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# The hampering and supporting factors of sustainable business development in the Estonian SMEs in the textile and apparel

# industry

Master's thesis

Master of International Business Administration

Supervisor: Professor Susanne Durst

I hereby declare that I have compiled the thesis independently and all works, important standpoints and data by other authors have been properly referenced and the same paper has not been previously presented for grading. The document length is 19473 words from the introduction to the end of conclusion.

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### ABSTRACT

The uncontrolled rise in the consumption of our planet's precious resources exacerbated the difficulty of meeting human society's resource needs and jeopardizing future generations. Additionally, waste exacerbates the global economic challenge of "natural resources" becoming depleted as a result of product degradation and utilization. As a consequence, trash generated as a result of waste or the mismanagement of environmental resources that causes create pollution has a detrimental effect on the environment and human life.

To this end, extensive research and activities have been conducted to protect the environment and the proper use of resources. In this case, several definitions for the development of sustainability were developed in the researches at various social, economic, and environmental levels, and the factors affecting each of these three aspects of sustainability were examined. However, there is a lack of a comprehensive and integrated framework that takes all of these influential factors into account and examines their interconnections and interactions in the previous researches. Moreover, the necessary research into the factors affecting the development of sustainable businesses is not seen among small and medium-sized enterprises (SMEs) operating in the textile and apparel (A&P) industry as one of the most influential industries on environment sustainability.

Hence, the purpose of this research is to identify these influential factors from previous research and evaluate them in Estonian SMEs in the same industry. By examining these factors, the mentioned gaps can be addressed or a step can be taken to reduce them.

This research emphasizes the need to identify the factors influencing the development of sustainable businesses among SMEs and also examines the importance of examining them in the textile and apparel industry and introduces 23 factors as the main factors. Moreover, the result demonstrated them as internal and external factors that have supporting or hampering effects on sustainable development in Estonian SMEs in the textile and apparel industry as well as the type of impact and interrelationships of these factors displayed in one holistic integrated framework.

Keywords: Sustainability, Sustainable development, Hampering factor, Supporting factor, Sustainable SMEs, Textile and Apparel industry, Holistic framework,

## **INTRODUCTION**

In recent decades, mankind has gradually realized that the uncontrolled expansion or growth that has occurred in the environment of our planet's finite resources has been unsustainable for an extended period (Ceniga & Sukalova, 2020). Pavel also belive that in the interests of both humans and the ecosystem, it must be replaced by something more sustainable (Ceniga & Sukalova, 2020). In addition to the problem of resource constraints and unsustainability for an extended period , wastage also exacerbates the global economic problem. Waste is related to "natural resources" (any ecosystem that the land provides to people), which are depleted as a result of the deterioration of products and the consumption of those items. The social system and the ecological system's sustainability are intertwined and have an impact on one another (Buzatu et al., 2019).

Sustainable economic development has risen to the forefront of public perception in most industrialized countries in recent years (Seidel et al., 2008), and consumer awareness of global environmental challenges such as climate change and oil depletion has increased significantly. (Seidel et al., 2008) also mentioned that as a result of this increased market awareness, the demand for environmentally friendly products has steadily increased (Seidel et al., 2008).

The impact of these issues and the emergence of environmental impacts has been such that it has increased consumer caution and their awareness of global environmental challenges such as climate change and oil depletion significantly. As a result of this increased market awareness, the demand for environmentally friendly products has steadily increased (Seidel et al., 2008).

Moreover, sustainable economic development has risen to the forefront of public perception in most industrialized countries in recent years (Seidel et al., 2008). It should be stated that SMEs drive economies in both developed and developing nations (Szczepańska-Woszczyna & Kurowska-Pysz, 2016). SMEs are a source of economic growth as well as innovation across all industries. Besides, they provide jobs for the citizens of the countries concerned. They also offset the negative economic trends and support the restructuring of industries (Szczepańska-Woszczyna & Kurowska-Pysz, 2016).

Therefore, it is very clear that SMEs are one of the main effective business groups to the people, economies, environment and even susceptible to the above-mentioned environmental problems.

On the other hand, the fashion garment business is battling for increased profitability in the face of global economic downturns, while also contending with sustainability issues and consumer uncertainties (Pal, 2014). In the research scope of this paper, textile and apparel (T&A) industry which has negative impact on the environment, was considered. Because it is a well-known truth that the T&A sector creates crucial water, air, and soil pollution, posing a threat to people and aquatic species. The textile and apparel industry has a considerable potential to affect all three pillars of sustainability (Baumgartner et al., 2019). Furthermore, overseas exports are falling, resulting in financial losses for T&A industries and stifling the country's economic progress. Workers are losing their employment, cotton farmers aren't getting their fair share, and there isn't enough awareness among the workforce about safety and health procedures, to name a few of the social concerns that the T&A industry is dealing with. As a result, this field of research is critical for achieving economic gains, environmental protection, and social balance. (Baumgartner et al., 2019).

#### **Research Aim and Question**

The aim of this research is to identify the factors that effect sustainable development in small and mediume sized interprises (SEMs) in the textile and apparel industry in Estonia. The concepts of sustainability, sustainable development, and their importance have been examined in this study, as well as the importance of implementing sustainable development in small and medium enterprises. In the following, the effective factors in the development of sustainability in SMEs as well as the identification of new effective factors in the T&A industry and in Estonia are discussed. Within this context, this study is motivated by five research questions to clarify the path in order to formulate the main following research question: "Which factors influence sustainable business development in SMEs in the textile and apparel industry of Estonia?". As a result, the following questions have been posed:

- What factors influence the sustainable development in SMEs?
- How do these influential factors affect sustainable development in SMEs?
- Which of these factors have interconnection and interaction with each other?
- Which of these factors influence sustainable development in SMEs of the textile and apparel industry?
- Which of these factors affects SMEs of the textile and apparel industry in Estonia?

By examining these factors, creates transparency in the analysis of the degree of sustainability of companies and also identifies harmful and impeding factors in the sustainable development of these companies and strengthens the reinforcing factors that have many effects on the development of sustainability at the national or global level.

As a result of the study's main purpose, 23 supporting and hampering factors in developing the sustainable business of Estonian SMEs in the textile and apparel industry were identified. Additionally, this study examined the type of these factors' impact, as well as their interconnection and interaction with one another. The coherent outcome of this research is the integrated framework of the hampering and supporting factors of sustainable business development in the Estonian SMEs in the textile and apparel industry.

#### **Organization of Thesis**

The first chapter introduce the concepts of sustainability and sustainable development, and focus on the sustainability in SMEs in the textile and apparel industry. the second chapter introduces effective factors that have been discussed in the relevant literature that synthesized in the initial holistic framework. The methodology has been specified in the third search chapter and includes Background of research objects, research design, research methods, sampling, selection of respondents, data collection protocol and data analysis. In the fourth chapter, the result shows the synthesized literature review which is brought together with the finding from interviews. The outcome of the fourth chapter would be the updated framework of relative influential factors to the sustainable business development of SMEs in the Textile and apparel industry of Estonia. Finally, the fifth chapter discusses the explanation of results, limitations of research and recommendations for future research, and practical implications.

# **1. THEORETICAL BACKGROUND**

#### **1.1.** The Concept of Sustainability

Capitalism was re-defined in the 1990s as an agent capable of addressing the world's demands. This was a significant departure from the 1970s debate. (Bergquist, 2017)Several industries, especially oil and gas, which had fought environmental legislation in the 1970s, announced that they had reached a point where the continued damage of the environment, including climate change, had to be addressed quickly. Sustainability has suddenly become a concept that is consistent with profit and has the potential to add value to huge multinational corporations (Bergquist, 2017) (Carroll et al., 2012).

There are many different types of sustainability, such as sustainable development, sustainable economics, sustainable growth, sustainable finance and so on (Magdalena et al., 2015). (Szczepańska-Woszczyna & Kurowska-Pysz, 2016) Also refer sustainability to a range of things, including ecological sustainability, social sustainability, and sustainable economic growth. The United Nations General Assembly adopted the report "Our Common Future" in 1987, which defined sustainable development as "development that meets the requirements of current generations without endangering the ability of future generations to satisfy their own needs." This definition, in particular, includes the fundamental premise of sustainability, as well as an ethical leitmotif, the principle of accountability to future generations (Ceniga & Sukalova, 2020) (Morelli, 2011).

Although there are many ways to define "sustainability," the essential is linked to the company's organic development in a dynamic balance with its external business environment and natural surroundings (Szczepańska-Woszczyna & Kurowska-Pysz, 2016) and provides a systemic term that is adopted by businesses on their own initiative, in response to the expectations of interested parties (Bakanauskienė et al., 2020).

Furthermore, (Yolles, 2018) believes that the interactions and trade-offs between the oftenconflicting objectives of the many components of sustainability must be examined in order to comprehend sustainable development. Both indicators and measures for social sustainability are also required. There is also a need to evaluate their contexts as part of a co-evolutionary framework, and any sustainability evaluation or measurement must be incorporated in that framework, which must be dynamic and take into account interactions between the many aspects. In this case, (Yolles, 2018) summarized the findings of previous research (Figure 1) which demonstrate the different dimensions of sustainability.

Sustainability dimension	Author	
Social	Brundtland (1987)	
Economic	Brundtland (1987)	
Ecological environment	Brundtland (1987)	
Finance	Elkington (1999)	
Politics	McKenzie (2004) and Griessler and Littig (2005)	
Market-institutional	Dominici et al. (2017), Boström (2012) and Griessler and Littig (2005)	
Culture	Griessler and Littig (2005) and Hawkes (2001)	
Cultural-aesthetic, religious-spiritual, political-institutional	Burford et al. (2013) and Griessler and Littig (2005)	

Figure 1. Different dimensions of sustainability

Source: (Yolles, 2018, p. 267)

According to the research in this paper, all factors have been examined in the following sections, are within above mentioned dimensions that help to better understand its sustainability and development in companies in order to create holistic framework of factors effect sustainable development in SEMs in textile and apparel industry.

#### **1.1.1. Sustainability at The Firm Level**

Sustainability could be defined as the ability to endure; it is a relatively new notion that has yet to be thoroughly explored in the business sector (Szczepańska-Woszczyna & Kurowska-Pysz, 2016). Sustainability is defined by (Grudzewski et al., 2010) as a company's ability to continuously learn, adapt and develop, revitalize, reconstruct, and reorient to maintain a lasting and distinctive position in the market by providing buyers with above-average value today and in the future (consistent with the paradigm of innovative growth) through organic variation constituting business models, and arising from the creation of new opportunities, objectives, and responses to them while maintaining a lasting and distinctive position in the market (Szczepańska-Woszczyna & Kurowska-Pysz, 2016). Moreover, social and environmental responsibilities (CSR) or

sustainability reports, which are becoming more popular, can be used as a management tool to assess a company's economic, social, and environmental responsibility, as well as to involve the company's stakeholders in its CSR initiatives and communication (Swiatkiewicz, 2017).

One of the most widely used definitions of CSR, according to (Bergman et al., 2015), analysis of the conceptual scope of this term, is based on three pillars or domains of sustainability, namely, economic (e.g. increasing competitive advantage, increasing productivity or/and revenue, increasing investment, improving brand reputation, gaining publicity, saving money, avoiding risks), social (e.g. poverty reduction, health concerns, avoiding risks), and environmental (e.g. eco-friendly and green production, global warming issues, depletion of natural resources, energy efficiency, carbon footprint strategies, investing in specific environmental projects) (Swiatkiewicz, 2017).

#### 1.1.2. The Importance of Sustainability for The Businesses

The importance of social issues and environmental circumstances to societies and businesses has expanded considerably during the last five decades (Deborah et al., 2012) (Bakanauskienė et al., 2020). The unequal allocation of focus on the three aspects that reflect sustainability, namely the companies' economic wellbeing, environmental initiatives, and social responsibility, is one of the possible symptoms of inadequacies in the companies' policies. (Bakanauskienė et al., 2020). As a result, the value of sustainability, which includes vision and competitive advantage through strategic thinking and leadership (Szczepańska-Woszczyna & Kurowska-Pysz, 2016), is becoming increasingly obvious, particularly in times of economic uncertainty, and is only anticipated to grow in the future (Schoenherr, 2012). According to the findings, managers believe that sustainable development is the key to the company's future success (Szczepańska-Woszczyna & Kurowska-Pysz, 2016). The application of sustainable principles will aid in the development of society (Buzatu et al., 2019).

As the result, (Ville Matinaro, 2018) believe that sustainability must be seen as a critical component of every organization's strategy. They also argue that there is actual economic significance, incentives, and motivation in enterprises to act in a sustainable manner when they believe they may achieve greater profits, better competitive advantages, including improved shareholder value, while maintaining a positive image in the marketplace. This also means that businesses must maintain their sustainable value propositions, which include pledges to society, and recognize that cheating can be costly.

#### **1.2.** Sustainable Development

As previously stated, sustainability is a concept that aims to strike a balance between social, economic, and environmental challenges, and it is a critical prerequisite for future generations to enjoy a good quality of life. (Magdalena et al., 2015)

In terms of the economics of inequality, this balance is especially essential, with expanding income gaps, an aging society, social difficulties, capitalism's crises, and unprecedented environmental challenges that will become millstones receiving special attention (Magdalena et al., 2015). The magnitude of the aforementioned issues has social and economic costs and consequences, all of which have a detrimental impact on sustainable development and growth. These issues must be addressed because they have a significant impact on people's quality of life, economic performance, and basic society rights and values like liberty, equality, justice, and fairness. Sustainable development and expansion are in high demand in such circumstances (Magdalena et al., 2015).

Also (Bakanauskiene et al., 2020) believe that ensuring sustainability is critical and that the concept of sustainable development governs current generation requirements while protecting future generations (Bakanauskienė et al., 2020). Hence, it can be possible to talk about sustainable development when the connection between human needs and natural resources can be recognized. Existing scientific research provides a wide range of sustainable development definitions (Buzatu et al., 2019). Sustainable development is the process of identifying and implementing sustainable solutions that benefit people, the economy, and the environment (Ceniga & Sukalova, 2020). In other words, The application of sustainability concepts to business operations is referred to as sustainable business development (Szczepańska-Woszczyna & Kurowska-Pysz, 2016). Also (Buzatu et al., 2019) mention that "Developments that are responsive to current needs without compromising the ability of future generations to meet their own needs" and "have developed considerably and are developing further" (Buzatu et al., 2019). In addition, for the firm level, according to the conceptualization of the concept of sustainability, The ability of companies and firms to contribute to sustainable development, which incorporates three elements including economic, social, and environmental gain, sometimes known as the "triple bottom line", can be viewed as sustainable development (Bakanauskienė et al., 2020). In this regard, Sustainable development rather than being a technical solution can also be moral problem for society (Ceniga & Sukalova, 2020) which demands a holistic approach to environmental, social, and economic elements of business operations (Bakanauskienė et al., 2020).

According to the above-mentioned view, the necessity for constant improvement and acquiring a competitive edge drives the search for and implementation of common principles for sustainable development (Buzatu et al., 2019). And these principles can help us on the way to turning the business into a Sustainable business. Sustainable business practices are those that have been determined to be ecologically friendly. These practices could include using organic and natural products in the construction of its facilities, tighter emission controls, environmentally responsible supply sourcing, and developing organizations and processes to make the most efficient and costeffective use of resources (Karagülle Özgür, 2012). Adopting concepts, strategies, and practices that increase the quality of life for customers while also protecting resources is what sustainable business is all about. Using renewable energy sources, improving material recyclability, and decreasing hazardous dispersion are all eco-friendly corporate strategies (Karagülle Özgür, 2012). Hence, it is possible to generally summarise that sustainable businesses or companies that are sustainable: 1) create sustainable financial value, 2) understand how their actions affect the environment and actively work to reduce their impacts, 3) care about their employees, customers, and communities and work to make a positive social change, and 4) recognize that these three elements are interconnected (Szczepańska-Woszczyna & Kurowska-Pysz, 2016).

#### **1.3.** Small and Medium-sized Enterprises

SMEs stands for small and medium-sized enterprises also known as small and medium-sized business (SMBs). (Al-Herwi, 2019). According to the European Union definition, SMEs account for 99 percent of all firms in the European Union. The classification of a SMEs is critical for obtaining financing and participating in EU support programs designed exclusively for these businesses. Hence, the number of employees and either turnover or balance sheet total are the two most important elements in assessing whether a company is a small or medium-sized business as demonstrate in following table.

Table 1. Categorization of SMEs according to the European Union definition

Company category	Staff headcount	Turnover	Or Balance sheet total
Medium-sized	< 250	≤€ 50 m	≤€ 43 m
Small	< 50	≤€ 10 m	≤€ 10 m
Micro	< 10	$\leq \in 2 m$	$\leq \in 2 m$

Source: (Union, 2020)

According to the report of European Commission, slightly more than 21 million micro, small and medium-sized SMEs were active in the EU- 27, accounting for 99.8% of all enterprises in the EU- 27 non-financial business sector (NFBS) in 2020.

