MAPPING STAKEHOLDER EXPECTATIONS IN A DIGITAL BUSINESS: CASE PINJA GROUP

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ABSTRACT

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Abstract

Corporate sustainability has emerged as an essential topic in the business world and academic discussion. Nowadays, companies from different industries pay more vigorous attention to their social, economic, and environmental impacts. At the same time, a shareholder-centric approach shifted towards a stakeholder-oriented approach, requiring businesses to listen and respond to stakeholder expectations. Despite the increasing importance of corporate sustainability and the role stakeholders play in it, there is limited research in this field in the context of the digital industry.

This thesis attempts to understand stakeholder expectations regarding material sustainability aspects and corporate sustainability management process relevant for Pinja Group - a case company operating in the digital sector. In addition, this thesis seeks to compare the expectations of different stakeholder groups. Thus, the theoretical framework of this study consists of prior research related to corporate sustainability in the Information Technology (IT) sector, sustainability reporting, and materiality approach, as well as stakeholder theory and stakeholder engagement.

The research methodology strategy used in this research is the case study, while the data collection method is semi-structured interviews. Semi-structured interviews were conducted with the company's primary stakeholders, including shareholders, employees, customers, and top management stakeholder groups. The qualitative data received from the semi-structured interviews were analyzed by using the thematic analysis method.

This study identified the following six material sustainability themes expected by stakeholders: (i) corporate social performance, (ii) sustainable services and solutions, (iii) internal environmental performance, (iv) partner and third-party sustainability, (v) economic stability and growth, and (vi) corporate compliance. Furthermore, the results showed that stakeholders expect the case company to manage its corporate sustainability by creating a sustainability program consisting of (i) sustainability strategy, (ii) sustainability measurement system, (iii) stakeholder engagement, and (iv) practical guidelines, as well as develop sustainability communication including (i) sustainability awareness creation, (ii) sustainability performance communication (iii) marketing communication. In addition, the study results showed the differences in stakeholder expectations across various stakeholder groups.

Keywords

stakeholder expectations, materiality assessment, stakeholder theory

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1   INTRODUCTION

This chapter is an introductory chapter that starts with the discussion of the research background, introducing the research problem and motivation of the study. Next, a brief introduction of Pinja Group Oy – the case company is presented. Then, the purpose of the research and the research questions are introduced. Lastly, the glossary of the key concepts used in the thesis is presented, followed by the structure of the study.

1.1   Background of the research

The role of businesses in society has been changing; in the past decades, the significance of corporate sustainability has dramatically increased. This can be seen from a considerable amount of research published on the topics such as sustainability strategy (Engert & Baumgartner 2016; Lloret 2016; Tsai & Liao, 2017), sustainability management and performance (Lee & Farzipoor Saen, 2012; Nawaz, & Koç, 2018), sustainability reporting and disclosure (Azizul Islam & Deegan, 2008; Hogan & Lodhia, 2011; Lodhia & Hess, 2014). Furthermore, the importance of corporate sustainability has increased in companies representing various sectors. However, the research related to corporate sustainability in the digital sector is limited. On the one hand, digital solutions play an inevitable part in achieving sustainable development globally, as noted by several researchers (Calero et al., 2019; Faucheux & Nicolaï, 2011; Huang, 2009). However, on the other hand, the negative impacts of IT companies cannot be neglected. In fact, the IT sector accounts for 1.4% of the total world's emissions, which is similar to emissions of the aviation industry (Malmodin & Lundén, 2018). Therefore, it is vital for companies operating in the digital sector to pay more vigorous attention to their corporate sustainability performance to respond to sustainability risks and opportunities.

The concept of corporate sustainability is tightly connected to stakeholder engagement; to be sustainable in the long term, companies need to be accountable to their stakeholders. As Freeman (1984) proposed in the stakeholder theory, the purpose of business is not only maximization of the shareholder value any longer, but also consideration of other stakeholders such as customers, employees, and suppliers. In accordance with stakeholder theory, stakeholder relationships are an essential factor that affects decision-making (Searcy & Buslovich, 2014). As accountability to the stakeholders develops, companies are increasingly disclosing their corporate sustainability performance through sustainability reports. Sustainability reporting is a way for companies to report their social, environmental, and economic performance, ensuring accountability to their internal and external stakeholders (Calabrese et al., 2016).

Despite some similar topics addressed in sustainability reports, an organization's individual characteristics, such as business model, size, ownership, determine the company's sustainability impacts and the expectations stakeholders

have about a company's sustainability performance (Calabrese et al., 2016). Therefore, companies operating in similar industries might have completely different essential or "material" topics which should be addressed in sustainability reports. Since one of the aims of the sustainability report is to provide stakeholders with accurate information to enable them to assess the company's sustainability performance (Calabrese et al., 2016; Searcy & Buslovich, 2014), companies should emphasize the topics that are important for stakeholders. Indeed, international reporting guidelines such as GRI (2016) and AccountAbility (2016) recognize the significance of focusing on material topics in sustainability reports and base their guidelines on the materiality principle. Although the materiality approach is an important method to identify the report content, it has been argued that it has several other important implications. For example, according to Johnson (2015), materiality assessment is seen as the first step in sustainability strategy formulation, communication, and identification of positive sustainability impacts of the company.

This thesis attempts to identify the most material sustainability areas relevant for Pinja Group - a digitalization and industrial innovation company based in Finland. The motivation for the research includes both theoretical and practical perspectives. From the practical point of view, the motivation is the willingness of the case company to integrate sustainability into its operations and practice sustainability reporting in the future. Thus, it is essential to identify the most material sustainability areas relevant for the company as well as understand stakeholder expectations on corporate sustainability management in general. From the theoretical point of view, this thesis seeks to contribute to the research in the field of corporate sustainability in the digital sector. Although both positive and negative impacts of the sector have been widely discussed (Calero et al., 2019; Faucheux & Nicolaï, 2011; Huang, 2009; Malmodin & Lundén, 2018), current literature has not extensively addressed the importance of sustainability in the digital sector from the corporate point of view. Therefore, corporate sustainability in the digital sector needs more attention both in the academic literature and the business world. By researching stakeholder expectations, this thesis attempts to fill the research gap in the field of corporate sustainability in the digital sector.

1.2 Case company: Pinja Group

Pinja Group (Pinja) was established in 1990 in Finland as an industrial consulting company. It grew to an IT and engineering company that currently provides different services throughout the entire product lifecycle for businesses operating in various industries such as energy, circular economy, health and welfare, marine, and wood processing (Pinja, n.d.). Naturally, sustainability issues are of high importance for its customers, considering the industrial nature of its operations. Pinja's digital solutions assist its customers in improving supply chain management, production management, maintenance, occupational safety, and knowledge management. The company also provides maintenance, cloud platform, ICT, security, and support services for production-critical environments.

In the year 2020, Pinja's turnover accounted for EUR 50M, and the number of employees was 550.

Regarding sustainability management in the company, Pinja has recently started to focus its attention on relevant sustainability topics. The reason for that is the increasing stakeholder expectations regarding corporate sustainability, particularly from the shareholder stakeholder group. However, currently, Pinja does not have a comprehensive strategy for sustainability management, nor it reports its sustainability performance. Therefore, this thesis attempts to assist Pinja in defining relevant sustainability topics to formulate a sustainability strategy and develop a sustainability reporting framework.

1.3   Research questions

The primary purpose of the thesis is to understand stakeholder expectations regarding corporate sustainability. Particularly, the thesis aims to identify the most material sustainability areas for Pinja, as well as understand stakeholder expectations regarding the corporate sustainability management process. Furthermore, this thesis attempts to compare the expectations of different stakeholder groups. Thus, the following research questions were set:

RQ1: What are material sustainability topics for Pinja Group according to the company's primary stakeholders?

RQ2: What are stakeholder expectations regarding the corporate sustainability management process at Pinja Group?

RQ3: Do these expectations differ between stakeholder groups?

Pinja considers the implementation of sustainability strategy and reporting for better accountability to its primary stakeholders. Therefore, the stakeholder groups included in the study boundary are employees, top management, customers, and shareholders. According to Johnson (2015), the opinions of both internal and external stakeholders are essential for materiality assessment. Therefore, both internal and external stakeholders were chosen due to the importance for Pinja to receive as comprehensive a picture as possible, eliminating subjective opinions of internal stakeholders only.

1.4   Glossary of the key concepts

This subchapter provides definitions of the central concepts and terminology used in this research.

Materiality/Materiality assessment - "identifying and prioritising the most relevant sustainability topics, taking into account the effect each topic has on an organisation and its stakeholders" (AccountAbility, 2018).

Sustainability/Sustainability Development - "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." (WCED 1987, p. 54).

Corporate Sustainability (CS) – "a systematic business approach and strategy that takes into consideration the long-term social and environmental impact of all economically motivated behaviors of a firm in the interest of consumers, employees, and owners or shareholders." (Bergman et al., 2017, p. 10)

Sustainability reporting – "(also called environmental, triple bottom line corporate responsibility reporting) is a broad term for reporting on economic, environmental and social impacts of business operations." (Amoako et al., 2017, p. 186)

Stakeholder - "any group or individual who can affect or is affected by the achievement of the organization's objectives." (Freeman, 1984, p. 46).

Stakeholder engagement – "Stakeholder engagement is understood as practices the organisation undertakes to involve stakeholders in a positive manner in organisational activities." (Greenwood, 2007, p. 316).

1.5   Structure of the study

This study consists of five chapters. This chapter is an introductory chapter, where the research background, research questions, the case company, and glossary of the key concepts are presented. In the next chapter, the relevant theoretical background is discussed. The existing literature on corporate sustainability in IT, sustainability reporting and materiality approach, and the role of stakeholders in corporate sustainability are discussed. Methodological choices are presented in chapter 3, which discusses the research strategy, data collection, and data analysis methods chosen for this study. The study results are communicated in chapter 4, which analyses expectations of stakeholder groups and differences in them. The following chapter 5 summarizes the results and compares them with the prior literature. Furthermore, managerial implications and research contribution, research evaluation, limitations, and future research possibilities are also discussed in chapter 5.

2 THEORETICAL FRAMEWORK

This chapter discusses the prior research conducted in the fields of corporate sustainability, sustainability reporting, materiality assessment, and stakeholder role in corporate sustainability. The chapter starts with a definition of corporate sustainability and its role in IT business, followed by a discussion about sustainability reporting and materiality approach. Afterward, this chapter outlines the role of stakeholders in corporate sustainability and sustainability reporting while also discussing literature on stakeholder expectations. At the end of the chapter, a summary of the theoretical framework is provided.

2.1 Corporate sustainability and its role in IT business

Sustainability has emerged as an essential topic in the academia, business world, the political discussion, and the media. Although there is a vast number of definitions of term sustainability, the definition proposed by the World Commission on Environment and Development (WCED) in 1983 in the "Our Common Future" report, also known as Brundtland report, is mainly used by the researchers (Eizaguirre et al., 2019). WCED defied sustainable development as a "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." (WCED 1987, p. 54). This definition highlights the importance of equality between different generations and can be viewed from different aspects of sustainability; social, economic and environmental. Indeed, sustainability is often seen through the application of the triple bottom line approach (TBL), which was introduced by John Elkington in 1994 (Gimenez et al., 2012). According to Elkington (1994), the TBL approach simultaneously highlights the importance of social, economic, and environmental aspects. In other words, sustainability can be seen as a balance between economic and social prosperity and environmental protection. It is also important to note that TBL emphasizes an equal level of importance on each of the three pillars of sustainability (Alhaddi, 2015). While economic sustainability often refers to the financial sense, environmental sustainability is a reduction of emissions, waste, energy consumption (Gimenez et al., 2012). In turn, social sustainability is seen as encouragement of diversity, promotion of equal opportunities, and ensuring the quality of life. United Nations set 17 Sustainable Development Goals (SDGs) in September 2015, which are the core of the global sustainable development agenda (UN, 2015). The response to SDG has been expressed by governments, businesses, and other organizations (Setó-Pamies & Papaoikonomou, 2020).

The term corporate sustainability (CS) is used in business research to describe the corporate sustainability performance of the company. For example, Bergman et al. (2017) define CS as "a systematic business approach and strategy that takes into consideration the long-term social and environmental impact of all economically motivated behaviors of a firm in the interest of consumers, employees, and owners or shareholders." (p. 10). From this definition, it can be seen

that TBL of sustainability and the importance of stakeholder engagement are a vital part of corporate sustainability. Similarly, Corporate Social Responsibility (CSR) is also widely used by the academic and business communities to refer to the company's sustainability performance. According to the most cited definition proposed by Carroll (1979), CSR is "the social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time."(p. 500). The study of Montiel (2008) concluded that, although having different origins, CS and CSR share the same vision to balance three pillars of sustainability, them being economic, social, and environmental. In this thesis, the term corporate sustainability is used to refer to social, economic, and environmental organizational performance.

As the importance of sustainability has increased in the corporate context (Elkington 1994), a significant amount of research has been published on the topics such as sustainability strategy (Engert & Baumgartner 2016; Lloret 2016; Tsai & Liao, 2017), sustainability management and performance (Lee & Farzipoor Saen, 2012; Nawaz, & Koç, 2018), sustainability reporting and disclosure (Azizul Islam & Deegan, 2008; Hogan & Lodhia, 2011; Lodhia & Hess, 2014). Furthermore, sustainability practices have found a wide application in the business world in companies representing various industries. As Pinja Group operates in the digital sector, the sections below discuss relevant literature on sustainability in the Information Technology industry.

2.1.1 Sustainability issues and corporate sustainability in IT

IT industry is by its nature a people-intensive industry, characterized by low natural capital and high human capital. However, it does not mean that the sustainability impact of IT companies should be neglected. In fact, Malmodin and Lundén (2018) found that the CO2 emissions of the IT sector account for 1.4% of the total world's emissions, based on the data available in 2015. At the same time, digital solutions play an inevitable part in achieving sustainable development globally, as noted by several researchers (Calero et al., 2019; Faucheux & Nicolaï, 2011; Huang, 2009). For example, according to Lago et al. (2015), software solutions can help systems improve their energy efficiency, streamline processes and adapt to environmental changes. Summarizing both views, researchers see sustainability in IT from two different angles: "Green IT" and "Green by IT" (Calero & Piattini, 2017; Naumann et al., 2015). According to Naumann et al. (2015), "Green IT" can be defined as actions that help to make the IT industry more sustainable by itself, while "Green by IT" can be seen as actions that help to achieve sustainability through IT. Therefore, it can be concluded that, while having sustainability impacts, IT companies also contribute to sustainable development by providing digital solutions. In the following sections, the sustainability impacts of the IT sector and corporate sustainability in the industry are discussed further.

