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## **Adoption of the “Sustainability” as a part of Business Strategy**

Maria Carlota Soares de Matos dos Santos Pires

MSc in Management

Supervisor:  
PhD Leandro Ferreira Pereira, Assistant Professor,  
ISCTE-IUL

November, 2022





BUSINESS  
SCHOOL

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Department of Marketing, Strategy and Operations

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## **Dedication and Acknowledgements**

This dissertation means the conclusion of a very important chapter of my life - my master's degree. A long and challenging journey which would not be possible without the incredible people that I am lucky enough to have surrounding me and to whom I would like to express my gratitude:

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## Abstract

Corporates started to have more concerns about sustainability what is affecting the business world as well as our society. Sustainability is now seen as a key drive to future development and innovation but for those companies who implement it in their business strategy. With these concerns the problem statement looked to answer with this thesis is “How to implement sustainability in business strategy. The research objectives are identify the main topics related to business sustainability, how is sustainability changing the business world, how can companies implement sustainability in their business strategy, and correlate the empirical evidence with the interviews. To achieve these objectives data was collected through 101 interviews from the book “*101 Vozes pela Sustentabilidade, Por um desenvolvimento responsável*”. The key findings conclude were that Portugal and worldwide companies have a huge concern regarding sustainability and megatrends, and Portuguese companies have megatrends’ opportunities that can be addressed.

**Key Words:** Sustainability, Corporate Social Responsibility, Sustainable Development Goals, Megatrends, Sustainable Strategy

### **JEL Classification:**

I23 - Higher Education

L21 - Business Objectives of the Firm

M14 - Corporate Culture, Social Responsibility

Q01 - Sustainable Development

Q56 - Sustainability, Environment and Development, Population Growth





## Resumo

As empresas começaram a ter mais preocupações com a sustentabilidade, o que está a afetar o mundo dos negócios e a nossa sociedade. A sustentabilidade é agora vista como um fator chave para o futuro desenvolvimento e inovação, para aquelas empresas que implementam a sustentabilidade na sua estratégia. Tendo em conta estas preocupações o problema que procuro responder com esta tese é “Como implementar a sustentabilidade na sua estratégia?” Os objetivos da pesquisa são: identificar os principais tópicos relacionados com a sustentabilidade empresarial, identificar como é que a sustentabilidade está a mudar o mundo dos negócios, como é que as empresas podem implementar sustentabilidade na sua estratégia, e correlacionar as evidências empíricas com as entrevistas. Para atingir estes objetivos, os dados foram recolhidos através de 101 entrevistas do livro “101 Vozes pela Sustentabilidade, Por um desenvolvimento responsável”. As principais conclusões recolhidas foram que Portugal e as empresas mundiais têm uma enorme preocupação com a sustentabilidade e com as *megatrends*, além disso, as empresas portuguesas podem abordar algumas *megatrends* como oportunidades.

**Palavras-Chave:** Sustentabilidade, Responsabilidade Social Corporativa, Objetivos de Desenvolvimento Sustentável, Estratégia Sustentável.

### **Classificação JEL:**

I23 - *Higher Education*

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## **List of Abbreviations**

**Adj** – Adjective

**Adv** – Adverb

**CO<sub>2</sub>** – Carbon Dioxide

**CSR** – Corporate Social Responsibility

**DF** – Document Frequency

**EU** – European Commission

**HEIs** – High Education Institutes

**KWIC** – Key Words in Context

**MDG** – Millennium Development Goals

**NGOs** – Non-Governmental Organizations

**POS** – Part of Speech

**RO** – Research Objectives

**RQ** – Research Questions

**SDGs** – Sustainable Development Goals

**TBL** – Triple Bottom Line

**TF** – Term Frequency

**UN** – United Nations

**ZDCs** – Zero-deforestation Commitments



# **Chapter 1 - Introduction**

## **1.1 Context Description**

Nowadays the sustainability topic has a huge impact in our society and the business world is not an exception. Sustainable concerns, practices and measures are getting place in our daily lives and so in managers concerns, visions and goals that leads to implement it in the companies' strategies.

In addition, sustainability is the fundamental key to change, drive and innovate the business world and worldwide governments. These concerns are emphasized because of the current world context, the challenges that governments and companies are facing in reconstruction their business, economy, and social issues due to the COVID-19 pandemic.

However, the COVID-19 pandemic brings an awareness of how companies need to be quickly adapt themselves to the environment and changes that they cannot control and here the sustainability topic has a huge impact because it was thought sustainable topics that companies were able to face this pandemic and now the business world is more aware of the importance and the impacts that sustainability has in their business, not only in performance topics but also in consumers perspectives.

## **1.2 Research Problem**

As the sustainability became a constant element that is affecting the business world in economic, social, and environmental aspects an urgent concern started to rise in managers choices of action and a big concern on how they can implement sustainability in their business strategy started to be a huge topic among all firms.

Nevertheless, there is a gap on the managers' way to implement sustainability in their business strategy, most of the sustainable reports done by firms are unbalanced and disconnected from business goals (Erin et al., 2022), so, saying this, the research problem is how can companies implement sustainability in business strategy?

### **1.3 Structure of the dissertation**

In order to answer to the research problem this dissertation follows a well-defined structure with 6 (six) chapters.

The first chapter is the Introduction where is presented the theme framework, the research problem, and the objectives of the dissertation.

The second chapter is the literature review where the stated of art of the sustainability is explained and inside of this topic will be addressed the themes of triple bottom line, sustainable development goals, megatrends, business and digital ethics, and future sustainability opportunities and threats as well as the existing research.

The third chapter is the methodology and here it will be explained the chosen approach to answer the research questions and the sample characterization is presented.

The fourth chapter is the data analysis where the data is analysed and presented.

The fifth chapter is the discussion and findings and here is presented the results of the data analysis and a corresponding discussion with the authors presented in the literature review, as well as presented the finding that can be added to the authors and to the literature review.

The last chapter of this thesis is chapter 6 (six) and is where presented the main conclusions and future research.

## **Chapter 2 - Literature Review**

### **2.1. Sustainability**

The origin of the sustainability definition by Kuhlman and Farrington (2010), is very connected with the forestry and the natural resources as they stated that we should never harvest more than what the forest produces. Still, the United Nation World Commission on Environment and Development (developed in the Brundtland Commission) defined sustainable development as the practice of present actions that satisfy existing needs without compromising that future generations have the means and resources to meet their future needs.

Sustainability concerns are taking place in our daily lives as citizens as well in managers actions as decisions regarding with their business and with their strategic management of their business. It is important to clarify that sustainability have three pillars: economic sustainability, environmental sustainability, and social sustainability.

Manager's sustainable concerns are defined as the Corporate Social Responsibility (CSR) and according with the European Commission Corporate Social Responsibility is a management concept that defines the way in which companies can reach a balance and integrate their concerns between the economic, environmental, and social problems that are present in their business operations and in the interactions with their stakeholders.

In addition, when companies act in conformity with social responsibility, they started to have a crescendo interest in deliver economic and social value that meet the needs of their stakeholders. This will have multiple effects such as brand image, customer loyalty, reputation, sales revenue, attraction and retention improvement of their customers, and higher productivity and lower operation costs. The concerns regarding with the management of social and environmental aspects in company's value chain started to increase and became a core driver to sustainable competitiveness and due to that, managers are more aware of their CRS initiatives (Padilla-Lozano & Collazzo, 2022).

In fact, short-terms earnings and goals are not a guarantee for a company's success, and due to that companies must create a long-term sustainable strategy, that leads to a long-term performance by balancing his financial, environmental, and social outcomes. In addition, company's culture will positively influence the corporate sustainability of the firms when used share values, vision, and decision making to transform the perspectives, preferences, and ambitions of the organization(Hossain et al., 2022).

The sustainable business models are responding to the new use of service, and consumption habits that are emerging in the consumers. These models were created to help companies to aim significant positive impacts for the society or the environment through the implementation of changes in the creating, deliver, capture, and change of their value proposition (the benefits of a product or service that a company promise to serve to customers) and these sustainable business models must align business goals with stakeholders and society needs (Laukkanen & Tura, 2022).

Inside the business world there is a well-known performance measurement framework that helps managers connect their strategy with their CSR. This framework is called Triple Bottom Line (TBL) also called 3P's (people, planet, and profit).

### 2.1.1 Triple Bottom Line

The Triple Bottom line (TBL) is an accounting framework to measure performance introduced by Elkington, 1994 . It is an important tool to support the company's sustainable goal because its focus is different from the traditional measures. This means that, with this tool, managers are allowed to see their company's performance through the triple bottom line and not only, as happened before, from traditional measure such as profit, return on investment and shareholders investments to include environmental and social dimensions.

Following (Slaper, 2011) the TBL incorporates three dimensions of performance: economic, environmental, and social. This framework is used by business, non-profit organisations, and government.

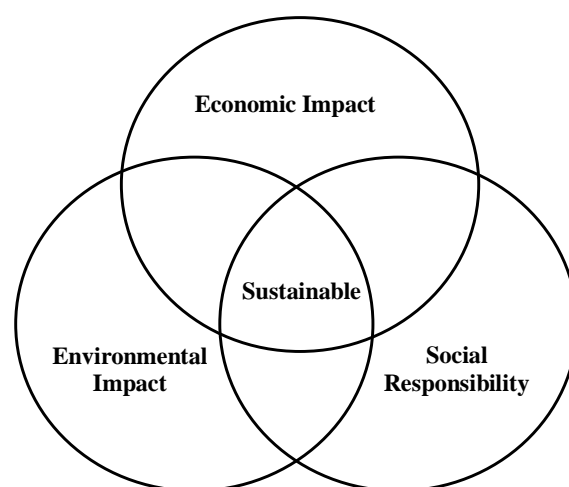


Figure 1 – Triple bottom line. Adopted from (Kabir et al., 2019).

Now that the concept of sustainability was analysed and as well as the TBL concept and his importance it is also important to address two big important themes: the first it is the Sustainable Development Goals and the second it is the megatrends.

