Tampereen yliopisto

Roope Jetsu

UTILIZING THE ENVIRONMENTAL ADVANTAGES IN THE SALES PROCESS

Master's thesis
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ABSTRACT

Roope Jetsu: Utilizing the Environmental Advantages in the Sales Process
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Global warming and environmental changes are compelling private sector businesses to transition towards more environmentally friendly processes. The drive for this shift comes from global agreements, governmental regulations, and evolving customer preferences. Companies striving for improved environmental practices are discovering a novel source of competitive advantage. Although the relationship between a company's environmental performance and financial success has been explored from various angles in academic literature, research combining environmental performance with sales success remains scarce.

This research seeks to bridge the gap in academic understanding by examining how companies can leverage the environmental benefits of their offerings within their sales processes. To guide this investigation, the following research questions have been formulated: 1) What environmental benefits do customers desire from their suppliers? 2) How can sales teams leverage the environmental benefits of products to their advantage 3) During which stages of the sales funnel can environmental offerings be effectively utilized?

The study commences with a literature analysis of modern B2B sales processes, the dimensions of environmental sustainability, and the environmentally friendly practices adopted within companies' supply chain management. A framework for integrating environmental sustainability into sales processes is developed. The empirical segment of the study involves qualitative interviews with seven sales professionals.

The findings underscore how environmental concerns have gained prominence in companies' purchasing decisions, yet these considerations are seldom the foremost determining factor for manufacturing firms. While companies have long focused on factors with a positive environmental impact, such as energy and water usage reduction, these efforts have been primarily driven by potential cost savings. However, there is a growing emphasis on highlighting the favourable environmental impacts of these initiatives. Environmental projects and processes are now employed in stakeholder communications and marketing materials, presenting new avenues for sales teams to differentiate their offerings.

For manufacturing companies, the three most critical environmental dimensions are energy usage, water usage, and circular economy practices. The priority of these dimensions varies across industries and company levels. Sectors with the highest environmental focus are often related to renewable energy sources, such as biofuel manufacturers. The most promising markets for capitalizing on a product's environmental benefits are typically found in developed countries, particularly within the EU, due to the stringent environmental targets and regulations in these regions.

Leveraging a product's environmental benefits enables companies to establish a competitive edge over rivals. This advantage is particularly manifested through enhanced brand image and company reputation, driving additional sales. The study also identifies increased customer loyalty and a more adept response to customer needs as positive outcomes contributing to sales success.

The integration of environmental benefits into sales processes divides the sales journey into three phases: pre-sales, sales, and after-sales processes. The pre-sales phase involves collecting information about customers' environmental objectives, levels of commitment, and focus areas, thereby initiating the process of identifying customer-specific benefits. During the sales process, customer-specific benefits are pinpointed, and communication efforts to convey these benefits are launched. In the after-sales process, customer communication is concluded, and supplementary offerings can be proposed.

Keywords: Environmentally, sustainability, sales, competitive advantage, sales process

TIIVISTELMÄ

Roope Jetsu: Ympäristöetujen käyttäminen myyntiprosessissa
Diplomityö
Tampereen yliopisto
Tuotantotalouden diplomi-insinöörin tutkinto-ohjelma
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Ympäristön muutos ja ilmaston lämpeneminen näkyy yhä vahvemmin yksityisten yrityksien tavoitteissa saavuttaa yhä ympäristöystävällisempiä prosesseja. Tätä muutosta eteenpäin ajavia voimia ovat muun muassa kansainväliset tavoitteet, kehittyvä lainsäädäntö sekä asiakkaiden muuttuvat tarpeet. Yritysten pyrkimys saavuttaa korkeampi ympäristöystävällisyyden taso avaa niiden potentiaalisille toimittajille mahdollisuuden saavuttaa uudenlaista kilpailuetua. Tiedeyhteisössä on tutkittu paljon ympäristöystävällisyyden ja tuottavuuden suhdetta, mutta tutkimus ympäristötekijöiden vaikutuksesta myyntilukuihin on hyvin puutteellista.

Paikatakseen tätä aukkoa, tutkimus pyrkii vastaamaan kolmeen tutkimuskysymykseen: 1) Mitä ympäristöetuja asiakkaat toivovat toimittajiltaan 2) Kuinka myyntitiimit voisivat hyödyntää tuotteiden ympäristöetuja myyntiprosesseissa 3) Missä vaiheessa myyntiprosessia tuotteen ympäristöetuja voidaan hyödyntää.

Tutkimus alkaa kirjallisuusanalyysillä modernista myyntiprosessista, ympäristövastuullisuuden eri dimensioista sekä ympäristöystävällisistä käytännöistä, joita yritykset ovat ottaneet osaksi toimitusketjun hallintaa. Empiirinen osa tutkimuksesta toteutetaan kvalitatiivisena haastatteluna seitsemän myynninammattilaisen kanssa.

Tutkimuksen löydökset alleviivaavat kuinka ympäristötekijät ovat nostaneet tärkeyttään osana yritysten ostopäätösprosessia, mutta ne ovat yhä harvoin yksi tärkeimpiä päätös kriteerejä. Yritykset ovat jo pitkään keskittyneet saavuttamaan prosesseja, jotka ovat ympäristöystävällisimpiä. Tämä on kuitenkin tehty pääosin prosessikulujen, kuten energian ja vedenkäytön pienentämiseksi. Kuitenkin ympäristöystävällisyys on nousemassa alati suuremmaksi tekijäksi, ja sitä käytetään erityisesti sidosryhmä ja markkinointiviestinnässä.

Valmistavalle teollisuudelle kolme tärkeintä ympäristödimensiota ovat energiankäyttö, vedenkäyttö sekä kiertotalous. Näiden tekijöiden tärkeys riippuu teollisuusalasta, ja vaihtelee myös yritysten välillä. Yritykset, jotka toimivat uusiutuvien energialähteiden alalla, ovat kaikista kiinnostuneimpia ympäristöparannuksista. Alueellisesti kaikista lupaavimmat yritykset ympäristötekijöiden hyödyntämiselle myynnissä sijaitsevat kehittyneissä maissa, eritoten EU:n alueella. Tämä johtuu kehittyneiden maiden ja eritoten EU:n tiukoista säännöistä ja laista.

Ympäristöhyötyjen hyödyntämisellä on mahdollisuus luoda kilpailuetua markkinoilla. Kilpailuetu on saavutettu parantuneen brändin sekä yrityskuvan kautta. Muita hyötyjä myynnille joita tutkimuksessa nousi esiin on kasvanut asiakaslojaliteetti ja parempi kyky vastata asiakastarpeisiin.

Kun ympäristöhyötyjä halutaan ottaa enemmän mukaan myyntiprosessiin, myyntiprosessi voidaan jakaa kolmeen osaan: Ennen myyntiä, myynti ja myynnin jälkeen prosessit. Ennen myyntiä prosessin aikana asiakkaiden ympäristötavoitteet, ympäristöprosessien taso sekä ympäristöfokuksen pääpainot selvitetään. Myös asiakas kohtaisten etujen selvittämisprosessi aloitetaan. Myyntiprosessin aikana asiakaskohtaisten etujen selvittäminen viedään loppuun, sekä aloitetaan näiden etujen kommunikointi asiakkaalle. Myyntiprosessin jälkeen asiakasetujen kommunikointia jatketaan, ja myös lisätarjoamien esittely aloitetaan ja lisämyyntiehdotuksia voidaan esittää.

Avainsanat: Ympäristö, vastuullisuus, myynti, kilpailuetu, myyntiprosessi

PREFACE

My personal university journey has involved every aspect that a blockbuster movie would include. The story features moments of pure happiness and joy, moments of sadness and disbelief, and typically involves a lot of very quick decisions. All these experiences have shaped and taught me a lot, and I am grateful for the opportunity to have lived through each one.

For me, the most important aspect has always been and will continue to be the people around me. When I look at the persons I have been fortunate enough to surround myself with, I couldn't be prouder of my choices. A special thank you to all those who have encouraged and supported me through every moment of laughter and sighs – my family, relatives, and friends. Thank you from the bottom of my heart.

The university journey got a worthy ending in the form of Master's thesis. Academic writing was not one of my strengths during my studies, and after completing this assignment, I truly feel that I exceeded my own expectations. This accomplishment wouldn't have been possible without the professional guidance of Jouni Lyly-Yrjänäinen and the opportunity to participate in the fascinating project offered by Raimo Metsola.

Even though one time period comes to an end, in the big picture not much will change. I am lucky enough to own a friend group and own mindset which will not surrender under pressure of growing too adult minded. As one of my close friends always likes to remind me, it is just another day, and another slay.

Tampere, 19.9.2023

Roope Jetsu

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LIST OF SYMBOLS AND ABBREVIATIONS

B2B	Business-to-Business
B2C	Business-to-Consumer
GSCM	Green Supply Chain Management
CPA	Customer Profitability Analyses
CLV	Customer Lifetime Value
CRM	Customer Relationship Management
AI	Artificial Intelligence
KAM	Key Account Management
UN	United Nations
ESG	Environmental, Social, and Governance
SDG	Sustainable Development Goals
CO2	Carbon dioxide
GHG	Greenhouse Gases
EU	European Union
UNFCCC	United Nations Framework Convention on Climate Change
EU ETS	European Union Emission Trading System
NFRD	Non-Financial Reporting Directive
SME	Small and Medium Size Enterprises
SBTi	Science Based Target initiative
WWF	World Wide Fund
SGMS	Sustainable Green Management System
CSR	Corporate Social Responsibility
GRI	Global Reporting Initiative
ISO	International Organization for Standardization
MTO	Make-to-Order
EP	Environmental Performance
FP	Financial Performance
R&D	Research and development
TCO	Total Cost of Ownership
LCA	Lifecycle Assessment

1. INTRODUCTION

1.1 Background

The focus of companies on environmentally friendly business practices has significantly increased in recent years and decades. This movement impacts both the industry and consumer markets, and nearly every firm, regardless of its industry, has some form of environmental targets that it promotes (Hermundsdottir and Aspelund, 2020; Yao et al., 2019). When companies undertake environmentally friendly processes and transform their business, they have different goals in mind. Bansal and Roth (2000), researched these goals companies want to achieve by focusing on the environmental side of their operations. They identified three primary motivations for companies pursuing greener business practices:

- Competitiveness
- Legitimation
- Ecological responsibility

First, competitiveness motivation refers to companies' desire to achieve higher competitive level, such as more profitable business or bigger market share. Companies seek out business opportunities and advantages by implementing greener business as part of its core business. By adopting greener strategies, companies can gain competitive advantages, such as identifying new market segments or achieving cost reductions (Forsman, 2013; Porter and van der Linde, 1995).

Second, legitimation motivation revolves around responding to changing regulations. Since environmental issues and the prevention of environmental harm have become integral components of government policies worldwide, companies are compelled to adapt to this evolving business landscape. New regulations and laws necessitate changes in companies' processes and business practices (European Comission, 2022). The driving force for these kind of regulations and laws is international agreements, such as Kyoto protocol and Paris agreement (UNFCCC, 1997; United Nations, 2023a).

Third, ecological responsibility means the actions which are going beyond regulations to promote sustainable business practices. It includes adopting environmental manage-

ment systems, considering environmental factors in decision-making processes, and developing more environmentally friendly products and services (Pane et al., 2009). The desire to implement these factors often stems from within the company itself, driven by employees and management who are eager to make a positive environmental impact and create a more environmentally friendly business (Kucharska and Kowalczyk, 2019).

Because companies are all time focusing on achieving more environmental business practises, this creates a need for new kind of supplier actions (Tseng et al., 2019). One way to make company's business more environmental friendly, is by focusing on Green Supply Chain Management (Hsu and Hu, 2008). This creates changes for the companies to gain competitive advantage for their sales if they are capable to fulfil this need. How ever, there is no literature, which would explain, how companies can benefit from their environmentally friendly product during their sales processes.

1.2 Research Questions and Objectives

Research on companies' sustainability and environmental practices and their impact on overall business has been conducted in the literature (Hermundsdottir and Aspelund, 2020; Horváthová, 2010). The need for companies to demonstrate the sustainability impact of their products on customers' processes and the importance of sustainable innovations have been studied by Patala et al. (2016). Additionally, literature has explored the focus of companies on Green Supply Chain Management and its impact on business performance (Abdallah et al., 2020; Zhu et al., 2017). However, there is no literature, which would explain how companies could leverage the environmental benefits of their products throughout the entire sales process.

To address and formulate the main research questions, three sub-questions have been developed. These sub-questions serve as the foundation for the literature framework. The formulation of the sub-research questions and the main research questions is illustrated in Figure 1.

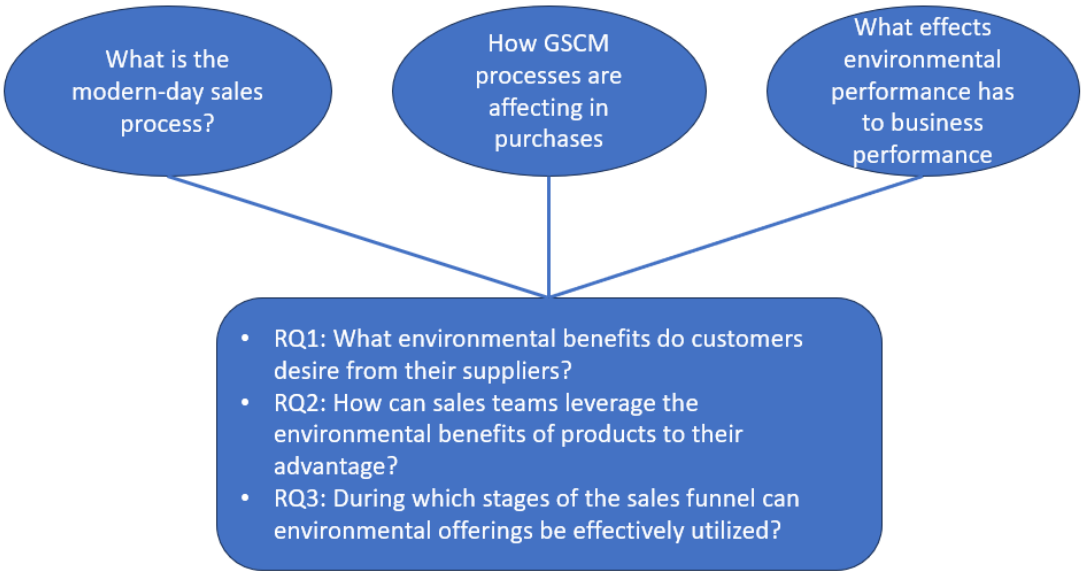

Figure 1: Building process of research questions.

The main research question aims to provide a comprehensive understanding of how the environmental benefits of products should be considered throughout the sales process. RQ1 addresses the question of which environmental benefits are most desired by customers. This question is crucial as there are numerous environmental dimensions that suppliers can focus on. RQ2 explores how the sales department can leverage the advantages of environmentally friendly products. This question seeks to identify strategies for maximizing the potential sales growth resulting from these new product benefits. RQ3 investigates which stages of the sales funnel should incorporate the presentation and integration of environmental benefits.

To answer the main research question and the sub-research questions, a literature analysis is conducted. The review examines the contemporary B2B sales funnel and explores the factors that companies emphasize within their funnel. It also investigates how sustainability and environmental processes and actions impact companies' business performance, as well as the specific requirements for B2B customer companies regarding Green Supply Chain Management (GSCM).

1.3 Research Process and Methodology

This research is executed as a case study. Case study is good way to gain more understanding from complex phenomena, such as process changes. In case studies, qualitative methods, such as informal interviews, are often used in data gathering methods

(Gummesson, 1993). In this study, the main data gathering method is informal interviews.

The research consists of two parts: a quantitative literature review and a qualitative empirical interview component. The quantitative literature review provides the theoretical background necessary for establishing the research framework. Quantitative research is particularly suitable when the aim is to uncover reasons and explanations for observed patterns (Busetto et al., 2020). The empirical part is conducted to discover new information not found in existing literature. The findings from the empirical part are then applied to the framework derived from the literature analysis. This combining approach in case studies is called adductive approach (Dubois and Gadde, 2002).

The research utilizes interventionist methodology. In interventionist research, the researcher actively participates in the actions of the case company. The researcher's aim is to improve the case company's operations as a result of the research (Tiitola et al., 2021). Through this approach, the case company allows the researcher to observe its processes and action models. This mutually beneficial arrangement allows the case company to enhance its processes while providing the researcher with valuable data for academic research. The interventionist goal for the case company is to improve and develop its sales processes by effectively responding to new environmental customer needs and maximizing competitive advantage through environmentally friendly solutions.

The research process started in January 2023, with the authors research idea formation. After developing the idea, the author began reaching out companies that might be interested in participating in a study that explores the integration of environmental sustainability and sales processes. Sulzer, the chosen case company, responded positively to the proposal, and the subject matter was further defined in February. The research process is illustrated in Figure 2.

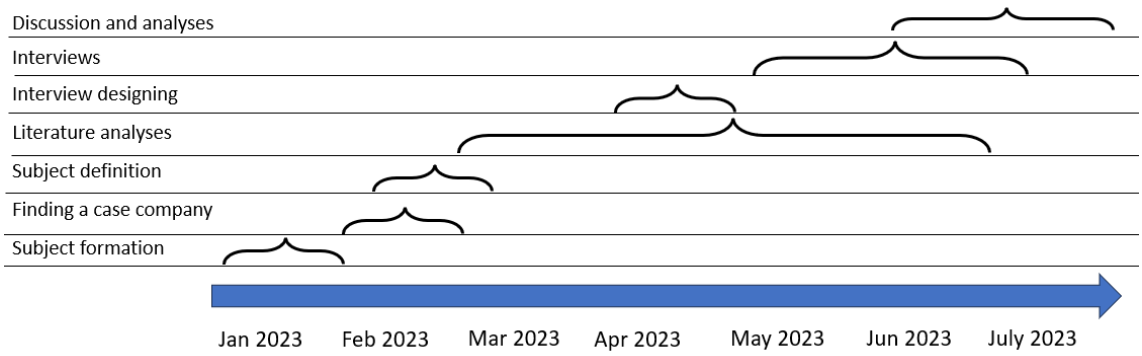

Figure 2: Research process timeline.

The author had been employed in the carbon offsetting industry, leading to the emergence of the idea for the thesis topic. A comprehensive understanding of the subject was developed following a concise literature review. Afterwards, the author crafted a summarized version of the thesis abstract and began reaching out to potential companies.

The case company, Sulzer, was confirmed in February due to their alignment with the ideas surrounding product environmental benefits and their interest in the study. Once Sulzer was confirmed, the study subject and aim were further refined in collaboration with the company, and the final topic was finalized and specified by the end of February.

Literature analysis commenced in late February and continued throughout the entire research process. Finding literature specifically focused on the integration of environmental factors and sales proved challenging, but separate literature on sales, sustainability, and the environment was readily available.

The interview design was completed between April and May, and the interviews were conducted in two parts: the first part took place in early May, while the second part occurred at the end of July. All interviews were conducted online using the Microsoft Teams platform. The author visited Sulzer's premises once on March 21, 2023. During the company visit, the author got familiar with Sulzer’s manufacturing processes and employees.

1.4 Structure of the Thesis

The structure of the thesis is as follows:

1. Introduction
2. B2B sales
3. Environmental sustainability
4. Green Supply Chain Management
5. Environmental Friendliness in Sales
6. Case Company Introduction
7. Methodology chapter
8. Interview results
9. Discussion
10. Conclusion

In the introduction chapter, the background of the research and the research questions are presented. Chapter 2 builds the theoretical background from the B2B sales process. Chapter 3 explains environmental sustainability and its effects on companies' businesses. Chapter 4 explains the term "Green Supply Chain Management" and its features. Chapter 5 constructs the theoretical framework from the findings of literature analyses. In Chapter 6, the case company is introduced along with how research-related issues are implemented as part of the company's business. Chapter 7 illustrates the research methodology and process. Chapter 8 presents the results of the interview research. Chapter 9 combines the findings from the interviews and the theoretical framework, discussing the suitability of the framework. Finally, Chapter 10 concludes by summarizing the major findings of the research paper.

2. B2B SALES

2.1 The Driving Factors of B2B Sales

There are several differences between business-to-business (B2B) and business-to-consumer (B2C) markets. These differences primarily arise from variations in customer base and market structure. The B2B sales process is heavily influenced by these dissimilarities. The Table 1 outlines these differences and their impact on B2B sales.

Table 1: B2B and B2C market differences and effect of these differences to B2B sales accordingly. (Zablah et al., 2010).

Difference	**Difference in B2B market**	**Effect on sales process**
Decision-making process	Purchasing decisions are more rational driven. Decisions are involving more persons.	Decision-making process takes longer and is more complicated.
Customer base	Smaller number of customers.	Business is more relationship based.
Nature of demand	Demand is derived from the demand of customers sales.	Customer's success benefits company's sales department.
Branding emphasis	Corporate (as opposed to product) branding is more prevalent in business than consumer markets.	Corporate brands can be leveraged across product categories and purchase situations to influence buyer decision processes.
Marketing communication mix	Interpersonal communication (e.g., personal selling) has a heightened role in business markets when compared to consumer markets.	Salesperson's communication and relationship skills are emphasised.

First, due to the complex needs of B2B companies, decision-making is rarely carried out by a single person. Companies rely on the extensive knowledge of experts from different departments during the supplier decision-making process. Furthermore, suppliers are actively involved in offering designs to better meet the demand (Nurhayati et al., 2023). According to Nurhayati et al. (2023), joint decision-making in B2B transactions provides several benefits, including more effective operations, enhanced performance, improved quality, and better financial outcomes.

Second, a smaller customer base creates the opportunity and necessity for a closer relationship between the customer and the supplier. Establishing close, personal relationships between buyers and sellers remains one of the key requirements for successful B2B sales processes. Elhajjar et al. (2023) identified relationship management as the second most important responsibility of B2B salespeople. The study also highlighted other crucial social skills, such as communication and negotiation abilities.

Third, in B2B markets, sales numbers are influenced by derived demand, making them more challenging to control compared to the B2C sector. If a company's customer experiences low sales numbers, it affects all of its suppliers. This emphasizes the importance of assisting the customer in achieving success (Hutt and Speh, 2010).

Fourth, a strong brand can offer various benefits to a company, including a competitive advantage and an enhanced reputation. According to the study by Bendixen et al.(2004), the impact of a brand on sales success is not as potent in B2B markets as it is in consumer markets. However, a brand still significantly contributes to a company's sales department performance, although factors such as price and delivery may be more crucial (Bendixen et al., 2004).

Fifth, interpersonal selling plays a vital role in the B2B selling process. Interactions with customers are closer, and relationships tend to be longer-lasting compared to the consumer side. Additionally, the ability to use software that helps maintain customer relationships has been increasingly emphasized as a required skill for B2B salespeople in recent years (Elhajjar et al., 2023).

2.2 B2B Sales Process

Traditionally, one of the most widely used frameworks for selling is provided by Alan Dubinsky in 1980. He divided the selling process into seven different steps. These steps are presented in the Figure 3.

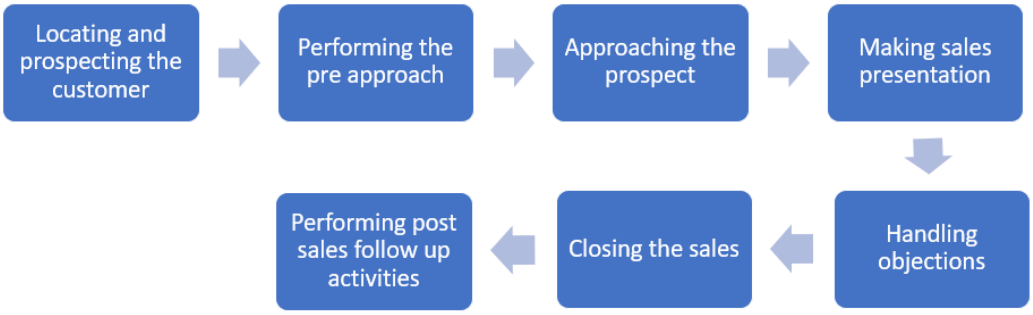

Figure 3: Seven steps of the sales process (Dubinsky, 1980).

