizational barriers while emphasizing corporate development. Also explaining what managerial roles are needed depending on the specific green innovation game in order to help abandon current old-fashioned beliefs and infusing corporate objectives with corporate sustainability. However, Lampikoski's et al. (2014) study primarily focuses on large sustainability leaders like Nike and IBM, raising questions about its applicability to small and medium enterprises (SMEs). In fact, the lack of literature specifically directed toward sustainable value-creating managerial practices for for-profit SMEs shows a weakness in the current literature that needs to be further explored.

1.1. Problematization

The pharmaceutical industry is one of the most unsustainable industries in the world (Belkhir & Elmeligi, 2019). For context, the pharmaceutical industry is a more emission-intensive industry than the entire automotive industry (Belkhir & Elmeligi, 2019), being very resource intensive both upstream and downstream (Richie, 2022). Upstream processes like drug research and manufacturing come with high energy costs, while costs associated with transportation for distribution also have a negative impact. The downstream, on the other hand, is focused on drug prescribing practices (Richie, 2022). As such, the pharmaceutical industry is unsustainable and due to the size of the industry and the negative impact that it currently has on the environment, it is troubling for society as there is a lack of concern towards sustainability and sustainable development. While pharmaceutical industry companies take part in voluntary sustainable initiatives and have been for some time, there are still high-profile ethical lapses (Schneider, Wilson, & Rosenbeck, 2010). Unlike in other traditionally unsustainable industries,

pharmaceutical companies have a certain ethical responsibility toward society by providing affordable drugs to those who need them (Nussbaum, 2009). Yet, as patients are wanting cheaper drugs, research, and development processes are facing challenges to make it possible (Federsel, 2006). Thereby, leveraging sustainable practices is needed to respond to these challenges, especially so for SMEs. However, Burlea-Schiopoiu and Mihai (2019) state that SMEs have access to fewer resources, and, as a result, are more vulnerable to the current hypercompetitive business environment than MNCs (Troise, Corvello, Ghobadian, & O'Regan, 2022). Consequently, managers within such SMEs have an immense responsibility and play a key role in handling such challenges, notwithstanding the fact that there are few tools and little research made on how these managers should handle the situation they are in.

1.2. Case Study

The case study is based on a local pharmaceutical company named Red Glead Discovery (RGD), a for-profit SME whose primary focus is to drive and execute integrated drug discovery projects in a laboratory-based setting (Red Glead, n.d.a). Red Glead Discovery is determined to achieve more sustainability in their drug discovery process as aligned with its mission of "better health for people and planet" (Red Glead, n.d.b). With that, RGD poses an interesting case as the company has seemingly found a way to integrate sustainability into its value creation practices and address the aforementioned problem. Therefore, a more in-depth analysis of how the management of RGD has installed this change is called for.

1.3. Significance for Strategic Management

Knowing how important sustainability and sustainable development are, not just for society at large, but also for for-profit corporations to use as a central objective to help develop competencies that create long-term value (Nidumolu, Prahalad, & Rangaswami, 2009), a better understanding of the managerial processes and strategic management at RGD could help other for-profit SMEs gain a better understanding of how they can utilize sustainability to create value at the core of their operations. In that sense, studying RGD would not just add substance to science, but it will help managers of companies that face similar barriers gain an understanding

which can help them implement similar managerial practices to create sustainable value for their companies.

1.4. Purpose Statement and Research Question

The purpose of this research is to understand how managers in SMEs within the pharmaceutical industry can integrate sustainability into their company in a manner that creates value while integrating sustainable practices in a way that continues generating profit, both now and in the future. As such, there is a scientific need since the literature regarding how managers in SMEs within the pharmaceutical industry should go about this is lacking. Yet, there is also a practical need since there is an opportunity for SMEs to use sustainability to create value to survive in the short-term and succeed in the long-term, while simultaneously contributing to something bigger than themselves. As a result, the following research question was chosen:

How can managers within SMEs in the pharmaceutical industry help foster an adaptation of sustainability into business operations in order to create sustainable value which generates profitability for the company, while also being mindful of the next generation?

2. Literature Review

2.1. Development of Sustainability in Companies

It is impossible to have sustainable development in society without the sustainable development of corporations (Schaltegger, Lüdeke-Freund, Hansen, 2012). Thereby, corporations are not just contributing to sustainable development on an organizational level but rather on a far greater stage (Evans, Fernando, and Miying Yang, 2017), as their activities are shaping the future development of the economy and society at large (Schaltegger, Lüdeke-Freund, Hansen, 2012).

In 1987, the World Commission on Environment and Development (WCED) published a report called "Our Common Future" (later referred to as the "Brundtland Report") which defined sustainable development as "meeting the needs of the present without compromising the ability of future generations to meet their own needs." (WCED, 1987). Moldan, Janouskova, and Hak (2012) differentiate between sustainability and sustainable development establishing that sustainability is a system property that refers to quality, while sustainable development is related to humans' entitlement to a healthy and productive life in harmony with nature (Moldan, Janouskova, and Hak, 2012). Nevertheless, the two concepts are fundamentally similar.

Sustainable development measures sustainability by integrating the three dimensions of economic, environmental, and social sustainability (Elkington, 1997). Economic sustainability involves the maintenance of capital or keeping capital intact (Goodland, 1995). In terms of economic sustainability, firms must manage several types of economic capital, including financial capital, tangible capital, and intangible capital (Dyllick & Hockerts, 2022). Environmental sustainability involves safeguarding human welfare by protecting sources of raw materials and ensuring that the capacity to deal with human waste products is not exceeded (Goodland, 1995). Social sustainability, as defined by Goodland (1995), requires systematic community participation and a strong civil society. It also requires maintenance and replenishment by shared values and equal rights to prevent it from depreciating like physical capital. Dyllick and Hockerts (2022) define corporate social sustainability as adding value to the communities within which companies operate by increasing individual and societal human

capital. Companies that manage social capital effectively can ensure that stakeholders understand their motivations and can broadly agree with their value system (Dyllick and Hockerts, 2022).

The pharmaceutical industry is a sector that is considered to have a high impact on the environment and society, having to deal with fundamental global issues in environmental contribution (De Lucia, 2021). Milanesi, Runfola, and Guercini (2020) mention some challenges that the pharma industry faces and that is the basis for future research such as social sustainability with more access to medicines, innovative solutions in terms of waste management, and the relationship between innovation and sustainability. Additionally, there is a need for the pharmaceutical industry to change its business model in order to overcome the high R&D expenditures and move towards sustainable innovation management (De Lucia, 2021).

2.2. Approaching Value Creation Through Corporate Social Responsibility

Corporate Social Responsibility (CSR) is one of many approaches that corporations use to manage sustainability (Baumgartner & Rauter, 2017). While CSR has no exact definition, it can be understood as the actions of a corporation that include, yet go beyond the corporation itself and are of voluntary nature (Nussbaum, 2009; Kotler & Lee, 2005; Vogel, 2005). At the core of CSR, "is the idea that corporations should transition from a state of mere compliance to a mode of engagement, from harm minimization to value creation" (Jamali & Mirshak, 2007, p. 244). This is also connected with the idea that the private sector is the dominant creator of growth, and has an obligation to contribute to economic growth and opportunity, equitably and sustainably (Jamali & Mirshak, 2007; Chandler, 2020). CSR has created increasing attention to ethical and responsible business practices in general (Jamali & Mirshak, 2007), yet the pharmaceutical sector has "particular ethical responsibility towards the public" (Nussbaum, 2009, p. 67) as it is tasked with providing affordable drugs to those who need them. Nussbaum (2009) argues that pharmaceutical companies are currently not fulfilling such ethical responsibility and might need to review how they do business to be able to do so.

Knowing the attention put to ethical and responsible business practices among various stakeholders no company can completely disregard CSR (Jamali & Mirshak, 2007). However, the motivation behind why a company chooses to be "responsible" might vary between

companies. Vogel (2005) argues, there are "many reasons why some companies choose to behave more responsibly in the absence of legal requirements. Some are strategic, others are defensive, and still others may be altruistic" (p. 2). However, Kotler & Lee (2005) argue that the idea of CSR as being beneficial to the company is what is driving the interest, with Siegel and Vitaliano (2007) even stating that a "firm is hypothesized to engage in CSR if it anticipates benefits greater than costs" (p. 7). And as the motivation for being responsible might vary from firm to firm, so do the actions in which they engage with it as "CSR is difficult to generalize across firms as they have differing social, environmental and ethical impacts for which they may be held responsible" (Moon, 2007, p. 297). Still, CSR is commonly used as a communication tool to help present the brand to stakeholders often through annual reports or specific sustainability reports (Lindgreen & Swaen, 2010). However, Siegel and Vitaliano (2007) state that such annual reports can just as well be seen as a form of advertisement, sequentially claiming that while they could be useful, they are also arguably biased.

While contested by some, CSR has a stakeholder focus (Ebner & Baumgartner, 2006; Castelo Branco, & Lima Rodriques, 2007) and even can be seen as a new stakeholder approach (Ebner & Baumgartner, 2006) or as two separate, yet overlapping and intertwined concepts (Freeman & Dmytriyev, 2017; Carroll, 1999; Kakabadse, Rozuel, & Lee-Davies, 2005). Either way, "the conceptual enlargement brought by stakeholder's theory has led to identify CSR as a value driver" (Bosch-Badia, Montllor-Serrats, & Tarrazon, 2013, p. 12), which not only can create value for just the company and its shareholders, but for multiple different stakeholders.

In Min, Desmoulins-Lebeault, and Esposito's (2017) study they conclude that CSR can add value to corporate performance in the pharmaceutical industry, yet for that to happen, senior management needs to embrace it by aligning it with the company's day-to-day operation. Integrating it into the core business allows for a greater sustainable impact and uses CSR actions to create value which has a positive impact on the company's profitability (Min, Desmoulins-Lebeault, and Esposito, 2017). Their study also points out that this is not something that is exclusive to large pharmaceutical companies, but that it is something that all companies no matter their size should pursue. Thereby, while the motivation to implement CSR can be of an altruistic nature (Vogel, 2005), companies in the pharmaceutical industry should integrate it into their strategy and into their day-to-day activities for it to have the most success (Min,

Desmoulins-Lebeault, & Esposito, 2017). However, it is not a must, as such is the nature of CSR. In other words, while CSR can be seen as an approach that has the ability to be used to create sustainable value when connected to a greater sustainability strategy and the company's core business objectives (Min, Desmoulins-Lebeault, and Esposito, 2017) it can just as well be an approach which aims at helping to position the company and its brand, performing more of a marketing function than contributing to any large sustainability initiative (Siegel and Vitaliano, 2007; Lindgreen & Swaen, 2010).

2.3. Creating Shared Value vs Sustainable Value Creation

Porter and Kramer (2011) claim that we have become fixated on social responsibility in the sense that companies try to address social issues that are at the periphery of their business and not at the core of it. They also argue that companies should use the principle of *shared value* which they explain involves creating economic value in a manner that also creates value of society by addressing its needs and challenges. As such, Porter and Kramer (2011) introduce the concept of Creating Shared Value (CSV) and argue that it should supersede CSR as they believe that CSR focuses mainly on the reputation of the company and often has little connection to the operation of the company. Explaining further that CSV is not about social responsibility, or, for that sake, even sustainability, but should be understood as a new way of achieving economic success with the purpose of shared value and not just profit.

