



**THE DEVELOPMENT OF SOCIAL SUPPLY CHAIN ACTIONS AS A RESULT  
OF STAKEHOLDER PRESSURE**

Focus on companies using cobalt mined from DRC

Lappeenranta–Lahti University of Technology LUT

Bachelor's thesis, Business administration

2022

Vilja Aalto

Examiner: Junior researcher Axel Zehendner

## ABSTRACT

Lappeenranta–Lahti University of Technology LUT  
LUT School of Business and Management  
Business Administration, Supply Management

Vilja Aalto

### **The development of social supply chain actions as a result of stakeholder pressure, focus on companies using cobalt mined from DRC**

Bachelor's thesis

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**Keywords:** Social sustainability, supply chain management, stakeholder pressure, cobalt

This thesis examines how do public allegations affect the practices companies use to ensure social sustainability in their supply chains. The study also looks into how the allegations affected reporting customs during a three-year period. The topic is investigated through a case study surrounding a lawsuit of five US technology companies accused of utilizing child labour in their cobalt supply chains.

The topic of the thesis is relevant as people are concerned about the sustainability of products they use in their everyday lives and want to know how companies publicly respond to these types of concerns, and if it is possible to try to influence companies to act more sustainably through public pressure.

The case study was conducted by using qualitative content analysis to analyse the public reports of companies addressing their social sustainability, from the timespan ranging from the year before the allegations to one year after.

It was found that the most common practices are codes of conduct, standards, and auditing measures and that the practices do not drastically change as a result of the lawsuit. The statements surrounding ensuring social sustainability increased but addressing the lawsuit was only done by one company.

## TIIVISTELMÄ

Lappeenrannan–Lahden teknillinen yliopisto LUT

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Kauppatieteet, Hankintatoimi

Vilja Aalto

### **Sosiaalisen vastuullisuuden käytänteiden kehitys hankintaketjussa sidosryhmäpaineen seurauksena, keskiössä Kongon demokraattisesta tasavallasta kobolttia hyödyntävät yritykset**

Kauppatieteiden kandidaatintyö

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Tämä tutkielma tutkii kuinka julkiset syytökset vaikuttavat yritysten hankintaketjuissaan käyttämiin sosiaalisen vastuullisuuden keinoihin. Tutkimus myös käsittelee, miten raportointikäytännöt muuttuivat kolmen vuoden ajanjakson aikana. Aihetta tutkittiin tapaustutkimuksella, jossa kontekstina toimii viiden Yhdysvaltalaisen teknologiayrityksen haastaminen oikeuteen syytöksistä, jotka koskivat lapsityövoiman hyödyntämistä yritysten koboltti-hankintaketjuissa.

Tutkielman aihe on ajankohtainen, sillä ihmiset kasvavissa määrin ovat kiinnostuneita käyttämiensä tuotteiden vastuullisuudesta ja siitä, miten yritykset julkisesti vastaavat kuluttajien huoliin, sekä siitä onko yrityksiin mahdollista vaikuttaa ja saada toimimaan vastuullisemmin julkisen painostuksen avulla.

Tämä tapaustutkimus suoritettiin hyödyntämällä laadullista sisällönanalyysiä, jonka avulla analysoitiin yritysten julkisia sosiaalista vastuullisuutta käsitteleviä raportteja ajanjaksolta, joka käsitti vuoden ennen syytöksiä vuoteen syytösten jälkeen.

Tutkimus osoitti, että kaikista yleisimmät yritysten käyttämät keinot ovat ohjesäännöt, standardit sekä auditoinnit, ja että nämä käytänteet eivät merkittävästi muuttuneet oikeusjutun seurauksena. Oli kuitenkin havaittavissa, että sosiaalisen vastuullisuuden takaamiseen liittyvät lausunnot lisääntyivät, vaikka itse oikeusjutun mainitsi vain yksi yritys.

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## 1. Introduction

Countries around the globe are working towards transitioning into low-carbon societies with the help of modern technology. However, this transition is threatening to happen at the expense of the social and environmental wellbeing of low-income countries (Sovacool, Hook, Martiskainen, Brock & Turnheim, 2020). The vast majority of the technology needed for the transition is often produced with several metals, one of which is cobalt. Cobalt is an essential component of modern technology that we use in our everyday lives from smartphones and computers to electric cars and solar panels. However, the mining process of the mineral is associated with several human rights issues (Amnesty, 2016). World Bank (2019) has estimated that as the demand for technology increases, the worldwide demand for cobalt is to increase up to 585%. At the same time, consumers are becoming more interested in the sustainability of the products they use and are ready to demand accountability from companies. Companies are increasingly expected to be responsible for the activities of their suppliers and not only avoid but actively take action to improve the sustainability in all of their operations. However, there has not been extensive research on how pressure from the public affects the sustainability practices of companies, especially in regard to the cobalt industry, and child labour that is said to occur in the lower tiers of global supply chains of multinational companies.

In this thesis, the focus will be on the effects of public accusations of child labour on large companies sourcing cobalt in the Democratic Republic of Congo (DRC). The non-theoretical context of the thesis is the lawsuit on the use of child labour in cobalt supply chains, filed against five US technology companies in 2019. The study is conducted as a case study in which a qualitative content analysis will be used to look into public reporting of the companies with the intention of examining what sort of social sustainability practices are used, and how do they develop as a result of public pressure. It will also be investigated how companies consider these serious accusations in their public reporting. To address the topic, the thesis presents the main research question of “How does stakeholder pressure affect the social sustainability actions of companies?” and two sub-questions “What sort of practices are reported to address social sustainability, especially in regard to cobalt mining and child

labor, in the public reporting of companies?” and “What kind of development is there in the practices as a result of child labor accusations?”

The thesis is structured so, that first the theoretical framework and key concepts relating to social sustainability in supply chains are presented after which the needed background information and context for the case will be given. After the case background, the thesis will introduce the methodological approach, from where the thesis will move to show the research findings with discussions and limitations.

## 2. Theoretical background and key concepts

In this section, we define some key terms and concepts and present the theoretical background for the thesis. The first parts of the section will focus on social sustainability in supply chains after which the focus will shift to common motivations for companies to adopt sustainability, which are legal requirements, prevention of reputational risks and stakeholder pressure.

### 2.1 Sustainable supply chain management

Sustainability as a concept is one with multiple definitions, mostly dependant on the context of its use. In this thesis regarding sustainability in supply chains, we utilise the triple bottom line concept introduced by Elkington (1998) to define sustainability. In the triple bottom line, sustainability is divided into economic, environmental, and social dimensions. This implies that where these dimensions overlap there are business possibilities that create social and environmental benefits, while also bringing profit to the business. (Carter & Rogers, 2008) Engaging with the sustainability triple bottom line could lead to competitive advantages, and help businesses operationalize sustainability as a concept into functions and business goals in the different dimensions (Gimenez, Sierra & Rodon, 2012).