### **2.1.2 Sustainable Development Goals (SDGs)**

In order to fight inequality, tackle poverty and provide inclusive development for all people, the United Nations agreed to create the seventeen Sustainable Development Goals that are, in order: 1. No poverty, 2. Zero hunger, 3. Good health and well-being, 4. Quality education, 5. Gender equality, 6. Clean water and sanitation, 7. Affordable and clean energy, 8. Decent work and economic growth, 9. Industry, innovation and infrastructure, 10. Reduce inequalities, 11. Sustainable cities and economies, 12. Responsible consumption and production, 13. Climate action, 14. Life below water, 15. Life on land, 16. Peace, justice and strong institutions, and 17. Partnership for the goals (Erin et al., 2022).

These SDGs were created in 2015 in substitution of the Millennium development goals (MDG) and they are seen as conventional targets or objectives that countries must meet to achieve the 2030 global agenda, are consider as the basis for key performance indicators (KPIs) to measure sustainable performance (Erin et al., 2022).

As these SDG emerge, started to raise with them serious concerns on the need to develop and create a sustainable future reflected among the nations, as at the same time companies, international organizations, started to demonstrate commitment to the seventeen SDGs by incorporate these goals, and sustainability issues and actions in their annual reports they started to identify SDG targets to incorporate in their business plans and models (Erin et al., 2022).

The sustainability topic will affect all firms in all industries and sectors such as automotive, fashion industry and energy that must see sustainability more than conserving the environment but involve social, financial, and economic (triple bottom line) issues as the SDGs consists in order achieve theirs financial and strategic goals while are contributing in a positive way to the environment and to the society (Lichtenthaler, 2021).

Following the previous authors (Erin et al., 2022), the concept of incorporating the SDGs in the reporting of companies started to have a global relevant due to its impact on business sustainability since they are a holistic reporting that captures all sustainability (environmental, social, governmental) issues of the SDGs targets,

As the previous authors (Erin et al., 2022) stated, to perform a report that demonstrate the SDGs, companies must measure, monitor, and make organizations accountable to achieve their SDGs targets. At the same time, there is a need to connect the stakeholders' responsibilities to the sustainability issues and address in the sustainability reports information's about the internal and external environment as well as define responsibilities and actions that must be address by the stakeholders.

In addition, the authors (Erin et al., 2022) also referred a study made by KPM, in 5.200 companies in more than 50 countries conclude that 80% of companies now report on SDGs issues and connect their businesses activities with the SDGs in their corporate reports and that the most frequently prioritized SDGs by companies are: 8. Decent work and economic growth, 12. Responsible consumption and production, and 13. Climate action, and the least commonly prioritized SDG is the 15. Life on land (also known as biodiversity). However, they also conclude that these reports are often unbalanced and disconnected from business goals.

Nevertheless, to help companies to create, implement, monitor, and achieve these SDGs in their strategy a planning methodology named "SDG Compass" was created. This plan has 5 (five) dimensions: 1. Understand the SDGs, 2. Define priorities, 3. Set goals, 4. Integrate, and 5. Report and communicate. With this plans companies will be also able to reach synergies between commercial and social issues related with sustainability practices and, due to that, promote an environmental and social development. (Cristina Ferreira Caldana et al., 2022).

As was stated before, the SDG 8. Decent work and economic growth is one of the most prioritized SDGs by companies. Saying this, a group of Portuguese authors (Borrego et al., 2022) conducted a study in Portuguese' chartered accountants' firms to understand the role of these firms in supporting small and medium-sized enterprises during the first wave of COVID-19 pandemic and understand how these firms perceive their contribution to the SDG 8. To do so, the authors interview more than 500 Portuguese chartered accountants located in Lisbon, Setúbal, and Porto. This study is important to this topic since give a perspective on what kind of activities could be addressed by companies to achieve the SDG8. This study concludes that these firms, during the pandemic increase their number of clients and due to that their exercises on purchase of equipment, training and communication increased as well, but despite this increasing of expenses and word 70% of this firms decided not to charge any extra-fee and decreased their monthly fees to their clients in some cases for solidarity with the difficult situations of his clients and in other cases due to the fear to lose clients due to the pandemic



situation what demonstrates that this companies had a sense of social responsibility to their clients and to the society contributing to the economic sustainability and helping to mitigate the possible negative effects in the SDG 8.

Despite these mandatory SDGs there are some objectives that companies voluntarily pledge to meet such as the zero-deforestation commitment (ZDCs). This commitment raised from the pressure establish from civil society actors and important Non-Governmental Organizations (NGOs) to the companies for them to end with the tropical deforestation and nowadays hundreds of companies are committed to adopt the ZDCs. There are different mechanisms to apply the ZDCs but some of them are: acting directly in the implementation (engaging suppliers and producers across the supply chain and work with them, being certificated as an eco-certified company), other is integrate sustainability standards in company' policies (such as standards for sustainable production of palm oil and soy). However, these implementations are not easy and requires resources allocation, external support and monitor the on-the-ground presence. Saying this, the key to progress on the zero-deforestation field is through verification, monitorization, audition and report of the impact of ZDG implementation by the firm (Bager & Lambin, 2022).

### **2.1.3 Megatrends**

As was just presented in one hand a huge important topic regarding to business sustainability is the SDGs but on the other hand megatrends has a huge relevance as well since it is expected that companies start to deal with them due to the will impact that the megatrends will have in the organizations (Linthorst & de Waal, 2020)

It is important to understand what megatrends are and which are the global megatrends. First, megatrend is described as an important or significant social, economic, political and/ or technological move or action in the process of any activity that influence the society. A megatrend must have a long duration of importance and deeper effects than the normal fashion or trends, it is not something that comes and goes, it is, in fact, something that influences the society for a long time and can emerge any time. Summing up, a megatrend must reflect a historic context, have a complex nature and an extensive impact(Mittelstaedt et al., 2014).

There are 5 (five) key global megatrends: 1. Rapid urbanization, 2. Climate change and resource scarcity, 3. Shift in global economic power, 4. Demographic and social change, and 5. Technological breakthroughs (Retief et al., 2016).

Following the authors, the rapid urbanization megatrend is related to the fact that the global population is increasing and more people are moving to live in the cities. Since this phenomenon is increasing, this megatrend targets to plan the urban areas to be more sustainable and liveable for the future generations, through innovation and sustainable outcomes.

As the authors stated, the climate change and resource scarcity megatrend is related to the future resource scarcity that humanity will face since the world became more urbanized, populous and the demand for energy, food and water is rising but Earth has a finite amount of natural resources to satisfy this demand. Due to this, this megatrend targets to discover ways to fight, in an innovative way and with the help of technology, the scarcity issues that the society is facing by, for example, reduce resource use or exploring substitute materials solutions.

In addition, the authors also referred, that the shift in global economic power megatrend targets to the future of an interconnected world without a solo dominant player by structuring global economy and global financial, as well as power relation between cities, and increasing the access to information. Summing up, this megatrend targets the global interconnectivity, interdependence, and interconnectedness.

Another megatrend described by the authors was the demographic and social change megatrend. This megatrend is related to the fact that is expected by 2050 the world's population becomes between 9 and 11 billion people however this raising will not be constant in all countries because every country has a differed demographic profile. However, what will happen is that this raising will have global effects and while this raising is happening, people are living longer and having fewer children in the more developed countries, but in the developing countries people will have more children's which means higher demands for quality education, employment, healthcare, and resources. Saying this, this megatrend targets for a evidence of future policy directions by all nations that takes in account these future demographic changes.

The last megatrend referred by the authors was the technological breakthroughs megatrend. This megatrend is related to the acceleration of technological innovation and targets for the future technology advances that provide access to important contributions to human well-being and governance arrangements in dealing with the disruptive technologies.

Taking Europe as an example, the more important megatrends related to European Agriculture are climate change and resource scarcity, and demographic and social change. Climate change is crucial for European agriculture due to the concerns regarding the water-limit, CO2 fertilization effects, droughts, and many others. The demographic and social change it is important because there are factors such as the age of farmers and the decline of working-age population that are in this field. (Debonne et al., 2022).

However, the adopting of these megatrends by organizations it is a difficult process that requires modify or recreate a new business model which is, for some companies a difficult working to achieve but for others that are more mature, it is a task that can be done successfully since they have the capability to adapt quickly and be flexible to deal with these long-term changes to perform these megatrends (Linthorst & de Waal, 2020).

#### **2.1.4 Business and Digital Ethics**

Business ethics are related with the ethical behaviour of the organization that can determine business success or failure. This ethical behaviour of organizations stated to have a big importance since these ethical values of the company can shows the organizations' commitment and reputation among stakeholders, employees, and the society. (Reck et al., 2021).

The ethics concerns emerged from the raising utilization of digital technologies, and it is important to make companies accountable for the moral implications of the digital technologies that they, design, development, use or produce since these technologies will have direct impacts on the society that consumes these technologies(D'Cruz et al., 2022).

Following these authors, one way to make companies accountable for the digital technologies that they produce is through the incorporation of corporate policies, norms and rules in the organization, meaning that the business ethics should expand the ethical evaluation to the digital technologies and include the decisions made around the outcomes of these digital technologies, such as the chosen of the technology, data use and policies and all the processes when developing these technologies. By being accountable for their actions, companies can achieve a better implementation of their digital technologies that leads to efficiency.

Another important aspect referred by the authors, is that the use of the digital technologies must be aligned with the companies' goals and the business and digital ethics must be also aligned with these goals to the stakeholders maximize the view of the firm as well as

his performance what requires a well know conception of the value of the digital technology chosen.

### **2.1.5 Future Sustainable Opportunities and Threats**

Sustainable socio-economic concerns are taking a big place in nowadays society and present and future business leaders are the most important player to initiate, manage and maintain at an organization level these issues present and to take action to fight them. Indeed, a big player that can prepare these future leaders to such an important role are the higher education institutes (HEIs) and especially business schools(Csillag et al., 2022).

The authors stated that these HEIs have a hug responsibility and impact on promoting sustainability and forming the way that the future generations learn business practices, support a sustainable development, and address sustainability issues, due to that HEIs must been seen as an sustainable future opportunity.

In addition, an education regarding sustainable development promotes environmental awareness and highlights the need for good habits, encouraging the critical thinking and behaviour needed for students build future sustainable communities and society that have and act with conscious consumer values(Berchin et al., 2021).