#### **1.3.1.** Small and Medium-sized Enterprises in Estonia

According to the statists website, data on the number of SMEs in Estonia from 2008 to 2021, by their size, shows that Micro-sized businesses employing up to nine employees account for the majority of SMEs in Estonia, with around 71 thousand in 2021 (Clark, 2021). Moreover, according to the European union last reportage in 2019 SBA Fact Sheet about SMEs in Estonia, SMEs also play a significant role in Estonia's 'non-financial business economy, generating 76.7% of total value-added and 79.2% of total employment. SME value-added increased by 34.5 percent in the 'non-financial business economy' between 2014 and 2018. During the same time period, SME employment increased by 8.8%. Micro film value-added and employment rose most strongly, by 48.4% and 15.0% respectively. The future is particularly bright for value-added, which is expected to expand by 12.5 percent in 2018-2020, while SME employment is expected to grow by 1.6 percent.



Figure 2. Number of persons employed in SMEs and the value added of these enterprises Source: 2019 SBA Fact Sheet – Estonia

Thus, the impact of SMEs on the Estonian economy is almost as high as the normal average impact in the EU, but the added value is increasing, which doubles the importance and impact of these enterprises on the Estonian economy as figure 2.

#### **1.3.2.** The Important Role of SMEs in Economy

Based on statistics of the European Commission, SMEs account for 99.8% of all enterprises in the EU-27 non-financial business sector (NFBS) in 2020. Of this total, 93% were micro SMEs. Furthermore, 53% of the total value added produced by the EU- 27 NFBS and 65% of total EU-27 NFBS employment was generated by EU-27 SMEs in 2020. In the European Union, the most common upper limit for defining an SME is 250 employees with a turnover of fewer than 50 million euros.

Because small and medium-sized businesses have some of the characteristics of large corporations, such as a risk-based approach to CSR, sociotropism, and environmental and social dependence, the link between social and environmental obligations (CSR) and economic strategy is often different. Large corporations, on the other hand, have some of the characteristics of small and medium-sized businesses, such as the availability of funds and management skills (Szczepańska-Woszczyna & Kurowska-Pysz, 2016). SMEs play an essential role in many economies and are a source of economic growth as well as innovation across many industries. They provide employment for the residents of the countries involved and also help to counteract bad economic trends and encourage industry reorganization (Szczepańska-Woszczyna & Kurowska-Pysz, 2016). As previously said, the sector's long-term growth is critical to the economy and is a requirement for achieving economic growth for a variety of reasons. To begin with, SMEs account for six out of every 10 jobs. Second, SMEs are pioneers in the industry's transition from old to innovative production methods. Finally, SMEs play a significant role in the development of innovation with the goal of increasing their competitiveness. Organizations in this area also contribute to the global market's development (Szczepańska-Woszczyna & Kurowska-Pysz, 2016). He also mention that Innovation plays a significant role in enhancing the competitiveness of SMEs, which is conditioned by competencies, in particular, that of managers (Szczepańska-Woszczyna & Kurowska-Pysz, 2016).

Finding appropriate practical techniques to introduce and integrate environmental sustainability in these businesses can thus make a substantial contribution to the worldwide search for sustainable economic growth (Seidel et al., 2008).

According to the above, it is possible to understand the importance and effectiveness of SMEs in the economies of countries. This influence is also seen in Estonia as a member of the European Union, part of which is shown in Figure 2.

#### **1.4.** The Significance of Sustainable Development in SMEs

The study of sustainability and environmental issues in business have traditionally focused on major manufacturing companies, whereas small and medium-sized businesses have been mostly ignored (Cristian Bogdan Onete, 2013). This is because small firms are written off as a group that is too expensive to contact, while emphasis is focused on the simpler to reach large businesses, according to one theory (Seidel, 2008). The vast majority of enterprises operating around the world are SMEs, and their cumulative impact makes them very significant contributors to the world's environmental problems (Seidel et al., 2008). This multiplicity of companies in the world causes very major and fundamental effects on the economies of countries and the world economy. SMEs also play a significant role as far as sustainable development is concerned (Szczepańska-Woszczyna & Kurowska-Pysz, 2016). The European Commission policies emphasize the fundamental role that SMEs play in the shift towards a new and more sustainable model of production and consumption that can be obtained by investments in human resources as well as social and environmental capital (Szczepańska-Woszczyna & Kurowska-Pysz, 2016).

#### 1.4.1. Environmental Impacts of SMEs

It is projected that SMEs could be jointly responsible for up to 70% of industrial pollution. (Szczepańska-Woszczyna & Kurowska-Pysz, 2016). However, according to a survey of SMEs' environmental practices in the United Kingdom, the vast majority of SMEs are unaware of their own environmental implications. Past polls by the UK organization Envirowise have revealed an increasing amount of 'head in the sand' attitudes among SMEs: in 1995, 1998, and 2000, 22 percent, 33 percent, and 48 percent of the enterprises questioned thought that they had no detrimental influence on the environment, respectively (Seidel et al., 2008). A similar trend may be seen in the follow-up poll to the 2002 NetRegs study, which found that only 7% of the surveyed UK businesses believed they were involved in activities that could affect the environment in 2005. It is self-evident that SMEs' miscalculation of their environmental effect does not bode well for them as a motivator for improving their environmental performance (Seidel et al., 2008). Also according to the research of (Buzatu et al., 2019), organizations, unlike economic issues, do not tend to focus on environmental and social challenges from a system perspective.

It seems that in the environmental field, it appears that SMEs are more reactive than proactive (Szczepańska-Woszczyna & Kurowska-Pysz, 2016).

#### 1.4.2. Environmental Impacts of Textile and Apparel Industry

According to EURATEX (the European Apparel and Textile Confederation), "The textile and apparel industry covers a range of activities from the transformation of natural (cotton, flax, wool, etc.) or man-made (polyester, polyamide, cellulosic etc.) fibres into yarns and fabrics, to the production of a wide variety of products such as hi-tech synthetic yarns, bed-linens, industrial filters, and clothing and fashion". EURATEX in the report of Post-Corona-Strategy-Final, relates that due to a mix of technological advances, the evolution of manufacturing costs, and the rise of significant international competitors, this sector has seen a series of profound shifts in recent decades. Companies have increased their competitiveness by lowering or eliminating mass production of simple products in favor of a broader range of higher-value-added products. On the other side, according to the European Environment Agency (EEA), the enormous complexity and linearity of textiles' value chain reflects their environmental impact during production and consumption. The range of effects varies based on the textiles and fibers in question, as well as the environmental and socioeconomic circumstances in which they are manufactured, distributed, used, and retired (Figure 3). Environmental problems to which the textile industry contributes include loss of natural resources and water, land use, climate change, and chemical toxicity, to name a few (JRC, 2014).



ENVIRONMENTAL IMPACTS

Figure 3. Environmental impacts across the textiles life-cycle Source: EEA and ETC/WMGE, based on EEA (2014) The textile and apparel(garments) business is today regarded as one of the world's most polluting and resource-intensive industries, with social and environmental consequences across the whole value chain (Aus, 2011). The environmental implications of natural fiber cultivation, due to such factors as changes in land use, water extraction, and the use of fertilizers and pesticides, as well as the energy necessary for synthetic fiber manufacturing, are included in the production phase. The spinning and sizing of the fabrics, as well as the finishing and printing/dyeing of the finished goods, all play an important role (JRC, 2014). Transport emissions and packaging waste are increased as textiles are shipped around the world.

The majority of the impacts caused during the use phase are attributable to textile maintenance. The manner in which individuals wash, dry, and iron their clothing and home textiles has a substantial impact on the environment. With an estimated average of 6.2 washes per week per family across the EU, 12 percent of households wash most frequently at 60° C, 43 percent at 40° C, and 24 percent at 30° C. (Gray, 2017) (Pal, 2014).

As it was mentioned above, the textile and apparel sector creates crucial water, air, and soil pollution, posing a threat to people and aquatic species. For every kilogram of textile produced, two kilograms of Carbon dioxide (CO2) are released into the environment. Fossil fuels have been required in the textile and apparel industry for fiber cultivation, textile manufacture, customer handling, and disposal. Greenhouse gases are gaseous emissions primarily created by the combustion of fossil fuels, and they are released at every stage of the T&A supply chain. Carbon dioxide (CO2) from energy use, methane (CH4) from livestock, and nitrous oxide (N2O) from cotton production are the three main greenhouse gases (Raut et al., 2017). It should be noted that the T&A consumes 0.60 kg (approx.) of oil equivalent primary energy for every kilogram of product generated (Allwood et al., 2015) (Pal, 2014). The transportation and processing of end-oflife textiles, not to mention the large volume of textiles that are eventually burnt and landfilled, all have an impact on the collection and management of end-of-life textiles (Gray, 2017). Furthermore, the bulk of textile waste is disposed of in landfills, where it decomposes, emitting methane, which contributes to global warming. The fibers contain toxic chemicals and colors that do not leach into the soil, resulting in considerable soil and groundwater pollution (Baumgartner et al., 2019).

According to the Reet Aus (Aus, 2020), Estonians consume 15,000 tonnes of new clothing and home textiles annually. 4763 tonnes are collected and disposed of, whereas 2408 tonnes end up in landfills. Furthermore, 68% of discarded clothes is collected as municipal garbage. An Estonian four-person family discards 280 articles of clothing per year on average. In 2018, Estonians

consumed 2.4kg of second-hand textiles per person and a total of 3.7kg of textile waste was collected per person which makes us the biggest disposers of textiles in the Baltics.

But in the field of research of this research in Estonia according to the (Hussain et al., 2020), textile materials are used in excess of 62 million tons per year in Estonia. More than 27 million tons of garbage have the potential to be recycled. Locally produced textiles account for 27.212 million tons, imported textiles account for 12.064 million tons for shops and user applications, and more than 22 million tons are used for export. Estonia has overall capacity for material outflow and inflow of 27 million tons and 26 million tons, respectively (Hussain et al., 2020).

# 2. FACTORS AFFECTING SUSTAINABLE BUSINESS DEVELOPMENT IN SMES

In such a situation that the world is struggling with environmental issues and limited resources, businesses began to pay more attention to environmental problems in order to ensure the long-term viability or sustainability of their resources and operations. Managers are being forced to create and apply ecological managerial applications in order to safeguard natural resources as their awareness and consciousness about the "future of the world" grows (Karagülle, 2012). Enhancing quality, decreasing waste, improving quality, and implementing better systems are three sustainable ideas that may be summarized and formed into a framework that should be included in practically all quality management design plans (Alexandru-Ilie BUZATU, 2019).

Thus, an innovative method or framework needs to be created that allows for the transformation and promotion of sustainable businesses based on the company's internal characteristics and external influences, while adhering to formulated, analyzable, and measurable principles and processes from sustainable development standpoint. Accordingly, It is critical to understand the drivers and barriers that influence the framework, as well as the specific characteristics and operating conditions of these companies, In order to successfully model the framework of environmental innovation adoption in SMEs (Seidel, 2008).

In this section, the effects of hampering and supporting factors on the operation of SMEs have been examined that impress their progress toward environmentally sustainable business practices. The factors have been collected from the collection of 55 papers among the 115 kinds of research that formed the basis for the analysis. The oldest publication is from 2004, and the most recent ones are from 2020. Reviewing the papers involved in the present study points toward a growing interest in the topic of sustainability and sustainable development.

In the review of prior literature, it was discovered that 21 factors influence the growth of environmental sustainability, affecting the operation, performance, and sustainable business development of SMEs. All of these factors may be related to and interact with one another, which will be examined further in this research. These influential factors have been classified into internal factors, external factors, and bilateral factors that affect externally and internally as follow.

### 2.1. Internal Factors

On the basis of previous researches, 16 factors were identified as having an internal effect on the sustainable development of SMEs. 10 of these factors were classified as having external effects, while the 6 remaining factors are classified as factors that have only internal effects. Table 2 shows the factors that have only an internal impact, along with references to previous studies on each of these factors.

Internal factors	Previous researches
Business model	<ul> <li>(Abdelkafi &amp; Täuscher, 2015), (Cheung et al., 2013), (Fielt, 2013), (Marisa et al., 2008),</li> <li>(Marko et al., 2017), (Ville Matinaro, 2018),</li> <li>(Yunus et al., 2010)</li> </ul>
Characteristic of SMEs	(Seidel et al., 2008), (Bruna et al., 2017)
Institutional framework	(North, 1990), (OECD, 2018), (Szczepańska- Woszczyna & Kurowska-Pysz, 2016), (Williamson, 2000)
Management and leadership	(Karagülle Özgür, 2012), (Seidel et al., 2008), (Schoenherr, 2012), (Szczepańska- Woszczyna & Kurowska-Pysz, 2016)
Organizational culture and structure	(Cristian et al., 2013), (Seidel et al., 2008)
Strategy	(Buzatu et al., 2019), (Swiatkiewicz, 2017), (WORLDWIDE, 2017), (Ville Matinaro, 2018)

Table 2. Internal factors affecting on sustainable business development in SMEs

Source: author's calculations

The business model is the first item in this table which is one of the most critical factors in the field of management and within the organization. (Fielt, 2013) states that a business model "describes how an organization creates and captures customer value". according to (Ville Matinaro, 2018) Sustainability has become a popular topic for business models that helps SMEs operate more sustainably and is critical to their strategy execution (Cheung et al., 2013). (Marisa et al., 2008), (Abdelkafi & Täuscher, 2015) and (Marko et al., 2017) examined environmental value propositions, which indicate a business model's intended environmental impact, and how to include them in a BMfS. Although the business model is centered on customer value, it is increasingly used in conjunction with sustainability (Cheung et al., 2013). Moreover, some authors used the business model framework to show how to create socially beneficial firms (Marko et al., 2013).

2017). In this regard, (Yunus et al., 2010) state that a social business model that describes the expected social benefits holistically and overshadows the social aspect of sustainable development.

In order to examine the characteristic of SMEs, it must be considered that the transition to environmentally friendly design and manufacturing, as well as the development of sustainable business practices, is fundamentally difficult (Seidel et al., 2008). Hence, One of the important factors that can speed up or slow down the process of developing sustainable development is their characteristics. Barriers to adopting environmental innovation may be caused by a mix of SMEs' characteristics and operational environment (Seidel et al., 2008).

(Seidel et al., 2008) and (Szczepańska-Woszczyna & Kurowska-Pysz, 2016) believe that the founders, managers, and employees' personal and ethical values frequently drive SMEs to engage in some form of sustainable growth. In the following, based on previous studies by (Seidel et al., 2008), the differences in the characteristics of SMEs which affect changing to or developing sustainability in their operation will be discussed. Firstly, The power base in larger firms is more evenly spread among the managers of various divisions, whereas, in SMEs, the owners typically run the company and have a significant impact on most strategic decisions. Because of this, their manager's background and education will have a significant impact on the firm's strategic path (Seidel et al., 2008). Secondly, the general organizational structure of SMEs sets them apart from larger corporations. Job descriptions in SMEs are frequently vague, with employees often juggling multiple roles. As a result, individual accountability is weaker than in larger firms, and efforts tend to 'fizzle out,' impeding the company's sustainable development (Seidel et al., 2008). Thirdly, SMEs also have less defined strategic development procedures, as well as less established communication and information flows. This means that specifics about strategic objectives can 'slip between the cracks' if they aren't followed up on (Seidel et al., 2008). Fourtly, Rather than exporting, most SMEs serve their local markets (although with increasing globalization, there is a trend toward more export). Local markets may not reflect market expectations in terms of regulation and public perception, so they are less vulnerable to global pressures and trends. (Seidel et al., 2008). And the last distinguishing feature of SMEs is their general concentration on day-today operations and this is mostly due to intrinsic financial and human resource constraints, and as a result, SMEs frequently focus on short-term issue solutions. (Seidel et al., 2008). In summary (Seidel et al., 2008):

- Owner managers in SMEs have a strong influence on the direction of the organization
- SMEs often have a short term focus with little thought for strategic initiatives
- Communication flows are often not well developed

#### • SMEs are strongly and effectively influenced by external factors conditions

A flexible institutional framework is other main factors determine sustainable business development in SMEs in addition to leadership, access to skilled labor, access to financial resources through the banking system, ability to meet market and social requirements (Szczepańska-Woszczyna & Kurowska-Pysz, 2016). According to the (North, 1990) and (Williamson, 2000), the institutional framework for SME policy should include both hardware and software components that impact the activities and conduct of economic players. The hardware component includes the national and local bodies responsible for developing, implementing, monitoring, and assessing SME policy, as well as their physical structures, personnel, and financial resources. How those institutions interact with target businesses and their representatives, as well as with a larger community of SME policy stakeholders such as employers, employees, local governments and non-governmental organizations is determined by the software component (NGOs). Due to the influence and effectiveness of these rules in the development of companies and the development of sustainability in their performance (OECD, 2018), it can be concluded that the institution's framework, laws, regulations, and policies also have an impact on the development of SMEs' sustainability.