2.1.1.1. Corporate sustainability in IT

The research on the corporate sustainability of IT companies is limited. Most studies address the topics of hardware and software sustainability (Huang, 2009), particularly discussing environmental sustainability, but not from the perspective of the entire organization. Calero and Piattini (2017) suggest levels of organizational sustainability applicable to the IT companies, represented in Figure 1. According to the authors, the organization's sustainability depends on the sustainability of (i) business processes, (ii) services, and (iii) IT, which is, in turn, dependent on hardware and software sustainability. The authors highlight that the sustainability of the organization should be managed holistically by considering all the levels.
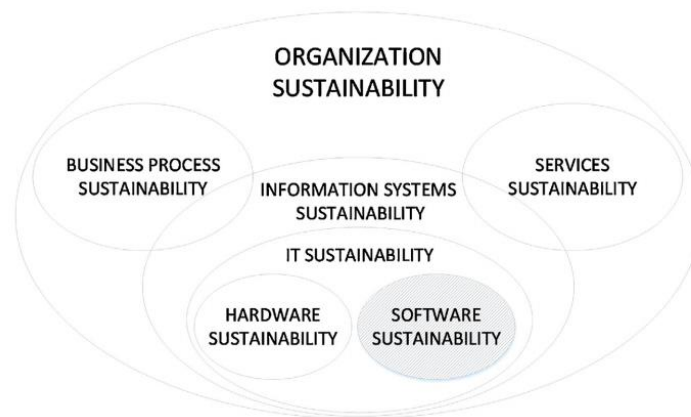
Figure 1. Sustainability levels of IT companies. (Calero & Piattini, 2017, p. 119)

Furthermore, Calero et al. (2019) analyzed the sustainability policies and actions of the major international software development corporations. The findings revealed that even though companies report on their sustainability performance, more attention is paid to the sustainability of the hardware than the sustainability of the software development process itself. The authors state that it is crucial for companies to understand the entire production lifecycle. According to Johann et al. (2011), the software lifecycle consists of the following phases: (1) Development, (2) Acquisition/Distribution, (3) Deployment, (4) Usage, Maintenance, (5) Deactivation, (6) Disposal. The visual representation of the software lifecycle is presented in Figure 2.
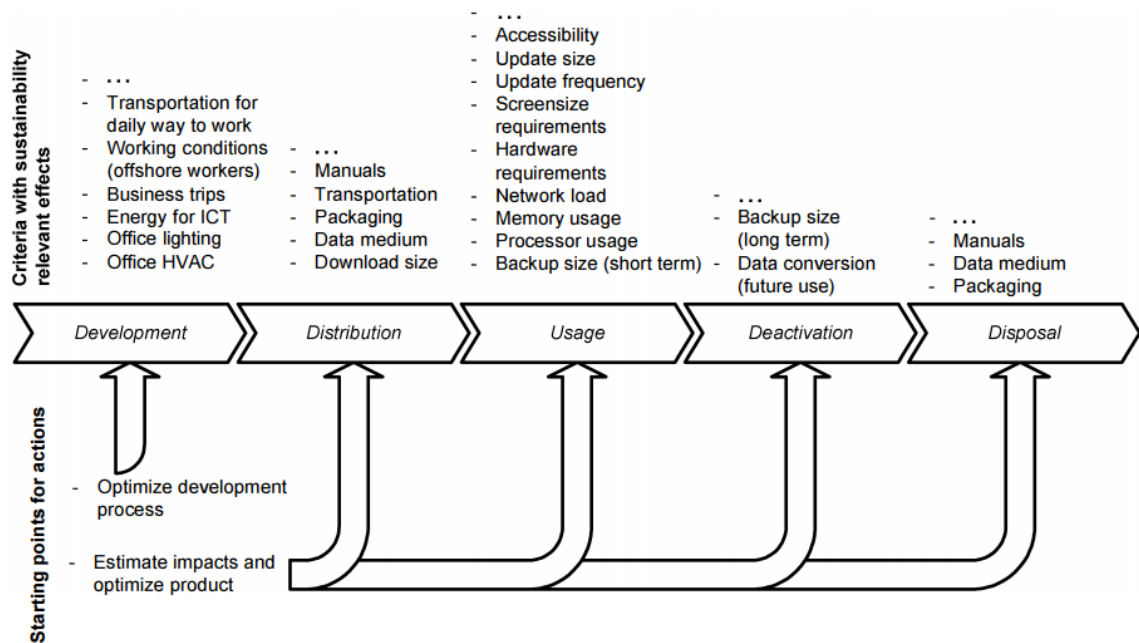
Figure 2. Life Cycle of Software Production (Johann et al., 2011, p. 36)

According to the author, *the development phase* includes all the sustainability impacts associated directly with the software development process. This can include environmental factors such as daily work transportation, business trips, energy for powering ICT, office lighting, and HVAC, as well as social factors such as employee working conditions. The traditional system development life cycle (SDLC) further divides the development phase into five steps: planning, analysis, design, implementation, and maintenance (Huang, 2009). *The distribution phase* is associated with the distribution of the software to the customer (manuals, transportation, packaging, data medium, download size) (Johann et al., 2011). *Usage* is referred to all the sustainability direct and indirect impacts associated with the use of the software. *Deactivation* considers all impacts related to the removal of the software product (e.g., backing), while the *disposal* is all the impacts associated with the disposal of manuals, data medium, and packaging. In other words, the entire software production life cycle should be considered to understand the key sustainability impacts of companies operating in the IT sector. According to Calero and Piattini (2017), the software life cycle process requires three resources: human resources, economic resources, and energy resources. Those recourses can be seen from the TBL perspective, in line with the social, economic, and environmental aspects of sustainability.

2.1.1.1.   Sustainability impact of IT industry

One of the most widely discussed environmental impacts in the software development sector includes energy consumption (Calero et al., 2019; Dick & Naumann, 2010; Faucheux & Nicolaï, 2011; Huang, 2009; Johann et al., 2011). According to Johann et al. (2011), the development phase requires energy to power workstations of software developers, the energy needed to power IT infrastruc-

tures such as servers and networking devices, and overall office energy consumption such as lighting, heating, air conditioning, and ventilating. Although being energy-intensive, IT contributes to reducing emissions in other sectors that are among the most significant greenhouse gas (GHG) emissions producers (Faucheux & Nicolaï, 2011; The Climate Group, 2008). Therefore, an increase in emissions of the IT industry might be compensated by the decrease in emissions from other sectors. Apart from reducing emissions, IT contributes to some other environmental benefits. For example, Huang (2009) states that digital solutions help reduce natural resource consumption.

According to OECD (2001), several negative environmental impacts are also associated with the production, use, and disposal of hardware (e.g., computers, screens), which is extensively used during the software development process. For example, the equipment manufacturing process is energy-intensive and consumes a significant amount of water used for cooling and rinsing. Furthermore, the hardware production process generates waste (Huang, 2009) and consumes non-renewable and toxic resources harmful to the environment and human health (Faucheux & Nicolaï, 2011). Therefore, the generation of electronic waste (e-waste) is also among other environmental issues relevant for the IT industry, as it is connected to the end of the IT lifecycle (OECD, 2001).

The environmental sustainability impacts of the IT sector are discussed more widely, compared to social and economic dimensions of sustainability. Nevertheless, Faucheux & Nicolaï (2011) identified several social-economic impacts of the IT sector. According to the authors, investment in IT increases capital stock and contributes to the development of labor productivity through innovations, both in the IT industry and on the global scale. Additionally, IT enables businesses to rethink their business model and, in this way, adding value to their customers. Furthermore, the author states that the IT sector contributes significantly to the increase of high skilled jobs and overall economic growth. However, on the other hand, digitalization leads to the loss of less-skilled jobs.

2.2 Sustainability reporting and materiality approach

The role of the materiality approach towards sustainability issue identification is heavily emphasized in different sustainability reporting guidelines (Puroila & Mäkelä, 2019). As this study attempts to identify material issues for the case company, it is essential to define sustainability reporting and specifically explore the concept of materiality in sustainability reporting.

Sustainability report "(also called environmental, triple bottom line corporate responsibility reporting) is a broad term for reporting on economic, environmental and social impacts of business operations." (Amoako et al., 2017, p. 186). Sustainability reporting can also be seen as the primary communication channel to disclose the corporate sustainability performance of the company to its stakeholders (Calabrese et al., 2019; Hsu et al., 2013). Through sustainability reports, the company can communicate sustainability initiatives such as sustainability plans, programs, and projects (Searcy & Buslovich, 2014). Thus, from a

sustainability report, the company's stakeholders can identify whether the company is in line with their requirements or personal values. Nowadays, an increasing number of companies are publishing sustainability reports. According to the study conducted by KPMG (2017), 93% of the Global Fortune 250 companies publish non-financial reports. Researchers have identified different motivations for sustainability reporting, considering its voluntary nature. By summarizing key literature, Searcy and Buslovich (2014) state that public pressure, enhancing corporate legitimacy, and pursuing a differentiation strategy are among the main motivators for companies to produce sustainability reports.

The Global Reporting Initiative (GRI) is an independent international organization that helps businesses report on their sustainability performance by creating the most widely used sustainability reporting standard - the GRI Standards (GRI, n.d.). By providing a framework for reporting financial and non-financial information, the GRI reporting standard outlines the importance of communicating organizational social, environmental, and economic impacts, both positive and negative. In this way, the framework is divided into three categories, corresponding to sustainability TBL (economic, social, and environmental). Each category is further divided into sustainability aspects. The GRI sustainability aspects are presented in Table 1.

Table 1. GRI sustainability aspects (GRI, 2016)

Category	Economic	Environmental	Social
Aspects	• Economic performance • Market Presence • Indirect economic impact • Procurement Practices • Anti-corruption • Anti-competitive behaviour • Tax	• Materials • Energy • Water • Water and Effluents • Biodiversity • Emissions • Waste • Environmental Compliance • Supplier Environmental Assessment	• Employment • Labor/Management relations • Occupational Health and Safety • Training and Education • Diversity and Equal Opportunity • Non-discrimination • Freedom of Association and Collective Bargaining • Child Labor • Forced or Compulsory Labor • Security Practices • Rights of Indigenous Peoples • Human Rights Assessment • Local Communities • Supplier Social Assessment • Public Policy • Customer Health and Safety • Marketing and Labelling • Customer Privacy • Socioeconomic Compliance

One of the central sustainability reporting challenges companies face is determining the report content, meaning selecting important information to be included in the report (Hsu et al., 2013). As Calabrese et al. (2019) stated, individual characteristics of the company directly influence the content of the report. Therefore, even companies from the same industry might have different sustainability topics relevant to their business. Thus, to be transparent and address the needs of stakeholders, companies should report on sustainability aspects that are viewed as material by their stakeholders.

2.2.1 Materiality approach in sustainability reporting

The term materiality has its roots in accounting, where it is used to determine the importance of an item to be included in the financial report, based on a relative significance (Unerman & Zappettini, 2014; Whitehead, 2017). Materiality is seen as a threshold for influencing the decision-making of those who use financial reporting (GRI 2016). In this way, it can be seen that the term is used for one stakeholder group: investors in particular. However, the term materiality has also been widely applied in the sustainability field, but with a broader scope (Puroila & Mäkelä, 2019), in addition to considering the financial performance of an organization in materiality assessment, social and environmental impacts of the organization are also considered. As sustainability reports are created for stakeholders with the purpose of transparency and accountability (Calabrese et al., 2016; Searcy & Buslovich 2014), companies need to develop sustainability reports in a way that would address the most important topics for their stakeholders. Overall, the idea behind materiality in financial and sustainability reporting appears to be similar; both seek to identify whether a particular impact is significant enough to be included in the report. However, the main difference lies in the target audience; while the first one determines the materiality of specific topics for investors, the latter considers materiality for all stakeholders and society in large (Whitehead, 2017).

The materiality principle in sustainability reporting is one of the crucial parts of various international reporting guidelines such as GRI, AccountAbility, International Integrated Reporting Council (IIRC) framework, and the Sustainability Accounting Standards Board (SASB) in the US (Puroila & Mäkelä, 2019). Broadly, the process of identification of the most important or "material" social, economic, and environmental topics for the organization can be referred to as materiality assessment (GRI 2016). Materiality assessment is not only a way to determine the crucial topics to be included in the sustainability report but also a starting point for sustainability strategy formulation and decision-making (Calabrese et al., 2019). In other words, materiality assessment enables a company to ensure that its sustainability strategy and report contains information relevant and topical for both internal and external stakeholders as well as in line with the company's strategy. According to Taubken & Feld (2018), the materiality assessment process helps companies to align their sustainability strategy and sustainability management. Furthermore, the authors state that this tool should enable companies to assess how significant a certain topic can influence the stakeholders' decisions.

Although several international sustainability reporting standards consider materiality as one of the central principles determining the reporting content (Puroila & Mäkelä, 2019; Unerman & Zappettini, 2014), below, only GRI and AccountAbility standards are discussed further. According to Puroila and Mäkelä (2019), those standards emphasize the multistakeholder approach, while IIRC and SASB address materiality from the shareholder perspective.

According to GRI (2016), materiality is one of the principles determining the report content, along with Stakeholder Inclusiveness, Sustainability Context,

and Completeness. Since many sustainability topics might be relevant to the organization's operations, GRI Standards suggests that the organization should choose only material topics. The topic is considered material if it reflects the company's social, economic, or environmental impacts or influences the decision of its stakeholders (GRI, 2016). From this definition, it can be seen that stakeholder engagement is an essential part of materiality assessment according to GRI standards. Indeed, compared to other standards, GRI guidelines make an emphasis on the multi-stakeholder approach, stressing the importance of inclusive stakeholder opinions (Calabrese et al., 2019; Puroila & Mäkelä, 2019). Although stakeholders' views are considered crucial in materiality assessment, materiality is not determined by the stakeholder opinions alone. According to GRI (2016), a combination of both internal and external factors should be considered while assessing the materiality of a certain topic. Factors such as the organization's mission and strategy, broader societal expectations, and international agreements with which the organization must comply (GRI, 2016).

Materiality assessment results are presented in a materiality matrix, which can be seen in Figure 3. The matrix shows sustainability issues relevant for an organization with a dot positioned in it with the consideration of issue "influence on stakeholder assessments and decisions" and "significance of economic, environmental, and social impacts" (GRI, 2016).
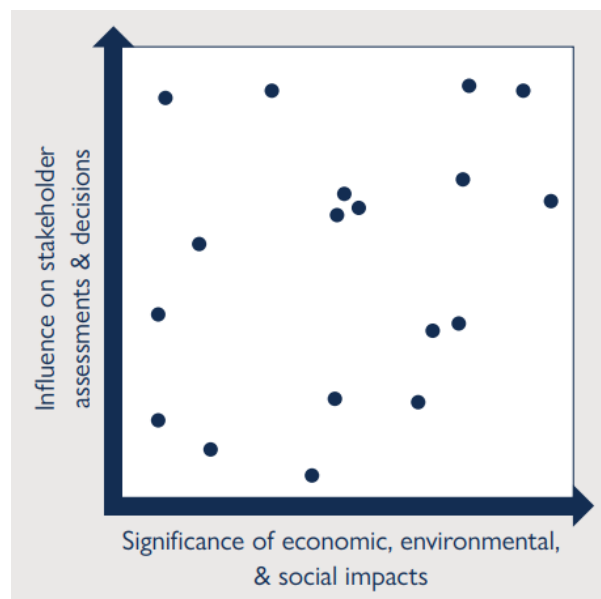
Figure 3. Materiality matrix (GRI, 2016)

Despite its wide application, the GRI standard has been criticized for providing only a general framework but not a systematic guideline for materiality assessment. For example, Forstater et al. (2006) noted that although the GRI guidelines call for prioritizing material issues, few guidelines are given.

