

**SUSTAINABILITY AND SUSTAINABILITY  
COMMUNICATION OF PHARMA INDUSTRY  
COMPANIES LOCATED IN FINLAND**

**Jyväskylä University  
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**Master's Thesis**

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## ABSTRACT

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<p>Sustainability is an important part of business environment as responsible behaviour is expected from companies in the dimensions of environment, social and business. Even though there are no commonly accepted definition for the phenomenon, companies are involved to it and taking actions to meet the expectations of stakeholders. Strategic communication aims to maintain the healthy reputation of the organisation in the eyes of the public and to advance the mission of the organisation. Through strategic communication on sustainability related issues, companies might obtain the benefits from their responsible behaviour and to enhance the relationship and trust with stakeholder groups.</p> <p>This research studies the sustainability of the pharmaceutical companies in Finland and how strategic communication on sustainability issues could help to achieve the sustainability vision of the industry. Pharmaceutical industry is unique global business environment and an integral part of health of the societies, so it provides an interesting research setting from the perspective of sustainability and stakeholder expectations. This research is conducted in qualitative research method as the aim is to understand these phenomena more comprehensive. The data was gathered in 7 individual interviews of the representatives of the local pharma companies. The data was analysed by utilising thematic method.</p> <p>By the results of this research, the sustainability of pharmaceutical companies in Finland seems to be action-oriented projects, focusing on the dimensions of environment and social. The maturity of the sustainability strategies varied a lot among the companies. The regulation frames the industry, which limits the possibilities to negotiate and interact with the stakeholders. Due the regulation and the need to enhance the reputation of the industry, the strategic approach to sustainability and to communication is required.</p>	
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## TIIVISTELMÄ

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<p>Yritysvastuu on keskeinen osa yritysten toimintaa ja vastuullisuutta odotetaan ympäristöön, sosiaaliseen vastuuseen ja liiketoimintaan liittyvissä kysymyksissä. Vaikka yritysvastuullisuuden ilmiölle ei ole olemassa tarkkaan määriteltyä viitekehystä, useat yritykset ovat sitoutuneita vastuullisuuteen ja tekevät toimia sidosryhmien asettamien odotusten mukaan. Strateginen viestintä pyrkii säilyttämään organisaation hyvän maineen yleisöjen silmissä ja edistämään organisaation mission toteutumista. Strateginen viestintä yritysvastuun teemoista voi auttaa yrityksiä saamaan hyötyjä vastuullisesta käytöksestä ja rakentamaan suhdetta ja luottamusta tärkeimpien sidosryhmien kanssa.</p> <p>Tämä tutkimus kuvailee mitä on yritysvastuu Suomessa toimivien lääketieteellisuuden yritysten kontekstissa ja kuinka strateginen viestintä voisi auttaa yrityksiä saavuttamaan alan vastuullisuusvision. Lääketeollisuus on ainutlaatuinen globaali toimiympäristö ja keskeinen toimija yhteiskunnan terveyden näkökulmasta, joten se tarjoaa mielenkiintoisen tutkimusasetelman yhteiskuntavastuun ja sidosryhmien odotusten näkökulmasta. Tämä tutkimus toteutettiin laadullisena tutkimuksena koska tarkoituksena oli ymmärtää yritysvastuun ja strategisen viestinnän ilmiöitä paremmin. Tutkimusaineisto kerättiin seitsemässä lääkeyritysten edustajien yksilöhaastattelussa. Aineisto analysoitiin hyödyntämällä temaattista lähestymistapaa.</p> <p>Tutkimuksen tulosten perusteella lääketieteellisuuden yritysten yritysvastuu näyttäytyy projekteina erityisesti ympäristö ja sosiaalisen vastuun alueilla. Yritysvastuustrategioiden status vaihteli yritysten välillä. Regulaatio kehystää yritysten toimintaa sekä rajoittaa mahdollisuuksia vuorovaikuttaa sidosryhmien kanssa. Sääntelyn ja alan maineen parantamistarpeen vuoksi strategista lähestymistapaa kestävään kehitykseen ja viestintään tarvitaan.</p>	
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# 1 INTRODUCTION

Social and environmental responsibility is a core business issue in corporations and almost all decisions in business are affected by social and environmental dimensions (Montiel, 2008). In academics and business, there are several different concepts used to describe the relationship between business, society and environment (Ihlen et al., 2011). Despite of the importance of the phenomenon, there are no commonly accepted definition or conceptualisation for the responsible behaviour of the organisations even though the intention is same: to balance economic responsibilities with social and environmental ones (Montiel, 2008).

To obtain the returns of responsible behaviour and to understand the obligations from the stakeholders, the communicational activities are required in order to negotiate the relationship between the organisation and the public at large (Dhanesh, Ganga S., 2022, p. 320). The concept of licence to operate is associated with responsible behaviour of organisations and with more broaden concept of legitimacy. Legitimacy can be seen as commonly shared meaning between the organisation and its publics. (Ihlen, Øyvind & Verhoeven, Piet, 2015, pp. 131-132.) Through the communication processes the organisations maintain their intangible assets and the relationships with the stakeholders (Luoma-aho, Vilma, 2018, pp. 202-205).

This research explores the phenomenon of responsible behaviour of companies in the context of pharmaceutical industry and how the companies use communication to obtain the inputs of responsible behaviour. Pharmaceutical industry is unique as it operates directly with health of the societies, so the expectation to the responsible behaviour is emphasised (Schneider et al., 2010, p. 421). The industry faces exceptional set of responsibility issues related to the



dimensions of environment, social and business. In this research, the context is set on the research based pharmaceutical companies operating in Finland.

As the aim is to understand the phenomenon of sustainability and the role of communication in order to achieve the sustainability vision, following research questions was formed:

RQ1: What is sustainability of pharmaceutical industry companies located in Finland?

RQ2: How strategic communication on could support to achieve the sustainability vision of the industry?

By utilizing qualitative research method, the aim was to increase the understanding of the phenomena in given context. The data was gathered through individual interviews of representative of the pharmaceutical companies operating Finland.

## **1.1 Structure of the research**

This research is structured on 5 main chapters. After the introduction the theoretical foundation of the research is presented in the chapters of 2 and 3. The chapter 2 describes the academic understanding related to the responsible behaviour of the organisations and chapter 3 describes how the discipline of the communication is understood in this research. Chapter 4 gives an eyesight for the business environment of the pharmaceutical industry and the special features on it.

After presenting theoretical disciplines of the research, the rest of the chapters describe the research process more detailed. On chapter 4 the methodology and research process are presented. After that, the chapter 5 presents the results of the research. The chapter 6 includes discussion of the results and evaluation of the research process.

## 2 CORPORATE RESPONSIBILITY RELATED CONCEPTS

The chapter shortly presents some of the concepts related to responsible behaviour of organisations. As there are no common consensus of the definition in the academics, the concepts of CSR and the sustainability are presented, as these are widely used in the literature and the practise. At final, the relationship of these two terms is discussed in the light of academic understanding.

### 2.1 Corporate social responsibility

Ihlen, Bartlett and May (2011) define the origins of current responsibility thinking into the 1960's but in the late 1990's globalisation brought the business responsibility in the spotlight. On the other hand, Coombs and Holladay (2011) define the origins of today's CSR phenomenon to the 1970's and to the Sullivan Principles, which was the key milestone to the end of the apartheid society, even though they admit that it was not the first CSR action seen in the business world. The findings of Montiel (2008) support the view of Coombs and Holladay, as he notice that CSR articles began appearing in management journals in the 1970's. Coombs and Holladay (2011) emphasise the importance of actions related to the Sullivan Principles which stands for the high pressure from the society towards the corporations to change their behaviour that does not meet the expectations of responsible behaviour.

It is commonly agreed that the phenomenon of CSR is real and old, but as Ihlen et al (2011) summarises there is no dominant paradigm or commonly agreed definition for CSR. Coombs and Holladay (2011) explains the lack of the one accepted conceptualization by great situational variation and they are viewing CSR more like a *philosophy* and a *process* which aims to change the organisational behaviour and guides corporations to allocate their resources to

improve social and natural environments. Montiel (2008) reviewed a material gathered from management journals between 1970 to 2005 and found that the most common definition used for CSR was the Carroll's (1979) as a follow:

“The social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organisations at a given point in time” (p.500).

He also found that the publications of early 1970 did not define CSR specifically but the change was notable in later publications as the need for definition came obvious. As a conclusion, Montiel (2008) states that the variation of the definitions reflects the situational related nature of CSR which is in line with the view of Coombs and Holladay (2011).

The European commission (EC) defines CSR as follows:

“A concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis” (European Commission, (2011)).

Coombs and Holladay (2011) endorse the idea of strategic CSR which is in alignment with the definition of European Council. The strategic CSR emphasise the idea of the CSR as an action that is driven by the purpose and the vision of the organisation, and as an intention that is beyond the legal requirements. On the strategic CSR, Coombs and Holladay (2011) underline voluntary ethical and discretionary dimensions without performance goals, and the intentional to meet expectations of the stakeholders.

Ihlen et al (2011) argued that CSR is an activity of organisation where it attempts to negotiate its relationship to stakeholders and the public at large. They emphasised that at least CSR focuses to handle economic, social and environmental issues on organisation's environment. However, Książak and Fischbach (2018) note that organisations may priorities these dimensions differently in different countries. They underline that fight against global warming is highly prioritised by organisations in all sizes as well as actions against corruption. According to them difference can be seen on how organisations focus on social dimension e.g., through workplace safety or gender-gap on salary or focusing on set core labour standards. They concluded that in the end this leads the organisations to conversation with stakeholders involved in and promotes communication with society at large.

Książak and Fischbach (2018) argued that the main driver for CSR actions of corporations is increased pressure from nongovernmental organisations (NGO's) and general public in common, which is in line with the view of Coombs and Holladay (2011) mentioned earlier. Beside this, Książak and Fischbach (2018) underline the idea of social contract. By this they mean that corporations as well as society in large should respect the law, act responsibly and act for favour of

general good. In this perspective corporations and society are equal partners with rights and responsibilities for each other's.

## 2.2 Corporate sustainability

Roosa (2008) argues that the overall sustainability on Earth in the timeline of human experience may be difficult or even impossible to achieve. Nevertheless, he underlines the importance of sustainable development and its problem-solving implications in society as the presence of sustainability increasingly comes to reality of organisations through different policies and agendas. Montiel (2008) argues that the common interest toward the phenomenon of sustainability rose after the publication of the World Commission on Environment and Development (WCED) report called "Our Common future" in 1987. The report is also known as Brundtland Report and the idea of it is to cover all entities in society including politics, education and NGOs besides with the business environment (Signitzer & Prexl, 2007). According to Montiel (2008) the report popularised the term *sustainable development* and gave it a commonly accepted definition as a follow

"Meeting the present needs without compromising the ability of future generations to meet their own needs" (WCED, 1987, p. 43).

Later in the 1990, Elkington presented the idea of *Tribble Bottom Line* (TBL), which integrates the three dimension of sustainability - economic, environmental and social - together and allows the development and measuring of the global economy in the sustainability issues (Milanesi et al., 2020, p. 262).

Signitzer and Prexl (2007) defined the *corporate sustainability* as a term to cover sustainability actions and management processes of corporations. They admitted the same fact as Roosa (2008) about the impossible nature of sustainability, but instead the corporate sustainability is founded on processes of permanent improvement. Signitzer and Prexl (2007) described the corporate sustainability as an umbrella term, which origins from sustainable development and which covers several other concepts such as CSR. The Figure 1 presents the view of Signitzer and Prexl (2007). The findings of Montiel (2008) shows that the corporate sustainability began appearing in management journals in the 1990s and it was complemented with an idea of meeting simultaneously satisfying environmental, social and economic dimensions. Also Signitzer and Prexl (2007) emphasised the importance of balance between these three dimensions' goals and values.

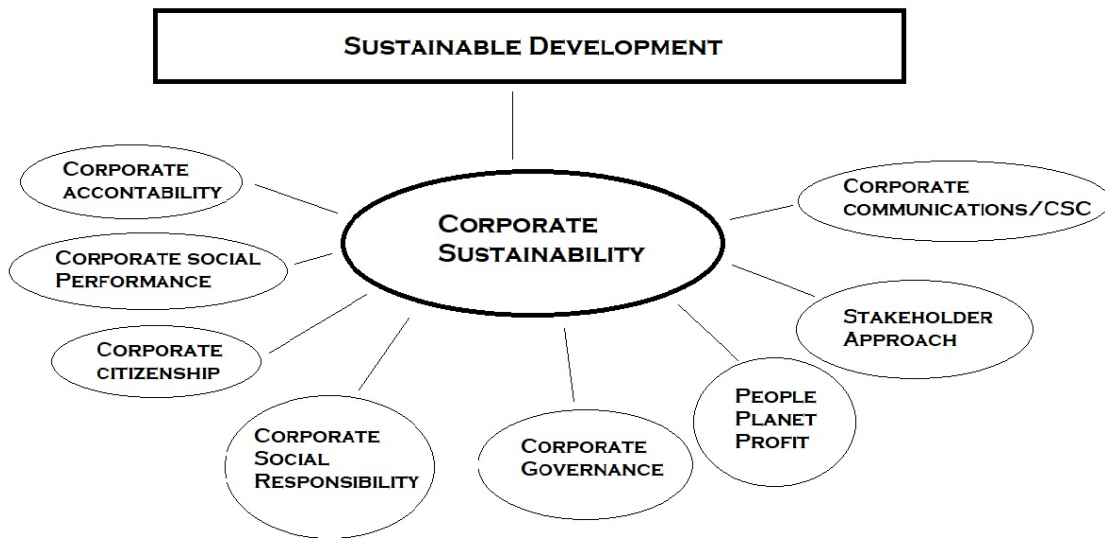


FIGURE 1 Corporate sustainability according to Signitzer and Prexl (2007).

## 2.3 Summary of the phenomenon

In academics, CSR has driven as a popular definition even though several other definitions, such as sustainability, corporate social advocacy (CSA), environment, social and governance (ESG), has arose among side in the discussions (Dhanesh, Ganga S., 2022, p. 320). Especially the rise of the concepts of corporate sustainability and sustainable development has gained popular in business and blurred the line between social and environmental dimensions (Verk et al., 2021, p. 510).

Montiel (2008) emphasises that academics suffer from the lack of common definition and commonly accepted conceptualisation for the terms of CSR and corporate sustainability. He points out a historical difference in classification of the terms as social issues has been studied in CSR and the environmental issues has been in the field of environmental management (EM) research. This explains the association of sustainability and TBL especially into environmental responsibilities of the corporations. On the other hand, the CSR has included itself the elements from TBL as well, covering all the dimensions from social, environmental and economical dimensions. (Dhanesh, Ganga S., 2022, p. 320.) Montiel (2008) underlines that both concepts, CSR and corporate sustainability, aims to the same outcome: *to balance economic responsibilities with social and environmental ones* (p. 246). The view is supported by several literature reviews, which shows that the CSR and sustainability are often used as a synonyms in academics as well as in practice (Verk et al., 2021, p. 504).