The similar-sounding Sustainable Value Creation (SVC), on the other hand, has a large scope as it is an extension of the traditional understanding of value creation developed in various fields such as corporate sustainability, sustainable and social entrepreneurship, and sustainable business model research (Lüdeke-Freund, Romana Rauter, Gjerdrum Pedersen, and Nielsen, 2020). As such, studies into the various fields suggest different ways in which companies and managers can create sustainable value. For example, Vincenza, Ciasullo and Troisi (2013) show how SVC can be integrated into corporate strategy and, Achtenhagen, Melin, and Naldi (2013) and Freudenreich, Lüdeke-Freund, and Schaltegger's (2020) studies explain how the use of business model frameworks can be used to create sustainable value, yet in two different ways where Achtenhagen, Melin, and Naldi's (2013) framework is more internally focused as the capabilities of the company are the focal point, while Freudenreich, Lüdeke-Freund, and Schaltegger's

(2020) focus is less on the internal aspects of the company more on the external elements with a focus on stakeholders. Furthermore, Hussinki, Kianto, Vanhala, and Ritala (2019) highlight the company's intellectual capital, arguing for its centrality in creating sustainable value. Even Though such studies all offer a good understanding of how SVC can be done individually, Chandler (2020) offers a more comprehensive approach to SVC by introducing ten principles for companies and managers to follow to create sustainable value and even defines it as: "the incorporation of a holistic CSR perspective within a firm's strategic planning and core operations so that the firm is managed in the interests of a broad set of stakeholders to optimize value over the medium to long term" (p.102).

Chandler (2020) explains that profit is central to SVC. The reason is that it is the best measurement for value and, as such, argues that the profit, defined as "profit = total value", that a company generates is the best way to measure its value as the economic value cannot be separate from other kinds of values. By believing that could be, one misunderstands what profit is and how it is generated. Instead, the profit that a company makes "represents the total value added, to all stakeholders, as a result of ongoing operations" (Chandler, 2020, p. 61). Moreover, he explains the role of the for-profit firm and its importance as the main source of innovation which allows society to progress, either by coming up with an innovation or converting an innovation made by others.

Due to its similarity to Porter and Kramer's CSV, Chandler (2020) explains that it is not connected to "philanthropy" but rather to day-to-day operations. However, the difference between the two lies in the focus of the firm and the relevance to core operations. In other words, Porter and Kramer (2011) view charitable goals and operational goals as equally important stressing economic success through shared value and *not just profit*, and as such argue that a for-profit company should be more like nonprofit organizations or government agencies than a for-profit company. However, since profit is arguably the most important aspect of a for-profit company as it is the reason for its existence, Chandler (2020) opposes this. As such, while Chandler (2020) allows for a holistic understanding of a for-profit company and its managers should in general terms conduct business to create sustainable value he does not give any instructions on how to practically do it.

2.4. Managing Value Creation Sustainably

By studying sustainability leaders, their competitive strategies, and managerial roles, Lampikoski et al (2014) created a road map for value-creation strategies for green innovation. The authors explain how corporate sustainability can foster environmentally friendly innovation and what types of managerial roles are needed, as well as activities needed to enable the transformation. In the road map, they present four green innovation games named the Rationality, Collaboration, Radical, and Clarity game, with different value logics and barriers that may support managers while decision-making in terms of sustainable innovation. Within the green innovation games, they also introduce three managerial roles, the Unlocker, the Connector, and the Transformer, which are all needed in order to play the games and enable transformation in the companies. Additionally, when presenting and accounting for their research, Lampikoski et al. (2014) found that such green innovations were generally based on a combination of partner resources, capabilities, and intellectual capital. A claim that aligns with previously mentioned studies that stress the central role of co-creation (Freudenreich, Lüdeke-Freund, and Schaltegger, 2020), the utilization of capabilities (Achtenhagen, Melin, and Naldi, 2013), and the importance of great intellectual capital (Hussinki et. al 2019) to create sustainable value.

While Lampikoski et al. (2014) help explain how sustainability leaders have utilized their efforts in corporate sustainability to help drive advancements in environmentally friendly innovations and what managerial roles are needed to enable such transformation, it is unclear how SMEs can do the same. Lampikoski's et al. study is not aimed at large corporations specifically, however, it's difficult to understand how SMEs should be able to follow in the same tracks as the large, sustainability leader of its industry. Especially so when they explain that the barriers to moving from evolutionary innovation to revolutionary innovation are lack of funds and skills, lack of permission to try and fail, and inadequate conditions. To start "playing" the radical game and pursue revolutionary business practices, the barriers seem too high for SMEs. Troise et al. (2022) explain that SMEs are more vulnerable in the current hypercompetitive business environments due to the lack of resources, yet still believe innovation to be central to the survival and success of SMEs, and argue for the integration of digital technologies into the daily practices of the organization to become more agile. As such Troise's et al. (2022) study focuses more on

ensuring survival by becoming agile enough to be able to handle whatever obstacle might be next.

Similar to this, Pertuz and Pérez (2021), present a study on innovation management practices in SMEs worldwide and conclude that only 1,5% of innovation management practices concerns "measuring the impact of innovation" as the authors label it. That includes managing environmental impact, developing environmental-friendly products, acquiring new technologies related to the sustainability strategy, working proactively to improve social and community impact, and others (Pertuz and Pérez, 2021). In comparison, 13,11% is associated with implementations of changes or improvements in products or processes, and 8,24% corresponded to practices related to the implementation of technology in the innovation process (Pertuz and Pérez, 2021), much like what Troise et al. (2022) argue for. Therefore, it is clear that sustainability does not play a big role in managerial innovation practices in SMEs, and as such, in the process of creating value. While a misbelief that sustainable management innovation practices make companies less competitive, in a sense that it only poses a cost and does not create value, is still common (Nidumolu, Prahalad and Rangaswamy, 2009; Lampikoski et al., 2014), it is unlikely the main reason for this.

Burlea-Schiopoiu and Mihai's (2019) state that access to fewer resources among SMEs, whether that be human, financial, physical, etc., presents a real challenge in order to implement a general sustainability strategy and sustainable-driven innovation practices. Yet, their quantitative study shows a positive association between the amount allocated to sustainability factors and the profit generated by SMEs. As such, Burlea-Schiopoiu and Mihai's (2019) study helps underline that sustainable investments can clearly help create value, more specifically, profit. This is important as profit is central to the survival of the firm and is unarguably the main purpose of the for-profit firm (Burlea-Schiopoiu and Mihai, 2019; Chandler 2020). Thereby, while this helps underline that sustainability can create value through profit to help ensure survival and success for SMEs, the role of managers in creating such sustainable value within SMEs and how they can help foster such integration still needs to be further investigated as the current literature on the area is lacking.

3. Methodology

To better understand how this thesis intends to address the research question and the overall purpose, a general understanding of the methodology used, the reasoning behind it, and its limitations is needed. Thereby, the chosen methodology will be presented, and additionally, we will present the pros and cons associated with it, along with the limitations and the validity and reliability of the study itself.

3.1. Research Approach and Design

Leavy (2022) explains that "research methods should be selected on the basis of their ability to best address your research purpose and... to help answer your research questions" (p. 93-94). Consequently, researchers should pick the research method that will be the best support in producing the information which is sought after. While such logic is easy to comprehend, actually finding the best research method is arguably far more difficult. Yet, a qualitative research approach has been decided upon as the best option due to the fact that there has been little research made on the specific area and because the variables are not previously known (Creswell and Creswell, 2018). Moreover, the research question is inductive as it aims at understanding:

How can managers within SMEs in the pharmaceutical industry help foster an adaptation of sustainability into business operations in order to create sustainable value which generates profitability for the company, while also being mindful of the next generation?

Thereby, it is highly suited for a qualitative research approach (Leavy, 2022). Nevertheless, while the fact that there has not been a lot of research made on the specific area does not necessarily reject a quantitative or a mixed approach, the lack of previously known variables arguably does. However, as Leavy (2022) explains, a general approach such as qualitative research should be understood as an umbrella term for numerous strategies for conducting the research. When it comes to the specific strategy of inquiry, a single case study has been decided on for the following reasons. To start with, it offers flexible design, yet will allow for in-depth analysis of the chosen company and the managing individuals (Creswell and Creswell, 2018; Kothari,

2004). Moreover, it offers meaningful characteristics of real-life events, such as organizational and managerial processes, this is because it utilizes various forms of evidence which can help understand the underlying complexities (Yin, 2009; Gummesson, 1991). As a research design, it gives the flexibility to incorporate different forms of evidence which can provide a holistic, yet in-depth analysis of the company, its individuals, as well as its organizational and managerial processes which are essential to answer the proposed research question.

While case studies offer valuable mechanisms that can help not just the focal organization, but help create a shared understanding, there is still an apprehension towards the generalization of the findings from case studies, pointing out the lack of external validity in case studies, especially in single case studies (Mariotto, Zanni, and Moraes, 2014). Yet, Yin (2009) explains that the researchers' "goal is to expand and generalize theories (analytic generalization) and not to enumerate frequencies (statistical generalization)" (p. 15). Which leads to researchers generalizing findings in the case to theory. Moreover, Gummesson (2006) explains that single case studies of this sort are not just important but rather required to be able to deal with complexity, context, and persona as statistical methods are unable to.

3.2. Choice of Case Company

Having explained our chosen approach and research design, a closer look at the chosen case company, and with that, an explanation on what basis it was selected is required. The chosen company, Red Glead Discovery (RGD), is a for-profit SME, founded in Lund, Sweden, that operates in the pharmaceutical industry and focuses on drug discovery projects in a laboratory-based setting (Red Glead Discovery, n.d.a). In addition, RGD has a clear sustainable approach to their business with a mission of providing "better health for people and planet", while experiencing exponential growth and high profitability (Red Glead Discovery, n.d.b; Red Glead Discovery, n.d.a). As such, RGD as a case offers a good fit to the need criteria associated with the general purpose of the study and the aim at answering the aforementioned research question. This being that it is an SME that operates within the pharmaceutical industry which, in comparison to the industry at large, has put an effort towards sustainability by incorporating it into the company's mission. Yet, most importantly, as it checks these boxes, presents an

opportunity to learn more about how RGD, or rather its management, helps foster an adaptation of sustainability into the business operations in a manner that seemingly is generating profit.

3.3. Data Collection

To collect the data, we have used semi-structured in-depth interviews and annual reports containing financial statements between the years 2015 to 2022. All in all, two interviews with managers in different positions within RGD have been conducted. Having multiple interviews with managers who have different tasks within the company allows us to gain a holistic view and an overall better understanding of their overall impact which is central to the study. The semi-structured interviews have been conducted by both researchers over video call through Google Meet as opposed to face-to-face researchers. The benefits of using video call instead of face-to-face interviews, as Gray, Wong-Wylie, Rempel, and Cook (2020) explain is that it allows for accessibility for all parties as logistical and geographical factors do not present a barrier; with that offering "cost effectiveness without compromising a meaningful connection with the participants" (Gray et. al, 2020, p. 1297). This is important to take into consideration, especially since Kothari (2004) explains that the need for a research design, in the first place, is to ensure making "research as efficient as possible yielding maximal information with minimal expenditure of effort, time and money" (p.32).