Similar to GRI, AccountAbility, the global consulting and standards company, also recognizes the importance of the materiality principle. In its AA1000 Series of Standards, the company addresses the framework created for private and public organizations to prove accountability, responsibility, and sustainability performance (AccountAbility, n.d.). The materiality principle is one of the

four main principles behind the AA1000 Series of Standards and is defined as "identifying and prioritising the most relevant sustainability topics, taking into account the effect each topic has on an organisation and its stakeholders" (AccountAbility, 2018).

While the definitions of GRI and AccountAbility are somewhat similar, as both address the importance of stakeholders' opinions in materiality assessment, the approaches differ in terms of the purpose of the materiality assessment. While the purpose of materiality assessment in GRI is to determine sustainability report content, AccountAbility seeks to guide business strategy and performance, engage stakeholders, and help with reporting (Puroila & Mäkelä, 2019). In accordance with AccountAbility, identifying the material topics requires a materiality determination process that is based on a cycle of three broad stages: identify issues, prioritize, review (AccountAbility, 2018; Forstater et al., 2006). In turn, this process is connected with an ongoing process of strategy development, performance management, reporting, and stakeholder engagement (AccountAbility, 2018). The visual representation of the process is presented in Figure 4.
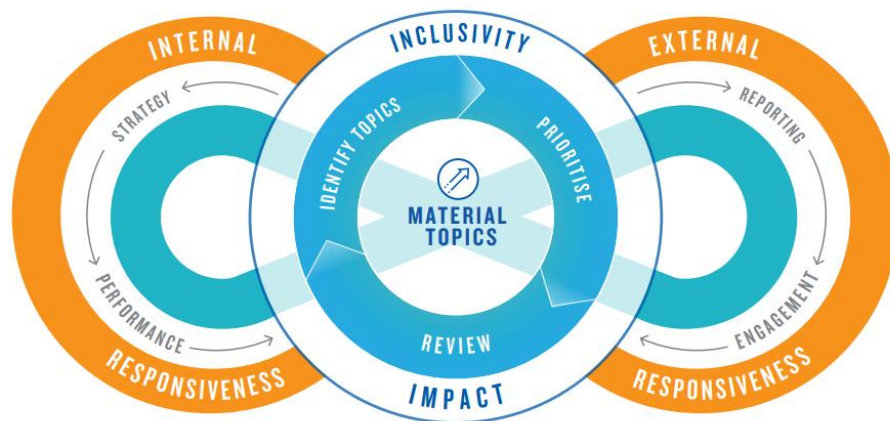
Figure 4. Materiality determination process (AccountAbility, 2018)

Similar to the GRI standard, AccountAbility suggests that results are presented in the form of a materiality matrix. However, the criteria for materiality are different compared to GRI. While GRI (2016) suggests that "Influence on stakeholder assessment and decisions" should be represented on one axis and "Significance of the organization's economic, social and environmental impacts" on another, AccountAbility bases its materiality matrix on "Internal" and "External" material topics. In other words, in GRI, materiality is determined by stakeholders' opinions and the organization's sustainability impact, while in AccountAbility, internal and external factors influence materiality.

2.2.2 Materiality assessment process

Although there are several different guidelines used for materiality assessment, the process of materiality assessment is similar. One of the first steps in materiality assessment is identifying and prioritizing stakeholders relevant to the organization (AccountAbility, 2018; GRI, 2016). According to KPMG (2014),

while conducting materiality assessment, it is essential to engage stakeholders who have the most impact or are the most impacted by a company's operations.

Identification of the relevant issues for the organization is another step (Bellantuono et al., 2016; Calabrese et al., 2019). Quite often, it is suggested that organizations create a long list of the potential topics which might be material. According to Forstater et al. (2006), inclusivity should be one of the guiding principles for this stage, meaning that the issues should be looked at from the perspective of several stakeholder groups. The authors also state that information about short-term risks and opportunities, issues that affect the ability of the organization to act in accordance with strategic objectives, stakeholders' opinions, best practices in the industry, and societal norms and future regulations should be considered. Similarly, GRI (2016) suggests that factors such as the company's mission and strategy, expectations of the society, and various agreements with which the organization must comply, also crucial in determining the materiality of a certain topic.

Prioritization is another essential step in materiality assessment; both GRI and AccountAbility standards are guided by this principle (AccountAbility, 2018; GRI, 2016). During this step, the significance of issues for the organization is determined. According to Hsu et al. (2013), internal and external criteria should be selected, which is the most important to the company's stakeholders and drive business strategy. Although both GRI and AccountAbility standards highlight the significance of this step, there is no specific instruction on the process of prioritization (Whitehead, 2017). According to KPMG (2014), the topics should be prioritized based on the importance for the company strategy, the priority for stakeholders, and the social, economic, and environmental impact each topic has on the company's value chain. The way to assess the significance of sustainability issues for the company's stakeholders can be done using a questionnaire, interviews, stakeholder dialogue, or materiality assessment workshop. The importance of the topic for the company's strategy can be determined by scoring each issue in accordance with the individually developed method.

Different researchers have proposed various methods for prioritization of sustainability topics. For example, Hsu et al. (2013) suggest that issues can be prioritized based on (i) occurrence, which can be detected from the percentage of the stakeholders concerned, (ii) likelihood of being detected, which is referred as to the level of stakeholder concern; and (iii) severity which is seen as the level of the impact on the company's strategy. Whitehead (2016) has also proposed a driver-focused prioritization (DFP) method of sustainability indicators. According to the author, the priority of the sustainability issues is determined by its silence across different stakeholder groups and also potential risks associated with the issue. Whitehead (2016) states that potential risk can be understood as "potential severity of consequences an issue could have "and "the likelihood of harm of the issue." Calabrese et al. (2019) suggest that in addition to considering stakeholder opinions regarding the importance of sustainability issues, it is also essential to measure stakeholders' opinions on the adequacy of the disclose of those sustainability issues.

It can be summarized that researchers are increasingly highlighting the role of stakeholders in defining the importance of sustainability topics. According to Silva et al. (2019), the company's sustainability performance should be in the context of the organization's stakeholders and their expectations. Nevertheless, other factors such as the impact on the company strategy, risks associated with the issue are considered important during prioritization.

2.3 Stakeholders and corporate sustainability

The crucial role of stakeholders in corporate sustainability has been highlighted in the scientific literature (Freeman, 1984; Helmig et al., 2016; Kassinis & Vafeas 2006; Manetti & Toccafondi, 2012; Rudyanto & Veronica Siregar, 2018). Furthermore, international sustainability reporting standards acknowledge the pivotal role of stakeholders in sustainability reporting through the materiality approach (AccountAbility, 2018; GRI, 2016). Thus, this section presents the existing literature by introducing stakeholder theory and stakeholder engagement concept, followed by the discussion on the role of stakeholders in corporate sustainability and reporting as well as conflicting stakeholder expectations.

2.3.1 Stakeholder theory and stakeholder engagement

According to Freeman (1984), stakeholders can be defined as "any group or individual who can affect or is affected by the achievement of the organization's objectives" (p. 46). From this definition, it can be concluded that stakeholders are an integral part of an organization and play a crucial role in its long-term survival. Stakeholders include both internal individuals, such as top management, employees, and owners, as well as external, such as customers, suppliers, governments, competitors, media, local community organizations, among others (Freeman, 1984). Stakeholder theory has been widely applied in the management research (Crane & Ruebottom, 2011; Donaldson & Preston 1995; Jensen & Sandst, 2011; Minoja, 2012; Mitchell et al., 1997; Preble, 2005) as well as gained recognition in CS literature (Dunfee, 2008; Hörisch et al., 2014; Ranängen, 2017). The wide application of stakeholder theory in CS research is evident; since the general idea behind CS is accountability to a wide network of stakeholders, which is in line with stakeholder theory.

Freeman (1984) states that various stakeholders have different expectations from the organization. As a result, stakeholders have been classified in different ways to prioritize them and meet the challenge of balancing between diverse and sometimes conflicting stakeholder expectations. For example, Clarkson (1995) divided stakeholders into two groups: primary and secondary. According to the author, the organization cannot survive without primary stakeholders, while secondary stakeholders are not essential for the company's survival. Furthermore, to classify stakeholders, Mitchell et al. (1997) developed a theory of stakeholder salience, which is referred to as the degree to which stakeholders' claims call for immediate actions from the company. Kumar et al. (2016) state that

the approach proposed by Mitchell et al. (1997) is the most used classification in literature. According to Mitchell et al. (1997), the stakeholder salience is determined by (i) the power to influence the company's decision-making, (ii) legitimacy of the stakeholder relationships with the firm, and (iii) urgency of the stakeholder's claims. The theory states that the more attributes the stakeholder group has – the greater salience they have, ultimately having higher priority in the organization.

Along with the discussion on the importance of stakeholders in business settings, the need for stakeholder engagement has been extensively discussed. Greenwood (2007) defined stakeholder engagement as "practices the organization undertakes to involve stakeholders in a positive manner in organizational activities" (p. 315). This definition outlines the importance of dialogue with stakeholders and their role in decision-making. Therefore, stakeholder engagement is essential for identifying relevant sustainability areas for the organization. According to Lingenfelder and Thomas (2011), the materiality of the sustainability topics is not possible to determine without stakeholder engagement. Furthermore, Ferrero-Ferrero et al. (2018) state that stakeholder engagement and materiality are closely related in the context of sustainability reporting. In addition to the scientific discussion, the essential role of stakeholder engagement has been addressed in the business world. For example, stakeholder engagement is one of the critical principles in GRI Standards (GRI 2016). Various methods can be used for stakeholder engagement, including inviting written responses, meetings, online engagement mechanisms, focus groups, surveys, forums, joint projects, and others (Bellantuono et al., 2016).

2.3.2 Stakeholder role in corporate sustainability and sustainability reporting

Researchers have increasingly discussed the role of stakeholders in corporate sustainability. For example, Singh et al. (2019) researched the role of stakeholders in sustainability marketing strategy in India. Furthermore, the ability of stakeholders to influence the sustainability of supply chain management and logistics function has been addressed by scholars (Dai et al., 2014; Meixell & Luoma, 2015). Not only the influence of stakeholders in organizational processes such as marketing and logistics have been discussed, but also their role on corporate sustainability implementation and performance as a whole (Helmig et al., 2016; Kassinis & Vafeas 2006) and sustainability reporting (Manetti & Toccafondi, 2012; Rudyanto & Veronica Siregar, 2018). For example, Fernandez-Feijoo et al. (2014) found that stakeholder pressure influences the transparency of the sustainability reports. Considering the role stakeholders have in determining the company's sustainability performance, it is vital for businesses to consider their opinions.

In addition to the general role of stakeholders in the company's sustainability, scientific research attempted to identify how specific stakeholder groups can influence corporate sustainability. For example, research shows that customer opinions significantly impact a company's sustainability practices. Rodrigue et al. (2013) found that customers influence the company's environmental strategy and, in turn, indirectly influence environmental performance indicators (EPIs). Furthermore, Sigala (2014) identified that customers have a significant impact on

the application of sustainability practices in supply chain management. It is no surprise that customers can influence the company's sustainability as they are considered one of the primary stakeholder groups. According to Bradford et al. (2017), most of the company's customers are perceived to have a strong stakeholder silence, meaning that their claims are prioritized by management due to their power and urgency.

Furthermore, the shareholders' expectation in the sustainability performance and reporting has been extensively discussed. Multiple studies have demonstrated the positive correlation between a company's revenue and sustainability reporting (Leszczynska, 2012). The increase in revenue impacts shareholder wealth, increasing interest and pressure from shareholders on the company's corporate sustainability performance and reporting. At the same time, investors are increasingly adapting responsible investment principles (PRI, 2020), which consider environmental, social, and governance factors (ESG), impacting their portfolio companies. According to Rodrigue et al. (2013), shareholders' concerns might influence a company's sustainability strategy and adaptation of EPIs. The study conducted by Fernandez-Feijoo et al. (2014) found that investors and employees have the highest impact on sustainability reporting transparency.

The role of employees in the company's sustainability has also been widely discussed. For example, Wolf (2013) states that, in addition to the company's management, employees are the only stakeholder group that can not only directly express their sustainability expectations but also contribute to defining and implementing sustainability activities, considering employees' unique knowledge of the firm. Similar to the results about customer influence, Rodrigue et al. (2013) found that employees define environmental strategy and EPI.

Researchers have outlined the significance of top management commitment in corporate sustainability. For instance, Kiesnere and Baumgartner (2020) claim that managers can influence corporate sustainability by having the power to influence a company's culture and decision-making process, but also by providing recourses and incentives for employees to promote sustainability initiatives. Several authors look at top management as a mediator between stakeholder pressure and implementation of sustainability practices. For example, Li et al. (2019) found that external and internal forces influence top management decision-making and, in turn, affect the adaptation of green practices. Similarly, Cao and Chen (2019) found that external pressure and internal driving forces influence green innovation strategy, while top management's environmental awareness plays an important mediating role. In other words, it can be said that top management has a primary role in corporate sustainability by responding to the expectations of different stakeholders and balancing them.

2.3.1 Conflicting stakeholder expectations and corporate sustainability

According to Bellantuono et al. (2016), stakeholder engagement is not only about communication of the key company's decisions but also involving stakeholders in the decision-making process. The authors also state that quite often, balancing between conflicting opinions of stakeholders is required. Indeed, one of the main challenges companies face while integrating corporate sustainability

is considering stakeholders' diverse needs and expectations (Asif, 2011; Jamali, 2008).

Several studies confirmed that various stakeholder groups have different expectations regarding the company's corporate sustainability management and sustainability disclosure. For example, Joensuu et al. (2018) has studied stakeholder expectations for sustainability reporting in financial and energy companies. In addition to the conflicting stakeholder expectations, the authors also identified the differences in opinions within those groups. Furthermore, Azzone et al. (1997) identified various requirements from various stakeholder groups for environmental reporting. According to the author, topics related to environmental compliance are relevant for nearly all stakeholder groups. Furthermore, most external stakeholders (academia, NGOs, local communities, policymakers) and the financial community are interested in the topics related to environmental management systems. In addition, financial disclosure is among the issues relevant to the financial community. Employees appeared to be interested in a range of various topics across different topics.

Bradford et al. (2017) analyzed what factors are perceived as important by customers. The results showed that customers are most concerned with the company's social justice aspect, which includes topics such as human rights, labor practices, and decent work conditions. Furthermore, the environmental performance, risk, and legal compliance, and employment opportunities were identified as important. Calabrese et al. (2013) found that customers together with employee stakeholder groups are the most demanding in terms of following GRI sustainability indicators, compared to other stakeholder groups.