The idea of “*doing well by doing good*” encapsulates the strategic approach to behave in responsible way in business environment regardless of what word is chosen to use. In addition, the companies need to communicate about their engagement to responsible behaviour to their stakeholders to increase the awareness, influence on attitudes and behaviours and in the end to obtain a variety of returns from inputs of responsible behaviour. (Dhanesh, Ganga S., 2022, p. 319).

In this research the term “*sustainability*” is used to describe the goal-oriented activities of companies in the dimensions of environmental, social and economic dimensions.

### **3 STRATEGIC COMMUNICATIONS**

This chapter provides a definition for the strategic communication and for related concepts of legitimacy, trust and reputation. In the end, the chapter presents further information on communication of CSR and sustainability.

#### **3.1 Defining the strategic communications**

Strategic communication has a roots in several different academics fields and approaches (Sara LaBelle & Jennifer H. Waldeck, 2020, p. 28). Strategic communication can be viewed as an umbrella concept covering several goal-oriented communication activities and the emphasis of the phenomenon may vary. In this research, the strategic communication is approached from “the European perspective” which defines the phenomenon as a managerial issue for an integrated communication actions of all kind of organisations (Holtzhausen & Zerfass, 2015, p. 3).

To understand the phenomenon of strategic communication, some of related definitions need to be clarify. The definition of the organisational communication includes the communication that takes place inside of the organisation and on the other hand, how the communication creates and maintains the organisations (Sara LaBelle & Jennifer H. Waldeck, 2020, p. 28). The stakeholders are defined to be individuals or groups of people who are affected by organisation or have the ability to affect the organisation (Phillips & Freeman, 2003).

If the organisational communication is the foundation for existence of organisations, the approach of strategic communication defined by Hallahan et al (2007) includes the intentional dimension on it:

“In its broadest sense, (as) communicating purposefully to advance the organization’s mission” (p. 4).

In more broaden sense the strategic communication can be seen as a holistic way to communicate organisational purpose, mission and goals to different stakeholder groups and engaging them to it (Sara LaBelle & Jennifer H. Waldeck, 2020, pp. 28–30). One of the main goals for strategic communication is to maintain healthy reputation of the communicative organisation in the public sphere (Holtzhausen & Zerfass, 2015, p. 5).

Hallahan et al. (2007) describes the relationship of the organisational strategy and strategic communication as an interrelated process as the strategic communication aims to implement and negotiate the strategy of organisation through the processes of communication with relevant stakeholder groups. However, it is worth of underline that the processes do not necessarily mean to be manipulative - being inclusive and collaborative is found to be more effective to engage stakeholders. In the organisational environment, the stakeholder interaction and communication are segmented under different units such as human resources, marketing, public relations and so forth, the segregation may lead to the fragmented communication. To avoid this, the approach of strategic communication aims to avoid fragmentation through holistic stakeholder-oriented approach to communication instead of unit or business-oriented approach. (Holtzhausen & Zerfass, 2015, p. 10.)

Even though there are several concepts to define the management of communication, it can be interpreted by as a follows:

“Steering and shaping communication activities and processes that affect value creation in organisational contexts by means of planning, organising, leading and control” (Zerfass, Ansgar & Link, Jeanne, 2022, p. 238).

In management literature, strategic and operational dimensions can be identified as independent phenomena. Strategic approach is referred to aim to sustain success or survival of the organisation and the operational approach refers to actions that make issue successful, profitable, or acceptable in the light of daily practices. Strategic approach is more holistic, and the operational approach is more about the tactics that can be copied. (Zerfass, Ansgar & Link, Jeanne, 2022, p. 238.).

### **3.2 Legitimacy**

The nature and the position of the modern organisations is an social entity that is expected to participate and engage to the public issues and debates as an equal part of the society (Hallahan et al., 2007, p. 27). This requires taking a concern for



the sociological and culturally oriented issues, as the aim is to create favourable position for the organisation in the relation to the public arenas or to the society at large. The relationship between society and organisational communications has long traditions as a part of the discipline of public relations and the connection with discipline of strategic communication is therefore obvious. (Ihlen, Øyvind & Verhoeven, Piet, 2015, pp. 127–128.) There are several different research domains and approaches to describe the societal and cultural dimensions as well as the discipline of public relations. Therefore, in this research it is enough to summary that via communication processes it is possible to form the relations between actors who are involved in the same public arena.

Certain abstract concepts such as legitimacy, are structured by knowledge and it structures the knowledge – this reflects the importance of the communication in its most fundamental form. There are several different approaches and definitions to the phenomenon of the legitimacy. In short, the legitimacy can be viewed to be based on the acceptance from the surrounding environment, justified of being exist and on more wider perspective, the legitimacy can be seen as the commonly shared meanings between organisation and it's publics. "*Licence to operate*" is associated with the concept of the legitimacy and it appears commonly with the concept of CSR, as the "licence" is received from the society and through communicational processes. Indeed, the increase of interest to corporate responsible behaviour can be seen as an answer to the stakeholders demand for legitimate exist of the organisations. (Ihlen, Øyvind & Verhoeven, Piet, 2015, p. 131.)

It is no clear whether the approach to the legitimacy is the goal itself or is it a way to conduct the goals of the organisation. However, from perspective of social theory it is clear, that the opinion of the public defines whether the organisation receive the licence to operate or not. This underlines the importance of the strategic approach to the communication as the aim is to co-create common meanings with public and the organisation by negotiating of knowledge and behaviour. (Ihlen, Øyvind & Verhoeven, Piet, 2015, p. 132.)

### **3.3 Concepts of trust and reputation**

The social theory has been also used to interpret the concept of the trust in the discipline of the communications. Stakeholder trust toward organisation can be seen as an interrelated phenomenon to the legitimacy of the organisation. (Ihlen, Øyvind & Verhoeven, Piet, 2015, p. 132.) The theory of social capital of political scientist Robert Putnam has been implemented into the field of communication sciences to explain the stakeholder trust to organisations.

Putnam proposes that the success of societies dependents on the long-term collaboration among the individuals on in it:

“Only repeated, long-term relations are able to generate the cohesion that brings societal benefits” (Luoma-aho, Vilma, 2018, p. 195).

The social capital of the organisations is proposed to be intangible asset that creates connections between stakeholders and the organisation. Concepts of trust and reputation reflects the experiences of the stakeholders and express the social capital of the organisation in the operational form. The reputation can be seen as a reflect of the past stories told about the organisations as the trust reflects the future expectations of the mutual relationship. Both concepts are formed in the interaction with stakeholders and the communication is way to shape and understand the mutual relationship. As reputation and trust is formed and shaped by the experiences and expectations of the stakeholders, the nature of these processes is interrelated. (Luoma-aho, Vilma, 2018, pp. 202–205.) Figure 2 presents simplified continuum of the processes that take place in forming trust and reputation of organisation among its stakeholders.

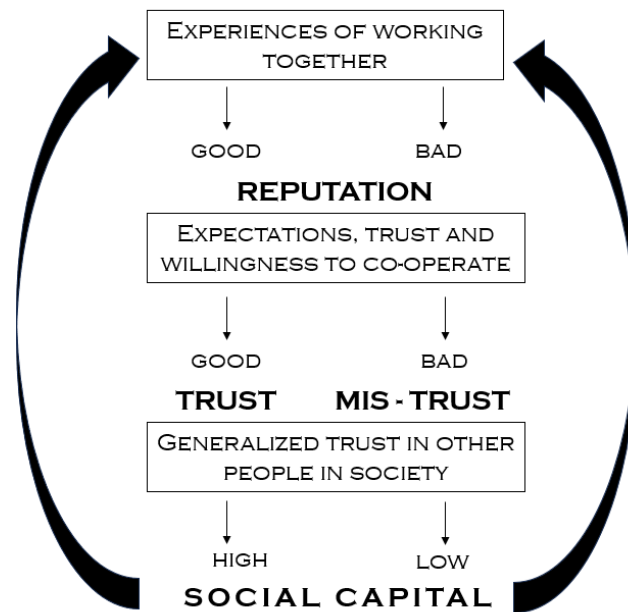


FIGURE 2 The formation process of reputation, trust and social capital by (Luoma-aho, Vilma, 2018, pp. 202–205.)

### 3.4 Corporate responsibility communications

#### 3.4.1 CSC and CSR communication

Even though the concept of sustainability has gained attention in recent years, the history of the phenomenon is fairly young as it began appeared in academic in 1990’s and it was strongly implemented on the environmental management

issues (Montiel, 2008; Roosa, 2008; Signitzer & Prexl, 2007). The origins of communication of sustainability issues and overall discipline of Corporate Sustainability Communication (CSC) is in corporate social reports and environmental communication programs, as the environmental catastrophes in the 1970s and 1980s created pressure for companies to communicate their environmental related issues. In the 1970s companies already reported their social performance but the honesty and transparency of these reports was questionable. Due to the time the nature of CSC communication was more like crisis communication and one-way communication like an environmental program reporting. (Signitzer & Prexl, 2007.)

Instead, the term business social responsibility gained attention in academic field of study in the 1950's and since then the development to the phenomenon of corporate social responsibility (CSR) has been founded in the academics as well as practice (Dhanesh, Ganga S., 2022, p. 320). As the fundamental nature of the CSR can be viewed as an activity of the corporation as it negotiates its relationship with stakeholders and public at large. This includes several processes of mapping and evaluating the demands of the stakeholders and after that the implementation of the actions needed. From this point of view the CSR communication is understood as all of the ways that the corporations communicate their responsibility related issues and involves stakeholders to the CSR processes. (Ihlen et al., 2011, p. 8.)

As described in the chapter 2, the concepts of sustainability and CSR are interrelated with same intentions. Despite this, from communicational perspective, the availability of the academic literature is more broaden in the discipline of the CSR communication. Hence, from this on the communication related to social, environmental, and economical issues is called as a CSR communication.

### **3.4.2 CSR communication**

Multiple research findings emphasise the positive outcomes of the strategic approach to CSR communication in organisations. There is evident that the strategic CSR communication can help to create several reputational, relational and legitimacy returns among internal and external stakeholder groups. As an example, these can be a strengthened stakeholder engagement, maintaining organisational public relationships, enhancing corporate reputation and ethical corporate identity. Beside these, there are findings that argue positive outcomes of the genuine CSR communication in times of crises. (Dhanesh, Ganga S., 2022, p. 319.) As a novel interdisciplinary research area, the nature of CSR communication is fragmented, and the field is still evolving. However, constantly increasing number of the research underline the importance of the subject. (Verk et al., 2021, p. 492).

CSR communication is defined broadly as the ways that corporations communicate in and about the economic, social, and environmental issues and processes it is involved. As the business earns its *“licence to operate”* from civil

society at large, it must act in harmony with social norms to maintain its licence for future (Ihlen et al., 2011). The definition of Podnar (2008) for CSR communication takes a notion for a stakeholder perspective:

“A process of anticipating stakeholders’ expectations, articulation of CSR policy and managing of different organization communication tools designed to provide true and transparent information about a company’s or a brand’s integration of its business operations, social and environmental concerns, and interactions with stakeholders” (p. 75).

Podnar (2008, p. 75) also underlines that the stakeholders are the ones to whom companies should be responsible. Findings of the literature review of Nielsen and Thomsen (2012) also emphasises the perspective of stakeholders as they underlined the importance of dialogue, inside-out communication, message content and communication channels. Besides these, Ihlen et al. (2011) stresses the positive dimensions of stakeholder involvement in CSR communication. According to them, CSR communication creates opportunity to participate stakeholders on the actions of corporation and possibilities to create ethical business practices.

CSR communication differs from other organisational communication. Organisation ability related communication is built into facts related for example superiority of products or innovations, as the CSR communication is built on corporate identity and values which are more fundamental and enduring of their nature. This identity-revealing nature of CSR communication is crucial from the perspective of stakeholders’ perception formation about the organisation and it may affect on the development of mutual relationship. (Du et al., 2010, p. 10). Several studies has shown that awareness of CSR activities of the company among both external and internal stakeholders is typically low which can lead to loss of full potential of CSR advantages (Du et al., 2010, p. 2)

CSR communication in its fundamental form includes elements from of annual social or environmental reports, organisational ethical principles, codes of conducts, CSR advertisements, CSR marketing and management communication and so on (Nielsen & Thomsen, 2012, p. 49). However, the strategic approach to CSR communication is more holistic and involves stakeholder perspective and engagement. Strategic CSR communication can be conducted through four-step process that utilises strategic issue management. The process starts with generating research insight from environmental surveys which turns into informed actions and communication strategies, implementation of tactics and evaluation of outcomes. (Dhanesh, Ganga S., 2022, p. 319.)

### **Critics against CSR communication**

Critics against CSR communication argues that the motivation of corporations is to serve self-interests of corporations and the aim of CSR communication actions is to enhance or protect their reputation, which is even admitted by some corporations (Ihlen et al., 2011). This can lead to feelings of scepticism among stakeholders which is real challenge (Du et al., 2010; Ihlen et al., 2011). Some other issues that can disadvantage effectiveness of CSR communication are perception of corporate hypocrisy and the paradox of CSR communication (Dhanesh, Ganga S., 2022, p. 324). The fear of violated relationships with stakeholders may lead in the situation where corporations choose to communicate CSR actions as less as possible (Ihlen et al., 2011).

## 4 PHARMACEUTICAL INDUSTRY

This chapter gives an insight for the pharmaceutical industry in the context of sustainability. In this research the pharmaceutical industry means the innovative pharmaceutical companies that research and develop medicines in global context.

### 4.1 Characteristics of the industry

Aging population of western countries and development of healthcare technologies have accelerated the wheels of pharmaceutical industry as the companies “research, develop, produce and markets drugs, vaccines and treatments for common and rare diseases” (Milanesi et al., 2020, p. 2). As a companies, which provides health to the public at large, the sustainability and CSR efforts have been seen as an essentials for a long-term success of the industry and the interest towards the phenomenon is present at academic as well as practical dimensions (Milanesi et al., 2020; Schneider et al., 2010, p. 421.)

Among the common understanding, it is important to conduct industry specific sustainability research to form a sector specific issues of the phenomenon (Min et al., 2017, p. 59). On the pharmaceutical industry this is especially true as the industry does not follow the traditional market forces of supply and demand. As it is often “the question of life or death”, the consumers (i.e. patients), are not able to decide by themselves whether or not to buy the medicine. (Saxena et al., 2021, p. 574.) Also, consumers are usually unable to evaluate the quality of the medicine. This creates an information asymmetry situation between producer and consumer, and it weakens the power of the consumers. Due to this, the role of the regulators is prominent in the “*credence goods markets*” as it is called (Tang

et al., 2023, pp. 1-2.) It is worth to clarify, that the doctors who write the prescriptions are the key customers for the pharmaceutical companies, even though in some countries it is also legal to influence to consumers by advertising. Ethics of the direct to consumers advertising (DtCA) on prescription medicines is widely debated. (Marmat et al., 2020, pp. 368-369.) The nature of the product and the unique stakeholder relationship network separates the pharmaceutical industry significantly from traditional consumer goods. (Marmat et al., 2020, p. 369.)