Naturally, conducting qualitative interviewing in such a manner also offers some barriers in comparison to traditional face-to-face interviews. For example, it does assume that the participants have a fair understanding of technology and how to use Google Meet. In this study, however, it was never considered a barrier as both interviewees had ample knowledge of it. Instead, what was brought up as a potential barrier was that interviewing via video call can make it more difficult to understand the interviewees body language and emotional cues (Gray et. al, 2020). As such arguments could be made that limit us from, as Kothari (2004) puts it, yielding maximal information. Yet, while conducting interviews via video call could potentially lessen the ability to understand body language and emotional cues, such potential difference is not likely to impact the reliability, and as such, it is unlikely to have any impact on the outcome of the study.

Gray et. al (2020) also offers a list of recommendations for researchers who decide on conducting qualitative interviewing via video call, and some of them we decided to use. For example, as per their recommendation, the video call program was thoroughly tested, and backup plans associated with internet or recording issues were put in place. Moreover, we used an AI application called Otter.ai, which automatically records and transcribes the interviews directly from the meeting link. As Leavy (2022) explains, this type of technology will likely help save time and effort, yet still needs to be thoroughly reviewed. The same meeting link was emailed to the participants at least 24 hours prior to the interview, along with an interview guide to help the participants gain a better understanding of what questions would be asked. However, as we use semi-structured interviews, follow-up questions, as well as other questions, were asked. During the interview, notes were kept as an additional backup source of information. On average the interviews lasted one hour and thirty minutes.

Table 1 - List of respondents of semi-structured in-depth interviews. (Created by authors)

Position / Company	Name	Interview Method	Citation
Executive Vice-President / Red Glead Discovery	Martina Kvist	Google Meet	Kvist, 2023 / Kvist
Head of Medicinal Chemistry / Red Glead Discovery	Magnus Bergner	Google Meet	Bergner, 2023 / Bergner

3.4. Data Analysis

In order to make sense of the different data collected, the interview transcriptions and the company's annual reports need to be further analyzed (Creswell & Creswell, 2018). In simple terms this is done by segmenting and taking apart the data collected to, later on, put it back together (Creswell & Creswell, 2018). Creswell and Creswell advise researchers to view such qualitative data analysis as a process divided into five steps, which this study will follow. They explain that the first step focuses on preparing the data for analysis by, for example, transcribing the interviews, optically scaling material, and sorting and arranging data into different types. In step two they explain that the researcher should start to read through the material to get a general sense of the data and start to reflect on it. As such, in this step, researchers try to gain an

understanding of the ideas communicated by the participants but also reflect on the depth and credibility of the information collected in general. The third step is when researchers start to "code" the data, in other words, taking the gathered data, and segmenting sentences into categories that preferably are labeled based on the language used by the participants. Step four, on the other hand, is about generating a description and themes with the use of the coding process. Creswell and Creswell explain that a description is detailed information on people, places, or events in a setting. Moreover, generating themes through coding will construct the major findings in qualitative research. Lastly, step five, talks about representing the description and themes in the qualitative narrative. They explain that this is most commonly done through a narrative passage that presents the findings of the analysis, something that in our case will be done by discussing the interconnections of the themes.

As mentioned previously, part of the data analysis requires a coding process. In this case, a general inductive approach for qualitative data analysis was used (Thomas, 2003). The inductive approach is used to 1) condense raw text data into a brief summary format, which applies to this research as the interviews are transcribed as raw data; 2) establish links between the research objectives and the findings that come from the analysis of the raw data; and 3) develop a model that can structure the raw data (Thomas, 2003). As can be seen, the inductive approach is "straightforward" and provides researchers with a brief non-technical set of data analysis procedures. After the data is coded, the interview segments will be analyzed into themes and similarities between the subgroups of the themes will be explored as well. As such, the coding scheme starts with a brainstorming process to match the text obtained in the interviews and document analysis with key words to be able to find and locate information. After this, the words are simplified into groups of words with specific "more general" topics that are mentioned in the data, and finally, keywords that are grouped together and form the entire analysis.

Baškarada (2013) states that qualitative analysis can be seen "as both the most difficult and the least codified part of the case study process" (p. 10). As such, while Creswell and Creswell (2018) urge researchers to apply their aforementioned sequential steps, it is not a must. Yet, needless to say, researchers need to properly analyze the data since, if it is not done correctly, it can lead to unjustified conclusions (Baškarada, 2013).

3.5. Validity and Reliability of the Study

While the text has previously touched upon concerns in regard to the validity and reliability of the study, there is a need for a closer observation of it as well as the procedures undertaken to try to ensure it. When it comes to the research design, it is intended to "represent a logical set of statements" and as such it can be judged as "the quality of any given design according to certain logical tests" (Yin, 2009, p. 40). The tests to assess such quality in research are commonly known to be: construct validity, internal validity, external validity, and reliability. Yin (2009) explains that researchers need to pay attention to all of them. However, since this case study is not an explanatory case study, internal validity does not pose a concern (Yin, 2009). Construct validity, however, does pose a challenge as it only "occurs when investigators use adequate definitions and measures of variables" (Creswell & Creswell, 2018, p. 328), something critics argue case study researchers often fail to do and that subjective judgment is used to collect the data (Yin, 2009). In order to address this and increase construct validity, the study will use multiple sources of evidence, as mentioned before, which will allow for convergent lines of inquiry (Yin, 2009). This is supported by Thomas (2003) which refers to "triangulation within a project" as a technique to address trustworthiness, which will be done by applying the same interview guide during the interviews that will be conducted.

External validity refers to the problem associated with knowing if the findings are generalizable, in other words, applicable to use outside the case itself (Yin, 2009). And while the generalizability of case studies is often criticized, along the lines previously discussed, it boils down to the fact that case studies rely on analytical generalization and not statistical generalization. As such, this study is striving for generalizing a set of results that can be applied to a border theory (Yin, 2009). Meaning, that this study will not support statistical generalization, nor does it aim to do so. When it comes to reliability, the test's objective is to ensure that if researchers would conduct the same case study, they would end up with the same findings and conclusion (Yin, 2009). Thereby, the aim is to avoid biases and errors. Central to this is having good documentation of procedures taken, with Yin (2009) explaining that researchers need to think of their documentation similarly to an accountant since they are aware that they can be audited and need to conduct their business in a manner that an outsider could be brought in and reach the same result.

3.6. Ethical consideration

Finding a research topic that has potential value or significance became a main concern while deciding on which topic to focus the research on (Leavy, 2022). In this case the proposed research is focused on sustainability and managerial impact, which potentially benefits SMEs in currently unsustainable or sustainable industries. The study, as well as impacting stakeholders such as society in general and the environment, will also promote new studies into the topic of profitability and sustainability, as well as possible social and industrial change within organizations. Additionally, the company, which the case study is done with, will benefit from the findings as they will be able to read the thesis and take advantage of the results.

Ethical consideration is important since researchers have an obligation towards participants to respect their needs, rights, and values (Creswell and Creswell, 2018). Participants from the company were selected and informed about the time commitment that was required for the research. Additionally, the researchers established ethical parameters in order to not affect the company and people that are being interviewed. Firstly, the objectives of the study were clearly explained to the participants to ensure that they gain an understanding of the study. Furthermore, written transcriptions and interpretation, along with a draft will be made available to the participants and were made with their previous consent. Moreover, the participants were contacted requesting if they would want to be referred to anonymously or not in writing (Creswell and Creswell, 2018); nevertheless, when asked during the interviews how they wanted to be cited, the participants mentioned to be cited as it worked best. It is good to clarify that the participants received the interview guide beforehand and all the information that was collected was delivered freely and without judgment. After having interviews with the company representatives, further contact was established in order to clarify information and to thank them for their participation.

The possible ethical issues that could be present in the study were reviewed according to Cresswell and Cresswell (2018). Additionally, the researchers guaranteed no presence of ethical mishaps. The handling of the collected data will be done strictly by the researchers and for the sole purpose of the study. The interview guide, notes and transcripts will only be shared between

the researchers of the thesis as well as the participants names and comments. To avoid any data anomalies, two interviews were considered for data reliability and validity.

4. Red Glead Discovery (RGD) Case Study

4.1. Description of the Company

Red Glead Discovery (RGD) was founded in 2011 by eight scientists, specialists in drug discovery and research, who were previously employed by Astrazeneca (Red Glead Discovery, n.d.a). As Astrazeneca's research facility in Lund was disbanded, they started to think about what they could do after the termination of their employment contracts and decided to use their competence as a team and offer their services to new customers, making way for RGD (Red Glead Discovery, n.d.a). Their current service value is to offer lab-based services related to medicinal chemistry, fragment screening, computational chemistry, peptide chemistry, assays and screening, NMR spectroscopy, and ADME and analysis (Red Glead Discovery, n.d.c). These services are where chemical molecules are designed, tested, analyzed and then developed into potential drugs that can be tested in clinical trials. Additionally, RGD impulses efforts to ensure that everyone has access to high-quality medicine and technology, making them a relevant company regarding sustainability. RGD includes sustainability in their value proposition, which is to improve people's lives by using their competence and service platform (Red Glead Discovery, n.d.a).

RGD has sustainability as one of their core principles, when they include it in their value proposition and follow SGD number three to ensure healthy lives and promote well-being for all. They are currently measuring their Greenhouse Gas (GHG) emissions in collaboration with the climate consultancy firm 2050, having a target to reduce absolute scope 1 and 2 GHG by 38% from 2021 to 2030 and achieve net zero by 2050 (Red Glead Discovery, n.d.b). RGD has experienced incredible growth since its start in 2011, with that, going from seven to around fifty employees in about ten years and even being awarded the Gazelle prize by Dagens Industri for being one of Sweden's fastest-growing companies (Red Glead Discovery, n.d.a).

Currently, RGD's sustainability mindset has led to innovation within the operations as they have strategic goals that encompass the whole organization and they also have operational goals that are specific to the areas inside the company. Examples of products or processes that have resulted from this approach are starting to become more relevant within the organization.

Synthesis of compounds is one of the examples that RGD has with more sustainable processes. With this, they can show that more companies are working in sustainable practices and that the role of managers in promoting and achieving sustainable value creation is ongoing. Their objective in the long-term is to be able to synthesize pharmaceuticals with low environmental impact (Red Glead Discovery, n.d.b).

4.2. Empirical Findings

In this part, the case will be further analyzed and the empirical findings will be presented. In other words, using the steps previously presented in the methodology, we have broken down the data, categorized it, and constructed themes which will serve as headings used for each individual part of the analysis. Therefore, this next part only aims at presenting all the data collected in a uniform way.

4.2.1. From Personal Interest to Corporate Mission

While RGD today has a clear interest in the environment and in sustainability, that has not always been the case, Kvist mentions. However, as Bergner explains, the reason for this was not because of a lack of concern for it, but rather it was not directly communicated to customers and external stakeholders in the manner that they are currently doing it. By looking at the annual report this becomes clear as prior to 2021 there is no mention or connection to the environment or sustainability in them (Red Glead Discovery, 2015-2022). However, Kvist explains that actual change came in 2020 when she, heavily influenced by her own personal beliefs and concerns for the environment, influenced a change. The idea of sustainability was introduced by Kvist, while thinking about the future in a manner similar to, "what would happen if we [RGD] would *not* use sustainability in a structured way in the company" a line of thought that fostered a sustainability focus. Such change, and Kvist being the catalyst behind it, is something that Bergner seconds.