Sustainability is essential to many businesses and also a key part of supply chain management. As is the case with sustainability, a variety of different definitions are available for sustainable supply chain management (SSCM), however, what is common between many of them is connecting the triple bottom line with supply chain management. One of those is the definition by Seuring and Müller (2008, pp.1700) who define SSCM as “the management of material, information and capital flows as well as cooperation among companies along the supply chain while taking goals from all three dimensions of sustainable development, i.e., economic, environmental and social, into account which are derived from customer and stakeholder requirements”.

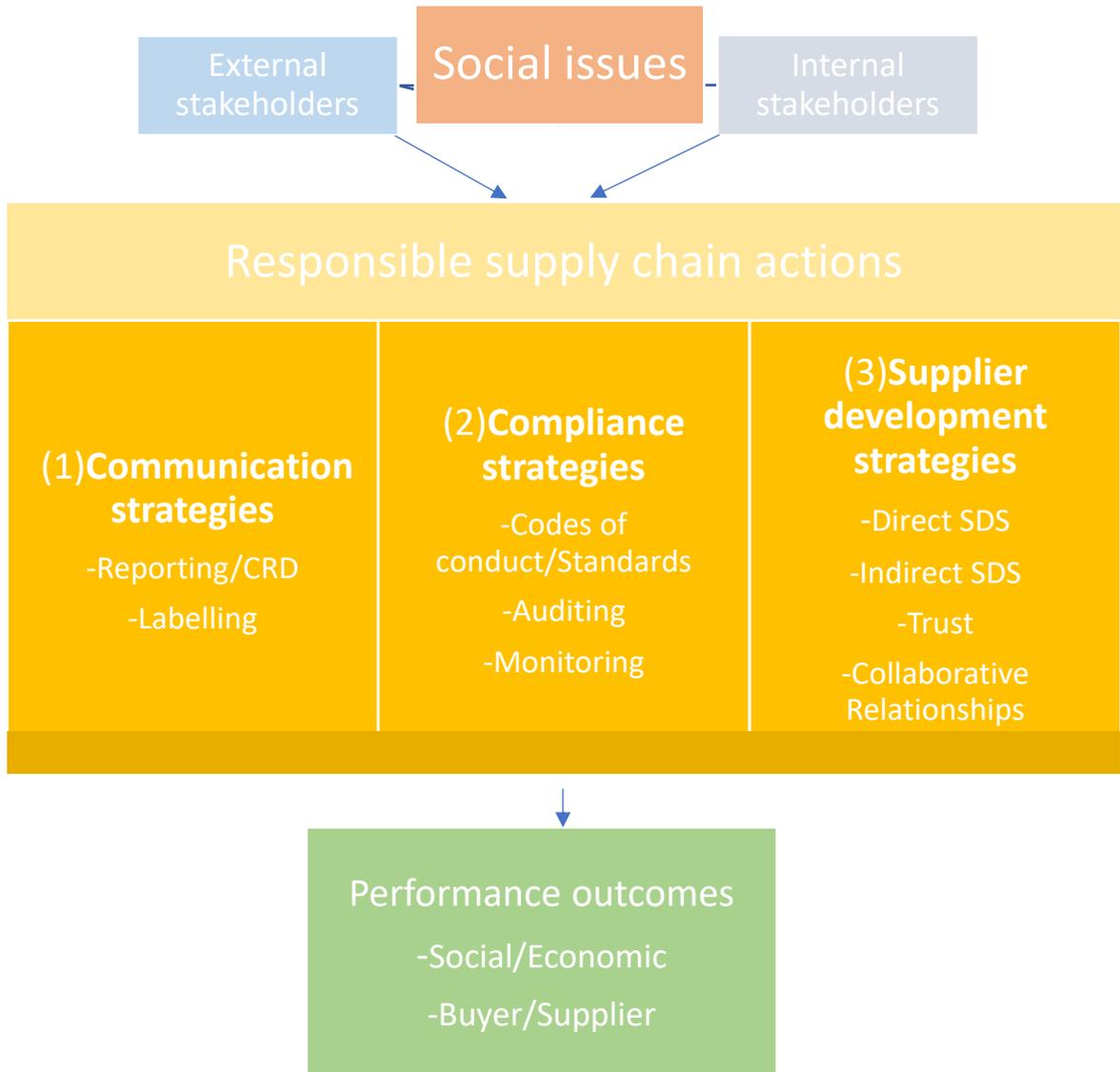
SSCM as a term is usually associated with the management of environmental or social sustainability. Environmental, sometimes called green or ecological sustainability refers to supply chain management that takes into consideration for example pollutants, emissions, and other factors that have an effect on the environment (Lintukangas, Kähkönen & Ritala, 2016). Social sustainability on the other hand is concerned with areas that concern humans and society as a whole (Yawar & Seuring, 2017). Socially responsible actions are sometimes also referred to as corporate social responsibility (CSR), which is sometimes used interchangeably as a term when referring to the socially responsible aspects of sustainability in supply chain management—although CSR can also include actions addressing environmental aspects of sustainability (Klassen, Vereecke, 2012).

## 2.2 Social sustainability in supply chains

Social sustainability in supply chains is a term that encompasses areas in supply chains relating to human and societal well-being. Klassen and Vereecke (2012, pp.103) give the definition as “product or process-related aspects of operations that affect human safety, welfare and community development and protection from harm”. The dimension includes a wide variety of issues such as human rights, working conditions, child labour, health and safety, minority development, disabled/marginalised people inclusion, and gender equality (Yawar & Seuring, 2017). It can also entail themes that affect the wider social environment such as community impact programs (Walker, Seuring, Sarkis & Klassen 2014).

Social sustainability has gotten much less attention as a research area of sustainability compared to the environmental dimension (Seuring & Müller 2008; Ashby, Leat, Hudson-Smith 2012; Yawar & Seuring, 2017). However, this has started to change in the last 10-20 years and the number of studies on the topic has started to increase (Feng, Zhu, Lai, 2017; Tang & Zhou, 2012)

Sustainability is integrated into the supply chain through actions. What actions are used depends for instance on the nature of the supplier relationship, the SSCM strategy, and the wanted outcome. In this thesis, we will utilize the conceptual framework for managing social issues in supply chains by Yawar and Seuring (2017). The framework, which is presented in Figure 1, entails a three-category classification for different social sustainability strategies, practices, and their motivators and performance outcomes.



*Figure 1.* Conceptual framework for managing social issues in supply chains (Yawar & Seuring, 2017, pp.624)

Communications strategies involve active communication with the stakeholders and addressing their concerns, which is commonly done through sustainability reporting, corporate responsibility disclosures (CRD), and integrated reports. Another aspect of communication strategies is labelling as a way of enhancing transparency, reputation, and legitimacy by communicating to the external stakeholders about the sustainability of products.