Furthermore, Professionalization of management processes and a high level of skills are two of the most significant needs that modern businesses must meet (Drucker, 2004; Komiski, 2008; Nogalski & niadecki, 2001), particularly in the case of SMEs and their long-term sustainability (Szczepańska-Woszczyna & Kurowska-Pysz, 2016). According to the relationships (Szczepańska-Woszczyna & Kurowska-Pysz, 2016) and (Goehrig, 2008)strong leadership is critical for a company's long-term success, since it directly affects crucial aspects such as the company's level of innovation, corporate reputation, performance, financial stability, sustainable development and customer. (Hemingway & Maclagan, 2004) believe that an SME's owner-manager is both the author (creator) and performer (enforcer) of certain ideals. Managers demonstrate their values through their actions, decision-making processes, and expressed values. In the case of SMEs, the scale of company goals is connected to the owner-manager, for whom the link between personal and corporate success is considerably stronger than when delegating managerial competences to others, and takes the form of ethical and responsible behavior regardless of the outcome. Environmental efforts made by SMEs are at the discretion of the owner, and SMEs have a hard time incorporating environmental issues into their operations (Szczepańska-Woszczyna & Kurowska-Pysz, 2016). Most executives believe they must choose between profit and the environment, but with a thorough awareness of environmental issues, this conundrum may be turned into a win-win situation. (Szczepańska-Woszczyna & Kurowska-Pysz, 2016). However, Previous studies indicate the major barriers, i.e. low awareness on the part of an owner, poor management skills as well as the lack of skills to implement environmental improvements (Szczepańska-Woszczyna & Kurowska-Pysz, 2016). The owner or manager's awareness and motivation are among the characteristics that determine the sustainability of SMEs. The majority of managers are familiar with the notion of sustainable company development, can identify activities associated with it, and can put single solutions in place (Szczepańska-Woszczyna & Kurowska-Pysz, 2016).

Moreover, the lack of a defined environmental organizational culture in SMEs is a significant impediment to enhancing environmental sustainable performance (Cristian et al., 2013). This is especially problematic in economies where there are few external incentives forcing SMEs to improve the environment, such as regulation, public pressure, or market requirements. By establishing rules and pressures, companies are practically pushed to create their internal motivation for sustainable environmental innovation activities and will most certainly make very little progress in this area unless there is an organizational-wide sympathy for environmental issues (especially from the top management standpoint) (Seidel et al., 2008). Successful adoption of environmental design and industrial innovation necessitates significant organizational transformation, which is difficult in SMEs. Many factors, both internal and external, have a role in successfully driving and impeding change (Seidel et al., 2008). Internal variables include things like management structure, corporate culture and politics, leadership talents, common vision, financial status, management, and strategy procedures, among others. Internal influencing elements are interconnected and dynamic, rather than controlled and static, as assumed by traditional study methodologies (Seidel et al., 2008). In addition to internal organizational considerations, an SME's external business environment has an impact. Changing market requirements, competitive challenges, laws, and other external variables can all have an impact on SME organizational transformation and innovation (Seidel et al., 2008). In the organizational culture and structure, employees motivation is strongly linked to the level of owner/manager support, according to (Seidel et al., 2008) study findings. Employee motivation improves the efficacy of the organizational environmental culture. Increased "environmental competence," or the ability of employees to unconsciously execute environmentally efficient activities, is a result of improved environmental culture. An increase in this type of environmental expertise will almost always result in cost savings (Seidel et al., 2008).

The next effective internal factor is the strategy in accordance with the principles of sustainability. The importance of a strategy that implements design for sustainable development to reduce waste at the source, as well as the need for continuous improvement and gaining a competitive advantage, especially for companies in emerging countries, leads to the search for and implementation of common sustainable development principles, which will aid society's development (Buzatu et al., 2019). According to the (WORLDWIDE, 2017), Developing a sustainability program that is future-proof for the entire organization is a difficult task. Companies who have a thorough awareness of the subject are in a fantastic position to start or refresh a sustainability program within their organization. However, the problem is that sustainability must transcend all organizational barriers and spread throughout the entire organization. According to studies by (Swiatkiewicz, 2017), (Buzatu et al., 2019) and (WORLDWIDE, 2017) sustainable development strategies have the following benefits:

- Sustainable development strategies may assist stakeholders in meeting their current needs without jeopardizing their ability to meet future needs.
- It causes to look beyond corporate social responsibility and the social activities that an organization contributes to the community.
- Concentrate on how the environment impacts an organization and how the organization impacts the environment.
- Assure long-term financial stability, compliance with applicable laws, readiness for potential future requirements, reputation maintenance, resilience to economic, social, and environmental change, more efficient use of finite resources, and improved service to the community.
- Integrating sustainability into the decision-making process when planning and forecasting business delivery, designing and constructing construction projects, considering how employees work, setting strategic direction, and carrying out day-to-day operations.
- Sustainable development strategies is a positive and enlightening method of energizing an organization to be astute and innovative.
- It includes mechanisms to mitigate climate change by reducing emissions and acting more sustainably. This alone will not protect enterprises from the effects of climate change.
- Sustainable development strategies address the organization's ability to adapt and change through forward planning; increasing resilience, managing risks, protecting oneself and the

community, and also, importantly, taking advantage of any potential opportunities that arise.

#### 2.2. External Factors

On the basis of previous researches, 15 factors were identified as having an external effect on the sustainable development of SMEs. 10 of these factors were classified as having external effects, while the 5 remaining factors are classified as factors that have only internal effects. Table 3 shows the factors that have only an external impact, along with references to previous studies on each of these factors.

External factors	Previous researches
Access to financial resources	(Cheung et al., 2013), (Seidel et al., 2008), (Szczepańska-Woszczyna & Kurowska-Pysz, 2016)
Business competition and global market	(Cramer et al., 2018), (Karagülle Özgür, 2012), (Seidel et al., 2008)
Public desire and expectation	(Bruna et al., 2017), (Cook, 2004), (Marisa et al., 2008), (Sirilertsuwan et al., 2019)
Regulations and legislation	(Bakanauskienė et al., 2020), (de Jong & van Witteloostuijn, 2014), (Karagülle Özgür, 2012), (Lee, 2014), (Oliver et al., 2018), (Seidel et al., 2008), (Szczepańska- Woszczyna & Kurowska-Pysz, 2016)
Universal pacts and conventions	(Bakanauskienė et al., 2020)

Table 3. External factors affecting on sustainable business development in SMEs

Source: author's calculations

The elements that determine sustainable business development in SMEs, according to Benmeriphi, are (1) access to trained labor, (2) access to financial resources through the banking system, (3) the ability to respond to market demands, and (4) a flexible institutional framework (Szczepańska-Woszczyna & Kurowska-Pysz, 2016). The finance function plays a vital role in creating and implementing a sustainability plan in many SMEs, as the CGMA research illustrates (Cheung et al., 2013). Also reductions (Seidel et al., 2008) believe that by improving financial resources, more eco-efficiency measures are implemented, resulting in further cost. Lack of funding has been regarded as the most major impediment to the design and implementation of sustainable

innovations, followed by a lack of time and competent employees (Szczepańska-Woszczyna & Kurowska-Pysz, 2016).

Moreover, the inability of SMEs to be flexible and sensitive to the market's growing importance of environmental issues is largely due to a general lack of financial and time resources. Moreover, an investment that does not provide a significant short-term financial gain is usually not considered by SMEs (Seidel et al., 2008).

However, The findings show that in the studied companies, having significant financial resources for sustainable development is less important than leadership, employee approval, employee beliefs from individual departments and teams, having a sustainable strategy for sustainable development in the company, and external stakeholders' approval which will be mentioned in the next other sections.

According to the (Seidel et al., 2008) the competitiveness is defined as the drive to increase profit potential by generating resources and competencies that are difficult to duplicate . (Cramer et al., 2018) mentione that SMEs are now more exposed to international business influences, opportunities, risks, and imperatives as a result of the advent of information technology and globalization. However, it appears that even in the twenty-first century, many SMEs (particularly in developing nations) struggle to exploit accessible data to respond rapidly to international competitive demands (Seidel et al., 2008). (Karagülle Özgür, 2012) express that companies with an environmentally friendly image and using green technologies in the workplace, have a better reputation than their competitors. Green practices should result in increased cash flow and corporate performance, as reputation is a source of competitive advantage. Offering green processes to clients means differentiating yourself and adding value to your customers, which means you'll be more competitive (Karagülle Özgür, 2012). One example of the high importance of the competition and global market factor can be seen in New Zealand. According to the research by (Seidel et al., 2008), The business environment in New Zealand has progressively tough to operate over the last five years. Domestic manufacturers are under pressure to gain a competitive edge over foreign firms importing low-cost goods from Asia. New Zealand's inflated currency rate and the allure of low labor and operating costs in third-world countries have aided the recent trend of high-profile firms moving offshore.

Public desire and expectation is the next factor that has been found in the previous researchers as effective factor on sustainable business development in SMEs. (Marisa et al., 2008) believe that consumer considerable awareness of environmental issues such as recycling, demand for eco-

fashion (green and organic products) is currently modest. However, the consumer wants the manufacturer to take responsibility of invirnimental issues, but he or she does not appear willing to change their behavior (or, to put it another way, to personally face certain consequences/costs). There are also counter-trends, such as fashion becoming a leisure pastime, particularly among the youth, who seek novelty and seek for low-cost fashion that they quickly discard after purchase (Sirilertsuwan et al., 2019). As the rise of the child as a customer in the fashion business demonstrates, such 'demand volatility' is a phenomena that is rising to younger and younger ages (Cook, 2004). In this regard (Marisa et al., 2008) mention that the managing a volatile demand is difficult, particularly for conventional textile and apparel SMEs, which are less capable of investing in ICT, are more likely to suffer from information asymmetry, and lack the most up-to-date competences to estimate demand in a complex and dynamic environment. This could make these SMEs less competitive. On the other hand, (Bruna et al., 2017) emphasize that by increasing knowledge of customers about advantages of sustainable fashion, the consumers desire and expectations could not be addressed well which can cause in inreaseing which can also bring with it unusual and practical tendencies.

Regulations and legislation is the next factor effect in sustainable development in SMEs operation. According to the (de Jong & van Witteloostuijn, 2014) owner-managers' interpretations of the rule and its implications for their organization can have an impact on business decisions. (Oliver et al., 2018) believe that understanding how owner-managers assess the implications of regulation has the potential to yield helpful information if research methods can accurately reach their opinions. However, just a few of the studies delve into the specifics of these topics or the impact of rules on corporate growth. (Oliver et al., 2018) also mention that the regulation is frequently mentioned as a barrier to firm-level growth in these studies, although it is rarely mentioned as the primary obstacle. The results of the Business Barometer in recent years corroborate this overall picture that the regulation ranking behind the economy, cashflow, taxation, and competition as the top barrier to SMEs' success (Oliver et al., 2018). According to research conducted in the United Kingdom, some (but not all) owner-managers see regulation as a hindrance to their company's growth. However, (Lee, 2014) found that potential high-growth enterprises were held back by the economy, their managerial skills, finance, and cash flow, but that they were less likely to consider regulation as a problem than other firms in a large-scale study of 4,858 UK SMEs. (Lee, 2014) states that his findings debunk popular views that regulation is a barrier to SME growth, emphasizing regulation's ability to shape activities and have a positive influence.

Moreover, (de Jong & van Witteloostuijn, 2014) study of regulation as a source of red tape in The Netherlands provides additional insight by elaborating three different areas of perception: perceived regulation cost; perceived regulation inconsistency; and perceived regulation change. (de Jong & van Witteloostuijn, 2014) found that both perceived high regulatory costs and inconsistency have a negative and statistically significant effect on sales turnover growth but have no effect on market competition performance. The perceived regulation change was found to significantly hamper both sales turnover growth and market competition performance (de Jong & van Witteloostuijn, 2014). (Oliver et al., 2018) also briefly outline each of various effects of regulations to the SMEs with empirical examples as can be find in Appendix 1. This typology of effects of regulation on SME also has been used to categorized in order to realized hampering and supporing affect of them on sustainable development in SMEs. According to (Oliver et al., 2018) findings, regulations and legislations can have a variety of effects on the development processes of SMEs. By examining these effects, it is possible to conclude that they are also influential on the development of sustainable businesses and can be classified as efficacious in the development of sustainability. Hence, Given the understanding of the impact of regulations and legislations on the development of SMEs, the impact of these regulations on the development of sustainability in them should also be considered. Effective environmental regulation is one of the most important reasons why SMEs invest in environmental innovations, according to recent studies (Seidel et al., 2008). SMEs frequently claim that they will not invest in environmental improvements until required to do so by legislation. There is an apparent lack of awareness of international trends in legislation and markets involving environmental elements of business in SMEs in nations like New Zealand which is one of the obstacles to the potential development of sustainability in this country (Seidel et al., 2008).

Moreover, the pollution is a form of economic inefficiency, according to the sustainable ecoefficiency approach, and reducing pollution boosts production (Karagülle Özgür, 2012). However, State restrictions can have an impact on a country's competitiveness. The European Union, for example, imposes significant regulations on the private sector, and the degree of environmental impact can impair a company's competitiveness (Karagülle Özgür, 2012). Significant improvement can be expected if enterprises take on new commitments willingly; nevertheless, (Evangelinos and Skouloudis, 2014) finds that sustainable activity is more closely linked to the enforcement of legislation, which is consistent with the findings of a study conducted in Greece. To put it another way, compliance with national legal acts is conflated with advancement (Bakanauskiene et al., 2020). Global pacts and conventions as the next factor that has been found in this research, can be effective in promoting sustainability and developing sustainability laws. The influence of the international community in various economic, political, social, or environmental aspects is one of the influential factors in global policies that will affect the domestic policies of a country and ultimately the whole society, including active companies are not an exception of Effectiveness. For an example UN Global Compact. Even though the Global Compact provides a relatively simple mechanism for businesses to declare the sustainability of their operations and thus contribute to the development of a positive image of responsible business (Bakanauskiene et al., 2020). Joining the Global Compact does not imply that one is engaging in sustainable behavior. There is no possibility to unambiguously claim that companies listed on the stock exchange implement more socially responsible policies; however, (Bakanauskiene et al., 2020) exposed that attention from the investors can be additional leverage of power to which the companies are forced to react and give more consideration to topics that are of concern to the public. Moreover, the factor of the global compact could prove beneficial while attempting to evaluate how consistent and honest companies are about considering sustainable development in their company during the process of production or service provides (Bakanauskienė et al., 2020).

### 2.3. Bilateral External and Internal Factors

On the basis of previous researches, 10 factors were identified as having an external and internal effects on the sustainable development of SMEs. Table 4 shows the factors that have only an external impact, along with references to previous studies on each of these factors.

Internal and External Factors	Previous Researches
Ability to meet market and social requirements	<ul> <li>(Sluyterman, 2010), (Sluyterman, 2007),</li> <li>(Szczepańska-Woszczyna &amp; Kurowska-Pysz, 2016), (Yolles, 2018), (Ville Matinaro, 2018)</li> <li>(Cláudia et al., 2020), (Sluyterman, 2007)</li> <li>(Ceniga &amp; Sukalova, 2020)</li> </ul>
Capacity for change	(Gordon, 2021), (Judge, 2011)
Cost	(Jones & Wilson, 2005), (Marisa et al., 2008), (Seidel et al., 2008), (Szczepańska- Woszczyna & Kurowska-Pysz, 2016)

Table 4. Bilateral external and internal factors affecting on sustainable business development in SMEs

Development and use of technology	(Berawi, 2017), (Marisa et al., 2008), (Stengg, 2001),
Environmental management system	(Cláudia et al., 2020), (Jaroslava et al., 2007), (Seidel et al., 2008), (Schoenherr, 2012)
Environmental practices	(Jaroslava et al., 2007), (Seidel et al., 2008), (Schoenherr, 2012)
Knowledge	(Ansett, 2007), (Bruna et al., 2017), (Seidel et al., 2008), (Szczepańska-Woszczyna & Kurowska-Pysz, 2016), (Wang & Song, 2010)
Skilled labour	(Seidel et al., 2008), (Szczepańska- Woszczyna & Kurowska-Pysz, 2016)
SMEs interactions with society	(Fonseca & Lopes Ferro, 2016), (Szczepańska-Woszczyna & Kurowska-Pysz, 2016)
Supply chain and logistics	(Bruna et al., 2017), (Christopher & Peck, 2007), (Ceniga & Sukalova, 2020), (Karagülle Özgür, 2012), (Lee, 2014), (Loo- See et al., 2016), (Pal, 2014), (Marisa et al., 2008), (Loo-See et al., 2016)

Source: author's calculations

Other elements that determine sustainable business development in SMEs, according to Benmeriphi, are (1) access to trained labor, (2) access to financial resources through the banking system, (3) the ability to respond to market demands, and (4) a flexible institutional framework (Szczepańska-Woszczyna & Kurowska-Pysz, 2016). As an example, Sluytermann's research of Royal Dutch Shell (Sluyterman, 2010) and (Sluyterman, 2007) shows how a company's inability to meet the social and environmental expectations of its stakeholders can have disastrous consequences for its reputation. Shell's position in South Africa, the planned sinking of the Brent Spar in the North Atlantic Sea in the early 1990s, and environmental and human rights concerns in Nigeria all contributed to the company's reputation and legitimacy eroding. As a result, the corporation had to reassess its ethics, principles, and cooperation in order to face the increasing problem of sustainability in the 1990s.