Following the previous authors, a social demand for the HEIs adopt social good practices is growing and leads for HEIs implement these sustainable practices what is seen as an example for others HEIs and the main practices that these institutions are addressing are in the fields of having basic premises, teaching, research, campus operation, research, and communication.

As the authors stated, to these fields be successful achieve they must act and address plans, and activities for each field. Starting with the basic premises, HEIs must establish goals, have an inclusion and accessibility education, and increase in involve students and teachers in the university governance; for the teaching field they must have teaching methods and a continuous capacitation and training for the students and educators, transform the curricula by creating new and specific disciplines connected to sustainability, and they also have the capability to implement e-learning and distance courses. Regarding the campus operation HEIs must promote initiatives or services with the help of stakeholders to make changes of promote sustainable practices in the community. The research field is where institutions can support research centres that are focus on sustainable studies, promote studies with local impact and

use innovative technology. The last field is communication and here HEIs can create spaces to share knowledge in the sustainable area such as performing workshops, events, conferences, and seminars.

However, there are also some future sustainable threats that managers must be aware of. Since the implementation and assessment of sustainability in their business managers must ensure that it has a long-term perspective, otherwise it will not survive to market changes and to the social and environmental impacts, so they must ensure that it is a flexible implementation due to this time and uncertainty changes that can occur in our society. Moreover, customers' needs, expectations, market conditions (raw material prices for example) are also a sustainable threat and risks because they are also unpredictable and can rapidly change (Villamil et al., 2022).

One example of a recent global threat is COVID-19 since it has socio-economic consequences worldwide. In fact, the pandemic situation highlighted sustainability issues, and the pandemic is itself an example of a sustainable threat. In fact, with the pandemic some of the SDGs get a setback, for example the SDG 1. No poverty suffered significant impacts, due to worldwide situation, as well as the in the SDG 10. Reduced inequalities what is happening is that social and economic inequality is increasing (Hörisch, 2021).

Author, Year	Main Topics (Actual Research)	Main Issues (Future Research)
Kuhlman & Farrington, 2010	Definition and measurement of sustainability.	Clarify the concept of sustainability and address economic and social benefits that comes up with sustainability.
Slaper, 2011	The triple bottom line concept, flexibility, framework for organizations to measure sustainability and take long- term decisions.	Understand how to measure the three categories of the TBL, and which policies contribute to sustainability.
Erin et al., 2022	Organizations' SDGs activities and their contribution to the organization' performance.	Comparative analysis of SDGs activities in organization from different countries.
Lichtenthaler, 2021	Description the relevance of the adoption of multiple types of innovation in business processes to achieve growth from sustainable initiatives and processes.	Understand, the trend impacts in the context of SDGs.
Linthorst & de Waal, 2020	Description of how can HPOs address megatrends to secure sustainable performance and at the same time work on the United Nations (UN) sustainable development goals.	Understand the impact of megatrends in organizations' processes, behaviours, and performance.
Retief et al., 2016	Global megatrends description and their implications for environmental assessment practice	Identify and explore the effects of the effective implementation and measurement of environmental assessments and of strategies to deal with megatrends' implications.
Mittelstaedt et al., 2014	Megatrend's concept and sustainability description.	Fresh research among scholar, practitioners, policy makers, and stakeholders to identify and explore the implications of technology, politics, in the interactions between consumers and institutions and how it can potentiate sustainability.
D'Cruz et al., 2022	Description of the business ethic aspects, and issues of the organizations.	Understand the future business ethics and business ethics education.
Cristina Ferreira Caldana et al., 2022	Description of how companies define, report, integrate, communicate, understand, and implement the SDGs.	Identify the negative and positive impacts of the SDGs in a specific firm, according to the sector and country where this firm is located.
Borrego et al., 2022	The important role of chartered accountant Portuguese firms to the SDG 8 during the COVID-19 pandemic.	Understand the society' awareness for the importance of activities related to the SDGs addressed by companies during the pandemic.
Bager & Lambin, 2022	Definition of the processes, mechanisms, and conditions to companies implement a ZDCs.	Research between private, public, and civil society actors to identify a transformative way of eliminating the deforestation from companies' supply chain.
Debonne et al., 2022	Identification, quantification, and mapping megatrends related to the European agriculture.	Conduct a more qualitative assessment of megatrends and their dimensions.
Hossain et al., 2022	Identification of the effects among corporate sustainability, culture, and leadership.	Research that examines the influence of company size and ownership on the connection between corporate and sustainability.
Laukkanen & Tura, 2022	Identification from a customer and corporate perspective the sustainability impacts, sustainable value proposition and values.	Conduct research that comprehends customers' and suppliers' perspectives in the processing of value creation.
Csillag et al., 2022	Identification of how HEIs (business schools) implement sustainability that influence the future.	Conduct research that identifies the effects of a sustainability education in companies.
Berchin et al., 2021	Identification of how sustainable development is promoted by HEIs.	Conduct qualitative research that involves university managers perspectives regarding the promotion of sustainable development by HEIs.

Reck et al., 2021	Identification of ethical decision-makers and processes conducted by family firms.	Explore ethical and unethical behaviours conducted by firms.
<b>Padilla-Lozano &amp; Collazzo, 2022</b>	Identification of the relationship between CSR, competitiveness, and green innovation.	Explore how green supply chain management relates with suppliers, customers, CSR, and green innovation and identify the variables that drive companies to have an environmental culture, business, and competitiveness.
Villamil et al., 2022	The importance of implement strategic sustainability in products processes.	Explore different industries to aim companies exceed strategic sustainability.
Hörisch, 2021	COVID-19 crisis related to SDGs	Conduct research of a specific example of a newly emerging sustainability issue.

*Table 1- Summary of the mains topic and issues that come from the literature review.*

## Chapter 3 – Methodology

In this chapter will be described the methodology method, and the techniques and instruments used in this thesis. The research objective (RO) defined are:

**Research objective 1:** Identify they mains topics related to business sustainability.

**Research objective 2:** Identify how sustainability is changing the business world.

**Research objective 3:** Identify how can companies implement sustainability in their business strategy.

**Research objective 4:** Correlate the empirical evidence obtained with the beliefs of the 100+ respected Portuguese names that were interviewed.

The research technique chosen was analysing interviews. The aim was to collect information through the interviews are from the book “*101 Vozes pela Sustentabilidade, Por um desenvolvimento responsável*” (Many Authors, 2022), the book deals with sustainability in a strategic perspective for organizations and the country in a perspective of 101 stakeholders. The research questions (RQ) defined are:

**Research question 1:** Why do we need to care about the challenges posed by sustainability megatrends?

**Research question 2:** How has your organization/sector/context addressed the challenges posed by these megatrends?

**Research question 3:** What has your organisation/sector/context done specifically in terms of products and services to address these challenges?

**Research question 4:** In personal terms, how do you see the future of our planet, what are the main threats and what are the great opportunities?

The research questions and research objectives integrated with the main issues from the literature are presented in the following table:



Key Research Question:	How to implement sustainability in business strategy?	
<b>Main Issues (Author, Year)</b>	<b>Research Question</b>	<b>Research Objective</b>
<p>1. Clarify the concept of sustainability and address economic and social benefits that comes up with sustainability.</p> <p>2. Understand how to measure the three categories of the TBL, and which policies contribute to sustainability.</p> <p>3. Comparative analysis of SDGs activities in organization from different countries.</p> <p>4. Understand, in the context of SDGs, the positive and negative interdependencies with.</p> <p>5. Understand the impact of megatrends in organizations' processes, behaviours, and performance.</p> <p>6. Identify and explore the effects of the effective implementation and measurement of environmental assessments and of strategies to deal with megatrends' implications.</p> <p>7. Fresh research among scholar, practitioners, policy makers, and stakeholders to identify and explore the implications of technology, politics, in the interactions between consumers and institutions and how it can potentiate sustainability.</p> <p>8. Understand the future business ethics and business ethics education.</p> <p>9. Identify the negative and positive impacts of the SDGs in a specific firm, according to the sector and country where this firm is located.</p> <p>10. Understand the society' awareness for the importance of activities related to the SDGs addressed by companies during the pandemic.</p> <p>11. Research between private, public, and civil society actors to identify a transformative way of eliminating the deforestation from companies' supply chain.</p> <p>12. Conduct a more qualitative assessment of megatrends and their dimensions.</p> <p>13. Research that examines the influence of company size and ownership on the connection between corporate and sustainability.</p> <p>14. Conduct research that comprehends customers' and suppliers' perspectives in the processing of value creation.</p> <p>15. Conduct research that identifies the effects of a sustainability education in companies</p> <p>16. Conduct qualitative research that involves university managers perspectives regarding the promotion of sustainable development by HEIs.</p> <p>17. Explore ethical and unethical behaviours conducted by firms.</p>	<p>RQ1: Why do we need to care about the challenges posed by sustainability megatrends?</p>	<p>RO1: Identify they mains topics related to business sustainability</p>
	<p>RQ2: How has your organization/sector/context addressed the challenges posed by these megatrends?</p>	<p>RO2: Identify how sustainability is changing the business world.</p>
	<p>RQ3: What has your organisation/sector/context done specifically in terms of products and services to address these challenges?</p>	<p>RO3: Identify how can companies implement sustainability in their business strategy.</p>
	<p>RQ4: In personal terms, how do you see the future of our planet, what are the main threats and what are the great opportunities?</p>	<p>RO4: Correlate the empirical evidence obtained with the beliefs of the 100+ respected Portuguese names that were interviewed.</p>

<p>18. Explore how green supply chain management relates with suppliers, customers, CSR, and green innovation and identify the variables that drive companies to have an environmental culture, business, and competitiveness.</p> <p>19.The importance of implement strategic sustainability in products processes.</p> <p>20.COVID-19 crisis related to SDGs.</p>		
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*Table 2 -Research questions and research objectives integrated with the main issues from the literature.*

The following table presents the research objectives, the questions that were done to all the interviewees and the characterization of the type of questions made.