Kvist explains that her underlying motive was connected to the impact that the company has in regards to its CO₂ emissions, rather than as something that would produce any other form of value. Kvist recalls herself as being quite naive, not in the sense that she believed carbon emission calculation to be a trivial task, but rather that she did not fully understand the underlying complexities of, for example, calculating the emissions of the company. And when

reflecting and thinking back to this point in time, Kvist even lightly chuckled when recalling reaching out to her previous employer and industry giant AstraZeneca to understand how they calculate their emissions, getting the response that it was also a concern for them.

The motivation behind Kvists actions and their importance are of interest for this study. Kvist goes on to explain that to instill similar change in other companies, she believes that there needs to be an individual or individuals inside the organization which have a genuine interest in sustainability to impulse, support and drive the change. Yet, Kvist emphasizes that such a role does not need to be held by a manager, but that it is up to the manager to permit and support such individuals. Therefore, she mentions that for managers within the organization to impact change, they need to have the right competences, therefore they need to bring in the right people.

"... you need to identify the person in the organization that it's mostly passionate about sustainability. So, a leader or manager that has that influence, hopefully, but it could even be somebody else in the organization. That person that knows the most, understands it the best and has some kind of connection to the business... to the core business." (Kvist, 2023)

Moreover, she explains that in RGD, as in similar SMEs, there is no one who has an education or background specifically related to sustainability or a similar field, and therefore, being this a weakness, it becomes even more important to embrace and leverage the knowledge that employees have. As such, while it can be helpful to have one or a few individuals to lead the way in the beginning, getting everyone in the company involved will allow for further sustainable development and greater success.

"Nobody at our company is or has studied environmental science. That can be a kind of drawback sometimes" (Kvist, 2023).

Kvist, as part of the evolution of her role, becomes responsible for marketing, sales and human resources, which gives her a perspective into social sustainability. She emphasizes the importance of having working conditions that are satisfactory for employees and supporting personal development, which would lead to employees enhancing their capabilities and therefore

improving the company's sustainability perspective. This, added to the fact that in RGD they have multidisciplinary sustainability groups that discuss how they can improve internal processes and operations, shows how individuals in the organization can develop professionally and have the power to influence the firms' sustainability decision-making process.

"I think that internally for employees, we have very good working conditions, we are trying to emphasize personal development ... that you are encouraged to improve for enhancing your competence and which connects to the social development or the social part of the global development goals when you look at in business perspective, and we also have as a value, ambition so thriving towards something new, better, improved, more sustainable." (Kvist, 2023)

4.2.2. Making Sustainability a Commodity

In the interview, Kvist explained that RGD should aim at treating sustainability as a commodity and communicate it as such both internally and externally. Internally, Kvist explains that RGD does a lot of different things to get employees onboard with this idea. For example, she explains that they put a lot of focus on personal development and encourage people to improve and grow.

"You need to talk about what you're doing so that everybody gets involved in it. And that's kind of a little bit making it a commodity. Sustainability should be a commodity in our business. It should not be something special or strange that only Martina is working with." (Kvist, 2023)

More concretely, Kvist explains that they work with "Inner Development Goals (IDG)" which helps employees understand where they are in terms of sustainability, as well as different forms of incentives for employees. However, the idea is not to force sustainability on people or question those who personally might not believe it to be as important, but rather to ensure an understanding that allows growth for both the individuals and the company as a whole.

"We have natural scientists and engineers so we focus on the scientific stuff and I would like to try to bring this much more into our company, and we have also discussed... if you have heard about the inner development goals... It's about that you first need to be able to take care of

yourself and know where you are in terms of sustainability in order to be able to take care of others, and help them in their sustainability journey. It's a little bit more on them." (Kvist, 2023)

Moreover, the role of managers is not to act as "puppet masters", as Kvist puts it, but to help motivate and talk about sustainability by adding it to the agenda. In fact, to gain a better understanding of how the employees perceive sustainability, RGD sent out an anonymous survey to the employees, Kvist explains. The result showed that 100% of the surveyed employees answered that they worked with sustainability, and 70% that they are involved themselves and can explain what actions they partake in their daily routines.

"We also have regular updates on our sustainability work. Many people are involved with it. We had a survey on it... 100% say our company works with sustainability. It's really good. 70% said that they are themselves involved and they also can name what it is we're doing" (Kvist, 2023).

That was not the case for external stakeholders. Kvist explains that communicating sustainability as a commodity caused some confusion for external stakeholders at the start, most so for customers. As RGD decided to take a more sustainable approach, they decided to send a survey to their customers, as they did with their employees, yet they had less successful results as customers' interest in sustainability wasn't very high. This becomes a challenge for the company as they mention the need of looking into how to become more sustainable as an industry. And while Kvist has noticed a slight change since the implementation of the survey, sustainability is still not treated as a commodity per se. Therefore, RGD has put an effort towards communicating it externally.

"I think we absolutely need to look at how we can be more sustainable as an industry and I think that the pharma industry is a little bit better in recognizing that and formulating that." (Kvist, 2023)

For example, when asked to talk about the growth that RGD has experienced at a conference, Kvist instead wanted to use time to talk about sustainability. Similarly, Kvist explains that RGD is organizing a symposium to educate and inform external stakeholders on the methods and

techniques they currently use in regards to sustainability and its potential uses that they are working on.

"And we are organizing a symposium in the fall for this kind of method or techniques. Where we have one session only about sustainability. Where we will present the results as well as to help out other companies as well..." (Kvist, 2023)

4.2.3. Integration of Sustainability in Business Decisions

The importance of having a future focus is something that Kvist stresses, both for RGD, and for others who want to follow in their steps with sustainability. Kvist explains that initial reasoning for becoming more sustainable and being more mindful of the environment was rooted in a concern for future generations, rather than future business. However, the two are arguably connected, and as such, fifty percent of Kvist's role at RGD involves being responsible for future business endeavors. Kvist strongly believes that integrating sustainability into operations is not just important in regards to current operation, but also towards future existence of both the company and the planet at large.

"... with respect to having a better offer in the future... that needs companies that have sustainability implemented in their business decisions and can deliver services that are more sustainable... I think I then need to understand the world we will be living in in the future." (Kvist, 2023)

Using the Brundtland report's definition of sustainability as the basis of the argument, Kvist believes that companies that want to stay in business will have to abide by it at a greater level, especially connected to CO₂ emissions. Believing that companies that do not make such investments at an early stage will struggle when it likely becomes a mandate, as the process is difficult and time consuming for any company no matter the size and financial strength. Therefore, what she recommends companies and managers to do is approach this by asking themselves "How do we think the world will change?". She explains that companies need to try to paint a picture of what they believe the world will look like and how it will impact them and change accordingly.

"So, I think that it is wise for every company to define what they mean in order to be able to communicate sustainability... we refer to the Brundtland Commission's definition as well. And we also thought that it is quite fitting to talk about future generations also with a kind of very specific relationship to our company." (Kvist, 2023)

For example, Kvist foresees that companies will likely have to pay for the emissions they produce in future, and that material scarcity will become an issue for companies in general, and the pharmaceutical industry in particular. Adjacent to this, she explains that RGD is working towards finding new ways to handle, for example, the increasing scarcity and cost of helium, and looking at ways to recycle and reuse it. Thereby, in much the same way, she argues that other companies must try to look into the future, understand the impact the environmental and sustainability aspects will likely have, and make changes. In that sense, if not for the greater good of society, then at least for themselves as they will likely find it difficult to ensure survival in the long-term otherwise.

"And in the long run, those that produce CO2 will need to pay for somebody to take care of it. If we cannot reduce our emissions or the amount of our emissions, that is a business risk... we're working with materials that might become more scarce in the future, more expensive, like helium. And we were today discussing how we could already have it as a goal and look into alternatives for helium recycling." (Kvist, 2023)

While RGD's decision of including more sustainable practices and being more mindful of the environment did not raise much interest initially, both Kvist and Bergner have acknowledged an increasing interest in sustainability within the industry. Bergner explains that, especially amongst the larger players, interest has grown and, with it, the pressure on subcontractors to be able to deliver in line with such demand. Both Kvist and Bergner explain also that RGD is currently working on offering alternative services which would be more sustainable than the current ones. Kvist presents these alternatives as giving the customers an option to pick between "the old, dirty way" or "the new, less harmful way", as such, being able to offer both depending on the

customers preference. However, Kvist expresses hope that they will be able to offer the more sustainable service at a lesser price, making it become the standard option.

"But we can say okay, we do this, the old dirty way. Or we can do it the new, less harmful way by using different materials and different methods and want to price it exactly the opposite, as you would expect. So, the pricing is still the same or is it how we want to make the dirty service more expensive." (Kvist, 2023)

RGD has also partnered up with Danish AI company Desupervised ApS to develop an AI tool which aims at shortening the time for drug development, making the process more cost effective and more sustainable as can be seen in Appendix B (Bergner, 2023). In the future, however, it will become more important for RGD to choose the "right suppliers" that actually care about sustainability and have proof of the actions they are taking in order to reduce their own emissions. Making them start to choose suppliers that are also working on reducing their own emissions and provide proof of it. It will not be enough to just mention that sustainability is an important part of the business, but to actually have the evidence to support it, Kvist explains.

"So, in a couple of years, there will not be many suppliers that are allowed to kind of dirty our supply chain with their climate emissions. So, we'll choose suppliers that are also working in reducing climate emissions, and you need to deliver proof that you're doing so. It's not enough anymore to say that we think sustainability is really important and we all love it. But you really have to do something about it." (Kvist, 2023)

4.2.4. Not in the business of Planting Trees

Both Bergner and Kvist make it clear that RGD is a business and while the company and its employees are dedicated to sustainability it needs to make money, not just keep that commitment but to ultimately survive as a company. Kvist states that at the end of the day companies are measured by their ability to create growth and turn profit, explaining that you don't win the Gazelle prize for being sustainable but for growth. However, Kvist is also very clear about the fact that RGD's goal is not to maximize their profit as such, but rather to optimize their value over the long-term. Particularly, while steady growth and profitability are needed for survival,

they are not obsessed with it by any means. Instead, RGD is currently using more sustainable material which often carries a premium, with that always picking a more susceptible matter as long as it's not more than ten to fifteen percent more expensive. Moreover, Kvist explains that it's likely that they will have to lower the price of "the new, less harmful way" service that they intend to offer, with that, incurring the additional cost themselves and lowering their short-term financials to set the stage and attract customers to hopefully ensure long-term success.

"But there's a lot of obstacles on the way. And that is that still, if you think about that, companies are measured by growth... the Gazelle price, for example. You only get it for growth, not for being sustainable... So as long as we are looking at the financials, in terms of what revenue we have, everything that will diminish this revenue will, depending on who's looking, not be seen as a positive thing. But we want to optimize our value over the long term. And we strongly believe that we, by doing this by engaging in these activities, will have better outcomes." (Kvist, 2023)

Kvist recalls that as of right now the industry at large is doing much less than it could, and although it's moving in the right directions, change is needed. She explains that RGD is currently allocating about 1,4% of its budget towards sustainability, however, as Bergner puts it, RGD is not in the business of planting trees when it comes to being sustainable, meaning that RGDs focus is on the core of their business.