De Villiers and Van Staden (2012) analyzed the shareholders' attitudes towards corporate environmental disclosure. The study results revealed that shareholders expect a range of various environmental information to be published, with a particular focus on the company's environmental risks and environmental policy. In the same vein, Huang and Kung (2010) found that internal stakeholders such as employees and shareholders put additional pressure on the environmental performance communication.

Some researchers also attempted to compare the materiality of topics perceived important by various stakeholder groups. For example, Font et al. (2016) conducted a materiality analysis to identify the most critical issues for stakeholders in the cruise industry. The results showed that various stakeholder groups perceived materiality differently. For instance, managers perceive indicators related to social sustainability as less critical than employees and customers, while environmental sustainability topics seem essential for all the stakeholder groups.

Overall, it can be concluded that stakeholders have different expectations and demands regarding corporate sustainability performance and disclosure. Azzone et al. (1997) suggest that companies can either produce generic reports that would address topics common to all target groups or alternatively tailor the reports to each stakeholder group to meet the challenge of stakeholders' different opinions. Therefore, it is vital to analyze the specific stakeholder expectations for the particular company, as they vary based on the industry, company size, management, strategy, and values.

2.4　Theoretical framework summary

The role of corporate sustainability in organizational settings has gained importance. Nowadays, companies from different industries pay more vigorous attention to their social, economic, and environmental impacts. The importance of sustainability issues in the companies operating in digital business has also been growing, although the current academic research on the topic is limited. On the one hand, the most discussed sustainability issues throughout the life cycle of software development have been associated with energy consumption, CO_2 emissions, and e-waste generation. On the other hand, the pivotal role of digitalization in achieving sustainable development has been extensively discussed.

As the role of corporate sustainability is growing, companies are increasingly introducing sustainability reporting. Sustainability reports can be described as a tool for companies to communicate their sustainability performance to the stakeholders. The role of stakeholders has been highlighted in the company's corporate sustainability and sustainability reporting. Prior literature has also addressed the conflicting expectations of stakeholders, and, as a result, the importance of balancing between them. As different stakeholder groups have different sustainability expectations from the company, it is critical to understand their concerns and take them into account in sustainability strategy formulation, sustainability management, and sustainability reporting. Various international reporting guidelines such as GRI and AccountAbility suggest that stakeholder engagement is an integral part of sustainability reporting, highlighting the importance of the materiality principle. By conducting materiality assessment, companies can identify important sustainability aspects relevant to their business.

3 METHODOLOGICAL CHOICES

This chapter aims to outline the methodological choices of this study by introducing the research design strategy, data collection, and data analysis methods.

3.1 Research strategy: case study

Research strategy is an essential step in conducting research and can be defined as an overall plan for executing the research study (Johannesson & Perjons, 2014). Saunders et al. (2007) identifies the following seven research strategies: (i) experiment; (ii) survey; (iii) case study; (iv) action research; (v) grounded theory; (vi) ethnography; and (vii) archival research. The case study was selected as a research strategy method in this thesis predominantly due to its applicability to the real word setting (Eriksson & Kovalainen, 2008; Harrison et al., 2017). According to Yin (2009), the case study research strategy can be defined as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident."(p. 18). From the definition proposed by the author, case study can be seen as a relevant research strategy for the case company, considering its applicability to the real-life context. Furthermore, the main goal behind conducting a case study is to conduct an in-depth and holistic analysis of a particular case or cases (Cohen & Crabtree, 2006; Eriksson & Kovalainen, 2008). As a result, case study has been widely applicable in business research due to its ability to present complex business issue in an understandable and clear way (Eriksson & Kovalainen, 2008).

Although the researcher can utilize various sources for emphatical data collection in the case study, interviews have been the primary method of emphatical data collection, while other methods have been used to complement the research findings (Eriksson & Kovalainen, 2008). The examples of other methods used in the case study include surveys, observations, document analysis, and questionnaires (Saunders et al., 2007). Furthermore, although the qualitative research method is more widely used in case studies, the quantitative method can also be utilized in the case study. However, this thesis is based on the qualitative research design method. Qualitative research can be defined as a way for data collection and analysis that aims to explore social relations and the reality experienced by the respondents (Adams et al., 2014). In this thesis, it is important to identify the expectations and needs of the company's stakeholders, making qualitative research a suitable method for this thesis. Qualitative researchers can collect their data through document examination, behavior observation, and interviews, then review and analyze what they might mean (Creswell, 2012).

3.2   Data collection

3.2.1 Semi-structured interviews

In this study, the semi-structured interviews were selected as a means of data collection to gain an understanding of the opinions of Pinja's stakeholders. A semi-structured interview can be defined as a qualitative research method where the researcher asks the interviewees a set of pre-planned but open-ended questions (Given, 2008). It is suggested that while conducting the semi-structured interview, the researcher has a set of prepared questions or themes but still has the flexibility to ask additional questions in each interview (Eriksson & Kovalainen, 2008). The primary motivation for selecting semi-structured interviews in this thesis is the importance of encouraging interviewees to share their opinions about their concerns on sustainability issues openly.

Furthermore, although having a framework, semi-structured interview still allows for flexibility, providing space for new insights, which is essential for collecting opinions of the stakeholders. Indeed, according to Saunders et al. (2007), semi-structured interviews may lead to the discussion of the topics which the researcher has not previously considered. In turn, those topics might be essential for the researcher to gain a deeper understanding of the topic and help in achieving the research objectives.

In addition, semi-structured interviews give much more flexibility for the interviewer to follow up on the topics he or she considers important and omit some of the initially planned questions (Leavy, 2014; Saunders et al., 2007). At the same time, this research method allows the interviewee to express their opinions more openly, compared to the structured interviews (Leavy, 2014; Kallio et al., 2016). Since this thesis aims to understand stakeholders' views, it is essential to have an environment where the interviewees can openly express their opinions. Additionally, this method provides informal settings (Eriksson & Kovalainen, 2008), which can help interviewees share their opinions.

3.2.1 Data collection process

The data was collected through (12) twelve interviews with Pinja Group's primary stakeholders. The researcher prepared interview framework questions in cooperation with the representative of the shareholder company during autumn 2020. Since this study attempts to understand the expectations of four different stakeholder groups, four different interview frameworks were developed. Although having different frameworks, the majority of the questions were similar across the frameworks. After the interview questions were ready, three professionals from Pinja Group and the thesis supervisor provided their feedback on the interview frameworks and questions. The interview frameworks were improved based on the feedback, and some of the questions were added or omitted.

Most of the stakeholders were contacted personally by the researcher through e-mail, phone, or internal communication platform used in the company. However, some of the representatives of the customer stakeholder group were

contacted by employees at Pinja Group responsible for the customer project. All the interviewees received basic information about the purpose of the study and a brief description of the topics which would be discussed as well as practical details about the interview. The interviews were conducted from December 2020 till February 2021 through Google Meet or Teams online conferencing platforms, depending on the individuals' preferences. Due to COVID-19 and the different locations of the researcher and interviews, there was no possibility to conduct face-to-face interviews. The language used during the interviewing process was English, which is not native for neither interviewed stakeholders nor the researcher. The length of each interview was around 45-60 minutes. All the interviews were recorded with the interviewees' permission and carefully transcribed right after the interviews to ensure accuracy. During the transcribing process, filler and repetitive words were omitted as well small grammatical mistakes were corrected for improved readability.

3.2.2 Interviewee selection

Interviewees were selected in accordance with two criteria relevant to the scope of this study. Firstly, it was essential to interview primary stakeholder groups for Pinja Group, whose opinions are critical to the decision-making process. Therefore, four primary stakeholder groups were chosen for the interviewing, including representatives of internal stakeholder groups, such as top management, employees, and shareholders, as well as customers, as representatives of the external stakeholder group. Employees, shareholders, and customers were chosen due to their higher salience in the company. In turn, top management was interviewed to understand better the company's strategy and vision, relevant sustainability issues for the industry, and future sustainability management and reporting expectations.

Secondly, since no prior sustainability research was done at Pinja, it was especially important to receive diverse perspectives from different stakeholder groups. For example, the customer companies were selected together with the Sales and Marketing Director to receive insights from companies representing various industries and using different Pinja's services. Interviewed customers were representatives of the forest, energy, and cargo handling industries with the purpose of receiving insights from multiple sectors. The same principle was applied to employee selection as it was essential to receive diverse opinions of employees working in different corporate functions and different business areas at Pinja. Therefore, employees working in sales, software development, and design were chosen for the scope of this study. At the same time, employees' personal characteristics such as professional backgrounds, gender, and age were considered while selecting interviewees. All the employees were recommended to the researcher by the company's HR Director to ensure the employees' diverse professional and personal backgrounds. Furthermore, three representatives were interviewed from the top management stakeholder group, representing different corporate functions. Particularly, three pillars of sustainability were considered while choosing management representatives for the interview. Table 2 presents the interviewees of the study.

Table 2. The interviewees of the case study

Stakeholder group	Interviewee code	Area of expertise
Management	M1	Sales and marketing
	M2	HR
	M3	Finance
Employee	E1	UX design
	E2	Business Manager
	E3	Customer service
	E4	Business unit director
	E5	Sales
Shareholder	S1	Sustainability
Customer	C1	Engineering, R&D
	C2	Supply chain
	C3	Sustainability

3.3   Data analysis: thematic analysis

Qualitative data analysis refers to organizing data in meaningful categories and seeking patterns (Gavin, 2008). Thematic analysis was performed to analyses qualitative data generated from the interviews with the company's stakeholders. Thematic analysis is one of the most popular ways to analyses qualitative data received from interviews, observations, and text (Gavin, 2008) and can be seen as a descriptive qualitative approach to data analysis. Braun and Clarke (2006) defined thematic analysis as "a method for identifying, analysing and reporting patterns (themes) within data" (p. 79). In other words, the thematic analysis seeks to find common themes within the data set and categorize them.

The main reason for choosing thematic analysis is that it is an appropriate data analysis method in the research that attempts to identify patterns in relation to the interviewees' experiences, views, and perspectives (Clarke & Braun, 2017). Furthermore, according to the authors, this data analysis method allows receiving unanticipated insights. Considering that this thesis seeks to understand stakeholders' expectations, thematic analysis is a suitable data analysis method for this study. Since this thesis attempts to compare expectations of stakeholders across different groups, another reason for choosing thematic analysis is that it can outline similarities and differences across data set (Clarke & Braun, 2017).

Braun and Clarke (2006) suggest that thematic analysis consists of the following six steps: (i) familiarizing yourself with your data, (ii) generating initial codes, (iii) searching for themes, (iv) reviewing themes, (v) defining and naming themes, (vi) producing the report. The description of each phase is presented in Table 3.

Table 3. Phases of thematic analysis (Braun & Clarke, 2006)

Phase	Description of the process
1. Familiarizing yourself with your data	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

In this research, the six-step process proposed by Braun and Clarke (2006) was used to perform thematic analysis due to its straightforward and easy-to-follow structure. The data analysis process of this study started with the data transcription, followed by coding and theme formation. The themes generated as the result of thematic analysis are presented in the result chapter.

4   RESULTS AND ANALYSIS

In this chapter, the results from the empirical data collected from twelve (12) interviews with the company's stakeholders are presented. Section 4.1. and 4.2 presents Pinja's primary stakeholders' expectations regarding material sustainability issues and corporate sustainability management process, respectively. Section 4.3. outlines the differences in expectations between the stakeholder groups.

4.1   Stakeholder expectations

This chapter outlines the stakeholder expectations about material sustainability topics relevant for Pinja Group. The findings of this study showed that stakeholders expect the case company to consider the following sustainability areas represented in Figure 5: (i) corporate social performance, (ii) sustainable services and solutions, (iii) internal environmental performance, (iv) partner and third-party sustainability, (v) economic stability and growth, and (vi) corporate compliance. Each theme is further described in detail in this section.
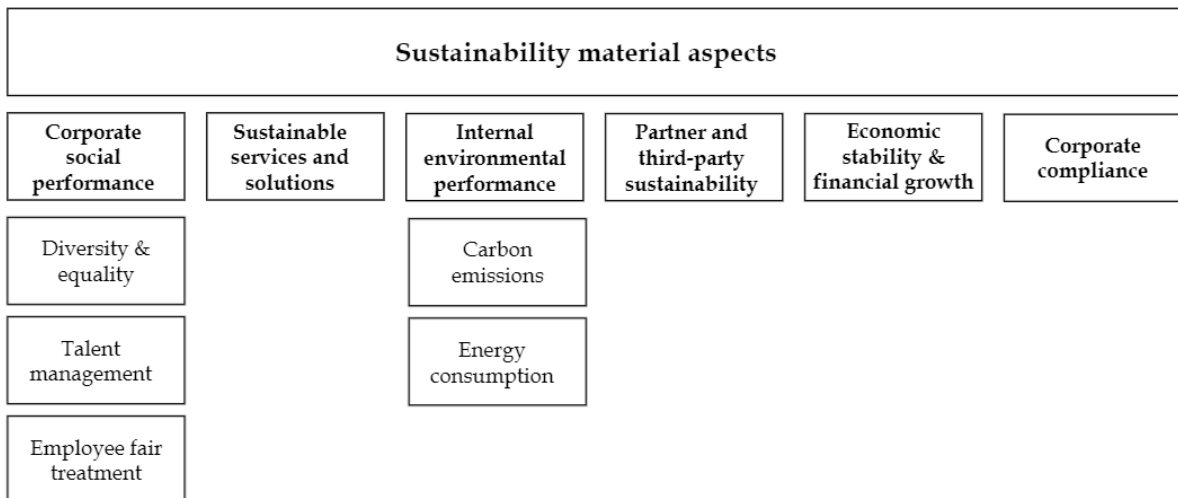
Figure 5. Sustainability material aspects

4.1.1 Corporate social performance

The research showed that the main stakeholder expectations in terms of sustainability are related to social sustainability. In this thesis, the corporate social performance theme can be described as activities taken by the companies to manage their social impacts. Different stakeholders discussed the importance of this topic, emphasizing the human nature of the business and particularly outlining employee-related aspects.

For example, while describing the shareholder's approach towards responsible investing, S1 highlighted their focus on a customized approach towards sustainability aspects identification. According to the interviewee, the set

of sustainability criteria is developed for each portfolio company, and the social aspects are central while assessing the sustainability of companies such as Pinja Group.

S1: *"If it is an industrial company, we might more emphasize environmental aspects, and if it is a company like Pinja, we would emphasize more social aspects. For example, employee aspects and cybersecurity and governance issues."*

In the same vein, top management outlined the importance of the responsibility of Pinja towards its employees, highlighting the people-centric approach of the business.