<b>Research Objective</b>	<b>Question</b>	<b>Type of Question</b>
RO1: Identify they mains topics related to business sustainability.	Why do we need to care about the challenges posed by sustainability megatrends?	Interpretive Question Descriptive Question Exploratory Question
RO2: Identify how sustainability is changing the business world.	How has your organization/sector/context addressed the challenges posed by these megatrends?	Interpretive Question Descriptive Question
RO3: Identify how can companies implement sustainability in their business strategy.	What has your organisation/sector/context done specifically in terms of products and services to address these challenges?	Interpretive Question Descriptive Question
RO4: Correlate the empirical evidence obtained with the beliefs of the 100+ respected Portuguese names that were interviewed.	In personal terms, how do you see the future of our planet, what are the main threats and what are the great opportunities?	Interpretive Question Descriptive Question

*Table 3 - Prototype of the research instrument integrated with the research objectives.*

## Chapter 4 - Data Analysis

The text document that resulted from the book comprehends 101 (interviews) stakeholders among them entrepreneurs, academics, energy specialists, activists, entrepreneurs, researchers, plastic artists, bankers, and architects, and among them respected names in Portugal as António Guterres, António Costa Silva, António Saraiva, Francisco Ferreira, Luísa Schmidt, Bordalo II, Carlos Fiolhais, Pedro Norton de Matos, Teresa Ricou, Roberta Medina, Leandro Ferreira Pereira, and many others. The text document as 7817 words, 3118 sentences and 2906 paragraphs. The qualitative analysis of this data will be described below, according to the types of analysis which were performed with the KH Coder tool.

### Word Frequency List

The first analysis is the word frequency list, with this analysis is possible to identify the most frequent (and relevant) words presented in the book/ interviews, the command done in KH Coder shows us the following table:

Word	POS (Part Of Speech)	Term Frequency	Word	POS	Term Frequency
sustainability	Noun	777	author	Noun	206
company	Noun	489	reduce	Verb	204
development	Noun	482	value	Noun	203
sustainable	Adj	470	take	Verb	202
climate	Noun	466	example	Noun	201
change	Noun	458	transition	Noun	201
social	Adj	445	system	Noun	200
energy	Noun	431	need	Verb	199
new	Adj	422	promote	Verb	198
economic	Adj	405	technology	Noun	197
world	Noun	380	most	Adv	195
make	Verb	360	policy	Noun	194
economy	Noun	357	issue	Noun	192
challenge	Noun	355	develop	Verb	191
environmental	Adj	353	european	Noun	191
impact	Noun	350	opportunity	Noun	191
planet	Noun	342	such	Adj	190
business	Noun	318	use	Noun	190
year	Noun	317	water	Noun	189
society	Noun	312	solution	Noun	188
global	Adj	310	waste	Noun	187
sector	Noun	295	service	Noun	185
resource	Noun	286	health	Noun	182
people	Noun	275	management	Noun	180

time	Noun	274	need	Noun	180
country	Noun	270	material	Noun	175
action	Noun	269	natural	Adj	170
life	Noun	258	generation	Noun	168
level	Noun	257	achieve	Verb	167
product	Noun	256	know	Verb	164
way	Noun	254	production	Noun	163
model	Noun	253	increase	Verb	162
only	Adv	252	already	Adv	161
public	Adj	251	environment	Noun	161
good	Adj	249	activity	Noun	159
portugal	Noun	248	innovation	Noun	159
term	Noun	241	today	Noun	159
well	Adv	241	use	Verb	159
great	Adj	234	project	Noun	154
carbon	Noun	230	ensure	Verb	153
area	Noun	225	strategy	Noun	153
human	Adj	225	organization	Noun	152
create	Verb	224	nature	Noun	150
future	Noun	218	growth	Noun	148
emission	Noun	217	important	Adj	147
consumption	Noun	215	market	Noun	146

Table 4 - Word Frequency List Analysis: Top words Output from KH Coder.

According to the output (Table 4) we can conclude that the TOP 5 most common words mentioned by the interviewers are: “sustainability” (TF=777, that represents approximately 10% of all words), “company” (TF= 489, that represents approximately 6,2% of all words), “development” (TF= 482, that represents approximately 6,1% of all words), “sustainable” (TF=470, that represents approximately 6% of all words), and “climate” (TF=466, that represents approximately 5,9% of all words). We can conclude that the TOP 5 words represents approximately 34,2% of all words.

In the KH Coder tool, it is possible to analyse the data in two different ways: the first is extracting the whole list by clicking in the “single column” (previous table number 1), and the second way it is to analyse the data from his category (Noun, Adj, Adv and Verb) by clicking in “By POS tags”.

The second option (“By POS tags”) shows the words divided by the following categories: Noun, Adj, Adv and Verb.

Noun	TF	Adj	TF	Adv	TF	Verb	TF
sustainability	777	sustainable	470	only	252	make	360
company	489	social	445	well	241	create	224
development	482	new	422	most	195	reduce	204
climate	466	economic	405	already	161	take	202
change	458	environmental	353	very	146	need	199
energy	431	global	310	increasingly	115	promote	198
world	380	public	251	now	111	develop	191
economy	357	good	249	still	109	achieve	167
challenge	355	great	234	always	106	know	164
impact	350	human	225	therefore	93	increase	162
planet	342	such	190	just	82	use	159
business	318	natural	170	thus	72	ensure	153
year	317	important	147	particularly	64	base	144
society	312	future	137	especially	62	change	144
sector	295	same	130	far	60	live	141
resource	286	different	129	however	60	become	140
people	275	digital	129	together	56	see	137
time	274	financial	125	almost	54	contribute	128
country	270	various	117	long	54	give	127
action	269	necessary	113	often	53	face	122
life	258	high	112	currently	52	lead	122
level	257	long	107	then	51	want	121
product	256	circular	103	too	46	allow	120
way	254	possible	102	namely	43	provide	118
model	253	current	101	here	42	support	117
Portugal	248	national	101	only	252	make	360

Table 5 - Word Frequency List Analysis: by category Output from KH Coder.

The previous Table 5 show us the Top 25 word and his TF, by the following categories: Noun, Adj, Adv, and Verb. For each category is possible to identify the Top 5 words. Stating with the “Noun” category the Top 5 words are: sustainability, company, development, climate, and change. For the “Adj” category the Top 5 words are: sustainable, social, new, economic, and environmental. For the “Adv” category the Top 5 words are: only, well, most, already, and ready. And lastly, for the “Verb” category the Top 5 words are: make, create, reduce, take, and need.

### Term Frequency Distribution

The second analysis is the term frequency distribution, and with this analysis we can identify in all the interviews (101) how many type of words were examined, and we can conclude that exists 7817 types of words target for analysis, we also can identify the mean of

those words, that is the mean term frequency (TF) that as a value of 11.36, and we can also identify the minimum TF of words that should be included in the scope of analysis. The

TF	Term Frequency	%	Comulative Frequency	Comulative %	TF	Term Frequency	%	Comulative Frequency	Comulative %
<b>1</b>	<b>3112</b>	<b>39.81</b>	<b>3112</b>	<b>39.81</b>	<b>26</b>	19	0.24	7093	90.74
<b>2</b>	1132	14.48	4244	54.29	<b>27</b>	18	0.23	7111	90.97
<b>3</b>	599	7.66	4843	61.95	<b>28</b>	26	0.33	7137	91.30
<b>4</b>	382	4.89	5225	66.84	<b>29</b>	18	0.23	7155	91.53
<b>5</b>	<b>340</b>	<b>4.35</b>	<b>5565</b>	<b>71.19</b>	<b>30</b>	17	0.22	7172	91.75
<b>6</b>	220	2.81	5785	74.01	<b>31</b>	15	0.19	7187	91.94
<b>7</b>	202	2.58	5987	76.59	<b>32</b>	17	0.22	7204	92.16
<b>8</b>	147	1.88	6134	78.47	<b>33</b>	21	0.27	7225	92.43
<b>9</b>	115	1.47	6249	79.94	<b>34</b>	13	0.17	7238	92.59
<b>10</b>	97	1.24	6346	81.18	<b>35</b>	11	0.14	7249	92.73
<b>11</b>	91	1.16	6437	82.35	<b>36</b>	15	0.19	7264	92.93
<b>12</b>	92	1.18	6529	83.52	<b>37</b>	14	0.18	7278	93.10
<b>13</b>	69	0.88	6598	84.41	<b>38</b>	9	0.12	7287	93.22
<b>14</b>	60	0.77	6658	85.17	<b>39</b>	12	0.15	7299	93.37
<b>15</b>	52	0.67	6710	85.84	<b>40</b>	8	0.10	7307	93.48
<b>16</b>	47	0.60	6757	86.44	<b>41</b>	13	0.17	7320	93.64
<b>17</b>	49	0.63	6806	87.07	<b>42</b>	13	0.17	7333	93.81
<b>18</b>	43	0.55	6849	87.62	<b>43</b>	13	0.17	7346	93.97
<b>19</b>	33	0.42	6882	88.04	<b>44</b>	13	0.17	7359	94.14
<b>20</b>	37	0.47	6919	88.51	<b>45</b>	9	0.12	7368	94.26
<b>21</b>	27	0.35	6946	88.86	<b>46</b>	8	0.10	7376	94.36
<b>22</b>	32	0.41	6978	89.27	<b>47</b>	9	0.12	7385	94.47
<b>23</b>	41	0.52	7019	89.79	<b>48</b>	8	0.10	7393	94.58
<b>24</b>	26	0.33	7045	90.12	<b>49</b>	6	0.08	7399	94.65
<b>25</b>	29	0.37	7074	90.50	<b>50</b>	13	0.17	7412	94.82

following *Table 6 -Term Frequency Distribution Analysis Output from KH Coder.* table shows the Term Frequency distribution to the TOP 50 frequency.

According with the output (Table 6), it is possible to conclude that there are 3112 type of words that occur only once (TF = 1) and that the minimum term frequency of words that should be included in the scope of analysis.

Furthermore, by excluding words with a  $TF \leq 5$ , then the number of analysis targets can be reduced by 5565 types (approximately 70%).