In general, in any change in performance with the system, the word capacity is one of the main factors that comes to mind. However, the meaning of capacity to change at the organizational or corporate level need to be understood. According to the (Judge, 2011) organizational capacity for change (OCC) can be defined as an organization's overall ability to plan for or respond effectively to an increasingly uncertain and turbulent environmental setting. This multidimensional competence is made up of three components: (a) human skills and resources, (b) formal systems and procedures, and (c) organizational culture, values, and norms. As a result, OCC is a

multifaceted, dynamic skill that enables an organization to improve or revise existing organizational capabilities while nurturing new competencies that allow the company to live and prosper. Also (Gordon, 2021) complete that Trustworthy Leaders, Trusting Followers, Capable Change Champions (Change Agents), Involved Middle Managers, Systems Thinking, Communication Systems, Accountable Culture, Innovative Culture are dimensiones which affects to develop of OCC to respond to the uncertain and disturbed environmental issues:

- Dimension 1: Trustworthy Leaders What is the leader's level of trustworthiness? The ability to trust someone to pursue goals that are compatible with their convictions is referred to as trustworthiness.
- Dimension 2: Trusting Followers How much do the organization's members and stakeholders trust the leader?
- Dimension 3: Capable Change Champions (Change Agents) Is there a presence of change agents? What is their level of initiative and clout?
- Dimension 4: Involved Middle Managers Middle managers who are not sponsored provide support, stability, and sell the concept of change. They facilitate information flow and adaptation and are critical in implementing change elements.
- Dimension 5: Systems Thinking To what extent do all process participants practice system thinking? Systems thinking is concerned with the relationship between the whole and its components, as well as the relationship between the parts and the whole.
- Dimension 6: Communication Systems How effective is communication at the top, middle, and bottom levels of the organization?
- Dimension 7: Accountable Culture To what extent are leaders, managers, and employees required to accept responsibility for their actions or be willing to do so?
- Dimension 8: Innovative Culture To what extent do employees display creativity and imagination in the development of new ideas, the recombination of existing ideas, and the implementation of those ideas?

The above information shows that change is critical to a company's growth and development and that each of its dimensions is interconnected with factors affecting sustainable development. Thus, the ability to change into a sustainable business is one of the main factors influencing its development, and a lack of understanding of capacity can be a major hindrance.

Furthermore, the cost is one of the important factors influencing the development of sustainable businesses that can affect the sustainable performance of SMEs from different dimensions (Jones

& Wilson, 2005). Given the previous example from New Zealand, this section also says that cost reductions are a major motivator for environmental activities in nations like New Zealand, where legislation and market pressures are not as developed as they are in Europe. Moreover, Over the last few decades, eco-efficiency programs all over the world have demonstrated that implementing waste efficiency strategies can result in large savings, and given the strong influence of the owner/manager on choices in SMEs, the owner-manager support for environmental measures grows as a result of these cost reductions. Increased support leads to a rise in the availability of resources for sustainability efforts. As a result of the improved availability of people and financial resources, more eco-efficiency measures are implemented, resulting in further cost reductions (Seidel et al., 2008). According to (Seidel et al., 2008), the expense of adopting eco-efficient manufacturing projects is a significant hurdle in manufacturing SMEs due to a general lack of financial and human resources. (Szczepańska-Woszczyna & Kurowska-Pysz, 2016) also mentioned compliance that has a cost, and voluntary activities that do not result in indirect commercial benefits may be overlooked. The expense of sustainability has a detrimental impact on owner/manager support for environmental measures. To overcome this obstacle, it may be possible to prioritize eco-efficiency projects that have both short-term cost-cutting potential and a lower environmental impact. After making the necessary initial investments and overcoming the sense of insurmountable expenses, the influence of this loop will diminish over time (Seidel et al., 2008)(Marisa et al., 2008).

By the same token, the development and use of technology is the next effective factor in the development of sustainability .(Berawi, 2017) believe that by boosting the efficiency and efficacy of new and more sustainable means of development, technology development plays a vital role in reaching sustainable development goals (SDG) targets. It is consequently necessary to develop new technologies that promote research and stimulate innovation. Strengthened knowledge-sharing and collaboration among stakeholders in both national sustainable development policies that attempt to transform the nature of economic growth rather than limit it can help to accelerate these processes (Berawi, 2017). They are based on the concept that technology can enable us to continue to grow in a finite environment by allowing us to uncover new sources or give alternatives if a specific resource looks to be running out. Otherwise, technology will assist us in making the most efficient use of what we have. Economic instruments, regulatory measures, and consumer pressures are all used to achieve technological improvements including recycling, waste minimization, material substitution, modified industrial methods, pollution control, and resource efficiency. in both national and international situations (Berawi, 2017).

The degree of differentiation that technologies may provide, as well as the sustainable viability of a strategy, are determined by how technologies are. Moreover, the size of operation and business, rather than international borders, is a greater impediment to technology investment due to the significant expenses involved (Marisa et al., 2008). Rapid technological innovation may pose a challenge to Europe's competitiveness, given the history of SMEs in several European nations, such as France (Stengg, 2001).

In addition to the technology, Environmental Management System (EMS) is the next detected factor effects on sustainable business development in SMEs as well. According to a study conducted by (Jaroslava et al., 2007) using the results of a 2005 study conducted by the Czech Environmental Management Center and the Czech Environmental Information Agency with the objective of evaluating the importance of EMS for promoting the concept of sustainable development in business practice, represent the fact that 97 percent of respondents have established a quality management system demonstrates the critical nature of management systems (ISO 9001). (Jaroslava et al., 2007) also mention that EMS enables an enterprise to enhance its environmental performance explicitly, resulting in economic gains and social improvements. The research of (Jaroslava et al., 2007) established that EMS is beneficial for improving a business's environmental performance and also provides additional benefits such as increased economic effectiveness, improved relations with interested parties, improved social welfare conditions, increased knowledge potential, and provision of information for environmental communication. Moreover, the EMS that is certified to the ISO 14001 standard has an influence on pollution prevention, material recycling, and waste reduction programs as the core four competitive capabilities of quality, delivery, flexibility, and cost (Schoenherr, 2012). (Cláudia et al., 2020) also, believe that the sustainable management systems standards (SMSS) model advocates for an expanded role for integrated management systems (IMS) in the sustainability debate. It contains all of the necessary elements for the development of a sustainable management model, including the structures, such as the process approach, continuous improvement, assisting in the effective and systematic development of a sustainable business, and looking into the future(Cláudia et al., 2020). However, (Seidel et al., 2008) emphasize that the creation and execution of an EMS can not imply effective and continual environmental improvements without the presence of a complementary organizational culture that is open and friendly to environmental innovation.

Environmental practices and their impact on sustainable operational performance in diverse economic zones around the world (Schoenherr, 2012) is the next effective factor. Prior research

has demonstrated that investing in environmental practices can boost a company's competitive advantage and operational success (Schoenherr, 2012) (Jaroslava et al., 2007). The lack of a defined environmental organizational culture in SMEs is a significant impediment to enhancing environmental performance. This is a significant issue in nations with lax environmental legislation, which rely on manufacturing enterprises to implement environmentally friendly methods on their own (Seidel et al., 2008)

Knowledge is considered as the next effective factor in the development of sustainability from two aspects, which include knowledge of owners and managers and knowledge of consumers. Smallbusiness owners and managers usually have low 'eco-literacy,' or knowledge and comprehension of environmental issues and how they affect their business (Szczepańska-Woszczyna & Kurowska-Pysz, 2016). This is a huge concern since, as previously said, small business owners and managers often wield tremendous authority and influence, and hence are the source of the majority of strategic initiatives and choices. When there is a dearth of awareness about how environmental issues influence business, owner-managers are reluctant to implement systems or initiatives to change things (Seidel et al., 2008).

On the other hand, according to an empirical study by (Bruna et al., 2017), the majority of the defining characteristics of slow fashion are simply not valued by their customers. Consumer awareness of such potential benefits can be a first step toward developing sustainable business models based on this approach. Consumer education, on the other hand, can be a driver for changes in consumer behavior toward more sustainable individual fashion practices. (Bruna et al., 2017) also, continue that many innovative and sustainable business strategies have failed to persuade customers of the advantages of sustainable fashion that could lead to the failure of many of the examined sustainable business concepts. One of the most difficult aspects of this task is persuading (Wang & Song, 2010), and addressing consumers' sustainability expectations that is a challenge strongly tied to consumer education and required to increase consumer knowledge of sustainability (Bruna et al., 2017). Extreme expectations among the small group of buyers already concerned about fashion's sustainability may be a problem. It may be difficult for traditional businesses heavily linked to fast fashion to effectively change their brand image towards sustainability. (Ansett, 2007).

Another elements that determines sustainable business development in SMEs, according to Benmeriphi, is access to skilled labor (Szczepańska-Woszczyna & Kurowska-Pysz, 2016) as the next effective factor. Due to the increased availability of trained workers inside the company, more
eco-efficiency measures are adopted, resulting in additional cost savings (Seidel et al., 2008). Human resource quality and competitive advantage in a firm are progressively becoming critical growth elements. As a result, human resources become an organization's most valuable asset and frequently decide the company's competitive advantage in the market. Organizations look for creative ways to get the most out of their employees' skills while carrying out present tasks and implementing sustainable plans (Szczepańska-Woszczyna & Kurowska-Pysz, 2016).

On ther side, companies that have skilled members that have a personal interest in becoming involved in environmental and social issues are more likely to pay attention to these issues (Szczepańska-Woszczyna & Kurowska-Pysz, 2016).

In the case of SMEs, the importance of contacts with society is emphasized as the next effect factor. (Szczepańska-Woszczyna & Kurowska-Pysz, 2016) believe that a company's interactions with society, entail a corporation strengthening ties with value chain actors, policymakers, researchers, non-governmental organizations (NGOs), and customers. For SMEs, sustainable performance is contingent upon the quantity and quality of collaboration. (Szczepańska-Woszczyna & Kurowska-Pysz, 2016).

The extent of collaboration and the quality of these interactions determine the success of SMEs in terms of sustainability (Cramer, 2006; Perrini & Tencati, 2006; Waddock & Bodwell, 2004). Companies play an important role in society, not only as a profit-making entity, but also as a provider of specific values that society expects (Szczepańska-Woszczyna & Kurowska-Pysz, 2016). Also continued the firm's mission statement often recognizes and defines interactions. The mission can be a specific proclamation of an organization's identity, intended for both internal and external stakeholders. which can be resulted from making connections and interactions (Szczepańska-Woszczyna & Kurowska-Pysz, 2016).

Additionally, a direct connection between this factor (interaction with society) and Corporate Social Responsibility (CSR) can be identified. According to the United Nations Industrial Development Organization (UNIDO), Corporate Social Responsibility (CSR) is a management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders. In this regard, (Fonseca & Lopes Ferro, 2016) discovered that acceptance of socially responsible policies is a reliable source of competitive advantage and a reliable predictor of long-term success for SMEs.

Supply chain and logistics in line with environmental sustainability is the last factor influencing the development of sustainability in SMEs. According to (Bruna et al., 2017) and (Loo-See et al.,

2016), the methods for matching values with the supply chain must be improved, resulting in real collaborative arrangements and stakeholder commitment to share information, resources, and talents. Commercialization plays a role in the search for sustainability in fashion supply chains, for example, by selling products from previous seasons or second-hand items. (Bruna et al., 2017) also continue in providing an overview of sustainable supply chain process that in the first situation, value network players must set up a reverse supply chain, which means moving the product backward from the customer to the manufacturer and redirecting it to a new sales channel, usually outlets. Because a new customer category is being targeted, different value network actors are involved when it comes to secondhand things.

Moreover, regarding the impact of logistics in the fashion industry, which also strongly affects SMEs, (Pal, 2014) states that long lead times between when fashion merchants place an order and when it is delivered (Christopher & Peck, 2007), caused by the dramatic relocation of production sites towards the Far East have resulted in higher transportation costs, loss of employment in the manufacturing sector, and higher carbon footprints. (Ceniga & Sukalova, 2020) also, continue that the transportation is part of logistics that is one of the most polluting industries and has a minor share of total energy consumption of 3–6 % of primary energy and Transport. The combination of these effects indirectly affects sustainability in a way that the negative logistical effects on the development of SMEs, especially sustainable companies, reduce the development of sustainability globally (Pal, 2014). On the other side, Karagülle believe that the logistics management that is environmentally friendly (Green Logistics) can minimize resource usage and expenses, resulting in increased competitiveness (Karagülle Özgür, 2012) and organization can add value to its customers, logistics activities can be seen at every level of the manufacturing process (Karagülle Özgür, 2012)(Ceniga & Sukalova, 2020).

# **3. RESEARCH METHODOLOGY**

#### 3.1. Background of Research Objects

The considered case for study in this research is the sustainable fashion companies include AUS DESIGN OÜ, KiRiVOO OÜ and ILLIMOR OÜ. Because these small company has taken very important steps in the field of sustainability and sustainable development in the fashion and clothing industry and has provided a new way to increase sustainability in the fashion industry. In addition, the owner-manager of the company is Ms. Reet Aus, who has provided valuable research in the field of sustainable development and sustainability in the fashion industry. The set of reasons stated makes the company the best option for conducting research for this information, which can be an acceptable confirmation of the studies conducted in this research.

In the following part, there is a review of companies' information in order to get acquainted with the companies and their manager briefly.

Aus Design OÜ is a private company founded by designer Reet Aus Ph.D. 9 years ago. The company has a turnover of 103,615 Euro, and 9 employees In the 3rd quarter of 2021 (Register, 2021). Aus Design OÜ is the first Estonian company to join the international Fur Free Retailer program. This companies Awards are Listed as one of the Top 20 Women in Business by the Nordic Business Report (2015) and Runner-up at European Business Awards for the Environment (2014) (loomus, 2016)

Reet Aus is a fashion designer and researcher with a passion for ethical fashion and the creation of a renewing fashion environment and developing sustainability.

The complete Reet Aus range is manufactured in accordance with UPMADE® standards. Upcycling is a procedure that allows for the recycling of production waste, considerably lowering the fashion industry's environmental effect. The potential for upcycling in the fashion sector has also led in the development of UPMADE® certification, which encompasses the entire life cycle analysis of a textile product and enables the material's full potential utilization. (Voog, 2021)

The majority of mass production generates approximately 18% of industrial leftovers, which are often landfilled or cremated. Each UPMADE® garment in the Reet Aus range conserves an average of 75% water and 88% energy in comparison to the new product.

Kirivoo OÜ is an awarded sustainable fashion and low impact fine jewelry brand and retailer that believes in complete transparency, that sharing is caring, and that strives to develop a zero-waste, circular business.

Kirivoo's name and pattern have ethnic origins. These are taken from the Estonian word kirivöö, which literally translates as "patterned belt" (the waist belt of the national costume). While a belt improves the fit of clothing, the same can be said of the KV brand.

Kirivoo is committed to creating slow designer apparel in which they envision a better society in which fashion is always ethically produced and has a negligible environmental impact. They claimed that their mission is to safeguard the planet's health and empower people to enjoy a beautiful and mindful lifestyle by purchasing and sharing a variety of sustainable items that have a low environmental impact, are safe, ethical, and well-made. They are steadfast in their commitment to promoting a more sustainable fashion business.

Concerning their sustainability, they can state that their garments are handmade by professional seamstresses using GOTS certified organic textiles (organic cotton, organic silk, and organic cotton blend fabrics) or OECO-TEX certified bamboo viscose carefully sourced from the United Kingdom, Germany, France, Estonia, Italy, and the Netherlands. Additionally, their 3D printed jewelry is manufactured with responsibly sourced precious metals, conserves resources, and has a negligible impact on the environment.

Kirivoo's founder and CEO is Ines Karu-Salo, a serial entrepreneur who has always been motivated by a desire to make the world a better and happier place. "Fast fashion is one of the most polluting industries and that needs to change. It's my mission to take steps that help to preserve the health of our planet and give people an easy way to live beautifully and sustainably - wear apparel that has a low environmental footprint, is responsibly well-made, and timeless."

Liis Tiisvelt, an Estonian designer, developed Illimor OÜ, a sustainable and carefree apparel business. The Illimor idea is based on striking a balance between comfort, environmental sustainability, and social responsibility. Illimor thinks that fashion should remain joyful and enjoyable along with sustainability because it is a type of art in which all people participate, whether consciously or unconsciously. That is why they are committed to presenting this sort of art ethically and sustainably. Liis's also passion in providing more than simply clothing dates all the way back to her education at London College of Fashion, which set the bar high for sustainable resource use without sacrificing quality. As a result of her second studies in the subject of Resource Management for Clothing and Textiles, her ambition to make eco-friendly clothing that worships the world and minimizes environmental impact became even stronger.