"We're not, you know, planting forests or something like that to compensate for ours. We're trying to look at our own business and what we can do." (Bergner, 2023)

4.2.5. Incorporating Sustainability into Daily Operations

While explaining that there is nothing necessarily wrong with planting trees, Bergner explains that RGDs sustainability efforts are incorporated into its daily operations. He also explains that labs use a lot of energy, mainly connected to heating and ventilation, something that Kvist seconds by explaining that labs are four times more energy intensive than traditional working spaces. As it is so energy intensive, Bergner explains that by implementing seemingly small changes, they can achieve a big impact. More specifically, he explains that they have put half a "smiley face" on the sash of the fume hood so that when an employee pulls the sash down, the

top half of the smiley face connects to the bottom one forming a whole smiley face. In other words, nudging people to close the sash to form the smiley and with that putting less strain on the ventilation system, and in turn, consuming less energy.

Additionally, Bergner further explains that they use vials instead of more traditional beakers and flasks glassware as it allows them to reduce the amount of solvent as well as the amount of silica used, ensuring that less resources are used. However, while they put a real effort towards ensuring that sustainability and environmental aspects are incorporated into RGD operation, Bergner points out that only seven percent of RGD's emissions are connected to scope 1 and 2. In other words, emissions from their own sources (scope 1) and indirect from the purchase of energy (scope 2). As such, most of their emissions are incurred indirectly outside the value chain (scope 3), something that makes the overall sustainability process arguably more difficult as they, and industry at large, are dependent on material from the petrochemical industry. Moreover, Bergner explains that in comparison to, for example, a manufacturing company, RGD does not have many standardized processes as they never do the same thing twice, which in itself, creates additional challenges.

4.2.6. Not Only About Delivering Molecules

Both Bergner and Kvist stress that RGD emissions reduction goals are important to their sustainability push, both as a form of performance indicators and as a tool to educate and inform both internal and external stakeholders. As a performance indicator, Bergner and Kvist mention that RGD uses climate emissions calculations as their main form of KPI. Thus, they do not have any form of operational KPI that includes sustainability in the day to day operations. In order to calculate their emissions RGD brought in external consultants to help them, something that Kvist explains carries a large cost, yet has helped them a lot as it has created interest in the company as well. As such, Kvist is open with the fact that such actions also serve a marketing purpose as well, and that the company has received more notice because of it.

"Climate emissions are one of the most prioritized that we're working on the most, with that, we are also investing the most in, and that is visible to everybody like our employees or investors and customers" (Kvist, 2023)

Still, Kvist explains that RGD has a stakeholder approach and while customers play a large role, they are only one of the external stakeholders to be taken into consideration. In fact, Kvist explains that RGD even includes future generations amongst its external stakeholders. As such, there is also a sense of altruism that is incorporated in their actions, even arguing that it is a must. Because at the end of the day it is not just about delivering molecules for RGD, as Kvist puts it. Yet, while it might be what keeps the lights on, Kvist stresses the importance of informing and inspiring other leaders to make similar changes, and with that, being able to improve the conditions for the planet and future generations.

"We have done a stakeholder analysis but have identified who we are seeing as stakeholders in our business, of course, employees, customers, suppliers, and so on. But we also included future generations" (Kvist, 2023).

5. Discussion

5.1. Introduction of Sustainability practices

The introduction of sustainability in RGD offers a clear view of how managers can start making a difference in their companies and start introducing new practices. In the case of RGD it can be clearly related to the four "green innovation games" introduced by Lampikoski et al. (2014). The first green innovation game that can be referred to here would be the radical game, which aims to "create revolutionary innovation with new technologies and experiment with emerging and new business models" (Lampikoski et al., 2014, p. 99), by doing so it can make the corporation more sustainable and create new value opportunities. Naturally, allocating resources in such a manner is not something that comes easy to all corporations, especially for companies with a lack of funds or skills, which is mostly the case for SMEs. The clarity game can also be converged with the sustainability initiatives presented by RGD because it centers on the idea that managerial activities need to be connected to the organization's environmental vision, incorporating organizational culture, strategy, and values (Lampikoski et al., 2014). With that, playing the Clarity game can reshape and reform corporations and their ways of creating value. However, without visionary leaders which understand, and can make sense of the environmental business opportunities, it can be difficult.

While the reasoning behind introducing, and "reforming" RGD through a focus on sustainability and environmental aspects was not originally intended to be a source of value, rather an action of concern, Kvist also argues that for similar companies to follow suit an individual with a vision and an interest in sustainability and the environment is needed. However, unlike Lampikoski et al. (2014), Kvist does not believe that this role needs to be held by a manager, but rather that it is the role of the manager to ensure that the person who is best suited for the role is selected for it and given the tools needed to successfully complete the task. In other words, while Kvist had this role in RGD, and was also a manager, she stresses that this did not have to be the case and the person best suited for the task should be responsible for it. Which makes sense since there is no one in RGD who has an education in the area, as well as the fact that they cannot afford to hire anyone to have this as their sole task, something they arguably share with a lot of other SMEs.

Lampikoski et al. (2014) also illustrate the different manager types needed to play each of the "green innovation games". And in the case of RGD one can argue that Kvist has both the role of the Connector and Transformer. Connectors being the ones that connect the environmental and social mission with the business in terms of economic pursuit, corporate culture, organizational values, leadership models, and business strategy. Additionally, Connectors intertwine the environmental aspects with the corporation at large. Transformers, on the other hand, make sure that rational and emotional aspects are considered when making critical business decisions, thus, keeping tabs on the fact that business decisions are aligned with values, purpose, and vision. As such, ensuring a stable positioning between short-term financials and long-term environmental goals, making them key players in the Clarity games.

Kvists concern gives RGD the focus and opportunity of including sustainability practices in their day to day business. Bergner also mentions that in the operations they are taking sustainability into account and modifying their practices, nevertheless it is not being measured in a consistent way as activities are not repetitive, or standardized, making it a challenge as it becomes hard to compare in different time frames and hard to implement long-term KPIs. Introducing the Sustainable Balanced Scorecard into the mix of tools to review progress within SMEs could provide a clear path to assess this performance with a structured approach (Hristov, Chirico and Appolloni, 2019). The possibilities of having balanced scorecards that take sustainability into account, or simple facts like ESG reporting, will eventually make companies start to focus more on sustainability, not only as an obligation or regulation, but because in the end, it will be the only way to survive in the long-term (Chandler, 2020).

5.1.1. Innovation

In order for RGD to be sustainable, Kvist mentions that they are thinking that they not only have to develop new medicines but also look at what else they can do. This integrates with what Chandler (2020) mentions when he establishes that the best way for businesses to be successful and survive in the long-term, thereby being sustainable, is to do what they do best, their core business. RGD provides a good example of both ways of thinking as on one hand they mention that they want to widen their scope of business, and on the other hand, they are actually working within the core business to innovate in order to improve their operations and be more sustainable

with what they already have. As mentioned by Kvist, sustainability is connected to change, and in general, is a facilitator for innovation, and in order to follow what has been mentioned before, companies must innovate in their current core operations in order to become more sustainable. As Nagji and Tuff (2012) sustain, where innovation is a novel creation that produces value, it is important to maintain the right balance. An example of this in RGD would be their investment with Danish AI company Desupervised ApS where they are working on AI tools aimed at shortening the time for drug development.

5.2. The Role of Stakeholders

5.2.1. External Stakeholder Management

RGDs efforts towards communicating sustainability for external stakeholders poses additional challenges. While the commodification of sustainability allows for it to take kind of a "spotlight", there must still be a demand for it in the market. As Chandler (2020) mentions, the services that you are giving to customers should come from the analysis of the market in order to generate superior outcomes. Nwagbara & Reid (2013) emphasize the need of effective stakeholder communication in terms of sustainability in order to facilitate organizational success and legitimacy, meaning that for RGD to continue effectively in the road of sustainability and for them to find partners with similar objectives, this communication should be prioritized. This is something that RGD has acknowledged and they are working closely into educating external stakeholders in sustainability. One example is the symposium that is being planned, which will be held by RGD and the main topic will be the use of new sustainable techniques and procedures within their line of operations. By having the symposium, RGD is reducing the potential barriers that are present by having lack of coordination with stakeholders and limited information flow in the adoption of circular business models (Al-Awlaqi and Aamer, 2022). Additionally, effective communication between organizations is recognized as a crucial factor in adopting sustainable practices, as highlighted by Chauhan, A., Kumar and Chauhan, C. (2021).

In the future, Kvist expresses the vision of RGD of choosing suppliers that are working on reducing their own emissions and providing proof of it. She mentions that it will not be enough to mention that sustainability is an important part of the business, but that there will need to be evidence to support it. While this is RGDs vision, it is hard to have an accurate timeline of when

this will happen, even as Kvist mentions that there seems to be an increasing interest in sustainable practices within their stakeholders.

Innovating in sustainability has led RGD into looking outside of the pharma industry and locating new partners with specific expertise in different aspects of corporate sustainability (Lampikoski et al., 2014). Danish AI company Desupervised ApS is supporting RGD in developing tools for shortening drug development times, hence making the process more effective. Lampikoski et al. also emphasize the importance of partners in making sense of emerging technological paradigms and learning about environmental issues in general. As Koenig and Dillon (2017) put it to words, partnerships between engineers developing practical solutions and the sharing of greener methods is the primary action in order to achieve a truly sustainable future for the pharmaceutical industry.

5.2.2. Internal Stakeholder Engagement and Organizational Culture

RGD treating sustainability as a commodity makes arguably a lot of sense, however, it is a difficult thing to pull off in its entirety. Internally, commodifying sustainability revolves around getting employees involved in sustainability, and in order for that to be possible RGD has a clear focus towards personal development and growth. This allows employees to understand what RGD is trying to accomplish while giving employees the needed understanding to also contribute as well. Moreover, RGDs use of Inner Development Goals (IDG) which allows for a better understanding of themselves in regards to sustainability, and where they stand. Therefore, instead of forcing sustainability onto the employees, RGD allows the process of commodifying sustainability inside the company to be more focused on the employees themselves. While it is difficult to tell what impact the use of IDG has had on the employees, the anonymous internal survey, previously presented, hints that it could have had a positive effect on employees. Either way, what can be said for certain is that training employees and developing sustainability-related competencies has shown to be very important for employee performance in the short-term and greening the corporate culture in the long-term (Law, Hills and Hau, 2017). More importantly, Law, Hills, and Hau (2017) explain that without such support and commitment from all employees, it's impossible to ultimately reach the corporate goal of sustainability. Therefore, managers have to become aware that they are not the only ones that should be concerned with

sustainability in the company, and employees play a fundamental role in the sustainable becoming of the firms (Klingenberg & Kochanowski, 2015).

Having the right people inside the organization will support organizational culture, which also plays an important role for a company to become sustainable. Creating a culture of sustainability requires a multilevel approach that begins "top down" with top managers, but the efforts should be complemented with the operational practices of the company as mentioned by Bergner, thus ensuring a "bottom up" approach as well (Galpin, Whittington, & Bell, 2015). As such, having a business model that supports the correct implementation of a sustainable culture within organizations can have benefits related to the direction which the organization is moving towards in terms of sustainability (Galpin, Whittington, & Bell, 2015).

After attracting the right people and actually hiring employees with a sustainability mindset, part of the communication has to be directed to them, consequently the previously mentioned communication efforts should go both ways, towards internal and external stakeholders. It is very important to acknowledge that in order to have good communication with the employees, the company needs to invest time in "getting to know themselves". RGD is on the correct path as they are establishing partnerships that are enabling them to focus on their carbon footprint as well as to be able to know where they are in their sustainability journey.