Compliance strategies are used as a means of ensuring that each operator in the supply chain works according to stakeholder expectations. Common practices include codes of conduct, standards, auditing, and monitoring. Codes of conduct and standards are used for ensuring that each partner shares the same values and is committed to the wanted behaviour according to the strategy, whereas monitoring and auditing assess the compliance of the supplier to the code of conduct and standards. Monitoring for instance requires supply chain members themselves to continuously assess and report their sustainability performance (Klassen Vereecke 2012).

Supplier development strategies in turn are about developing the supplier and relationships within the supply chain, through active collaboration with the aim of improving sustainability further. Direct development strategies refer to measures initiated by the company such as training, educating, and direct financial or technical investments. Indirect development strategies such as informal auditing and evaluation can encourage suppliers themselves to develop their operations into more responsible ones. Important factors in supplier development strategies are strengthening trust between and with suppliers, active engagement through collaborations, and improving the capabilities of partners further with training. This category might also entail collaborating with stakeholder groups such as NGOs.

All these responsible supply chain actions aim for performance outcomes. Positive performance outcomes are available for both the buyer and the supplier. What is being achieved through adhering to stakeholder demands is economic benefits and enhanced market performance through minimizing social risks and cost reduction and enhanced supplier performance. Social benefits include improved working conditions and health and safety of workers. The pressure and motivation for engaging with social responsibility and designating what actions are implemented come from internal and external stakeholder

groups and their expectations. In the next paragraph, we will explore further the motivations for implementing socially responsible actions and stakeholder pressure.

### 2.3 Drivers for companies to engage with social sustainability practices

Businesses can have many different motivations for adopting socially responsible practices in their supply chains. Not all motivations are voluntary as legislation requires businesses to consider human rights in their practices. For example, child labour and slavery are prohibited in almost all countries of the world. European Union employment laws have set minimum requirements for instance for workers' safety and health (European Commission, 2021). The international labour organization (ILO) in turn strives to improve labour rights and conditions globally through international labour standards (ILO, 2021a).

One factor affecting companies greatly in their sustainability decisions is stakeholder pressure. Managing and working to meet stakeholder expectations is mentioned often in the SSCM literature as one of the main pushing forces behind companies taking part in social sustainability and introducing responsible practices in their supply chains. (Yawar & Seuring 2017)

According to stakeholder theory, businesses are comprised of a set of relationships with stakeholders. Each stakeholder has a stake in the business activities and can have an effect or be affected by the business. Stakeholders and companies interact with each other to create value for the business. Stakeholder management is focused on creating value for the stakeholders and managing the business by managing the different stakeholder relationships. This means creating value for stakeholders by adhering to their demands as a way to create value for the company. Primary/internal stakeholders are groups that are economically tied to the company such as employees, suppliers, and management. Secondary/external stakeholders are groups that are not financially connected such as NGOs, media, and the government. This categorization however may vary depending on the business. (Freeman, Harrison & Wicks 2007) The interests and expectations of different stakeholder groups might be significantly different from one another which may lead to conflicts (Freeman et al. 2017).

If the actions of companies do not satisfy some stakeholder groups, it is possible to try to pressure companies into changing behaviour. This effect is referred to as stakeholder pressure (Parmigiani, Klassen & Russo 2011).

The type of pressure can appear differently depending on stakeholder groups either as regulatory pressure exerted by the government, answering to competition from other businesses, responding to demands from customers, and NGO attention. Stakeholder pressure can influence companies in mainly three ways: (1) creating awareness for the firm about sustainability issues, (2) getting businesses to set up actual sustainability goals relevant to their operations, and (3) driving companies to implement the actual practices. Different stakeholder groups have different areas of influence, for instance, external stakeholders are very capable of raising awareness and impacting the introductions of goals, and the public opinion on the company. Internal stakeholders on the other hand have more influence on implementing the actions in practice. There is no one answer on which stakeholder groups' pressure has the strongest influence on companies. It is noted however being dependant on the sustainability dimension of the problem, for example, regarding social sustainability, NGOs and media have greater influence, whereas the government has a stronger influence on problems concerning the environmental dimension. (Meixell, Luoma 2015) One instance of this was when Garde Sánchez, Rodríguez Bolívar & López Hernández (2017, pp.1041) presented that stakeholder pressure from the government has a positive effect on “the promotion of socially responsible actions”. Wolf (2014) still proposes that there is a variety of different sorts of benefits available for companies from the use of sustainable practices and so SSCM should be implemented not only as a result of stakeholder pressure.

One other major factor that makes the area of social sustainability an important topic for companies, is its association with risk management (Seuring & Müller, 2008). Many global companies have extremely complicated and multi-tiered supply chains, and the further away in the chain the supplier is, the harder it can be to ensure the sustainability of the operations (Hoejmose, Roehrich & Grosvold, 2014). No matter the closeness of the relationship with the supplier, if misconduct along the supply chain is brought to the public attention, the backlash will be associated with the focal company (Hartmann & Moeller, 2014). The quick flow of information, attention of the public, and the active monitoring of NGOs have made companies pay close attention to their public image, since a public sustainability scandal

could lead to major value losses and reputational damages for companies (Awaysheh, & Klassen 2010).

The reputation of a company is how different stakeholders perceive its image. A good reputation is an important asset that can bring remarkable competitive advantages and financial benefits (Petersen & Lemke, 2015). A stain in the image can be seen as a serious danger, and it has been proposed that reputational risks are the biggest threat to businesses (Nobanee, Alhajjar, Abushairah, Al Harbi, 2021). Reputational risks can appear as the likelihood of an unwanted event occurring, or the likelihood of the perception of stakeholders negatively being affected as a result of discovering an unwanted event. Accusations from NGOs can cause significant reputational losses and businesses that are either market-leaders or otherwise operate in socially and environmentally sensitive industries, are particularly exposed to reputational risk. (Hoejmose et al. 2014) Businesses with visible brands and positive reputations are also vulnerable to being targeted by activist campaigns (Bartley & Child 2014). Likewise at risk are companies that operate at the consumption end of production networks and that way are closer to the everyday consumer (Wright 2016)

Due to the serious impacts of reputational damage, engagement with CSR and social sustainability is seen largely as a possibility to control reputational risks and minimize the likelihood of reputational risks (Carter & Rogers 2008; Seuring & Müller 2008). However, Ho, Zhang, Yildiz and Talluri (2015) mention that too strong of a focus on only risk prevention can create an approach where the risks are seen as so unlikely that actual risk responses are insufficient. Reputational risk management is usually tied into the concept of bounded rationality which occurs when a business makes decisions based on limited information and processing ability available to them, due to information asymmetry and limited sources. Making decisions regarding possible risks under bounded rationality might cause the risk prevention to not be as effective as possible. (Roehrich et al. 2014)

## 2.4 Sustainability reporting and disclosures

As mentioned in the social sustainability dimension, companies report on their sustainability practices as a response to stakeholder pressure, to address their interest and gain legitimacy (Garde Sánchez et al. 2017). Through reporting practices businesses are able to communicate to external stakeholders and to the public on their sustainability performance and practices. Different reporting practices assist companies in their identity creation and enhance reputation while upholding stakeholder relationships through communication (Ellerup Nielsen & Thomsen 2009; Garde Sánchez et al. 2017).