Dubinsky explains the steps as follows: The first step is locating and prospecting customers, which involves finding the right customer. This can be accomplished through internal or external sources or personal contacts. Second, in the pre-approach stage, the salesperson gathers beneficial background information from the potential customer. For example, they may conduct interviews or gather information from other stakeholders. The third step is approaching the customer, where the salesperson makes contact with the potential customer through some form of action. This action can include highlighting product benefits, offering a trial, or asking questions about the customer's business. The fourth step is the sales presentation, which involves presenting the offering to the customer. The offering and its benefits can be visualized, demonstrated, or explained. The fifth step is handling objections, which entails addressing the client's counterarguments regarding the need or desire for the product. The sixth step is closing, where the seller finalizes the deal by confirming that the customer is ready to move forward. Finally, seventh step, post-sales follow-up activities include training, spare part services, follow-ups, and making any necessary adjustments to the offering. The goal is to ensure customer satisfaction with the supply.

Nowadays, selling methods have evolved significantly since the 1980s, and companies typically utilize a "selling mix" in their sales processes. The selling mix refers to selling through different channels, such as teleselling, selling through the internet, inbound selling, etc. These changes have emerged due to new sales technologies, globalization, and a changing customer base. Moncrief and Marshall (2005), studied how the sales process has evolved in the 21st century and developed a seven-step framework that highlights the differences compared to Dubinsky's paper. The framework is presented in Figure 4.

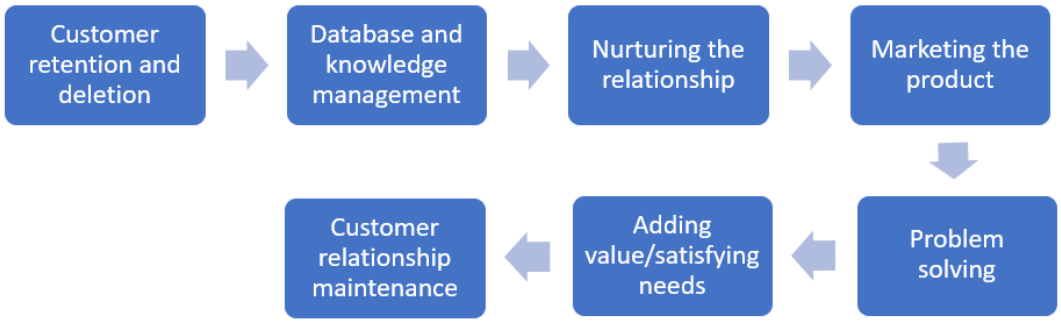

Figure 4: Advanced sales process framework (Moncrief and Marshall, 2005).

Next, all seven steps are explained in detail, focusing on the challenges and key areas that companies are currently addressing. The first step, customer retention and deletion, is presented in Figure 5.

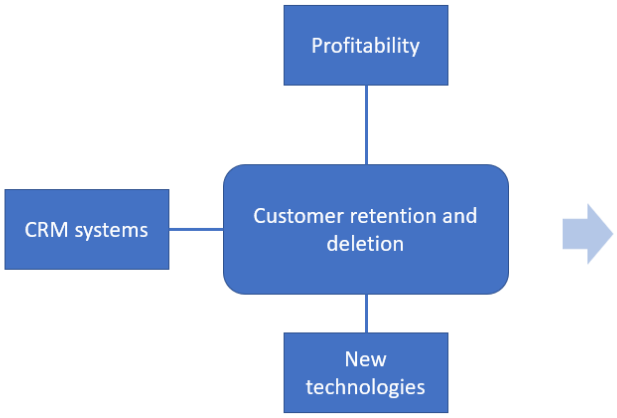

Figure 5: Customer retention and deletion step.

Companies are increasingly shifting their focus from acquiring a large number of customers to focusing on the most profitable ones. Customer retention and establishing long-term relationships have become more important as customer switching is now easier than ever (Tamaddoni Jahromi et al., 2014). The 80/20 rule, where 80% of profits are generated by 20% of customers, emphasizes the significance of targeting the right customers (Moncrief and Marshall, 2005). This highlights the importance of focusing on right customers (Fang et al., 2016). To analyse customer profitability, companies employ various methods, such as customer profitability analyses (CPA) and customer lifecycle value (CLV) (Wen Chang et al., 2012).

Recent advancements in technology have provided new avenues for assessing customer potential and profitability. Customer relationship management (CRM) systems have long been used to understand the profitability of different customers, aiming to build stable relationships and optimize financial results (Florez-Lopez and Ramon-Jeronimo, 2009). CRM systems enable sales teams to track customer activities, increasing their

efficiency and transparency in analysing customer profitability (Andersson et al., 2018, p.190). Furthermore, technological advancements have led to the use of Big Data and machine learning in estimating customer purchasing behaviour and forecasting future trends, particularly in industries like insurance (Fang et al., 2016; Martínez et al., 2020). Artificial intelligence (AI) integrated into CRM systems is also gaining traction as a way to estimate customer profitability and determine the level of investment from the sales organization (Libai et al., 2020). The second step of the framework is presented in the Figure 6.

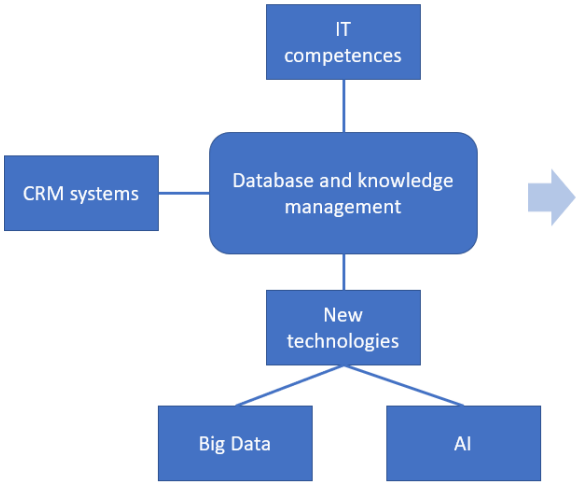

Figure 6: Database and knowledge management.

The second step in Moncrief and Marshall's framework is database and knowledge management. Companies are increasingly focusing on data gathering and management, investing heavily in these processes (Moncrief and Marshall, 2005). The availability of data has grown exponentially over the past decade, leading to a shift in focus towards the management and utilization of Big Data (Frizzo-Barker et al., 2016). Researches, such as Hallikainen et al. (2020) have explored how customer big data analytics can improve a company's performance in customer relationship and sales growth. They found that big data analytics had a positive impact, particularly on sales growth, but also on relationship performance.

Given the vast amount of data available to companies, effective data management and knowledge sourcing have become increasingly important (Khodakarami and Chan, 2014; Nam et al., 2019). Many companies utilize customer relationship management (CRM) systems to assist in data gathering, organizing, analysing, and updating (Khodakarami and Chan, 2014). However, data management capability is closely related to a company's IT competences, and despite CRM system usage, many users fail to fully leverage the system's potential (Khodakarami and Chan, 2014; Nam et al., 2019). One

significant change in data handling techniques over the past decade has been the integration of AI into software and applications (Saura et al., 2021). AI serves as an effective tool for analysing customer data, enabling the creation of personalized and tailored content to enhance company operations (Paschen et al., 2020). Next, step number 3 is presented in the Figure 7.

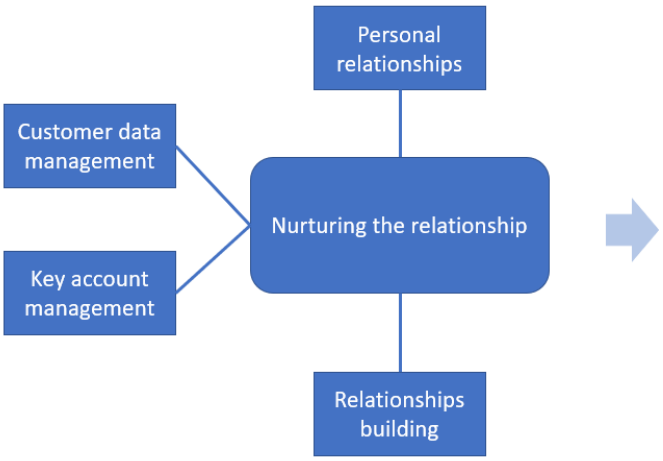

Figure 7: Nurturing the relationship.

Step three in Moncrief and Marshall's framework is nurturing the relationship with customers. This step is also known as relationship selling, where the focus is on establishing long-term relationships that yield beneficial results in the long run, rather than solely aiming for short-term wins (Moncrief and Marshall, 2005). One approach used by companies to serve their key customers is called key account management (KAM). KAM involves dedicated personnel who work with the company's most important customers, aiming to build and maintain long-term, high-quality relationships. The selection of KAM customers can be based on factors such as sales volumes, image benefits, or fit for the company (Kumar and Werner, 2012).

The role of technology has significantly grown in this step over the past decade. CRM systems play a crucial role in relationship management by organizing customer data, updating customer needs, and facilitating communication between the customer and the company (Khodakarami and Chan, 2014). AI-based CRM systems have introduced new possibilities for relationship management, including customer need forecasting, chatbots for communication, and, most importantly, the ability to generate customer-specific materials based on collected data (Paschen et al., 2020). Next, step number 4 is presented in the Figure 8.

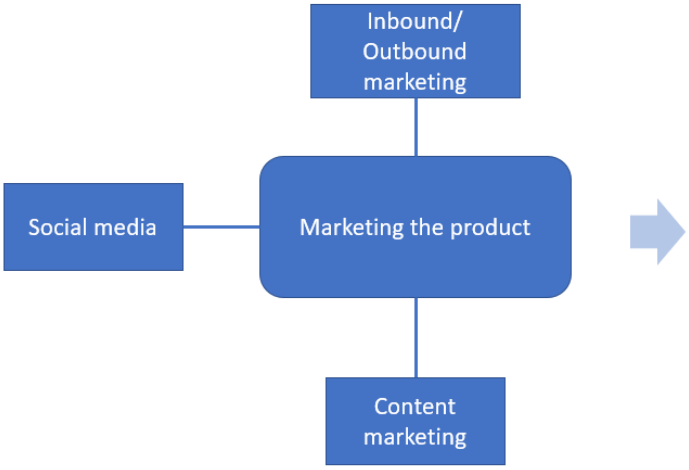

Figure 8: Marketing the product.

Step four in the selling process framework by Moncrief and Marshall (2005) is marketing the product. In the current business environment, salespeople are required to participate in a wider range of marketing actions beyond just making sales presentations. These actions include market segmentation, product development, and market development (Moncrief and Marshall, 2005).

The role of the sales presentation has been transformed by new technologies and marketing tools. Customers now have access to product information and benefits from various sources, and they no longer solely rely on information presented directly by salespersons. The use of social media has also impacted sales processes in the B2B sector. Platforms like LinkedIn and Facebook offer new ways to contact customers, manage relationships, and enhance customer satisfaction (Agnihotri et al., 2016). Through social media marketing, companies and salespeople can increase their contacts, gain market insights, and achieve higher customer engagement (Fraccastoro et al., 2021). Social media usage has become a beneficial tool for salespeople to gain a competitive advantage (Agnihotri et al., 2016; Fraccastoro et al., 2021).

Companies are increasingly focused on creating digital marketing materials that facilitate inbound sales. Such materials can include blogs, seminars, search engine optimization, whitepapers, and more. (Vieira et al., 2019). The goal of inbound marketing is to encourage potential customers to express their interest in the company's offerings voluntarily (Patrutiu-Baltes, 2016). In contrast to traditional outbound marketing, inbound marketing and sales place the customer as the active party who initiates contact with the seller. In inbound marketing, it is essential to contact customers through the right channels with customer-tailored content(Patrutiu-Baltes, 2016). This highlights the significance of content marketing in today's sales and marketing environment. Content marketing involves

sharing and creating relevant and timely content that engages customers at different stages of their purchase journey (Wang et al., 2019). Content marketing and inbound marketing contribute to better alignment between sales and marketing divisions. These marketing activities complement salespersons' personal selling efforts (Wang et al., 2019). Next, the fifth step of the sales funnel framework is presented in the Figure 9.

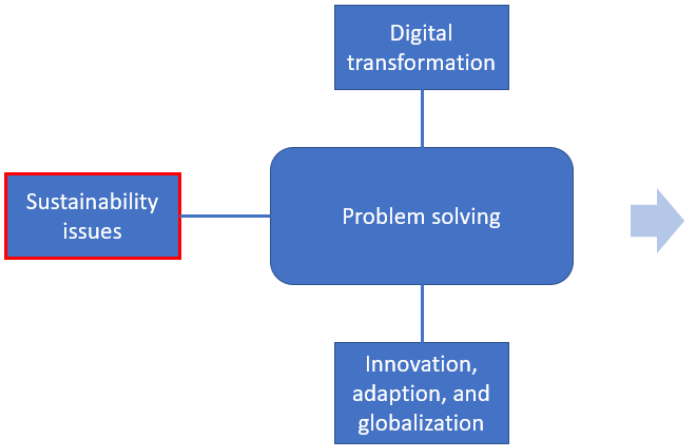

Figure 9: Problem solving.

The fifth step in the framework involves problem-solving with customers. Salespeople should not only focus on overcoming objections but also on identifying problems and needs, and offering effective solutions to address these challenges (Moncrief and Marshall, 2005). In this study, the major challenges discussed include digital transformation, the need for innovations, adaptation, globalization, and sustainability issues.

As explained earlier in this chapter, the use of digital tools in sales and marketing processes offers great opportunities for companies. However, increased digitalization can also be seen as a threat to their businesses. The adoption of digital processes and new technologies has transitioned from being a business opportunity to a necessity for many companies (Kraus et al., 2022). Digital transformation impacts various aspects of a company's operations, such as products, sales channels, financial actions, and supply chain management. According to Zhai et al. (2022), digital transformation has a positive impact on cost savings, business efficiency, and innovation. These impacts necessitate companies to invest in new knowledge and skills and make changes to their business processes. Addressing this problem is crucial as companies face the Industry 4.0 revolution (Zhou et al., 2015).

The increasing pace of new innovations, globalization, and the need for adapting to new processes pose challenges to firms operating in B2B markets. The major challenges companies face is related to heightened competitiveness. Globalization allows new com-

petitors to enter the markets, and the normalization of online purchases presents challenges for locally operating companies (Patel et al., 2014). The speed at which new innovations emerge and new technologies are adopted is a significant source of competitive advantage, and companies that lack these capabilities fall behind (Casadesus-Masanell and Ricart, 2010). This underscores the importance of addressing these issues in companies' operations.

During recent decade, there is a growing focus on sustainability issues in companies' operations and businesses. Sustainability is often categorized into 17 sustainable development goals by the United Nations(United Nations, 2023b). The term sustainability encompasses various dimensions and can have different meanings in different discussions. Chapter 3 provides a broader explanation of the term sustainability. The impact of sustainability development and its dimensions on companies' businesses has been widely studied (Mensah, 2019). However, one dimension that lacks deeper research is how companies can benefit from solving their customers' sustainability, specifically environmental, problems. The use of environmental problem-solving as part of the sales funnel is largely underexplored in the literature. More information about the utilization of environmental and sustainable benefits can be found in Chapters 3, 4, and 5. Next, Figure 10 illustrates the sixth step of the sales framework.

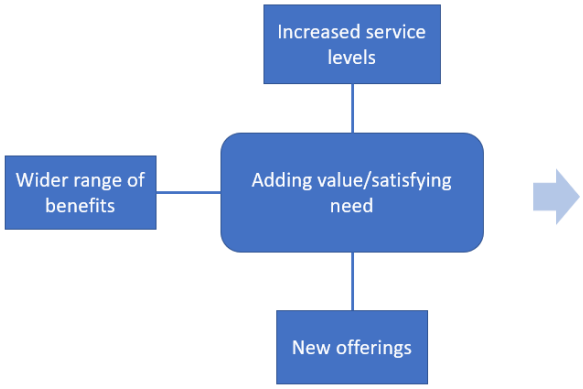

Figure 10: Adding value/satisfying need.

The sixth step in the sales funnel is adding value or satisfying needs. These needs and potential value creation opportunities arise from the customer's problems. The solutions that are most effective in solving the customer's problems are also the most valuable for the business. One way to increase customer satisfaction, for example, is by providing high-quality after-sales services (Szwejczewski et al., 2015). Through excellent service, a supplier can enhance the value received from their offering, thereby increasing customer satisfaction.

The ideal situation occurs when a supplier is able to address multiple customer problems simultaneously. George and Schillebeeckx (2022) conducted a study on how digital transformation and sustainability can be integrated into the operations of multinational companies. They argued that sustainability and digitality issues, along with the impact of COVID-19, posed significant challenges for multinational companies in the early 2020s. However, these challenges also present new opportunities to add value for customers, such as the development of digital tools for ESG reporting. The value creation process and its specifics are further explained in Chapter 2.3. Finally, the last step of the framework is presented in the Figure 11.

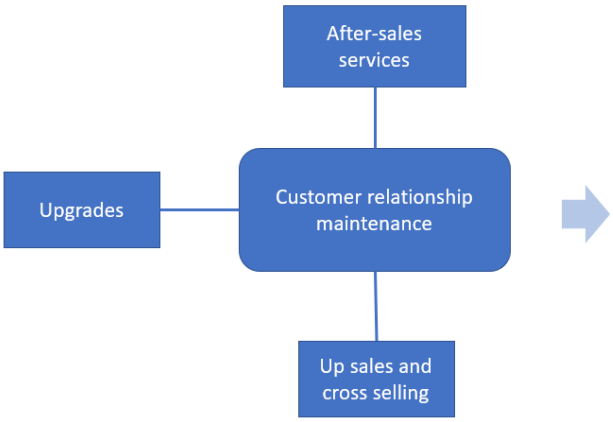

Figure 11: Customer relationship maintenance.

Finally, the last step of the framework by Moncrief and Marshall (2005) is customer relationship management. According to them, this step is most similar to the traditional follow-up step presented by Dubinsky (1980). It involves conducting follow-ups, providing after-sales services, and ensuring customer satisfaction. The implementation of this step has been influenced by various technologies (Moncrief and Marshall, 2005). Technologies such as AI, big data, and machine learning offer great opportunities to enhance the after-sales process and foster customer relationships (Paschen et al., 2020; Rohaan et al., 2022). These technologies enable salespersons to monitor how different customers behave after-sales, assess their support needs, and forecast their future purchases (Rohaan et al., 2022). Identifying potential upselling and cross-selling opportunities becomes crucial once the original offering has been successfully delivered to the customer (Paschen et al., 2020).

2.3 Creation of Customer Value

The value creation process in B2B markets is more complex compared to the B2C side. Sellers need to possess a broader knowledge and skill set about customers' businesses than is required in consumer business. The B2B value creation process can be divided into five stages as follows:

- Understanding the customers' business
- Identifying customer's need
- Developing the customized solution
- Value demonstration for customer
- Building a relationship with the customer

First, insight from customers' businesses is one of the first things a salesperson should have before sales negotiations. This was highlighted in research by Kaski et al. (2017), who studied the differences in expectations between sales and purchasing professionals. The research found that buyers place great importance on sellers having a deeper understanding of their businesses. Overall industry knowledge is and will continue to be one of the qualities that salespeople need in the value creation process. Otherwise, understanding customer needs and perceived value becomes challenging (Elhajjar et al., 2023; Hancock et al., 2005).

Second, identifying customer needs might sound self-evident, but in reality, it is much more complex phenomena. Customers might not be aware of all the problems they have, and they may not even realize the potential new offerings could bring. Adamson et al. (2012) emphasized the importance of identifying customer needs by arguing that it is beneficial for the seller to be one step ahead and engage the customer before they fully realize their needs. Leff and Williams (2009) referred to this skill of identifying customer needs as "awareness." They argued that a lack of awareness might lead to accepting the customer's problem identification at face value and result in ineffective solution offerings.

Third, developing customized solutions is highly important in the B2B environment due to the variations in customer needs. Customization can increase the value offered to the customer, which correlates positively with project incomes (Rodríguez-Escudero et al., 2022). Studies also emphasize the importance of cooperation and information sharing between the buyer and seller during the solution development process (Du et al., 2003; Rodríguez-Escudero et al., 2022). Currently, one approach to offering more customized solutions in the manufacturing industry is through upscaled servitization. Manufacturers

must be capable of gaining a competitive advantage and customization by offering higher-ranked services in response to increased competition on the product side (Hakanen et al., 2017).

Fourth step in the sales and value creation process is demonstrating the value to the customer. Without success in this step, the customer will not fully understand all the benefits of the offering, making it challenging to achieve the sales target. Cheng et al. (2022) emphasized that B2B salespeople need to help customers rationalize their purchase decisions and not solely focus on the features, capabilities, and price of the product. Important aspects of value demonstration include avoiding unnecessary information and solely presenting the benefits and advantages. After this stage, the customer should have a clear understanding of their wants and needs from the solution (Paschen et al., 2020).

Fifth, building a close relationship with the customer cannot be emphasized enough. A close relationship and mutual trust between the buyer and seller facilitate knowledge sharing, customer satisfaction, and value creation for both operators (Gil-Saura et al., 2009; Hakanen et al., 2017; Lasrado et al., 2022). A close relationship is crucial factor in building trust and loyalty between the buyer and seller (Gil-Saura et al., 2009). Close relationships are not just between two companies, the relationships are usually established at the personnel level between the salesperson and those who are responsible for procurement (Lasrado et al., 2022).

These factors presented above can be summarized in the framework presented by Andersson et al. (2018). The authors divided value creation disciplines into three different parts, which are presented in Figure 12.

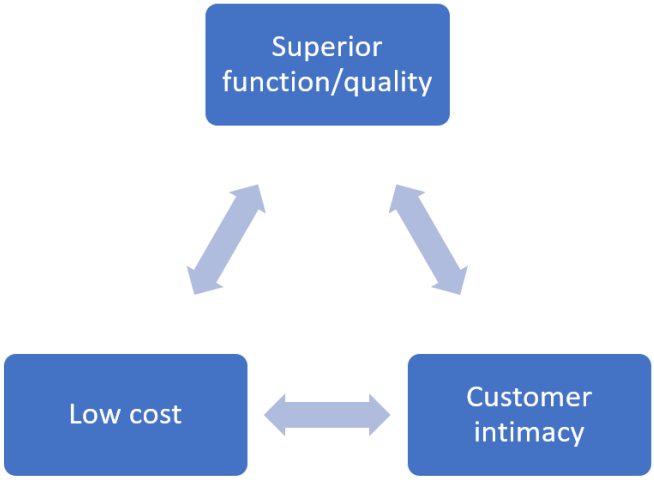

Figure 12: Customer value creation disciplines (Andersson et al., 2018).

First, this discipline describes how value can be created through functional or quality benefits. As a product leader, you surpass competitors by offering the most beneficial product or service to the customer. Second, customer intimacy describes how value can be created by modifying and tailoring the offering specifically for individual customers. Achieving customer satisfaction through this principle requires high customer specification and focus. Third, value creation is achieved by offering low-cost goods or services. This principle emphasizes the importance of lowering customers' costs to create value. Implementing this step requires excellent process efficiency from the supplier.

2.4 Selling Sustainability

As described in the previous chapters, the utilization of sustainability issues within the sales funnel is an area that lacks comprehensive studies in sales literature. There is a gap in the literature regarding specific aspects of sustainability and their integration throughout the entire sales process. Existing literature primarily focuses on certain isolated aspects of the sales process. One notable study that delves into sustainability and sales is conducted by Patala et al. (2016). This study develops a framework for sustainable value proposition development, which is presented in Figure 13.