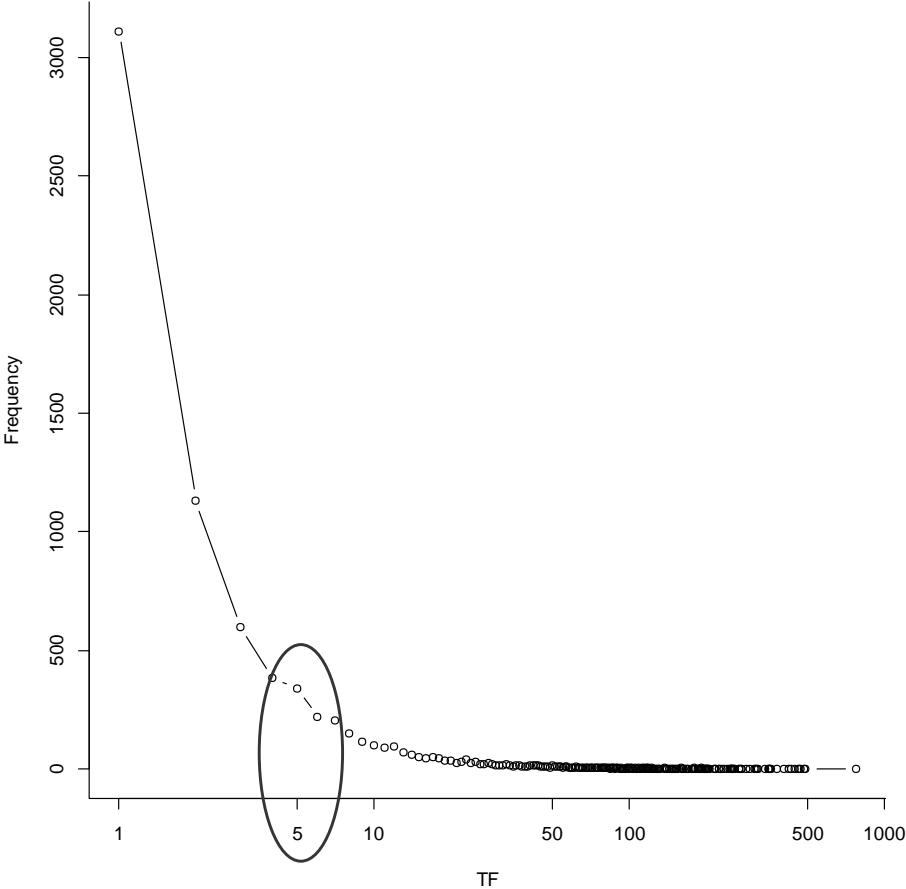


Figure 2 -Term Frequency Distribution Plot Analysis Output from KH Coder.

The previous Figure 4, represent the terms frequency distribution plot, the horizontal axis (x-axis) indicates the terms frequency when the vertical axis (y-axis) shows the number of type of words corresponding to each TF (the scale is a logarithmic scale). Additionally, is possible to analyse that for the  $TF > 5$ , the frequency starts to be stabilized. This Term Frequency Distribution Plot helps to visualize the term frequency distribution in a more practical way.

## Document frequency Analysis

Once the analysis for how many types of words were examined was conducted for all the interviews (Term Frequency), the same analysis will now be conducted for each individual interview – this type of analysis is named Document Frequency.

DF	Frequency	%	Comulative Frequency	Comulative %	DF	Frequency	%	Comulative Frequency	Comulative %
<b>1</b>	<b>3542</b>	<b>45.31</b>	<b>3542</b>	<b>45.31</b>	<b>26</b>	25	0.32	7359	94.14
<b>2</b>	1122	14.35	4664	59.66	<b>27</b>	19	0.24	7378	94.38
<b>3</b>	586	7.50	5250	67.16	<b>28</b>	22	0.28	7400	94.67
<b>4</b>	378	4.84	5628	72.00	<b>29</b>	21	0.27	7421	94.93
<b>5</b>	<b>296</b>	<b>3.79</b>	<b>5924</b>	<b>75.78</b>	<b>30</b>	14	0.18	7435	95.11
<b>6</b>	195	2.49	6119	78.28	<b>31</b>	16	0.20	7451	95.32
<b>7</b>	173	2.21	6292	80.49	<b>32</b>	14	0.18	7465	95.50
<b>8</b>	137	1.75	6429	82.24	<b>33</b>	15	0.19	7480	95.69
<b>9</b>	103	1.32	6532	83.56	<b>34</b>	20	0.26	7500	95.94
<b>10</b>	108	1.38	6640	84.94	<b>35</b>	12	0.15	7512	96.10
<b>11</b>	83	1.06	6723	86.00	<b>36</b>	20	0.26	7532	96.35
<b>12</b>	76	0.97	6799	86.98	<b>37</b>	18	0.23	7550	96.58
<b>13</b>	62	0.79	6861	87.77	<b>38</b>	7	0.09	7557	96.67
<b>14</b>	73	0.93	6934	88.70	<b>39</b>	12	0.15	7569	96.83
<b>15</b>	58	0.74	6992	89.45	<b>40</b>	15	0.19	7584	97.02
<b>16</b>	51	0.65	7043	90.10	<b>41</b>	13	0.17	7597	97.19
<b>17</b>	34	0.43	7077	90.53	<b>42</b>	11	0.14	7608	97.33
<b>18</b>	38	0.49	7115	91.02	<b>43</b>	14	0.18	7622	97.51
<b>19</b>	43	0.55	7158	91.57	<b>44</b>	13	0.17	7635	97.67
<b>20</b>	33	0.42	7191	91.99	<b>45</b>	5	0.06	7640	97.74
<b>21</b>	33	0.42	7224	92.41	<b>46</b>	9	0.12	7649	97.85
<b>22</b>	33	0.42	7257	92.84	<b>47</b>	13	0.17	7662	98.02
<b>23</b>	21	0.27	7278	93.10	<b>48</b>	6	0.08	7668	98.09
<b>24</b>	24	0.31	7302	93.41	<b>49</b>	3	0.04	7671	98.13
<b>25</b>	32	0.41	7334	93.82	<b>50</b>	7	0.09	7678	98.22

Table 7 - Document Frequency Distribution Analysis Output from KH Coder.



Analysing the output (Table 7), we can conclude that the author/interview number 1 has 3542 types of different words, what represents a 45% of the different words from all the interviews.

It is also possible to conclude that the first 5 interviews/authors, represents or contains approximately 76% of the different types of words in the book.

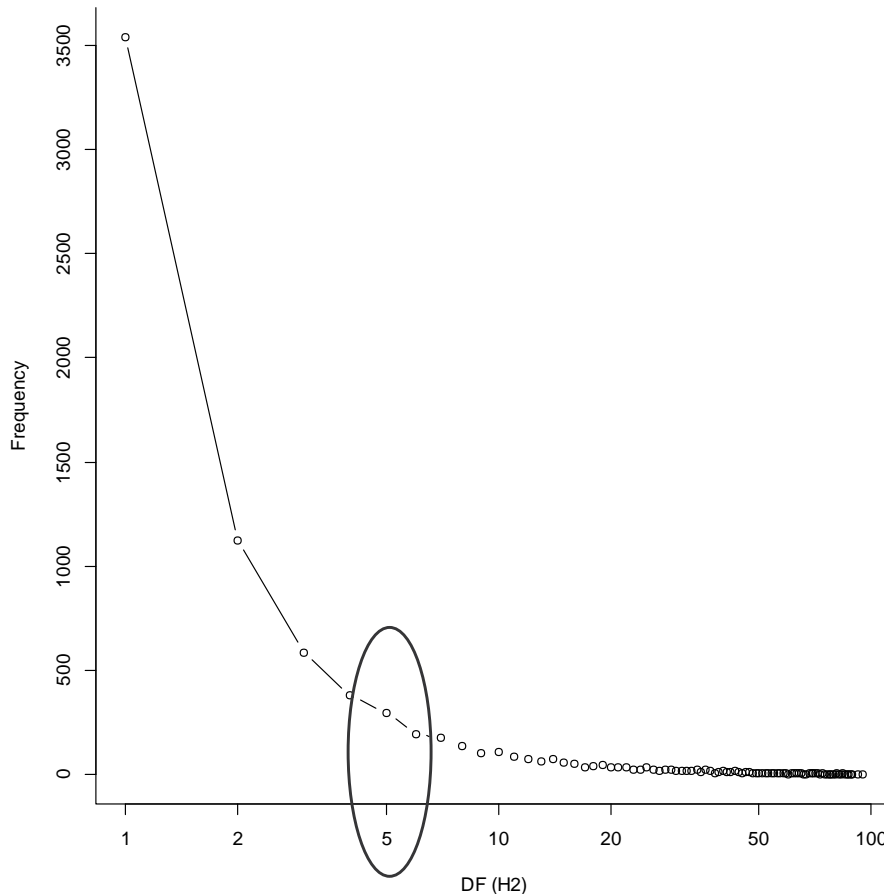


Figure 3 - Document Frequency Distribution Plot Analysis Output from KH Coder.

The previous Figure 5, represent the document frequency distribution plot, the horizontal axis (x-axis) indicates the document frequency when the vertical axis (y-axis) shows the number of type of words corresponding to each TF (the scale is a logarithmic scale). Additionally, is possible to analyse that for the  $DF > 5$ , the frequency starts to be stabilized, meaning that from the fifth (5<sup>th</sup>) interview until the 101<sup>st</sup> interview the frequency of different types of words starts to stabilize meaning that these approximately 96 interviews have in their context very similar words or thoughts. This Document Frequency Distribution Plot helps to visualize the term frequency distribution in a more practical way.

Another conclusion that we can get is that the interview/ author number 1 is the one that was most different words associated, this is justifiable since this first interview is also the

introduction note of the book and because of this it has a different type of words associated since it is the first one to appear in the book so the insights/words named from the author are the firsts to appear.

For the interviews/ authors number 2, 3 and 4, what happens is that these 3 authors made the preface of the book so, as happens with the author number 1, the text associated with these authors are also new insights and different from the introduction note.

In addition, starting with the 5<sup>th</sup> author is here where the interviews start, so it is expected that the text from this author to the 101<sup>st</sup> and last author starts to be more cohesive. As was possible to concluded before, the frequency starts to stabilize from this 5<sup>th</sup> interview and the first 5 interviews represents approximately 76% of all words of the book, due to this analysis is possible to conclude that the 101 authors have very similar insights regarding the topic of the book.