Villiers & Saden (2006) looked into environmental reporting through the legitimacy theory, which motions that companies would change the way of their disclosures and reporting when faced with expectations of stakeholders to retain their legitimacy. Legitimacy theory presents, that businesses will do whatever is required, to appear legitimate to the public in their operations. They also found out that corporations that operate in industries that have an image of negative impacts on the environment are more likely to report less specifically on their environmental information. Wan Ahmad, De Brito and Tavasszy (2016) found that companies report and highlight more on their commitment towards sustainability than about their actual sustainability performance and that reporting on social sustainability was more often qualitative due to missing indicators for measuring social sustainability. De Villiers, Low and Samkin (2014) in their research on South-African mining companies found out that bigger companies were more likely to report more information, and that when faced with a legitimacy threat, the number of disclosures increase.

Previous studies have recently been done about the reporting practices in modern slavery statements. Schaper and Pollach (2021) analysed modern slavery statements from the perspective of substantive actions against modern slavery and study found that since the legislation that binds corporations to publish these statements does not require anything specific to be reported, the contents and how companies report on modern slavery issues, are extremely variable. It was however noted that substantive practices became more common in the statements as the years went by while the outlooks of the reports also started to appear more professional which could either indicate increased importance, or it could be

seen as a way of trying to conceal the missing substance. It was also observed that it was rare for companies to openly report if they had had any cases of modern slavery, the response to the situation and if it brought any results. Schaper and Pollach (2021) also point out that companies utilise many different forms of sustainability reporting that may overlap the contents of modern slavery reports and leave them to less attention. Companies can also deliberately avoid reporting any achievements in their modern slavery statements even positive ones due to it possibly resulting in loss of competitive advantage, or to avoid capturing the attention of the public, which may criticize the sustainability practices for not being strong enough or turn the attention to business operations that might not yet be sustainable (Meehan & Pinnington 2021).

### 3. Case description

This section will first give a brief introduction to the cobalt mining industry in the Democratic Republic of Congo (DRC) and on the ethical issues associated with the industry, especially from the perspective of artisanal and small-scale mines. It will also explore the lawsuit raised in 2019 against large technological companies, to give the needed context for the thesis.

#### 3.1 Cobalt mining in DRC

Cobalt is a metal used in a wide variety of technological devices and most commonly as a component of lithium-ion batteries (Nordic Innovation, 2021). Since it is widely used in for example batteries of electric cars it has become an element with rising demand (European Union, 2018). The Democratic Republic of Congo (DRC) is a country in central Africa, situated in the so-called Central African Copperbelt that, despite having remarkable mineral and precious metal deposits, suffers from poverty, corruption, and political unrest. Currently, DRC is the largest cobalt provider in the world with approximately 60% of all of the world's cobalt coming from its mines. (Kennedy, 2020)

The largest mining corporations operating in DRC are foreign, most notably Chinese and Swiss-owned (Century cobalt, 2018). The type of industrial mining these companies conduct is so-called large-scale mining (LSM) which encompasses 75-80% of the local cobalt production. In addition to LSM, artisanal and small-scale mines (ASM) are widely used to dig metals. It is estimated 15-20% of the Congolese cobalt is from ASM. (Kennedy 2020) Most ethical issues relating to cobalt arise from ASM, which entails the mining of precious stones, metal, and minerals and is characterized by intense physical labour and the use of primitive tools (Schwartz, Lee & Darrah, 2021a). The amounts of cobalt mined by one person in ASM are significantly smaller than those of industrial mining, but since large groups of people are working together, the amounts start to appear significant (Schwartz, Lee & Darrah, 2021b). ASM is in most cases done legally in the proximity of big industrial plants and in the tailings of old plants. The cobalt mined from ASM gets brought to markets,

where it is sold through middlemen to bigger refineries. Commonly, people have not been able to get high prices for the cobalt they sell. (Sovacool, 2019)

Due to the primitive nature of ASM, it involves several health concerns and dangers such as being exposed to dangerous chemicals, poor sanitation, physical injuries from heavy lifting, death in collapsing tunnels, and other social issues such as substance abuse, violence, and human trafficking (Schwartz, Lee & Darrah, 2021b). As mentioned, ASM mines are also sometimes located close to LSM mines where it is possible for workers to sneak into the industrial mines at night to look for more cobalt, which can sometimes lead to conflicts with armed guards (Tsurukawa, Prakash & Manhart, 2011). Along with extremely poor working conditions, a problem is seen in the wide-scale of children working in ASM mines. According to Kara (2018), it has been estimated that in DRC around 35 000 children of all ages work by accompanying their parents and to help support their families in different tasks ranging from washing the metals to carrying heavy loads. International labour organization (ILO) has classified this as being “the worst forms of child labour”, due to the hazardous nature of the work (ILO, 2021b).

Although ASM is usually not illegal, it has lacked legal recognition and regulation by the government, which also meant that there is no protection for workers or control for working conditions (Hirons, 2014). Very recently however there have been actions trying to tackle the issues of ASM and in 2020 a state-owned company was formed by the Congolese government with a monopoly to purchase ASM cobalt, as a step to try to control the prices, formalize the role of ASM, improve working conditions and enhance the traceability. (Home, 2020).

Many companies claim that their products do not contain cobalt from ASM, but this has been questioned since many refineries source both LSM and ASM cobalt and mix them together into one mass. The traceability of the origins of cobalt is also usually weak, which is why the possibility of ASM cobalt being mixed into LSM is presented high. (Le Petit, 2019) Although LSM cobalt is commonly introduced as being the more ethical alternative, issues have been also presented about the working conditions, unjust salaries, and unfair treatment of workers in big industrial mines (Pattison, 2021).

Despite the various issues, ASM is for large groups of people the only way to make a living, pay for education, and help to lift them out of poverty. Political instability has also forced people to leave their former way of living with agriculture and ASM has provided an opportunity to earn income. (Sovacool, 2019) Due to the complicated socioeconomic roots of the issue with ASM, there are no easy solutions to eradicate these problems.