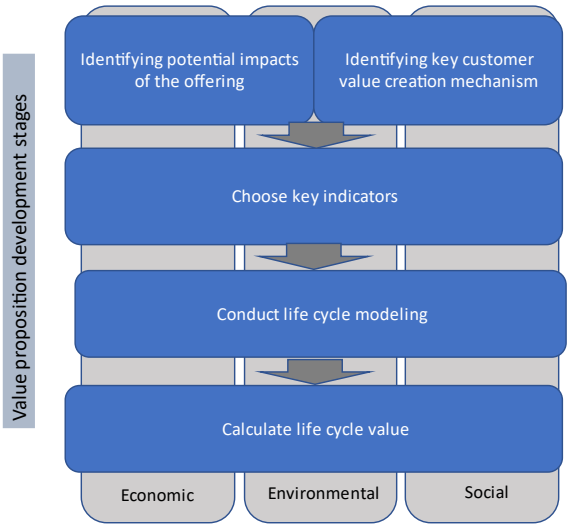

Figure 13: Framework for sustainable value proposition development (Patala et al., 2016).

The framework illustrates how a sustainable value proposition can be developed by considering the economic, environmental, and social dimensions of sustainability. However,

both this framework and existing literature lack a comprehensive understanding of how sustainability, particularly environmental issues, can be effectively integrated into the company's entire sales process. The problem with these studies is twofold. Firstly, they focus only on a limited part of the sales funnel, without providing a holistic view of the entire process. Secondly, the term "sustainability" can have different meanings in various studies and papers. The term is too complex and multidimensional to be researched wholly in one paper. Therefore, it is necessary to explain the sustainability concept and its specific environmental aspects in a case-specific manner. This thesis paper focuses specifically on the environmental dimension of sustainability, and the concept of sustainability, along with its environmental aspects, is explained in detail in Chapter 3.

3. THE IMPACT OF GOING GREEN

3.1 Sustainability and environmental sustainability

The concept of sustainability includes many different aspects, targets, and perspectives. According to Eweje and Perry (2011. pp. 9) sustainability involves actions aimed at extending the socially useful life of organizations, preserving the planet's ability to support all living species and the biosphere, enhancing society's capacity to sustain itself and address challenges, and ensuring freedom, participation, and well-being for present and future generations. The United Nations' 17 Sustainable Development Goals (SDGs) are widely used to assess businesses' sustainability, communicate sustainability efforts, and formulate future plans. These goals are illustrated in Figure 14.

Figure 14: United Nation's 17 sustainable development goals (United Nations, 2020).

The 17 sustainable development goals (SDGs) provide a comprehensive framework that addresses various aspects of sustainability beyond just environmental protection and social improvement. They highlight that sustainability encompasses multiple dimensions. However, the challenge in sustainability literature is that the term "sustainability" can have different interpretations across publications, and studies often fail to provide a specific definition of sustainability within their particular context (Moore et al., 2017).

In the context of supply chain sustainability, a common approach is to assess sustainability performance based on three dimensions: economic, environmental, and social. This approach is often referred to as the triple bottom line.

Additionally, companies' sustainability scores can be evaluated by considering their environmental, social, and governance (ESG) performance (Rajesh, 2020). Originally developed for assessing the sustainability effects of financial investments, ESG reporting and scores have become popular tools for companies to communicate their commitment to sustainable development and address regulatory requirements (Clément et al., 2023). While both frameworks serve similar purposes, they are applied in different contexts. The triple bottom line focuses on the three dimensions of sustainability within the supply chain, while the ESG framework assesses the broader environmental, social, and governance performance of companies. Figure 15 illustrates both the triple bottom line and ESG frameworks.

Figure 15: Triple bottom line and ESG models (Crace and Gehman, 2023).

Both models serve as frameworks for communicating, evaluating, and assessing a company's sustainability performance (Rajesh, 2020). The model on the left is commonly used in the finance sector, while the model on the right is primarily used for evaluating supplier sustainability performance (Clément et al., 2023; Rajesh, 2020). For instance, it was reported that around 90% of S&P 500 companies had published some form of ESG report in the early 2020s (Crace and Gehman, 2023). Both models share similarities in presenting social and environmental performance indicators and KPIs. The key difference lies in how the economic impact of operations is reported. In the ESG model, the economic impact of the company is viewed as an outcome resulting from the implementation of ESG processes (Rajesh, 2020).

In this thesis paper, the primary focus is on the environmental dimension of sustainability. Lam and Lai (2015) defined environmental sustainability as the capability of the firm and its supply chain to reduce its CO2 emissions and carbon footprint. According to (Global Reporting Initiative, 2002) the environmental dimension encompasses various factors, including:

- Emissions and waste
- Energy consumption
- Water usage
- Materials
- Biodiversity
- Suppliers
- Products and services
- Transport

These are the main characteristics that the thesis paper focuses on. When discussing the environmental and ecological perspective of sustainability, various terminologies are used. Understanding these terminologies and the distinctions between them is crucial for comprehending the message and the relationships they influence.

3.2 Environmental terminology

With rising concern and research towards the environmental impacts of companies' operations, new terminology has emerged to communicate their climate and environmental work. Companies are using different kinds of terminology, including:

- Carbon footprint
- Carbon handprint
- Carbon neutrality/Net zero
- Water hand and footprint

Carbon footprint is the most widely used and, according to some research, the most important measure for the climate performance of a company, country, or individual (Chang et al., 2014). It measures the amount of greenhouse gases (GHG) released into the atmosphere caused by human action, such as manufacturing, transportation, or energy usage. Carbon footprint is usually expressed as CO2 equivalents and takes into account other GHG gases such as methane and nitrous oxide. When companies communicate their emissions caused by their actions, they usually do so by referring to their carbon footprint. These emissions can be divided into Scope 1, 2, and 3 based on the

company's role in their formation (Barrow et al., 2013; Pajula et al., 2021). Different Scope are explained later in this chapter.

The term carbon handprint refers to the positive impact a company has on other players' carbon footprints. It is a positive environmental measure that is the opposite of the carbon footprint (Pajula et al., 2021). Companies often use the concept of carbon handprint to communicate their positive environmental actions and to make their brand appear more environmentally friendly. For example, a company may reduce its customers' energy consumption or transportation emissions through new innovations. The carbon handprint can then be calculated as the difference between emissions before and after the change (Pajula et al., 2021).

Carbon neutrality or climate neutrality means that an actor's GHG emissions and absorption are balanced, so that the net emission amount into the atmosphere does not increase. GHG absorption mainly happens through soil and ocean's ability to capture carbon dioxide (European Council, 2022). In Europe, the EU's carbon neutrality target has been set for 2050. This means that the EU aims to reduce emissions and increase absorption sources within its area. This target requires huge investments from both the public and private sector (European Council, 2022). Finland's goal is to be carbon neutral by 2035, which is one of the most ambitious targets in the world (Ministry of the Environment, 2022). Sometimes companies or the public sector use the term "net-zero" in their communication. This term has a similar meaning to carbon or climate neutrality, as it means that some action's net impact on the climate is zero, i.e. emissions and absorption are balanced (Science Based Targets, 2022).

Water footprint and handprint are similar terms to carbon footprint and handprint, but they measure water usage. Water footprint measures the negative environmental impact of some action on water, while water handprint communicates the positive changes of some action to the scarcity or quality of water (International Organization for Standardization, 2014; Pajula et al., 2021). Both water footprint and water handprint are important in countries where water resources are scarce or poor quality.

Currently, companies and governments are mainly utilizing a standardized emission calculation system that categorizes GHG emissions into three different levels based on their formation principles (Greenhouse Gas Protocol, 2013). These levels are referred to as Scopes, and emissions are allocated under either Scope 1, 2, or 3. The Greenhouse Gas Protocol defines the various Scopes and their respective definitions. With the Scopes, communicating and comparing companies carbon footprints is possible. Table 2 outlines the different Scopes and their definitions.

Table 2: Emission Scopes, definitions, and examples (Barrow et al., 2013)

Scope	Definition	Example
Scope 1	Emissions from operations that are owned or controlled by reporting company	Emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.; emissions from chemical production in owned or controlled process equipment
Scope 2	Emissions from the generation of purchased or acquired electricity, steam, heating, or cooling consumed by the reporting company	Use of purchased electricity, steam, heating, or cooling
Scope 3	All indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions	Production of purchased products, transportation of purchased products, or use of sold products

The different Scopes can be divided in a manner such that Scope 1 comprises direct emissions that a company is responsible for, while Scope 2 and 3 encompass indirect emissions that arise from the company's operations (Greenhouse Gas Protocol, 2013). In generally, Scope 1 emissions are minor compared to Scope 2 and 3 emissions, which are usually covering 90 % or over of total emissions of companies (Greenhouse Gas Protocol, 2011). In this study, the primary focus is on Scope 2 and 3 emissions and how a company can aid its customers in reducing these emissions. Scope 2 emissions can be minimized by providing more energy-efficient products, which can lower the need for energy, heat, steam, or cooling. Decreasing Scope 2 emissions is advantageous for the target company, as it can lead to reduced variable costs and increased process efficiency. On the other hand, the emission reduction process for Scope 3 is more multifaceted. For instance, offering products that are manufactured with less pollution, providing recycling services, and reducing supply chain transportation emissions are some of the ways to lower Scope 3 emissions.

Finally, the terms used around environmental businesses are explained. These are the terms, literature is using and what companies are using in their communication. The terms will be used in this thesis paper further.

Table 3: Environmental sustainability terms and explanations.

Term	Explanation	Source
Green business	”Green business is the sustainable business process of executing business with improving the economic conditions of a country, protecting the environment from the adverse effects, and finally ensuring the positive response to the society as a green capital”	(Hasan et al., 2019)
Environmentally friendly or eco-friendly	Environmental or economical friendliness means actions which are aiming to create environmental benefits.	(Katsikeas et al., 2016)
Eco-	Ecological is usually synonym for “environmentally friendly in sustainability” literature	(Hasan et al., 2019)
Circular economy	Economy which aims to reduction of waste and pollutions, and keeping the materials and other resources in use.	(Aarikka-Stenroos et al., 2021)
Environmental innovation	An innovation which has environmentally positive impacts.	(Wijethilake et al., 2018)

In the next chapters the effect of environmental business to companies’ overall performance is studied. The relationships and impact relations between environmental performance and business performance are brought out, and environmental terms are discussed more detailed level.

3.3 Governmental agreements and consequences

The first major and global environmental agreement between countries was Kyoto Protocol (UNFCCC, 1997). The Kyoto Protocol is an international agreement that operationalized the United Nations Framework Convention on Climate Change (UNFCCC) by establishing country-specific limits and reduction targets for greenhouse gas (GHG) emissions. The treaty was signed in Kyoto, Japan in 1997 and introduced a system for emission reduction to developed countries, which are referred to as Annex 1 countries in the treaty. The treaty came into force in 2005, and its first commitment period was from 2005 to 2012, during which Annex 1 countries were required to reduce GHG emissions by 5% compared to 1990 levels (UNFCCC, 1997).The Kyoto Protocol required treaty parties to report their carbon sinks, emissions, and technology development in a transparent and consistent manner. The agreement presented tools for GHG reduction, such as taxation exemptions, enhancing energy efficiency, and promoting research. Additionally, the Kyoto Protocol introduced the concept of emission trading between parties (UNFCCC, 1997).

The Paris Agreement is one of the most well-known climate agreements and provides direction for companies and governments regarding climate and other environmental actions. The agreement's main goal is to limit the increase in global warming to below 2°C above pre-industrial levels, and as of 2023, over 170 countries have signed the agreement (United Nations, 2023a). The agreement divides parties into developed and developing countries and gives them different timelines to implement climate actions. Since 2020, countries have been submitting their Nationally Determined Contributions (NDCs), where they present their current and future actions to reduce their greenhouse gas emissions (UNFCCC, 2023).

Private sector companies are facing changes in their market due to the aforementioned treaties. Governments are taking actions to regulate markets in an environmentally friendly manner to achieve their objectives. The pressure is strongest on developed countries, which have a primary responsibility for historical and current GHG emissions (UNFCCC, 2023, 1997). Some examples of actions taken by governments include the EU Emission Trading System (ETS), carbon taxes in Canada and Australia, and the EU Green Deal (European Commission, 2023a). Inside EU, the Non-Financial Reporting Directive (NFRD) was adopted in 2014. It requires large companies, with average number of employees excessing 500, to report how sustainability issues affect in their performance and business (European Commission, 2021). EU has published ESG metrics for the companies, which introduces requirements for ESG reporting, such as energy consumption and greenhouse gas emissions (The European Parliment and Council, 2019).

The requirement for sustainability reporting will expand to cover all the small and medium size enterprises (SMEs) in 2025, covering the financial year of 2024 (European Parliament, Council of the European Union, 2022).

The EU's Emission Trading System is designed to make environmentally friendly choices more economically beneficial and to establish a price tag for carbon emissions. The EU ETS works as follows: the overall amount of GHG emitted by power plants, industrial factories, or air transportation sectors that fall under EU ETS is limited by the number of emission allowances. One allowance gives the holder permission to emit one ton of CO2 equivalent. Companies under the EU ETS can trade CO2 permissions if their needs are higher or lower than their owned permissions (European Commission, 2023a). Permissions are sold in a carbon market auction, and the price development is illustrated in Figure 16.

Figure 16: Clearing prices in auctions of general allowances 2013-2022 (Trading economics, 2023).

The aim for these regulations and systems is to modify the markets to more environmentally friendly direction. The pursued situation is when more environmentally friendly decision is economically sensible choice.

3.4 Private sector's actions

In the private sector, new approaches towards environmentally sustainable business have emerged in the past decade. Due to the limited number of regulations that provide

clear guidance on how companies should operate and reduce emissions, the majority of actions taken by companies are voluntary. This chapter presents two of the most widely discussed and utilized methods that companies currently use.

The Science Based Targets initiative (SBTi) is a collaborative effort among various organizations that provides guidance for emission reduction plans for private companies. This partnership includes the Carbon Disclosure Project (CDP), the United Nations Global Compact, the World Resources Institute, and the World Wide Fund for Nature (WWF). SBTi was established in response to the Paris Agreement in 2015, to assist companies in setting emission reduction targets and plans that are in line with the Agreement (SBTi, 2022). As of 2023, nearly 5,000 companies had made commitments to SBTi, with 82 companies in Finland having committed to SBTi targets (SBTi, 2023). Companies wishing to participate in SBTi are required to make emission reductions that align with the latest climate science. Reduction plans must cover all emission Scopes, and SBTi evaluators assess whether the targets are sufficiently stringent and achievable (SBTi, 2022). After receiving approval from the evaluators, companies are able to communicate their commitment to stakeholders. SBTi has received praise for its science-based approach and ongoing evaluation of companies' progress in addressing climate change (Walenta, 2020).

Carbon offsetting is a strategy aimed at mitigating carbon emissions by increasing the capacity of carbon sinks, such as newly planted forests or ocean sinks, to capture and store CO2 from the atmosphere. Carbon credits are used to participate in offsetting projects, which involve buying credits from third-party players who channel the funds into offsetting initiatives. This approach can be used to address emissions that are difficult to reduce or avoid. However, the current offset markets and companies face several challenges, including verifying the effectiveness of offsetting projects and addressing greenwashing practices. As a result, companies should prioritize their own emissions reduction efforts rather than relying solely on offsetting (Becken and Mackey, 2017).

In addition to these voluntary actions, which are usually partly aiming for improved brand reputation, companies are implementing greener procedures because of the competitive needs. Regulations presented in Chapter 3.3 are causing extra fees for the companies which are still causing burden for the environment. Additionally, there is many competitive advantages sources available for companies with greener business. These sources are presented in the following chapters.

3.5 Green management

In the central of companies greener and more environmentally friendly operations is green management. Pane et al. (2009) defined green management as an "organization-wide process of applying innovation to achieve sustainability, waste reduction, social responsibility, and a competitive advantage through continuous learning and development and by embracing environmental goals and strategies that are fully integrated with the goals and strategies of the organization." Green management requires company-wide involvement for significant results.

For successful implementation of green management, managing elements of sustainability such as emissions, effluent discharge, waste disposal, and energy efficiency is crucial. These elements are typically measured and managed using Sustainable Green Management Systems (SGMS) (Mustapha et al., 2017). The foundation for these systems is usually built on Corporate Social Responsibility (CSR) standards. The most commonly used CSR standards include ISO 14001, ISO 26000, and the Global Reporting Initiative (GRI) standards, which play a pioneering role in environmental performance reporting (Halkos and Nomikos, 2021).

If a company aims to develop a more environmentally friendly business, the entire company culture must be aligned with these goals. Green organizational culture reflects the level of environmental concern, green leadership, and employees' green behaviour (Al-Swidi et al., 2021). Green leadership and green human resource management are valuable building blocks for fostering a company-wide green management culture. Green human resource management processes and green leadership play critical roles in shaping a company's green innovations (Singh et al., 2020).

3.6 Environmentally friendly innovations

Dias et al. (2012) defined environmental innovations as "organizational implementations and changes focusing on the environment, with implications for companies' products, manufacturing processes, and marketing, varying in degrees of novelty." The significance of environmental innovations has grown due to the heightened attention to environmental issues and the increased market demand (Bossle et al., 2016; Wijethilake et al., 2018). Bossle et al. (2016) created a framework to explain the formation of environmental innovations. The framework is presented in Figure 17.

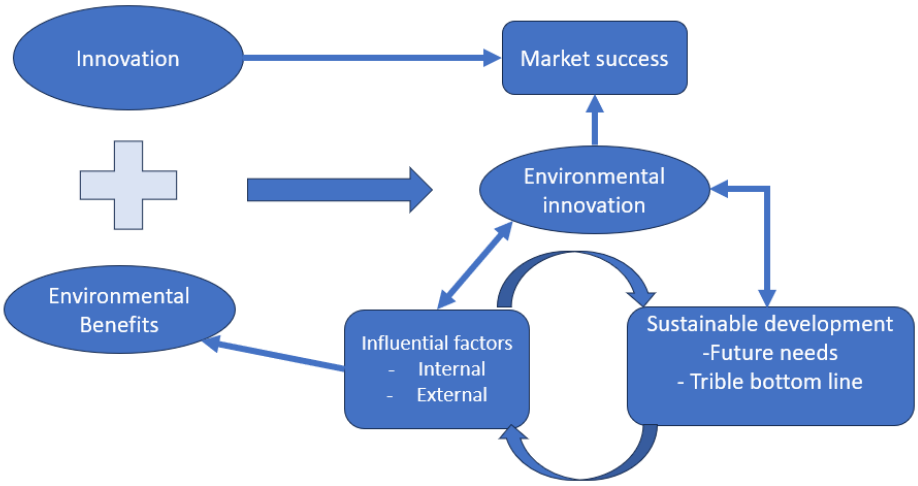

Figure 17: Environmental innovation dynamics (Bossle et al., 2016).

Bossle et al. (2016) conducted a study on the external and internal drivers of environmental innovations. They identified regulatory pressure, technological opportunities, market demand, and collaboration with other parties as external drivers. Internal drivers, on the other hand, included cost savings, adoption of certifications, environmental culture, and environmental leadership. Green innovations serve as a perfect example of Michael Porter's hypothesis on environmental "win-win" situations. Porter was the first economist to argue the positive impact of environmental innovations on a company's overall business, as they enable more efficient and resource-wise actions (Porter, 1991; Porter and van der Linde, 1995).

Having an environmental innovation strategy has become crucial for companies as they strive to meet the growing demands of the green market, adhere to stricter regulations, and respond to stakeholder pressures (Yu et al., 2017). Skordoulis et al. (2020) examined the relationship between environmental product and process innovations and competitive advantage. They found a positive correlation between both types of innovations and competitive advantage. ISO certification is the most commonly implemented practice to foster environmental innovation. According to Suchek et al. (2021), incorporating circular economy practices into the company's core business is one way to focus on creating more environmentally friendly innovations.

3.7 Circular economy

One-way companies are adopting sustainability and gaining a competitive advantage is by incorporating circular economy principles into their operations and products. Circular economy business models are being developed to make circularity a fundamental aspect

of business practices, aiming to close, narrow, and slow material and resource loops (Geissdoerfer et al., 2018). Companies are increasingly offering products, solutions, and technologies based on circular economy principles (Aarikka-Stenroos et al., 2021). Circular economy aims to deliver both economic and environmental benefits.

The environmental benefits of circular economy are evident. By reducing the need for raw and virgin materials and maximizing the utilization of end-of-life materials, circular economy practices contribute to the conservation of Earth's resources, including materials, water, and energy consumption (Pongiglione and Calderini, 2014). Circular economy has shown potential in reducing CO2 emissions in energy-intensive industries like steel production (Pongiglione and Calderini, 2014). However, it's worth noting that certain circularity processes may require energy-intensive operations, potentially raising environmental stress levels compared to linear processes (Haupt et al., 2018; Haupt and Hellweg, 2019). Hence, the environmental benefits of circularity should be assessed on a process-by-process basis.

The economic benefits caused by adoption of circular economic can be derived from the literature:

- Cost savings
- Resource efficiency
- Improvement in brand reputation
- Regulatory compliance
- Increased sales

Cost savings result from reductions in energy consumption, materials, and workforce needs. Circular economy practices minimize the need for extensive modifications to materials, leading to cost reductions across the value chain (Gigli et al., 2019). Resource efficiency directly translates into cost reductions as smarter and more efficient resource utilization and reuse methods drive significant savings. Additionally, by enhancing resource efficiency, companies can offer novel types of services and products to customers (Tukker, 2015).

Integrating circular economy into a company's business positively impacts brand reputation, stemming from emission reductions, material savings, and other environmental benefits. Circular economy initiatives are easy to communicate to stakeholders as they provide clear reference points for environmentally friendly practices involving recycling and reuse, facilitating effective brand communication.

Governmental regulations focusing on waste reduction drive the need for adopting circular economy practices in various operations. Circular economy is becoming a mandatory requirement for manufacturing companies, as demonstrated by the European Union's European Circular Action Plan published in 2015 (Talens Peiró et al., 2020). The plan aims to manage products and materials throughout their entire lifecycle, promoting waste reduction and the closure of recycling loops to enhance material efficiency. These regulations are expected to become more stringent, offering companies that can adapt to the changing landscape a competitive advantage.

Finally, incorporating circular economy practices into a company's overall business strategy can boost sales. As companies prioritize environmental considerations and sustainable practices, the demand for suppliers with circular economy capabilities and products is growing (Geissdoerfer et al., 2018). Companies that are prepared to meet this emerging demand can gain a competitive edge and increase sales. Circular economy also allows for cost reductions that can be passed on to customers, offering lower prices while maintaining or even increasing profit margins (Rakhshan et al., 2020).

3.8 Energy, water, waste, and emission management

Managing and reporting energy and water consumption, and waste and pollution creation is becoming increasingly important and mandatory for the companies (Gelderman et al., 2021). These factors are typically reported in firms' annual reports, financial disclosures, or sustainability reports. As discussed in Chapter 1, sustainability reporting will become mandatory for SME companies within the EU starting in early 2025 (European Parliament, Council of the European Union, 2022). For the understanding of sustainable reporting, typical reporting manners are presented.

Energy consumption is usually reported through total usage, usage savings, or the amount of energy consumed per product. The European Union has been establishing regulations and standards for energy reporting since 2015, and ongoing development work is taking place (European Comission, 2022). The goal of EU’s regulation is to ensure the fulfillment of Paris climate targets, and to ensure equal comparable reporting techniques. The EU's regulation aims to ensure the fulfillment of the Paris climate targets and promote comparable reporting techniques. The primary focus of energy reporting is on the utilization of renewable energy. However, a challenge in renewable energy source (RES) reporting, as well as other energy-related reporting, is the lack of standardization

in reporting methods, making it difficult to compare companies' environmental performance (Dragomir et al., 2022).