M1: *"Of course well-being of our staff is the most important for social sustainability."*
M2: *"People are the most important thing to us because we are a people company."*
M3: *"I think the main issues are related to our employees."*

Overall, this research found that different stakeholder groups expect Pinja to address various topics related to social sustainability. As stated by Calero and Piattini (2017), among other factors, the software development process requires human sustainability, which includes topics such as labor rights, health, social support, and equality. In this research, the themes were broadly divided into three categories, them being (i) diversity & equality, (ii) talent management, and (iii) employee fair treatment. The talent management theme was further divided into talent attraction and retention, and employee education & training. The visual representation of the theme can be seen in Figure 6.
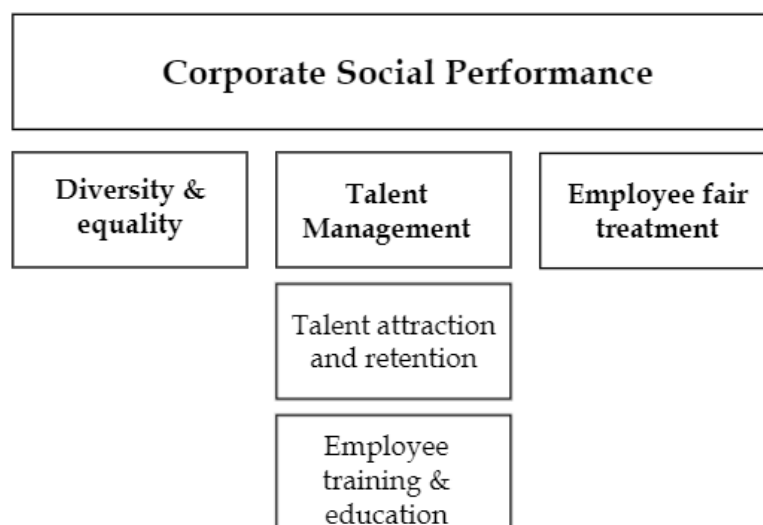
Figure 6. Corporate social performance

4.1.1.1.   Diversity & Equality

This research showed that diversity and equality are seen as a material aspect by various stakeholder groups. Internal stakeholders such as management, employees, and shareholders particularly emphasized the significance of diverse and equal culture in the company. In this thesis, diversity is referred to the existence of variation among a company's employees regarding their personal and

professional characteristics, while equality can be seen as a state where all the employees are equal.

S1: *"I think that the topic that will get more focus is probably diversity."*

E2: *"...if it is an IT or engineering company, I would be interested in equality issues."*

E4: *"...people coming from completely different backgrounds can give new views and completely new aspects to the topics that we are routinized in Finland."*

The diversity subtheme was discussed from several different perspectives. For example, gender diversity was identified as a relevant topic and important for Pinja Group. Furthermore, stakeholders also highlighted the importance of diversity from the perspective of the country of origin, ethical, personal, and professional backgrounds.

E2: *"I was very disappointed when I studied the website before joining the company, that there was a huge gender inequality and very homogeneous staff."*

E4: *"If you think about operational excellence area, most of the people are men, and there is no reason for that."*

E 4: *"...we should have more people from different nationalities and different ethical backgrounds."*

M2: *"We have to be a diverse workplace, so it is easy to enter from different cultures and different backgrounds."*

M3: *"Hopefully, we are able to increase the amount of different kinds of people, maybe some disabled people. Hopefully, we get some more foreign people."*

One of the employees highlighted the inability of the company to influence this aspect of sustainability, highlighting the lack of female talents in the market. *E1: "If they (female) are not there, then they don't hire them."*. However, one of the employees emphasized the role of management in creating relevant policies to address the topic of diversity.

E2: *"I don't think it is only a question of only what kind of talents are available at the market, I think it's a question on how we approach these people who are looking for jobs and how open we are in our policies to recruit these people."*

4.1.1.2. Talent management

This research identified that talent management is an essential aspect to consider for the case company. In this thesis, talent management refers to the company's activities to maintain a good level of expertise by attracting, developing, and retaining high-skilled employees. Thus, the talent management aspect was further divided into the following categories: (i) talent attraction and retention, and (ii) employee training & education. Talent management can be considered both social and economic sustainability aspects, as it influences not only the well-being of employees but also the company's financial performance.

During the interviews, the internal stakeholders discussed the role of attractive work placement creation. Stakeholders particularly highlighted the competitive situation in the recruiting market and the importance for the company to respond to this challenge. Different stakeholders outline the importance of attracting new employees and retaining existing ones. Thus, the talent attraction

and retention category was developed. In this thesis, talent attraction and retention refer to the activities performed by the company to attract new and keep existing employees.

S1: *"Pinja is a high technology company, so how do you get the best talents."*

M2: *"We have to be attractive, better than others."*

E2: *"How to make us look like an interesting company and attractive employer?"*

M2: *"It is important that…we all can see that Pinja is my employer now and after 3-4 years there are possibilities that are interesting for me and I can do my career path in a way that I would like to."*

In addition to acknowledging the importance of this sustainability aspect, some interviewees highlighted that to create an attractive work placement, Pinja needs to focus on other sustainability aspects such as employee wellbeing, internal environmental performance, and other sustainability topics relevant to the company.

E3: *"I think diversity can be one of the issues at Pinja. I think it does affect the decision of the future employees, do they want to join this company or not."*

M1: *"We need talents from new generations, and the awareness of these matters [sustainability areas] and their interest and how they make choices and decisions are on the new level. So, in order to succeed in the employer marketing area, we also need to put weight on this [sustainability]."*

E5: *"if you fail at that [employee fair remuneration], you will lose the best talents."*

M2: *"The whole idea to be a good employer is to keep existing people in Pinja."*

E4: *"Young people looking for jobs and organizations to work with are very sustainability-aware."*

Furthermore, different stakeholders outlined the significance of employee training and education. In this thesis employee education and training category is seen as the advancement of employees' professional competencies and skills. Particularly, shareholders and top management emphasized the need to constantly improve employee knowledge and competencies, considering that the company is working in the field of technology, which is continuously evolving.

S1: *"On the social category, the employee matters...talent aspects; so the training."*

M2: *"The improvement of knowledge is a very important area. Let's say the adult learning inside of the work."*

M3 *"...keeping a good level of competencies of our employees."*

4.1.1.3.   Employee fair treatment

Considering the human nature of the business, the employee fair treatment theme was highlighted by different stakeholders. In this thesis, employee fair treatment can be described as actions that the company takes to ensure decent work conditions for its employees, including employee well-being, health, safety, and fair remuneration. Different stakeholder groups outlined the importance of this aspect while focusing on various topics. For example, the theme was discussed from the perspective of employee well-being, health & safety, employee fair treatment, and fair remuneration.

The interviews with the top management showed that employee fair treatment is at the most important at Pinja Group when it comes to social sustainability. Top management representatives highlighted aspects related to employee well-being, treatment, and safety.

M1:   *"Of course well-being of our staff is the most important for social sustainability."*

M2:   *"People are the most important thing to us because we are a people company."*

M3   *"Of course in how we treat our employees that's one part and very important issue."*

M3:   *"We have people who are working in sites, and there are big machines. Of course, when there is a different environment, so there are different rules. They have to be aware what are the rules, so we don't get any injuries."*

In the same vein, customers outlined that they are increasingly paying attention to the employee treatment aspect while selecting suppliers and third parties to operate with.

C1   *"One thing that we have also paid a lot of attention to is how they [suppliers] treat their employees."*

C2   *"We always demand suppliers to take care of safety. "*

Employees also highlighted the relevance and the importance of the employee fair treatment sustainability aspect. However, due to non-sustainability-related backgrounds, the focus during the employee interviews was made mainly on environmental sustainability. The reason behind it might be already good management of labor-related matters inside the company, as E3 and E4 pointed out. Nevertheless, employees have emphasized the importance of employee well-being and satisfaction.

E2:   *"General issues about management, how employees are being treated."*

E3:   *"It was somehow brought to knowledge that employees are respected and taken care of."*

E2   *"It is important that we have...good healthcare and a range of other employee benefits."*

E4   *"I have this feeling that we are looking after our employees quite well."*

Furthermore, some of the stakeholders, inducing shareholder and employee, also emphasized the importance of employee fair treatment, particularly from the financial point of view, highlighting the importance of fair remuneration.

S1:   *"how management and employees are remunerated. So, remuneration policy."*

E5:   *"...if you want more and more out of them [employees] with the same salary, well think about it. At some point, they will question that."*

4.1.2 Sustainable services and solutions

The result of the study identified that different stakeholder groups view the company's potential to deliver a positive sustainability impact through its services and solutions. Compared to other sustainability aspects, this topic was addressed by all of the stakeholders to some extent. Stakeholders mainly focused on the environmental benefits Pinja Group delivers to its customers through its service portfolio. For example, the role of digital solutions in reducing energy consumption and emissions in other industries, as well as saving resources and

improving environmental performance measurement, were extensively addressed by stakeholders.

M3:   "we can provide some environmental measurement help to [our customers]."

M2:   "We can help our customers to be more productive, use less energy, report things better."

C2:   "It [one of the Pinja digital services] has been used for solid fuel and calculation of the emissions, keeping truck that all these EU-level regulations are in controls."

C3:   "How well these [digital and automation] suppliers can innovate and provide something value-adding; these would help us to meet our targets in terms of CO2 emissions reduction or energy efficiency, to name a few examples. That would be particularly important. "

While all the stakeholder groups highlighted the importance of this aspect to some extent, shareholders and top management found it more meaningful compared to internal environmental performance. The study showed that these stakeholder groups see enormous potential and significant impact in delivering positive environmental impact through its service portfolio.

S1:   "Regarding environmental aspects, I see that there are more opportunities on the Pinja's product and service point of view, so Pinja has a lot of potentials to bring to its customer's added value through its services."

M2:   "In Pinja, we think that our handprint is more important than our footprint."

Particularly, S1 highlighted the crucial role of Pinja Group in helping its customers to improve energy and resource efficiency, particularly to companies operating circular economy business models to contribute to their digitalization. Furthermore, S1 specifically emphasized the need to focus on the role of technology in climate change mitigation, highlighting the importance of this topic for Pinja's customers.

S1:   "Regarding specific ESG topics, I would say that climate change mitigation and adaptation: so how Pinja's services can respond to that challenge. Because many of your customers are tackling this challenge, you can have potential on that."

However, most of the employees only elaborated on the topic after they were asked a question about the impact their work has on the sustainability performance of the customer companies. For example, E1 and E2 pointed out that the digital solutions they work with help e-commerce, retail energy, and recycling industries to bring transparency to their supply chain management. The employee that works in the industrial maintenance department highlighted the importance of Pinja's preventive maintenance services to extend the life cycle of clients' equipment. In the same vein, an employee working in the test and quality team outlined the positive relations between high quality and reduction of environmental impacts.

E2:   "The services we offer relate to bringing more efficiency and improving the processes, and increasing energy efficiency."

E 3:   "I think a lot of our work is related to bringing more efficiency to the customer processes and in turn saving resources."

E4:   "…instead of getting rid of the machine after ten years, because it is basically unfixable, with preventive maintenance tasks, you make sure that it works as long as possible."

E5:   "I would say that our test and quality team has some relations to that. Because the higher the quality - less waste, less repairs, less need to change components."

While various stakeholder groups highlighted the importance of positive environmental impact through customer projects, some individuals emphasized the social and economic benefits Pinja's services bring to its customers. For example, improved efficiency, productivity, and safety were outlined by different stakeholders.

C1   *"Those [services of Pinja] are quite closely related to improving safety in terminals; how humans and machines are interacting with each other, safely. This is the topic we must put a lot of effort into all the time."*

E2:   *"I think a lot of our work is related to bringing more efficiency to the customer processes."*

M2:   *"...because they [services of Pinja] improve efficiency, they improve productivity."*

4.1.3 Internal environmental performance

The internal environmental performance of Pinja Group appeared to be an essential aspect by stakeholders, even though top management and shareholders considered it less impactful compared to environmental impacts. In this thesis, internal environmental performance can be seen as actions the company takes to minimize negative environmental impacts associated with its operations. Compared to other stakeholder groups, the discussion with employees mainly focused on internal environmental management and performance. Employees particularly highlighted the topics such as energy consumption, business travel, and, as a result, the company's carbon emissions.

E1:   *"At least CO_2 neutral is the minimum. This is the ambition any company can do with offsetting at least already."*

E4:   *"If the people know that their company is doing its best, that environmental topics are taken into a hand when making decisions and creating new internal processes. It would make me more confident for the cooperation I am working for."*

E2:   *"I really think that in our business, it is the energy consumption and then the traveling that has the most consequences."*

E1:   *"...I guess energy consumption is a big factor in our operations..."*

E5:   *"Making them [digital systems] consumes energy and also using them"*

Customers also emphasized the importance of internal environmental performance. Although customers did not highlight the specific topics relevant for Pinja, they generally outlined their expectations from the suppliers to understand, manage, and minimize their environmental impacts.

C3:   *"The basic requirement is that our suppliers understand their environmental impact, and they have certain measures in place to minimize that impact."*

C2:   *"Concerning sustainability issues, do you have ISO systems, and if not, why not?"*

Other stakeholder groups did not address this topic as necessary. In contrast, smaller attention was placed on the company's environmental impacts by shareholder and management stakeholder groups. Nevertheless, the representatives of these stakeholder groups pointed out that some attention should be placed on the internal environmental issues to stay coherent with the external communication.

S1:   *"I think that most of the effort should be put on the customer side."*

M2:   *"This is not so big an effect, but we can do something to reduce our emissions."*

S1:   *"I would say that it is also important for the company who has a sales argument of being sustainable also has its own backyard in shape."*

However, management representatives still addressed some of the relevant topics related to Pinja's internal environmental performance. For example, M3 stated that energy efficiency and CO_2 emissions monitoring are essential for the company's internal environmental sustainability.

M3:   *"We should also measure our CO_2 emissions that we can follow how we are and how we have developed."*

M2:   *"How we travel. Do we use public transport or own cars or just now, do we travel a lot or not so much? In our offices, we can, for example, buy green electricity or make some choices when we purchase things."*

4.1.4 Supplier and third-party sustainability

This research showed that stakeholders are concerned with the sustainability of suppliers and other third parties cooperating with the case company. In this thesis, supplier and third-party sustainability theme is seen as consideration of social, economic, and environmental aspects while choosing suppliers and third parties. This issue was raised by employee and customer stakeholder groups with a focus on environmental sustainability. For example, employees discussed the significance of sustainability consideration in the procurement of IT hardware, services, office supplies, and other procurements.

E4:   *"...when we are choosing third parties to operate with, for example, data service provider or data centers, I would like to see the environmental point in those selections..."*

E1:   *"At least it should be visible in a coffee you buy, in the chairs you use, on how your office looks like."*

E3:   *"Company could provide eco-friendly or organic food in lunch-rooms, use more solar power or wind power."*

E3:   *"Nowadays, you can purchase energy-efficient products such as computers and phones."*

E1:   *"With what suppliers do you work for that?"*

The third-party responsibility theme was also identified as critical by the company's customers. During the interview, C2 and C3 highlighted the importance of sustainable sourcing and procurement in their operations. In turn, customers outlined that they have the exact expectations from their suppliers to ensure sustainability in their supply chains. Customers highlighted the importance of third-party selection and their further sustainability assessment.