5.3. Approach to Sustainability in Management

5.3.1. Structured Approach

As previously mentioned, one of the thoughts present in the management team of RGD is that of having a structured approach to sustainability. Structured approaches to sustainability management can support the business by providing a basis so that companies can transparently assess their performance and continuous improvement of the processes, products, services and innovation opportunities (Mertins & Orth, 2012). Mertins and Orth mention that this approach can have benefits like resource efficiency, high-quality workforce, customer satisfaction and public acceptance. Introducing the Sustainable Balanced Scorecard into the mix of tools to review progress within SMEs could provide a clear path to assess this performance with a structured approach (Hristov, Chirico and Appolloni, 2019).

5.3.2. Connecting sustainability to the core business

Connecting sustainability to the core of the business becomes a crucial part of the process in becoming a sustainable business. As mentioned by Barbosa, Castañeda and Lombardo (2020) the objective of small companies should be to create a model that allows them to insert sustainability in their activities in a controllable manner that will eventually result in a competitive advantage. While RGD has already embarked on the initial phase of integrating business strategy and sustainability goals, the effects of such change in regards to creating value for the company is still unclear. In other words, while the company's total turnover has increased yearly since 2020, the year Kvist mentioned that the push towards sustainability began, it's difficult to tell how much the operational changes explained by Bergner can be ascribed to this. In fact, Kvist even acknowledged that the operational changes made are likely to have had little impact on the overall turnover. Nevertheless, Nidumolu, Prahalad, & Rangaswami, (2009) explain that bottom-line benefits can be achieved by having eco-efficiency strategies that focus on the reduction of pollution, energy consumption and water conservation, just as RGD is doing.

Furthermore, Kvist also acknowledges that such changes, especially the action of calculating their emissions, and the work on a new, more sustainable offering have resulted in increased interest in their services. As such, one could argue that the sustainability initiatives introduced so far have had more effect on positioning the company (Lindgreen & Swaen, 2010; Siegel & Vitalian, 2005), than being a source of sustainable value per se (Chandler, 2020). In other words, while Chandler argues for integrating sustainable practices at the core of the business similarly to what RGD has done, he also argues that the best measurement of the value created by doing so is profit. And while RGD is profitable (Red Glead Discovery, 2023), it is impossible to accurately measure how much of the profit that is generated due to the integration of such sustainability practices.

In comparison, if RGD hypothetically was already offering both the traditionally "old, dirty" and the "new, less harmful" this would not pose the same problem. Instead, one would be able to measure the value created in the manner in which Chandler (2020) intends, which would be using profit as measurement of value to see if the new, less harmful offering would create value, or if customers would still prefer the old offering. And as such, if the new, less harmful offering

would be able to create sustainable value, or if there would be no demand. However, since so is not yet the case, it is impossible to know.

5.3.3. Sustainability Investment in the long term

Kvist mentioned in the interview that when approaching the idea of becoming more sustainable, consideration was given to the cost that they would have to incur. After all, as both Kvist and Bergner express, it is a business, and while highly motivated to ensure that RGD does the utmost, the approach has to be progressive. As of right now, RGD allocates 1,4% of their budget towards sustainability initiatives, claiming that it probably won't generate profit in the short-term but it will enhance the company in terms of sustainability for future growth. Accordingly, in order to become more sustainable, RGD is willing to postpone short-term profit in the belief that making such changes would set RGD up for future success. However, Jain, Sharma, and Srivastava (2019) conclude that, initially, sustainable investments have no significant difference in performance from regular investments. With this said, the better option for managers would still be to have a sustainable approach and incorporate sustainable practices since it does not decrease performance, hence there is no real reason why a company would not do it. As mentioned by Kvist, RGDs aim is to optimize their value over the long-term, believing that it is in the best interest form themselves and society at large. This belief aligns with Chandler's (2020) principles for sustainable value creation in which he stresses the importance of profit optimization instead of profit maximization to be able to meet the needs of a broad number of stakeholders over the medium to long term.

The preconception of viewing sustainability as simply being an expense, rather than as a source of future value is something that Nidumolu, Prahalad, & Rangaswami, (2009) point out. Moreover, Nidumolu, Prahalad, & Rangaswami, (2009) explain that by viewing sustainability in such a simplistic, dated manner, companies limit themselves and put themselves in a position of disadvantage as integrating sustainability could be a source of value not just in the short-term, but more likely in the long-term. Thus, by integrating sustainability into the operation, companies will be able to develop competencies that will allow them to stay ahead of the curve with a future perspective. In RGDs case, one example of this would be their work on developing a new, more sustainable offering. While currently, it is not a must to have such services to be in

compliance with current regulation, it provides RGD an advantage as these offerings will set them apart to be more effective while creating economic and sustainable value in the future (Elkington, 1997). Nidumolu, Prahalad, & Rangaswami, (2009) even argues that only companies that have a clear sustainability goal will achieve competitive advantage, which means that companies need to rethink their business. Similarly, Chandler (2020) explains that integrating sustainability and sustainable value creation is not a choice for companies but rather an unavoidable outcome.

6. Conclusion

6.1. Summary of key findings

The purpose of this research has been to understand how managers in SMEs within the pharmaceutical industry can integrate sustainability into their company in a manner that creates value while integrating sustainable practices in a way that continues generating profit. With this in mind the following research question is formulated:

How can managers within SMEs in the pharmaceutical industry help foster an adaptation of sustainability into business operations in order to create sustainable value which generates profitability for the company, while also being mindful of the next generation?

The research question was analyzed by using a single case study of Red Glead Discovery, an SME in the pharmaceutical industry, that in the end provided several factors within the areas of sustainability practices, management, stakeholder engagement and communication, sustainability investment and profitability. The introduction of sustainability practices within companies can lead to innovation while integrating environmental vision into managerial activities and reshaping the organizational culture and values. Managers can be the visionary leaders playing an important role in driving sustainability in their companies, nevertheless, employees can also hold this position and responsibility. Additionally, managers can support the integration of environmental aspects, corporate culture and long-term goals making sure there is a balance in financial decision-making and sustainability objectives. This way, companies can start to have structured approaches to sustainability which will connect sustainability to the core of the business ensuring long-term success and creating competitive advantage.

Stakeholders play an important role within the sustainability journey of organizations. Effective stakeholder communication, internally and externally, will be essential to be able to achieve successful sustainability initiatives, reducing barriers and improving coordination with the company. Moreover, partnerships will evolve from these communications as, naturally, more companies will start to transform into sustainable businesses. On the other hand, employee involvement and development will increase workforce quality and competence that will support

the commodification of sustainability inside and outside the organization. Finally, the research has shown that sustainability practices can be initiated and developed in smaller corporations even though they do not have the financial flexibility as large multinational corporations do.

6.2. Contribution to the literature

Based on the case description and the empirical evidence presented, the discussion presents important findings that show potential contributions to the existing literature in terms of sustainability, corporate practice and the integration of environmental concerns with business strategies.

Role of individuals in driving sustainable change

The findings presented in the research highlight the importance of employees with an authentic interest in sustainability and their role in being able to set in motion and support sustainability initiatives in companies. This illuminates the fact that personal motivations and beliefs in driving sustainability change are of high significance for sustainability leadership and individual agency in corporate sustainability. These findings are contributing to Lampikoski et al. (2014) in their paper about the "green innovation games", as they focus primarily on the role of the managers in sustainability as it was their sole responsibility and only mentioning employees' passion once in their review, nevertheless it has to be taken into consideration that in order for employees to be correctly motivated, the role of the managers does play an important part.

Communicating sustainability as a commodity

In the case, it is described how RGDs approach to sustainability involves treating it as a commodity and actively promoting it and communicating it both internally and externally. This is a perspective that offers insight into how to communicate sustainability strategically and what potential impact it may have on stakeholders. The effectiveness and challenges of these communication strategies for sustainability as a commodity can be useful for managers in terms of decision-making when it comes to marketing and stakeholder engagement. This particular finding presents an interesting case and addition to Lindgreen & Swaen's (2010) paper related to Corporate Social Responsibility, where they explain that there should be a systematic and interdisciplinary examination in CSR communication to avoid triggering stakeholders'

skepticism and cynicism. Nevertheless, if sustainability starts to be communicated as a commodity, it may trigger different responses from stakeholders, establishing a possible true nature of sustainability and how it should be viewed as a valuable important resource.

6.3. Practical Contributions

The practical contributions of this thesis offer guidance into strategies and examples of how managers can guide organizations and drive sustainability initiatives, engagement with stakeholders and the integration of sustainability into the core of the business. The first and most important contribution is for managers and how they can position and improve their roles into driving sustainability. Having a clear view of the company now and a vision of the future, finding and developing the right people, developing KPIs and establishing sustainable balanced scorecards will support managers into developing strategies and frameworks to align financial objectives and sustainability goals effectively. Secondly, the right attraction of stakeholders, both internally and externally, requires effective communication and understanding and portraying sustainability as a commodity can be the best approach to it. Moreover, it has shown the importance of leveraging the knowledge of internal stakeholders and also not relying blindly on managers, which in the end will allow SMEs to have a better way of handling challenges connected to the scarce resources and capabilities they have in relation to MNCs.

6.4. Limitations of the study and directions for future research

Limitations

It is important to mention several limitations that were present during the development of the research for this thesis. The first limitation refers to the single case study approach that was selected. Even though the study was based on an SME in the pharmaceutical industry, thus is related to the question of research, a multiple case study can improve the findings and make sure there is a comparison between different companies in order to establish if what was found in this thesis can be considered general and applicable for a whole industry or a larger group of companies.

A second and important limitation that arose while the case was being analyzed is that this would be a great study in five years' time and this is due to the fact that most of the findings that were found do not have clear results or are not related to any profitability yet, so most of them cannot be confirmed in the short-term.

Directions for future research

In this case, RGD focuses on the challenge it faces when operating in a "non-standardized" industry when it comes to sustainability. The need for adapting sustainability practices in the operations where processes are not repetitive or "standard" may provide a good overview of how to improve sustainability practices in different sectors. The clearest adaptation that can be seen from the findings is related to the KPIs and the introduction of them when it comes to sustainability in "non-standardized" industries, which offers a clear possibility for future research in performance management indicators. Additionally, RGDs approach to sustainability is interesting as it is mentioned that they didn't always include sustainability in their decision making. The approach of balancing sustainability goals with the need for profitability that is established, raises questions about the trade-offs that companies face in their sustainability journeys and the challenges they have to overcome in their way. Business models and the integration of sustainability into financial decision-making provide another opportunity for future research. Finally, while the review of the literature for this research was successful in determining how sustainability is being approached by MNCs, there was an underlying trend within the literature to focus on multinational corporations and how they work around sustainability. The findings of the present study show that SMEs can also be studied around the topic and can impulse sustainability actions within their area of focus, which could bring to the literature new insight into how small corporations are approaching sustainability by focusing on driving sustainability inside the organization, making small steps that can have internal impact, commodifying sustainability and effective sustainability communication with stakeholders.