Water usage and water footprint measurements have gained attention as part of companies' environmental programs and environmental performance assessments. The significance of clean water has evolved due to increasing demand, and companies are incorporating water footprint and usage as part of their green marketing efforts (Symeonidou and Vagiona, 2018). A similar approach is taken with waste creation and management, where companies strive to reduce waste generation, particularly focusing on plastic waste, in their operations and leverage these processes in their marketing communication (Confente et al., 2020).

Regarding greenhouse gas (GHG) emissions, companies typically communicate all emissions as carbon dioxide equivalents (CO2-eq). CO2-eq is a metric used to express the total emissions of greenhouse gases from various sources in terms of the amount of carbon dioxide that would have an equivalent impact on global warming. It provides a standardized way to compare and aggregate different greenhouse gases based on their warming potential relative to carbon dioxide (Eurostat, 2001). As discussed earlier, CO2 emissions are the most common way to communicate companies' environmental performance, and, for example, in the EU, companies are required to pay a price for their CO2 emissions (Belkhir et al., 2017; European Commission, 2023a).

3.9 Environmental Marketing and Branding

One of the primary benefits of green business and innovation is their impact on a company's brand. Green marketing and branding have become increasingly common in both B2C and B2B markets (Chan et al., 2012). This is due to growing awareness and concern about global warming and environmental change (Vaccaro, 2009). However, green marketing and branding have also faced criticism. Many companies that market their products as green and environmentally friendly have been accused of "greenwashing," which refers to using environmental friendliness as a marketing tool without making a real impact on the environment (Kärnä et al., 2003; Vaccaro, 2009). The main reasons companies use environmental marketing can be listed as follows:

- Need to fulfil the customer need.
- Need to improve corporate’s social responsibility.
- Need to answer regulatory.
- Giving information from cost savings.

Environmentally friendly products provide various benefits for customers and are meet the emerging customer demand. According to the study by Tseng and Hung, (2013) there is currently a lack of sufficient green products to meet customer needs, resulting in a gap between rising environmental awareness and the market share of green products. New customer needs are influencing various aspects of a company's marketing strategy, such as pricing, corporate image, and the expertise of salespersons in green products (Gelderman et al., 2021).

Corporate social responsibility (CSR) can significantly impact a company's performance both externally and internally. Cordeiro and Tewari, (2015) conducted research on how stakeholders of the 500 largest US companies reacted after the companies received Newsweek's Green Ranking. The study argued that engaging in environmental CSR benefits market performance. The internal side of CSR is strongly related to the company's employees and culture. Through robust CSR programs, companies can enhance employee identification, organizational trust, and the company's reputation among employees (Ghosh, 2018; Kucharska and Kowalczyk, 2019). CSR researchers emphasize the importance of long-term commitments to developing projects.

Many companies are compelled to disclose their environmental data and figures due to regulatory requirements. For instance, in the USA, companies emitting more than 25,000 metric tons of CO2 per year are obligated to report their emissions (US EPA, 2014). Similarly, European Union requires public emission reporting for example from energy and heavy-duty vehicles (European Commission, 2023b). Such regulations are pushing companies to engage in environmental marketing.

New solutions offer improvements in energy efficiency and raw material usage, leading to lower per-unit production costs (Yao et al., 2019). Green solutions can also help companies reduce emissions and waste, which are already regulated costs (European Commission, 2023a). Informing about these advantages can help companies gain larger marketing share.

Another crucial aspect of environmental marketing is the company's operations behind the marketing efforts. Vaccaro, (2009) studied the two main strategies of green market-

ing—reactive and proactive—and compared their results in achieving a competitive advantage. A proactive approach, involving a long-term view and target setting, provides more guaranteed and longer-term competitive advantages. On the other hand, the reactive model means the company seeks faster results and benefits from its green projects, but the scope of projects is narrower. This approach might result in short-term financial gains but also increases the risk of greenwashing criticism (Vaccaro, 2009).

3.10 Relation between greener business and financial performance

The relationship between greenhouse gas emissions, environmental progress, and other sustainability work has been the subject of many studies in recent years (Choi and Luo, 2020; Horváthová, 2010; King and Lenox, 2001). This relationship has been studied using different types of methods and approaches. Some studies have compared GHG emissions, waste amount, water pollution, or sustainability innovations with companies' financial performance (Hermundsdottir and Aspelund, 2020; Horváthová, 2010).

The findings from these studies have not been unanimous regarding the impact of environmental performance (EP) on a company's financial performance (FP). Table 4 presents the research on this subject, the research focus, and the study results.

Table 4: Research related to companies' environmental performance and financial performance.

Research	Focus	Result
(Horváthová, 2010)	Analysing 37 empirical studies about the relationship between EP and FP.	55 % of the relationship between EP and FP were positive, 30 % insignificant, and 16 % negative.
(Choi and Luo, 2020)	Analysing company's value's relationship and carbon emissions by using 500 largest global firms	Carbon emissions are affecting negatively to firm's value.
(Hermundsdottir and Aspelund, 2020)	Analysing 100 articles about the relationship be-	64 % of the studies reported positive, 29 % mixed, 5 % inconclusive,

	tween sustainability innovations and competitiveness.	and 2 % negative relationship between sustainability innovations and competitiveness.
(Hassel et al., 2005)	Examination of relationship between market value and environmental performance in Swedish listed companies	Relationship between sustainability performance and market value is negative
(Albertini, 2013)	Examination of the 52 studies and researching relationship between corporate's financial and environmental performance.	Relationship between environmental and financial performance was found to be positive.
(Santos et al., 2019)	Compering how eco-innovations are affecting business performance in developed and emerging countries.	In the developing countries effect was positive, but in the emerging countries the effect couldn't be proved.
(Ghassim and Bogers, 2019)	Studying relationship between sustainable orientated innovations and financial performance in Norwegian mining companies.	Sustainable orientated innovations have direct impact in firm's financial performance
(Hussain et al., 2018)	Analysing sustainability reports of 100 best performing reports in the USA and studying relationship between sustainability performance and financial performance.	Sustainability work matters and it has positive impacts in companies' financial performance. Every company should include sustainability in their strategic planning.

(Forsman, 2013)	Analysing 128 Finnish firms and their relationship between environmental innovations and market-related competitive advantage.	Strong positive relationship was found between environmental innovations and market-related competitive advantage.

The table above shows that the majority of studies present a positive relationship between a company's environmental or sustainability performance and its overall or financial performance. Still, some of the research argues for a low or negative impact of environmental performance on financial performance. Horváthová (2010) concluded that the likelihood of finding a negative effect was higher when the research used correlation coefficients and portfolio studies. Choi and Luo (2020) argued that companies from countries with more stringent environmental trading systems (ETS) have a stronger relationship between environmental performance and financial performance. This might be the reason why research targeted at developing countries hasn't found such a strong positive correlation between EP and FP. Choi and Luo (2020) also argued for a weakening in the negative effect of emissions on firm value if the firm has a good level of corporate governance. Hermundsdottir and Aspelund (2020) found that strict governance within the industry positively affects the relationship between sustainability innovation and a company's competitiveness.

As this chapter has proven, more environmentally friendly business and its different dimensions has been widely studied in the recent decade. The majority of the studies argues positive relationship between companies' environmental performance and overall business performance.

The one dimension lacking behind is the usage of environmental factories as part of the company's complete sales processes. On the other side, companies have activated in evaluating their suppliers' environmental and other sustainability performance dimensions (Negri et al., 2021). This forces sellers to be more active with sustainability processes, and changing customer needs can be studied. The companies' focus areas and the impact of supply chain management are discussed in Chapter 4.

4. GREEN SUPLLY CHAIN MANAGEMENT

4.1 Description of Green Supply Chain Management

The emphasis on green supply chain management (GSCM) has significantly increased in both research and industry over the past few decades. This growth can be attributed to mounting concerns about global warming and biodiversity loss (Tseng et al., 2019). Hsu and Hu (2008) defined GSCM as a proactive strategy that aims to enhance the environmental performance of products and processes by adhering to environmental regulations. Srivastava (2007) introduced GSCM as “integrating environmental thinking into supply chain management, including product design, material sourcing and selection, manufacturing processes, delivery of the final product to the customers as well as end-of-life management of the product after its useful life".

Although researchers have yet to provide a definitive answer to the question of how beneficial it is for businesses to adopt green practices in terms of financial numbers, companies are still compelled to address mounting concerns about our planet and climate issues (King and Lenox, 2001). The increased importance of GSCM can be observed from the growing number of scientific research on the subject. Tseng et al. (2019) conducted a literature review on the trends and future challenges of the GSCM and detected that amount of research made per year has more than doubled between years 2012 and 2017.

As GSCM has evolved over the past decades, its practices have also developed. While the concept of GSCM was first mentioned in the 1990s, its popularity surged in the 21st century (Tseng et al., 2019). Zhu and Sarkis (2004) identified four distinct practises in GSCM which are presented in Table 5.

Table 5: GSCM practises and explanations (Zhu and Sarkis, 2004).

Practice	Explanation
Internal environmental management	Management's commitment, cross-functional cooperation, ISO 14001 certification.
External GSCM practises	Cooperation with customers and suppliers, green packaging and transportation.
Investment recovery	Reverse logistics.
Eco-design	Developing product with minimal energy usage, environmental impact and resource use.

The first practice in GSCM entails internal commitment from the company. The company's management must actively participate in the process, comprehending the overall goals and consequences of implementing GSCM practices. Successful GSCM requires collaboration among different departments, including procurement, R&D, and finance. Various tools and certifications are available to monitor GSCM development and success, with ISO 14001 environmental certification being the most commonly used.

External GSCM practices necessitate cooperation with suppliers and other stakeholders. Suppliers need to be informed about the company's objectives, and collaborative solutions should be developed together. Areas in which suppliers can contribute include green packaging and the exploration of environmentally friendlier transportation options.

GSCM also encompasses a growing focus on investment recovery. The objective is to promote circularity and enhance product recyclability. Reverse logistics plays a vital role in reducing waste and optimizing the utilization of investments after their useful life.

Finally, eco-design practices aim to develop more efficient products and processes. This requires both internal and external collaboration. The company must identify areas for improvement and work with suppliers to design solutions. This approach helps reduce energy and resource consumption while improving process efficiency.

4.2 The drivers and barriers of GSCM

The major drivers pushing for greener supply chains have been under study in recent years. Diabat and Govindan (2011) specified eleven different drivers for GSCM, of which the six most powerful ones were:

- Government regulation and legislation
- Reverse logistics
- Environmental collaboration with customers
- Environmental collaboration with suppliers
- Collaboration between product designers and suppliers to reduce and eliminate product environmental impacts
- ISO 14001 certification

First, government regulation and legislation have been identified as strong drivers for the transition towards more sustainable supply chain management. Different kinds of regulations can be some of the most important tools to control companies' transitions and to push them to use more environmentally friendly procedures (Ji et al., 2014).

Second, reverse logistics refers to a supply chain process where the end user returns the product back to the supply chain. This might be because the product has reached the end of its life, the product is not functioning properly, or the customer simply doesn’t need the product (Ravi and Shankar, 2015). Reverse logistics is a great way to provide higher customer value by offering, for example, recycling services or dealing with materials that might be harmful to customers. On the other hand, suppliers might also gain some benefits from reverse logistics to their core business. Some materials and products might have value for suppliers, and they can be resold partly or wholly. Ravi and Shankar (2015) studied the benefits of reverse logistics for the Indian manufacturing company. In their research they highlighted better customer service level, increasing corporate image, and obsolete equipment disposition as the top three benefits for the Indian companies that are using reverse logistics.

Third, environmental collaboration with customers has been emphasized because it is at the core of GSCM. The ultimate goal of GSCM is to reduce the supply chain's emissions and environmental impact, and close collaboration between customers and suppliers is a vital part of this process. Collaboration between operators typically involves sharing data and information about sustainability performance, developing common sustainability targets, and planning how to reduce environmental impact (Lerman et al., 2022).

The fourth part highlights the importance of environmental collaboration with suppliers in order to ensure that the entire supply chain is environmentally friendly. It is impossible to offer green products to customers if the entire supply chain is not properly managed.

In the fifth driver, emphasis is placed on the close collaboration between a company and its supply chain. In order to offer environmentally friendly products to customers, product designers and environmental experts must be involved in purchasing decisions.

Lastly, ISO 14001 certification is highlighted as one of the most significant drivers in GSCM. In 2011 when Diabat and Govindan conducted their research, over 40,000 companies had implemented the ISO 14001 environmental management system as part of their operations. The strengths of this management system lie in its voluntary nature and the willingness of committed companies to exceed regulatory emission reduction targets (Arimura et al., 2015). The impact of ISO 14001 on environmental performance varies across studies, and its overall significance is not yet fully understood (Arimura et al., 2015).

Other drivers which are forcing the supplier chain development in the greener way are competitors' actions, pressure from society and end users, and other institutional pressure (Tseng et al., 2019).

On the other side, Dube and Gawande (2016) conducted a study on the barriers that hinder the adoption of GSCM. The research examined the fourteen most common barriers to GSCM and identified the following as the most significant and powerful ones:

- Lack of top management commitment and support
- Lack of a mindset towards corporate social responsibility
- Financial constraint
- Lack of IT implementation
- Resistance to adoption of advanced technology
- Fear of failure
- Lack of training in GSCM
- Lack of technical expertise to implement GSCM
- Lack of customer awareness towards GSCM

According to Dube and Gawande (2016), the most powerful barrier is the lack of top management commitment and support. If the management is not interested in goal-setting and planning, the entire GSCM process is significantly hindered. The lack of a mindset towards corporate social responsibility reflects the company's perspective, direction, and willingness to go beyond regulatory requirements. Financial constraints indicate that

the company must make substantial investments in green processes. The lack of IT implementation slows down communication within GSCM. Resistance to the adoption of advanced technology prevents the introduction of new environmentally friendly innovations into the market. The fear of failure arises from concerns about financial losses due to changes in processes and patterns. The lack of training occurs when employees lack the necessary skills for GSCM. The lack of technical expertise to implement GSCM refers to the inability to develop low-pollution products that meet environmental requirements. Lastly, the lack of customer awareness stems from customers' lack of knowledge about greener products and their benefits.

4.3 Supplier's Impact on the Environmental KPI's

Suppliers have a multidimensional impact on the environmental performance and statistics of their customers. While the impact on waste amount and material usage is relatively straightforward to explain, calculating and reporting greenhouse gas (GHG) emissions becomes more complex due to different scopes in CO2 emission calculations. Scope 2 and 3 emissions are considered indirect emissions for a company, as they are generated from activities outside the organization's direct control. Examples of indirect emissions include emissions from electricity and suppliers' manufacturing processes (Greenhouse Gas Protocol, 2011).

The suppliers' impact on the environmental performance of the customer company are illustrated in figures bellow. These figures demonstrate the increased complexity of emission calculations when companies have multiple suppliers, which is typically the case. Figure 18 illustrates the situation when manufacturing company is selling its products directly to end customer.

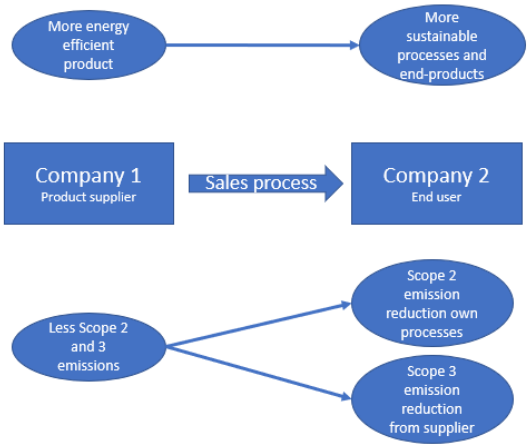

Figure 18: Supplier's impact on companies' energy usage and emissions, simple case.

When supplier is selling its products directly to end customer, tracking different Scope emissions is simpler. For customer, tracking emissions is easier because just one stakeholder has to report its emissions, and communication between parties is straight forward without any middlemen. This is rarely a case in B2B environment, and for example in big projects. Figure 19 presents a demonstration from simple situation where project supplier is involved.

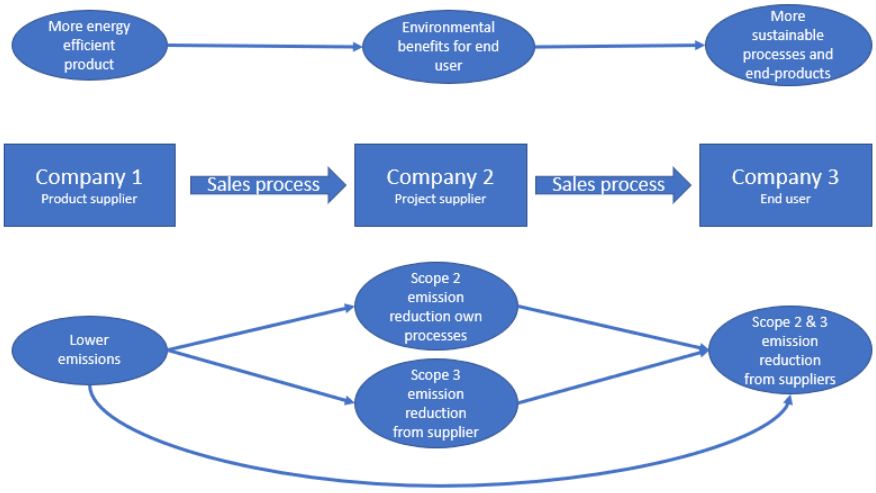

Figure 19: Supplier's impact on companies' energy usage and emissions, complex case.

When product's end user is clarifying the carbon footprint of product, their suppliers have a strong impact in their emissions. The emissions of the product supplier are the emissions of the project supplier. If product supplier is able to deliver solution, which decreases project supplier's emissions, these are usually Scope 2 and 3 emissions of project supplier. Both of the Companies' 1 and 2 emissions are Scope 3 emissions of the end user (Greenhouse Gas Protocol, 2011).The similar approach can be used when products total water footprint is calculated (Pajula et al., 2021). This approach emphasizes the importance of managing the entire supply chain when companies aim to achieve greener end products. However, as more parties are involved in the supply chain, the calculations and information gathering become increasingly challenging.

This complexity also impacts the sales side. If a product manufacturer has a solution that can reduce emissions for the end user, communication between parties becomes more challenging when intermediaries are involved. In a project environment, the project supplier may not be as interested in environmental issues as the end user. If the product manufacturer lacks direct communication channels with the end user, conveying the environmental benefits of the product to the end user becomes a challenge.

4.4 GSCM affects in business performance

Implementing GSCM procedures is not solely driven by the goal of saving the planet for companies. Corporations have other objectives, including increased efficiency, profits, brand image, and market share (Abdallah et al., 2020). Various studies have explored the relationship between GSCM and business performance. Abdallah et al. (2020) investigated the connection between GSCM, a company's environmental performance, operational performance, and business performance in Jordanian companies. They found a positive correlation between GSCM and environmental performance as well as operational performance, but they were unable to establish a definitive relationship between GSCM and business performance. However, their study demonstrated a strong association between higher environmental performance, operational performance, and business performance. Similarly, Zhu et al., (2013) examined the relationship between GSCM practices, environmental performance, operational performance, and economic performance. Although they did not find a direct link between GSCM practices and economic performance, they observed that GSCM had a significant positive impact on environmental performance and operational performance, which in turn had a substantial influence on economic performance. These findings were also supported in research by Sahoo et al. (2021), who argued that a company's environmental performance and operational performance contributed to increased economic performance, although the direct impact of GSCM on economic performance was not established. Based on these studies, we can construct a framework illustrating the relationship between GSCM and a company's economic performance, as presented in Figure 20.

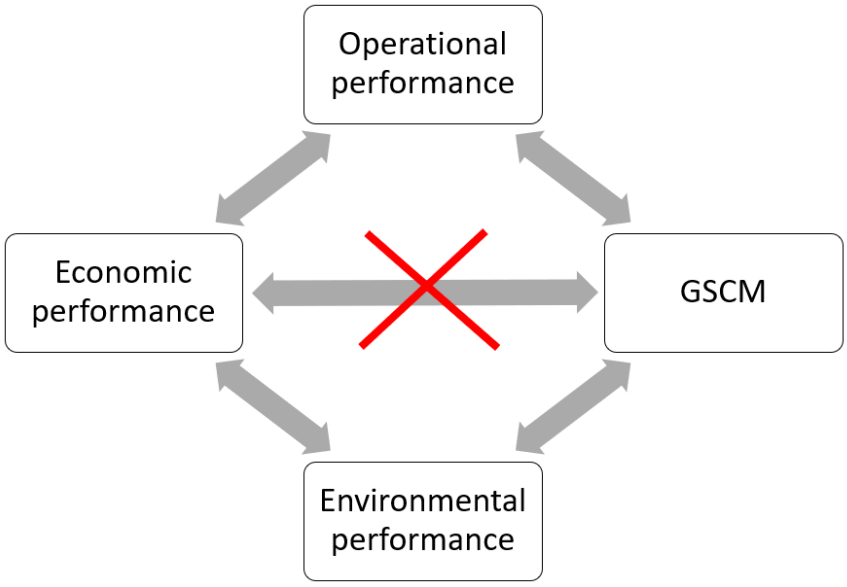

Figure 20: The impact relationships of GSM, environmental performance, operational performance, and economic performance.

The researchers unanimously agree that GSCM does not directly enhance companies' economic performance. However, GSCM does have an impact on environmental and operational performances, which in turn contribute to increased economic performance. Rokhmawati et al. (2017) examined the relationship between a firm's carbon performance and its financial performance in Indonesian-based manufacturing companies. Their findings revealed a positive correlation between carbon performance and financial performance indicators, such as sales performance. The study suggested that companies with a strong commitment to reducing carbon emissions are more inclined to collaborate with other companies that share similar environmental targets. This highlights the significance of environmental initiatives in terms of sales performance.

Companies are all time focusing more on GSCM practises when they are selecting their suppliers. This will force sales departments to react changed customer needs. In the next chapter, methods to take leverage from the environmental benefits of the companies' products are presented, and the framework of the study is formed.

5. ENVIRONMENTALLY FRIENDLINESS IN SALES

5.1 Using environmental benefits in sales processes

The usage of environmental benefits in sales processes has received limited attention in the sales literature. However, in this chapter, the integration of environmental issues at every step of the sales process is explored by drawing upon the framework developed by Moncrief and Marshall (2005). This framework provides valuable insights into how environmental considerations can be incorporated into various stages of the sales process, enhancing the value proposition for customers and contributing to sustainable business practices.

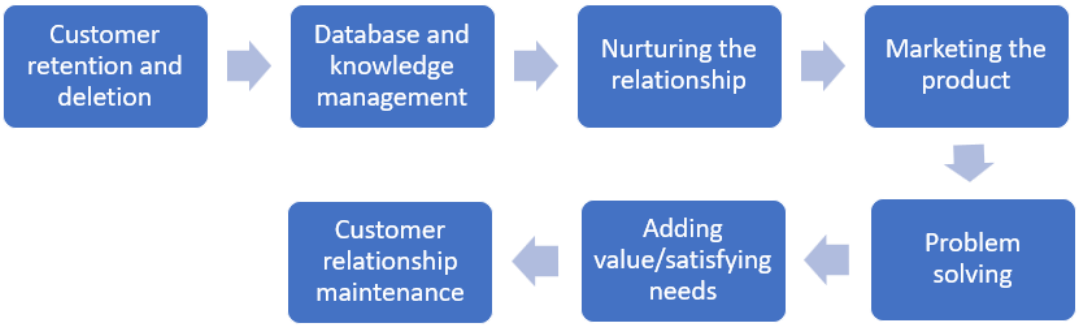

Figure 21: Seven steps of sales process by Moncrief and Marshall (2005).

The different steps are presented, and focus is, how environmental issues can be used in the benefits of the sales process. This kind of knowledge will be an advantage for companies, when the focus to finding more environmentally friendly solutions increases (Mensah, 2019).