C2:   *"we are keen to hear how your subcontractor selection is conducted, where are they located, and how you ensure their sustainability. "*

C3:   *"we require that suppliers are also actively taking these [sustainability] requirements to their own supply chain."*

However, the results showed that this theme is not considered as material by the company's management. For example, M2 stated that the supplier and third-party sustainability theme is not vital for IT companies, considering the inconsiderable number of suppliers and their location.

M2:   *"Currently, we are using some subcontractors, but they are mainly in Finland at the moment, so I don't see many issues in there."*

4.1.5 Economic stability and growth

As for the economic point of view, profitability and economic growth were highlighted as the most material economic aspects relevant for Pinja Group. Different stakeholder groups of Pinja outlined the significance of this topic. The shareholder stated that this is the basis for all of their investments, highlighting the importance of "ambitious growth plans" and "plans to grow sales and profitability.".

S1: *"It is always important that the company we invest in has ambitious growth plans and plans to grow the sales and profitability. This is basically the basis for the investment, and then we see that ESG aspects also support financial success."*

Similarly, financial profitability and long-term growth were highlighted as one of the critical strategic priorities by all the interviewees from the top management stakeholder group.

M1: *"Our strategic goal is to make profitable growth."*

M2: *"We need to meet every year and in the long term the growth and profitability targets."*

M3: *"On the economic side [It is important] that we are growing and profitable."*

While M2 discussed economic sustainability as the foundation for sustainability work at Pinja group: *"without a sound financial position we don't have anything else fun."*, M3 focused on financial stability as responsibility for suppliers and subcontractors: *"It is important that…we are able to fulfill all of our agreements and other stakeholders for the suppliers that we are paying them on time."*

When discussing economic sustainability, customers did not directly express their expectations regarding economic stability and growth. However, they indirectly indicated that this area is the basis for cooperation.

C2: *"Where we ask all these questions, starting from money issues."*

C3: *"It is important…how our suppliers' businesses are run and what kind of strategies they have in place and capability to innovate."*

This research showed that economic sustainability is a crucial sustainability topic for employees. Two employees highlighted the importance of financial stability from the perspective of their own and their subordinates' job security.

E3: *"It [economic sustainability] is highly important because if the company doesn't manage well, we don't have jobs."*

E4: *"They [subordinates] can be sure that they can work for the next years, get their paychecks, pay their loans, and take care of their families."*

However, none of the employees addressed the importance of economic sustainability before the interviewer asked to express their opinions. The reason could be that employees have not considered the economic aspect as an integral part of sustainability. However, one of the employees highlighted the importance of balancing between sustainability aspects.

E1: *"As long as we make profit, it is not sustainable, it is just you stay in a race, but it is not a good race."*

4.1.6 Corporate compliance

This study showed that stakeholders view corporate compliance as a material sustainability area relevant to Pinja. In this thesis, corporate compliance is described as adherence to relevant laws, regulations, and standards. Therefore, corporate compliance can be seen as a baseline of sustainable business conduct. This research showed that top management, shareholder, and customer stakeholder groups are concerned with the compliance aspect. Particularly, all the customers highlighted the importance of their suppliers' compliance with the minimum requirements set in their code of conduct. In fact, in their code of conduct documents, customers outline the importance of legal compliance, including human rights and environmental laws.

C3:   *"And we require that suppliers are at least meeting minimum requirements, and this is our supplier code of conduct."*

C2:   *"Of course you have to obey our rules. To every supplier contract we attach a code of conduct."*

C1   *"Naturally, we expect that they [suppliers] obey all the laws and regulations."*

C3:   *"...the fact that suppliers are working with compliance with local regulations."*

In the same vein, top management pointed out the significance of legal compliance. However, employees did not address this topic, perhaps due to already good management of legal issues, as pointed out by E2.

M2:   *"Of course, we need to meet all the regulations that the basic things are done correctly."*

M3:   *"It is important that…we are following all the rules and regulations."*

E2:   *"How the rules are being followed, this kind of regulatory things. I think this is very well handled in our company, of course."*

The shareholder of the company and one of the top management representatives particularly highlighted the importance of data and information security. In this thesis, the data security topic is seen as a part of the corporate compliance subtheme due to the existing legal requirements relevant for the case company, such as EU General Data Protection Regulation (GDPR).

S1:   *"I can see that cybersecurity must be important because the customers are big public companies."*

M1:   *"We are putting effort on the data security side, and that is becoming more and more important. The world is yelling about it quite a bit. So, I think we also have to be active on that. "*

4.2   Corporate sustainability management

This study found that stakeholders are increasingly expecting Pinja to manage its corporate sustainability comprehensively. In this thesis, corporate sustainability management can be described as a set of actions taken by a company to manage its sustainability impacts. Thus, this chapter discusses the stakeholder expectations in terms of practices case company should take to manage relevant sustainability areas.

In this thesis, corporate sustainability management is divided into two themes: (i) sustainability program, and (ii) sustainability communication. The sustainability program theme includes the following four subthemes: (i) sustainability strategy, (ii) sustainability measurement system, (iii) stakeholder engagement, and (iv) practical guidelines. The sustainability communication theme consists of the following three subthemes: (ii) internal sustainability communication, (iii) external sustainability communication. Figure 7 summarizes the stakeholder expectations regarding the sustainability management process.

Corporate sustainability management	
Sustainability program	Sustainability communication
Sustainability strategy	Sustainability awareness
Sustainability measurement system	Marketing communication
Stakeholder engagement	Sustainability performance communication
Practical guidelines	

Figure 7. Corporate sustainability management process

4.2.1 Sustainability program

A sustainability program was developed as a theme in this research. This research identified that stakeholders expect a comprehensive sustainability management program. In this thesis sustainability program can be described as a set of managerial actions which can help to manage corporate sustainability comprehensively. The sustainability program theme is further divided into the following subthemes: (i) sustainability strategy, (ii) sustainability measurement system, (iii) stakeholder engagement, and (iv) practical guidelines. This research found that internal stakeholders are interested in the internal processes for sustainability management. Particularly, shareholder and employee stakeholder groups outlined their expectations in this area. In turn, customers were interested in the result of the work and thus did not express their specific expectations in terms of a comprehensive sustainability management program.

Stakeholders expressed their expectations for a clear sustainability strategy. Sustainability strategy can be described as a framework that describes a company's approach towards managing environmental, social, and economic

impacts. Particularly employee and shareholder stakeholder groups addressed the pivotal role of the sustainability strategy formulation. While discussing the importance of corporate sustainability management, S1 highlighted that most of the sustainability issues are already an integral part of the company's operations, but they are not managed holistically. Therefore, the representative of the shareholder group emphasized their expectations of Pinja to set a clear sustainability strategy and sustainability targets. In fact, according to the S1, it is one of the essential criteria while assessing the sustainability of portfolio companies.

S1: *"As the owner's perspective, sustainability management is important; the process and how you develop that is really important. Getting a sustainability strategy is very important."*

Likewise, some of the employees communicated their expectations for a clear sustainability strategy and targets. Furthermore, some of the individuals discussed the need to incorporate sustainability strategy into the company's strategy.

E 4 *"I don't have any clue about our environmental strategy. So somehow, it should be clearer what we do for this topic internally."*

E 1 *"Set high ambitions, be clear about those."*

S1: *"Evaluate the most important sustainability topics and then set KPIs and targets and integrate those into the company's strategy."*

E5: *"My personal opinion, sustainability goes to the same category as all other systems and policies that company's management makes."*

The sustainability measurement system was developed as another sub-theme as a part of the sustainability program theme. The sustainability measurement system can be seen as quantitative metrics used to monitor the company's sustainability performance. A clear and transparent sustainability measurement system is essential to ensure the continual improvement and achievements of sustainability goals and targets. Stakeholders across different stakeholder groups communicated their expectations for a measurement system to monitor sustainability performance. Particularly, stakeholders pointed out the importance of sustainability key performance indicators (KPIs).

S1: *"The expectations would start from that Pinja would start KPIs and targets identified and defined."*

E4 *"Of course, we need to have KPIs to measure that where we are and what we are doing."*

C3: *"There is a need to be some kind of measures in place to assess that and, of course, to report back to us."*

M2: *"We should have some kind of measurement system."*

The study showed that stakeholder engagement is another crucial area for Pinja Group. Employees and top management stakeholder groups, in particular, emphasized the importance of this area. Stakeholder engagement refers to the involvement of the company's stakeholders in the decision-making process, which can be done in the form of satisfaction surveys, workshops, ongoing stakeholder discussion, among other ways. The stakeholders of the company emphasized the importance of engaging customers, shareholders, and employees.

M1: *"...interviewing our customers and that we are keen to understand about our customers. It is quite important."*

M2: "It is also crucial to understand, for example, the most important things to our people. I can easily live in some sort of bubble."

M3: "We have this satisfaction measurement, and we have other measurements related to that. So, we try to keep our people satisfied."

E2: "I think we have to carefully listen to our owners."

E5: "They [customers] appreciate constant interaction, up to date information, how things are progressing and, what is the process - how do we provide services."

Practical guidelines were identified as another subtheme in the sustainability program theme. Because sustainability is not an integral part of the company's operations, stakeholders highlighted the importance of the practical nature of the sustainability processes. Specifically, top management and employee stakeholder groups expressed the importance of practical guidelines that can be applied in day-to-day work.

M2: "...these need to be so concrete that people start following the guides or the processes."

M3: "There needs to be some policy behind it, but it should be very practical."

E5: "If we do it in a way that we do a digital document and say, "please read it" - nothing is going to happen."

E4 "where you can find the materials for customers and internal use."

4.2.2 Sustainability communication

This study showed that sustainability communication is seen as an essential aspect by the company's stakeholders. However, the specific expectations varied depending on the stakeholder group. While management and shareholder stakeholder groups addressed the importance of external sustainability communication, employees outlined the pivotal role of internal communication. To respond to this challenge, S1 expressed the need for customized sustainability communication strategies. The interviewee suggested that the company should a clear sustainability communication strategy tailored to the individual needs of each stakeholder group.

S1: "Regarding communication, it is important that the message is focused on each stakeholder group."

Thus, the sustainability communication theme was divided into the following three subthemes to address the stakeholder expectations better: (i) sustainability awareness, (ii) marketing communication (iii) sustainability performance communication. Each theme is presented in Figure 8 and further defined and described in the sections below.
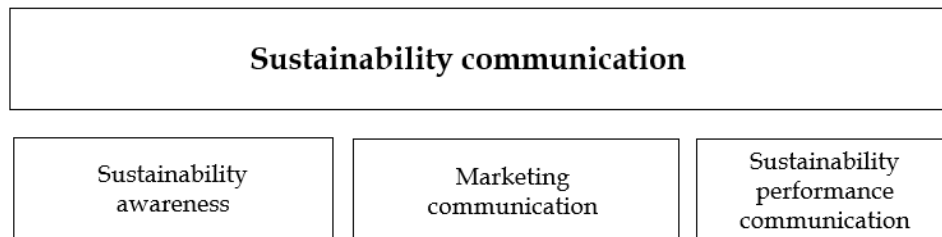
Figure 8. Sustainability communication

4.2.2.1.   Sustainability awareness

Sustainability awareness was identified as an essential aspect of sustainability communication. Particularly employees expressed the need for internal sustainability communication, highlighting the importance of sustainability awareness creation. In this thesis, sustainability awareness creation can be described as actions taken by the company to develop the employee's knowledge about sustainability issues relevant to the company. The sustainability awareness of employees is an essential step in realizing the sustainability strategy of the company. Nearly all the employees showed their interest in learning more about their work's impact and creating sustainability awareness in the organization.

E3:   *"Teaching how it is important to use eco-friendly lighting or how it is important to save water, how you can reduce energy consumption at the office."*

E2   *"how to support employees in making the right choices."*

E1:   *"Everybody should be aware of that [sustainability impacts of the company]. You don't get awareness only by reporting."*

E2:   *"...awareness on energy consumption, for example, printing paper and recycling in the offices."*

E3:   *"I would like to have some kind of training about sustainability."*

E4:   *"It is possible that there are materials about sustainability available, but I am not aware of them. Then the problem is why I am not aware of them and how many people at Pinja are aware of them. "*

Nevertheless, other stakeholder groups did not communicate the importance of this aspect. Expect a representative of the top management team emphasized the significance of sustainability awareness creation in the company.

M2:   *"Sometimes sustainability is a little bit too hard topic that we should bring closer to people's lives and in their thinking and their choices and what they can do and in their thinking."*

4.2.2.2.   Marketing communication

The need for marketing communication was discussed by different representatives of the interview stakeholder groups. Mainly internal stakeholders expressed the importance of marketing communication. In this thesis, marketing communication stands for communication of sustainability benefits of the services and solutions of the case company.

E2: *"It is good if we can integrate sustainability aspect in reference stories."*

E4: *"Maybe it would be interesting if we give to our customers a story that how we can help them with sustainability topics with our service products."*

E4: *"I know many companies are talking about environmental topics and sustainability topics in their marketing materials; it should be there."*

Particularly, the top management stakeholder group highlighted the significant potential to communicate the sustainability benefits of Pinja's services to the clients in marketing materials.

M2: *"I think that the most important thing is that we should speak loud about our positive impact that we can make together with customers."*

M3 *"We have not put so much effort on sustainability in our marketing in the way we are presenting our products currently. But there is a need for that."*

M1: *"We can create content, webinars; we have quite a bit of ways how to do it."*

Likewise, shareholders emphasized that Pinja should focus on communicating about the sustainability benefits of its services in its external communication. For example, S1 stated that Pinja Group should respond to the climate change mitigation challenge *"because many of Pinja's customers are tackling this challenge and Pinja has a potential on that."*

4.2.2.3. Sustainability performance communication

Sustainability performance communication was identified as an essential stakeholder expectation. In this thesis, sustainability performance communication can be described as regular communication of the current state of the company's sustainability performance to internal and external stakeholders. Particularly employee stakeholder group highlighted the pivotal role of this area. Employees expressed their expectations for regular internal communication to stay updated about the company's current state regarding sustainability performance.

E2: *"All these need to be communicated to external and internal stakeholders."*

E4: *"...a good start would be a well-prepared material and presentation about it [sustainability approach of the company] for everybody at Pinja."*

M1: *"we need to communicate our sustainability matters to our staff."*

E 1: *"If we have a goal to reach and report on it monthly. Make it visible; at least everyone could see it."*

E4: *"I would like to see it somehow as a part of internal discussions. For example, monthly meetings."*

E2: *"I think the monthly meeting is an important way to inform employees or put some kind of email or intranet."*

Furthermore, some of the stakeholders also highlighted the importance of communicating internal sustainability performance to the external stakeholders and using it for marketing purposes.

E 4: *"There will be someday that some potential customer is so focused on sustainability, if we don't have these topics settled and written down on how we operate on this, they will choose another partner."*

E2: *"…communicate what kind of activities we do as a company to promote sustainability."*

E4 *"I think for customers it [environmental strategy] is also an important value."*

In contrast, the current customers of Pinja Group did not express their expectations regarding sustainability communication. However, customers addressed the importance of transparency in case they decide to conduct a supplier sustainability audit.