## 4.2 Stakeholder universe of the industry

Sustainability has become an important part of pharmaceutical industry and the companies are facing increased demand for better corporate citizenship overall (Schneider et al., 2010, p. 422). The companies in the pharmaceutical industry are involved in great number of stakeholder relationships, in which the groups view the industry through divergent frames as they represent patients (consumers), health professionals including physicians or other prescribers, employees and employee candidates, regulators and regulatory agencies, suppliers, trade associations, political authorities and legislators, non-government organisations and communities, scientific and patient associations, and the media and the general public at large (Esteban, 2008, p. 77; Min et al., 2017, p. 61). Besides these, the investment banks, stockholders and rating agencies are evaluating the overall performance and on these days especially the actions of the battle against climate change, policies related to clinical-trials and overall corporate citizenship more broadly than ever. (Esteban, 2008, p. 77.) The Figure 3 describes the stakeholder universe of the pharmaceutical company.

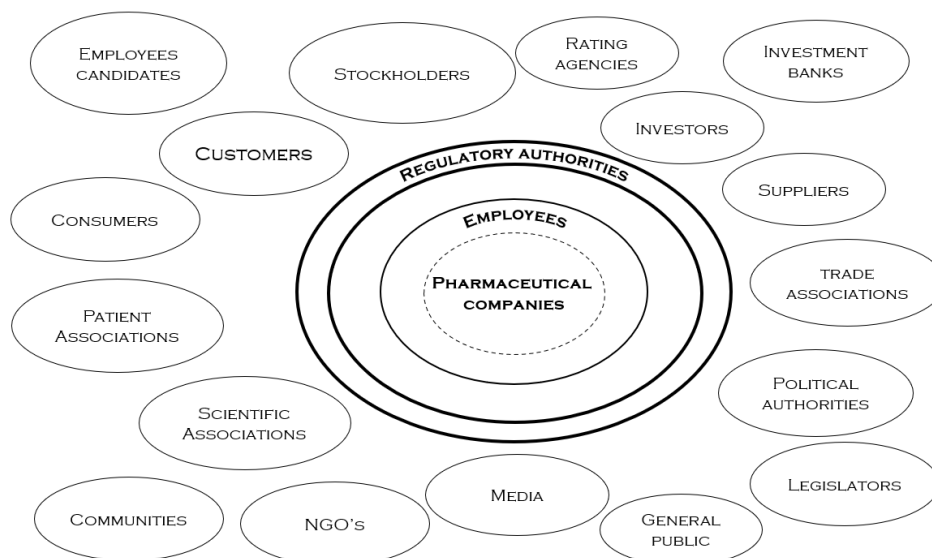


FIGURE 3 Stakeholder universe of pharmaceutical company

#### **4.2.1 Institutional stakeholders**

One of the most significant stakeholder groups for the companies in the industry are the regulators and other institutional stakeholders. The pharmaceuticals are viewed as “a credence goods market”, where the power dynamics between the consumer and the producer is abnormal, as the consumer cannot be sure about the quality of the product even after the consumption. This gives the power position to the producer and may lead to the reduction of the quality of the product and in the end to the unstable market situation where the consumers cannot trust the product or producer. (Tang et al., 2023, pp. 2–3.) Before regulation, many of the products in the pharmaceutical markets were ineffective or even dangerous for the consumers. The pressure towards better pharmaceutical products led to the national actions in the United States at the beginning of the 1900. The current form of national authority, The Food and Drug Administration (FDA), was established in 1962 to supervise the medical markets in the States. (Katz, 2016, pp. 3–4.)

The regulators require a series of clinical trials that address the efficiency, quality, and the safety of the product. The critics argue that regulators increase costs of R&D of medicines and delay the income of innovative medicines to the markets and in the end to the patients. (Katz, 2016, pp. 3–4.) Besides premarket regulation, regulators supervise the post-marketing issues as well (Tang et al., 2023, p. 3). In European Union (EU), the regulatory authority is European Medicines Agency (EMA) which evaluates and supervises the quality of the human and animal medicines used in the Union area. The EMA co-operates with the national authorities of member states and European Commission (EC). EMA provides single EU-wide market access process for the new medicines. EMA and FDA co-operate internationally by information exchange and several other actions. (Pignatti et al., 2011, pp. 1–3.). Regulatory authorities also promote ethical practices in pharmaceutical marketing (Marmat et al., 2020, p. 368)

However, the dynamics between the pharmaceutical companies and regulators is complicated, as the companies also benefit from the regulation e.g., by quality certifications and patent periods. Quality assurance creates mutual trust among consumers and companies which in the end ensures the returns of the investment and accelerates the innovation process towards even better medicines. (Tang et al., 2023, p. 3.) Besides the industry specific regulators, the political-institutional level actors and national legislation effect to the industry as well. The United Nations (UN), the European Commission (EC) and World Health Organisation (WHO) drive development by setting the general objectives for the field of health and construe these objectives throughout a policies and a legislation for pharmaceutical companies. (Milanesi et al., 2020.)

#### **4.2.2 Employees**

Employee engagement is industry wide issue as the competition of the best talents gets tougher. Traditionally pharmaceutical industry has had good



dedication to the employee related issues such as diversity, professional career development and compensation (Esteban, 2008, p. 78). Besides this, the pharmaceutical industry genuinely provides possibility to influence to world as we saw in the Covid-19 pandemic and in the key-role that pharmaceuticals companies played by developing and delivering lifesaving vaccines (Saxena et al., 2021, p. 573).

On the other hand, the sustainability issues and reputational crises makes it even harder for companies to find new employees especially in generation Z, who requires change and sustainable management of the companies in the industry (Milanesi et al., 2020, p. 262).

### **4.3 Phenomenon of CSR and sustainability in the industry**

The terminology used to describe the sustainability and CSR efforts varies significantly also in the pharmaceutical industry. According to Esteban (2008, p. 78) the pharmaceutical companies from US use the concept of “sustainable development” with the emphasis for environmental issues and the companies from Europe and UK prefer the term “social responsibility” with a focus on social programs, which makes it difficult to analyse the overall approach of the industry. Schneider et al. (2010) examined the sustainability reports of 11 pharmaceutical sector companies. According to their findings the emphasis of the reports is moving towards to the social responsibility, which brings the sustainability and CSR even closer to each other’s. They argue that the shift from the process-based efforts to larger social responsibility is due the pressure of the public opinion. Min et al. (2017) argue that in the pharmaceutical industry the sustainability is getting more popular than CSR, as it is more action charged word and for that reason it is more suitable for managers than CSR, which is more normative word.

The positioning of the CSR or sustainability function varies greatly in pharmaceutical companies as it can be part of communications or public affairs departments, human resources and legal affairs department, access management or in foundation created for special purpose of charity (Droppert & Bennett, 2015, p. 3; Esteban, 2008, p. 78).

The discipline of sustainability is fairly young in field in pharmaceuticals and the business models are still evolving which is in the line with overall unmaturing nature of the phenomenon (e.g. Esteban, 2008; Nussbaum, 2009; Schneider et al., 2010, p. 68.) In addition, Droppert & Bennett (2015) studied CSR activities of pharmaceutical companies and their findings support also the view of unmaturing nature of the phenomenon, as they found out that the pharmaceutical companies are in different stages at integrating and implementing CSR in their operations.

Despite unmaturing of the phenomenon, the pharmaceutical companies use great number of different standards and systems to manage, measure and report

their sustainability efforts. These systems and standards are either self-certified or externally rated. Major part of pharmaceutical companies also report their initiatives and actions related to CSR or sustainability issues in their web sites or reports. Reporting efforts add business value in several ways e.g. by enabling benchmarking the current performance of the company compared to its competitors and by communicating the value that the company creates for its stakeholders at large and initiating dialogue with them. (Schneider et al., 2010, pp. 421–427.) Esteban (2008) highlights three points that pharmaceutical industry should focus as managing arising CSR issues: transparency and communicating, employee engagement and environmental sustainability management.

#### **4.4 CSR and Sustainability issues in the industry**

As an industry, which owns the full lifecycle of the product from R&D to production and marketing, pharmaceutical industry provides interesting insight to the sustainability and CSR issues, which in the end reflects the ethics of companies and forms the reputation of the industry in the eyes of the public (Schneider et al., 2010, p. 421.). Due to the nature of the industry and the wide stakeholder universe, the companies face real challenges as they aim to add value and meet requirements of all stakeholders groups (Min et al., 2017, p. 61). Another unique characteristic of the industry is the marketing dynamics of the pharmaceuticals, where the customer is not directly the consumer, and the law of the demand and supply is not relevant. The situation might lead to the unethical behaviour of the companies. (Marmat et al., 2020, p. 385.)

Nussbaum (2009) highlights some of the key ethical issues on the industry: “financial pressures, research ethics, working with regulators, marketing and access, pricing, global business and governance” (p. 68). Another major and well-studied issue at the field is the environmental pollution during the full of lifecycle of the drugs which is in the focus of majority of sustainability research. (Milanesi et al., 2020, p. 2). Overcharges of the products, irresponsible animal testing and low intention to help developing countries are just some of the widely known claims and reputational crises of the industry over the years (Min et al., 2017, p. 61). Besides these, there is research evidence of unethical behaviour of the pharmaceutical companies (Marmat et al., 2020, p. 385). The reputation of the industry is low among certain stakeholder groups and the individuals, and the company leaders are wide aware of the situation (Nussbaum, 2009, p. 69).

However, the industry is changing rapidly from many perspectives and the company merges and divestitures lead to the decrease of the number of big pharma companies (Min et al., 2017, p. 61). From the point of ethical behaviour and norms, the organisational culture is the key factor to advance the right way to behave with stakeholders. The leaders and the organisational structures, such as processes of rewarding, are in the key role in building the ethical organisational behaviour (Marmat et al., 2020, p. 387.)

The further chapters present some of the industry specific issues in the pharmaceuticals. A holistic approach towards sustainability is widely adopted in the industry, so the strict classifications between CSR and sustainability is difficult to create (Milanesi et al., 2020, p. 8). However, to clarify this subject and to provide pleasant reading experience, I will utilize the classification of *Triple Bottom Line* to present some of the major issues in the field.

#### **4.4.1 Social dimension**

The social dimension of the sustainability includes several different aspects from employee satisfaction and safety to well-being of people and communities at stakeholder universe of the company at large (Milanesi et al., 2020, p. 262). As the product itself is a social resource, the social dimension of sustainability in the industry covers different programs that are inseparably connected to the core business (Schneider et al., 2010, p. 248).

#### **Pricing**

The pharmaceutical industry faces extraordinary ethical dilemma as it has the ability produce lifesaving medicines but it is unable to provide those medicines to everyone at affordable price (Nussbaum, 2009). The prices of medicines are commonly justified by high costs of research and development phase and by high risks that companies carry by searching new cures for disease (Light & Warburton, 2011, p. 34). It is argued that it takes approximately 10 years and \$2.6 billion to develop a new medicine with very low success rate (*PhRMA - Research and Development*, n.d.) At the same time, the companies are facing increasing pressure from national and global regulators who demand for lower prices of medicines and to limit access to certain products (Esteban, 2008, p. 3). Even though at least the companies find the high prices justified, some academics challenge the current system of medicine R&D and argue against of unreasonably high prices. The reason of the argue lies on highly controlled access into data of risks and costs of medicine development which is viewed as a business secret. (Light & Warburton, 2011, p. 34.).

#### **Availability and accessibility on medicines**

Drug shortages are globally increasing problem that may cause clinical and economic problems to directly to patient and in more broaden picture to society at large. The reasons behind the shortage can vary from manufacturing disruptions to international distribution and supply chain issues, which also includes the issues on the national pharmaceutical market such as profit margins and price differences. (Ravela et al., 2022.) In Finland, the shortage problems are common but these barely effects on the medication treatment of the patient due the availability of substitutional medicines (Sarnola, 2018).

Another major dimension on accessibility lies on the access to the basic medicines in the developing countries and markets. The public pressure drives

the companies to take the issue seriously and today numerous of companies report their activities which takes a form of programs, campaigns and strategies aiming to provide essential medicines either free or with markable discount for developing countries. (Schneider et al., 2010, p. 427.) Significant stakeholder pressure comes from global multilateral agencies. For example, ongoing strategies of the WHO and the European Commission mentions the access to the essential health service and to pharmaceutical products as a goals and these effects strictly to the operations of the pharmaceutical industry. (Milanesi et al., 2020). However, the attitude towards the underdeveloped countries has not always been so responsible. In early 2000 British NGOs sent questionnaires to 11 big pharmaceutical companies and asked actions to help poor people of developing countries to achieve access to treatments. Only 3 companies answered, and the report concluded that the significant change is needed to the industry due the issue of developing countries. (Bluestone et al., 2002.)

In 2008 an independent Access to Medicine Foundation published its first ranking, called Access to Medicine Index (AtMI), which evaluate the actions of the twenty biggest global pharmaceutical companies in this specific dimension (Quak et al., 2019, p. 172). The framework of the AtMI includes several different parameters to evaluate the performance of the companies. One parameter worth to underline is directly allocated R&D resources that aims to find medicines on especially need of developing countries. Expectations of the financial returns of this kind of new medicines or formulation directed to poor countries is low, but due to the AtMI, the increase of allocating resources on these kinds of R&D projects have been seen. AtMI gained great public attention and the result of it seems to be effective as the pharmaceutical companies compete on the high places on performance ranking and on the other hand the AtMI promotes the transparency of the practices of the companies. (Hogerzeil, 2013, p. 898.)

## **Orphan drugs**

Orphan and ultra-orphan drugs are drugs that are meant to treat rare diseases and conditions. There are around 5000-7000 different rare diseases globally and around 6% to 8% of the global population suffers from some rare disease. (Weerasooriya, 2019, p. 179.) As the default of the demand for these drugs is low and the R&D and manufacturing costs are extremely high, these drugs are “orphaned” by the innovative pharmaceutical companies. As the situation from point of patients with rare diseases was hopeless, the Orphan Drug Act (ODA) was established in USA in 1983 and following that, similar activities was seen in other continents as well. (Bruyaka et al., 2013, p. 117.) In the orphan drugs markets, innovative pharmaceutical industry faces the encounter of high risks and costs and high expectations from patients. Usually, the return of investment in orphan drugs is good from the perspective of the company but high prices involve the governmental authorities (public budget) or the insurance companies in the situation as the patients cannot afford to pay their treatment by themselves. The issue gets more complicated when discussions turn to the orphan drugs and access of them for patients in less developed countries. (Witkowska, 2018, p. 46.)

Some researches argue that the involvement into orphan drug issue reflects the strategic alignment of the CSR of the company (Bruyaka et al., 2013, p. 62). However, currently regulatory policies in USA and EU support the development of orphan drugs by several different activities, such as exclusive marketing rights or tax reductions or grants for clinical trials (Witkowska, 2018, p. 52).