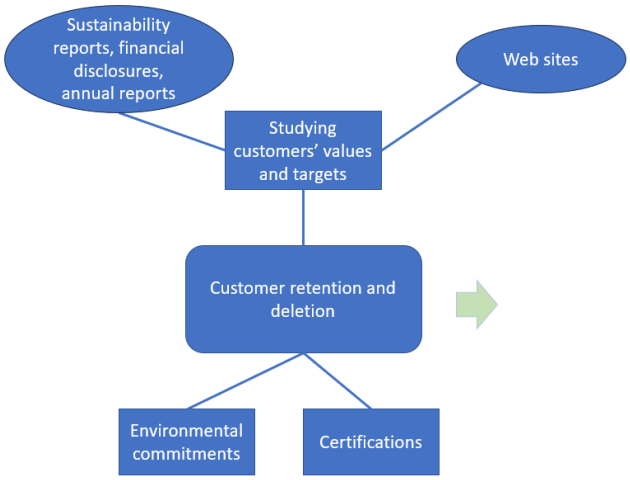

Figure 22: Customer retention and deletion via environmental information.

The first step, customer retention and identification, focuses on defining which customers are the most profitable or promising ones. Not all firms are interested or prioritizing environmental development, so it is important to identify the interested ones. One way to do this is by examining financial disclosures, websites, and other publications, as companies are increasingly compelled to publish their sustainability targets and figures (European Parliament, Council of the European Union, 2022). Certifications and environmental commitments, such as ISO certificates and SBTi commitments, can also serve as potential sources to determine companies' interest in environmental matters (Halkos and Nomikos, 2021; SBTi, 2022).

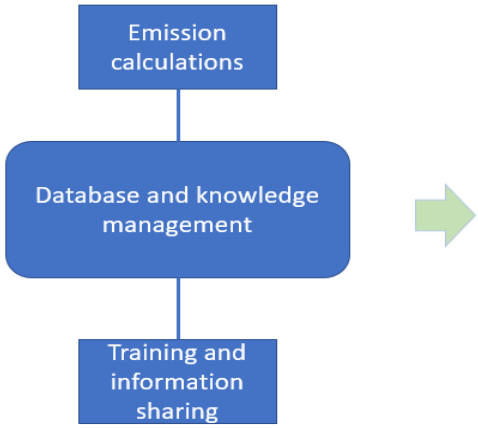

Figure 23: Environmental database and knowledge management.

The second step, database and knowledge management, deals with the increased amount of available data companies currently have. Because of the new regulations in EU are, companies environmental data will be available in more standardized format in the beginning of 2025 (European Parliament, Council of the European Union, 2022). When discussed about environmental data, the seller is able to help customers data management process. Gathering customer data can be complex process as illustrated in Figure 19. Providing easier access to GHG emission calculations is one way to help customers' data management process. After new regulations, environmental database and knowledge management will be easier for the companies, because more data is available and it is presented in more standardized format.

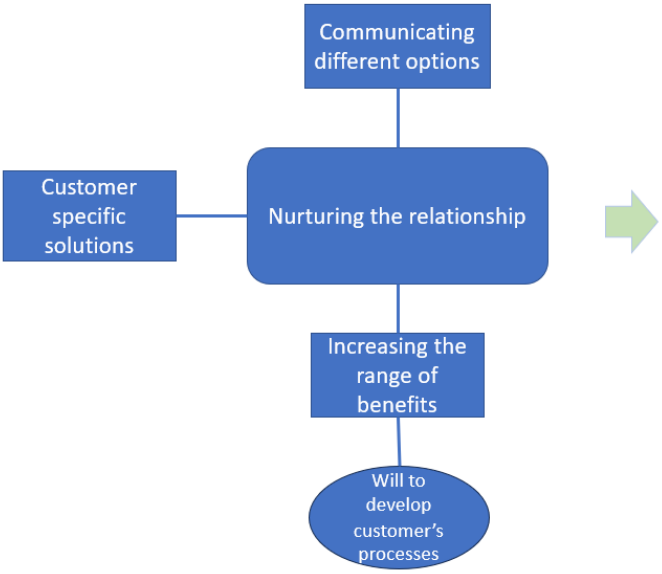

Figure 24: Nurturing the relationship with the help of environmental performance.

Nurturing the relationship step involves the initial stages of building a customer relationship. In today's business environment, focusing on building long-term partnerships is more desirable than simply pursuing new sales opportunities (Moncrief and Marshall, 2005). Environmental benefits serve as an effective means to strengthen the relationship and tap into the extensive knowledge of the customer's operations. Diabat and Govindan (2011) identified suppliers' lack of capabilities as one of the main barriers to successful GSCM implementation for companies. By addressing environmental issues and identifying areas for improvement, salespersons can demonstrate their deep understanding of the customer's business and their personal interest in enhancing customer performance. According to (Zhu et al., 2017), a high level of customer relationship governance combined with GSCM has a positive impact on a company's economic and environmental performance.

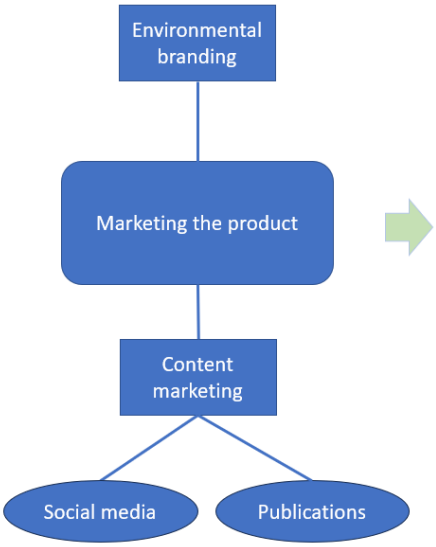

Figure 25: Marketing the product with the help of environmental benefits.

The third step, marketing the product, encompasses all the dimensions of environmental marketing that companies can benefit from. Companies have increasingly focused on environmental marketing actions in recent years (Chan et al., 2012). Social media has emerged as a powerful marketing channel, providing an effective platform to raise customers' awareness about companies' environmental initiatives and product benefits (Agnihotri et al., 2016; Fraccastoro et al., 2021).

The current demand for environmentally friendly solutions surpasses the supply, underscoring the importance and relevance of marketing environmentally friendly products (Tseng and Hung, 2013). Implementing high-level green marketing strategies enables companies to differentiate themselves from competitors and capture customers' attention by offering solutions and process upgrades (Yao et al., 2019). Marketing activities can reduce GSCM barriers presented by Dube and Gawande (2016), such as lack of training, expertise, customer awareness, and fear of failure towards the GSCM.

Environmental marketing effects positively to overall image of the company (Vesal et al., 2021). Marketing actions that highlight the new environmentally friendly features of a company's offerings, such as product publications, serve to increase awareness and improve the image of the company's products.

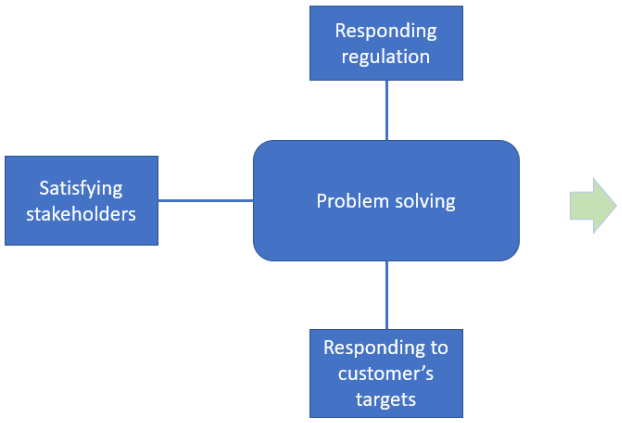

Figure 26: Environmental problem solving.

The fourth step, problem solving, encompasses the wide range of issues that companies face with their environmental challenges. One of the most visible challenges is the need to respond to changing regulations. As mentioned earlier, countries and economic regions are tightening laws and regulations to meet international commitments (European Parliament, Council of the European Union, 2022; UNFCCC, 2023; United Nations, 2023a). This poses a challenge for private sector entities and compels companies to develop new solutions. Suppliers play a crucial role when companies seek to reduce their emissions or energy consumption (Greenhouse Gas Protocol, 2011). , providing a competitive advantage to companies that can effectively leverage the environmental benefits of their solutions in problem solving.

In addition to laws and regulations, companies face pressure to adopt greener business practices from various stakeholders, including customers, investors, and owners (Tseng et al., 2019). The ability to satisfy these stakeholders is valuable for every company, and suppliers can gain a competitive advantage by offering solutions to address these concerns.

Furthermore, assisting customers in achieving their environmental goals is a powerful way to utilize environmental benefits as a sales tool. Companies set targets, whether for internal or external purposes, that are more or less ambitious (Ghosh, 2018; Kucharska and Kowalczyk, 2019). However, these targets cannot be met without the introduction of new solutions from suppliers. As companies approach their target years, these problems become increasingly important. Yadav et al. (2020) conducted research on the challenges of sustainable supply chains and identified ways to overcome them. Supplier-related challenges in achieving a more environmentally friendly supply chain include a lack of awareness of sustainable standards for raw materials, ineffective supplier selec-

tion, and poor communication with suppliers. Ways to overcome these challenges include supplier involvement, green purchasing, and packaging, and understanding the economic and social benefits. The findings demonstrate that suppliers have the opportunity to gain a competitive edge by comprehensively understanding their clients' business, environmental requirements, and problems, and by assisting them in achieving their targets.

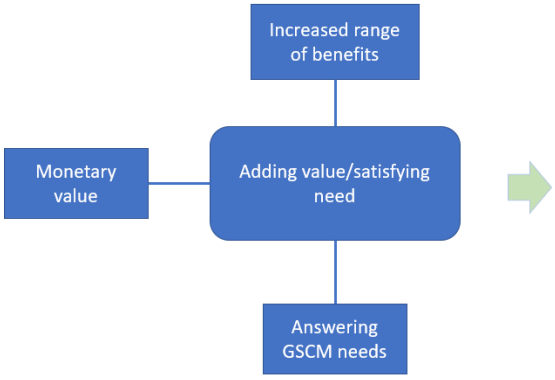

Figure 27: Adding value/satisfying environmental need.

Value can be added in several ways to customers' business. The value creation framework by Andersson et al. (2018) divided value creation mechanisms into three disciplines: offering lower cost, customer intimacy, and superior quality.

When companies aim to lower costs through more environmentally friendly products, several strategies can be employed:

- Reducing emission allowance costs
- Offering circular economy-based solutions
- Intensifying customer's processes

Reducing emission allowance costs will have a more immediate impact in areas with strict environmental targets, such as the European Union. Allowance prices have been increasing since their implementation, and due to the EU's ambitious targets, prices are forecasted to continue rising in the future (European Commission, 2023a; European Council, 2022). Offering circular economy-based solutions can help customers reduce their product's manufacturing and material costs. Evidence from various industries, including chemistry (Ul-Islam et al., 2020), vehicles (Gigli et al., 2019), and construction (Ghisellini et al., 2018) suggests positive economic effects from implementing circular economy processes as part of the core business. Intensifying customers' processes helps them reduce process costs, such as energy and material usage. Customers in

highly energy-intensive industries, such as the pulp or steel industry, continuously strive to minimize their energy consumption (He and Wang, 2017; Manzardo et al., 2014).

Customer intimacy can be achieved through various environmental value creation methods within different companies and industries. For example, in the textile and pulp industries, it is increasingly important to reduce water consumption and environmental footprint. With the growing population and demand, companies have no choice but to develop new processes and technologies to meet these challenges (Hasanbeigi and Price, 2015; Manzardo et al., 2014). Simultaneously, companies can also reduce water usage costs. Building customer intimacy and offering specific environmental solutions and offerings require careful analysis of customer knowledge and targets. These approaches are effective ways to provide an increased range of benefits for the customer.

For suppliers, responding to customers' Green Supply Chain Management (GSCM) requirements is one way to gain a competitive advantage and deliver superior quality. Deep cooperation among customers, suppliers, and other stakeholders is crucial, as mentioned in Chapter 4.3. This finding underscores the importance of knowledge and information sharing between companies and potential customers, as well as understanding customers' business targets. Zhu et al. (2017) conducted a study on the effect of customer relationship governance (CRG) conducted a study on the effect of customer relationship governance (CRG) on GSCM implementation and its impact on a company's economic and environmental performance. The results indicated that a collaborative relationship and high-quality CRG can help overcome implementation challenges and yield economic benefits for both parties.

Srivastava (2007) studied which are the GSCM dimensions where supplier can positively impact. These dimensions were:

- Product design and development
- Packaging
- Transportation and logistics
- Energy and material consumption
- Waste management

Product design and development require a high level of knowledge about customer processes and needs. The goal is to reduce a product's life cycle assessment (LCA) by using recyclable, durable, or renewable materials and minimizing the use of environmentally unfriendly packaging materials. Meeting customers' GSCM needs, such as reducing packaging size and materials or replacing them with reusable materials, is also crucial.

Transportation and logistics significantly contribute to emissions, so selecting low-emission methods and utilizing renewable fuels can enhance customer satisfaction. The focus should be on reducing energy and material consumption, particularly virgin materials, and improving waste management practices, including reverse logistics and waste reduction assistance for customers.

By offering solutions that address customers' GSCM needs, companies can differentiate themselves and provide added value. This, in turn, allows companies to command price premiums for their products or services. It is important for suppliers to recognize their position in the supply chain and assess their ability to influence their customers' businesses (Laari et al., 2017).

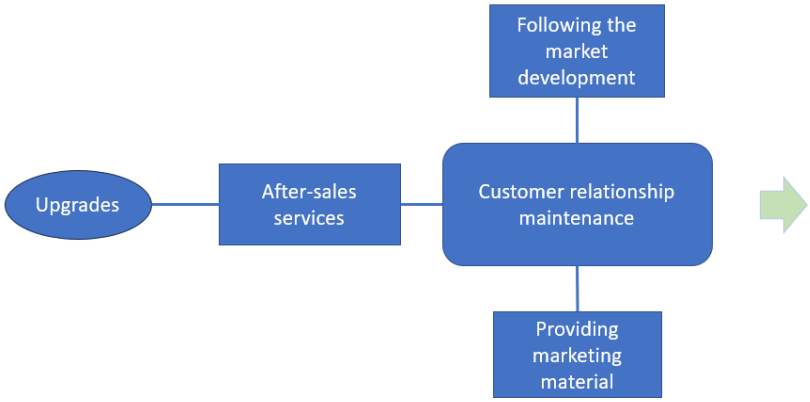

Figure 28: Customer relationship maintanance via environmental benefits.

Customer relationship maintenance includes the actions implemented after the sales process with the goal of increasing customer satisfaction and generating additional revenue sources (Moncrief and Marshall, 2005). Environmental considerations can be leveraged in this final step by offering new types of after-sales services, providing marketing materials for customers, and consistently monitoring market developments.

Environmentally friendly after-sales services can take the form of product upgrades, which can enhance the efficiency of the product. By achieving higher efficiency levels, companies can reduce resource usage, such as energy and water, as well as waste generation, including emissions and material waste. These upgrades exemplify the "win-win" situations proposed Porter and van der Linde (1995), where environmental progress leads to benefits for both the supplier and the customer. In this case, the supplier generates additional sales, the customer achieves cost savings, and more environmentally friendly processes are established.

Providing marketing materials is another example of environmental after-sales services offered by companies. When suppliers can improve their customers' environmental performance, supplying marketing materials like social media posts and publications can deliver additional customer value by strengthening the customer's brand (Gelderman et al., 2021). Examples of such marketing activities can be seen in publications by public companies like Fortum and Valmet (Fortum Oyj, 2023; Valmet Oyj, 2023).

Lastly, staying updated on market developments and informing customers about changes is a valuable tool for customer satisfaction and relationship building. With environmental issues, new regulations are emerging, and companies' needs are constantly evolving. The timeline for environmental issues, targets, and requirements is challenging to forecast, necessitating considerable attention from companies.

5.2 Process of Gaining Competitive Advantage

As evident from the framework presented in Chapter 5.1, environmental benefits can be incorporated into every stage of the sales funnel. Given that the literature analysis has revealed these issues to be novel for many companies, the level of communication becomes paramount when integrating environmental benefits into sales processes. Companies must ensure precision in their communication due to the differing knowledge levels among parties and companies. In this chapter, the most crucial aspects from the previously presented sales processes are selected and emphasized. The steps are as follows:

- Customer knowledge and information gathering
- Finding customer specific benefits
- Communication of customer benefits
- Providing additional offerings

First, customer knowledge and information gathering form the foundation for leveraging and communicating environmental benefits throughout the sales process. Given that communicating environmental targets, processes, and levels is a new and emerging trend for companies, suppliers must establish means of accessing this information. New sources of information include annual or sustainability reports, social media posts, and company websites (Searcy and Buslovich, 2014; Vaccaro, 2009). After new regulations, sustainability reporting will be mandatory inside EU area, and this kind of development

will become more and more common in other countries in the future (European Parliament, Council of the European Union, 2022). These kinds of changes will create new sources of customer information, but they will simultaneously set new requirements for the salespeople.

Second, salespeople must possess the skills to align their offering's environmental benefits with customer objectives. They must be capable of tailoring appropriate solutions for various customers based on their targets and the products offered by the sales company. The influence of customer satisfaction and salespersons' performance in green sales has been substantiated by Gelderman et al. (2021). Given the numerous dimensions in customer companies' environmental processes where suppliers can exert an impact, sales representatives must discern the most pertinent aspects before highlighting these benefits (Srivastava, 2007).

Third, the communication strategies for environmental benefits must be thoughtfully devised and adequately trained prior to implementation. Environmental matters can be conveyed to customers and other stakeholders through various channels, including social media posts and sales presentations (Garner and Mady, 2023). Within sales presentations and the sales process itself, various communication tools related to environmental concerns can be employed. Examples of such tools encompass Total Cost of Ownership (TCO), Life Cycle Assessment (LCA), and GHG emission calculations. These tools provide opportunities to communicate customer-specific benefits. Utilizing these tools necessitates a broad understanding of both one's own and the customer's processes, along with the skills of sales representatives (Gelderman et al., 2021; Patala et al., 2016). Suitable instances to present these calculations include during quotation and sales presentations where the company's offerings can be showcased.

Fourth, providing additional services, updates, or products is a means of delivering benefits from environmentally friendlier products that should not be overlooked. Services might encompass communication services such as publications and social media posts about cooperation and achieved advantages, calculations of environmental impact changes, and assistance in attaining environmental standards (Patala et al., 2016). These aspects are way to help customers achieve their own business targets and economic benefits (Halkos and Nomikos, 2021). Upgrades could involve product or software updates over time as techniques and processes evolve, allowing for the introduction of more energy-efficient products. These upgrades serve as a potential resource for heightened customer satisfaction and closer relationships (Bolton et al., 2008). Additional products can be similarly employed to produce more environmentally friendly outcomes in a customer's processes, after the main products have already been in use. In the Figure

29 these steps are illustrated. The figure illustrates how steps must be implemented during the whole customer interaction process.

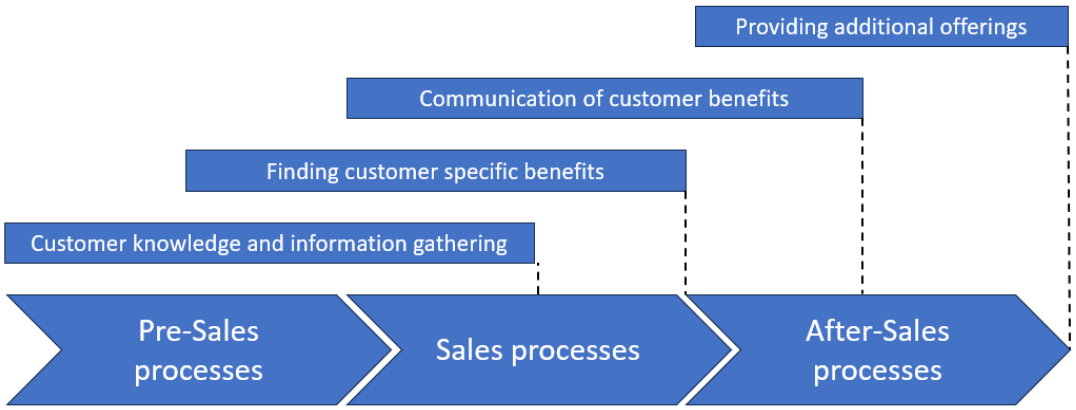

Figure 29: Different sales process stages and needed actions.

First, the initial step of customer knowledge and information gathering initiates at the inception of the pre-sales process. Nevertheless, this phase doesn't conclude until the sales process reaches a certain stage where salespersons have gained a comprehensive understanding of the customer's company and its operations.

Second, the next step involves identifying customer-specific benefits, which commences once salespersons have a preliminary grasp of the customer's requirements, business model, and distinctive characteristics. This phase continues throughout the entirety of the sales process, serving as the foundation for constructing major sales arguments.

Third, the communication of customer benefits begins right at the outset of the sales process and during negotiations with customers. This step entails collecting a comprehensive knowledge of the customer's needs and the benefits being offered. The communication process extends into the after-sales processes, where communication can also be extended to other stakeholders of the customer. This approach serves as a means to enhance additional customer satisfaction and secure a competitive advantage for the customer.

Fourth, the provision of supplementary offerings, such as services and upgrades, takes place within the after-sales process. This stage facilitates the generation of additional revenue and the reinforcement of the customer relationship.

5.3 Roadmap for Environmental Targets

As discussed in this research paper, environmental issues have gained increased importance in companies' operations, and their significance is expected to grow even further in the near future. In 2022, over one-third of the world's largest companies had planned and published net zero targets and target years. This number has risen rapidly, as in 2020, only one-fifth of companies had such agreements (Net Zero Stocktake 2022, 2022). Major corporations like Walmart, Amazon, and Allianz have set net zero targets for their companies, aiming to achieve carbon neutrality or other climate-related benchmarks by 2050 or earlier (Net Zero Tracker, 2023).

Two pivotal factors that have come to the forefront in discussions regarding companies' environmental objectives are the significance of short-term targets and Scope 3 emissions (Hertwich and Wood, 2018; Sun et al., 2021). Criticism has been directed at companies and nations for setting climate goals that extend far into the future while deferring immediate actions (Sun et al., 2021). As a result, there has been increasing pressure on companies to establish more immediate targets for reducing emissions (Net Zero Tracker, 2023; Sun et al., 2021). Within the industrial sector, Scope 3 emissions hold particular importance, and the manufacturing industry bears the highest proportion of these emissions (Hertwich and Wood, 2018). For instance, the European Union has unveiled its 2030 target, which involves a 55% reduction in greenhouse gas emissions compared to 1990 levels (European Commission, Directorate-General for Climate Action, 2020). In country specific targets Finland’s goal to be carbon neutral 2035 is one of the most ambitious ones (Ministry of the Environment, 2022). The pursuit of these targets will necessitate new regulations, a tightening of environmental policies, and an escalation in greenhouse gas emission taxation over the forthcoming years. These shifts will compel companies to seek out solutions with reduced environmental impact within shorter timeframes.

This progression underscores the mounting and pressing demand for novel, low-emission solutions, particularly for manufacturing enterprises. Such companies must innovate to fulfill both their long-term and immediate environmental and climate targets. This scenario presents an opportunity for suppliers capable of providing environmentally friendly manufacturing and holistic business solutions. However, meeting this demand mandates that sales departments acquire fresh knowledge and skills (Gelderman et al., 2021). Salespeople need to be educated in comprehending the evolving needs of customers and the advantages inherent in their offerings. This responsibility extends beyond just R&D teams and falls upon sales representatives as well, to deliver and leverage these new solutions.

6. CASE COMPANY

6.1 Case company’s profile and financial information

Sulzer Ltd. is a Swiss-based engineering company founded in 1834. Its headquarters is located in Winterthur, Switzerland, where it has been throughout the company's entire history. Sulzer specializes in pumping, agitation, mixing, separation, and purification technologies for all kinds of fluids. Currently, the corporation owns 180 manufacturing and service facilities worldwide (Sulzer, 2023a). The corporation’s total revenue in 2022 was 3 179,9 million CHF and it had 12 868 employees (Sulzer, 2023b).