C3:   *"We don't have too much of expectations, expects expectations for transparency - whether they are related to sustainability or now. We expect that our suppliers give us data that we are looking."*

C2:   *"We might conduct an audit at some point, so these things should be in order."*

4.3   Comparing stakeholder expectations

The result of the study outline that there are differences between stakeholder expectations. This chapter further summarizes the previously discussed findings of this research and compares stakeholders' expectations regarding the materiality of sustainability areas as well as expectations in terms of corporate sustainability management. The summary of the results is represented in Table 4 and Table 5.

4.3.1 Material sustainability issues

This section compares stakeholder expectations on material sustainability aspects, which were previously discussed in section 4.1. The findings of this study suggest that the following sustainability areas are viewed as material by the company's stakeholders: (i) corporate social performance, (ii) sustainable services and solutions, (iii) internal environmental performance, (iv) partner and third-party sustainability, (v) economic stability and growth (vi) corporate compliance. Nonetheless, some of the differences in stakeholder expectations regarding the materiality of sustainability issues were identified.

This research showed that different stakeholder groups addressed the pivotal role of Pinja's corporate social performance, highlighting the human-centric nature of the business. The findings revealed that top management and shareholders, in particular, view corporate social performance as one of the central themes relevant to Pinja's sustainability approach. Although employees acknowledged its importance, its significance was not extensively highlighted, compared to the top management and shareholder opinions. In this thesis, the corporate social performance theme includes the following three sub-themes: diversity & equality, talent management, and employee fair treatment. Concerning the sub-categories of this theme, internal stakeholders outlined the essential role of diversity & equality aspect for Pinja Group. Similarly, internal stakeholders viewed the talent management theme as material. In contrast, representatives of the customer stakeholder group did not address the importance of these two sustainability areas. Nevertheless, all the stakeholder groups outlined the importance of the employee fair treatment theme.

All the stakeholders discussed Pinja's ability to deliver sustainable services and solutions as a material sustainability aspect relevant for the company. Shareholder and top management stakeholder groups agreed that increasing the

visibility of Pinja's ability to deliver positive environmental impacts through digital solutions provides business opportunities and can create a competitive advantage. Therefore, both stakeholder groups saw considerable potential in addressing this topic. Furthermore, employees communicated the importance of this topic from the perspective of delivering positive sustainability benefits to the customers as well as creating a meaningful work placement. In turn, customers addressed the vital role of Pinja and other digital system suppliers in helping them to tackle their sustainability challenges. In other words, all stakeholder groups discussed the pivotal role of this aspect, although each stakeholder group approached this topic from different angles.

This research identified that stakeholders view the internal environmental performance of the company as a material topic. Mainly employees and customers addressed the importance of this sustainability area. Employees elaborated on the specific areas relevant to Pinja's internal environmental performance, such as energy consumption and carbon emissions. In turn, customers only expressed their expectations from their suppliers to understand and minimize their environmental impacts. Therefore, it can be said that customers are more interested in the outcomes of the work, rather than specific environmental topics. In contrast, top management and shareholders saw this area as less impactful than the sustainable services and solutions theme discussed above.

The study results showed that the partner and third-party sustainability theme is significant for employees and customers. Customers highlighted the pivotal role of sustainable supply chain management in their sustainability approach and, thus, expressed their expectations from suppliers to be committed to ensuring the sustainability of their supply chains. Furthermore, employees addressed the importance of sustainability criteria consideration in choosing suppliers and partners. Neither top management nor shareholders mentioned the importance of this aspect.

All stakeholders addressed the financial stability and economic growth theme to some extent. Top management highlighted that economic growth is one of the strategic priorities of the company. Shareholder and customer stakeholders group pointed out that economic sustainability is the basis for cooperation. Furthermore, shareholders recognized the pivotal role of ambitious plans to grow sales and profitability. Additionally, employees acknowledged the importance of this topic from the perspective of job security.

Corporate compliance was another material theme identified in this study. This research showed that shareholders, customers, and management are concerned with this sustainability area. Customers expressed their expectations from suppliers to comply with their supplier code of conduct, which among other topics, outlines the importance of legal compliance. In addition, top management and shareholder stakeholder groups looked at the corporate compliance topic from a data & cybersecurity perspective, which is becoming increasingly relevant for the companies operating in the IT sector.

Table 4. Stakeholder differences: material sustainability areas

Theme	Sub-theme	Category	Employee	Management	Customer	Shareholder
Corporate social performance	**Diversity & equality**		x	x		x
	Employee fair treatment		x	x	x	x
	Talent management	Talent acquisition	x	x		x
		Employee training		x		x
Sustainable services and solutions			x	x	x	x
Internal environmental performance			x	x	x	
	Carbon emissions		x	x		
	Energy consumption		x	x		
Partner and third-party sustainability			x		x	
Economic stability & financial growth			x	x	x	x
Corporate compliance			*	x	x	x

x – two or more representatives of a stakeholder group identified the sustainability aspect as important, or one representative of the shareholder group identified this aspect as important.
* – one representative of a stakeholder group identified the sustainability aspect as important (not applicable to the shareholder stakeholder group)

The results revealed that the expectations of top management and shareholder stakeholder groups are similar. Both stakeholder groups emphasized that the primary focus should be placed on corporate social responsibility-related areas and Pinja's ability to deliver positive sustainability impact through services and solutions. Furthermore, the study results showed that customers' and employees' expectations are somewhat similar; both stakeholder groups highlighted the importance of internal environmental performance and partner and third-party sustainability themes. Nonetheless, certain themes were viewed as essential by all stakeholder groups. In addition, it can be said that employees have most of the expectations compared to other stakeholder groups, while customers can be seen as the least demanding stakeholder group.

To conclude, this research identified that stakeholder expectations regarding sustainability material aspects differ between stakeholder groups. On the one hand, it can be concluded that there is no significant conflict between the expectations across different stakeholder groups. On the other hand, it can be said that although different stakeholders acknowledged the importance of certain sustainability aspects, the intensity of the importance is different depending on the stakeholder group. For example, the employee stakeholder group is more concerned with internal environmental performance than top management, although top management still acknowledged the importance of this area. Therefore, it is vital for Pinja to balance stakeholder expectations and respond to the expectations of each stakeholder group to the degree they require it.

4.3.2 Corporate sustainability management

This section compares stakeholder expectations on corporate sustainability management, which were previously discussed in section 4.2. This study identified that stakeholders have expectations for (i) sustainability program, and (ii) sustainability communication. The sustainability program theme was further divided into (i) sustainability strategy, (ii) sustainability measurement system, (iii) stakeholder engagement, and (iv) practical guidelines. Furthermore, the sustainability communication theme includes (i) sustainability awareness, (ii) marketing communication, and (ii) sustainability performance communication. Although all these areas were identified as crucial by the company's stakeholders, the study demonstrated that different stakeholder groups have different expectations regarding the sustainability management process.

This study showed that mainly internal stakeholders expect the company to manage its corporate sustainability comprehensively. Findings indicated that particularly shareholders and employees are increasingly expecting Pinja Group to have a sustainability strategy, which would clearly describe the company's sustainability approach. Furthermore, one representative from each stakeholder group highlighted the importance of having a sustainability measurement system to monitor the company's sustainability performance. In fact, shareholder group representative pointed out that a comprehensive sustainability management system which would include sustainability strategy, targets, and measuring system is among the essential criteria for assessing sustainability of the portfolio companies. Furthermore, stakeholder engagement was seen as important by top management and employee stakeholder groups, while customers and shareholders did not directly express their expectations regarding this area. In a similar vein, practical guidelines development was viewed as essential by top management and employee stakeholder groups. Considering that these two stakeholder groups will be responsible for formulating, implementing, and developing the company's sustainability approach, it is evident that they are concerned with the practical side of sustainability implementation.

Moreover, internal stakeholders expressed their expectations for sustainability communication. This study indicated that, in particular, employees are interested in sustainability awareness creation within the company as well as sustainability performance communication. Furthermore, top management, employees, and shareholders highlighted the curtail role of marketing communication, underlying the importance of communicating the role of digitalization in sustainable development. While the sustainability communication theme was viewed as important by internal stakeholders, customers did not express their expectations regarding sustainability communication, except for highlighting the principle of transparency.

Table 5. Stakeholder differences: corporate sustainability management

Theme	Sub-theme	Employee	Management	Customer	Shareholder
Sustainability program	Sustainability strategy	x			x
	Sustainability measurement system	*	*	*	x
	Stakeholder engagement	x	x		
	Practical guidelines	x	x		
Sustainability communication	Sustainability awareness	x	*		
	Marketing communication	x	x		x
	Sustainability performance communication	x	*		

x – *two or more representatives of a stakeholder group identified the sustainability aspect as important, or one representative of the shareholder group identified this aspect as important.*
* – *one representative of a stakeholder group identified the sustainability aspect as important (not applicable to the shareholder stakeholder group)*

To conclude, differences between stakeholder expectations regarding corporate sustainability management were identified as the result of this study. The findings revealed that mainly internal stakeholders have expectations in terms of corporate sustainability management. Particularly, employees have the highest expectations compared to other stakeholder groups. In contrast, customers did not express their expectations regarding the sustainability management process.

5   CONCLUSION AND DISCUSSION

This chapter aims to summarize the study and the research findings and compare them with the prior literature. Additionally, managerial implications and research contributions of this study are presented in this chapter. Furthermore, the reliability and validity of the study is addressed. Lastly, the limitations of this study and future research possibilities are discussed.

5.1   Summary of the study and research findings

This research aimed to understand the sustainability expectations of the primary stakeholders of Pinja Group regarding material sustainability areas and corporate sustainability. Furthermore, the study attempted to find how expectations differ between different stakeholder groups. Thereby, the following research questions were set:

RQ1: What are material sustainability topics for Pinja Group according to the company's primary stakeholders?

RQ2: What are stakeholder expectations regarding the corporate sustainability management process at Pinja Group?

RQ3: Do these expectations differ between stakeholder groups?

The research strategy methodology used in this study was a case study due to its applicability to the real-world setting. Within the case study research strategy, a semi-structured interview was selected as a data collection method to understand stakeholder expectations. Twelve (12) interviews were conducted with the case company's primary stakeholders, including top management, customer, employee, and shareholder stakeholder groups. The qualitative data was analyzed using thematic analysis, which is a suitable data analysis method for the research attempting to identify patterns from qualitative data. As a result, material sustainability areas relevant for the case company as well as stakeholder expectations regarding corporate sustainability management were identified. Moreover, the study found differences between the expectations of different stakeholder groups.

5.1.1 Stakeholder expectations: material sustainability aspects

This study identified the following sustainability areas that are perceived material by Pinja's primary stakeholders: (i) corporate social performance, (ii) sustainable services and solutions, (iii) internal environmental performance, (iv) supplier and third-party sustainability, (v) financial stability and growth (v) corporate compliance. The case company should respond to these sustainability areas

to meet stakeholder expectations. Considering the fact that all of the identified topics are important for Pinja's stakeholders, they all need to be managed and reported on.

This study showed that different stakeholder groups have different expectations from the case company. These results are in line with the previous studies about the role of stakeholders in corporate sustainability (Azzone et al., 1997; Calabrese et al., 2013; Font et al., 2016; Huang & Kung, 2010). Previous studies on stakeholder expectations, specifically in the IT sector, were not found, making it impossible to compare the findings of this study. Nevertheless, a comparison can be made between this study and prior literature on stakeholder expectations across different sectors and industries.

This study showed that customers are particularly concerned with fair employment, internal environmental performance, third-party sustainability, and corporate compliance themes. These results are somewhat similar to the finding of Bradford et al. (2017) and Font et al. (2016), who identified that customers are concerned with the social justice aspect, which mainly includes topics related to fair employment. Furthermore, Bradford et al. (2017) found that environmental performance and legal compliance are perceived as important by customers, which was also identified by customers as important in this study. In addition, Sigala (2014) identified that customers have a significant impact on the application of sustainability practices in supply chain management. Similarly, this study showed that customers perceive third-party sustainability as a vital sustainability area. In contrast, several studies showed that customers are concerned with various areas and are seen among the most demanding stakeholder groups (Bradford et al., 2017; Font et al., 2016). However, this study found that customers are interested in a limited number of topics compared to other stakeholder groups. It can be explained by the fact that Pinja's customers are more concerned with the sustainability of suppliers that are perceived to have more considerable sustainability risks. For example, while discussing supplier sustainability, a customer representative from the energy sector pointed out the crucial importance of fuel suppliers, while the customer from the forest industry highlighted the significance of sustainability of raw materials suppliers. Thus, it can be assumed that the sustainability of digitalization and automation suppliers is not the priority for the customers of the case company.

This study showed that employees are concerned with the range of different sustainability areas, similar to the research conducted by Azzone et al. (1997). Furthermore, the results revealed that employees are concerned with nearly all the sustainability themes identified in this thesis. Nevertheless, the results showed that employees mainly expressed their expectations in terms of internal environmental performance as well as partner and third-party sustainability. The previous studies suggest that employees can influence the adaptation of environmental performance indicators (Rodrigue et al., 2013), which can be seen as the importance of environmental sustainability for the employees. In this study, employees also expressed the expectations from the corporate social performance theme, especially highlighting the role of diversity & equality subtheme. Indeed, this theme is topical in the IT sector, considering the predominance of male employees in the industry.

Furthermore, this thesis showed that the opinions of shareholder and top management stakeholder groups are similar. Both stakeholder groups highlighted the pivotal role of corporate social responsibility, sustainable services & solutions themes. Furthermore, corporate compliance was discussed as material by both stakeholder groups. However, the results of this thesis showed that own environmental impacts of the company are not considered as a significant area. In contrast, the study conducted by Font et al. (2016) found that top management views environmental issues as the most critical sustainability areas among all the sustainability aspects. This difference could be mainly related to the nature of the businesses since there is no significant regulatory pressure regarding environmental sustainability in the digital business, which one more time highlights the importance of the materiality approach.

Overall, this research showed that the sustainable services and solutions theme is viewed as material by all stakeholders. Indeed, these findings are supported by the ongoing discussion about the role of digitalization in sustainability, including the Green by IT approach (Calero et al., 2019; Faucheux & Nicolaï, 2011; Huang, 2009). Furthermore, the study suggests that corporate social performance was considered as one of the most important sustainability aspects. As stated by Calero and Piattini (2017), among other factors, the software development process requires human sustainability, which includes topics such as labor rights, health, social support, and equality.

Additionally, the results of this thesis identified some sustainability topics that were not discussed in the prior literature but were viewed as significant by stakeholders in this research. For example, topics such as diversity & equality, partner and third-party sustainability as well as corporate compliance did not receive much attention in prior literature. Thus, it can be said that there is a need for a holistic approach to view sustainability in the IT sector. In addition, the results highlight the crucial importance of the materiality approach in corporate sustainability by identifying some of the essential sustainability areas relevant for Pinja, which received little attention in the prior literature.