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8. Appendix

Appendix A

Interview Guide for Red Glead Discovery Interviews

- 1. Please state your name and role in Red Glead.
- 2. Can you please tell us how Red Glead first started?
- 3. How did you come about Red Glead? Have you always been in the same role?
- 4. Tell us about your role and how it has changed throughout the years
- 5. How was sustainability first introduced in Red Glead? Where did the initiative to focus on sustainability come from?
- 6. Is there a person directly responsible or held accountable for sustainability activities?
- 7. What were the initial strategies and tools implemented to create sustainable value and promote sustainability?
- 8. How do you communicate the importance of sustainability to your stakeholders, such as employees, investors, and customers?
- 9. What kind of resources do you allocate to sustainability activities?
- 10. Sustainable value creation is defined as "the incorporation of a holistic CSR perspective within a firm's strategic planning and core operations so that the firm is managed in the interests of a broad set of stakeholders to optimize value over the medium to long term".
- 11. Can you describe any future sustainability goals your company has planned, and how do these align with your long-term business strategy?
- 12. How does Red Glead ensure that the sustainability goals are in line with the long-term profitability goals?
- 13. Does Red Glead monitor any kind of sustainable value creation?
- 14. Are there any important KPIs taken into account related to sustainability and its long-term impact on sustainability?
- 15. Is profitability considered when thinking about sustainability?
- 16. How does Red Glead integrate sustainability into its overall business strategy and objectives for future years?
- 17. How are projects prioritized?

- 18. How has Red Glead leveraged sustainable practices to drive innovation, and can you describe any specific examples of products or processes that resulted from this approach?
- 19. Can you describe the role of managers in promoting and achieving sustainable value creation at Red Glead?
- 20. Can you describe any challenges or barriers your company has faced in implementing sustainable practices, and if possible, what strategies have you employed to overcome these challenges?
- 21. Have there been any negative impacts from projects or activities that were made in order to be sustainable?
- 22. Does Red Glead have allies or partnerships related to sustainability?
- 23. Can you discuss any particular successes or achievements related to sustainable value creation at Red Glead?
- 24. What recommendations would you give to managers of SMEs in traditionally unsustainable industries who are interested in promoting sustainability as a means of achieving long-term profitability?
- 25. How do you see the role of sustainability evolving in the pharmaceutical industry in the coming years?
- 26. Is there any additional comments or something you would like to tell us to keep in mind while doing the research?

Appendix B

Red Glead Discovery Annual Report 2022 (Unpublished)

Arsredovisning för

Red Glead Discovery AB

556859-2876

Räkenskapsåret

2022-01-01 - 2022-12-31

Förvaltningsberättelse	1
Resultaträkning	4
Balansräkning	
Noter	7
Underskrifter	11

Förvaltningsberättelse

Styrelsen och verkställande direktören för Red Glead Discovery AB, 556859-2876, avger följande årsredovisning för räkenskapsåret 2022-01-01 - 2022-12-31.

Verksamheten

Allmänt om verksamheten

Red Glead Discovery AB grundades 2011 av sju delägare, samtliga med bakgrund från AstraZeneca. Verksamheten bedrivs i förhyrda lokaler i Lund dels på Medicon Village dels på Ideon, där man förfogar över ca 1 000 kvm laboratorier och totalt cirka 800 kvm kontors- och övrig yta. Bolagets verksamhet omfattar tvärvetenskapliga forskningstjänster, främst på det prekliniska stadiet, fokuserade på små molekyler och peptider. Tjänsterna erbjuds dels till externa kunder, främst inom Life Science, dels används de inom egen forskning och utveckling. Bolaget hade 57 anställda vid räkenskapsårets utgång – en ökning med 4 personer under året. 60% av medarbetarna har doktorerat och tillsammans besitter bolaget 600 års erfarenhet av läkemedelsutveckling.

Tjänsterna som erbjuds finns inom sju definierade specialistfunktioner, där kunder antingen utnyttjar enstaka tjänster eller använder bolagets erfarenhet av att genomföra integrerade projekt, där flera discipliner är representerade. Erbjudandet inom integrerade projekt kan i princip omfatta leverans från samttiga i bolaget representerade funktioner, vilket gör att kunderna i många fall kan använda Red Glead Discovery som sin enda leverantör. Detta i sin tur innebär att kommunikation och arbetssätt underlättas för kunderna och gör utvecklingsarbetet mer effektivt. Bolaget är i dagsläget främst representerat hos kunder inom Biotech- och Pharmasektorerna, vilka efterfrägar tjänster inom tidig läkemedelsutveckling. Dock kan alla verksamheter som är i behov av forskningstjänster inriktade på små molekyler och peptider använda sig av Red Glead Discovery.

Bolaget har en tydlig ambition att utveckla sina forskningstjänster för att kunna erbjuda hållbara, tidsbesparande och kostnadseffektiva metoder till kunderna och därigenom bidra till en bättre hälsa för både människor och planet.

Väsentliga händelser under räkenskapsåret

Inledningen av 2022 präglades även den av den allmänna situation som blev konsekvensen av Covid-19 men relativt snart förändrades situationen av det krig som bröt ut i slutet av februari då Ryssland invaderade Ukraina. Covid-19 medförde inte heller under 2022 någon väsentlig påverkan på verksamheten förutom en förhöjd frånvaro i början av året, på grund av de allmänna riktlinjer som då var aktuella. Kriget påverkade, speciellt inledningsvis, bolaget genom störningar framför allt i materialtiligången.

Intäkterna fortsatte öka under 2022, från totalt 60,5 MSEK under år 2021 till 64,8 MSEK under 2022 vilket motsvarar en 7% ökning. Försäljningen fördelar sig så att cirka 75% utgjordes av export till kunder främst i USA och Skandinavien och resterande 25% utgörs av försäljning till svenska kunder. I linje med strategin har bolaget också under 2022 väsentligt förstärkt sitt hållbarhetsarbete. Hemsidan har utökats med en sida för hållbarhet för att kommunicera företagets hållbarhetsmål och framsteg på hållbarhetsområdet (www.redglead.com/about/sustainability/).

Stöd har sökts och erhållits från Region Skåne, för att genomföra beräkningar enligt Greenhouse Gas Protocol (GHG) av bolagets miljöpåverkan med avseende på växthusgaser. Syftet var att kunna sätta klimatmål som går i linje med vad vetenskapen anser krävs för att klara målsättningama i Parisavtalet - att ta fram åtgärder som stöttar målet att begränsa den globala temperaturökningen till 1,5 °C.

Resultaten från utsläppsberäkningarna har också använts för att sätta mål för minskning av bolagets utsläpp fram till år 2030. Bolaget har även, i enlighet med Sveriges nationella klimatmål, förpliktigat sig att nå netto-noll till 2045. Bolagets klimatmål blev godkända av den internationellt erkända organisationen Science-based Targets initiative (SBTi), ett samarbete mellan UN Global Compact, World Resource Institute (WRI), WWF och Carbon Disclosure Project (CDP). Red Glead Discovery är det enda SME bland svenska Life Science bolag som har satt netto-noll mål, och ett av tre bolag som har satt mål i enlighet med Parisavtalet för 2030.

Att ha fätt klimatmålen godkända av SBTi är en viktig milstolpe i företagets hållbarhetsarbete, ett arbete som kommer intensifieras under det kommande året, för att stärka bolagets position som en ledare för hållbarhetsarbete i branschen.

Arbetet med att vidareutveckla den unika och patenterade tekniken i det delägda bolaget WAC Weak Affinity Chromatography AB (WAC) fortsätter. Denna metod bedöms även i framtiden vara en för våra kunder attraktiv och viktig del inom den tidigaste fasen av läkemedelsutveckling.

Marknadsföringsaktiviteterna har under 2022 fortsatt varit inriktade på USA och Västeuropa och i värt närområde framför allt Norge.

Det delvis EU-finansierade projektet som i Sverige hanteras via Vinnova där Red Glead Discovery tillsammans med ett danskt Al-bolag. Desupervised ApS går framåt enligt plan. De två bolagen ska gemensamt utveckla ett Al-verktyg som ska kunna bidra till att både förkorta tiden för framtagning av läkemedel och göra processen mer kostnadseffektiv och hållbar ur miljösynpunkt. Digitaliseringen inom bolaget fortsatte under 2022 i och med införandet av moduler för bland annat elektronisk hantering av leverantörsfakturor och uppföljning av tid och projekt. Ytterligare moduler kommer implementeras under kommande år.

För att kunna möta den ökande efterfrågan och behoven i den växande organisationen så fortsätter bolaget att investera i infrastruktur, instrument och personal. Bland de viktigare instrumentinvesteringarna under året märks ett HPLC-system för rening och separation av kemiska molekyler. Även på personalsidan har förändringar i form av rekryteringar genomförts, bland vilka bolagets första HR-Manager kan nämnas liksom ytterligare en beräkningskemist, vilka båda bidrar till att bredda företagets kompetensbas.

Då restriktionerna som en följd av Covid-19 avvecklades först under början av detta år medverkade vi även under 2022 i något färre event än normalt. Bolaget var representerade i form av föredragshållare och/eller utställare på 8th RSC-BMCS Fragment-based Drug Discovery Meeting i Cambridge, Drug Discovery Chemistry i San Diego, 3rd Swedish Medicinal Chemistry Symposium i Stockholm, och Drug Discovery Europe (Oxford Global) i Berlin. Medarbetare inom företaget har vidare medverkat som uppfinnare eller medförfattare på både patentansökningar och vetenskapliga publikationer.

Flerårsöversikt

				Belopp i kr
	2022	2021	2020	2019
Nettoomsättning	64 806 789	60 577 676	44 372 748	33 528 059
Resultat efter finansiella poster	2 990 885	8 513 680	5 393 906	3 472 257
Soliditet %	59,7	59	48,2	43,2

Förändringar i eget kapital

			Balanserat	
	Aktiekapital	Överkursfond	resultat	Arets resultat
Belopp vid årets ingång	125 000	135 000	7 310 191	4 554 297
Utdelning			-1 100 000	-1 100 000
Balanseras i ny räkning			4 554 297	-3 454 297
Arets resultat				1 708 816
Belopp vid årets utgång	125 000	135 000	10 764 488	1 708 816

Resultatdisposition

Till årsstämmans förfogande står följande medel:

	Belopp i kr
Överkursfond	135 000
Balanserat resultat	10 764 488
Arets resultat	1 708 816
Summa	12 608 304

Styrelsen föreslår att medlen disponeras enligt följande:

Utdelning	312 500
Balanseras i ny räkning	12 295 804
Summa	12 608 304

Styrelsens yttrande om vinstutdelning

Bolagets egna kapital har beräknats i enlighet med svensk lag och bokföringsnämndens uttalande. Styrelsen finner att full täckning finns för bolagets bundna egna kapital efter den föreslagna vinstutdelningen.

Styrelsen finner även att den föreslagna utdelningen till aktieägarna är försvarbar med hänsyn till de parametrar (verksamhetens art, omfattning och risker samt konsolideringsbehov, likviditet och ställning i övrigt) som anges i 17 kap 3 §, andra och tredje stycket, i aktiebolagslagen.

Styrelsen föreslås berryndigas att besluta om tidpunkt då utdelningen ska betalas.