### 3.2 Accusations of child labour

Several NGOs, scholars, human rights- and activist groups have raised concerns over cobalt production in the DRC and demanded accountability from companies (Amnesty, 2016; Kara, 2019; CNN, 2018). A new action was taken in 2019 when International Rights Advocates, a US-based human rights firm, together with experts on the topic, raised a federal class-action lawsuit against five technology companies from the United-States, on the behalf of 14 Congolese families. The companies were accused of, as summarised by Kelly (2019), “aiding and abetting in the death and serious injury of children whom they claim were working in cobalt mines in their supply chain”. According to the lawsuit the companies were aware of the human rights issues linked to cobalt they source and benefit from the dangerous labour of the children and are so to be held responsible. The directly sued companies were Apple, Google, Dell, Microsoft, and Tesla, and the misconducts were said to take place in the mining sites owned by Glencore which provides cobalt to a metal trader Umicore, which in turn supplies cobalt to the technology companies. This lawsuit was the first of its kind because never before had big companies been legally demanded accountability in this manner. (Kelly, 2019)

### 3.3 Involved companies

The seven companies involved in this study are all large multinational corporations. Google (Alphabet), Microsoft, Dell, Apple are technology companies, all with sales of approximately a minimum of \$100 billion (Forbes 2021). These four technology companies have a variety of different business operations and use cobalt as a component in some of their products. Tesla operates in the sector of electrical vehicles, energy generation, and storage systems (Tesla 2021). Glencore is one of the largest mining and cobalt-producing

companies in the world. The company operates two cobalt mines in DRC one of which is the biggest in the world. (Glencore 2021; Desai 2021) Umicore is a materials technology and recycling company focused on refining and recycling metals for applications such as rechargeable batteries. Umicore sources cobalt among other sources from the mines of Glencore in the DRC. (Umicore 2021; Umicore 2019)

## 4. Methodology

This section will introduce the purpose and methodological approach of the study and present the research material

### 4.1 Research purpose and methods

The purpose of this study is to examine how companies react to the concerns presented by the public and answer to serious accusations in their public reporting. It is investigated through which practices is social sustainability in supply chains is addressed and how do these practices develop when faced with stakeholder pressure. The study inspects what is the relevance of legal public accusations to the public reporting of companies and how do companies address serious topics that could be seen as possible reputational risks. The research questions presented earlier in the introduction section will be answered through the case study.

This thesis is conducted as a case study, which is an empirical study that examines extensively an event and can be conducted either as a single or multiple case study. Case studies are useful when trying to investigate a social phenomenon in its real-world context, in this case to study how public accusations might have affected the social sustainability practices of companies. (Yin 2014) The specific case type of this thesis is a single-case study with multiple embedded units of analysis (Yin 2003). The wider context is the earlier presented lawsuit raised in 2019 and inside of it the embedded units being the seven companies, Apple, Dell, Google, Microsoft, Tesla, Umicore, and Glencore, that were affected by the child labor accusations, each of which reporting practices will be individually analyzed. Apple, Dell, Google, Microsoft, and Tesla were chosen as research subjects as they were directly sued in the lawsuit, but Umicore and Glencore were also included since even though they were not directly sued, they were mentioned in the class-action and the accused child labor was said to happen in their supply chains, which is why it can be seen that they were also affected by the accusations.

This study is conducted as qualitative research that is a research method that is interested in analyzing data that is not in quantitative form, with the intent of creating comprehensive representations of the most important findings, and increasing understanding based on the data (Saldaña 2011).

## 4.2 Research material

The research material consists of publicly available reports from the timespan of three years from 2018 to 2020. All of the materials are publicly available secondary sources. The collected material was selected to gain information about the social sustainability practices of companies and the reaction to stakeholder pressure. The reports that were used are presented in the table (Appendix 1) and categorized by the company and year. It can be seen from the table, the same reports were not examined for every company, due to differences in reporting practices and the same reporting types not being available for every company each year. Overall, there were 40 reports analyzed, with 16 being modern slavery statements, 11 conflict mineral reports, and the rest 13 being companies' own reporting types either specifically on supply chain sustainability, cobalt procurement, or integrated reporting.

Modern slavery statements are publicly available documents where companies present their actions against modern slavery issues such as forced labor, human trafficking, child labor, and what companies are actively doing to tackle the problems. UK Modern slavery act 2015 requires companies that have business operations in the United Kingdom that have a turnover of over £36 million to publish an annual statement on slavery and human trafficking, and specifically what is being done to remove these problems from their supply chains. (GOV.UK 2021) Similar legislation is the California Transparency in Supply Chains Act in 2012 that requires the same from Californian companies conducting retail and manufacturing that have an annual worldwide turnover of over \$100 million. (OAG 2021) There are no legal requirements to what the statement should include, but it is suggested that it could present organizational structure, policies on slavery and human trafficking, due diligence processes, disclosure of most vulnerable parts of the supply chain, and future development areas (GOV.UK 2021).

Conflict minerals reports are required by the 2010 Dodd-frank Act from companies that file reports with the United States Securities and Exchange Commission and use tantalum, tin, gold, or tungsten in their products. Conflict mineral reports should include among other things information regarding due diligence of conflict mineral mining, state its products for instance as “DRC Conflict Free” or “Not Been Found to Be DRC Conflict Free” and include required information such as audit reports to verify the statements. (SEC 2017)

#### 4.3 Analysis categories formed from the material

The analysis method used in the study is qualitative content analysis, which is used to analyze the reports and statements of the chosen companies. Qualitative content analysis is a qualitative research method that, analyses material that is put into a written format such as articles, interviews, reports, and documents, with the aim of gaining a summarized and general picture of the research subject. The research material is thoroughly examined by grouping together relevant findings to create themes and categorize information. (Tuomi & Sarajärvi 2002)

Content analysis can be conducted with the objective of forming a theory from the material, and solely based on the material, with previous theory or research having no significance to the results. A theory-based content analysis on the other hand bases itself on a previous theoretical framework, background, or model, which defines how the study is conducted. The important terms or for example the categories that will be used to analyze the material are already defined in the theory. The objective of this type of study is to test previous knowledge in a new context. It is also possible to conduct a study with a method that is a mix of both of these approaches, that makes observations connected to, but not based strictly only on the theory. In this approach, the theory can be used as an assisting guideline, and for instance, the categories for analysis can be formed from the material, but the theory can be used as a guide in the selection. The goal of this method is not to test the theory, but to find new discourses and viewpoints. (Tuomi & Sarajärvi 2002)

The content analysis was targeted towards sections from the reports that addressed social sustainability in supply chains, child labor, and the mining activities of cobalt. It was also

analyzed if the reports included any direct mentions addressing the lawsuit or statements that could be seen as referring to it. Reports from different years were compared to see if there would be changes visible between reporting on these topics and what sort of development overall could be seen in the data material. It was also examined if there could be some common themes seen between the reporting practices on social sustainability actions of all companies. In this thesis, the categories used for classifying social sustainability actions were modelled from the research data based on the three categories presented in the framework of Yawar and Seuring (2017) (Figure 1). The new categories in Figure 2 were based only on the practices section and did not take into consideration for example the performance outcomes section of the Figure 1. The names of the categories have been changed from strategies to practices, and the supplier development category is changed to collaboration strategies and some new practices were also added to categories. (Figure 2)



*Figure 2.* Social sustainability practices in supply chains. Modelled from Conceptual framework for managing social issues in supply chains by Yawar and Seuring (2017) (+ = altered/changed; \* = inductively added)

## 5. Findings

This section of the paper will present the research findings starting from presenting the most common social sustainability practices found in the statements after which findings from analyzing the research material are presented. The practices are summarized in the Figure 3, with green color in the table indicating that the practice was mentioned in at least one of the company's reports that year, while red indicates that the practice in question was not mentioned.