5.1.2 Stakeholder expectations: corporate sustainability management

In this study, stakeholder expectations regarding corporate sustainability management were broadly divided into two groups: sustainability program and sustainability communication. The sustainability program theme consists of the following four subthemes: (i) sustainability strategy, (ii) sustainability measurement system, (iii) stakeholder engagement, and (iv) practical guidelines. In turn, sustainability communication includes (i) sustainability awareness, (ii) marketing communication, and (iii) sustainability performance communication. In other words, it can be said that the company's stakeholders are increasingly expecting Pinja to manage its sustainability impacts and communicate about it.

This study showed that mainly internal stakeholders have expectations from Pinja Group to manage its sustainability impacts comprehensively. Shareholders and employees especially outlined the pivotal role of sustainability strategy and sustainability measurement system. These results are similar to the find-

ings of Rodrigue et al. (2013), who identified that shareholder and employee concerns may lead to the adaptation of environmental strategy and EPIs. Similarly, Font et al. (2016) found that employees view governance structure & management systems as important. Additionally, this study showed that particularly employees have expectations for practical guidelines. Indeed, employees can be seen as actors who assist a company in implementing sustainability activities (Wolf, 2013); thus, providing employees with practical guidelines is essential to ensure the achievement of sustainability goals. Finally, stakeholder engagement was seen as another essential aspect highlighted by top management, employees, and shareholders. As indicated in the theoretical chapter of this thesis, stakeholder engagement is a crucial aspect of corporate sustainability and received its recognition in scientific research (Freeman, 1984; Greenwood, 2007; Lingenfelder & Thomas, 2011).

Furthermore, this study identified that stakeholders are increasingly expecting Pinja to communicate sustainability-related information actively. Indeed, sustainability communication was viewed as an essential aspect mainly by representatives of the employee stakeholder group. For example, employees highlighted the pivotal role of internal sustainability awareness creation. Similarly, Azzone et al. (1997) and Font et al. (2016) identified that employee training on the company's sustainability processes is seen as one of the most critical areas by employees.

The results showed that particularly employees have expectations regarding corporate sustainability management and communication. Compared to other stakeholder groups, employees were interested in all the themes related to corporate sustainability management identified in this study. Thus, it can be said that employees are concerned with the company's internal processes more than any other stakeholder group. In contrast, customers did not have specific expectations regarding the corporate sustainability management process, although previous research suggests that customers can be seen as one of the most demanding stakeholder groups (Bradford et al., 2017; Font et al., 2016).

5.2 Managerial implications and research contribution

The research findings provide a valuable contribution to the literature on the topics of stakeholder expectations regarding corporate sustainability. Particularly, by identifying stakeholder expectations and differences between them, the study contributes to the research about conflicting stakeholder expectations. At the same time, the study attempted to fill the research gap related to stakeholder expectations in the digital business by interviewing the case company's primary stakeholders.

To ensure that the company's sustainability approach is relevant and material for stakeholders, the result of this study suggests that the case company should focus its attention on the following sustainability areas: (i) corporate social performance, (ii) sustainable services and solutions, (iii) internal environmental performance, (iv) supplier and third-party sustainability, (v) economic

stability and growth (vi) corporate compliance. It is suggested that the company manages and reports on all of these sustainability areas, considering their significance for stakeholders. Furthermore, it is suggested that Pinja prioritizes issues in accordance with the strategic importance and places them on the materiality matrix. It is crucial to choose a small number of sustainability areas to formulate a sustainability strategy while managing and reporting the remaining areas.

Additionally, the study addresses stakeholder expectations on corporate sustainability management. The results showed that stakeholders expect a clear sustainability program that would include (i) sustainability strategy, (ii) sustainability measurement system, (iii) stakeholder engagement, and (iv) practical guidelines. Furthermore, the results identified that sustainability communication was seen as curtail by the company's stakeholders. Thus, it is suggested that Pinja focuses its attention on creating sustainability awareness, marketing communication, and sustainability performance communication.

The practical implications of this study can be viewed from two different perspectives. Firstly, it provides an overview of the current concerns and expectations of different stakeholder groups at Pinja Group. Managers at Pinja Group can utilize the results to formulate and further develop a sustainability strategy. The results can be further used in the decision-making process, assist in sustainability goals and key performance indicators identification, and sustainability management processes development. Furthermore, the results of this research can contribute to formulating content and framework for the sustainability report. This research demonstrated what should be the strategic sustainability priorities of Pinja Group. Secondly, the research outlined the conflicting stakeholder expectations regarding sustainability management and reporting. The knowledge on the difference in stakeholder's needs and concern can enable management to prioritize relevant sustainability topics and focus on those that are in line with the company's strategy and values.

To conclude, it can be said that the impact of the company's sustainability approach will depend on the company's ability to respond to stakeholder expectations. Thus, it is vital to align the sustainability approach with the sustainability areas expected by stakeholders and focus on developing processes to manage and communicate the impacts of these areas. Therefore, Pinja not only should consider these areas while developing its sustainability management process and reporting but also constantly engage its stakeholders and constantly seek for the improvement.

5.3   Research evaluation

Eriksson and Kovalainen (2008) state a need to evaluate qualitative research to ensure its quality and trustworthiness. In this thesis, the issues related to the trustworthiness of the research were considered throughout the entire process to ensure the quality of the study at different stages of the research. According to Eriksson and Kovalainen (2008), reliability and validity are the most common criteria used for qualitative research evaluation. According to Leung (2015),

reliability refers to the "replicability of the processes and the results.". In other words, reliability can be seen as the ability to repeat the study and receive similar results. In turn, validity is described as the suitability of the methodological choices, processes, and data (Leung 2015).

The reliability of this research comes from a well-planned research process. During the data collection step, the risks of participant error were minimized by ensuring the suitability of the interview time for the interviewer and adjusting to the participants' schedule. Furthermore, the risk of participant biases was eliminated by ensuring the confidentiality of their responses, which enabled interviewees to share their opinions freely. Moreover, the purpose of the research was clearly described to the interviewees before the interview to ensure the suitability of the sample. Additionally, the issues related to researcher error or biases were considered throughout the coding and data analysis steps. However, considering the researcher's lack of experience in conducting qualitative studies, the risk of personal bias might be present.

To communicate the validity of the research, the methodological choices of this study are clearly and transparently presented in section 3. According to Morse et al. (2002), methodological coherence is an important strategy to verify the validity and reliability of the research. According to the authors, methodological coherence can be seen as the coherence between the research question and research method. In this thesis, the case study research strategy and semi-structured interviews were seen as suitable methods to answer the research questions. Furthermore, it is suggested that to ensure the validity of a study, the research findings can be compared with the prior research (Pickard, 2017). Even though the research on the topic of stakeholder expectations specifically in the IT sector is limited, the results were compared with the prior literature on stakeholder expectations across different sectors in section 5.1.

5.4   Limitations and future research possibilities

In this research semi-structured interview was chosen as a data collection method, which by itself has several limitations. One of the main limitations of semi-structured interviews is the subjective perception of the interviewer and the potential presence of personal biases. Furthermore, it might be assumed that certain issues were not communicated by stakeholders, even though they perceive them as important. In other words, the qualitative nature of the study makes it impossible to understand the significance of a certain issue was for a particular individual. However, this master's thesis did not attempt to quantify but rather provide key sustainability expectations of various stakeholder groups. Semi-structured interviews were chosen due to the importance of Pinja Group to receive as many insights as possible. Therefore, other research methods can be utilized in the future to study stakeholder expectations in more detail. Nevertheless, this research provides a starting point for future research in the organizational context. Furthermore, the semi-structured interviews were conducted online due

to the COVID-19 pandemic; the absence of face-to-face communication could have affected the research results.

Other limitations of this research are mainly associated with the sample size. Stakeholders of only one company were interviewed. Furthermore, only one representative of the shareholder group was interviewed due to the time unavailability of other representatives. Therefore, future studies can potentially focus on better understanding the needs of different stakeholders needs in the IT sector by interviewing stakeholders of several companies. Furthermore, it is suggested for future research to consider the needs of other stakeholder groups such as suppliers and NGOs. The predominance of internal stakeholder's opinions could affect the results of the study. However, as the purpose of the research was to identify the expectations of the primary stakeholders, the results fulfill the research objective.

During the study, several possibilities for future research studies were identified. As the research on corporate sustainability in IT and digital business is limited, it is suggested that future research focuses its attention on exploring this area. The sustainability themes identified as the result of this study can be further utilized to quantify the importance of these issues for stakeholders. For example, by utilizing the quantitative method, one could quantify the stakeholder expectations and determine the most impactful and significant topics relevant for stakeholders in the IT sector. Furthermore, future research can also focus not only on the expectations of stakeholders but also on exploring current sustainability practices of digital business companies. For example, one could analyze the current corporate sustainability management practices employed by companies operating in IT companies to find best practices. Additionally, it would be interesting to explore the current state of sustainability reporting of the IT companies, analyzing sustainability areas reported by the companies.

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APPENDIX 1   STAKEHOLDER INTERVIEW FRAMEWORKS.

<u>**Customer interview questions**</u>

1. **Introduction questions**
   a. Please introduce yourself and your responsibilities.
   b. Please, tell about your experience working with Pinja.
2. **Approach to sustainability at the customer company**
   a. What are the main business drivers and megatrends affecting your company's business strategy?
   b. Please, briefly describe your company's approach to sustainability in general (e.g., sustainability goals).
   c. How can your suppliers help you in achieving them (sustainability goals)?
3. **Sustainability and supply chain management**
   a. Please describe your approach to sustainable supply chain management
   b. How do you consider sustainability in your sourcing and procurement decisions (e.g., supplier assessment criteria or something similar)?
   c. How do you view the importance of sustainable sourcing and procurement in your company in the next one to three years?
4. **Customer expectations**
   a. **Pinja support in terms of assisting in achieving sustainability goals.**
      i. How Pinja contributes to improving your sustainability performance through its technologies and services offering? How Pinja helps you to meet your own sustainability needs and/or targets?
      ii. Please describe how Pinja could add the most value to you by supporting or improving your business.
   b. **Expectations on Pinja's sustainability management and performance (material topics, content):**
      i. Please, describe your main expectations on Pinja's sustainability management and performance?
      ii. Please describe if Pinja meets your sustainability expectations regarding the following:
         1. Pinja's governance and management of its sustainability in its own operations
         2. Pinja's contribution to improving your sustainability performance through its technologies and services offering
      iii. How can these expectations be met better? Please, provide some examples.

        iv. How do you view your expectations developing in the next one to three years?

        v. How is Pinja able to communicate your expectation in its current communication channels?

    c. **Expectations about Pinja's sustainability communication**

        i. How would you describe Pinja's sustainability-related communication so far?

        ii. What would be the preferred way(s) for Pinja to communicate and/or display the most value-adding sustainability issues?

5. **Do you have anything else you would like to bring up?**

Top management interview questions

1. **Introduction questions**
   a. Please introduce yourself and your responsibilities
2. **Business environment**
   a. What are the key megatrends and drivers affecting Pinja's business and the key customers' business?
   b. What results would you like to achieve by integrating sustainability into your business?
3. **Company strategy and purpose**
   a. What are Pinja's key strategic targets?
   b. What are Pinja's most important strengths and opportunities of Pinja?
   c. What are the most relevant weaknesses and threats affecting Pinja's business?
   d. How are sustainability themes integrated into management decision-making?
4. **Pinja's sustainability work**
   a. What kind of expectations related to sustainability does Pinja receive from different stakeholder groups?
   b. Please describe how Pinja meets stakeholders' sustainability expectations regarding the following (please give specific examples of how expectations could be better met):
      i. Pinja's governance and management of its sustainability in its own operations
      ii. Pinja's contribution to improving customers' sustainability performance through its technologies and services offering
5. **Defining materiality of sustainability topics**
   a. **Environmental topics**
      i. What are the most relevant environmental topics in Pinja's value chain?
         1. From Pinja's point of view

           2. From a stakeholder point of view (e.g., Pinja's product support in customer sustainability)
      ii. What are the most significant risks and opportunities related to environmental themes in your company?

    b. **Social topics**
      i. What are the most relevant social topics in your company's value chain?
          1. From Pinja's point of view
          2. From a stakeholder point of view (e.g., Pinja's product support in customer sustainability)
      ii. What are the most significant risks and opportunities related to social themes in your company?

    c. **Economic and Governance topics**
      i. What are the most relevant governance topics in Pinja's value chain?
          1. From Pinja's point of view
          2. From a stakeholder point of view (e.g., Pinja's product support in customer sustainability)
      ii. What are the most significant risks and opportunities related to governance themes in your company?

6. **Sustainability management process**
    a. Please, describe your main expectations on Pinja's sustainability management and performance?
    b. How can Pinja disclose its sustainability performance?
7. **Do you have anything else you would like to bring up?**

Shareholder interview questions

1. **Introduction questions**
    a. Please introduce yourself and your responsibilities
2. **Approach to sustainability:**
    a. Please describe your company's approach to sustainability in general.
    b. What are your key sustainability goals?
    c. What kind of sustainability criteria do you follow while choosing portfolio companies?
3. **Defining material sustainability topics**
    a. What are the most relevant environmental topics in Pinja's value chain?
    b. What are the most relevant social topics in Pinja's value chain?
    c. What are the most relevant economic topics in Pinja's value chain?
4. **Expectations on Pinja's sustainability management and performance**
    a. What are your main expectations at the moment regarding the sustainability management process?

      b. How do you view the expectations developing in the next one to three years?

      c. Please describe if Pinja meets your sustainability expectations regarding the following (please give specific examples of how expectations could be better met):

          i. Pinja's governance and management of its sustainability in its own operations?

          ii. How Pinja helps you to meet your own sustainability needs and/or targets?

      d. Do you feel that Pinja adequately fulfills your expectations? How can those expectations be met better?

5. **Please describe your experience with Pinja's sustainability communication**

      a. How would you describe Pinja's sustainability-related communication so far? What did you find useful?

      b. In your opinion, what would be the most effective ways to communicate sustainability performance?

Employee interview questions

1. **Introduction and understanding sustainability**

      a. Please, briefly describe your main responsibilities at Pinja

      b. What are the first 2-3 words that come into your mind when talking about sustainability in the IT and engineering sector?

      c. Do you feel that a company's responsibility is among the factors that can affect your job preference? (e.g., how well the company comply with social legislation, financial stability, environmental performance)

      d. What sustainability issues do you face at your everyday work? In your opinion, how significant an impact they have?

2. **Defining material sustainability topics**

      a. Do you think the Pinja business should be developed to be more sustainable?

      b. In your opinion, what are the most significant sustainability issues in the industry (or your work) where change is needed?

      c. In your opinion, what sustainability topics Pinja should address/focus on as an employer?

      d. In your opinion, what are the important sustainability issues Pinja should address to meet customer expectations and needs better?

3. **Expectations about Pinja's corporate sustainability management**

      a. In your opinion, how is sustainability visible in Pinja's everyday work? (Please, provide some examples)

      b. What are your main expectations on the sustainability management of Pinja?

    c. How would you describe Pinja's sustainability-related communication so far?

    d. In your opinion, what would be the most effective ways to communicate sustainability performance?

4. Do you have anything else you would like to bring up?