#### **3.2.** Research Design

In this research, previous studies were first reviewed to collect and examine the factors influencing sustainable development in SMEs that were identified along with their type of impact in one framework. In this summary, the factors that were explanatory or detailed were classified into categories that a total of 21 factors were identified. The type of impact and their relationship to other factors were also identified. Then, an initial framework of these factors was designed and semi-structured interviews with managers and owners of SMEs were conducted to examine and validate the effectiveness of these factors on their operation in the textile and apparel industry. Afterwards, the results are reviewed and a final and holistic integrated framework of the factors influencing the development of sustainability in SMEs in the Estonian textile and apparel industry, the type of their impacts and their interaction and interconnection with each other -mentioned in previous researches- is designed in this framework.

#### 3.3. Research Methods

The main purpose of this research is to establish a practical strategic framework of 'roadmap' for successfully overcoming the constraints that small and medium-sized firms encounter in adopting environmental design and manufacturing methods and progressing towards sustainable business development. In this scenario, hampering and supportive factors are identified and interrelations explored and integrated holistic framework extracted.

(Lubbea et al., 2020) believe that the integrative literature review (ILR) as a research method, enables researchers to go beyond the analysis and synthesis of primary research data, providing fresh insights and synthesized knowledge on a particular issue. Although an ILR is intended to be similar to a systematic review, it allows for the inclusion of primary research studies as well as additional materials (such as opinions, discussion papers, and policy documents) that are not included in a conventional systematic review (Lubbea et al., 2020) (Cynthia, 2005).

(TORRACO, 2005), (Cynthia, 2005) and (Lubbea et al., 2020) are proposing 5 steps of integrative literature review which are problem formulation, data collection (or literature search), evaluation of data, data analysis, and interpretation and presentation of results.

As seen in the schematic in Figure 4, the research is based on the following research plan inspired by an integrative literature review.

integrative literature review from (Cynthia, 2005) and (TORRACO, 2005) includes five phases frame as follows: (i) problem formulation, (ii) data collection (or literature synthesizing), (iii) evaluation of data, (iv) data analysis, and (v) interpretation and presentation of results.

Accordingly, (Lubbea et al., 2020) has performed the same 5 steps more clearly than the previous sample collection in order to provide an augmented five-step, multi-layered, systematic approach to the ILR. Hence, in this study, the method is according to (Lubbea et al., 2020) approach which includes review question, sampling, data collection(Literature synthesizing), data analysis, interpretation and presentation of results. Moreover, two parts of Initial framework based on literature review after data collection (Literature synthesizing) as well as an integrated systemized framework with interrelationships of the influential factors based on literature review after the step of data analysis was included.

Therefore, this research plan has been established on based of integrative literature review method.



Figure 4. Study research plan

Source: author's calculations based on (Lubbea et al., 2020)

(I) Review question: According to (Cynthia, 2005), the process of problem identification should include the formulation and development of conceptual and operational definitions for the variables that will be evaluated. The conceptual definition expresses the reviewer's abstract conception of the study under consideration.

Therefore, in this study, the concepts of sustainability, sustainable development and their importance, small and medium enterprises and the importance and impact of sustainable development in their business, and the importance of implementing sustainable development has

been examind. In order to formulate a research question that is "which factors influence sustainable business development in SMEs in the textile and apparel industry of Estonia?", a number of questions have been asked to clarify the path. Hence, it is necessary to determine in advance which factors are effective in promoting the sustainability of SMEs and the extent to how they have an effect. Then, in order to gain a more precise and in-depth understanding, the interactions of these factors and their interconnections should be examined. Then, the findings should be analyzed in the Estonian T&P industry, and any new factors should be investigated through field research. Therefore, the following question has been asked:

- What factors influence the sustainable development in SMEs?
- How do these influential factors affect sustainable development in SMEs?
- Which of these factors have interconnection and interaction with each other?
- Which of these factors influence sustainable development in SMEs of the textile and apparel industry?
- Which of these factors affects SMEs of the textile and apparel industry in Estonia?

The order of these questions makes this research take a more straightforward and obvious path by recognizing the existing gap and formulating the main research question and the aim of research based on this question.

(II) Sampling: The data evaluation stage is the third level of the integrative review process which conducred in the sampling process as it is critical stage for the rest of research. The reviewer determines whether the data element or result is deserving of inclusion in the study data set during this phase. This can be determined a priori, when the decision to include or omit certain researches is made prior to data collection, or a posteriori, when the decision to include all articles is made but less weight is given to the less rigorous (ie, less scientifically rigorous) publications.

A search may provide a large number of initial records that are potentially eligible for inclusion in an ILR . To ensure that the review contains only relevant and unbiased documents, the study selection should be both specific and sensitive, referring to the degree of precision with which the search was conducted (Grove et al., 2013), or to the exactness with which the search was conducted in a way that minimized the risk of errors. The selection procedure might take into account concepts such as validity, comprehensiveness, efficiency, and relevance of the studies under consideration (Smith et al., 2011).

To maintain confidentiality, the entire number of documents that satisfy the search strategy's inclusion requirements should be recorded, even if some are irrelevant. For this purpose, in this

study, the Excel file has been prepared from a collection of past researches according to the (Lubbea et al., 2020).

Additionally, PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) is a flow chart that depicts the process of identifying the appropriate resources to use throughout the search and selection process (Lubbea et al., 2020). The PRISMA flow diagram that has been shown in Figure 5, ensures proper reporting, hence ensuring the search and selection procedures' transparency and repeatability.

(III) Data collection (literature synthesizing): The data collecting or literature review synthesizing phase is the second stage of the integrative review process. After exposing the strengths and weaknesses of a body of literature, authors can use the breadth and depth of their insights to develop a more complete grasp of the subject through synthesis. Synthesis is the process of combining existing and new ideas in order to generate a fresh articulation of a topic or issue. Synthesizing the literature entails weaving together distinct lines of research in order to focus on fundamental topics rather than just recounting past work (TORRACO, 2005).

(IV) Initial framework based on literature review: After reviewing gathered information of hampering and supporting factors that affects sustainable development in SEMs, an initial framework has been created in order to have a holistic overview of the factors and used in the data evaluation and interview.

(V) Data presentation and analysis: The fourth stage of the integrative review process includes analysis and interpretation. This stage is for condensing the inquirer's disparate data pieces into a coherent statement about the research problem (Cynthia, 2005). Depending on the integrative review's objective, the analysis may include statistical tests or the development of a systematic framework of concepts gleaned from the study of research. As the fifth stage in this study, the results of the analysis of factors affecting sustainable development in SMEs in the textile and apparel industry and the type of their impacts in terms of supporting or hampering effect, internal or external impact, and interrelationship of these factors are expressed. To further evaluate and validate the results found in the Estonian textile and apparel industry, it was preferred to conduct an interview with a real case to validate the results found in Estonia and in a specific field in order to check and validate data. For this purpose, a semi-structured interview was conducted with the CEO of a sustainable company in the apparel industry, as well as the owner of that company, who is an academic expert in this field, and the results were analyzed and compared with the outcomes of data collection (literature synthesizing) stage.

(VI) Integrated systemized framework with interrelationships of the influential factors based on data analysis: At this stage, the set of research results and their validation is shown by conducting

an interview in a complete and mature format. This framework is a completed sample of the initial framework which is the main result of this research.

(VII) Interpretation and presentation of results: (Cooper, 1998) recognized the interpretation and presentation step as the fifth and final stage of the integrative review. Dissemination of integrated literature review findings is critical for the development of our knowledge base. (Cooper, 1998) also observes that no universally approved format for reporting integrative research reviews exists. Numerous journals do provide criteria, however, they are inconsistent in their application. At this stage, explanations related to the result of the prepared framework and its development, review of concrete results and explanation of previous research and its review in textile and apparel companies in Estonia, as well as the continuation of the possibility of this research will be explained.

#### **3.4.** Sampling

In this study, from 115 number of researches 55 number of them were selected in the concepts of sustainability and sustainable development. Also, the number of researches that dealt with the factors affecting sustainable development or sustainability in the field of business and at the company level were selected. Collected researches are related to the years (1990) to (2021), and the largest number of related researches is available from (2017). Due to the direct relationship between sustainability and sustainable development with factors related to and influencing these concepts, in reviewing all the researches found, the factors affecting sustainability and sustainable development and their implications were also examined. The initial step in developing this integrative research review method was to choose the keywords. The keywords used for the search were supporting factor, hampering factor, enabler, driver, barrier, challenge, sustainable development, sustainability, influential factor, effective factor in SMEs, T&A industry, and Estonia. These keywords were chosen based on the topic of sustainability and sustainable development in the context of SMEs, as well as their relevance and effects to the textile and apparel industries and the research challenge described in the Introduction section. The purpose of the keywords was to cover the topic and study problems, taking into account the definitions of sustainability and SD and the factors that affect on developing these concepts in operation of SMEs.

The PRISMA flow diagram in Figure 5 illustrates the research technique used in this research.



Figure 5. Flow diagram for ILR (Adapted from PRISMA - Preferred Reporting Items for Systematic Review and Meta-analysis)

Source: (David et al., 2009, p. 8) and (Lubbea et al., 2020)

To ensure the literature's accessibility, the language was limited to English. The focus of this research is on peer-reviewed scientific journal articles, books, and authentic global reports in this work because they were deemed to be the most useful; consequently, the source types for the search were limited to journals and scientific book publishers, and the document types to articles, books, conference papers, and authentic global reports. To ensure the inclusion of high-quality and current results, journals without impact factors were omitted. The original sample was drawn from 115 journals (Appendix 2). This list was whittled down to 55 journals using the majority of published researches and various journal rankings. For the identifications of the influential factors, an extensive literature review was carried out using search engines namely Emerald Insight, IEEE explorer, Google Scholar, Google, Inderscience online, ScienceDirect (Elsevier), Springer, Taylor

and Francis Group, and Wiley online library. After reviewing the journal papers, international reports, valid statistics, book chapters, conference proceedings, and from the expert's inputs, 21 factors were identified. For instance, a further bias arises from the fact that one of the leading publications on this subject is titled Sustainability or Sustainable Development. The research was included in the final sample if it addressed any aspect of sustainability, sustainable development, or effective factors in SMEs. There were no time constraints, and the literature search was place in the third and fourth quarters of 2021. After excluding duplicates, these search parameters were applied to search strings to generate a sample collection of 100 researches.

#### **3.5.** Selection of Respondents

In terms of the degree of accessibility to participants, one of the main forms of a nonprobability sampling technique was 'convenience sampling' that was used in selecting participants. This research approached these SMEs through the following sources include the ministry of environment of Estonia, Europages, productmkr, sustainablegate, balticfashion.eu, textile.ee and google engine(direct connection).

The websites have been searched and after finding information about the SMEs in the Estonian textile and apparel industry, proper companies which claim that they are sustainable have been evaluated. In the following, they tried to be contacted after selecting convenient sustainable companies according to the information and research in the source websites.

Interview participants were selected based on three criteria: 1) the participant should be a senior decision-maker (i.e.: Chief Executive Officer (CEO), Production Manager/Senior Manager, founder/co-founder and Owners) responsible for sustainable business development; 2) Company have to be sustainable enterprise ( by implementing sustainable practices in the whole production process) 3) According to the definition of the European Union, the participant company should be is one of SMEs in Estonia. Even though there were nearly 10 SMEs in Estonia, only a very small sample (i.e.: participants from 3 SMEs) fit the three criteria. The participant details information about them has been mentioned in the previous sector.

#### **3.6. Data Collection Protocol**

The data collection protocol described the semi-structured interview and survey procedure and comprised the interview questionnaire. The semi-structured interview protocol was chosen because it allows for follow-up questions to elicit additional information about interesting points raised by managers and to ensure proper comprehension (Sirilertsuwan et al., 2019).

The interview questions were inspired by previous similar research such as (Caldera et al., 2019), and (Yin, 2017). The prompts were used to evaluate and further probe into the factors that affect sustainable business development in both interviews and surveys (Appendix 3). Creating a holistic framework of effective factors and using them in the interview, sending question guidelines to managers which were not available or preferred survey than an interview, as well as providing aim of the research, the benefit of research and researcher information, helped shorten interview time while still gaining qualified data to answer our research questions and reveal findings Complement the prior research. Sampling different types of clothing companies as different data sources as well as knowledgeable informants helps answer what factors are influencing their sustainable business development and what is the impact? Which of the following factors contributes to sustainable development in their business? Do they confirm that these factors are effective in their business? And what are the most important effective factors?

The interviews were held on November 25th, 2021 in the office of the company and surveys have been conducted approximately for a month. The interviews ranged between 30 and 60 min in length and were digitally recorded and two surveys which considered to take maximum 10 min which created in Google Form.

#### 3.7. Data Analysis

The digitally recorded interviews were manually transcribed in the paper. The data analysis was conducted by textual selective coding and classifying the data in 21 categorises. These were then analyzed in the context of the holistic framework and shared in the middle of interview with participants and the data gathered. The data analysis was conducted by analyzing conversations and interactions and looking for emerging categories in the data. The comments and examples cited by the interviewees related to each of the factors found, recorded and new factors mentioned were reviewed. The purpose of this interview was to verify that the interviewed individuals considered our results to present a summary of the research findings, validate influential factors by knowledgeable managers, ascertain that the results represented the reality in their enterprise accurately, and to provide a further opportunity to add details to individual findings.

# 4. RESULTS

#### 4.1. Initial Holistic Framework of Influential Factors

In this research Integrative literature review selected in order to collect hampering and supporting factors in one framework and realize their interconnection to create sourse for managers and decision makers as well as governments to support development of environmental sustainability. Before finding the factors there was need to review and collect the

Information has been collected from previous research in literature review and the results of the research have been obtained. Therefore, 21 factors were determined influencing the development of sustainability in SMEs in the textile and apparel industry that were mentioned in relative research (Appendix 4). According to the methodology and research plan of this study, this section can be considered as a complement to the literature review section as an integrative data collection of literature review collectively. Based on previously analyzed papers and research, each of these characteristics has had either hampering or supporting effects or both which has been shown in appandex 4.



Figure 6. Internal and external factors in effecting sustainable business development in SMEs Source: author's calculations

Based on the results of previous research and realizing factors that have infulence on sustainable development in SMEs, an initial holistic framework is designed. In this framework (figure 6), the influencing factors are classified into two groups includes internal factors and external factors which have been shown in appandix 6.

#### 4.2. Data Presentation and Analysis

Comparison of the results of researches on effective factors in the sustianable development of SMEs provides the type of impact of each factor in terms of internal and external impact as well as the type of positive or supporting and negative or hampering impacts of them to develop sustainability in SMEs in the textile and apparel industry. These validations were conducted through the development of a questionnaire in interviews, and surveys. The findings were analyzed in such a way that participants' opinions on each of the factors discovered were elicited, and they were asked to select which of these factors affected their sustainable business (Appendix 5 and 6) and to indicate if a new factor was considered. The following is a detailed examination of the findings from interviews and surveys regarding 21 related factors, as well as newly discovered factors.

As the first participant company, two interviews were held with the owner and CEO of Aus design OÜ seprately as well as one interview-survey conducted with.

The first interview was conducted with the CEO of the company, who had a very good knowledge of business as well as concepts and issues of sustainability. In the first stage of the interview, an attempt was made to examine the factors influencing the sustainable business development of their company, and in response to the question of what factors affect the development of their business as a sustainable business, they explained two factors. These two factors included the positive effect of "Demand" and the negative effect of "tax" and "lack of government tax supporting". He explains that the higher the customer demand, the higher the business development. Moreover, no tax deductions and lack of government financial support were two consistent factors that affect sustainable companies negatively. According to the CEO, in Estonia, all companies, sustainable stable and unsustainable partners, pay the same tax, and consumers still have to pay 20% VAT to buy sustainable products. He also believes that sustainable companies should pay lower taxes because they produce sustainable products and help prevent the destructive effects of products on

the environment along with making research on how to make business more sustainable, which supports sustainable companies and sustainable development.

He also notes that attracting customers to their products is not only due to the production of sustainable clothing, and other factors such as the quality of clothing, etc. can be more effective in attracting customers to sustainable products, but the impact of the concept of sustainability and its importance in the global community also have important implications for the development of sustainable businesses.

The CEO's opinion about the initial holistic framework of the effects of the factors found in this research was such that after reviewing, he confirm that all the factors mentioned have influenced the company's sustainable business and sustainable development (Appendix 5 and 6).