#### **4.4.2 Business dimensions**

When the companies decide to take a part for sustainability initiatives, they need to find appropriate balance between business and ethical standpoints, as the profitability is one of the three dimensions of the sustainability (Schneider et al., 2010, p. 423). Besides this, shortening of the patent duration time of the most important products and increase of requirement of product safety evidence are just some of the factors that drives companies to cut costs and increase the sales as the aim is to secure profitability (Min et al., 2017, p. 62).

Following chapters present some of the issues related sales promotion and marketing in the field of the pharmaceuticals. The issue is complicated as most of the pharmaceutical companies are stock listed companies with profitability goals. In recent years several different mechanisms have been adopted by national and international regulators, laws, and associations to ensure the acceptability of interaction of pharmaceutical companies and healthcare professionals and to ensure accuracy product claims. Classification of control systems can be separated on following stages: laws and regulations, industry codes of practices and internal company standards (Francer et al., 2014, pp. 2-3). The industry it itself has implemented wide self-regulatory guidelines to meet and go beyond the current legal requirements and industry codes (Francer et al., 2014, p. 2; Marmat et al., 2020, p. 368). A compliance units or departments in companies guide and train employees of the company to meet legal requirements and ensure operating procedures. However, in the end it is the organisational culture and values that guide interaction with stakeholders. (Francer et al., 2014, p. 2.)

#### **Unethical marketing and sales promotion**

As the same product may be either a cure or a poison, the appropriate use of the medicine is crucial (Leonardo Alves et al., 2019, p. 1168) Quality and availability of the information is essential to ensure the safety of the patients, so the interaction between the healthcare providers and the scientific companies is necessary (Francer et al., 2014, p. 1). The informed decision to start a medical treatment requires several different aspects and professional knowledge to evaluate those in current situation. The information how to use medicine or how it works is not enough as the prescriber need to take concern also the following issues:

“The likelihood of benefit and harm, how this medicine compares with other available treatment options or the option not to treat and relative cost-effectiveness”. (Leonardo Alves et al., 2019, p. 1168.)

As the intention of the healthcare professionals is to provide the best possible treatment for the patient, they need to keep up with the latest scientific information and advancements of the new medicines. Therefore, it is important that the information is scientifically accurate and updated. Prescribers in the health care units receive information from several different sources such as scientific conferences, literature and clinical trial summaries, but the straight contact with pharmaceutical companies is still necessary (Francer et al., 2014, pp. 1-2.)

However, discrepancy in the situation arise as the pharmaceutical companies need to fulfil requirements of business profitability by increasing sales (Leonardo Alves et al., 2019, p. 1168). Over the years, there have been several ethical lapses on marketing and promoting efficiency of the products and promoting off-label use of medicines (Mulinari et al., 2021; Schneider et al., 2010, p. 422). Besides these obvious misleading, there are wide range of research of how the actions of the pharmaceutical companies affect the decision-making process of the doctors or how the companies affect to the research conducted in collaboration with public sector. The relationship between the companies and the doctors has been extensively debate over the decades. (Fickweiler et al., 2017, p. 1.) The contradiction is obvious as the main stakeholder for the healthcare professionals is the patient and for the pharmaceutical companies the main stakeholder group is the shareholders. Despite this, both parties are depended on each other's and there are several common goals such as responsible use of medicines, monitoring the effects of the medicines and co-operation in innovative research towards better medicines or new treatments. (Komesaroff & Kerridge, 2002, p. 118.)

### **Direct to consumers advertising**

In most of the countries that regulate prescription medicines, direct to consumer advertising (DtCA) is prohibited by legislation. (Francer et al., 2014, p. 9.) Only exceptions on the industrial countries are the United States and New Zealand where DtCA of prescribed medicines is legal (Mintzes et al., 2003, p. 405) DtCA has evoke wide public debate for and against it, as the critics argue that it violates patient-doctor relationship and leads to wasteful prescribing and the supporters claims it increase the autonomy and the empowerment of the patient (Marmat et al., 2020, p. 369). However, pharmaceutical companies spend great amount of money for DtCA in the countries where it is legal, and the trend is increasing. On the other hand, in the countries where it is illegal the authorities punish companies significantly from misbehaving e.g., suspending the marketing licence for certain time period. (Leonardo Alves et al., 2019, pp. 1174-1175).

#### 4.4.3 Environmental dimension

The environmental issues have drawn attention locally and globally in every industry since the 1980s and the combat against climate change is one of the most major driver for environmental sustainability (Milanesi et al., 2020, p. 262; Schneider et al., 2010, p. 430). The environmental sustainability refers to “the impacts of processes, products, and services on the environment, biodiversity, and human health”. (Milanesi et al., 2020, p. 262.)

Even though the social impacts of pharmaceutical industry are positive to well-being and health of people, there are several studies arguing of the negative impacts of the industry to the environment. According to Belkhir and Elmeligi (2019) the pharmaceutical industry in the United States is higher intensity emitter of greenhouse gases (GHG) than automotive industry. Besides this they found that there was significant difference between the highest and the lowest GHG emitting on studied companies.

Besides the traditional production related emissions, the antimicrobial resistance (AMR) and antimicrobial release during the production are major environmental issues in the pharmaceutical sector. In Europe, the antimicrobial pollution is caused by consumption of the medicines and due the metabolic compounds or molecules, but in the South-East continent the major source of the antibiotics in the environment is the manufacturing of medicines. (WHO: ‘Pharmaceutical Pollution and AMR’, 2018)

Overall, the pharmaceutical industry is involved to improve its performance on environmental sustainability issues at wide range (Saxena et al., 2021, p. 581). On going trend is to move from traditional reduction of process footprint to more wide programs that seeks new further solutions without compromising the quality and compliance practices (Schneider et al., 2010, p. 430). The new environmental programs in the pharmaceutical industry can be categorised as follow: cleaner production, green supply chains, green human resource management and green materials (Milanesi et al., 2020, p. 266). As part of ecofriendly manufacturing, the green chemistry is increasing theme in the field of pharmaceuticals (Saxena et al., 2021, p. 581).

#### 4.5 Pharmaceutical industry in Finland

Pharmaceutical industry employs around 6100 high educated professionals in Finland (Lääketeollisuus ry, n.d.). In 2022, total sales of pharmaceuticals on wholesale prices were approximately 2977 million euros in Finland (Lääketeollisuus ry, The Finnish pharmaceutical market 2022, n.d.). From perspective of global companies, Finland is a small pharmaceutical market and it is usually seen as a part of some other market area, such as Scandinavian or Nordic cluster (Sarnola, 2018, pp. 6–7).

National authority issues a licences for companies operating in Finnish pharmaceutical markets either as a manufacturer or as a wholesaler (Fimea, Licenses, n.d.). To receive operating licence, the company need to be registered in Finland (*Lääkeasetus 693/1987*, n.d.). Locally registered companies operate in the local markets and the business environment.

Pharma Industry Finland (PIF) is a local trade association that promotes the policy interest of the research-based pharmaceutical industry in Finland. In addition to the national work in business environment, PIF a member organisation of European Federation of Pharmaceutical Industries' and Associations (EFPIA). (Järvensivu et al., 2010, pp. 272-274.) The pharmaceutical industry in Finland includes also other actors such as generic production companies, contract manufacturers and other major actors, but in this research the focus is on the member organisations of PIF.



## 5 METHODOLOGY AND RESEARCH PROCESS

In this chapter the strategical perspective to the research is discussed. The chapter also presents the methods used and describes in the more detailed the processes of data gathering and analysis. The chapter brings together the methodological perspective of the research.

### 5.1 Qualitative research

Qualitative research method is evolving way to conduct research and it aims to understand a phenomenon rather than explain it (Tuomi & Sarajärvi, 2018, p. 33). The origins of the qualitative research arise in the human sciences from the need to interpret human actions through more multidimensional approach than numbers and statics allowed. The qualitative approach can be utilized in situations, where the research subject is phenomenon combined with abstract individual understanding and the approach allows to face research subject from a perspective of conceptualising (Eskola & Suoranta, 1998, pp. 8-15, 32).

This master's thesis utilises the qualitative research approach, as the intention is to investigate the phenomenon of sustainability and sustainability related communication in the pharmaceutical industry in Finland. The qualitative approach allows to conceptualise several independent understandings of the phenomenon to one united ensemble that represents a set of companies in certain location, industry, and at moment of time. The research setting translated into following research questions:

RQ1: What is sustainability of pharmaceutical industry companies located in Finland?

RQ2: How strategic communication on could support to achieve the sustainability vision of the industry?

The nature of the qualitative research approach was utilised through the master's thesis. The selection of the interviewees was set through rational criteria and the data was gathered from the independent discussions where the voice and understanding of each interviewee was meaningful. (Hirsjärvi et al., 2000, pp. 165–166). The form of the research questions evolved during the research project, which is possible in the context of the qualitative research (Hyvärinen et al., n.d.). However, the research aim remained the same during the process.

The abductive research approach was utilised in the research as it combines data driven approach to certain theoretical foundations, looking for similarities and disparities from collected data in the light of the theories (Tuomi & Sarajärvi, 2018, p. 99).

## 5.2 Gathering of Data

The data of the research was collected directly for the intentions of this master's thesis. The method utilised in the data gathering was semi-structured interviews with each interviewee. The benefit of gathering data by interviews is in the direct interaction with the interviewees which enable flexible conversation and possibility to deep into to topics more thoroughly and multidimensionally (Hirsjärvi et al., 2000, p. 201). Semi-structured interview is form of interview where the researcher creates question form which is utilized in every interview. The questions might not be asked in the same order in every interview, but the form of the questions remains the same for every interviewee. Semi-structured interview enables more freedom in answering for the interviewees (Hyvärinen et al., n.d.). Rich and multidimensional data is typical for qualitative research (Alasuutari, 1994, p. 84). The interview form was built on the three sections. The first section aimed to understand the phenomenon of the sustainability of the companies. The second section focused on the communicational practises of the companies on the sustainability related issues. The third section aimed to understand the sustainability vision of the companies and the industry they represented. Each section included 5 to 8 questions. The interview form was carefully tested with voluntary test person before the interviews. The interview form can be found in the attachment of the research.

In qualitative research, the quality of the data is more important than the amount of the interviews, as the aim is to analyse the data and to describe the findings through social structures (Eskola & Suoranta, 1998, p. 18). In this research, the aim was to interview 5-10 representative of pharma industry companies operating in Finland. As the global research-based pharmaceutical companies form a significant part of pharmaceutical sector operating in Finland, this research was conducted in co-operation with Pharma Industry Finland (PIF) which is the local interest association of the innovative pharmaceutical industry. The voluntary interviewees were found in the member organisations of the PIF. This decision on data collecting outlines certain groups and companies operating

in pharmaceutical industry in Finland and may affect on the results of the research. Chapter 5.2. takes concern the evaluation of the research process in more detailed.

### **5.2.1 Target group**

Data gathering by individual interviews enables to choose relevant interviewees by their experiment of the research subject (Tuomi & Sarajärvi, 2018, p. 86). As the voluntary interviewee candidates contacted researcher, following inclusion and exclusion criteria was set:

- The target group for the interviews was the individuals working in the pharmaceutical companies and who were in a position, in which the sustainability or communicational related issues of the company were on their control. The level of the position was not specified as a criterion for the interviewee neither the experience in working years.
- If the interviewee candidate didn't operate with sustainability issues of the company in current position the exclusion criteria was fulfilled.

### **5.2.2 Interviews**

The call for the interviewees was shared through internal communication channel of member organisations of PIF (Extranet). The call for interviewees can be found in the appendices of this research. Information related to the research was also spread in internal network meetings of the PIF. The voluntary interviewees contacted directly to the researcher via email. With each suitable interviewee the personal interview meeting was booked.

From research ethical point of view it is important to make sure that the interviewees know in what they are participating, how the data is used and make sure that the interviewees have enough time to prepare for interview (Tuomi & Sarajärvi, 2018, p. 86). At least week before each interview, the interviewee received following documents via email: official notification of the research, data privacy notice and consent form. The official notification described the purpose of the research and the base information related to the research process. The data privacy notice described the data collected from interviewees, the use of the data and the data storage and handling.

All the interviews were virtual meetings organised in Zoom and the meetings was recorded for transcribe purpose. The protocol described in the consent form was read through at the beginning of each the interview and the consent of the interviewee was inquired. One consent form was received signed via email.

In total 7 interviews were conducted, and the interviews took place between June and August 2023. 6 out of 7 interviews were conducted in Finnish and one interview was conducted in English. As there is no established translation for

“sustainability” in Finnish, the word used was “yritysvastuu” and “yritysvastuullisuus” which directly translates to the “corporate responsibility”. Due to internet error, 20 minutes of one interview was lost.

The interviewees represented 7 member companies of PIF. The headquarters of the companies were either in USA (4) or in the Europe (3). One of the companies had manufacturing operating licence in Finland and the others were companies with wholesaler licence.

The interviewees were professionals from different positioning levels, units, and divisions. Two of the interviewees were highest position in a local context. 3 of the interviewees were on the position “head of...” or “director of...”. One of the interviewees were on managerial level and one of the interviewees were specialist. Titles of 3 interviewees were related to the external affair or corporate affairs or communication. One of the interviewees was working on with governance and standards and one was working with finance operations.

### 5.3 Analysis

In qualitative research the gathered data is organised as a beginning of analysis process (Hirsjärvi et al., 2000, p. 218). The different analysis methods can be utilised in the analysis process and the researcher need to make choice which method is used. The different approaches guide the method choice. In this research the approach to the analysis is the realistic approach, as the researcher is interested in what is in the material and what is said about the research subject (Hyvärinen et al., n.d.)

In this research, the data was analysed by using content analysis with coding and thematic approach. The analysis was done in Finnish. At first the recorded interviews were transcribed to written form and the currency of the content of each text was reviewed. Each interview received a identification number and specific colour, and these were utilised in the coding phase. By using colour and number coding, the keywords and phrases of each interview were visualised into the Miro platform as the research prefers manage data through visualisation. Miro is a web-based white board application, and it was used by personal education licence.

As mentioned earlier, the interview was conducted in three sections. The coding was also built in three sections and in each section some joint phenomenon or issues was recognised and keywords or phrases from each interview was brought around joint issue by using colour coding. Each colour identifies each interview. This formed a mind-map which is illustrated in Figure 4.