### 5.1 Social sustainability practices in supply chains

Most often mentioned and extensively reported practices were the ones belonging to the *compliance practices* category (Figure 2). Within this category codes of conduct, standards, and policies, were the most visible social sustainability practices throughout the whole timespan, across all companies and their different reporting formats (Figure 3). Companies report these as being the basis of their social sustainability practices and a way to establish guidelines, values, and requirements for supplier relationships. For example, when addressing child labour companies most commonly refer to their commitment through policies and that it is severely prohibited in the contract policies. Statements such as in Glencore's 2020 Modern slavery statement (pp.1), "We set out our commitment to zero tolerance for modern slavery in our workplaces and supply chains in our Code of Conduct, Supplier Standards and in our Group Human Rights Policy: We do not tolerate child labour...", were common. *Compliance practices* are used as a guarantee that social sustainability is obtained the same way across all of their operations. Supplier codes of conduct are mentioned as being an integral part of supplier contracts and a precondition for establishing a relationship. The companies rely on binding contracts and expect their suppliers to extend these policies to their own suppliers and sub-suppliers. For instance, Microsoft in its 2020 Modern slavery statement (pp.22) mentions that "Our directly contracted suppliers contractually agree to incorporating Responsible Sourcing of Raw Materials Policy requirements into their contracts with their sub-tier suppliers". Operations

against the codes of conduct, policies, or standards in most cases are entitled to the termination of supplier relationships.

Companies commonly mentioned their policies and standards being developed in accordance with, or to align with, the guidelines of different organizations. Apple, Glencore, Umicore, Microsoft, and Dell for instance mention their policies relating among others to the United Nations Guiding Principles on Business and Human Rights, ILO's labor standards, and the Responsible Business Alliance's code of conduct. When referring to sustainability in the sourcing of minerals and cobalt, all the examined companies mention the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, as a basis for their policies and practices addressing the topic.

Belonging also to the *compliance practices* category and mentioned in the reports of every company, were actions to ensure suppliers' compliance and commitment to act according to the company policies through different auditing and monitoring activities. Auditing was reported as being conducted through own internal teams established by the company or external third parties. All the companies report using the Responsible mineral initiatives (RMI) audit program that inspects how suppliers comply with OECD Guidance-aligned standards. Auditing was targeted towards finding violations against company policies, and especially to concern suppliers that were prone to human rights risks. Undesirable findings from audits were reported to lead to corrective actions and even to terminating the supplier relationship, which could also be caused by refusal to take part in auditing measures. Google's 2019 Responsible supply chain report (pp.15) for example states, when referring to auditing according to their supplier contracts, that "We reserve the right to audit any facility where modern slavery is reported and to terminate our agreements for any violation of these policies". Additionally, companies periodically collect data from suppliers to monitor their performance through self-assessments, on-site interviews, and surveys. Companies also have established practices to monitor internally, that include whistleblowing and helpline channels for employees and people working in supply chains to report anonymously on unethical behaviour or non-compliance to company policies.

The category with the second-most reported practices was the *collaborative practices* category. All companies reported using some type of voluntary or obligatory training programs, targeted either to their own direct employees or to their suppliers and partners. The purpose of these programs was to educate and raise awareness on issues of social sustainability and modern slavery and develop further the own capabilities of suppliers. For example, Tesla's 2020 Modern slavery statement (pp.3) mentions that "...employees who work with suppliers are trained on issues of human trafficking, slavery and child labour, particularly with respect to mitigating risks within our supply chain.". The training also had the aim of ensuring all parties possess sufficient knowledge of company codes of conduct and values. The training could be conducted through in-person or online training courses and workshops.

Along with supplier partnerships, all companies reported having collaborative relationships with different organizations, associations, or being members of different alliances that operate in the area of social sustainability. Google, Microsoft, Umicore, Tesla, and Glencore all belong to the Global battery alliance, Tesla and Glencore are members of the Fair cobalt alliance, and all of the companies mention working with the Responsible business alliance (RBA) and Responsible minerals initiative (RMI). Companies also reported taking part in community impact programs that do not directly have anything to do with the business itself but aid the communities in areas they operate. Umicore introduce having a long-term partnership with UNICEF to help children access education in impoverished communities. Google and Apple, report collaborating with non-profit organization PACT that operates to eliminate child labour in cobalt mines of DRC and Dell with IMPACT to aid women in ASM communities. Many companies also report donating to charities and organizations that work in the area of modern slavery and social sustainability, for example, Google donates to organizations on the Global modern slavery list.

Most rarely mentioned practices were a part of the *communication practices* category. All companies take part in sustainability reporting practices, but as previously mentioned, all companies utilize varied and separate reporting forms to address different areas of sustainability in their supply chains. All companies that publish modern slavery reports mention their statements being reported in accordance with the modern slavery legislation of the UK Modern slavery act 2015, California Transparency in Supply Chains Act, or the

Australian Modern Slavery Act 2018. The conflict minerals reports are also mentioned to be published in accordance with the Securities Exchange Act of 1934.

Companies also mention requiring certain certificates from their suppliers and partners. Google, Tesla, and Umicore disclose only using smelters and refineries that have been certified by responsible mineral initiative (RMI) as conflict-free. Dell alongside Glencore reported also using smelters and refiners that have been certified by third-party to ensure their sustainability. Dell had supported its suppliers in acquiring certification to develop their operations. Alongside third-party certification, ISO certificates were mentioned in the reports to be required from suppliers. Tesla also reported on requiring all of its Tier 1 material suppliers to be certified against social sustainability issues.