### TF-DF Plot

The TF-DF analysis allows to evaluate the correlation between TF (number of occurrences of each term in the entire book) and DF (the number of interviews in which terms is used). Using the KH Coder tool is possible to analyse this correlation.

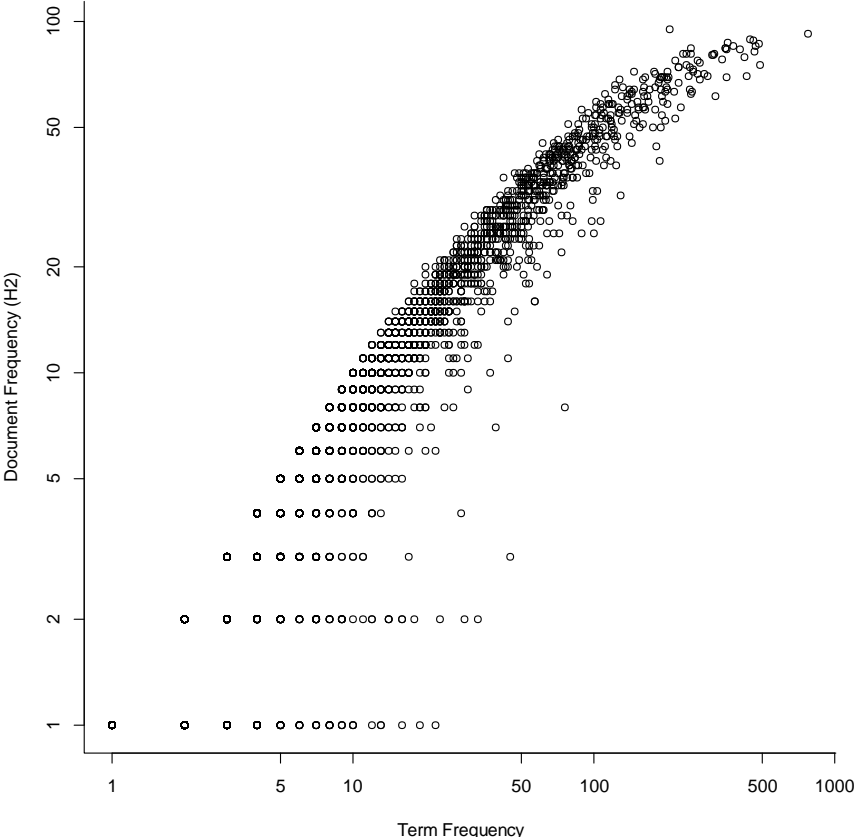


Figure 4 - TF-DF Plot Analysis Output from KH Coder.

The previous Figure 6, represent the TF-DF plot, the horizontal axis (x-axis) indicates the term frequency when the vertical axis (y-axis) shows the number of document frequency, and the scale is a logarithmic scale.

This correlation matrix represents the expected strong correlation between the values, the higher the DF, the higher the TF, meaning that a word or term that appear commonly across all the interview also appears in the most of them.

### Key Words in Context Concordance

With the KH Coder and the command KWIC (Key Words in Context) Concordance, it is possible to analyse how and extracted word is used in the target file (the book/all interviews). When searching the key words, we have the results according to the context (sentence, paragraph, interview) where that word was mentioned, and their order of appearance in the text, what is very useful when the intention is to obtain deeper research to the term and to analysis in which and in how many interviews the term was referred.

Index	Left	Key Word	Right
2,3,4	... it's not just about	sustainability	It is about people who become...
5	... and development networks. The	sustainability	of our society has a clear and objective ...
6	... consequences for our long term	sustainability	such as in food production, obtaining ...
7	... market issue have to do with	sustainability	? Because no activity works without its ...
9	... care about the challenges posed by	sustainability	megatrends? The challenges posed by ...
10	... that they are considering	sustainability	as a critical factor in their purchasing ...
11	... Two examples closely related to	sustainability	are, one, climate change...
12	... absolutely unavoidable trends in	sustainability	and that mark the times in which we live...
14	... about mega trends linked to	sustainability	can be gauged from the outset by the red ...
17	... focus, work and legislate on the	sustainability	of the three fundamental pillars...
19	... care about the challenges posed by	sustainability	megatrends? The challenges posed ...
24	... a businessman who seeks the	sustainability	of his organisation and his country...
25	... of the Capgemini Group is	sustainability	The organization is concerned with...
28	... constituting an indispensable	sustainability	Tools. The last few years have been ...
30	... When we see these	sustainability	megatrends, we have to be cautious ...
31	... global concern, because the	sustainability	of the planet can only be done with ...
32	... about the challenges posed by	sustainability	megatrends ' It is clear from the ...
33	... and because talking about	sustainability	is like holding a skein of many...
34	... our health when we talk about	sustainability	? Just like with the carbon footprint...
35	... the pandemic has also placed	sustainability	at the top of the organizations ' ...

Table 8 - KWIC Concordance Analysis: word sustainability Output from KH Coder.

Previously in the frequency analysis was possible to conclude the TOP 5 words for the analysis. Now, the KWIC Concordance analysis was conducted for the word “sustainability” that is the most frequency as analysed before.

The results showed in Table 8 are a sample of all results of the KWIC analysis of the word “sustainability” in KH Coder.

Interview Index	Number of occurrences	Interview Index	Number of occurrences	Interview Index	Number of occurrences
41	33	56	9	58	4
61	27	89	9	101	4
52	25	94	9	5	3
71	25	98	9	12	3
50	24	33	8	15	3
90	20	34	8	19	3
13	19	65	8	24	3
54	19	69	8	32	3
55	19	85	8	39	3
64	19	99	8	43	3
9	18	100	8	48	3
91	18	16	7	62	3
63	17	17	7	72	3
66	17	28	7	76	3
26	16	59	7	79	3
42	16	60	7	84	3
40	14	81	7	6	2
14	13	20, 21, 22	6	10	2
25	13	53	6	11	2
75	13	67	6	45	2
97	12	70	6	78	2
38	11	77	6	27	1
46	11	86	6	51	1
47	11	96	6	73	1
57	11	18	5	74	1
68	11	35	5	75	1
88	11	37	5	80	1
7	9	87	5	82	1
31	9	2,3,4	4	83	1
44	9	30	4	91, 93	1
49	9	36	4	95	1
<b>Total of Index interviews: 98</b>			<b>Total of number of occurrences: 777</b>		

Table 9 - Interview Index and Number of Occurrences with the word: sustainability. (made by the author).

In order to get better conclusion with this first analysis, the Table 9 was made. Due to this is possible to conclude that the word “sustainability” was referred from 98 in 101 of the

interviews what represents approximately 98% of the interviewers, so, it is possible to conclude that this is a very important word for the interviews.

With this analysis it is also possible to conclude that the word “sustainability” was more frequently for the following Top 5 authors: author 41 (33 times), author 61 (27 times), author 52 (25 times), author 71 (25 times) and author 50 (24 times). We can also conclude that the word “sustainability” is more important for these authors when comparing to the other authors, since this word was more frequent in these authors interviews.

As analyse before, the TF of the word “sustainability” is 777, and as expected, considering all the interviews where this word is mentioned we can conclude that, in total, this word is mentioned 777 times.

Now that a big picture analysis of the most frequent word was conducted, we can deeper analyse this word itself, and try to understand what the most important words are associated with this “sustainability” word.

To do so, it will be conducted the command Collocation Stats to understand which words appear frequently before and after the target word and which are the most associated words with this target word.

N	Word	POS	Total	LT	RT	L5	L4	L3	L2	L1	R1	R2	R3	R4	R5
1	environmental	Adj	53	40	13	1	3	7	2	27	0	3	4	4	2
2	challenge	Noun	45	23	22	3	0	12	8	0	14	0	2	6	0
3	issue	Noun	44	19	25	3	1	3	11	1	20	3	0	0	2
4	sustainability	Noun	36	18	18	1	11	3	2	1	1	2	3	11	1
5	economic	Adj	35	20	15	6	2	4	1	7	0	4	4	2	5
6	social	Adj	32	19	13	3	2	6	1	7	2	2	1	4	4
7	author	Noun	29	1	28	1	0	0	0	0	1	12	3	0	12
8	megatrend	Noun	28	10	18	2	0	5	3	0	12	3	2	0	1
9	planet	Noun	27	8	19	2	1	1	3	1	0	0	14	2	3
10	business	Noun	21	9	12	1	3	2	2	1	0	4	5	1	2

Table 10 - Collocation Stats word: sustainability from KH Coder.

For this target word “sustainability” the Collocation Stats show us in the Table 10 that the word “environmental” is the word that most appears right before the target word (L1=27), and the word “issue” is the word that most appears right after (R1=20). We can also conclude that the Top 5 words often used in association with “sustainability” are “environmental” (Total=53), “challenge” (Total=45), “issue” (Total=44), “sustainability” (Total=36), and “economic” (Total=35). Saying this, is possible to conclude that the “environmental sustainability” and “sustainability issue” are the most important merge/sequence of words with the word “sustainability” for the 98 authors.

Index	Left	Key Word	Right
13	... to ensure environmental	sustainability	but also, economic and social...
17	... reducing environmental	sustainability	by abandoning the management ...
25	... and environmental	sustainability	In the context of this third pillar ...
26	... strategy and environmental	sustainability	will now be taken into...
28	... in social and environmental	sustainability	believes that the success and future ...
36	... or positive, with environmental	sustainability	, social justice and economic growth ...
39	... ensuring greater environmental	sustainability	This is a deep issue of fierce political ...
42	...around social and environmental	sustainability	The adoption of standards should ...
47	... values of environmental	sustainability	seems to be increasing ...
52	... improving its environmental	sustainability	This suggests that we are not doing well...
60	...of humanity environmental	sustainability	and combating climate change...
66	... the jargon as environmental	sustainability	economic sustainability or even social ...
68	..competitiveness and environmental	sustainability	The excessive consumption of raw ...
76	...economic, social or environmental	sustainability	Thus, Nestlé has implemented ...
84	... three components: environmental	sustainability	economic sustainability and socio ...
86	...to turn threats to environmental	sustainability	and stability into opportunities...
90	...financial and environmental	sustainability	it should be noted that it is not enough ...
91	...in terms of environmental	sustainability	particularly on two topics that seem ...