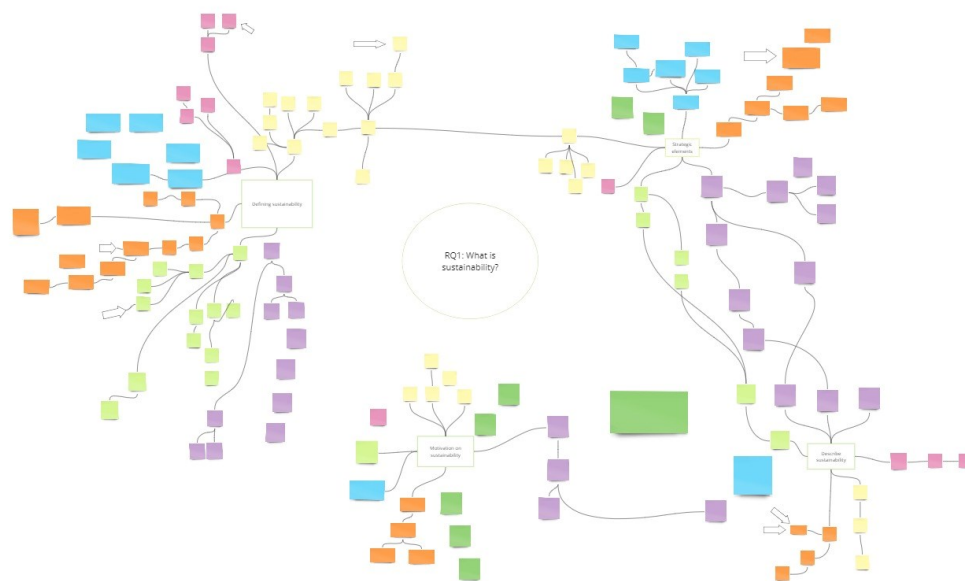


Figure 4 describes the coding of RQ1. In this section, there are 4 joint issues/phenomena and each colourful sticky note represent key words or phrases of the interviewees. There is overlapping and connection between the issues. Also highlight to other sections can be identified from arrow elements.

Some phenomenon took place in every three sections, for example reputation, stakeholders or regulation, and these were highlighted in all sections. Highlighting was done by using different elements such as arrows, connecting lines and text formatting e.g. bolding or underlining. This is illustrated in the Figure 5. After all interviews was brought into mind maps, each section was observed independently and in the end all sections were observed as a one ensemble.

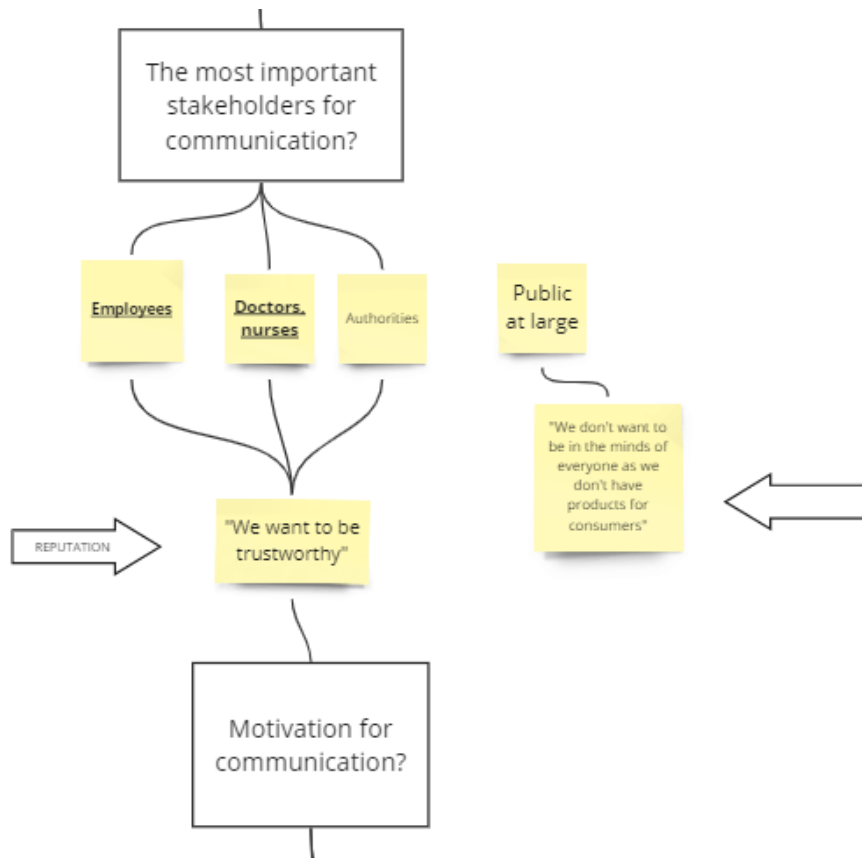


Figure 5 represent coding of section 2, which was related to sustainability communication. Yellow sticky notes are answers of one interviewee, the black boxes are joint issues and arrows point out severally occurring and overlapping phenomena.

The transcription to the English was done while writing findings. The translation application of Microsoft Word was utilised during the writing process. Zotero application was used in the reference management during the writing process. In this research AI applications was not used.

## **6 RESULTS**

The fourth chapter presents the results from the analysis process. The results are presented in the order of the interview process. As a part of the nature of the qualitative research, the amount of data was big, and it was multidimensional. The chapter presents only small amount of gathered data which was seen as relevant in the light of the research purpose.

### **6.1. Sustainability in the industry**

As mentioned above, the interview process included three sections. At the first section, the aim was to describe what is responsible behaviour from the perspective of local pharmaceutical companies. In this section, the questions courage interviewees to describe the responsibility activities of their companies, strategical approaches, and the motivation for responsible behaviour. The maturity level in the issues varied a lot but common for all the interviews was the strong emphasis to the employees.

The issues highlighted by the interviewees was able to categorise by using environmental, social and governmental or financial dimensions, which is also known as TBL. In following chapters, the data gathered will be presented by adopting these three dimensions as the aim is to provide pleasant reading experience. As the term “sustainability”, was widely utilized to describe responsible behaviour of the companies, it will be utilized from this forward. The Table 1 describes the terms used for responsible behaviour in the companies and the location of the headquarters.

TABLE 1. The location of the headquarter and the term used for sustainability

The term used for sustainability	The location of headquarter
Sustainability	European Union
Sustainability	European Union
Sustainability	European Union
Corporate responsibility, ESG, EHS, sustainability on the local context	United States
Sustainability	United States
ESG	United States
ESG, sustainability on local context	United States

### 6.1.1 Approach to sustainability

Most of the interviewees reflected their organisational definition of sustainability through environmental and social dimensions. Almost all of the interviewees mentioned the economical dimensions as well, but the main attention stayed in the environmental and social dimensions in all of the discussions.

The cross-cutting themes for all of the interviews was the motivation for “doing right”. This was founded into regulation of the industry and on the other hand on the values and ethics of the company. Also, all the interviewees viewed that the sustainability need to be founded on the actions.

“It's important to, what we're already working with, to make sure that there's a foundation of ethics and transparency, because that is key.”

- Interviewee 3

The maturity related to the sustainability activities varied a lot. Some of the companies had implemented a holistic approach to sustainability as an integral part of organisation strategy and in some of the companies the sustainability work has not yet started. 2 of the companies were currently working on their local organisational strategies and according to the interviewees, the sustainability will have great impact on the strategy work. Four of the companies already had locally implemented strategy of sustainability ongoing at least a few years. In one of the companies there was a decision of local board of directors to keep sustainability plan among side of ongoing strategy as it was not directly included on it.

All the interviewees viewed sustainability as an important phenomenon and underlined that it is prerequisite for continue the operation in the future. The importance and the engagement to the sustainability issues was qualified through certifications as 4 independent certifications got mentioned. On the other hand, the fundamental nature of pharmaceutical industry was highlighted.



“The stakeholders expect from us better and safer medical products and treatments. Of course, environmental issues need to take in concern, but it is secondary” concluded interviewee 1.

### **6.1.2 Environmental dimension**

As defining “sustainability”, the environmental dimension got the greatest attention.

“The emphasis of the environmental issues has increased remarkable in past few years in locally as well as globally in our company.”

- Interviewee 3

All the interviewees mentioned some of the following environmental related actions ongoing on their company either globally or locally: decreasing CO2 emissions, saving water, waste management. Some of the companies had clear targets for environmental dimension, as an example to be carbon neutral in upcoming years, and these companies had clear goals and measurements especially for CO2 emissions. On the other hand, on some of the local companies the accounting work of CO2 emissions has not yet started. In discussion of environmental impacts, the supply chain and purchase were often mentioned but the limited possibilities to affect these functions in local companies was highlighted by some of the interviewees as well as possibilities to impact to the manufacturing processes overall.

One interviewee with long experience in the industry concluded that in the Nordic countries the environmental issues are high prioritized and underlined that people here are very proactive related to sustainability issues. All the companies mentioned some concrete ongoing local project related to environment dimension. The projects varied a lot between the companies and following local projects got mentioned: transition in travelling to electric vehicles (either car or bicycle), decrease business flying, energy efficiency of office buildings and in overall office practices, event organising practices including preferring local food. It is worth of underline here, that only one of the companies was manufacturing unit and all the others were operating on wholesaler licence. However, the interviewees recognised the importance of the manufacturing and the supply chain as a part of their environmental dimension.

“The environmental dimension is difficult” - Interviewee 5

“If we are planning supply and logistic (to Finland) more efficient way [environment friendly], we cannot risk the local accessibility”

- Interviewee 3

Similar balance needs to be found in the manufacturing processes as the environmental sustainability can never overcome the product quality and safety issues.

“On the production, the sterile working environment requires using plastic gloves and the amount of waste is unavoidable.”

- Interviewee from manufacturing company

The role of the plastic on the packages and dosing devices was also recognised and some of the companies approached this as a challenge that must be overcome. Two of the interviewees highlighted the importance of the innovation, rethinking and continuous boundary pushing as actions for achieving environmentally sustainable development. These two companies were companies with clear CO<sub>2</sub>-goals and measurement practices. Beside the innovation, both of these interviewees mentioned that they had clear targets for their local partners in distribution, acquisition and purchase, and their aim is to push other for better outcomes in the environmental issues.

### 6.1.3 Social dimension

The social dimension got important part in the discussions beside with the environmental sustainability. The social dimension was recognised as a part of the core business of the companies, and it is integral with the companies as they work directly with healthcare units. Besides core business issues, the employees got mentioned often in discussions related to the social dimension.

“Medicine itself is a sustainable product according to the UN SDG’s.”

- Interviewee 4

This reflects to the Sustainable Development goals of United nations and the goal number 3: “ensure healthy lives and promote well-being for all at all ages” (UN SDG:s). However, it is important to underline here, that all of the interviewees viewed social sustainability of the companies much wider than just selling products.

“Our company want to be seen as a part of the solution, not just the provider of medicines” - Interviewee 7

The foundation of the social dimension in some of the companies was highlighted in discussions.

“We are here to serve the patients” - Interviewee 2

“The social dimension has been in the company since the beginning [as we are founded in USA]” - Interviewee 3

As a concrete example of social dimension projects in Finland, the equality in the access to the treatments was underlined by three of the interviewees. Beside the access to the treatments, the concern of the economic pressure of the medical

treatments for the patients was mentioned in two of the discussions. There were concrete projects going on in both of these social issues in Finland where the companies were involved.

In three of the interviews, the importance of the actions with the local communities were mentioned. The interviewees highlighted the importance of the issue but the variation in the status of the actions was notable. The interviewee 4 mentioned that the working with the local society is often missing when discussing the social dimension of pharmaceuticals. The opposite example arose from manufacturing company as the interviewee described how their company has ongoing projects and clear goals for the community work in their operating area. On the other hand, interviewee 7 mentioned that the community work is aimed to start, and the company is seeking the ways for the co-operation with the local community. The interviewee underlined that their aim is to do and impact locally, not just fund local initiatives. There was variation in therapy areas, the maturity and in the nature of business operations between these companies but all these interviewees underlined the importance of the co-operation with the local communities and viewed it as a forming way to conduct social dimension.

The global social responsibility got mentioned by two of the interviewees, but it was not directly on the scope of the local companies. As a part of strategy of the parent company, the funding of the global education was mentioned by interviewee 2. Interviewee 6 mentioned their global R&D projects for the developing countries and underlined that all the global pharmaceutical companies have similar ongoing project.

“These issues don’t trend here in Finland and maybe it is why these projects sometimes forgot. Maybe it is because the issues are far from here and we don’t have colonial history and the relationship to the developing countries. When we have communicated about these [global projects] the attitude towards us is negative and the doubt of the greenwash is present”

- Interviewee 6

## **Employees**

Employees raised up to the conversations in every discussion and the importance of this stakeholder group was underlined. Three of the interviewees mentioned employees as a part of defining sustainability of the company or as a part of the sustainability strategy, as the others mentioned employees every now and then during the conversation. For question, “why corporate sustainability is important?” 4 of the interviewees answered directly “employees”. While defining sustainability, the employees got mentioned as a part of organisational culture. The equality, inclusion and engagement to the working community were seen important. As a recognition of good working culture, two independent certifications were mentioned by interviewees.

“The new generations require sustainability from the employer.”  
- Interviewee 1

“We can impact on well-being of our people every day” - Interviewee 3

In some of the interviews, all the sustainability activities in local company were organised through voluntary organised employee group or the activities organised by sustainability group included voluntary projects. In some companies, the importance of the sustainability activities was seen also through to the engagement and meaningfulness for the employees.

“We have created organisational culture in Finland that aims good for others and besides that, the employees want to act for good.”  
- Interviewee 3

“[Sustainability] adds value for the employees because it makes people proud, that we know that we have real impact, and we know that it's not just something that we write down - it's something that we're actually really doing” - Interviewee 4

“Our employees are proud of our sustainability work” - Interviewee 2

#### **6.1.4 Economical and governance dimension**

For all of the interviewees it was important that in their company “*the things are done in the right way*” or “*we do the right things*”. This was the firm theme through all of the interviews. The issue was described either through the regulation of the industry or through the values and ethics of the companies. Two of the interviewees raised up both intentions.

“I believe that the motivation [for sustainability issues] need to arise from inside [the company] and from the belief that we are doing right things for all of us” - Interviewee 7

“Whatever we are doing, we must do it on the right way - the compliance is the key principle in our industry” - Interviewee 3

The long-term nature of the business operation environment was underlined by three of the interviewees and the concern of the reputation and mutual trust rose often.

“We are funded and financed directly or indirectly by the state [...] so it is important for us to make sure that we are transparent, that we are working on the right direction, and we can prove the value of our product and services.”  
- Interviewee 4

Financial dimension got mentioned by three of the interviewees as a part of the definition of the sustainability, but the discussion never got further on the topic. It was mentioned as a part of nature of stock listed companies but nothing more. In few of the interviews, the difference between on the natures of CSR and sustainability got in the conversation. The CSR was viewed more of the perspective of charity and these conversations the need for the revenue of the invested income got mentioned.

## **6.2 Sustainability related communication**

In this section the aim was to understand the nature of communication related to the sustainability activities. From the perspective of strategic communication, the emphasis was to find strategic elements and to understand the role of the communication as a part of the operations. There were only limited number of strategical elements on the approach to the communication on sustainability, even though the understanding of the main stakeholder groups was clear. The employees were highlighted as an important stakeholder group for sustainability communication. The motivation for the sustainability communication was to enhance the reputation but the relation between communication and the intangible assets of the organisation, such as reputation, was not recognised by all the interviewees in the sustainability context.

### **6.2.1 The definition of sustainability communication**

The definition of the sustainability communication woke up a versatile reflection in the interviews. Four of the interviewees found sustainability communication as a part of overall corporate communication and two of these mentioned that the sustainability themes need to be specifically communicated by the company. Two of the interviewees mentioned that the parent company reports the sustainability issues and one of the interviewees did not find sustainability communication itself important at all. Three other interviewees also underlined that the sustainability communication need be founded on the actions of the company.