Sulzer divides its operations into three different divisions: Flow Equipment, Services, and Chemtech. The Flow Equipment division is responsible for manufacturing pumps, agitators, dynamic mixers, compressors, and aerations, as well as submersible mixers. The Services division provides spare parts, maintenance, and repair services for customers. The Chemtech division focuses on innovations in mass transfer, static mixing, and polymer solutions for the chemicals, petrochemicals, refining, and liquefied natural gases industries (Sulzer, 2023a). The size and importance of every division can be seen from the created revenue by each division. These revenues are presented in Table 6.

Table 6: Revenues in millions of CHF by divisions (Sulzer, 2023b).

Division	Flow Equipment	Services	Chemtech
Revenue in 2022	1 323 million CHF	1 117 million CHF	739,9 million CHF
Percentage	41,6 %	35,1 %	23,2 %

As depicted in Table 6, Flow Equipment stands as Sulzer's primary revenue generator, trailed by Services and Chemtech. The operations of Sulzer span the globe on a global scale. Certain processes and business practices vary across the subsidiaries situated in different countries. These distinctions can be attributed to the specific business characteristics of each country and region.

6.2 Sulzer Pumps Finland Oy

The main focus of this study is Sulzer's subsidiary in Finland, known as Sulzer Pumps Finland Oy (referred to as SPF hereafter). SPF has branch offices in various locations in

Finland, including Karhula, Mänttä-Vilppula, Helsinki, Oulu, Rauma, and Vantaa (Finder, 2023; Teknologiateollisuus, 2023). Main location of SPF is specifically situated in Karhula, where all manufacturing operations in Finland take place. SPF was established in 2000 when Sulzer Ltd acquired the Finnish pump manufacturer Ahlström Pumps Oy. Other units in Finland focus on service, research and development (R&D), or sales operations. As of 2022, SPF employed 445 individuals, and its revenue totalled 17.5 million euros (Finder, 2023). In this case, the focus is on SPF's industry business unit, although interviews are conducted with a global perspective.

SPF's primary focus has centered on manufacturing pumps, and its manufacturing line was modernized in 2022. The company manufactures the following products (Sulzer, 2023c).

- Process pumps
- Double suction pumps
- MC® pumps
- Vertical pumps
- Mechanical seals
- Multistage pumps
- Agitators
- Turbo-compressors and Submersible aerator mixers
- SX chemical mixer and other MC® equipment

In summary, Sulzer is involved in fluid engineering and chemical processing applications. The company's focus is to be the most reliable, sustainable, and innovative pump manufacturer globally (Sulzer, 2023b). Sulzer and SPF's industry business unit divide their most valuable customer industry segments into three categories:

- Pulp, paper, and board
- Food and biofuels
- Metals, mining, fertilizers, and chemical processing

Different segments have specific needs, which are reflected in the end products provided to customers. For instance, the metal and mining industries require durable and robust pumps due to their demanding nature, resulting in a quick turnover of pumps. On the other hand, the food and biofuels industries use pumps for longer periods, emphasizing the importance of reliability and maintenance support. These industry-specific needs are

evident in the sustainability and environmental processes and priorities of customer companies.

Sulzer and SPF are treated separately in certain sections of this thesis paper because their actions and focus points may vary among subsidiaries in different areas. Examples of these differing actions include environmental performance levels and sales strategies. Throughout this paper, information was sought at the corporate level whenever possible. However, in some cases, information was only available at the SPF level.

6.3 Environmental actions in Sulzer

Sultzer Ltd. has published corporate-wide environmental targets in its sustainability report. In the report, Sulzer has divided its sustainability targets into four categories which are:

- Minimize the carbon footprint
- Enable a low-carbon society
- Govern according to best practises
- Engage employees and communities

This study focuses on the first two categories, within which Sulzer Ltd. aims to reduce its impact on the environment and climate. The first category primarily centers on Sulzer's own operations and actions that directly influence the company's CO2 emissions. The second category involves the company's efforts to facilitate emission reductions among its stakeholders. The overarching carbon footprint reduction goals for the entire company entail a 30% reduction in CO2 emissions by 2030 and achieving carbon neutrality by 2050 (Sulzer, 2023d). The subdivisions, along with their descriptions and the actions implemented in the Karhula subsidiary, are presented in Table 7.

Table 7: Sulzer's environmental targets, descriptions, and SPF's actions.

Aim	**Description**	**Actions taken in SPF**
Energy efficiency	Increasing products energy efficiency and by this customer's consumption	Research centre High efficiency pump production Pump repairing
Water consumption	Saving or producing clean water	Water treatment plant products Lowering water consumption in pumps
Low-carbon	Lowering Sulzer's and its customers carbon emissions	Participation in green projects Lowering own operation's carbon footprint
Circular	Reusing materials	Preowned pumps Participating circular-economy projects Eco-design Waste management

First, through energy efficiency, the company strives to assist its customers in reducing energy consumption in their processes. Sulzer's products are highly energy-intensive, and the requirement for electricity or other types of energy sources represents their most significant expense. Energy efficiency has long been a central focus of the company's operations. In addition to the environmental benefits, this objective offers cost reductions for customers. One of the most common ways to enhance energy efficiency is by improving a product's efficiency (Sulzer, 2023d, 2023b).

Second, water consumption is a recent business area for Sulzer, as well as a point of focus for its own operations' reduction efforts (Sulzer, 2023d). The company manufactures many products that can be used in water purification processes, playing a crucial role in clean water distribution. Simultaneously, the company's own products require clean water to function properly, which can be challenging in situations where clean water is not readily available. This challenge has intensified the pressure to develop innovations that decrease the need for clean water in Sulzer's products.

Third, low-carbon business practices have been a longstanding core target for Sulzer in its operations. Currently, the focus has shifted towards addressing Sulzer's stakeholders' emissions. The company has initiated Scope 3 emission calculations and is mapping the emissions its products generate when Sulzer's customers use them. This approach enables the company to make a more substantial impact on the overall environmental impact and potentially add customer value.

Fourth, circularity is reflected in both Sulzer's own operations and its interactions with other stakeholders. The company has engaged in numerous projects that promote the circular economy, such as developing products for recycling textile pulp material. Another facet of circularity is the company's ambition to recycle its own products or similar products from competitors. Sulzer has launched a pre-owned business unit, which involves purchasing second-hand pumps, renovating them, and reselling them.

6.4 Sales processes in Sulzer

Sulzer's sales processes exhibit variations across divisions, customers, and different sales situations. The Flow Equipment, Services, and Chemtech divisions each possess their unique processes and division-specific procedures. In the Flow Equipment division, there is a strong emphasis on project-based sales processes. This particularly applies to situations where Sulzer's sales representatives present pump proposals to companies responsible for establishing factories or power plants. In these cases, salespersons must respond swiftly and provide prompt offers. On the service side, sales processes are typically predefined based on the customer's product types, as illustrated by one of the salespersons:

> "*The majority of purchases come from end users, and they usually acquire one or a couple of pumps. Additionally, a significant portion of my sales cases are related to project sales, such as when we sell pumps for a new factory, and the purchase volumes are much higher. In these cases, our primary communication is with the project supplier*.

Project-based sales situations are more intricate because the primary responsibility for purchasing decisions rests with the project supplier and not the end user. Nevertheless, to ensure end-user satisfaction, Sulzer needs to establish communication channels with these stakeholders. The communication must be as efficient as possible, and the channels and hierarchy may vary between projects and companies.

SPF's pumps are manufactured according to make-to-order (MTO) principles. This means that no warehouses stock pumps, and the manufacturing process commences only after receiving the customer's order. This approach is necessary due to the high level of modularity in the products. Sulzer's Head Business Development explained the modularity level as follows:

> *"Considering all the various parts and setups, we have calculated that we could produce pumps using well over a billion unique combinations."*

All pumps are manufactured for various types of processes, and customer requirements differ due to factors like the pumped fluid, required mass flow, and necessary head height. This scenario renders manufacturing pumps for the warehouse impractical since customer-specific information is essential for the appropriate pump selection process. The advantages of MTO manufacturing are that customer products are optimized for their intended use. However, the downsides include longer delivery times and more complex manufacturing processes. This aspect represents a weakness in Sulzer's processes, as elucidated by one of the salespersons:

> "*Even though our products are becoming increasingly complex, the trend is that our customers still expect quicker delivery times from us. The reality is that we rarely can deliver our products within one or two weeks, but some customers do not have scheduling flexibility for this."*

Extended delivery times are attributable not just to the MTO manufacturing approach but also due to long transportation distances. Sulzer does not maintain manufacturing facilities in every country, underscoring the necessity for product transportation. Overcoming long delivery times is an imperative concern if Sulzer aims to continue as a customer-oriented company, as it has been.

7. METHODOLOGY

7.1 Interview method

A qualitative semi-structured interview method was chosen for this research. The benefits of semi-structured interviews are that they allow the researcher to explore the lived experiences and gather additional information beyond existing theory (Galletta and Cross, 2013, pp. 72).

The decision to use this interview format was supported by the flexibility it offered in structuring the interview. This was necessary because the researcher could not be certain about the interviewees' background knowledge on the subject, and therefore the level of precision and depth required for the questions. This aspect aligned with the decision to conduct qualitative interviews, as Gummesson (1993) argues, "the selection of questions is governed by the actual situation confronting the interviewer".

A semi-structured interview method was used to create dialogic interview atmosphere. The dialogic interview atmosphere was needed to get most out of the interviewees' knowledge and opinions. Dialogic interviews require mutual trust between interview participants (Saunders et al., 2019 pp. 439). With the trust to the interviewer, interviewees are more willing to share their knowledge, assumptions, and thoughts.

The data quality issues related to semi structured interview research according to (Saunders et al., 2019 pp. 447) are as following:

- Reliability/dependability
- Forms of bias
- Cultural differences
- Generalisability/Transferability
- Validity/Credibility

First, reliability/dependability concern is related to repeatability of the research. The similar results should be achieved if somebody else is implementing the similar study. Second, form of bias is focusing on interviewer's or interviewees' bias formed prior study. The layout of the questions, interviewer and interviewees attitudes toward each other's, and the atmosphere during the interviews must not impact to the results of the study. Third, cultural differences are occurring when interview parties' backgrounds are differing, and this sets barriers for the study. Barriers may be such as language, taboos, and

hierarchy differences (Saunders et al., 2019 pp. 450). Fourth, generalisability/transferability is an issue when research in done with a small number of data sources. The findings of the research may not be usable in other environments, if the research is done with just inside specific interviewee group. Lastly, validity/credibility during interview process must be achieved by careful consideration of the questions and interview layout planning. The listening skills and guiding the conversation skills must be emphasised by the interviewer (Saunders et al., 2019 pp. 458).

7.2 Data gathering process

Data collection took place in May and June 2023 through interviews conducted with Sulzer salespersons. The selection of representatives from Sulzer was purposeful, aiming to ensure a diverse representation from various sales departments. This diverse representation allowed for a more comprehensive understanding of Sulzer's sales processes. Furthermore, diversity was achieved by conducting interviews across different geographical locations. Given that sales departments possess distinct procedures and customer interactions, and by concentrating on various types of sales situations, a comprehensive grasp of the company's overall operations was attained. This method enhances the study's generalizability and transferability, even though the research centres on a single case company (Saunders et al., 2019 pp. 451). All the interviews were conducted by the author of this paper.

The research themes were meticulously designed to align with the research goals and to facilitate a comprehensive understanding of the theoretical background. Questions were formulated for each major theme, corresponding to the subjects discussed in the literature review. The aim was to address the research questions effectively. To ensure the validity of the questions, the interview questions were shared with the research supervisors for their input, comments, and suggestions. All the interview questions can be found in Appendix 1. The structure of the interview contained following components:

- A brief introduction of interview participants and the subject of the interview
- Discussion on the significance of environmental issues in the current and past business environment
- Exploration of the impact of emissions on companies' business and sales processes
- Examination of the influence of water footprint on companies' business and sales processes
- Investigation into the effect of the circular economy on companies' business and sales
- Assessment of environmental training requirements and timetables for salespeople
- Evaluation of the effect of project-based sales in the sales process
- Analysis of the overall benefits for suppliers resulting from leveraging the environmental advantages of products.

Not all interviewees were posed with all the questions, considering the variations in their backgrounds, job descriptions, and areas of focus. As specific environmental factors were not applicable to each interviewee's role, questions related to those factors were omitted in such instances. This was also necessary due to time constraints during the interviews. The order and structure of the questions were adjusted during the interviews. This adjustment was primarily made because at times, interviewees provided answers to questions that were planned for later in the interview. In such cases, transitioning to another topic before returning to the previous one enhanced the flow of the interview.

Interview preparation evolved during the interview process. After conducting the first four interviews, the author decided to send interview questions in advance to the subsequent interviewees. This adjustment was made to accommodate the preferences of the interviewees and to ensure their better preparedness for the questions. By providing the questions beforehand, the interviews proceeded more smoothly as the interviewees were already familiar with the thematic areas. The list of interviewees and their specific job titles is presented in Table 8.

Table 8: Interviewees and background information about them.

Interviewee	**Date**	**Job title of the interviewee**	**Job description**
α	10.05.	Regional Sales manager	New product sales, project sales
β	15.5.	Sales Manager	Spare parts and preowned equipment sales
γ	10.5	Sales Engineer	Spare parts sales
δ	30.5.	Head of Product Management	Product portfolio management
ε	26.6.	Tender Sales Engineer	Project and end customer sales
ζ	30.6.	Regional Head of Sales	Project sales and area sales department leading
η	11.7.	Reginal Head of Sales	Project sales and area sales department leading

With seven of the interviewees, the holistic picture from overall state of industrial sales was achieved. All the interviews were held remotely over Microsoft Teams platform. The remote interviewing method was chosen because of the geographical distance between author and interviewees, and because of the tight timetable of the salespersons.

The first four interviews were conducted in Finnish, while the subsequent ones were conducted in English. The initial four interviews were with salespersons working in Finland, while the second group comprised international salespersons from Europe, North America, and South America. Cultural differences did not disrupt the interview process, as all interview participants had a fluent command of English or Finnish. The interview themes were related to global issues that are emerging similarly everywhere, which facilitated discussions. Furthermore, the interviews were conducted within a single company where the internal corporate culture helped mitigate cultural differences, as noted by Saunders et al., (2019).

Given that the study's theme revolves around environmental friendliness, which can evoke strong opinions, the introduction and interviewee neutrality had to be underscored. Bias can have a significant impact when discussing topics that involve strong personal

opinions (Saunders et al., 2019). Throughout the interview process, the interviewer's focus was on concealing personal opinions and maintaining formal, unbiased questioning. Interviewees refrained from commenting on the answers and their validity, as doing so might have influenced future answers and impacted interviewee opinions.

All Teams interviews were recorded, enabling the author to take precise notes afterward. Note-taking post-interview was essential, as the author's full focus during interviews was on guiding the discussion. A relaxed atmosphere was maintained during the interviews, aiming to create a pleasant session for the interviewees. This approach encouraged their openness and willingness to respond to detailed questions. The interviewees are anonymized in this study to ensure freedom in answering the interview questions. Anonymity alleviated potential pressures on interviewees, such as from their employer companies (Saunders et al., 2019). Privacy concerns are paramount in research involving external interviewees (Karin, 2016).

To enhance the author's comprehensive understanding of the sales relationships within the researched phenomena, additional documents and materials were provided by interviewees after the interviews. These materials included publications and documents like scientific articles, newspaper articles, and examples of customer communication scenarios. These supplementary materials were valuable in gaining a more comprehensive insight into the sales processes and customer actions related to environmental matters. Interviewees emailed these documents to the author after the interviews.

The results from the interview process are presented in Chapter 8. The presentation order aligns with the sequence of the sales process illustrated in the framework: pre-sales processes, sales processes, and after-sales processes.

8. INTERVIEW RESULTS

8.1 Pre-Sales processes

In the pre-sales process, the focus is on clarifying knowledge regarding the customer's environmental needs, targets, and processes. Notably, differences among companies related to environmental issues were emphasized by every interviewee. Some customers placed a strong emphasis on their environmental practices, and this emphasis often played a significant role in the supplier decision process. However, the majority of customers did not prioritize these issues.

Salespersons typically acquired this information from customer companies' publications, websites, and social media posts. While some environmental targets were presented during meetings between sales and procurement personnel, this practice was neither common nor a major point of discussion. This underscores the significance of a comprehensive pre-sales process and gaining a deep understanding of the target company. Interviewee α highlighted the current scenario:

> *"Our customers are actively promoting their environmental processes and how they are transitioning toward more environmentally friendly business practices. However, these aspects don't necessarily translate into our sales processes. (α, 10.5.)*

One aspect discussed during the interviews was the disparities between customer segments. For instance, potential market segments where Sulzer could establish a competitive advantage by offering Scope 2 and 3 emission reductions were identified as the European area, specifically the Nordic countries, North America, existing customers, and the pulp and paper industry. Interviewee ε elucidated the geographical variations among customers:

> "*The vast majority of companies which are interested in reducing their GHG emissions are coming from Europe and North America area. It's rare to get this kind of requirements from different areas. (ε, 26.6.)*

The reasons for this geographic diversity in emissions demands were attributed to governmental focuses, regulations, and the overall interest of customers in emission reductions. In developed countries, inhabitants are more invested in environmental issues, which influences the priorities and operations of companies. Interviewees α, ε, and ζ highlighted how the significance of environmental and emission benefits for companies

within the EU stems from the strict emission targets and regulations set by the EU, as well as country-specific GHG emission targets.

When it comes to water consumption, identifying the most promising market segments geographically was not as straightforward as it was for emission reductions. Interviewees held diverse opinions on which areas were exerting the greatest effort in reducing water consumption. Interviewee η succinctly summarized the water footprint situation:

> *"Everybody is interested in water consumption reductions. This question is more tied up to the cost aspect. In developed countries water must be disposed in certain way after the usage which creates huge costs. In developing countries clean water resources are limited and cleaning processes are expensive" (η, 11.7)*

Interviewees δ and η highlighted how Sulzer's customer base has been prioritizing water reduction processes even before other sustainability concerns took precedence. The primary focus of these companies was, and often still is, not on achieving environmental benefits, but on realizing cost reductions. However, there was a contrary viewpoint regarding the trend of water reduction. Interviewee α explained situations where water reduction efforts are driven by environmental requirements:

> "*Companies' water management has gained increasing importance. Customers are showing growing interest in potential water consumption reductions. The most pressing need for water conservation arises in countries that lack clean water, where companies are compelled to use limited groundwater resources, for example, for sealing water." (α, 10.5.)*

Slowly, an increasing number of customers are incorporating water reduction targets and achievements into their marketing and communication materials. According to interviewee ε, this evolution transforms water consumption reduction from a mere cost-saving measure to an image-enhancing aspect. According to ε, this shift will pave the way for harnessing the benefits of products in new ways.

The concept of circularity within environmental processes was introduced during a company visit at the outset of the research project. This dimension held significance because pumps are manufactured using over 90% recyclable materials, such as steel. Besides their excellent recyclability, these materials are highly energy-intensive to produce. Interviewees noted that Sulzer has been actively promoting circularity in its business for an extended period, offering a wide range of circularity solutions. These processes encompass life cycle management through spare parts and maintenance, a pre-owned equipment business, material decision-making, and afterlife-time services. Sulzer repurchases various types of its own products from customers after their lifespan ends or

when they are no longer needed. These aspects are well-known among Sulzer's potential customer base and provide valuable assets for the company's marketing and sales teams.

From an industry perspective, the most promising market segments for capitalizing on environmental aspects to enhance sales success were identified as pulp and paper, mining, chemistry, and renewable energy industries. The emphasis on environmental considerations varied across industries, and the opinions of the interviewees about the most promising sectors also differed. This can be observed in the responses of interviewees η and ζ:

> *“The most promising market segments for leveraging our product’s environmental benefits are the two industries with biggest environmental negative footprint, chemical and mining. (η, 11.7.)*

> *“Among my customers, the ones which would benefit the most from environmental upgrades are companies working with renewable energy sources, such as biofuel companies. (ζ, 30.6.)*

In the context of these industries, the pulp and paper sector was mentioned to primarily show interest in reducing water consumption, while the mining industry could derive substantial value from circular economy applications. The benefits that customers receive from these efforts encompass both financial and reputational gains. Interviewee ε summed up the evolving business environment:

> *“Energy and water consumption reductions have been our target because of the lower usage costs for our customers. In recent years, however, the significance of image benefits associated with these initiatives has been steadily increasing. (ε, 26.6.)*

Currently, the importance of environmental considerations is determined on a case-by-case basis, and no universally established procedures have been developed across companies. Interviewees highlighted that this progression will necessitate time within the companies. Due to the diverse targets and environmental processes of customer companies, the acquisition of customer-specific knowledge and the enhancement of salespersons' skills were underscored.

8.2 During Sales Processes

During the sales process, effective customer communication is essential, involving the information gathered both in the pre-sales stage and throughout the sales negotiations. However, environmental issues have not been a prominent focus during sales discussions. This sentiment was underscored by interviews with δ and γ:

> *"Some of the customers have been asking CO2 emission calculations from our products, but this has happened with the really small part of the cases. (δ, 30.5.)*

> *"In the customer meetings environmental issues rarely are under discussions. I remember just a few cases where customers have been asking our product's environmental details. (γ, 10.5.)*

This limited engagement could be attributed to either the lack of interest in environmental performance or customers' unawareness of how suppliers could contribute to enhanced environmental performance. Interviewee β identified the latter issue:

> *"For many of our customers, it's like a 'Eureka moment' when we explain our circularity processes and the potential environmental impact on their products. Customers have often expressed surprise, admitting they hadn't considered such solutions." (β, 15.5.)*

Generally, discussions about environmental aspects only arose if customers initiated them during the sales negotiation process. Sulzer's salespersons seldom emphasized these factors unless specifically questioned, and the company lacked structured guides and processes for effectively leveraging the environmental benefits of their products. This was a point of improvement that salespeople desired. Interviewee ζ elaborated on the current state of utilizing environmental benefits:

> *"We are still in the process of learning how to effectively leverage these environmental benefits in our sales processes. They should be more prominently utilized, and we are still adapting our internal processes and customer communication strategies. In the future, we will require more tools and marketing materials." (ζ, 30.6.)*

All interviewees were in agreement that environmental issues are gaining increasing significance in sales processes. Interviewees α, η, and γ asserted that changing regulations represent the primary driving force propelling environmental developments. Interviewee α emphasized how companies often fail to invest in environmental advancements unless regulations mandate them. An example was given of electric motors, which now face efficiency limits imposed by the European Union. Conversely, such regulations are still

lacking in the pump industry, hampering performance improvements. Interviewee δ demonstrated how new regulations prompt companies to initially train their salespersons, who can then educate customers. In such scenarios, competitive advantage can be gained by exhibiting strong knowledge and swift adaptation to changing circumstances.

All interviewees were positive about companies' potential to achieve competitive advantage through the environmental benefits their products can offer customers. They emphasized the necessity of incorporating these issues more prominently into sales processes and negotiations to ensure customers are fully aware of all the advantages. Interviewees η and γ summed up the sentiment:

> *"I don't see that the environmental benefits will be the major decision-making factor in the near future, but it is one additional way to differ from our competitors. Because we are not the cheapest opinion in the markets, we have to focus closely to every quality aspect of our product. (η, 11.7.)*

> *"Absolutely we should bring these environmental issues more in our spare part sales processes. This would bring the needed additional tools for our spare part sales processes. (γ, 10.5.)*

On the other hand, while direct environmental concerns may not yet be the primary determining factor, customers have been increasingly seeking solutions that offer lower operational costs, inherently more environmentally friendly. Interviewee ζ explained the evolving landscape:

> *"When we talk about energy usage and water consumption reduction, our customers have been requesting these factors for tens of years. The change is that ten years ago we were developing our products for lower operational costs whereas nowadays environmental benefits have been joining into the discussions. (ζ, 30.6.)*

It became evident that, according to the salespersons, incorporating new environmental calculations into sales processes would be beneficial. Higher-ranking interviewees acknowledged that the inclusion of more detailed GHG emission analyses has been a topic of discussion within Sulzer. However, customer interest has not been substantial enough to integrate these calculations into quotations.