Table 11 - KWIC Concordance Analysis: word environmental (L1) of sustainability Output from KH Coder.

Now that was possible to conclude that the most important word to the left side of the word “sustainability” is “environmental” is interesting for all analysis to get a deeper insight into the comportment of these two words in this sequence.

The table 10 shows the results from the conducted analysis of the word “sustainability”, and it was also possible to conclude that the word “environmental” appears 27 times in the left side of the word “sustainability” across the interviews. With this KWIC Concordance analysis represented in Table 12 this result was expected and confirmed.

Interview Index	Number of occurrences	Interview Index	Number of occurrences	Interview Index	Number of occurrences
52	3	13	1	42	1
68	3	17	1	60	1
90	3	26	1	66	1
25	2	28	1	76	1
47	2	36	1	84	1
91	2	39	1	86	1
<b>Total of Index interviews: 18</b>			<b>Total of number of occurrences: 27</b>		

Table 12 - Interview Index and Number of Occurrences word environmental (L1) of sustainability. (made by the author)

In order to get better conclusion with this analysis, the Table 11 was made. Due to this is possible to conclude that the sequence “environmental sustainability” was referred in 18 out of 101 of the interviews what represents approximately 17.8% of the interviewers.

With this analysis it is also possible to conclude that this sequence was more frequent for the following Top 3 authors: author 52, 68 and 90, all referring this sequence of 2 word 3 times. We can also conclude that this sequence is more important for these authors since when comparing to the other authors, since this word was more frequent in these authors interviews.

The last, and curious conclusion that is possible to make is that for the author 52, appears in both Tops authors made that frequently used the word “sustainability” as well for the ones that used the sequence “environmental sustainability”. Doing so we can conclude that for this specific author these two words are very important and were very referred when compared to the other authors.

Since the analysis for the most important word to the left side of the word “sustainability” was conducted is time now to conduct the analysis to the most important word to the right side of the word “sustainability” that is “issue” since is interesting for all analysis to get a deeper insight into the comporment of these two words in this sequence “sustainability issue”.

Index	Left	Key Word	Right
7	... will always pass through	sustainability	issues. The economic forecasts ...
9	...ISCTE has underlain	sustainability	issues, long before we call it as such ...
16	...have towards environmental and	sustainability	issues Political cycles of four or five...
28	... and other stakeholders to	sustainability	issues environmental, social and ...
34	...From a personal point of view,	sustainability	issues are taken into account to the ...
38	... people are aware of current	sustainability	issues, and through the United Nations...
41	...includes the need to address	sustainability	issues, both material and non-material...
61	... Portuguese in relation to	sustainability	issues, namely the trend in some sectors...
64	...The growing weight of the various	sustainability	issues on the business agenda reflects...
87	... Catholic Church 's vision on	sustainability	issues comes from Pope Francis ' ...
91	... In Portugal,	sustainability	issues are also increasingly present...
97	... It is one thing to say that	sustainability	issues are opening up new economic ...

Table 13 - KWIC Concordance Analysis: word environmental (L1) of sustainability Output from KH Coder.

The Table 13 shows the results from the conducted analysis of the word “sustainability”, and it was also possible to conclude that the word “issues” appears 20 times in the right side of

the word “sustainability” across the interviews. With this KWIC Concordance analysis represented in table 9 this result was expected and confirmed.

Interview Index	Number of occurrences	Interview Index	Number of occurrences	Interview Index	Number of occurrences
64	4	41	2	38	1
9	2	61	2	87	1
16	2	7	1	91	1
34	2	28	1	97	1
<b>Total of Index interviews: 12</b>			<b>Total of number of occurrences: 20</b>		

Table 14 - Interview Index and Number of Occurrences word issue (R1) of sustainability. (made by the author)

In order to get better conclusion with this analysis, the Table 14 was made. Due to this is possible to conclude that the sequence “sustainability issue” was referred in 12 out of 101 of the interviews what represents approximately 11.8% of the interviewers.

With this analysis it is also possible to conclude that this sequence was more frequent for the author 64 that referred this sequence 4 times. We can also conclude that this sequence is more important for this author since when comparing to the other authors, since this word was more frequent in these authors interviews.

The last, and curious conclusion that is possible to make is that for the author 41, appears in both of the analysis in the Tops authors made that frequently used the word “sustainability” as well for the ones that used the sequence “sustainability issue”. In the analysis of the sequence “sustainability issue” is not a Top author but is a second Top author referring this sequence 2 times. Doing so we can conclude that for this specific author these two words are very important and were very referred when compared to the other authors.

### **Word Association**

The word association analysis enables to find words that are closely associated with a specific word performing a graph with the selected word for analysis. Since the most frequent word in the sample is “sustainability” a word association graph will be perform to this word.



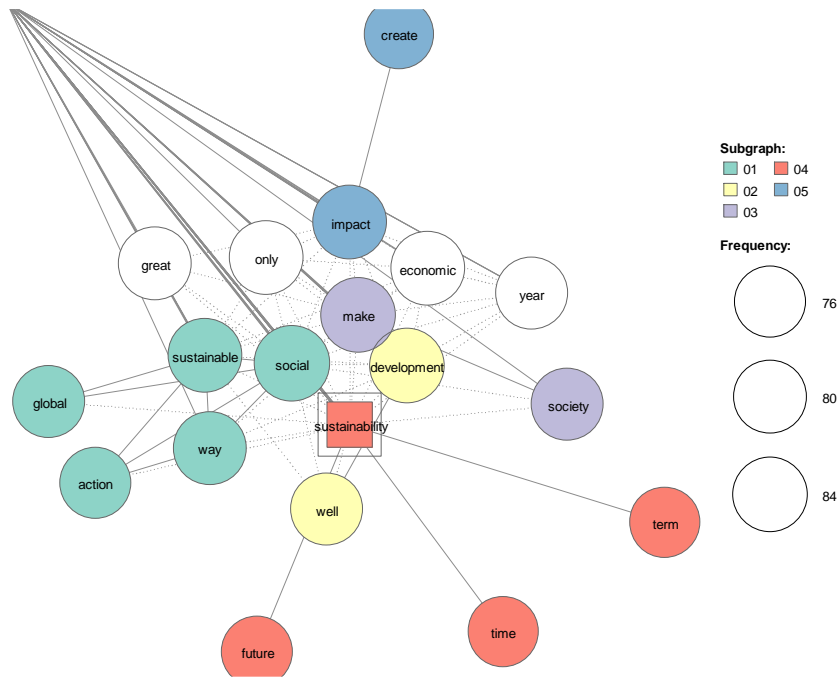


Figure 5 -Word Associations Analysis: word “sustainability” Output from KH Coder.

The previous output (Figure 7), represents a network of words that are most associated with the word “sustainability”. The darker lines represents the stronger associations and the graph scale is a Jaccard scale since is the most accurate scale to use when performing a association analysis.

Its is also possible to conclude that there are five (5) groups of words related to the word “sustainability”, the groups are differentiated by colors and the groups are: group 1 (green color, words “social”, “sustainable”, “way”, “action” and “global”), group 2 (yellow color, words “development”, and “well”), group 3 (purple color, words “make”, and “society”), group 4 (red color, words “future”, “time” and “term”), and group 5 (red color, words “impact”, and “create”).

### Correspondence analysis of words

The correspondence analysis of words command is used to explore what kind of words have a simmlar appearance pattern, by performing a correspondence analysis and producing a two-dimensional scatter diagram to help visualize the results.

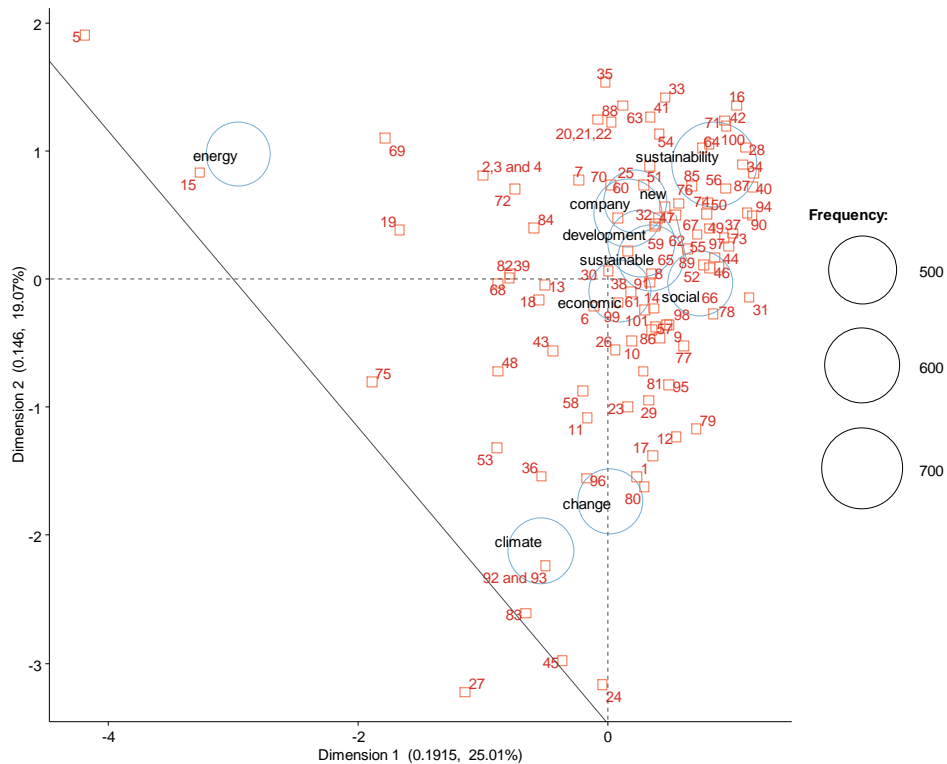


Figure 6 - Correspondence Analysis of words (word x documents) Output from KH Coder

The Figure 8, was conducted with the Top 10 words that are more frequent in the sample, and as seen before these words are “sustainability”, “company”, “development”, “sustainable”, climate”, “change”, “social” “energy”, “new”, and “economic”.