2018	Apple	Dell	Glencore	Google	Microsoft	Tesla	Umicore
Codes of conduct							
Standards/policies							
Audits/Monitoring							
Whistleblowing channels							
Training							
Collaborating with organizations/NGOs							
Funding							
Certifying							
Reporting							

2019	Apple	Dell	Glencore	Google	Microsoft	Tesla	Umicore
Codes of conduct							
Standards/policies							
Audits/Monitoring							
Whistleblowing channels							
Training							
Collaborating with organizations/NGOs							
Funding							
Certifying							
Reporting							

2020	Apple	Dell	Glencore	Google	Microsoft	Tesla	Umicore
Codes of conduct							
Standards/policies							
Audits/Monitoring							
Whistleblowing channels							
Training							
Collaborating with organizations/NGOs							
Funding							
Certifying							
Reporting							

*Figure 3.* Social sustainability practices mentioned in the reports of companies divided by years

## 5.2 Addressing the public accusations

When examining all of the companies' reports, Umicore stands out as being the only one that directly addresses the 2019 lawsuit by the International Rights Advocates, even though they were not one of the directly sued companies. Their 2019 Due diligence Compliance Report Cobalt Procurement publication mentions in the risk identification and assessment section, that the company has been mentioned in a lawsuit regarding child labor and mining, which has led to attention from the media and grievances from RMI. The report also presents that the follow-up action has been done through contacting the supplier and performing third-party audits that found no evidence of ASM or child labor, which is why they decided to continue the relationship, as the lawsuit is still pending. No other of the seven companies openly mentioned the lawsuit in their reports.

Even though Umicore is the only company to openly disclose the 2019 lawsuit, there can be changes noted in the reports of the other companies that could be seen as a consequence of the lawsuit and the resulting stakeholder pressure, and as an attempt to avoid reputational damage. Apple added a paragraph to its 2019 and 2020 modern slavery statements that stated that Apple "takes third party allegations concerning our suppliers very seriously" and that these allegations can for example come from civil society organizations, news outlets, or people in the supply chain. The statement assures that these allegations are thoroughly

investigated and given an appropriate response. The 2019 statement also had added a new “materials due diligence” section, that stated that Apple does not directly purchase raw materials from mines and that the responsible sourcing standards had been strengthened to apply more effectively to all levels of suppliers. Apple also reported on removing 18 smelters from its suppliers, due to not adhering to the requirements of sustainable mineral sourcing.

Similarly in Tesla’s 2020 modern slavery report, there is an added statement about Tesla having not found any evidence of causing, contributing to, or being linked to modern slavery, child labour or human trafficking in their supply chain, and that there is a possibility Tesla is indirectly exposed to modern slavery risks due to “due to the unavoidable realities of our global supply chain”. In the 2019 conflict minerals report, Tesla added a new addition about not tolerating the use of child labour, and that there has not been any evidence found of human rights violations in their supply chain. Tesla also admits since they do not have a direct influence on suppliers many tiers removed, they focus on emphasizing to their suppliers the importance of their participation in ensuring that they pass their sustainability requirements on to their own suppliers.

### 5.3 Analysis of the material

Aligning with the previous research by Schaper and Pollach (2021), the overall contents of the modern slavery statements increased as the years went by. This can be seen in the modern slavery statement of companies that publish them, Google and Tesla were the only companies whose statements increased a maximum of 2 pages, as with Apple, Glencore, and Microsoft the increase was around 10 pages, during the three-year time period. The same could be observed also in the case of conflict mineral reports and other types of reporting by companies.

In the case of Tesla, it is notable that after 2019, cobalt is not mentioned in any way in the conflict minerals reports. In 2018 there is a separate section titled “cobalt” that addresses that Tesla is aware of the issues linked to ASM cobalt from DRC but does not directly deny the possibility of its being in the supply chain. The report also assures that the amount of cobalt Tesla’s products entail is minimal. In 2019 this section is reduced to a short passage

in the footnote that addresses that Tesla recognises the economic value of mining in DRC to its people and that in the future reporting on cobalt will be relocated to the impact reports, which is why it does not appear in reports in the later years.

In Tesla's modern slavery statements, the mentions of cobalt increased year by year starting from 2018, when there were no mentions, to 2020 where there is an added statement addressing that Tesla's products have been mentioned in a list of products that might be linked to forced or child labour due to containing cobalt. Tesla impact reports on the other hand discuss cobalt clearly since the beginning in a distinct section. In the 2018 report, it is stated clearly that Tesla does not use ASM cobalt, whereas in the impact reports of following years this is not mentioned anymore, but rather been replaced with statements of recognizing the economic importance of mining to the local communities and supporting the positive development and professionalization of ASM communities.

Microsoft modern slavery statements do not go into detail on the significance of cobalt to the company's supply chains or the problems it entails, only referring to it as a risk material that requires attention in the future and that Microsoft is part of programs striving to remove child labour from cobalt supply chains. This way of reporting around cobalt does not notably change in modern slavery statements during the three years. Similarly, to the reports of Tesla, it is brought up as a challenge that many mineral suppliers are multiple tiers away, which is why in the future ensuring that suppliers extend these policies to their suppliers is presented as an aim. Their 2019 modern slavery statement also acknowledges the same accusation as Tesla of being connected to the child and forced labour by their products. The 2019 statement also more extensively addresses the topic of child labour in the mineral supply chains and artisanal mines of DRC, than the year before. In the 2020 modern slavery statement however, there were no references to DRC or artisanal mining. Microsoft's 2018 and 2019 conflict minerals reports do not really differ in the contents from modern slavery statements in their social sustainability practices towards mineral mining and child labour, but the 2020 version does not mention the word "child" even once.

As mentioned previously the conflict minerals reports of Dell do not include any mentions of cobalt or child labour, likewise statement against slavery and human trafficking does not

include any mentions of child labour, cobalt, DRC or mining, but rather the general actions and policies that the company uses to address social sustainability. The statement does not go into detail on the current risk environment or challenges the company is facing regarding social sustainability. The 2018 Supply chain sustainability progress instead presents a framework regarding sustainable cobalt sourcing and being part of a program for assisting women in ASM communities in DRC. Dell is also very clear that it does not source minerals straight from mines or smelters and that artisanal mines are not direct suppliers of the company, although the use of ASM cobalt is not denied. Dell also expresses being committed to supporting peaceful economic growth in regions that practice responsible mining.

Google's modern slavery statements are open to informing about partnerships with NGOs on eliminating child labour in cobalt mines of DRC but do not mention how that is relevant to Google's business operations or what is Google's relationship with mineral mining. All Google's modern slavery statements include a "responsible mining" section that delves into programs the company is part of to remove the problem of child labour in cobalt mines of DRC, however in the 2020 version the references to cobalt are removed.