Moreover, the CEO believed that the knowledge factor is a very important and influential case mentioned in this study. Also, the lack of a fixed system or method for examining the sustainability or instability of companies was considered a problem in the discussion of sustainable business because companies could be found that claimed sustainability, but in practice this was not the case. As he continued, one of the main problems with the impossibility of assessing the sustainability of companies is that if companies like H&M that are not sustainable have a small sustainability approach, they should register as a stable company while producing unsustainable production. Thus, it is very difficult to distinguish the sustainability. He also emphasizes that knowledge agent can An important factor influencing the finding of the answer to this problem. However, in order to examine which factors have had a greater and more important impact on the development of their sustainable business, it was asked that in the classification of the CEO, 8 factors were identified as the most important factors, which are: 1. Business Model 2. Management and Leadership 3. Skilled labour 4. Supply Chain and Logistics 5. Ability to meet market and social requirements 6. Cost 7. Knowledge 8. Development and use of technology (Appendix 5 and 6).

The same interview steps were conducted to examine external factors that the CEO believed that all factors except Cost and Interaction with society are effective in developing the company's sustainability. He also presents 5 more important external factors that have had the most impact on their business includes: 1.Public desire and expectation 2. Supply chain and logistics 3.Business competition and global market 4. Access to the financial resources and 5. Requlations and Legislation (Appendix 5 and 6).

From these results, it can be seen that the CEO understood the effective factors in this format well and even mentioned examples for promotion or as an example. He looked at these factors from a business perspective in order to promote the company without worrying about sustainability issues and research to develop sustainability, which is quite normal given his position at the company.

However, in the deep aspect of understanding sustainability and in-house research and development, the company owner, who was a researcher and academic expert in the field of sustainability, monitors the company's orientation in sustainability development.

In the interview with the owner of the Aus design OÜ, the results were different. In the second interview, all the steps of the first interview with the CEO were tried, but the view of the owner of the company was deeper and different. According to her, all these factors can be very important in any particular moment and situation. However, because of lack of ability to compare and realize the sight of viewer to the effect of factor, it is not easy to comment how much and how they effects. The study of these effective factors should be deeper to realize how they are effective, and with the result of the type of influence, better understanding and outcome can be achieved for the development of sustainability. She believed that the factors found were due to the type of vision and position and activities of the company and could have different effects. The owner of the company also believed that for an academic, professional and in-depth study, the effects of each of these factors can be subset of the other. Therefore, it can be much more useful to study the type of effect of these factors and their relationship and their effects on another factor.

She also stressed that this factor is one of the important factors in promoting sustainable development in companies, which is directly related to environmental practices or Supply chain and logistics as well as the costs factor. The owner of the company also suggested that in order for this framework to be more practical, it is better to connect to a set of international activities and researches such as EU Green Deal and also to a political format. He also believed that if the result of this research could lead to a methodology or formula for validating and examining the sustainability of companies by finding influential factors, it would be very valuable to meet the needs of real sustainable companies and the international community today. In this regard, she suggested the continuation of this research to find this formulation in the next researches.

KiRiVOO OÜ was the second company selected for the empirical study. Due to the CEO's visit to the UK, a survey was prepared with the same format of interview questions as the previous company, and the results of this survey confirm the results of this research. According to the result of Interview/Survey, the CEO describes costings, sustainability commitments, and sales as influential factors in the development of their company as the sustainable business. She specify the effective factor as follows:

"Cost - as a sustainable business we care about fair trade and want to motivate the people we work with. That increases the costs in business development and manufacturing. Sustainability commitments - our business is guided by UNSDG's as we believe that the future depends on the sustainable work we do today. Sales are important for any company."

In the continuation of the survey, by selecting all the options of effective internal and external factors in the development of companies' sustainability, the CEO confirms that all the factors found in this research are effective in developing the sustainability of sustainable companies in the textile and apparel industry. she also selected the three factors of Business Model, Knowledge and (Sustainable Development) Strategy as the three most important and effective internal factors and the three factors of Access to Financial Resources, Environmental Practices, and Supply Chain and Logistics as the three most important and effective external factors in the development of sustainability in their company (Appendix 5 and 6).

ILLIMOR OÜ was the third company selected for the empirical study. The survey (as the owner preferred) was prepared with the same format of interview questions as the previous company, and the results of this survey confirm the results of this research. According to the result of Interview/Survey, the founder describes Sustainable material availability, financial resources and tight competition in market as influential factors in the development of their company as the sustainable business. She specify the effective factor as follows:

"A lot of fabrics I use are sourced as production leftovers or roll ends from another factory. Very often there's a limited color or composition available, so it makes design development difficult. On the other side I use Estonian produced fabric Tencel, which is more environmentally friendly than cotton, but I'm always bound to a min. quantity and have to buy a full roll (50 meters), even though my client needs only 20 t-shirts (20 meters). There's also a fierce competition in sustainable fashion brands, because it's a trend and everyone are looking ways to market their products are "green" products."

In the continuation of the survey, the founder confirms that the following selected factors found in this research are effective in developing the sustainability of sustainable companies in the textile and apparel industry:

Internal selected factors includes Business Model, Capacity for change, Cost, Knowledge, Supply Chain and Logistics, Strategy, Ability to meet market and social requirements.

And selected external selected factors includes Access to financial resources, Business Competition and Global Market, Cost, Environmental practices, Supply Chain and Logistics She also selected the three factors of Business Model, Knowledge, Strategy as the three most important and effective internal factors and the three factors of Business Competition and Global Market, Cost, Environmental management system (EMS) as the three most important and effective external factors in the development of sustainability in their company (Appendix 5 and 6).

The founder mentioned at the end that there is no more factors recognizable which effects on sustainable development in their company.

The founder mentioned at the end that she did not notice any more factors that affect sustainable development in their company and have not been identified in this framework.

All the results of the analysis of the information found from the reviews of previous research and the results of their validation and the newer points of the interviews and surveys (Appendix 5 and 6) can create a complete set of factors influencing the development of sustainability.

#### 4.2.1. New Factors Found From Interviews and Surveys

The owner of Aus design où mentioned other factor that focusing on the principle of social sustainability was human and consumer rights, which was not included as an independent factor among the factors found. She believed that this factor is one of the most fundamental factors that is not addressed in academic research as well as managerial decisions. The owner also highlighted another factor that could accelerate sustainable development. Emphasis on transparency was another factor that both the owner of Aus design où and the CEO of Kirivoo où emphasized, and believed that transparency in sustainable operations could accelerate the development of sustainable business in various industries, especially the textile and apparel industry. The CEO of Kirivoo où then introduces transparency as one of the effective factors in the development of sustainability that is not present in this research and explains the reason as follows:

"Tranparency. Sustainability can be achieved through full transparency. That means business model needs to be transparent, so, there is no greenwashing and that is understood by all people internally and externally. And it goes for the whole supply chain - sustainability starts from transparency.".

After obtaining new findings regarding the factors influencing the development of sustainability in SMEs operating in the textile and apparel industries in Estonia, previous studies were reexamined to ascertain the relationship between these new findings and previously discovered factors. Table 5. New factors found from interviews and surveys

Human rights	Internal and external effect	<ul> <li>Business competition and global market</li> <li>Environmental practices</li> <li>Cost</li> <li>Knowledge</li> <li>Regulations and legislation</li> <li>Supply chain and logistics</li> </ul>
Supporting effects:	4a in all anna ata a	of life such as in production and service
providing raises awaren- economy, and this preve substandard and unsusta - Sustainable developmen	ess of people's rigents the spread of inable clothing.	ghts about Friday, the environment, and the renvironmental issues by producing prover and protector of one of the rights of the rel and by expanding it, the rights of the
Transparency	Internal and external effect	<ul> <li>Business model</li> <li>Characteristic of SMEs</li> <li>Environmental management system (EMS)</li> <li>Environmental practices</li> <li>Supply chain and logistics</li> <li>Strategy</li> </ul>
there is no greenwashing And it goes for the whole	g and that is unde le supply chain -	n example in the textile and apparel industry, erstood by all people internally and externally. sustainability starts from transparency.

- Existence of single definitions of sustainability and sustainable development as well as methods or tools for measuring and validating the sustainability of companies increases transparency in the process of sustainable development.

Source: author's calculations

Additionally, the nature of their impact was presented through an examination of the results of interviews and surveys, as well as previous findings. Table 5 summarizes the new factors, their relationships and interactions with other variables, as well as their impact on the development of sustainability in SMEs in the textile and apparel industries in Estonia.

Hence, in order to create an integrated holistic framework of related factors as the following of the main purpose of this research, it is necessary to consolidate and organize the impact of the abovementioned factors into a single framework, and the type of their effects based on previous findings, as well as their interconnections and interactions with one another, were considered in this research (Appendix 7).

# 4.3. Integrated Holistic Framework of Influential Factors

The following framework has been generated from integrated systemized review of the factors, their type of impact as well as their interconnection and interaction with one another (Based on Appendix 7).



Figure 7. Integrated holistic framework with interrelationships of the effective factors in the sustainable business development based on literature review and interview Source: author's calculations

According to the article's objective of identifying effective factors in sustainable business development and also reviewing and studying these factors in SMEs in the textile and apparel industry in Estonia, the above framework has been created which shows 23 factors analyzed from previous studies, interviews, and surveys. These factors are classified into two categories in this framework: internal effective factors and external effective factors. Some factors fall into both categories, and their impact is denoted by the terms H and S, or both, in terms of their supporting or hampering effect or both. The impact of each of these factors on the others is also determined in this framework by the number, which indicates the interconnections and interactions between these factors.

## 5. DISCUSSION

The research was based on finding factors influencing the development of sustainability in Estonian-based SMEs operating in the textile and apparel industry. The findings of this research provide 23 important influential factors and emphasize understanding of the importance of detecting factors that effects sustainable business development in SMEs in the textile and apparel industry. The main observation is that the introduction of sustainable business concepts is strongly influenced by factors that highly affect evaluating and verifying the sustainability of SMEs. This study combined the insights from previous literature on SBD with results from interviews and surveys to develop an integrative framework of hampering and supporting factors for sustainable development in SMEs of the textile and apparel industry. The proposed framework consists of 23 distinct categories of environmental, economic, and social aspects with their interconnections. The framework offered in this research is likely to support firms developing sustainable development initiatives in their efforts to analyze their internal and external business environments and help the government to realize factors and set the supporting policies for sustainable businesses. Gathering past studies literature and by conducting interviews and surveys, found that these 23 factors influencing the sustainable development of SMEs in the textile and apparel industry in Estonia, which had the hampering and supporting effects on the development of these companies. In addition, it was found that the environmental and economic aspects in the previous researches were considered more than the social aspects so that the diagnosed factors were more from the managerial, financial, and environmental aspects. As evidenced by feedback from interviews and surveys, managers place a premium on managerial and business knowledge, placing a greater emphasis on effective managerial and business factors, while managers or owners with prior knowledge or studies in the field of sustainability or sustainable development placed a greater emphasis on effective social factors. The new cases found in this study were two influencing factors of the social and managerial aspects of sustainable development, including human rights and transparency. Although it can be considered that the general importance of sustainability and sustainable development can help increase attention to the protection of people's rights and that the study of 21 effective factors discovered can help significantly increase the level of transparency, the high importance, and scope of these two implications, compelled this research to include them as two additional significant factors. Also, the gap in previous research, which indicates the lack of a formula to verify and evaluate the sustainability of companies, still can be seen which with the help of 23 factors found in this research, the module formula and method can be achieved. Given that, the review of past findings showed that these factors are not limited to

the T&P industry and can be considered factors affecting the development of sustainability in SMEs in all industries that can be used as formulation factors of sustainability.

#### 5.1. Limitations and Recommendations for Future Research

The research methodology is limited to the use of three interviews and surveys which caused from following reasons:

First, no specific source is available to measure or assess to what extent is the performance or attention to sustainability conducted and whether the company found, is sustainable based on its claims or not. Second, contrary to beliefs, companies that claimed to be sustainable businesses, were not really sustainable, so they are reluctant to participate in interviews or polls. Numerous cases have been found during data validation and data collection. Third, the validity of the analysis and validation of the data in this study was due to the consistency of the participants in the interview or survey, the number of these companies in Estonia is very small. Fourth, a referral is very important in Estonia which was needed to have a meeting for an interview. However, not more responses have been received by in-person visit, telephone, and e-mail, which was a major obstacle to increasing the interview in reviewing the data of this study. Fifth, also during the research and a brief conversation with the CEOs, it was realized that companies may not be able to answer the question of the factors that promote sustainable development due to their lack of knowledge about sustainability and sustainable development.

Due to the importance of sustainability for human society, such research is necessary to better understand and develop the display of the positive effects of sustainability. From the empirical point of view, it would be valuable to conduct additional interviews and use other methods in order to test the robustness of the presented holistic framework and specifically different factors identified and displaced in this framework.

Moreover, in this study, factors affecting the development of sustainability were collected, most of which are influential in other industries. Therefore, it is recommended that these factors be used in future research to design a method or formula for evaluating or measuring sustainability in companies. This formula or method can solve one of the biggest gaps in research as well as in decision-making within the organization or at the national level. By solving this problem, the pace of sustainable development at all levels of the social, economic, and biological environment will accelerate.

#### 5.2. Practical Implications

The journey to sustainability and sustainable business development (SBD) is rather complex and challenging and organization needs to take into consideration a number of different factors that affect SBD which is particularly challenging for small and medium-sized enterprises.

The importance of SMEs and their influence on the economy and society is quite recognizable and obvious which leads them to have a need for these understandings in order to increase the success in sustainable development-oriented activities. Thus, managers or owners of these businesses can alter their management policies by having access to the factors affecting their business's sustainable development in one integrated framework that enables them to understand how each of these factors can affect their business and take a specific path toward smarter sustainable development.

Additionally, their awareness of the impact of each factor on the others can aid them more than in the past in making management and leadership decisions and policies. On the other hand, by having the framework found in this research and analyzing each of these factors affecting the development of sustainable business can increase transparency for managers and owners of SMEs, as well as for government and international legislators or policymakers, allowing them to create contracts that incorporate sustainable development principles, implement supportive policies, gain a better understanding of business sustainability, implement sustainable methods, and comprehend the needs of the local and global communities.

# CONCLUSION

For the time being, sustainability and sustainable business development are given a high priority in various societies, which can be demonstrated through the increased number of studies and researches, raising public awareness, and the efforts of the international community to develop it. Additionally, the growth of SMEs and their increasing impact on national economies has increased the importance of research into the development of sustainability in these businesses. Likewise, with an emphasis on the negative impact of these companies operating in the textile and apparel industry on the environment, this study's main research question is based on identifying effective factors that influence the sustainable business development of these companies. The main research question was addressed by identifying 21 effective factors that affect the sustainable business development of SMEs based on previous research. Additionally, factors found have been examined and evaluated for effectiveness in Estonian SMEs, as well as two new effective factors identified through an empirical study in Estonian SMEs operating in the T&P industry. As a result of the study's main purpose, 23 supporting and hampering factors in developing the sustainable business of Estonian SMEs in the textile and apparel industry were identified. Additionally, this study examined the type of these factors' impact, as well as their interconnection and interaction with one another. The coherent outcome of this research is the integrated framework of the hampering and supporting factors of sustainable business development in the Estonian SMEs in the textile and apparel industry. In future research, the result of this research can serve as a coherent foundation for identifying factors influencing the development of sustainability in textile and apparel SMEs, allowing for more legible and complementary studies, as well as a solid basis for developing a formula for evaluating a company's sustainability. Additionally, this framework can conform as a suitable and understandable resource for managers and owners of SMEs looking to strengthen and develop their business's sustainability. Legislators and policymakers can also use this framework to develop more effective and robust advocacy policies aimed at fostering national and international sustainability and sustainable development.