In water consumption reduction side, customers have been more demanding with the calculations. Interviewee ε, explained how water usage calculations have been rising as part of the sales processes.

> *“It is quite resent trend companies are interested in their water usage. Because of drying of some areas, nowadays almost all the quates I am handling include water amount calculations”. (ε, 26.6.)*

Finnish salespersons emphasized the paramount importance of circularity within Sulzer. This was largely due to the innovative 'pre-owned' pump process, predominantly implemented in Finland. 'Pre-owned' pumps refer to pumps that are repurchased by Sulzer when the original customer no longer requires them. Subsequently, the pumps are refurbished and resold with the same guarantees as brand-new pumps. Interviewee α elucidated the advantages of the pre-owned pump business:

> *“Our customers are asking these kinds of solutions for example for backup pumps or test pumps. Customers are really appreciating the environmental aspect of our pre-owned pumps and sometimes we are able to provide other additional benefits, such as shorter delivery times. I am sure these kind of circular economy applications will increase their popularity in the future. (α, 10.5.)*

Another environmental aspect related to sustainability that customers highlighted, according to the interviewees, was the long lifetime and potential for lifetime extensions of the products. Sulzer is renowned for its high-efficiency products; additionally, the company has invested in products that boast longer lifetimes and higher service levels than its competitors. Interviewees α, γ, and η explained how a pump's lifetime could extend to tens of years if it's adequately maintained. Interviewee δ shed light on the features of the case company's business:

> “*The pump products and processes are simple. The trick is to implement these so reliably there are no brakes or breakdowns. The interruptions in customers’ processes are really expensive. That’s why our focus is in reliable and long life-time products.” (δ, 30.5.)*

The long lifetime and product quality were conveyed to customers during the sales process. Thanks to the company's long history, major customers were already familiar with its reputation.

The final theme covered in the interviews was the different types of sales situations and how sales processes vary between project and non-project types of sales, along with how environmental issues could be integrated into different types of sales. For the case company, two distinct types of sales situations emerged. The majority of sales cases involved direct interactions with end users, but a significant percentage of sales were also conducted through intermediaries or third parties. This usually occurred when constructing larger facilities or power plants. In these situations, the end user typically orders

the project from another company known as the project supplier. This complicates purchasing decisions due to the involvement of three key stakeholders in the project. Interviewee η clarified:

> *"We are in touch with both, end user and project suppliers, its really case specific which party we are in touch with. I would say 70 % of the business is directly with the end users." (η, 11.7.)*

All interviewees confirmed that environmental performance played a more crucial role when the sales process involved the end user. If the purchasing decision was made by the project supplier, the decision was primarily price-oriented. Interviewee ε provided insight:

> *"End users are definitely more interested about environmental performance and operational costs. Unfortunately, constructors and engineering companies are still focusing on the price, but at the same time, end users are considering more about TCO and LCA meters. (ε, 26.6.)*

Project sales situations were described as busier than sales directly to end users. Interviewee α explained that in project-based sales, offers must be generated as swiftly as possible, often leaving minimal time for considering various possibilities. α also highlighted a challenge in sales to project suppliers:

> *"In some project cases we have had problems with the dimensioning the pumps. This is because of every party is doing "sizing maximation". If end customer's real need is pump with volume flow of 100 $^{l}/_{s}$, end user is adding 10 % and the project supplier is adding 10 % just to be sure. After all, I am delivering pump with the volume flow of 121 $^{l}/_{s}$, and this of course decreases the efficiency. (α, 10.5.)*

To mitigate this problem, salespersons strive to communicate with both project suppliers and end users. This can be challenging in substantial projects, but progress has been made. Salespersons agreed that Total Cost of Ownership (TCO) calculations are gaining prominence in purchasing decisions, surpassing the sole consideration of price. With pumps, given the product's extended lifespan, TCO constitutes approximately 10% of the purchase price, with the remainder arising from energy and maintenance costs, for instance.

8.3 After-Sales Processes

The utilization of a product's environmental benefits should not cease after the deal has been sealed and products delivered. In fact, interviewees α and ζ underscored that existing customers represent the primary customer segment where environmental benefits can be harnessed to drive additional sales. Interviewee α elaborated:

> *"In my opinion existing customers are the main customer segment for emission and energy reductions. We are doing a lot of energy audits, which are aiming for efficiency upgrades. Factories can include hundreds of pumps and if we are able to increase efficiency a bit, it will be huge bonus for us and for our customer." (α, 10.5.)*

Energy audits are conducted for various reasons, including changes in factory processes, the accumulation of detailed data after a period of factory operation, or adjustments made during the pump purchasing phase to optimize sizing. Interviewee α noted that customers have responded positively to this process optimization.

Another environmental aspect where post-sales upgrades have been gaining traction is water consumption reduction projects. Customers are increasingly attentive to their water footprint, driving upgrades in operating plants and facilities. Interviewee ζ explained:

> "*There is increasing number of cases where, we are visiting in factory, and purchasing manager has x million for water usage reduction projects. Then they are asking what solutions and upgrades we could offer for them". (ζ, 30.6.)*

Water reduction initiatives primarily focus on seal technology, but diverse applications are emerging. Interviewees α and ζ detailed how companies are striving to harness rainwater directly from factories for environmental benefits. These systems often require additional pumps, which, according to the interviewees, present yet another avenue to leverage environmental considerations for additional sales.

Given the heightened stakeholder and marketing communications related to environmental matters, interviewees were gaining insights into their customers' environmental projects. All interviewees agreed that it would be advantageous for Sulzer to generate reports and publications tailored for customer use. Subsequently, customers could share these publications with their stakeholders. Interviewees α, γ, and ε summarized:

> "*This could be a powerful way to add value for the customer. We could build models for customers, and they could use these in their stakeholder communication. Many of our customers are already using this kind of methods in their operations." (α, 10.5.)*

> *“All kind of communication tools, such as graphs and reports, are welcomed and I am sure our customer would be happy to use this kind of material in their stakeholder communication”. (γ, 10.5.)*

> *“This kind of documents are coming, our company is working on that. In the document there is the environmental details of certain pump types.” (ε, 26.6.)*

Interviewees argued that these types of additional services, no longer the company's core business, could significantly enhance customer satisfaction and relationships. They were aware that some competitors were already providing after-sales communication services, and they shared examples of customers receiving similar reports from other industry players.

Among the more traditional after-sales services provided are maintenance and spare parts. However, the environmental benefits stemming from a high-level implementation of these services should not be underestimated. Through proper maintenance and spare part services, a product's lifetime can be extended by decades. While historically these services were primarily pursued for cost savings, companies are increasingly recognizing their environmental advantages. Interviewee γ emphasized the significance of robust after-sales services, while interviewee β noted a shift in perspective:

> *“We have really focused on our maintenance and spare part services. Our products can have a long-life time if they are properly maintained. I am often selling spare parts for pumps which have been operating 50 years or more.” (γ, 10.5.)*

> *“The radical change has emerged during past couple of years. Nowadays companies are taking all the environmental aspects into consideration with after sales operations. The impact of maintenance team has been and is increasing. (β, 15.5.)*

Thanks to their extended lifetimes and dependable operational reliability, Sulzer has built a positive reputation among potential customers. Over the recent decades, the spare part business has evolved, and companies are increasingly opting not to maintain spare part inventories on their premises. This shift is driven by cost reductions and the liberation of tied-up capital, but it also carries environmental benefits. Interviewee β detailed the current processes and their environmental advantages:

> *“We are taking care of spare part storage for our customers. This releases customer’s space and costs, but forces us to have capabilities to react fast. On the environmental side this reduces production of spare parts and has positive environmental impacts. (β, 15.5)*

Sulzer has also shifted focus towards implementing circular economy principles in spare part deals. As various components of pumps possess differing lifespans, some parts can still be used and maintained even when a larger component, such as a filter, needs replacement. These reusable components can then be integrated into new pumps, aligning with the same concept as the pre-owned pump business. Certain major customers of Sulzer are now returning all the bearings utilized during bearing change operations. Subsequently, these bearings are factored into the pricing of spare parts and maintenance services.

8.4 Timeline for Sales department

All the interviewees strongly supported the argument that environmental and climate issues have gained increasing significance throughout their careers, particularly in the last decade. Salespeople explained that environmental concerns were scarcely addressed in sales negotiations centuries ago, but currently, they are discussed with each customer to varying degrees of precision. The interviews indicated a need for training and enhanced communication about the environmental benefits of products:

> *"If we are starting to discuss more about these issues with customers, or our marketing is highlighting them, then we need knowledge about this kind of information and terms." (δ, 30.5.)*

> *"In my opinion, environmental sustainability training is lacking compared to other sustainability dimensions training. We have a lot of training sessions about anti-corruption and equality, but not from environmental issues." (α, 10.5.)*

The majority of interviewees were unable to pinpoint a specific timeline for when customers will give more weight to environmental issues in their purchasing processes. However, they concurred that environmental concerns were increasingly evident in customer interactions, with varying levels of urgency among companies:

> *"There is no party, which would not be interested in environmental issues. Previously, companies' interest was towards safety issues, nowadays environmental issues are rising to equally important level." (γ, 10.5.)*

> *"Increasing number of our customers are needing LCA- reports and different certificates from our products to get an approval for their investments." (ε, 26.6.)*

The most solid estimations underscored the significance of global deals and how companies track these and each other's progress while establishing agreements. Most current companies have set environmental targets for 2030 and climate neutrality goals for 2050. Geographical distinctions exist, as explained by interview η:

> *"I predict that GHG emissions will be in more crucial role for companies after 5 years. However, the development will start from the Europe, and will be followed by North America countries. The last ones in this environmental development will be developing countries. (η, 11.7.)*

The general opinion among the interviewees was that Europe is a global trendsetter with the strictest targets and regulations. Interviewee η explained, how environmental discussions where, almost with all the cases, coming from Europe, and other continents were just waking up to this development.

The most prominent barrier to environmental advancement and the utilization of products' environmental benefits in sales processes was the absence of regulation. Regulations were identified as the most substantial factor influencing companies' environmental processes and operations:

> "*When new type of environmental regulations are emerging, we have to react to these rules by modifying our products. This has been the case with the electric motors and their energy efficiency regulations from EU. With the pumps this kind of efficiency or other environmental regulation is rarer." (δ, 30.5.)*

One environmental application discussed during the interviews that could enhance the competitive advantage derived from environmental benefits was the provision of communication services and support for customers. This support could encompass publications and social media posts concerning collaborative efforts and accomplished environmental upgrades:

> *"This could be a powerful way to add value for the customer. We could build models for customers, and they could use these in their stakeholder communication. Many of our customers are already using this kind of methods in their operations." (α, 10.5.)*

8.5 Summary from the interviews

This chapter summarizes key insights from the interviewees' responses in Table 9. The table condenses their detailed answers into a quantitative format, helping to distinguish differences among interviewees and emphasize critical areas that still need attention.

Table 9: Summarised answers of the interviewees.

Interviewee	**α**	**β**	**γ**	**δ**	**ε**	**ζ**	**η**
Dealt with customers using environmental issues as primary purchase criteria	x				x		x
Noticed increased importance of environmental issues during work experience	x	x	x	x	x	x	x
Familiar with customers' emission reduction targets	x	x				x	
Competitive advantage could be gained through water reduction	x	x	x	x	x	x	x
Competitive advantage could be gained through energy and GHG emission reductions	x	x	x	x	x	x	x
Circular economy will be important part in Sulzer’s business in the future	x	x	x	x	x	x	x
Has received environmental training from Sulzer	x	x				x	
Advocates for more environmental training for salespersons	x	x	x	x	x	x	x
Customers interested in additional "environmental services" alongside product benefits	x	x	x	x	x	x	x
Most important environmental dimension for Sulzer's future 1. Energy efficiency and decreasing CO2 emissions 2. Reducing customer’s water consumptions 3. Implementing more circularity in product manufacturing 4. Other	2	3	4	1	1	1&2	1&2

Out of all the interviewees, only three have had customers who have highlighted environmental issues as one of their major decision-making points in their purchasing processes. Additionally, with these three salespersons, cases like this have occurred only a few times. This highlights the fact that environmental issues are not yet the major decision-making tool for Sulzer's customers. However, all the interviewees agreed on the increased importance of environmental issues. The interviewees also saw that Sulzer could gain a competitive advantage by improving its products' three major environmental aspects: energy and GHG emission reductions, water usage reductions, and circular economy.

More than half of the salespersons were not receiving any training related to environmental issues and how their products could be beneficial for the customer. Simultaneously, the same number of salespersons were not familiar with the customers' environmental targets. All the salespersons were still positive about the benefits environmental training could offer for them. The positive impact on the company's sales success was also seen if Sulzer would offer additional services related to environmental friendliness for its customers.

Finally, the most important environmental aspect for the company divided opinions. All three aspects chosen at the beginning of the research process were considered important for the company, but the most important one varied between interviewees.

When asked about the main benefit of leveraging environmental issues in sales processes, all the interviewees mentioned brand and image benefits as one of the most important ones. The interviewees agreed that with more environmental processes, the company could strengthen their brand, which could lead to an increase in sales numbers. As interviewee ε summarised:

> "*Every company wants to be greener nowadays. By helping our customers to reach their targets and with more environmentally friendly products, we could get competitive advantage in terms of our brand. Strengthening our brand and image would surely lead to increased sales." (ε, 26.6.)*

All the interviewees agreed that environmental issues would be a valuable asset in future competition. Different individuals had different approaches and emphases, but all the salespeople were sure that in the future, environmental issues would play a significant role in their customers' purchasing decisions.

As the importance of environmental performance continues to grow, leveraging the benefits of products becomes crucial. As interviewee γ concluded:

> *“In my opinion with the increased focus on environment, we could get brand benefits, higher customer satisfaction, and eventually increased sales. In addition to this, more environmental processes and products would increase employees internal satisfaction. (γ, 10.5.)*

This comment highlights how the positive impact of environmental friendliness in sales processes is not limited to external benefits. If a company's values and employees' values are aligned with environmental friendliness, internal gains can also be achieved. As interviewee η concluded the interview, she emphasized that companies' operations should be oriented towards the future, and sales should anticipate the upcoming challenges of its customers. Regarding the environmental aspect η argued:

> *“These issues have not affected our sales yet. Still, I hate to play catchup and be the slow mover with the competition. These environmental issues will rise more important for every company, and I am worried that we have to play catchup if we are waiting for longer.” (η, 11.7.)*

The major reason why companies have not prioritized environmental considerations more in their sales operations and salespeople training was summarized as low customer interest. Even though all the interviewees agreed on the trend towards increased interest in environmental friendliness, customers who prioritize environmental issues as one of the most important factors in purchase decisions are still rare. Customers are still focusing their efforts and attention on many other dimensions, and the broad environmental trend related to the purchasing processes of manufacturing companies is still largely pending.

9. DISCUSSION

9.1 Implementation of environmental leverages in sales processes

In this chapter, the relationship between the empirical data gathered in the case study and the framework formed in the literature analysis is discussed. In B2B markets, companies' increasing trend towards environmental friendliness in their businesses and processes is evident (Hermundsdottir and Aspelund, 2020). This leads to companywide actions, such as increase for Green Supply Chain Management (GSCM) in the B2B markets (Tseng et al., 2019). As procurement departments of companies shift their focus towards evaluating customers based on their environmental practices and the environmental benefits they can offer, salespersons must be prepared for this change. Environmental friendliness can be perceived as a source of competitive advantage (Patala et al., 2016). This thesis aims to explore how companies' salespeople can leverage this advantage in their sales processes.

The literature framework was built around seven step sales process by Moncrief and Marshall (2005). The findings from empirical research are used to confirm or reject the framework built in Chapter 5. The findings are depicted in the following figures, where they are either validated with a green colour, partially confirmed with a yellow colour, or prove false with a red cross. The results are presented in the four different parts as follows:

- Pre-sales processes
- Sales processes
- After-sales processes
- Customer, industry, and sales process differences

First, the pre-sales processes include steps such as customer retention and deletion, as well as database and knowledge management. Second, the sales processes step includes nurturing the relationship, marketing the product, and problem-solving steps. Third, the after-sales processes encompass adding value/satisfying needs and maintaining customer relationship steps. Finally, the section on customer, industry, and sales process differences explains how the leveraging of environmental benefits differs between industries, customers, and sales situations, and how these differences should be taken into account in sales processes.

9.2 Pre-sales processes

First steps in the sales process, pre-sales process, included customer information gathering included customer knowledge and information gathering. According, the theoretical part, customer information could build with the help from publications, such as annual reports and websites, and from environmental commitments and certifications. Theoretical base is illustrated in Figure 30.

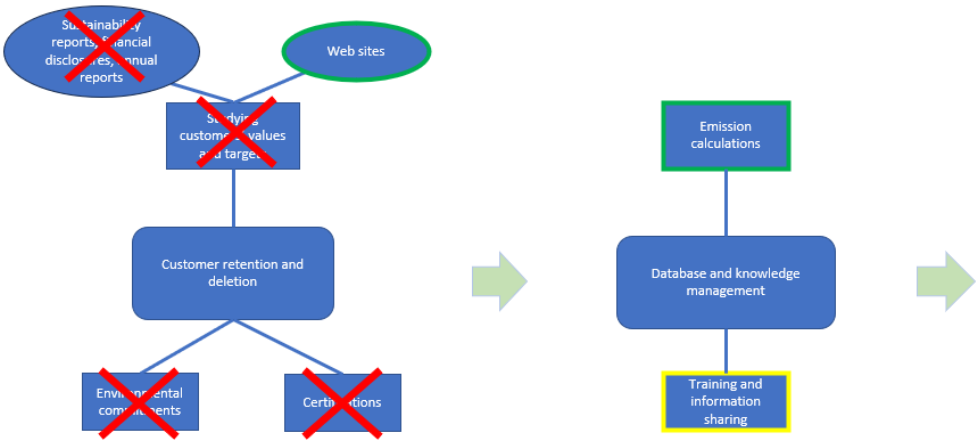

Figure 30: Customer knowledge and information gathering.

In the empirical portion of the study, the initial objective was to identify potential information sources for salespersons regarding their customers' environmental needs and objectives. Interviews with the salespeople yielded expected outcomes that aligned with the theoretical framework, although the extent of pre-sales information gathering fell short of what was presented in the framework.

First, the primary source for building customer knowledge during pre-sales processes was found to be the customers' websites and social media posts. These findings align with the framework, which emphasized the growing significance of social media marketing and internet utilization in discussions about environmental issues (Searcy and Buslovich, 2014; Vaccaro, 2009). None of the interviewees mentioned sustainability or annual reports as information sources. Such publications demand more time and effort to become acquainted with, which explains their low utilization rate. As salespersons explained, their working hours are limited, and they lack the time to collect all relevant customer information. The process of becoming familiar with such publications seemed excessively time-consuming compared to the value gained.

Second, the salespeople did not mention environmental commitments or certifications as sources of information. Environmental commitments and certifications were not well-

known to the salespeople, explaining their non-usage of these information sources. A significant portion of environmental certifications and commitments, such as SBTi, have gained popularity recently, and information about them has not yet disseminated to the salespeople (Bjørn et al., 2021). To effectively leverage their products' environmental benefits, companies must train salespeople to identify customer needs and explore how their products could be advantageous for the customers. Training is also required on the company's own targets and initiatives. At present, most major companies already have some form of environmental targets and commitments (Bjørn et al., 2021). However, these aspects are not yet integrated into the companies' sales or procurement processes, leading to a lack of familiarity with the associated terminology. A comprehensive understanding of environmental issues, targets, commitments, and terminologies must be established before these aspects can be effectively utilized.

9.3 Sales-Processes

During the sales process, the phase of finding customer-specific benefits continues with the help of customer discussions. These discussions then transition into the phase of communicating the benefits the product can provide for the customer. The sales processes included four steps from the Moncrief's and Marshall's (2005) sales process framework. The steps are presented in the Figure 31.

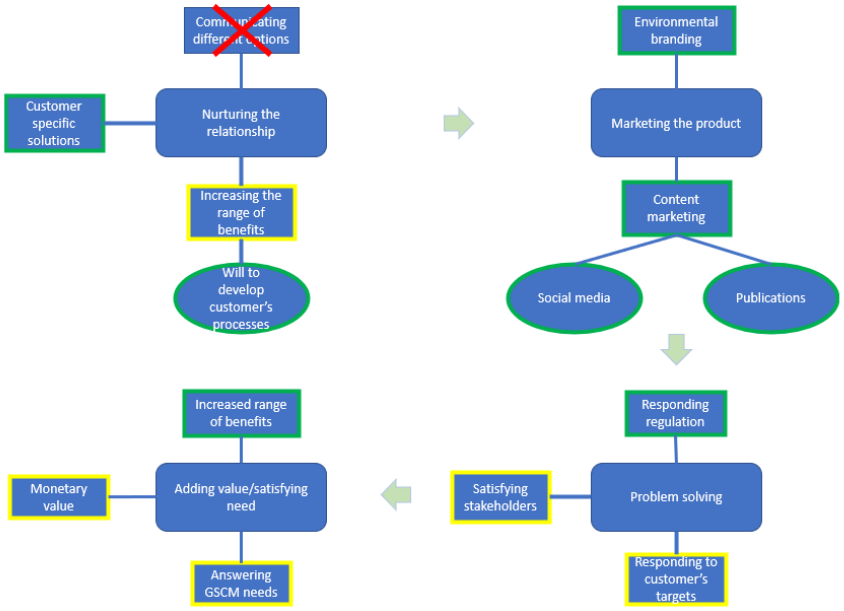

Figure 31: Customer knowledge gathering and communicating performance benefits.

As shown top left in Figure 31, nurturing the relationship step accentuated the communication aspect. Establishing a robust relationship involves focusing on customer processes and business development. In the context of environmental considerations, this work predominantly centres on responding to the customer's Green Supply Chain Management (GSCM) targets. Diabat and Govindan (2011) highlighted the significance of suppliers' environmental capabilities and communication skills in relationship building. To enhance relationships with customers, salespersons must develop their environmental competencies. Currently, companies with a primary focus on environmental friendliness, such as those engaged in renewable energy sources, possess sufficient expertise to create customer value with environmental concerns. In other companies, environmentally-friendly products are often sold mainly due to lower costs. Strengthening relationships can be achieved by proposing novel solutions and services for customers (Gelderman et al., 2021). However, the utilization of such actions with environmental aspects in modern-day sales processes remains limited. New solutions and upgrades are primarily proposed when customers request or allocate resources for them. However, the push for such initiatives seldom originates from the suppliers' side. A lack of understanding of customers' environmental targets and the potential benefits the product could offer hampers the advancement of this step. The desire to offer customer-specific solutions is prominent among salespeople, but currently, customers' interest in sustainability issues does not play a significant role during the sales processes.

As shown top right in Figure 31, marketing the product is one of the actions companies are majorly using in leveraging environmental issues for the sales benefits (Searcy and Buslovich, 2014). The results of this study aligned with the findings presented in the literature analysis. A novel trend in environmental marketing emerged from this study, where companies are utilizing content generated by their suppliers as marketing material. This content includes reports and social media posts from collaborations, or publications showcasing gained advantages. Through these additional marketing services, customers can access valuable marketing materials that foster closer customer relationships and heightened customer loyalty. Nonetheless, concerns regarding environmental marketing involve the potential use of terms, commitments, and phrases unfamiliar to salespeople, which could result in reduced communication effectiveness and trust between customers and salespersons.