Resultaträkning

		2022-01-01 -	2021-01-01 -
Belopp i kr	Not	2022-12-31	2021-12-31
Rörelseintäkter, lagerförändringar m.m.			
Nettoomsättning		64 806 789	60 577 676
Ovriga rörelseintäkter		888 484	566 720
Summa rörelseintäkter, lagerförändringar m.m.		65 695 273	61 144 396
Rörelsekostnader			
Råvaror och förnödenheter		-13 015 519	-9 623 037
Övriga externa kostnader		-13 944 446	-13 032 857
Personalkostnader	2	-34 188 053	-29 275 817
Av- och nedskrivningar av materiella och immateriella anläggningstillgångar		-995 336	-614 670
Övriga rörelsekostnader		-205 170	-42 437
Summa rörelsekostnader		-62 348 524	-52 588 818
Rörelseresultat		3 346 749	8 555 578
Finansiella poster			
Resultat från andelar i intresseföretag och gemensamt		-318 000	0
styrda företag			
Övriga ränteintäkter och liknande resultatposter		2 781	0
Räntekostnader och liknande resultatposter		-40 645	-41 898
Summa finansiella poster		-355 864	-41 898
Resultat efter finansiella poster		2 990 885	8 513 680
Bokslutsdispositioner			
Förändring av periodiseringsfonder		-710 487	-1 891 675
Förändring av överavskrivningar		6 939	-613 077
Summa bokslutsdispositioner		-703 548	-2 504 752
Resultat före skatt		2 287 337	6 008 928
Skatter			
Skatt på årets resultat		-578 521	-1 454 631
Arets resultat		1 708 816	4 554 297

Balansräkning

Belopp i kr	Not	2022-12-31	2021-12-31
TILLGÅNGAR			
Anläggningstillgångar			
Immateriella anläggningstillgångar			
Koncessioner, patent, licenser, varumärken samt	3	58 038	0
liknande rättigheter			
Summa immateriella anläggningstillgångar		58 038	0
Materiella anläggningstillgångar			
Inventarier, verktyg och installationer	4	3 273 910	3 703 909
Summa materiella anläggningstillgångar	_	3 273 910	3 703 909
Finansiella anläggningstillgångar			
Andelar i intresseföretag och gemensamt styrda företag	5	1 562 917	1 356 250
Fordringar hos intresseföretag och gemensamt styrda företag	6	150 000	150 000
Andra längfristiga värdepappersinnehav	7	444 000	444 000
Summa finansiella anläggningstillgångar	_	2 156 917	1 950 250
Summa anläggningstillgångar	-	5 488 865	5 654 159
Omsättningstillgångar			
Varulager m.m.			
Råvaror och förnödenheter		254 390	347 994
Summa varulager m.m.		254 390	347 994
Kortfristiga fordringar			
Kundfordringar		6 689 189	8 480 532
Övriga fordringar		731 431	636 091
Förutbetalda kostnader och upplupna intäkter		6 751 808	5 994 042
Summa kortfristiga fordringar		14 172 428	15 110 665
Kassa och bank			
Kassa och bank	_	11 677 492	8 917 566
Summa kassa och bank		11 677 492	8 917 566
Summa omsättningstillgångar	-	26 104 310	24 376 225
SUMMA TILLGÅNGAR	-	31 593 175	30 030 384

Balansräkning

Belopp i kr	Not	2022-12-31	2021-12-31
EGET KAPITAL OCH SKULDER			
Eget kapital			
Bundet eget kapital			
Aktiekapital		125 000	125 000
Summa bundet eget kapital		125 000	125 000
Fritt eget kapital			
Överkursfond		135 000	135 000
Balanserat resultat		10 764 488	7 310 191
Arets resultat		1 708 816	4 554 297
Summa fritt eget kapital		12 608 304	11 999 488
Summa eget kapital	-	12 733 304	12 124 488
Obeskattade reserver			
Periodiseringsfonder		6 898 952	6 188 465
Ackumulerade överavskrivningar		832 230	839 169
Summa obeskattade reserver		7 731 182	7 027 634
Långfristiga skulder			
Övriga skulder till kreditinstitut	8	99 986	299 990
Summa långfristiga skulder		99 986	299 990
Kortfristiga skulder			
Övriga skulder till kreditinstitut	8	200 000	200 000
Leverantörsskulder		2 273 495	2 086 104
Skulder till intresseföretag och gemensamt styrda		0	204 423
företag			
Skatteskulder		665 255	1 748 485
Ovriga skulder		1 053 591	1 403 416
Upplupna kostnader och förutbetalda intäkter	_	6 836 362	4 935 844
Summa kortfristiga skulder		11 028 703	10 578 272
SUMMA EGET KAPITAL OCH SKULDER	_	31 593 175	30 030 384

Noter

Belopp i kr om inget annat anges.

Not 1 Redovisningsprinciper

Årsredovisningen är upprättad i enlighet med årsredovisningslagen och Bokföringsnämndens allmänna råd (BFNAR 2016:10) om årsredovisning i mindre företag.

Immateriella anläggningstillgångar

Foljande avskrivningstider tilampas:	Ar
Koncessioner, patent, licenser, varumärken samt liknande rättigheter	3
Materiella anläggningstillgångar	
Följande avskrivningstider tillämpas:	Ar
Maskiner och andra tekniska anläggningar	5-7
Inventarier, verktyg och installationer	3-5

Definition av nyckeltal

Nettoomsättning

Rörelsens huvudintäkter, fakturerade kostnader, sidointäkter samt intäktskorrigeringar.

Resultat efter finansiella poster

Resultat efter finansiella intäkter och kostnader, men före skatter.

Soliditet

(Totalt eget kapital + (100% - aktuell bolagsskattesats av obeskattade reserver)) / Totala tillgångar

Tjänste- och entreprenaduppdrag

Företagets intäkter från uppdrag till fastpris redovisas enligt alternativregeln. Företaget räknar in indirekta tillverkningskostnader i värdet för pågående arbeten för annans räkning.

Not 2 Medelantalet anställda

	2022-01-01 -	2021-01-01 -
	2022-12-31	2021-12-31
Medelantalet anställda	51.1	46.5

Not 3 Koncessioner, patent, licenser, varumärken samt liknande rättigheter

	2022-12-31	2021-12-31
Förändringar av anskaffningsvärden		
Inköp	61 450	0
Utgående anskaffningsvärden	61 450	0
Förändringar av avskrivningar		
Arets avskrivningar	-3 412	0
Utgående avskrivningar	-3 412	0
Redovisat värde	58 038	0

Not 4 Inventarier, verktyg och installationer

	2022-12-31	2021-12-31
Ingående anskaffningsvärden	7 079 709	4 422 210
Förändringar av anskaffningsvärden		
Inköp	561 925	2 667 984
Försäljningar/utrangeringar		-10 485
Utgående anskaffningsvärden	7 641 634	7 079 709
Ingående avskrivningar	-3 375 800	-2 771 615
Förändringar av avskrivningar		
Återförda avskrivningar vid försäljningar resp. utrangeringar		10 485
Årets avskrivningar	-991 924	-614 670
Utgående avskrivningar	-4 367 724	-3 375 800
Redovisat värde	3 273 910	3 703 909

Not 5 Andelar i intresseföretag och gemensamt styrda företag

	2022-12-31	2021-12-31
Ingående anskaffningsvärden	2 356 250	2 000 000
Förändringar av anskaffningsvärden		
Inköp	206 667	356 250
Utgående anskaffningsvärden	2 562 917	2 356 250
Ingående nedskrivningar	-1 000 000	-1 000 000
Utgående nedskrivningar	-1 000 000	-1 000 000
Redovisat värde	1 562 917	1 356 250

Not 6 Fordringar hos intresseföretag och gemensamt styrda företag

	2022-12-31	2021-12-31
Ingående anskaffningsvärden	150 000	0
Förändringar av anskaffningsvärden		
Årets lämnade län	0	150 000
Utgående anskaffningsvärden	150 000	150 000
Redovisat värde	150 000	150 000

Not 7 Andra långfristiga värdepappersinnehav

	2022-12-31	2021-12-31
Ingående anskaffningsvärden	444 000	444 000
Utgående anskaffningsvärden	444 000	444 000
Redovisat värde	444 000	444 000

Not 8 Långfristiga skulder

	2022-12-31	2021-12-31
Långfristiga skulder som förfaller till betalning senare än fem år efter	99 986	299 990
balansdagen		

Företagets totala banklån uppgår till 299 986 kr varav 99 986 kr utgör en långfristig skuld och 200 000 kr utgör en kortfristig skuld

Not 9 Ställda säkerheter

	2022-12-31	2021-12-31
Företagsinteckningar	2 200 000	2 200 000
Tillgångar med äganderättsförbehåll	1 546 045	1 964 276
Andra ställda säkerheter	1 000 000	1 000 000
Summa ställda säkerheter	4 746 045	5 164 276

Not 10 Eventualförpliktelser

	2022-12-31	2021-12-31
Eventualförnliktelser	1 075 179	1 275 161

Red Glead Discovery AB 556859-2876 10/11

Not 11 Väsentliga händelser efter räkenskapsårets slut

Bolaget räknar med fortsatt omsättningstillväxt även under 2023, vilket också planeras innebära en ökning av antalet medarbetare.

Då arbetet inom hållbarhetsområdet är prioriterat kommer fortsatt stort fokus kommer läggas på detta, både internt och gentemot verksamhetens intressenter. Ett annat område som bolaget kommer satsa ytterligare på är den tidiga delen av drug discovery med fokus på att utveckla kompetensen inom fler teknologier och metoder för att hitta nya kemiska startpunkter för nya läkemedelsprojekt. Investeringar i ytterligare digitalisering av processer, kommer även det fortsätta.

Investeringen i det delägda bolaget Sacra Therapeutics AB har ökat något efter årets utgång efter en förtida konvertering till aktier av ett konvertibelt lån.

Red Glead Discovery AB 556859-2876	11	1/11
Underskrifter		
Lund		
Johan Evenäs Verkställande direktör	Anders Löfgren Styrelseordförande	
Thomas Brimert Styrelseledamot	Anna Christerson Styrelseledamot	
Karolina Lawitz		
Styrelseledamot Vår revisionsberättelse har lämnats den dag sor	m framgår av vår elektroniska underskrift	
Öhrlings PricewaterhouseCoopers AB		

✓ Signerat 2023-05-04 17:28:00 UTC

Maria Lorentz Auktoriserad revisor

Deltagare

ÖHRLINGS PRICEWATERHOUSECOOPERS AB 556029-6740 Sverige

Signerat med Svenskt BankID

2023-05-04 17:28:00 UTC

Namn returnerat från Svenskt BankID: MARIA LORENTZ

Namn returnerat från Svenskt BankID: Lars Johan Evenäs

Detum

Maria Lorentz Director

Leveranskanat E-post

RED GLEAD DISCOVERY AB Sverige

Signerat med Svenskt BankID

2023-05-04 17:08:52 UTC

Detum

Johan Evenäs CEO

Leveranskanat E-post

Signerat med Svenskt BankID

2023-05-04 10:58:48 UTC

Namn returnerat från Svenskt BanklD: Anders Theodor Löfgren

Detum

Anders Löfgren

Leveranskanat E-post

Signerat med Svenskt BankID

2023-05-04 15:16:55 UTC

Namn returnerat från Svenskt BankID: THOMAS BRIMERT

Detum

Thomas Brimert

Leveranskanal: E-post

Signerat med Svenskt BankID

2023-05-04 13:09:14 UTC

Namn returnerat från Svenskt BankID: ANNA CHRISTERSON

Detum

Anna Christersson

Leveranskanat E-post

Signerat med Svenskt BankID

2023-05-04 17:12:58 UTC

Namn returnerat från Svenskt BanklD: Karolina Anna Lawitz

Detum

Karolina Lawitz

Leveranskanat E-post