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# APPENDICES

Effect on SME	Description	Example	Literature
growth	v relevant a particular pie		imm will yomy looding
to:	v relevant a particular pre	ce of regulation is to a r	inin will vary, leading
direct effects	The regulatory requirements are implemented by the firm	A specific response to regulatory requirements	No evidence identifie
indirect effects	the regulation requires some action to be taken but this is not mandated	Formalisation following a tribunal loss	Baldock et al. (2006): sales- turnover growth correlated compliance related improvements
affinity effects	changes in the spirit of a perceived general trend in regulation, even though the regulation does not require action	Firms exempt from a regulation enacting its spirit	Burgert (2005): mixed picture on threshold effects
Filtered and knock-on	effects		
filtered effects	how deeply embedded regulatory requirements are into existing practice affects ability to absorb compliance costs	Routinized informal practices may lower administration costs	Edwards et al. (2003): market conditions filter NMW effects
knock-on effects	further effects may result from the initial changes made to ensure compliance	Training staff for compliance may lead to risk of poaching	No evidence identified
Context effects: the wa	ays in which regulations	(or lack of) create the op	
Environmental effects	regulation shapes the SME's operating environment	Property rights, corruption	Johnson et al. (2002): property rights necessary for reinvestment
Competition effects	regulation distorts competition through effects on other businesses	Market competition	Ball et al. (2010): regulation benefiting large firm rivals
discourse effects	the ways regulation is talked about and	Red tape	Joumard et al. (1992): owner-

1	perceived that bares	managers not clear
	little or no	on specifics
1	relationship to the	
	actual regulations	

Source: (Oliver et al., 2018, p. 29)

# Appendix 2. List of all recorded identified research through database searching by reading the title and abstract

No	Author	Title of Journal Article	Year
1	Pavel Ceniga, Viera Sukalova	Sustainable Business Development in the Context of Logistics in the Globalization Process	2020
2	Natalia Prodanova, Natalia Savina, Zhanna Kevorkova, Lyudmila Korshunova, Nadezhda Bochkareva	Organizational and Methodological Support of Corporate Self-Assessment Procedure as a Basis for Sustainable Business Development	2019
3	Monica Maria Coros, Ana Monica Pop, Andrada Ioana Popa	Vineyards and Wineries in Alba County, Romania towards Sustainable Business Development	2019
4	Mamedova N.M, Bezveselnaya Z.V, Malakhova E.V, Kozmin V.S, Kornilova I.M, SavinchenkoT.I	The Modern Paradigm Of Advertising In The Light Of Sustainable Business Development	
5	Alexandru-Ilie BUZATU, Cristian COSTACHE, Adrian IORDACHE	Lean Management For Sustainable Business Development	2019
6	Andreea MAIER Sorina CIPLEA Dorina SUCALĂ Dana MORAR	Evolution of the Innovation Research in the Context of Sustainable Business Development	2019
7	Buzatu Alexandru- Ilie, Pleșea Doru Alexandru, Costache Cristian Iulian, Weiss Pablo Valentin	Managing Organizations For Sustainable Business Development: Interaction Between Vrio Framework And Mckinsey 7s Framework	2019
8	Yoo Hwan Lee, Young Wook Seo	Strategies for Sustainable Business Development: Utilizing Consulting and Innovation Activities	2018
9	Camelia MAEREAN, Eugen ALBU	Measuring Innovation For Sustainable Business Development	2019
10	Ali Özgür Karagülle	Green business for sustainable development and competitiveness: an overview of Turkish logistics industry	2012
11	Knut Haanaes	WHY ALL BUSINESSES SHOULD EMBRACE SUSTAINABILITY	2016
12	Nicholas A. Bainton Martha Macintyre	"My Land, My Work": Business Development and Large-Scale Mining in Papua New Guinea	2013

	Olgierd	Delta Cafés (Portugal): Sustainable Business	
13	Swiatkiewicz	Development	2017
14	Peter Bartelmus	Use and usefulness of sustainability economics	2010
15	Rudrajeet Pal	Sustainable Business Development Through Designing Approaches for Fashion Value Chains	2014
16	Jarmila Šebestová, Kateřina Nowáková	Dynamic strategy for sustainable business development: Mania or hazard?	2013
17	Tobias Schoenherr	The role of environmental management in sustainable business development: A multi-country investigation	2011
18	L. Antony Michaelraj a P. Shahabudeen	Replenishment policies for sustainable business development in a continuous credit based vendor managed inventory distribution system.	2008
19	Carmen Valentina Rădulescu Sorin Burlacu Dumitru Alexandru Bodislav Florina Bran	Entrepreneurial Education in the Context of the Imperative Development of Sustainable Business	2020
20	Cristian Bogdan Onete Răzvan Dina Denisa Elena Vlad	Social media in the development of sustainable business	2013
21	Jolita Vveinhardt	Sustainability Of Nasdaq-listed Companies: The Effects Of Participation In The UNGC	2020
22	Jaya Ahuja, Tapan Kumar Panda, Sunil Luthra, Anil Kumar, Sangita Choudhary, Jose Arturo Garza- Reyes	Do human critical success factors matter in adoption of sustainable manufacturing practices? An influential mapping analysis of multicompany perspective	2019
23	Alberto Peralta   Javier Carrillo- Hermosilla   Fernando Crecente	Sustainable business model innovation and acceptance of its practices among Spanish entrepreneurs	2019
24	Anil Kumar, Sachin Kumar Mangla, Sunil Luthra & Alessio Ishizaka	Evaluating the human resource related soft dimensions in green supply chain management implementation	2018
25	Vladimir Zhuravlyov, Natalia Varkova, Sergei Aliukov and Tatyana Khudyakova	Strategic Aspects of Ensuring Sustainable Development of Gold Enterprises of the Russian Federation	2018
26	Stefan Mann and Christian Gazzarin	Sustainability Indicators for Swiss Dairy Farms and the General Implications for Business/Government Interdependencies	2004
27	Katarzyna Szczepańska-	Sustainable business development through leadership in SMEs	2016

	Woszczyna, Joanna Kurowska-Pysz		
28	Daniela Ortiz, Karin Huber-Heim	From information to empowerment: Teaching sustainable business development by enabling an experiential and participatory problem-solving process in the classroom	2017
29	Kamarudin Abu Bakar, Mohd Fazli Mohd Sam, Md Nor Hayati Tahir, Ismi Rajiani, Norhana Muslan	Green Technology Compliance In Malaysia For Sustainable Business Development	2011
30	Manuel Seidel, Rainer Seidel, Des Tedford, Richard Cross and Logan Wait	Challenges of Implementing Urban Master Plans: The Lahore Experience	2008
31	Ritika Mahajan and Montu Bose	Business Sustainability: Exploring the Meaning and Significance	2018
32	Pratima Bansal and Mark R. DesJardine	Business sustainability: It is about time	2014
33	Sverker Alänge and Mats Lundqvist	Sustainable Business Development: Frameworks for Idea Evaluation and Cases of Realized Ideas Realized Ideas	2014
34	Thomas Dyllick and Katrin Muff	Clarifying the Meaning of Sustainable Business: Introducing a Typology From Business-as-Usual to True Business Sustainability	2016
35	Ann-Kristin Bergquist	Business and Sustainability: New Business History Perspectives	2017
36	Tjaša Štrukelj, Jelena Nikoli´c, Dejana Zlatanovi´c and Simona Sternad Zabukovšek	A Strategic Model for Sustainable Business Policy Development	2020
37	Mollie Painter Sally Hibbert · Tim Cooper	The Development of Responsible and Sustainable Business Practice: Value, Mind-Sets, Business-Models	2018
38	Magdalena Ziolo Filip Fidanoski Kiril Simeonovski Vladimir Filipovski Katerina Jovanovska	Business and sustainability: Key drivers for business success and business failure from perspective of sustainable development	2015
39	Aisma Linda Kiesnere and Rupert J. Baumgartner	Sustainability Management in Practice: Organizational Change for Sustainability in Smaller Large-Sized Companies in Austria	2019
40	Aron Cramer, Dunstan Allison- Hope, Alison Taylor, Beth Richmond, and Charlotte Bancilhon,	Redefining Sustainable Business (MANAGEMENT FOR A RAPIDLY CHANGING WORLD)	2018

	with additional guidance			
41	Cook, Daniel Thomas	The Commodification of Childhood: The Children's Clothing Industry and the Rise of the Child Consumer	2004	
42	Lee, Neil	What holds back high-growth firms? Evidence from UK SMEs	2014	
43	Ville Matinaro, Yang Liu, Tzong-Ru (Jiun- Shen) Lee, Jurgen Poesche	Extracting key factors for sustainable development of enterprises: Case study of SMEs in Taiwan	2019	
44	Maurice Yolles	Sustainability development: part 2 - exploring the dimensions of sustainability development	2018	
45	Bruna Villa Todeschin, Marcelo Nogueira Cortimiglia , Daniela Callegaro- de-Menezes , Antonio Ghezzi	Innovative and sustainable business models in the fashion industry: Entrepreneurial drivers, opportunities, and challenges	2017	
46	Ana Tur-Porcar, Norat Roig-Tierno, Anna Llorca Mestre	Factors Affecting Entrepreneurship and Business Sustainability	2018	
47	H.T.S. Caldera , C. Desha, L. Dawes	Evaluating the enablers and barriers for successful implementation of sustainable business practice in 'lean' SMEs	2019	
48	Petchprakai Sirilertsuwan, Daniel Hjelmgren, Daniel Ekwall	Exploring current enablers and barriers for sustainable proximity manufacturing	2019	
49	Rakesh Raut, Bhaskar B. Gardas, Balkrishna Narkhede	Ranking the barriers of sustainable textile and apparel supply chains: An interpretive structural modelling methodology	2018	
50	Nina Tura, Jyri Hanski, Tuomas Ahola, Matias Ståhle, Sini Piiparinen, Pasi Valkokari	Unlocking circular business: A framework of barriers and drivers	2019	
51	Juanita Álvarez Jaramillo, Jhon Wilder Zartha Sossa, Gina Lía Orozco Mendoza	Barriers to sustainability for small and medium enterprises in the framework of sustainable development—Literature review	2018	
52	Brenda Bushell, Masayuki Goto b	Leadership for sustainable society: A transformative learning approach	2011	
53	Cláudia Silva, José Magano, Anna Moskalenko, Teresa Nogueira, Maria	Sustainable Management Systems Standards (SMSS): Structures, Roles, and Practices in Corporate Sustainability	2020	
	Alzira Pimenta			
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	Dinis, Hélder			
	Fernando Pedrosa e			
	Sousa			
54	Vasileios Rizos, Arno Behrens, Terri Kafyeke, Martin Hirschnitz-Garbers and Anastasia Ioannou	The Circular Economy: Barriers and Opportunities for SMEs	2015	
55	Marisa P. de Brito, Valentina Carbone, Corinne Meunier Blanquart	Towards a sustainable fashion retail supply chain in Europe: Organisation and performance		
56	Walter Alfredo Salas-Zapata , Sara Milena Ortiz-Muñoz	Analysis of meanings of the concept of sustainability	2017	
57	Marin Georgiev	The Role of the Balanced Scorecard as a Tool of Strategic Management and Control	2017	
58	Rocsana Bucea- Manea-Tonis	SMEs Role in Achieving Sustainable Development		
59	Nicholas F. Cheung, Sandra Rapacioli, Kenneth Witt	ten key elements to sustainable business practices in smes		
60	Geoffrey Jones, Joseph C. Wilson	Renewing Unilever: Transformation and Tradition	2005	
61	Keetie Sluyterman	Royal Dutch Shell: Company Strategies for Dealing with Environmental Issues	2011	
62	Keetie Sluyterman	Keeping Competitive in Turbulent Markets, 1973-2007. A History of Royal Deutch Shell	2007	
63	Archie B. Carroll, Kenneth J. Lipartito, James E. Post, Patricia H. Werhane	Corporate Responsibility: The American Experience		
64	Marko Peric, Jelena Durkin, and Vanja Vitezic	The Constructs of a Business Model Redefined: A Half- Century Journey		
65	Erwin Fielt	Conceptualising Business Models: Definitions, Frameworks and Classifications		
66	De Lange D. E., Busch T., Delgado- Ceballos J.	Sustaining sustainability in organizations.		
67	Hung, Joseph Kam; Huanchun., Zhao; Wu, Zongjie; Technology., Shandong University of; (Australia), M & D Forum	The strategy investigation of the garment industry based on low-carbon economy situation	2010	

68         Ontodatary Nicholas O'Regan         Second-life retailing: A reverse supply chain perspective.         2016           69         Werner Stengg         The textile and clothing industry in the EU:A survey         2001           70         Sarah Gray         Mapping clothing impacts in Europe: the environmental cost         2017           71         Laursen, S.E., de Rodriguez, C.M. and Bocken, N.M.         "Well dressed?: the present and future sustainability of clothing and textiles in the United Kingdom         2015           72         Baskar B. Gardas, Balkrishan Narkhede         Ranking the barriers of sustainable textile and apparel supply chains, An interpretive structural modelling methodology         2017           73         Jaroslava Hyršlová, Danka Mémethová         Sustainable Development And Environmental Management Systems In The Czech Republic         2007           74         Vitali Podgurski, Maksim Antonov and Dmiri Goliandin         Circular economy approach to recycling technologies of postconsumer         2019           75         JALAL         What are SMEs?         2017           76         Ansett, Sean         Mind the Gap: A journey to sustainable supply chains         2007           77         Bergman, M.M., Leisinger, K.M., Bergman, Z., & Bergors, Z., & Bergwi, Mohammed         An Analysis of the Conceptual Landscape of Corporate Responsibility in Academia         2015           79         Nizar AbdelKafi, Karl Tauscher <th></th> <th>Loo-See Beh, Abby</th> <th></th> <th></th>		Loo-See Beh, Abby			
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112	Riina Antikainen, Katriina Alhola, Tiina Ja€askel € ainen	Experiments as a means towards sustainable societies e Lessons learnt and future outlooks from a Finnish perspective	2017	
113	John Morelli	Environmental Sustainability: A Definition for Environmental Professionals	2011	
114	Alexandros Gasparatos, Mohamed El-Haram, Malcolm Horner	Assessing the sustainability of the UK society using thermodynamic concepts: Part 1		
115	Abdul Hameed Siddiqui e: Author's calculations	A Sustainable Society: Its Meaning and Objectives	2018	

# **Appendix 3. Questionnaire Items**

#### Informational interview questions:

- 1. Could you please mention three factors influencing your company's development as a sustainable business?
- 2. Could you please specify how this factors influence?
- 3. Could you please check this preliminary holistic framework of internal factors influence on sustainable development in SMEs and select which of the following internal factors influence on sustainable development in SMEs? (Which items influence your sustainable business operation?)
- 4. Could you please specify most important factors (from this preliminary holistic framework of internal factors) influence on your sustainable business operation?
- 5. Could you please check this preliminary holistic frame of external factors influence on sustainable development in SMEs and select which of the following internal factors influence on sustainable development in SMEs? (Which items influence your sustainable business operation?)
- 6. Could you please specify most important factors (from this preliminary holistic framework of internal factors) influence on your sustainable business operation?
- 7. Are there any other aspects or factors that you've noticed and has internal effect that we did not identify in this frame?
- 8. Can I ask as a final question, do you think that preparing a coherent, comprehensive, segregated, and comprehensible resource for all to identify, understand, and use in future decisions can fade hampering and Strengthen the supporting factors to develop sustainability and sustainable business?

# Appendix 4. Hampering and supporting factors influence on sustainable development in SMEs

F	ACTORS
INTERNAL	EXTERNAL
Ability to Meet Market and Social Requirements	Ability to Meet Market and Social Requirements
Business Model	Access to Financial Resources
Capacity for Change	Capacity for Change
Characteristic of SMEs	Business Competition and Global Market
Cost	Cost
Development and Use of Technology	Development and Use of Technology
Environmental Management System	Environmental Management System
Environmental Practices	Environmental Practices
Institutional Framework	Knowledge
Knowledge	Public Desire and Expectation
Management and Leadership	Regulations and legislation
Organizational Culture and Structure	Skilled Labour
Skilled Labour	SMEs Interactions with Society
SMEs Interactions with Society	Supply Chain and Logistics
Strategy	Universal Pacts and Conventions
Supply Chain and Logistics	

	Aus de	esign oü	Kiriv	voo oü	Illin	nor oü
Internal factors	Influential factors	Most important factors	Influential factors	Most important factors	Influential factors	Most important factors
Business Model	•	•	•	•	•	
Capacity for change	•	•	•		•	•
Characteristic of SMEs	•		•			
Cost	•		•		•	
Environmental management system	•		•			
Environmental practices	•		•			
Institutional framework	•		•			
SMEs Interactions with society	•		•			
Knowledge	•		•	•	•	•
Management and Leadership	•	•	•			
Organizational culture and structure	•		•			
Skilled labour	•		•			
Supply Chain and Logistics	•		•		•	
Strategy			•			

# **Appendix 5. Interview and survey result of internal factors**

Development and use of technology	•	•		
Ability to meet market and social requirements	•	●	●	•

	AUS DE	SIGN OÜ	Kiriv	voo oü	Illin	nor oü
External factors	Influential factors	Most important factors	Influential factors	Most important factors	Influential factors	Most important factors
Access to financial resources	•		•		•	
Capacity for change	•		•			
Business Competition and Global Market	•	•	•		•	•
Cost	•		•		•	•
Environmental management system	•		•		•	•
Environmental practices	•		•	•		
SMEs Interactions with society	•		•			
Public desire and expectation	•	•	•	•		
Regulations and legislation	•		•			
Skilled labour	•		•			
Supply Chain and Logistics	•	•	•	•	•	
Development and use of technology	•		•			
Ability to meet market	•		•			

# Appendix 6. Interview and survey result of external factors

and social requirements				
Universal pacts and conventions	•	•		

# Appendix 7. Integrated hampering and supporting factors effects on sustainable development in SMEs in T&A industry in Estonia with their type of effect and interconnections

Factors	Type of impact	Interconnection
Access to financial resources	External effect	<ul> <li>Access to skilled labour</li> <li>Environmental practices</li> <li>Development and use of technology</li> </ul>
Hampering effects:		
	urdle to the design	and implementation of sustainable
technologies has been o	-	-
- The difficulty of SMEs	to be adaptable a	nd responsive to the market's increasing
	ental issues is part	ly due to a general lack of financial and
human resources.		
• •	ate investments the	at do not result in a large short-term financial
advantage.		
	irces bring a lack of	of competent employees.
Supporting effect:	stant hand and for	developing queteingble development which
		developing sustainable development which es, it can get out of the area of concern and
obstacles.	g mancial resourc	es, it can get out of the area of concern and
obstacles.		- SMEs Interactions with society
		organizational culture/structure
Business model	Internal effect	- Ability to meet market and social
		requirements
		- Strategy
Supporting effect:	L	
- The business model en	ables SMEs to be	more sustainable in their operations.
- The business model all	ows SMEs to oper	rate over a longer period of time and is critical
to the implementation of	of a company's str	
Capacity for change	Internal effect	- Environmental practices
Hampering effect:		
1 1	-	le process is the major barrier in turning
environmental improve	ements into busine	ess opportunities.
Supporting effect:	• •	
		create a process by considering sustainability
can increase the growth	n rate of sustainab	le development in companies.
		- Skilled labour
		- Business model
Characteristic of SMEs	Internal effect	<ul><li>Capacity for change</li><li>Institutional framework</li></ul>
Characteristic of SIVIES		<ul> <li>SMEs Interactions with society</li> </ul>
		organizational culture/structure
		- Strategy
Hampering effects:	1	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
1 0	mental innovation	adoption may be a result of a combination of
		of their operational environment and
-1		*

characteristics.