As shown bottom right in Figure 31, problem solving step was brought up with different aspects of combining environmental issues and sales processes. The highlighted aspects were:

- After new regulations
- When operation environment is changing
- When customer needs suppliers to achieve environmental targets

First, regulation was underscored as a major driving force compelling companies to adopt environmentally-friendlier processes as part of their operations. Growing regulatory requirements are becoming increasingly common in developed countries (European Parliament, Council of the European Union, 2022; UNFCCC, 2023; United Nations, 2023a). This study corroborated assumptions from the theoretical framework. Regulation emerged as the primary factor prompting companies to shift their business in a more environmentally friendly direction. When new regulations arise, changes offer opportunities to strengthen market positions for companies that promptly adapt to evolving markets. Following product-specific changes, customers require training, guidance, and support for the altered products. These situations provide the optimal context to leverage high environmental knowledge and skills within the sales department.

Second, during the empirical part, a problem mentioned involved changes in the operating environment that necessitate supplier assistance. A clear example of such radical changes is the increasing aridity in certain regions. Accelerating environmental changes and global warming are expected to exacerbate dryness and heat in many areas. Companies operating in these regions will require solutions that work efficiently with limited water resources. This scenario presents an advantage for entities possessing the most water and energy-efficient products. Additionally, the global trend toward rising resource prices shows no signs of abating.

Third, the final highlighted problem in this study pertained to situations where customers had environmental targets that necessitated supplier assistance. These situations related to efficiency upgrades, resource reduction, and product lifespan extension. In these scenarios, suppliers hold significant influence over the end result, offering a valuable opportunity to strengthen customer relationships. However, these situations have become increasingly common only in recent years, and they will play a more significant role in the success of sales in the coming years.

As shown bottom left in Figure 31, the sales process moves to adding value/satisfying need stage. In this stage, theoretical framework was built on top of the three principles presented by Andersson et al. (2018):

- Offering low-cost solutions
- Customer intimacy
- Superior quality

First, the framework proposed three distinct mechanisms for providing lower-cost solutions: reducing emission allowance costs, offering circular-economy based solutions, and enhancing customers' processes. However, the empirical part of the study did not observe a significant impact from the first mechanism, which involves reducing emission allowance costs. The cost burden associated with CO2 emissions does not play a major role in the current business environment. On the other hand, the impact of the last two mechanisms was evident in the empirical part of the study. Circular economy solutions offered potential cost savings by reducing material and workforce expenses. This finding aligns well with existing literature (Gigli et al., 2019). The positive impact of shorter delivery times with the circular economy products was brought up during the interviews. The interviewees were emphasizing how delivery times are for some customers the biggest advantage from circular economy solutions. Process intensification within customer operations has long been integral to the case company's core business, and all interviewees acknowledged its importance. Continuous product development was perceived as essential to maintaining competitiveness.

Second, the findings regarding customer intimacy resonated between the empirical part of the study and the theoretical framework. Hasanbeigi and Price (2015) and Manzardo et al. (2014) argued that energy-intensive industries face increasing pressure to reduce emissions and waste generation through innovative approaches. The interviewees concurred with this argument, noting that customers in direct collaboration with renewable energy sources are even more inclined to invest in sustainable products. This customer need stems primarily from image pressures and internal imperatives. Carbon-neutral processes hold significance in such businesses, and the drive to maximize environmental positivity within these companies is stronger than usual. However, the interviewees did not possess deep familiarity with their customers' GSCM targets. Dube and Gawande (2016) identified this lack of knowledge about customer GSCM targets as a major barrier to achieving high-level environmental performance in companies. Addressing this factor in greater detail in the future is essential if companies wish to maximize their potential for leveraging environmental benefits in sales.

Third, the influence of superior quality as a source of customer need satisfaction was recognized among salespeople. Interviewees emphasized that companies often face a choice between lower costs and higher quality. While some cost differentials level off

over time, particularly if higher quality leads to reduced maintenance and process expenses, it remains a customer-specific decision whether to prioritize lower purchase prices or lower Total Cost of Ownership (TCO) and Life Cycle Assessment (LCA) impacts.

9.4 After-sales processes

The final step of the sales process included providing additional offerings for the existing customer. The primary objective of these supplementary offerings is to generate more income and enhance customer relationships. In Moncrief and Marshall's (2005) framework, the final step was characterized as customer relationship maintenance, which provides further insight into the provision of additional offerings and underscores the significance of this process.

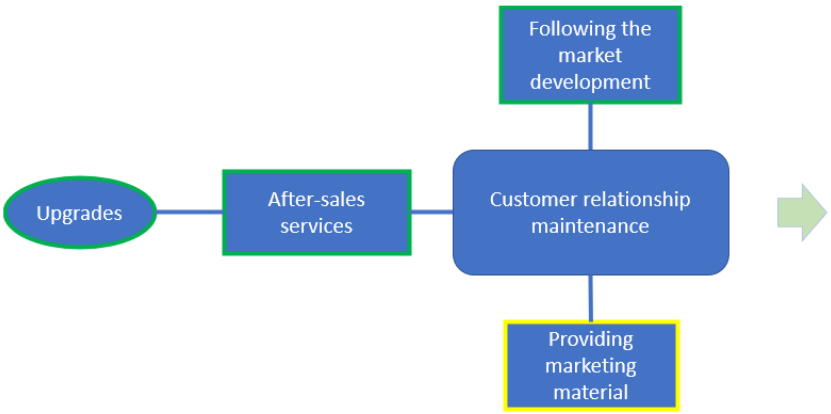

Figure 32: Providing additional offerings.

In the existing literature, the impact of environmental benefits on sales success has not been extensively researched. Due to this gap, the interviewees in this study surprisingly emphasized the significance of after-sales processes. Interviewees α and ζ even pointed out that existing customers represent the most promising customer segment for leveraging environmental benefits to achieve additional sales. These additional sales and environmental benefits were often realized through product and process upgrades.

Given that environmental requirements are in a state of continuous development, existing factories and plants must also adapt to these evolving demands. In scenarios where customers have a certain budget for upgrades but lack a clear objective, suppliers can exert a significant influence on the final outcome. This provides an opportunity to showcase the company's expertise and strengthen customer relationships. Another potential situation for after-sales involvement is audits conducted at the customer's premises. Through appropriate product upgrades, customers can achieve cost reductions in their

processes and transition to more environmentally friendly practices. As highlighted in the literature, these types of scenarios epitomize the "win-win" situations described by Porter and van der Linde (1995).

As the marketing of environmental friendliness continues to grow, companies are exploring new ways to connect potential customers with their marketing materials. While traditional narratives about recycling, renewable energy usage, and reduced business travel remain important components of environmental communication and branding, more targeted and specialized marketing materials are now required. Specific calculations, process upgrade diagrams, and other illustrations of environmental benefits were mentioned during the interviews. These needs present opportunities for suppliers to offer additional marketing and communication materials that highlight their products' environmental advantages.

Considering that environmental reporting will likely become mandatory for major companies in the future, offering calculations related to greenhouse gas emissions and water usage, for instance, could provide a marketing advantage by demonstrating preparedness for forthcoming changes. Environmental considerations are gaining a stronger foothold in firms' operations, and this represents a novel phase for many stakeholders. Therefore, communicating environmental maturity at this stage would be beneficial for overall sales success.

9.5 Customer, industry, and sales process differences

One aspect that emerged during this study was the extent to which various industries, customers, and sales situations influence the utilization of environmental benefits in sales contexts. Industry discrepancies were to be expected; it is evident that energy-intensive industries emphasize energy consumption and GHG emission reductions, whereas companies with a substantial water footprint primarily strive to curtail water usage. These actions have been extensively explored in prior research and were further underscored in the empirical phase (Pongiglione and Calderini, 2014); (He and Wang, 2017; Manzardo et al., 2014). The interviews provided insights into identifying the predominant environmental focus areas within different industries, contributing to a comprehensive understanding. The key findings are depicted in Figure 33.

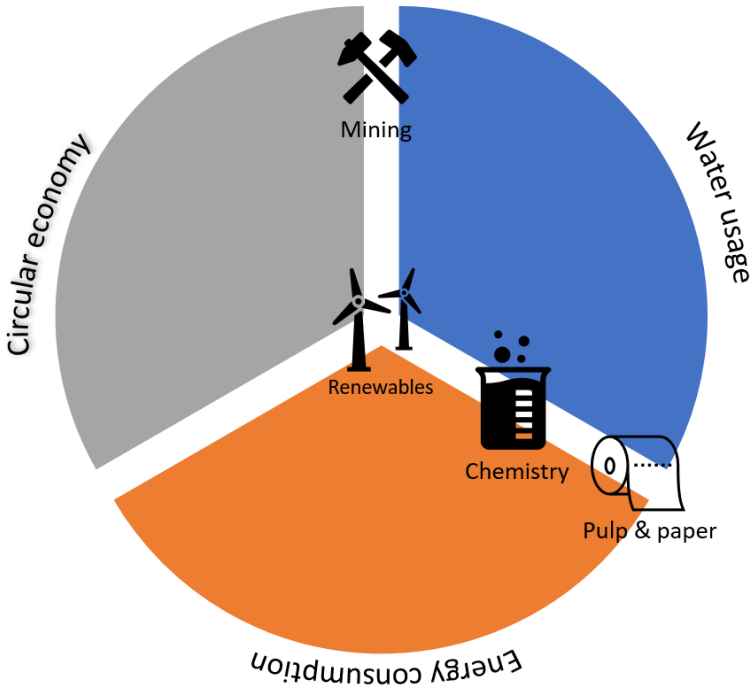

Figure 33: Industries' main environmental focus areas.

Based on the interviews, companies engaged in renewable energy production exhibit the highest interest in environmental upgrades. Notably, their interest isn't confined to a particular environmental aspect; they are open to enhancing their processes with assistance in any area. On the other hand, industries like pulp and paper and chemistry operate with energy- and water-intensive processes, directing developmental efforts towards energy and water consumption. For suppliers, a significant competitive advantage can be secured if their products effectively address these needs.

In the mining sector, the environmental focus diverges from other industries. Mining operations are resource-intensive, resulting in more frequent turnover of mining products. The higher costs and environmental impact of manufacturing new products for ongoing operations underscore the advantages of circular economy solutions. Circular practices enable the reuse of products, mitigating losses. Water usage is another pivotal consideration in the mining industry due to the substantial need for fresh water and effective water management. Consequently, circular economy practices and water usage management are the paramount environmental aspects for mining companies.

Furthermore, various sales situations influence the significance of environmental effects. In the manufacturing industry, project-based sales scenarios frequently arise when establishing large manufacturing units. These situations involve different end users than the project supplier, leading to more complex negotiations involving multiple parties. The

differences in priorities between project suppliers and end users are summarized in Table 10.

Table 10: Different decision making points for project suppliers and end-users.

Project supplier	End-user
• Purchase price • Easiness of the supply process • Flexibility and quickness of the bidding process	• TCO and LCA • Reliability of product • Maintenance and spare-part service level • Long life-time • Environmental benefits

As indicated in the aforementioned table, project suppliers place a higher emphasis on price and the simplicity of the procurement process. In the realm of project-based business, the practice of bidding is widely utilized for pricing, and assembling comprehensive bids is often done within tight time constraints. The research underscores the necessity for product suppliers to swiftly provide quotations to participate in bidding processes. Consequently, presenting detailed benefits and leveraging product-specific environmental advantages might prove to be too time-consuming.

Conversely, product end-users show greater concern for process costs and the product's life-cycle assessment. They find it advantageous to receive a comprehensive presentation outlining the benefits a product can offer throughout its entire lifespan. Since a significant proportion of manufacturing equipment accrues relatively higher costs during its operational life rather than at the point of purchase, the Total Cost of Ownership (TCO) becomes a more valuable criterion for end-users. Moreover, end-users exhibit higher expectations towards maintenance and spare part services. Showcasing examples of continuous development and updates throughout the customer relationship can serve as a strategy to attain a competitive advantage.

Another insight stemming from project-based sales characteristics is that communication among project stakeholders can sometimes be lacking, leading to diminished product efficiency and suitability. An often encountered issue in the manufacturing industry is sizing maximization. This occurs when each party adds safety margins to the product,

resulting in a final capacity that surpasses the actual requirement. Sizing maximization contributes to reduced efficiency and overpowered products, which in turn consume more resources, such as energy and water. Effective communication between all parties involved emerges as a crucial factor in avoiding these situations.

9.6 Limitations of the study

The research process requires careful and critical review to ensure its validity and reveal the possible weaknesses of the study. The limitation review focuses on both the framework generation process and the empirical part of the study. The main limitations of the study include generalizability, researcher and interviewee biases, and the process of building the framework.

The literature framework was built without the support of previous studies that combined environmental performance and wholesale process success. Since the framework had not been empirically tested before, and there was a lack of literature related to the subject, its development was challenging.

The final framework's development process heavily relied on the empirical study. Interviews were conducted with employees from the same company. While the interviewees were selected from various departments and country units, the company's shared culture and the need to align with the case company's intentions might have influenced the way they answered the questions. A more comprehensive and reliable perspective could have been achieved through interviews with representatives from different companies. The number of interviewees was relatively small. Although this number allowed for achieving the required accuracy, future studies related to the subject must involve a larger number of participants to ensure more reliable and generalizable results.

Another limitation related to the interviews was that not all interviewees had significant experience or competence in using environmental considerations in their sales processes. While this finding was significant, it also meant that many interviewees based their responses on their perceptions rather than concrete knowledge. The limited understanding of the terms and subject matter of the study contributed to the inaccuracy of their responses.

For more reliable and informative study results, including interviews with customers would have been valuable. This direction is necessary for future research. Currently,

sales representatives in companies are not fully aware of how to leverage the environmental benefits of their products to enhance sales success. Exploring customer needs and focus areas through research would shed more light on these issues.

10. CONCLUSIONS

Environmental issues are progressively gaining importance in companies' operations and overall business strategies. This evolution has brought about a scenario in which a majority of globally operating companies are adopting various environmental targets to enhance their environmental footprint (Hermundsdottir and Aspelund, 2020; Yao et al., 2019). This emphasis on environmentally conscious practices transcends a company's internal processes; it also extends to the impact of supply chain operations, elevating the significance of environmental performance. Green Supply Chain Management (GSCM) has gained prominence as companies factor environmental considerations into their procurement decisions (Tseng et al., 2019). As companies prioritize greener procurement decisions, this shift inevitably influences the sales processes of their suppliers. Existing scholarly literature extensively examines how environmental performance influences the competitive standing and financial metrics of companies. However, there's a dearth of research investigating how environmental benefits can be effectively harnessed in the context of sales processes (Hermundsdottir and Aspelund, 2020; Hussain et al., 2018).

In response to this research gap, this study aims to address the question of how companies can leverage the environmental benefits of their products in their sales processes. Three research questions have been formulated: 1) What are the environmental benefits that customers desire from their suppliers? 2) How can sales leverage the environmental benefits of products to their advantage? 3) At which stage of the sales funnel can environmental offerings be utilized effectively? Adductive research was chosen for the implementation of this study. First, quantitative literature analysis is conducted to gain a literature background and build the framework of the study. Second, quantitative interviews are held in the empirical part. The targets of the interviews are salespersons who have expertise from different sales situations and experience how environmental issues are emerging in sales processes. Finally, the findings from the empirical part of the research are compared with the theoretical framework.

The specific environmental aspects that hold the greatest interest for customers are often related to the company and industry context. The level of interest varies depending on the primary resources consumed by the customer companies. Enterprises operating directly within the renewable energy sector exhibit the highest potential for leveraging the environmental benefits of products. This stems from external expectations regarding environmental branding and image, as well as internal aspirations. Such companies fre-

quently set ambitious carbon neutrality goals within short timeframes. Conversely, industries like pulp and paper, as well as chemistry, place a strong emphasis on reductions in water and energy consumption due to their resource-intensive processes. The mining industry focuses primarily on circularity and minimizing water usage owing to the accelerated wear and tear of machinery and the significance of water resources. As a result of these industry-specific and company-specific goals, the desired environmental benefits from suppliers exhibit considerable diversity. However, certain common needs arise within industries, which offers advantageous insights for salespersons.

During the construction of the sales funnel framework, the sales process was partitioned into three distinct stages: Pre-sales, sales, and after-sales processes. The study concentrated on harnessing environmental benefits across these distinct phases of the sales journey. In the pre-sales stage, the primary objective is to gather foundational knowledge and information about potential customers. Contemporary business environments exhibit a significant variance in companies' approaches to environmental sustainability (Walenta, 2020). Consequently, the ability to identify the most promising customers becomes a critical factor (Fang et al., 2016). Regarding environmental concerns, the most promising customers are those who uphold the most rigorous environmental targets and commitments, as well as those who value an environmentally friendly image. However, the subset of customers demonstrating a strong interest in environmental considerations during their purchasing processes remains relatively modest. Notably, the highest degree of interest is observed among companies within the renewable energy sector. Geographically, the most promising customer segment is situated in developed nations, particularly within the EU region, aligning with the stringent environmental policies of the European Union(European Council, 2022).

Social media platforms and customer websites serve as the primary sources of information about customers' environmental objectives and practices. Environmental standards and commitments have proven to be effective resources for acquainting oneself with customer environmental aspirations, as affirmed by Halkos and Nomikos (2021). However, these sources are not commonly leveraged among salespersons. This can be attributed to time constraints, the contextual significance of environmental considerations in sales interactions, and the salespeople's lack of familiarity with environmental issues and related terminology. To bolster the integration of environmental concerns into pre-sales processes, salespersons must acquire new sets of skills and knowledge.

In the sales stage, environmental benefits can provide a significant advantage. These benefits stem from the information collected during pre-sales and discussions held with

the customer throughout the sales phase. Once these advantages are identified, effectively conveying them to the customer becomes paramount, which also occurs within the sales stage. Environmental concerns and the product's environmental benefits are not often central topics in sales negotiations. Nevertheless, customers express keen interest in reducing operational costs, particularly through energy and water usage savings. Moreover, the environmental facet of energy and water savings has garnered increasing attention, signifying a growing trend. An issue arises when customers are not always fully informed about all the potential environmental advantages the products can offer. Similarly, on the supplier's side of sales, training on the environmental benefits of products and understanding customers' environmental objectives must be prioritized for achieving a competitive edge. Although many major corporations have Green Supply Chain Management (GSCM) goals, these objectives do not necessarily dominate purchasing decisions. The most effective method to leverage a competitive advantage from environmental benefits is to align them with cost savings. Furthermore, alongside cost savings, customers are intrigued by a company's more environmentally friendly brand and image. By accentuating the environmental aspects of products within marketing and sales strategies, companies can enhance their brand, which, in turn, positively influences the success of their sales endeavours. Integrating an environmentally friendly brand into sales processes demands a new kind of expertise from salespersons, which should be acknowledged in sales training.

In the after-sales stage, there is an emphasis on providing additional offerings, such as post-sales services. Traditional after-sales services like maintenance and spare parts are gaining prominence among customers, particularly in terms of environmental performance. Customers increasingly value high-level services that prolong their product's lifespan. The pursuit of more efficient and environmentally conscious processes has resulted in a greater number of upgrades for existing units. These upgrade scenarios offer an excellent opportunity to solidify customer relationships and secure a competitive edge. Additionally, apart from conventional after-sales services, the aspiration for a more environmentally friendly brand motivates new avenues of customer value creation. Companies exhibit substantial interest in receiving environmental communication support from their suppliers. This kind of communication support could encompass elements like publications and social media posts highlighting their collaboration and the positive environmental impacts derived from it. While certain companies are already harnessing their suppliers for stakeholder communication, there remains substantial untapped potential in these applications.

The final factor to consider when integrating environmental concerns into sales processes is the nature of the sales situation. A substantial portion of sales scenarios within the manufacturing industry revolves around project-based sales, where the sales process is conducted with the project supplier, not the end-user of the unit. In project sales, the environmental benefits of products can be best leveraged when the supplier can directly communicate with the end-user. If communication and sales processes are solely managed by the project supplier, the purchase price significantly influences the purchasing decision. In project-based sales situations, suppliers should focus on influencing the end-user, who demonstrates more interest in the operational costs and environmental impacts of the product.

In the contemporary business landscape, environmental factors seldom take precedence as the primary purchase decision criteria for companies. However, the trend continues to elevate the significance of these factors, and companies can already derive a competitive edge by highlighting the environmental benefits of their products as supplementary advantages. Regulations emerge as the driving force compelling companies to adopt more environmentally friendly practices. Regulations are growing stringent concerning companies' environmental performance requirements, particularly within the EU region. As new regulations come into effect and companies' environmental target deadlines approach, the environmental benefits offered by suppliers are increasingly pivotal as decisive factors in purchasing choices.

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APPENDIX 1: INTERVIEW QUESTIONS

Background

- Please introduce yourself and tell me about your current role, responsibilities, and which unit are you working at?
- How much you are in touch with sales processes and with Sulzer's customers?
- Tell me how environmental themes like climate approach, circular-economy etc. are appearing in your work?

Terms used in the interview

Scope 2 emissions: Indirect CO2 emissions, which are formed for example from the electricity and heating processes. Sulzer is able to impact these emissions by more energy efficient products.

Scope 3 emissions: Indirect emissions, which are covering the emissions of all used products life cycle emissions. These are for example, manufacturing and transporting of the pumps. Sulzer can influence these emissions by environmentally friendly processes, supply chain management etc.

Water footprint: Water footprint is the total amount of freshwater used directly or indirectly to produce goods or services.

Circular economy: Economic system that aims to minimize waste and maximize resource efficiency. It promotes the reuse, recycling, and regeneration of materials, keeping them in the economic cycle for as long as possible.

SBTi: Collaborative effort between organizations to set scientifically derived targets for reducing greenhouse gas emissions. SBTi helps companies align their emissions reduction goals with the latest climate science to ensure they are contributing to global climate targets. Sulzer is one of the companies involved.

Questions for salespeople

Theme	Question
Importance of environmental issues	How are environmental issues being incorporated in sales processes in your company?
	How has the importance of environmental/climate issues changed during your work experience?
Scope 2 & 3	Are you familiar with your customers' companies' emission reduction targets or commitments, and what different types of commitments are there?
	Are you familiar with your customers companies' emission reduction targets or commitments, and what different types of commitments there are?
	What kind of competitive advantage could your company gain by offering solutions that help customers reduce their Scope 2 or 3 emissions?
	Which markets (geographic, industry, or market size basis) would benefit the most from emission reductions?
	Are there customers who already prioritize climate friendliness as one of the most important purchase criteria?
Water footprint	Which customer segments are most interested in their water consumption?
	What kind of benefits could customers gain from reducing their water usage?
	What kind of competitive advantage could your company gain from offering solutions for water usage reductions?
	In what kind of situations do water reduction targets appear?
Circular economy	Are you involved with the circular economy in your current position?
	What aspects of the circular economy are emerging in your sales processes?
	Are your customers overall interested in circular economy and its applications such as: - Preowned equipment - Maintenance performance
	What future potential and applications do you see in the circular economy from a sales perspective?
Training	Are you familiar with sustainability terms and issues (such as Scopes, SBTi, carbon neutrality)?

	Do you think the sales department should receive training on these subjects, and would it be beneficial for your work? What should be the major focus of the training?
	Is the pressure for this kind of knowledge and skills increasing currently?
Roadmap	Which environmental/climate issues you believe will be the most important ones in the future for your customers?
	Will your customers primarily require product applications or improvements in order to address environmental issues, or will they need communication or other kind of support/services as well?
	What kind of timeline you predict with these issues? What are the determining factors?
Working with project supplier	In your current position, are you in touch with project based selling processes?
	Which party is the most interested environmental benefits of your products in project-based sales situations? (Customer, project owner, governments, etc.)
	Are you capable to communicate your product functions and benefits directly to customer or is the communication dealt mainly with project owner? Could you tell about this process?
	When selling products for projects, what is the determining factor? Investment price or TCO? Has there been any changes to this?
Benefits for Sulzer	What are the main benefits Sulzer could gain from integrating environmental considerations more fully into the sales processes?