“It is more important to get things done [than communicate sustainability issues]” – Interviewee 7

On the other hand, there were sceptical voices related to the sustainability communication. Interviewee 1 underlined that the sustainability and sustainability communication need to be connected to the core business, otherwise it is not authentic and can be associated with greenwashing and doing things just for gaining reputation. Besides this, two other interviewees mentioned that they don't want to fall to “greenwashing” or “sugar coating”.

“[In sustainability issues] it is important to do things first and do it for the right reasons, not just because the issue need to be communicated”  
- Interviewee 7

“As we are particularly speaking sustainability and responsibility overall, according to my personal opinion, very often people associate it specifically with the environmental dimension.” - Interviewee 4

Even though 4 out of 7 interviewees viewed sustainability communication as a part of overall corporate communication, only one of the interviewees mentioned that the sustainability communication is strategically planned. Three of the interviewees mentioned that there is no strategical approach to the sustainability communication at all. All the interviewees reflected that the recourses for the communication operations were undersized and almost all of the companies were receiving support and material from parent company.

None of the companies had a publish reporting requirement. Some of the interviewees mentioned that they report their sustainability activities to the parent company.

### **6.2.2 Main stakeholder groups**

Six out of seven interviewees mentioned the employees or employee candidates as the most or one of the most important stakeholder groups what it comes to the sustainability communication.

“As we have been implementing the local sustainability work for a year now, at this point the communication for the inside of the company is very important. And we have succeeded in this as the employees in Finland were highly aware of the sustainability of the company according to the measurements between other local companies” - Interviewee 6

“I have noticed that [the global organisation] increasingly wants to make visible what each individual and team could do for sustainability. The nature of the communication [of the global organisation] has changed to more involving, human oriented and highlighting individual actions” - Interviewee 3

As mentioned earlier, two of the interviewees underlined that the new generations require the sustainability from their employers. 3 interviewees directly mentioned that one intention of the companies is to create reputation as a tempting employer.

“I would say that your employees are an important part for sustainability.”  
- Interviewee 4

Beside employees, the customers (doctors and the public health care units) and decisionmakers got mentioned as a stakeholder group for sustainability

communication. According to interviewee 6, in some of their therapy areas, the doctors are very interested to environmental related issues as their patients are asking questions related to the topic. The interest toward sustainability issues has risen in the conversations in the professional meetings with the clients. On the other hand, two of the interviewees underlined the need to be sure that the sustainability related issues are not brought into the wrong context. By this, the interviewees referred to the regulation and legislation of medicine marketing.

### **6.2.3 The themes of sustainability communication**

4 out of 7 interviewees mentioned the dialog with external stakeholders as the most important way to find out the relevant themes for sustainability communication. The external stakeholders were underlined here as the listening and the dialog was mentioned to have with customers and decision makers. Beside to the direct communication, the screening of public conversation was mentioned to be as an important way to find relevant themes for sustainability communication. The employees and the conversation inside of the company did not get mentioned as a source for sustainability communication themes.

As mentioned above, the interviewees underlined that the communication should be based on the actions or projects of the company and the communication should be tangible. The environmental issues were viewed to be the easiest theme to communicate as it is currently major part of public conversation.

“It's easy to communicate about CO2 reductions because everybody knows about it and it's very much related to sustainability” - Interviewee 4

The social themes in the sustainability communication were seen difficult as there are no similar possibilities to set absolute measurements. The social themes were related directly to the core business of the companies, and it was associated to the communication for patient. Related to the social themes, the patient organisations were viewed to have an important part as the direct communication to the consumers is regulated. In addition, two of the interviewees mentioned limits set by regulation on the communication channels that can be used in corporate communication.

“For a responsibility reasons, we have strong legislation to report if in social media conversations rise suspect of side-effect of our medicine [...] That's why all the text need to be approved and we cannot involve in fast social media discussion with stakeholders” - Interviewee 2

#### **6.2.4 The motivation for sustainability communication**

The current reputational situation of the industry was reflected by three of the interviewees.

“[Pharmaceutical industry] has like a bad reputation due the historical reasons and it has been difficult to get rid of it even though the industry has changed a lot in recent years” - Interviewee 7

“It feels difficult to communicate of sustainability issues of the company [...] as the attitude towards us is sceptical, like “pharmaceutical company is speaking, it must be green wash campaign” - Interviewee 6

The reputation was mentioned as the key reason for conduct sustainability communication by three of interviewees. The reputational issues were highlighted in conversation of employer brand but also in more wider context. The long-term co-operation with stakeholders was often mentioned to be important and the reputation goal of the companies is to be trustworthy partner, especially inside of the operational environment. This was framed through licence to operate, legislation and mutual trust. Even though the decision makers and politics were mentioned as one of the main stakeholder groups from the perspective of reputation work, the interviewees did not mention clear goals nor strategies how reputation is enhanced. Neither there was no reflection how the sustainability will be involved as a part of corporate communication for these stakeholder groups.

The reputational goals related to the outside of the operational environment divided significantly. Some of the interviewees did not see need to increase brand recognition outside of the operational environment as the products are not available directly for customers and as the companies do not have manufacturing here. Two of the interviewees viewed their sustainability and positioning in the society more wider as their vision is to increase value for society at large.

“We want to increase the awareness of our sustainability work but moreover ourselves as an independent company part of the society. [...] As in the pharmaceutical industry, the companies are not so well recognised outside of the customers and the operational environment. The corporate communication is increasing in bigger role [in our company] and sustainability communication will be a part of it” - Interviewee 7

### **6.3 Sustainability vision of the industry**

This section aimed to understand the goals of the sustainability work of the companies. The aim was also to understand how the companies view themselves as a part of industry and how the industry wide sustainability work should be



developed. The industry wide reputational issues were underlined as well as limited resources for the sustainability and communicational operations. As a result, there were several co-operational intentions among the interviewees.

### **6.3.1 About of the sustainability vision**

“We have succeeded in the sustainability work if the certain criticism against us fades away” - Interviewee 2

The ways to achieve the goal varied a lot among the interviewees but the long-term nature of the work was underlined by many.

“I would say that the work should be done through long-term stakeholder co-operation which increases awareness [of the industry] and the positive public conversation of us” - Interviewee 6

The covid-19 pandemic got mentioned by two of the interviewees as a good example of how pharmaceutical industry gained positive image and how the situation shed the light of the media into the core business of the industry.

“One of the problems of the industry is that the science behind the medicines is invisible” - Interviewee 6

Employees got mentioned as a part of sustainability vision by three of the interviewees. As the environmental issues were seen to be out of the hands of the local companies, the diversity, equality and inclusion issues in the companies and the employee well-being can be affected on the local level.

“Currently the people in the industry are quite similar from their background. [...] We are missing the diversity which could help us to understand how we are looking from the outside” - Interviewee 3

“We know that we have been successful [in the sustainability work] if the current employees engage us and stay at our company [...] and if in the recruiting process the employee candidate mentions the [sustainability related] values of the company, we have succeeded.” - Interviewee 2

As the companies have limited resources, the importance of the co-operation inside the industry was underlined. Some of the interviewees viewed that the companies should do more co-operation among each other.

“[In sustainability issues] we could do more co-operation with others in the same therapy areas and increase the reputation as an independent companies!” - Interviewee 7

“I wish we could find new ways to get [sustainability] things done together with other companies, even with the competitors, and create a new way to do sustainability work together” - Interviewee 3

The role of the PIF was underlined as important but in different ways. Commonly, the role of the PIF was seen as a neutral representative of the industry in different public arenas. Its key operations were seen as formatting the information from public to the member companies and vice versa. Some of the interviewees expected bigger role from PIF related to sustainability projects on the industry. These initiatives were expected to be relevant projects around the core business of the industry. On the other hand, some of the interviewees viewed that in the sustainability issues, the companies itself need to step up and take a prominent role in different projects.

## **7 DISCUSSION AND EVALUATION**

The aim of the final chapter is to answer to the research questions and to observe the results in the light of previous knowledge. In addition, the chapter evaluates the research in terms of credibility and ethics, and light the benefits of the research. At the end of the chapter, some further research propositions are presented.

### **7.1 Discussion of the results**

The aim of the research is to understand the phenomenon of the sustainability on the context of the local pharmaceutical companies and how communication is utilised as the aim is to achieve sustainability vision. For that reason, the following research questions was formed:

RQ1: What is sustainability of pharmaceutical industry companies located in Finland?

RQ2: How strategic communication on could support to achieve the sustainability vision of the industry?

From the results of the interviews, it seems that the sustainability of pharmaceutical companies in Finland is action-oriented projects in the dimensions of environment and social. Some companies have implemented a holistic strategic approach to the sustainability and these companies might show the way for others in the future. The regulation frames the industry, and it limits the possibilities to negotiate and interact with the stakeholders, which makes it difficult to engage stakeholders through communication. The industry suffers from the historical reputational crises and due the unique structure of operating environment, the reputation and trust among public at large is difficult to enhance. Following chapters reflect the results in the light of the previous knowledge.

### 7.1.1 Sustainability of the pharmaceutical companies in Finland

The sustainability seems to be a unmaturing phenomenon in pharmaceutical companies operating in Finland as the stages of implementing sustainability and the ownership of the function varied a lot. This is in line with findings on literature on pharmaceutical industry (Droppert & Bennett, 2015, p. 3; Esteban, 2008, p. 78; Schneider et al., 2010, p. 68) and on the other hand it may reflect the overall lack of the definition for the phenomenon (Montiel, 2008). In the local context, the companies mainly used the word “sustainability” which is in line with findings of Min et al. (2017), who argued that “sustainability” is action charged word and for that reason more suitable for the business environment. The importance of the action-oriented approach was also emphasised by the interviewees.

All the interviewees emphasised the importance of the phenomenon and underlined that they want to “*do things right*” or “*do what is right*”. The motivation was founded on the ethics, values of the company, to the regulation of the industry or on all of these. This may reflect to the phenomenon of CSR as it is founded more on the ethical approach and the negotiating relationship process with stakeholders (Coombs & Holladay, 2011; Ihlen et al., 2011). As the industry has adopted a holistic approach to sustainability (Milanesi et al., 2020, p. 8) and in the end the intention of the sustainability and the CSR is the same (Montiel, 2008), there is no sense to try classification the phenomenon in Finland more specifically.

Another interesting finding is the solid commitment of the interviewees, who were in high positions in the companies they represented, for the ethical behaviour and long-lasting work for the favour of the phenomenon of sustainability and ethic. As the leaders are the way to build the overall ethical organisational culture (Francer et al., 2014, p. 2; Marmat et al., 2020, p. 387) and the organisational culture has a prominent role to bringing ethical behaviour to the daily operations in the whole company (Min et al., 2017, p. 61), the sustainability work in Finland is built on the strong foundation. The commitment of the high position leaders is also crucial for the reputation creation and building trust among stakeholders (Schneider et al., 2010, p. 421) Reputational issues were highlighted as a significant part of the vision of the industry and will be discussed in the further chapter. However, it remains unclear whether the “ethics” mentioned by interviewees reflect their own perspective or the companies and are these two even possible to separate.

Another common finding was the willingness to take actions on sustainability related issues, which might also reflect on the nature of the sustainability as a continuously improving process (Roosa, 2008). As the local companies conduct the strategy of global company, the possibilities to impact certain issues are limited. In addition, the nature of the industry also set limits to certain sustainability actions in different dimensions. As an example, the product safety needs to be always prioritised before environmental sustainability issues and due the regulation and legislation the co-operation with certain stakeholder groups is limited. This might lead to the situation where especially on the

environmental issues are reflected as a “challenge” or “secondary”. On the other hand, the companies with clear sustainability strategies did not view the environmental issues as a problem. Strategic approach to manage the sustainability function is required and further research is needed for better understanding of the phenomenon in the field.

As involvement to the phenomenon of sustainability is strong among the high-position leaders and as the approach is action-oriented, it may explain the emphasised role of the employees in sustainability related issues. As the regulation of the industry limits the interaction with the consumers and customers (Francer et al., 2014, p. 9; Marmat et al., 2020, p. 368; Tang et al., 2023, p. 3), the employees remain to be one of the most important group for the organisation which is unlimited by the industry specific regulations. Also the employees were mentioned as a driver and motivation for sustainability actions, which is in line with theoretical findings as the future generation requires sustainable management practices and overall sustainable change in pharmaceutical industry (Milanesi et al., 2020, p. 262).

### **7.1.2 How strategic communication on could support to achieve the sustainability vision of the industry?**

Approach of the interviewees towards the communication in the context of sustainability varied a lot from a supporting operational function to more holistic approach. This may reflect the overall initial stage of the sustainability work in pharma companies in Finland and on the other hand, the evolving stage of the discipline of responsibility related communication (Verk et al p. 492). However, as one of the main goals of the companies is to build trustworthy reputation and increase positive public conversation about the industry, the strategic communicational approach is required (Hallahan et al, 2007, p. 4) and the strategic CSR communication provides elements to build the relationship between the industry and its stakeholders (Ihlen et al, 2011).

In companies where the overall strategic approach to the sustainability has not been defined, the strategic approach in communication perspective cannot be expected. On the other hand, the companies with on-going sustainability strategies were not quite clear how the advantages from sustainability inputs will be realised. It is common that the awareness of sustainability activities is low among internal and external stakeholders (Du et al, 2010, p.2). Thus, this is problematic as through strategic communication, the companies may have possibilities to influence attitudes, increase awareness and in the end to obtain returns from inputs of responsible behaviour (Dhanesh, Ganga S., 2022, p. 319).

The strategic CSR communication differs from the other organisational communications as it is based on the corporate identity and values (Du et al., 2010). As the ethical foundation of the industry seems to be highly prioritised in Finland and the values of the companies are founded on the operational environment in the dimension of social, the foundation for effective responsibility communication is solid. The employees were highly emphasised

by the interviewees, but the companies should focus on to find creative ways for interaction with external stakeholders within the limits of the industry regulations. The focus on external communication serves the aims on the context of employer branding but moreover it is crucial from the perspective of reputation of the industry in the eyes of the public.

Communication on the environmental related issues could be a way the reach and engage the external stakeholders as it is not directly under the regulatory elements of the core business (Francer et al., 2014, p. 9; Schneider et al., 2010, p. 422). However, this might lead to the paradox, as the core business is in the field of social dimension and the possibilities to impact on environmental issues is limited in local companies. Due this, the stakeholders might view the environmental related communication as a hypocrisy in the light of the business environment, which in the end might lead to violated relationship (Dhanesh, Ganga S., 2022, p. 324; Ihlen et al., 2011). The interviewees seem to be aware of this, as the importance of connection of communication on the core business issues was underlined. The uncertainty of stakeholder reaction could also explain some of the sceptical voices of the interviewees towards sustainability communication, as it is widely considered to cover only the environmental dimension. This was also mentioned by one of the interviewees. However, the environmental dimension is a central part of the sustainability and in the lights of the interviews, the external stakeholders of the pharmaceutical companies are increasingly interested the environmental issues of the companies. Thus, the environmental communication cannot be ignored which once again emphasises the importance of the negotiating processes with stakeholders and the strategic approach to communication (Ihlen et al., 2011, p. 8).