-	term issue resolution an		y operations, they frequently prioritize short- neet' above pursuing a longer-term strategic				
	strategy.						
-	Job descriptions are usually less well defined in SMEs, and responsibilities might overlap significantly, with employees filling many tasks. As a result, individual						
			firms, and efforts frequently 'fade away.' That				
	cause to loose skilled la		1 1 4 1 4 1 4				
-		_	more evenly distributed among the managers				
			he owner exerts significant influence over the , their manager's background, character,				
			a significant impact on the firm's strategic				
			impediments to the company's sustainable				
	success.	leating numerous	impediments to the company's sustainable				
_		acter of SMEs in	management principles, decision making				
			ship with the environment, influence on the				
			t the effect of them, communication flows				
			of organizational valuation and so on, cause				
	obstacles to the sustain						
Suppo	orting Effects:	*					
-		eals of the founde	rs, management, and employees could also				
	motivate SMEs to purs	ue at least some a	spects of sustainable growth.				
-	Rather of considerably	exporting, the ma	jority of SMEs focus on their local markets.				
			lobal pressures and trends than larger global				
	-	rkets may not min	cror market expectations in terms of legislation				
	and public perception.	1					
			- Ability to meet market and social				
	ess competition and	External effect	requirements				
global	market		<ul><li>Supply chain and logistics</li><li>Business model</li></ul>				
Hamp	ering effects:		- Busiliess model				
-	-	cially those in dev	veloping countries) struggle to leverage readily				
_			y to international competitive demands.				
_			and the attraction of low labour and operating				
		-	contributed to the recent trend of high profile				
			offshore which causes in the decline of the				
			f SMEs and reduce their competitiveness.				
-	Sustainable developme	ent is still not ac	ceptably considered in third-world countries.				
	Therefore, we can see	the departure of c	companies and the transfer of their activities to				
	third-world countries,	and we will see	a decrease in sustainable development in the				
	provision of services an	nd products.					
-	Supporting effects:						
-	-	-	ecting the resources (Developing sustainability)				
		-	workplace can assist a business in gaining a				
G		ort the company i	mage and the marketing activities.				
Suppo	orting effect:	nonmort or 1	oting the magazines (Developing succession life)				
-	-	-	ecting the resources (Developing sustainability)				
		-	workplace can assist a business in gaining a				
	compensive euge, supp	External and	mage and the marketing activities.				
Cost		Internal effect	<ul> <li>Business model</li> <li>Capacity for change</li> </ul>				
		mumai eneci	- Capacity for change				

-	- Environmental practices
-	- Strategy

Hampering effects:

- The cost of sustainable development has a deleterious effect on an owner's or manager's willingness to embrace environmental measures.
- Compliance to the sustainable business, itself comes at a cost that given the general lack of financial and staff resources available in manufacturing SMEs, the cost of implementing eco-efficient manufacturing initiatives is a significant barrier.
- Supporting effects:
- Cost savings are a significant motivation for environmental actions.
- One of the main drivers for environmental initiatives in countries is cost savings implementing waste efficiency initiatives and sustainable development.

Environmental management system (EMS)	External effect	<ul> <li>Business model</li> <li>Capacity for change</li> <li>Business competition and global market</li> <li>Environmental practices</li> <li>Regulations and legislation</li> <li>Organizational culture and structure</li> <li>Supply chain and logistics</li> </ul>
--	-----------------	---

Supporting effects:

- (EMS) certified to ISO14001 standard will be effective on successful change toward sustainable development with complementary existence of an organizational culture that is open and conducive to environmental innovation.
- The impact of the ISO 14000 certification, which was formed as a set of rules and standards to assist businesses with pollution prevention, material recycling, and waste reduction programs, produced the core four competitive strengths of quality, delivery, flexibility, and affordability.
- The standards of sustainable management systems advocates for an expanded role for integrated management systems (IMS) in development of a sustainable business.

Environmental practices	Internal and external effect	- -	Business model Business competition and global market Environmental management system
		-	Strategy

Hampering effects:

- The absence of a well-defined environmental organizational culture and then lack of proper implementation of environmental practices in small and medium-sized businesses is a significant hindrance to improving environmental performance.

Supporting effects:

- The investment in environmental practices can increase a firm's competitive advantage and lead to improved operational performance.

1	1 1	
Institutional framework	Internal effect	<ul> <li>Characteristic of SMEs</li> <li>Environmental practices</li> <li>Management and leadership</li> <li>Organizational culture and structure</li> </ul>

Supporting effects:

- Just as a flexible institutional framework is very effective and necessary for developing the performance and efficiency of a company's activities, it can also be very effective in developing sustainability and the development of sustainable companies - taking into account personality and structural differences.

as a framework for ach	ieving a certain o on may define the	
SMEs Interactions with society	Internal and external effect	<ul> <li>Business competition and global market</li> <li>Strategy</li> <li>Ability to meet market and social requirements</li> </ul>
<ul> <li>researchers, non-govern</li> <li>For SMEs, sustainable collaboration and intera</li> <li>Acceptance of socially</li> </ul>	nmental organizat performance is action with society responsible polic	e, companies value chain actors, policymakers, ions (NGOs), and customers. contingent upon the quantity and quality of y. ies -which shows interaction with society- is a antage and a reliable predictor of long-term
Knowledge	Internal and external effect	<ul> <li>Business competition and global market</li> <li>Environmental management system</li> <li>Environmental practices</li> <li>SMEs interactions with society</li> <li>Management and leadership</li> <li>Public desire and expectation</li> <li>Strategy</li> <li>Ability to meet market and social requirements</li> </ul>

- Lack of knowledge of managers and owners of SMEs about the concept of sustainability and how to develop it is a major obstacle to sustainable development, because they are the sole decision maker.

- When there is a lack of information regarding the impact of environmental issues on business, owner-managers are hesitant to establish systems or initiatives that will alter the status quo.
- Lack of knowledge and experience with environmental issues have negative impacts on encourage managers to develop sustainability in companies and consumers to buy sustainable products or products of sustainable companies.
- Consumer knowledge is one of the obstacles to the extension of sustainable development because it raises customer expectations and prevents consumer satisfaction with sustainable products.

Supporting effects:

- Increasing the awareness of managers and owners of SMEs can be very important and sensitive in implementing the principles and performance of sustainability in companies and sustainable development.
- Increasing consumer awareness can increase the demand for sustainable products or receive a service commensurate with the environment and the principles of sustainability, lead to the development of sustainable products and services, and ultimately the development of sustainable SMEs.

Management and Leadership Internal effect	<ul> <li>Business model</li> <li>Characteristic of SMEs</li> <li>Environmental management system</li> <li>Environmental practices</li> </ul>
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<ul> <li>Institutional framework</li> <li>SMEs interactions with society</li> <li>Organizational culture and structure</li> <li>Skilled labour</li> <li>Supply chain and logistics</li> <li>Strategy</li> <li>Development and use of technology</li> </ul>
- Ability to meet market and social requirements

Hampering effects:

- Low owner awareness, insufficient management skills, and a lack of ability to make environmental reforms all have a detrimental effect on expanding sustainable businesses and development.
- Ignorance of own environmental impacts decrease supporting the implementing of sustainable development in SMEs by the owners or managers.

### Supporting effects:

- Strong leadership enhances the level of innovation, the corporate reputation, performance, financial stability, and customer relationships of the organization.
- Managing a sustainable business might be considered as a cost-cutting measure.
- The owner's or manager's awareness of the concept of sustainable business development and motivation in this area can help SMEs improve their sustainability by identifying linked activities and implementing single solutions.
- Reviewing the process of proper sustainable implementation in the business or production can happen by managers or owners of SMEs which consider environmental issues.

Organizational culture and structure	Internal effect	<ul> <li>Characteristic of SMEs</li> <li>Cost</li> <li>Environmental management system</li> <li>Environmental practices</li> <li>Skilled labour</li> </ul>
		- Strategy

Hampering effects:

- Perceived conflicts between environmentally friendly practices and other business objectives.
- Due to the differences in management structure, corporate culture and politics, leadership abilities, shared vision, financial status, management and strategy procedures of SMEs, all of which contribute to the formation of the culture and structure, makes it difficult for these businesses to successfully adopt environmental design and industrial innovation.
- Undeveloped organizational environmental culture is one of the factors hindering sustainable development in SMEs.

Supporting effects:

- Increased "environmental competence," or employees' ability to carry out ecologically friendly tasks subconsciously, is a by-product of an enhanced environmental culture which almost invariably, increasing this type of environmental competence results in cost savings.

0		
Public desire and expectation	External effect	<ul> <li>Business competition and global market</li> <li>Environmental practices</li> <li>SMEs Interactions with society</li> </ul>
Supporting effect:		

- With excitement and enthusiasm even to a small extent of people who are conscious of environmental issues and sustainability can grow businesses that are sustainable. Hampering effects:
  - Insufficient enthusiasm and lack of adequate change in behaviour to environmental friendliness by customers have a negative impact on the development of sustainable product production and consequently on sustainable trade.
  - Awareness of people about sustainability can raise expectations for sustainable products beyond the capacity of SMEs, which can have a negative impact on their business.

		nave a negative impact on their cusiness.
		- Access to financial resources
		- Business model
		- Business competition and global market
		- Cost
Regulations and legislation	External effect	- Environmental management system
		- Environmental practices
		- Supply chain and logistics
		- Strategy
		- Development and use of technology

Hampering effects:

- Non-supportive cumbersome regulations is frequently mentioned could be barrier to firm-level growth in the studies that the regulations of cash flow, taxation, and competition are the top barrier to SMEs' success.
  - Significant regulations on the private sector and the extent of their environmental impact can jeopardize a business's competitiveness.
  - Lack of awareness of trends or not believing that sustainability will benefit the company hinders sustainable development and prevent attention on growing sustainability in companies.
  - Perceived high regulation cost and inconsistency have a negative and significant effect on sales turnover and business growth.
  - The perceived regulation change was found to significantly hamper both sales turnover growth and market competition performance.
  - Effective environmental law is a critical reason why SMEs invest in environmental innovations, as SMEs commonly assert that they will not invest in environmental improvements unless mandated by laws.
  - Increased awareness of the financial impact of waste in the sector, along with increasing customer awareness and pressure on environmental issues, as well as external demands and trades, have compelled smaller enterprises to examine and consider the environmental consequences of their operations.

Supporting effects:

- Stringent environmental legislation along with a developing understanding in the industry of the financial cost of waste, and the increase in consumer awareness are supporting development of sustainable development among firms.
- Effective environmental regulations and legislation can support sustainable business development.
- Regulations have high potential and ability to shape activities and have a positive influence.

Skilled labour External and internal effect	<ul> <li>Cost</li> <li>Environmental practices</li> <li>Supply chain and logistics</li> <li>Business competition and global market</li> <li>Organizational culture/structure</li> </ul>
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Hampering effect:

- Limited staff resources available for environmental projects.
- Supporting effects:
- Due to the increased availability of trained workers inside the company, more ecoefficiency measures are adopted, resulting in additional cost savings
- Businesses with knowledgeable employees who have a personal stake in environmental and social issues are more likely to pay attention to these issues.
- One of the crucial growth factors of companies is the quality of a firm's human resources.
- Competent employees bring benefits to the company such as innovation and so on.

Supply chain and logistics	Internal and external effect	<ul> <li>Business model</li> <li>Environmental management system (EMS)</li> <li>Regulations and legislation</li> <li>Skilled labour</li> <li>Strategy</li> <li>Development and use of technology</li> </ul>
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Supporting effects:

- Supply chain design, like reverse supply chain design, establishes a sustainable process that is seen as a factor in corporate sustainability.
- Sharing expertise and experience in supply chain operations can result in significant cost savings and enhanced market performance, among other benefits.
- Logistics is a key function, and the choices it takes are critical to achieving a competitive advantage.
- Organizations can maximize resource use and deliver added value to their customers by using sustainable logistics.
- By implementing sustainable logistics, organizations may maximize their resource utilization and provide added value to their consumers.
- Environmentally responsible logistics management can help reduce resource use and costs, resulting in greater competitiveness.
- Green Logistics is critical not only for overall logistics optimization, but also for enhancing the state's legislative requirements for working with returnable packaging, waste, and other materials.
- Its increasing prominence also contributes to the promotion of a sustainable way of thinking, in which managers strive to put the company's actions into a broader ecological context in addition to focusing on economic metrics.

Hampering effect:

- Protracted lead times (between when fashion merchants place an order and when it is delivered) resulting from the substantial shift of manufacturing to the Far East have resulted in increased shipping costs, job losses in the manufacturing sector, and increased carbon footprints.

Strategy External effect	<ul> <li>Business model</li> <li>Environmental practices</li> <li>Environmental management system</li> <li>Supply chain and logistics</li> </ul>
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Hampering effect:

- Tools, business cases, measurements, and verification procedures so far are primarily aimed at large businesses.

- Supporting effects:

- Strategy can help to design for sustainable development to reduce waste at the source, as well as the need for continuous improvement and gaining a competitive advantage.

Quality Management and Lean Management as a part of development strategy are important to establish a common platform for strengthen sustainable development and competitiveness enhancement. Along with a focus on culture and values, the existence of Lean ideas as one of stimulus component of lean strategy helps to lay the groundwork for better conditions for sustained development of corporation. **Business** model Business competition and global market Capacity for change Development and use of Internal and Cost \_ technology external effect Environmental practices Supply chain and logistics Skilled labour Supporting effects: Continual growth in a finite world is possible through the powers of technology, which will enable us to find new sources or provide alternatives if a particular resource appears to be running out. The tools of sustainable development-economic instruments, legislative measures, and consumer pressures—are aimed at achieving technological changes such as recycling, waste minimization, the substitution of materials, changed production processes, pollution control, and more efficient usage of resources and international contexts. Hampering effects: Sometimes due to the high cost of implementing technology because of the large size or complexity of operations or production process, hinders investment in it, which can slow down the growth of sustainable development with the help of technology. Ability to meet market and Internal and **Business Competition and Global Market** \_ social requirements external effect SMEs Interactions with society -Supporting effects: The ability to meet the needs of the market and society can increase the credibility of sustainable companies and the development of sustainable business. Hampering effects: Inability of a business to meet the social and environmental expectations of its \_ stakeholders can result in a lack of advancement and market penetration, and ultimately in the company's demise. Inability to respond to social demands and solicitudes may bring out environmental and human rights concerns, contributed to the company's reputation and legitimacy eroding. Access to financial resources \_ Business competition and global market Environmental management system Universal pacts and (EMS) External effect conventions Environmental practices Management and leadership Regulations and legislation Supply chain and logistics Supporting effects: Global agreements and treaties, such as the UN Global Compact, provide a relatively simple mechanism for businesses to declare the sustainability of their operations. Global commitments and treaties can promote sustainable development at the corporate and organizational levels by examining the extent to which companies are committed to

environmental friendly activities.

Human rights	Internal and external effect	<ul> <li>Business competition and global market</li> <li>Environmental practices</li> <li>Cost</li> <li>Knowledge</li> <li>Regulations and legislation</li> <li>Supply chain and logistics</li> </ul>
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Supporting effects:

- Considering human rights in all aspects of life such as in production and service providing raises awareness of people's rights about Friday, the environment, and the economy, and this prevents the spread of environmental issues by producing substandard and unsustainable clothing.
- Sustainable development is a kind of improver and protector of one of the rights of the people in the industry of textile and apparel and by expanding it, the rights of the people are guaranteed.

Supporting effects:

- By transparency in business models, as an example in the textile and apparel industry, there is no greenwashing and that is understood by all people internally and externally. And it goes for the whole supply chain sustainability starts from transparency.
- Existence of single definitions of sustainability and sustainable development as well as methods or tools for measuring and validating the sustainability of companies increases transparency in the process of sustainable development.

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