Glencore's reports after 2018 are the first that properly address cobalt mining and included more in-depth statements about the practices on the topic. The 2019 report is open to admitting that there are concerns about child labour and working conditions in ASM operations in conflict-affected and high-risk areas such as the Democratic Republic of the Congo, but the reports are mostly focused on the programs the company is being part of to address responsible mineral mining. In the earlier reports, ASM mining and purchasing of cobalt is presented as a modern slavery risk in the company's operations. In the later report of 2020, the viewpoint on the topic has shifted and it is expressed that transparently and responsibly produced ASM cobalt could have an important part in the company's supply chains. In 2020 Glencore is also more open to recognising the specific supply chain risks for cobalt and presents more extensively their due diligence processes.

Umicore publishes a separate report on its due diligence regarding cobalt procurement where it goes into detail about the processes the company takes, but the reports do not notably differ in contents in different years. The 2019 integrated report mentions ASM cobalt for the first

time and the risks associated with it but denies its involvement in the companies supply chain. The 2019 report also introduces a “sustainable cobalt” section that section does not go into detail on the actual sustainable policies or practices but rather states the company’s commitment to ethical sourcing. This section is nearly identical to the one in the 2020 report.

## 6. Discussions and limitations

Like mentioned earlier in the thesis by Yawar and Seuring (2017) and companies utilize reporting to address their stakeholders' concerns and expectations. The reporting is done to address multiple different types of stakeholder groups, which affects what and how the information is disclosed. In the case of the public accusation presented in the thesis, one of the groups that need to be addressed is the general public, who may not be the regular expected audience for companies reporting. This could be why the disclosures around the lawsuit may rather be conducted through other communication channels such as webpages, social media, or interviews and not in the company sustainability reports. Since the lawsuit is still pending, like mentioned in the report of Umicore, companies might want to wait until the final verdict is given, so that no rash decisions that could cause harm to the company are made. Companies also might not want to give any attention to the negative topic so that they would not be forced to be accountable, which was also pointed out in the research by Meehan & Pinnington (2021).

It also needs to be noted that the companies analyzed in the thesis are one of the largest corporations in the world, that have myriads of different operations in different parts of the globe, which is why trying to fit reporting on them all on simple statements and reports could be a challenge. Companies might also be targeted with multiple different accusations concerning their operations throughout the year, so addressing an individual one might not be strategically important. Cobalt also plays a different role in different companies' business operations, for example, it has a bigger economical meaning to the operations and supply chains of Glencore and Umicore that base their business around cobalt mining and refining operations, whereas for the other companies' cobalt is only a component of some of their products. Tesla for example was very vocal about how much cobalt their products entail and how it is not an essential mineral to the company.

The reporting practices around cobalt appeared varied between the companies but also within reporting types and years. Cobalt is not officially classified as a conflict mineral which are metals like tin, tantalum, tungsten, and gold (3TG) mined with the intent of funding armed groups in conflict areas (European Commission 2020). This can be seen as

the reason why Dell does not mention cobalt in any way in their conflict minerals reporting. However, possibly due to the publicly known ethical issues surrounding cobalt production, Apple, Google, Microsoft, and Tesla in turn have decided to include it in their reports.

In general, after the 2019 lawsuit, the mentions of cobalt increased, which could be due to the public knowledge increasing around the connection of these companies to cobalt and its ethical issues and expecting the companies to address the topic in some manner. The possibility of unethical cobalt being in technology products and the topic of ASM mining in DRC are so widely investigated and discussed that companies feel that there are more disadvantages in not commenting on the topic.

One change that could be clearly observed was how reports discuss the topic of ASM. In the earlier years, the focus was more on reassuring and asserting that there is no ASM mined cobalt or traces of it in the supply chains or products, whereas in the more recent reports there are statements recognizing the economic importance of ASM to local communities of DRC and about developing the communities around ASM. Some companies even expressed the possibility of taking ASM cobalt as a part of supply chains. This could be seen as the result of, the discussion around ASM changing into more accepting and understanding of its importance in the development of local communities, and as mentioned earlier in the thesis the local government's actions to formalize its role in supply chains.

In this thesis, it was investigated how stakeholder pressures affect the social sustainability practices in supply chains through analyzing the public reporting of companies with the timespan of three years. The study was conducted as a case study focusing on seven companies affected by accusations made in a public lawsuit about the use of child labor in cobalt supply chains.

The most frequently mentioned practices found from the research material were practices belonging to the compliance practices category, which was in accordance with the study by Yawar and Seuring (2017). There were however no notable changes observed in the practices in the timeframe of the study, even though the reports increased in contents following with the research of Schaper and Pollach (2021). Generally, as time and

stakeholder pressure increased the mentions addressing cobalt increased, which can be seen to line with the research of De Villiers et al. (2014), in that when faced with a legitimacy threat the number of reported disclosures increased. The public lawsuit itself was only mentioned in the reports of Umicore, but there was a slight increase in the statements that could be seen as a result of increased stakeholder pressure and aim to avoid reputational risks. The study findings also aligned with Wan Ahmad et al (2016) in that the most prevalent mentions in the reports were statements presenting commitment, and recognition of problems while staying away from reporting on negative incidents.

The results of this study can show how effective are public allegations in getting large corporations to act more ethically in a short amount of time. Stakeholder pressure is also found to have an effect on companies taking part in social sustainability. The study also touches on how stronger legal requirements on the contents of sustainability reports of companies could possibly increase the motive for the adoption of social sustainability practices in supply chains.

This study however includes limitations that hinder the possibility to generalize its results. First is the shortness of the timespan, which only encompasses three years, which does not give a comprehensive picture of the reporting practices of the companies. The companies also operate in different areas of business and utilize different reporting formats and conventions which complicates comparing them to each other. The sources were also all secondary sources, which is why the information might not be specific. In the future, reporting could be investigated with a longer time span and with a wider sample of reports. It would also be interesting to look into the topic again when the final verdict of the lawsuit has been given and see if the companies' statements are different.

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## Appendices

### Appendix 1. The analysed reports

	2018	2019	2020
Apple	Modern slavery statement	Modern slavery statement	Modern slavery statement, Conflict minerals report
Dell	Supply chain sustainability progress	Statement against slavery and human trafficking	Conflict minerals report
Glencore	Modern slavery statement	Modern slavery statement	Modern slavery statement
Google	Modern slavery statement, Conflict minerals report, Responsible supply chain report	Modern slavery statement, Conflict minerals report, Responsible supply chain report	Modern slavery statement, Conflict minerals report, Supplier responsibility report
Microsoft	Modern slavery statement, Conflict minerals report	Modern slavery statement, Conflict minerals report	Modern slavery statement, Conflict minerals report
Tesla	Modern slavery statement, Conflict minerals report, Impact report	Modern slavery statement, Conflict minerals report, Impact report	Modern slavery statement, Conflict minerals report, Impact report
Umicore	Integrated annual report, Due diligence compliance report cobalt procurement	Integrated annual report, Due diligence compliance report cobalt procurement	Integrated annual report, Due diligence compliance report cobalt procurement