Transparency, authenticity and negotiating based nature of CSR communication could be the way to enhance the reputation of the industry (Podnar, 2008, p. 4). The interviewees recognised the importance of the transparency and the need to improve the reputation in the eyes of public, which is in the line with the theoretical findings that argue that the industry is wide aware of its reputational situation (Nussbaum, 2009, p. 69). The current reputation represents the reflection of past stories and experiences. The long-term involvement to relationship and to interaction with stakeholders is required, as the aim is to enhance the current reputation of the industry. (Luoma-aho, Vilma, 2018, p. 195). The interviewees emphasised the importance of the long-term work but there were no elements that aims to increase interaction and negotiating processes with external stakeholders.

As the local pharmaceutical companies are guided by the regulation of the industry and on the other hand by the strategy of parent company, the local companies indeed face a challenge in the field of strategic CSR communication. As part of the vision of the industry is to repair its reputation, the strategic communicational approach need to be taken in concern together with engaging approach to local social community. As the social capital of the organisation and connections with stakeholder builds mutual trust and reputation (Luoma-aho, Vilma, 2018, pp. 202–205), the projects and co-operating with local society might

be a way to decrease the perception of hypocrisy among the public in local context.

As some of the companies have implemented the holistic strategic approach to sustainability and taking actions in the line with the stakeholder expectations, it is interesting to see how this effect to the legitimacy of other companies. The foundation of the “*legitimacy*” and “*licence to operate*” of the industry is solid as the industry is a key part of the healthcare sector, which was highlighted also by the interviewees. However, the legitimacy is depended on the social and culturally oriented expectations and commonly shared meanings with the publics (Ihlen, Øyvind & Verhoeven, Piet, 2015, p. 131). As the nature of the sustainability is evolving (Signitzer & Prexl, 2007), it is possible that the expectations of stakeholders increase during the time. The interviewees’ strong emphasis on the environmental dimension maybe reflection from the need to meet the changed the expectations of the stakeholders, even though it is secondary from the perspective of the core business of the industry.

## **7.2 Evaluation of the research**

In qualitative research method, the evaluation of the research is always present as the researcher need to constantly consider the methodological decisions and the credibility of the research (Eskola & Suoranta, 1998, pp. 208–209). This chapter evaluates the research project and highlight some issues during the process.

### **7.2.1 Success and benefits of the research**

This research succeeded to answer to both of the research questions. The research gives a sight to the features of the sustainability in the context of local pharmaceutical companies. This research also highlights the status of the sustainability related communication in the companies and reveals the need for strategic approach to communications in order to achieve sustainability vision and to obtain the benefits from the sustainability inputs. The research setting was a broad as it includes two independent phenomena: sustainability and strategic communication in the field of sustainability. There is limited amount of research available on these subjects, so this research provides new information and broadens the understanding the relationship of the phenomena and especially in the given context.

The choice of the research method was reasoned as the qualitative research method provided multidimensional set of data from research topic. One of the highlights of this research was the interviewees, who all were high position professionals in the companies their represented. As the aim of the research was to understand the phenomenon of the sustainability in the local companies, the views of the high position leaders can be seen as valuable. High position leaders set the direction of the companies and so forth their opinion reflects the approach

of the companies to the issue studied. Due this, the gathered data set can be seen as a high quality. In some cases, the *saturation* of the data can be seen as a measurement for the evaluation process of the research (Tuomi & Sarajärvi, 2018, p. 99). As the target group of the interviews was quite similar, the gathered data started to be quite similar after small amount of the interviews, which can be identified as a sight of saturation (Tuomi & Sarajärvi, 2018, p. 99). However, due the decisions related to the target group of innovative pharmaceutical companies, certain groups of companies in the field were outlined, which may affect to generalisation of the results in the context of the local pharmaceutical industry. The generic production companies, contract manufacturers and some other major actors in local context are not involved this research due the decision to focus on the member organisations of the PIF.

The results of this research help to understand the phenomenon of the sustainability and communication related to it. Especially the results expose the understanding of the phenomena in the field of pharmaceuticals which is unique and important industry from the perspective of the societies at large. The research gives a new information about the pharmaceutical industry operating in Finland as well as the sustainability as phenomenon in the Nordic countries. In addition, the research also gives a sight to the relationship of the strategic communication and the sustainability. This can be utilised also in other industries and the academics as well, as the discipline of the CSR communication is taking shape. The results of this research can be utilised in the pharmaceutical companies worldwide to reflect the activities of sustainability and strategic communication.

## 7.2.2 Evaluation of credibility and ethics

In qualitative research the credibility and the ethics are in foundational role for the quality of the research, even though the definitions and the approaches to the phenomenon are multidimensional (Tuomi & Sarajärvi, 2018, p. 20). There are no one commonly shared understanding of the evaluation process of the credibility in the qualitative research discipline. The impact of the researcher is unquestioned as a part of the research project and the frames set by the researcher shapes the project from the beginning to the end. However, the credibility of the research needs to be described as the aim is to set the content of the research in context of reality. (Tuomi & Sarajärvi, 2018, p. 158.) The ethics in the qualitative research includes several dimensions from research paradigms to the data gathering and the data use (Eskola & Suoranta, 1998, p. 52).

As there are no clear measurements for the reliability in qualitative research discipline, the *credibility* and the *transferability* are considered as a central concept in some approaches (Tuomi & Sarajärvi, 2018, p. 162). *Credibility* as a measurement of the reliability means common understanding of the conceptualizations and the interpretations between the researcher and the research subjects. This research suffers the lack of the conceptualization of the responsible behaviour of the companies. There are several overlapping terms to



describe responsible behaviour and the translation of the terms is not established. As the understanding of the responsibility is bind to the context and time (Montiel, 2008), it is difficult to share common understanding of the phenomenon. In addition, the linguistic choices may affect to the credibility of the research as the interviews was done in Finnish and the translation to English was done by the researcher. *Transferability* of the research results to another context can be evaluated but the generalization should be avoided. (Eskola & Suoranta, 1998, p. 210.) Due the unique nature of the pharmaceutical industry, the transferability of the research results is limited. However, the research result might be transferred inside of the innovative pharmaceutical industry to other countries.

In the evaluation process of qualitative research, the full research process needs to be taken in concern as well as the impact of the researcher (Eskola & Suoranta, 1998, p. 210). The aim of this research was to understand the sustainability of the pharmaceutical industry located in Finland. As the pharmaceutical companies have great impact to the societies by providing health to the public (Schneider et al., 2010), it is important to understand how the companies view their responsible behaviour and themselves as a part of society at large. As there are limited availability of previous knowledge, the research method of qualitative was reasoned decision (Tuomi & Sarajärvi, 2018, p. 33). In this research, the research process is described carefully to increase the credibility of the process. However, as the industry of the pharmaceuticals is diverse including different types of companies, the data gathered is limited to the innovative companies. The decision was done due to efficiency reasons as the interviewees were easier to reach through the local interest association. The researcher has working history in the industry which might affect to the credibility of the results.

The ethical issues were taken in concern through the research process. The ethical foundation of this research lays on the guidelines of the Finnish National Board of Research Integrity (Tenk) (Tuomi & Sarajärvi, 2018, p. 150). As described in the chapter 3 as part of the research process, the interviewees were informed about the purpose of the research and the permission to use data was asked from all of the interviewees as well as the permission to record the meeting. Also, the voluntariness of the interviewees was verified before the interviews. The documents used to inform the interviewees were the research notification, the privacy notice and the consent form. The research notification can be found in the attachment of this research. The privacy notice and the consent form used were the official JSBE documents. The data gathered was handled as described in the privacy notice document. As a part of ethical practices, the interviewees cannot be identified from this research.

### 7.3 Future research propositions

This research investigates how pharmaceutical companies themselves view the phenomenon of sustainability in local context and how the strategic communication could be utilized to achieve the sustainability vision. As the phenomenon of sustainability is continuously developing and due the importance of the pharmaceutical industry more research is required.

To understand the phenomenon in the industry wider, the perspective of the main stakeholder groups would be valuable. This should include at least the customers and the institutional organisations. What the customers and consumers expect from pharmaceutical companies in the light of sustainability and what value the sustainability work might bring to them. The perspective of the institutional stakeholders might increase the understanding of how the regulatory environment faces the sustainability work of the pharmaceutical companies. As the results of this research showed, the employees were one of the main stakeholder groups for sustainability activities. It would be valuable to understand how the employees view the sustainability activities of the companies and does it increase the engagement to the employer and the motivation.

According to findings of this research, the vision for the sustainability activities is to build the social capital of the organisation for the companies as well as the industry as whole. As this are gained through communicational processes, more research is required which focuses directly to the communicational strategies and implications in the pharmaceutical companies.

## REFERENCES

- Alasuutari, P. (1994). *Laadullinen tutkimus* (2. uud. p). Vastapaino.
- Belkhir, L., & Elmeligi, A. (2019). Carbon footprint of the global pharmaceutical industry and relative impact of its major players. *Journal of Cleaner Production*, 214, 185–194. <https://doi.org/10.1016/j.jclepro.2018.11.204>
- Bluestone, K., Heaton, A., & Lewis, C. (2002). *Beyond Philanthropy: The pharmaceutical industry, corporate social responsibility and the developing world*. Oxfam.
- Bruyaka, O., Zeitzmann, H. K., Chalamon, I., Wokutch, R. E., & Thakur, P. (2013). Strategic Corporate Social Responsibility and Orphan Drug Development: Insights from the US and the EU Biopharmaceutical Industry. *Journal of Business Ethics*, 117(1), 45–65. <https://doi.org/10.1007/s10551-012-1496-y>
- Carroll, A. B. (1979). A Three-Dimensional Conceptual Model of Corporate Performance on JSTOR. *The Academy of Management Review*, 4(4), 497–505. <https://doi.org/10.2307/257850>
- Coombs, W. T., & Holladay, S. J. (2011). *Managing Corporate Social Responsibility: A Communication Approach*. John Wiley & Sons.
- Dhanesh, Ganga S. (2022). Corporate responsibility and strategic communication. In J. Falkheimer & M. Heide (Eds.), *Research handbook on strategic communication*. Edward Elgar Publishing Limited. <https://doi.org/10.4337/9781800379893>
- Droppert, H., & Bennett, S. (2015). Corporate social responsibility in global health: An exploratory study of multinational pharmaceutical firms. *Globalization and Health*, 11(1), 15. <https://doi.org/10.1186/s12992-015-0100-5>

- Du, S., Bhattacharya, C. B., & Sen, S. (2010). Maximizing Business Returns to Corporate Social Responsibility (CSR): The Role of CSR Communication. *International Journal of Management Reviews*, 12(1), 8–19. <https://doi.org/10.1111/j.1468-2370.2009.00276.x>
- Eskola, J., & Suoranta, J. (1998). *Johdatus laadulliseen tutkimukseen*. Vastapaino.
- Esteban, D. (2008). Strengthening corporate social responsibility in the pharmaceutical industry. *Journal of Medical Marketing*, 8(1), 77–79. <https://doi.org/10.1057/palgrave.jmm.5050126>
- European Commission: A renewed EU strategy 2011-14 for Corporate Social Responsibility. (2011). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52011DC0681>
- Fickweiler, F., Fickweiler, W., & Urbach, E. (2017). Interactions between physicians and the pharmaceutical industry generally and sales representatives specifically and their association with physicians' attitudes and prescribing habits: A systematic review. *BMJ Open*, 7(9), e016408. <https://doi.org/10.1136/bmjopen-2017-016408>
- Fimea, licenses. (n.d.). Licenses. Retrieved 4 December 2023, from [https://fimea.fi/en/supervision/pharmaceutical\\_industry/licenses](https://fimea.fi/en/supervision/pharmaceutical_industry/licenses)
- Francer, J., Izquierdo, J. Z., Music, T., Narsai, K., Nikidis, C., Simmonds, H., & Woods, P. (2014). Ethical pharmaceutical promotion and communications worldwide: Codes and regulations. *Philosophy, Ethics, and Humanities in Medicine*, 9(1), 7. <https://doi.org/10.1186/1747-5341-9-7>
- Hallahan, K., Holtzhausen, D., Van Ruler, B., Verčič, D., & Sriramesh, K. (2007). Defining Strategic Communication. *International Journal of Strategic Communication*, 1(1), 3–35. <https://doi.org/10.1080/15531180701285244>

- Hirsjärvi, S., Sinivuori, E., Remes, P., & Sajavaara, P. (2000). *Tutki ja kirjoita* (6. uud. laitos). Tammi.
- Hogerzeil, H. V. (2013). Big Pharma and Social Responsibility—The Access to Medicine Index. *New England Journal of Medicine*, 369(10), 896–899.  
<https://doi.org/10.1056/NEJMp1303723>
- Holtzhausen, D. R., & Zerfass, A. (Eds.). (2015). Strategic Communication—Opportunities and Challenges of the research Area. In *The Routledge handbook of strategic communication*. Routledge.
- Hyvärinen, M., Suoninen, E., & Vuori, J. (n.d.). Laadullisen tutkimuksen verkkokäsikirja. In *Laadullisen tutkimuksen verkkokäsikirja*.  
<https://www.fsd.tuni.fi/fi/palvelut/menetelmaopetus/kvali/>
- Ihlen, Ø., Bartlett, J., & May, S. (2011). *The Handbook of Communication and Corporate Social Responsibility*. John Wiley & Sons, Incorporated.  
<http://ebookcentral.proquest.com/lib/jyvaskyla-ebooks/detail.action?docID=818739>
- Ihlen, Øyvind & Verhoeven, Piet. (2015). Social Theories for Strategic Communication. In D. R. Holtzhausen & A. Zerfass (Eds.), *The Routledge handbook of strategic communication*. Routledge.
- Järvensivu, T., Lukkari, Pirjo, & Järvensivu, Paavo. (2010). Strategic networks and the institutional environment: A case study of Pharma Industry Finland (PIF). *International Journal of Pharmaceutical and Healthcare Marketing*, 4(3), 265–281. <https://doi.org/10.1108/17506121011076183>
- Katz, A. (2016). *Pharmaceutical Lemons: Innovation and Regulation in the Drug Industry* [Preprint]. SocArXiv. <https://doi.org/10.31235/osf.io/5w8xs>

- Komesaroff, P. A., & Kerridge, I. H. (2002). Ethical issues concerning the relationships between medical practitioners and the pharmaceutical industry. *Medical Journal of Australia*, 176(3), 118–121. <https://doi.org/10.5694/j.1326-5377.2002.tb04318.x>
- Księżak, P., & Fischbach, B. (2018). Triple Bottom Line: The Pillars of CSR. *Journal of Corporate Responsibility and Leadership*, 4(3), 95. <https://doi.org/10.12775/JCRL.2017.018>
- Lääkeasetus 693/1987*. (n.d.). Retrieved 4 December 2023, from <https://www.finlex.fi/fi/laki/ajantasa/1987/19870693>
- Lääketeollisuus ry*. (n.d.). Retrieved 11 December 2023, from <https://www.laaketeollisuus.fi/laaketeollisuus-ry/jasenemme.html>
- Lääketeollisuus ry, The Finnish pharmaceutical market 2022*. (n.d.). Retrieved 11 December 2023, from <https://www.laaketeollisuus.fi/uutishuone/tilastot.html>
- Leonardo Alves, T., Lexchin, J., & Mintzes, B. (2019). Medicines Information and the Regulation of the Promotion of Pharmaceuticals. *Science and Engineering Ethics*, 25(4), 1167–1192. <https://doi.org/10.1007/s11948-018-0041-5>
- Light, D. W., & Warburton, R. (2011). Demythologizing the high costs of pharmaceutical research. *BioSocieties*, 6(1), 34–50. <https://doi.org/10.1057/biosoc.2010.40>
- Luoma-aho, Vilma. (2018). On Putnam: Bowling Together. In Ø. Ihlen & M. Fredriksson (Eds.), *Public relations and social theory: Key figures and concepts* (Second edition). Routledge/Taylor & Francis Group.
- Marmat, G., Jain, P., & Mishra, P. N. (2020). Understanding ethical/unethical behavior in pharmaceutical companies: A literature review. *International Journal of Pharmaceutical and Healthcare Marketing*, 14(3), 367–394. <https://doi.org/10.1108/IJPHM-03-2018-0016>

- Milanesi, M., Runfola, A., & Guercini, S. (2020). Pharmaceutical industry riding the wave of sustainability: Review and opportunities for future research. *Journal of Cleaner Production*, *261*, 121204. <https://doi.org/10.1016/j.jclepro.2020.121204>
- Min, M., Desmoulins-Lebeault, F., & Esposito, M. (2017). Should pharmaceutical companies engage in corporate social responsibility? *Journal of Management Development*, *36*(1), 58–70. <https://doi.org/10.1108/JMD-09-2014-0103>
- Mintzes, B., Barer, M. L., Kravitz, R. L., Bassett, K., Lexchin, J., Kazanjian, A., Evans, R. G., Pan, R., & Marion, S. A. (2003). How does direct-to-consumer advertising (DTCA) affect prescribing? A survey in primary care environments with and without legal DTCA. *Canadian Medical Association Journal (CMAJ)*, *169*(5), 405–412.
- Montiel, I. (2008). Corporate Social Responsibility and Corporate Sustainability: Separate Pasts, Common Futures. *Organization & Environment*, *21*(3), 245–269. <https://doi.org/10.1177/1086026608321329>
- Mulinari, S., Davis, C., & Ozieranski, P. (2021). Failure of Responsive Regulation? Pharmaceutical Marketing, Corporate Impression Management and Off-Label Promotion of Enzalutamide in Europe. *Journal of White Collar and Corporate Crime*, *2*(2), 69–80. <https://doi.org/10.1177/2631309X20970477>
- Nielsen, A. E., & Thomsen, C. (2012). Corporate Social Responsibility (CSR) Management and Marketing Communication: Research Streams and Themes. *HERMES - Journal of Language and Communication in Business*, *49*, Article 49. <https://doi.org/10.7146/hjlcb.v25i49.97737>
- Nussbaum, A. (Sascha) K. (2009). Ethical corporate social responsibility (CSR) and the pharmaceutical industry: A happy couple? *Journal of Medical Marketing*, *9*(1), 67–76. <https://doi.org/10.1057/jmm.2008.33>

- Pharmaceutical pollution and AMR. (2018). *WHO Drug Information*, 32(2), 220–221.
- Phillips, R., & Freeman, R. E. (2003). *Stakeholder Theory and Organizational Ethics*. Berrett-Koehler Publishers, Incorporated.
- PhRMA - Research and Development*. (n.d.). Retrieved 26 June 2023, from <https://phrma.org/policy-issues/Research-and-Development-Policy-Framework>
- Pignatti, F., Gravanis, I., Herold, R., Vamvakas, S., Jonsson, B., & Marty, M. (2011). The European Medicines Agency: An Overview of Its Mission, Responsibilities, and Recent Initiatives in Cancer Drug Regulation. *Clinical Cancer Research*, 17(16), 5220–5225. <https://doi.org/10.1158/1078-0432.CCR-11-0623>
- Podnar, K. (2008). Guest Editorial: Communicating Corporate Social Responsibility. *Journal of Marketing Communications*, 14(2), 75–81. <https://doi.org/10.1080/13527260701856350>
- Quak, S., Heilbron, J., & Meijer, J. (2019). Ranking, coordination, and global governance: The case of the Access to Medicine Index. *Business and Politics*, 21(2), 172–204. <https://doi.org/10.1017/bap.2018.22>
- Ravela, R., Lyles, A., & Airaksinen, M. (2022). National and transnational drug shortages: A quantitative descriptive study of public registers in Europe and the USA. *BMC Health Services Research*, 22(1), 940. <https://doi.org/10.1186/s12913-022-08309-3>
- Roosa, S. A. (2008). *Sustainable Development Handbook*. Lilburn, GA : Fairmont Press.
- Sara LaBelle & Jennifer H. Waldeck. (2020). *Strategic Communication for Organizations*. University of California Press.
- Sarnola, K. (2018). *Lääkkeiden saatavuus ja saavutettavuus: Tutkimus lääkkeiden saatavuusongelmista Suomessa ja harvinaislääkkeiden saavutettavuudesta Euroopassa*. Itä-Suomen yliopisto.



- Saxena, K., Balani, S., & Srivastava, P. (2021). The relationship among corporate social responsibility, sustainability and organizational performance in pharmaceutical sector: A literature review. *International Journal of Pharmaceutical and Healthcare Marketing*, 15(4), 572–597. <https://doi.org/10.1108/IJPHM-12-2020-0104>
- Schneider, J. L., Wilson, A., & Rosenbeck, J. M. (2010). Pharmaceutical companies and sustainability: An analysis of corporate reporting. *Benchmarking: An International Journal*, 17(3), 421–434. <https://doi.org/10.1108/14635771011049371>
- Signitzer, B., & Prexl, A. (2007). Corporate Sustainability Communications: Aspects of Theory and Professionalization. *Journal of Public Relations Research*, 20(1), 1–19. <https://doi.org/10.1080/10627260701726996>
- Tang, Z., Leo, E., Hull, C., Fu, X., & Stromeyer, W. (2023). When consumers lose power: An examination of the stakeholder dynamics in the pharmaceutical industry. *Business Ethics, the Environment & Responsibility*, 32(3), 986–1000. <https://doi.org/10.1111/beer.12544>
- Tuomi, J., & Sarajärvi, A. (2018). *Laadullinen tutkimus ja sisällönanalyysi* (Uudistettu laitos). Kustannusosakeyhtiö Tammi.
- Verk, N., Golob, U., & Podnar, K. (2021). A Dynamic Review of the Emergence of Corporate Social Responsibility Communication. *Journal of Business Ethics*, 168(3), 491–515. <https://doi.org/10.1007/s10551-019-04232-6>
- WCED. (1987). *Our Common Future*. <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>

- Weerasooriya, S. U. (2019). The impact of orphan drug policies in treating rare diseases. *Health Information & Libraries Journal*, 36(2), 179–184. <https://doi.org/10.1111/hir.12256>
- Witkowska, J. (2018). Corporate Social Responsibility (CSR) of Innovative Pharmaceutical Corporations. The Case of BIOGEN. *Comparative Economic Research. Central and Eastern Europe*, 21(3), 45–62. <https://doi.org/10.2478/cer-2018-0018>
- Zerfass, Ansgar & Link, Jeanne. (2022). Communication management: Structures, processes, and business models for value creation through corporate communications. In J. Falkheimer & M. Heide (Eds.), *Research handbook on strategic communication*. Edward Elgar Publishing Limited. <https://doi.org/10.4337/9781800379893>

## APPENDICES

### Appendix 1: Call for interviewees

Call for interviewees for the master's thesis research "Corporate sustainability communication of pharma industry companies located in Finland"

Hannamari Sirkko (M.S. in Economics and Business Administration student) is conducting master's thesis research which aims to understand how pharma industry companies communicate about CSR and CS issues and what needs and challenges do they have related CSR/CS communication. Pharma Industry Finland can utilize the results of the research as a part of sustainability work.

About 5-10 interviewees will be applied for the study and the interviewees will be selected in order of sign up. The research is conducted as an interview study. The interview take time approximately 1 hour and is conducted via Zoom. The interviews take place on June and July. The names of the interviewees or the companies are not published as a part of the reporting of the results.

Sign up before 15.6.2023!

Sign up and more information:

Hannamari Sirkko

M.S. student of Corporate Communication

Jyväskylä University School of Business and Economics

### Appendix 2: Interview question framework

#### Background information:

Title, position in the organisation:

How long have you worked in this company / In current position:

The term used on corporate responsibility:

#### Interview questions:

	In local company	In global company
-- "Warm up questions"		
<b>What corporate responsibility means to you personally?</b>		
About in the context of pharmaceutical industry?		
<b>RQ1: What is corporate responsibility in pharmaceutical companies in Finland?</b>		

What corporate responsibility means in your company?			
Is corporate responsibility important and what is important? <b>WHY?</b>			
<b>How</b> corporate responsibility is conducted in your company? → Can you give an example?			
<b>How</b> corporate responsibility is included to the strategy and <b>what kind of</b> responsibility issues is in the strategy? → Can you give an example?			
When responsibility included to the strategy work?			
What is your <b>motivation</b> for conduct the corporate responsibility actions? →			
<b>RQ2: How corporate responsibility communication is conducted?</b>			
How do you understand the responsibility communication?			
How responsibility communication is included to the strategy?			
Is there any guiding or binding issues in communication operations?			
Who is responsible for responsibility communication? (ie. marketing, global company, communication department etc)			
Who are the most important <b>stakeholders</b> for responsibility communication?			

How do you know what themes and issues are important for your stakeholders?			
How do you communicate about your responsibility? -what themes? -what is easiest theme? - do you report? - campaigns? channels?			
<b>Why</b> do you do communication on your responsibility issues? (Motivation) - What is the goal?			
<b>RQ3: Corporate responsibility vision of the company and industry</b>			
<b>What have you achieved on your responsibility communication?</b> -How do you measure? -How do you know you have succeeded?			
Do you have enough resources for communication?			
<b>On your perspective, how responsibility communication could be developed?</b> - In your organisation - In industry wide?			
<b>What kind of co-operation possibilities there could be related to the corporate responsibility and responsibility communication?</b>			
<b>What kind of support you expect from PIF related to responsibility/communication issues?</b>			

## Appendix 3: Research Notification

### 1. The master thesis “Corporate sustainability communication of pharma industry companies located in Finland” and invitation to participate in research

**We ask you to participate in “Corporate sustainability communication of pharma industry companies located in Finland”** which investigates how pharma industry companies understand the concept of sustainability, how they communicate about CSR and CS issues and what needs and challenges do they have related to CSR/CS communication. The research is conducted in co-operation with Pharma Industry Finland and the data is collected from the member companies of PIF.

You are invited to the study because you are representative of member company of PIF and because due to your position, you are the right person to tell about sustainability activities and sustainability communication of your company and in the addition the vision for the future.

This research notification describes the study and related participation. The attachment (*Privacy Noticement*) provides information on the processing of your personal data.

The main research questions (RQs) are:

- What is sustainability in the pharmaceutical companies in Finland?
- How the pharmaceutical companies conduct sustainability communication?
- What needs and development objectives the pharmaceutical companies have related to sustainability communication?

The research is conducted through personal interviews and the data is collected from 5-10 representative of the companies. The name of the companies nor the name of the interviewees (including other identification information) will not be reported in the results of the study.

This is a single study, and you will not be contacted again later.

### 2. Voluntariness

Participation in this study is voluntary. You can refuse to participate in the study, stop participating or cancel your previously given consent, without stating any reason for this and at any time during the study. This will have no negative consequences to you.

If you stop participating in the study or if you cancel your consent, the personal data, samples and other information collected on you up to that point will be used as part of the research material as far as it is necessary in order to ensure relevant research outcomes.

### 3. Progress of the study

The research will be conducted as an individual interviews, which will take place approximately between June 2023 and July 2023. The interview takes time approximately 60 minutes. The interviews are recorded, and the researcher transcribes the recordings into written form. After this, the recordings will be destroyed as described in the Privacy Noticement.

Participating in the interview does not require special preparation.

The interviews are carried out remotely using the Zoom service of University of Jyväskylä. The Funet Miitti (Zoom) service is implemented through NORDUnet in a Nordic way. The Zoom service offered by CSC and NORDUNet is technically different from the general Zoom service offered by Zoom Video Communications, Inc in the USA.

The names (or other identifying information e.g., age, position) of the interviewees or the company names are not published as a part of the reporting of the results.

#### **4. Possible benefits from the study**

There is no immediate benefit for you from participating in the study. However, the research results provide an understanding of how the companies in the pharmaceutical industry implement sustainability communication and what are the possible challenges they are facing related to sustainability communication.

Pharma Industry Finland can utilize the results of the research as a part of sustainability work.

In general, the research produces new information about how sustainability is perceived and how sustainability communication is implemented in the pharmaceutical companies in Finland.

#### **5. Possible risks, harm, and inconvenience caused by the study as well as preparing for these**

According to the researcher's opinion, participating in the study will not cause you any risks, disadvantages, or inconveniences.

#### **6. Study-related costs and compensations to the subject as well as research funding**

No rewards will be paid for participation in the study.

#### **7. Informing about research results and research outcomes**

The research will result one master's thesis, which will be published in the publication archive of the University of Jyväskylä: <https://jyx.jyu.fi/>

#### **8. Insurance coverage for research subjects**

The University of Jyväskylä has insurances for its activities and research subjects.

In the case of research conducted remotely, the insurance of the University of Jyväskylä compensates only for damage that is directly related to the assigned research task and that has occurred during the actual guided research task. The insurance does not cover accidents that occur during breaks.

The insurances of the University of Jyväskylä are not valid in the case of research conducted remotely if a research subject's home municipality is not in Finland.

The set of insurance includes a malpractice insurance, an operational liability insurance, and an optional insurance against accidents. During the research activities, the subjects are covered by the insurance for accidents, damages and injuries inflicted by an external cause. The accident insurance is valid during measurements and on trips integrally connected to them.

#### 9. **Contact person for further information**

Additional information from researcher:

Hannamari Sirkko  
Master student of Corporate Communication  
Jyväskylä University School of Business and Economics

### **Appendix 4: Abbreviations**

AMR = Antimicrobial Resistance  
CSR = Corporate Social Responsibility  
CS = Corporate Sustainability  
CSC = Corporate Sustainability Communication  
DtCA = Direct to Consumers Advertising  
EC = European Commission  
EMA = European Medicine Agency  
EM = Environmental Management  
EU = European Union  
FDA = Food and Drug Administration  
GHG = Greenhouse Gas  
NGO = Non-Governmental Organisations  
PIF = Pharma Industry Finland  
R&D = Research and Development  
TBL = Triple Bottom Line  
WHO = World Health Organisation