With the analysis of the Graph 5 is possible to understand the correspondence of the authors to these words. Saying this, is possible to conclude that the authors have a stronger correspondence to the words “sustainability”, “company”, “development”, “sustainable”, “social” , “new”, and “economic”, what makes sense since these words are the Top most frequent words.

A final and curious concluding that is possible to make with this analysis is that the word “energy” is one of the most frequent word, however, not all the authors referred this words, or, in other words, have a strong correspondence with this word but the author 15 have a strong correspondence with this word and it is also possible to conclude that this author was the one that most referred this word.



## Hierarchical cluster

With the hierarchical cluster analysis of words command it is possible to find and analyze which combinations or groups of words have similar appearance patterns.

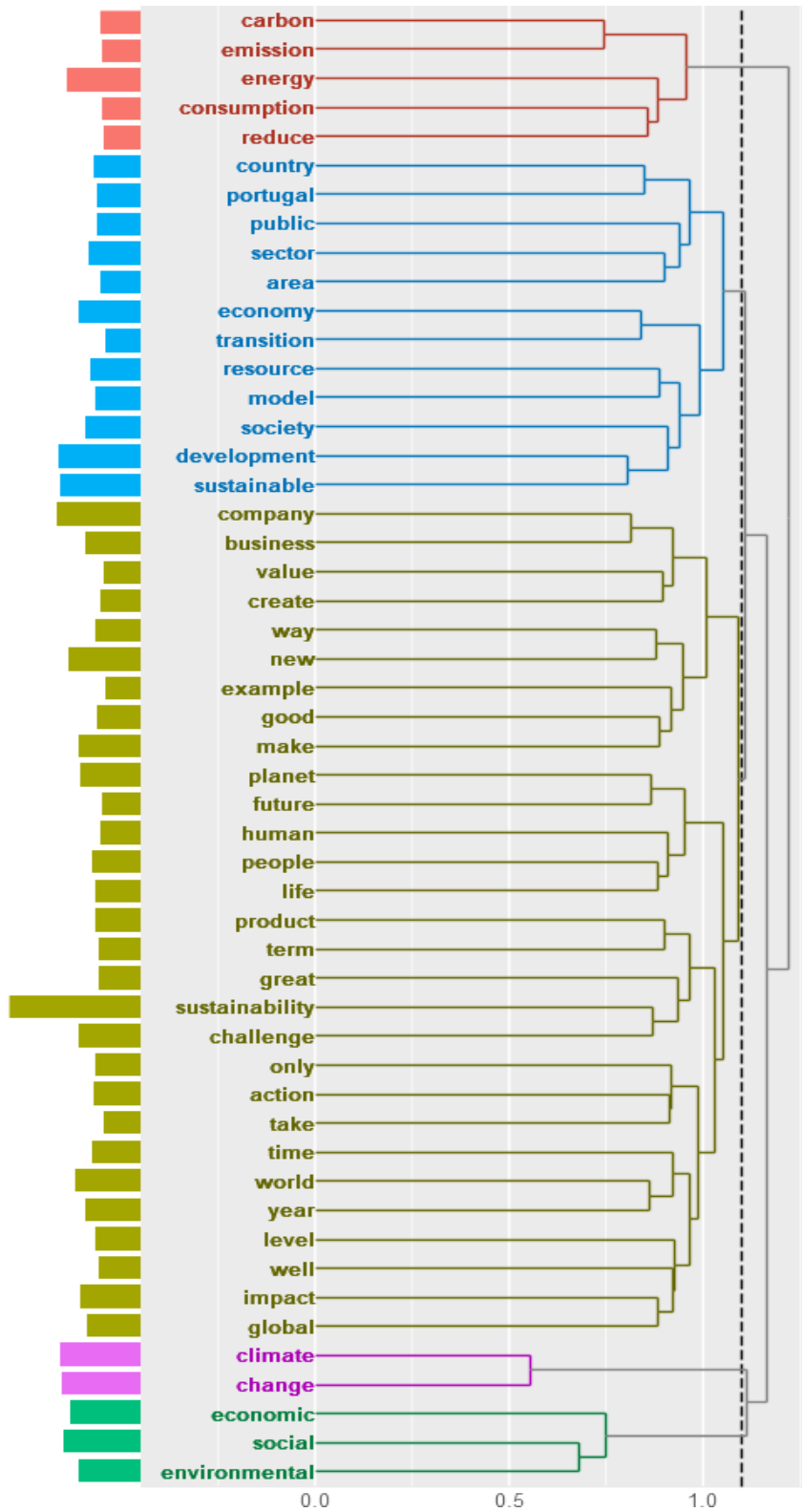


Figure 8 - Cluster Analysis Output from KH Coder

The Figure 10 represents a Dendrogram that shows the 5 clusters that represents the Top 50 words most referred in the interviews.

This cluster analysis is important to be conductud since that can be easier to interpret than the Graph 6 when the Data to analyze starts do be in more quantity or is important to analyze more data.

**Co-occurrence network**

With the co-occurrence network of words command it is possible to analyse a diagram that shows the words with similar appearance patterns, with high degrees of co-occurrence, connected by lines.

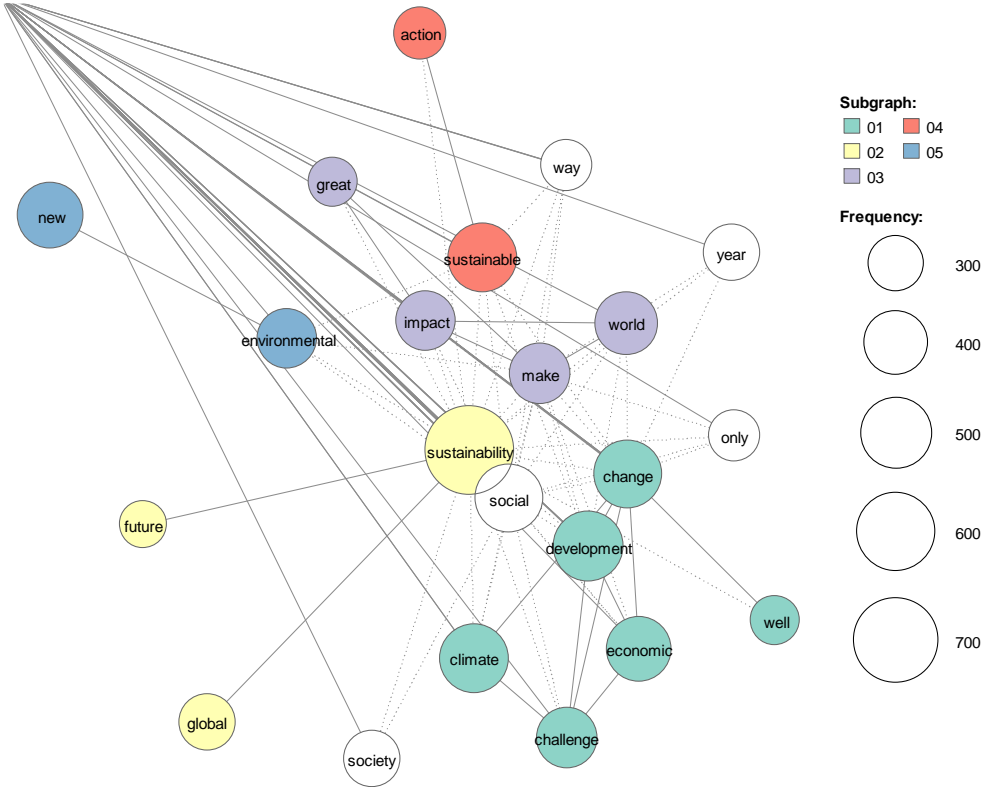


Figure 9 - Co-occurrence network: words-words

This co-occurrence analysis are important to be conductud since that can be easier to interpret and analyse than the Graph 6 when the Data to analyze starts do be in more quantity or is important to analyze more data.

In Figure 11 it is possible to analyse words that have a high degree of co-occurrence.

In Figure 12 it is possible to analyse the high degree of co-occurrence between words and interviews.

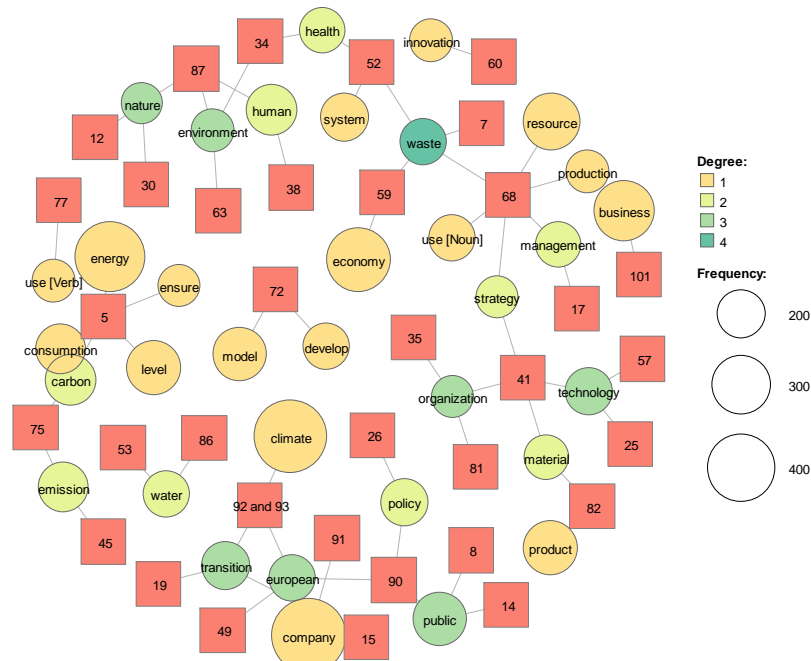


Figure 10 - Co-occurrence network: words-interviews

In Figure 13 it is possible to analyse the high degree of co-occurrence between words and questions. R1 is related to the RQ1, R2 is related to the RQ2, R3 is related to the RQ3, and R4 is related to the RQ4.

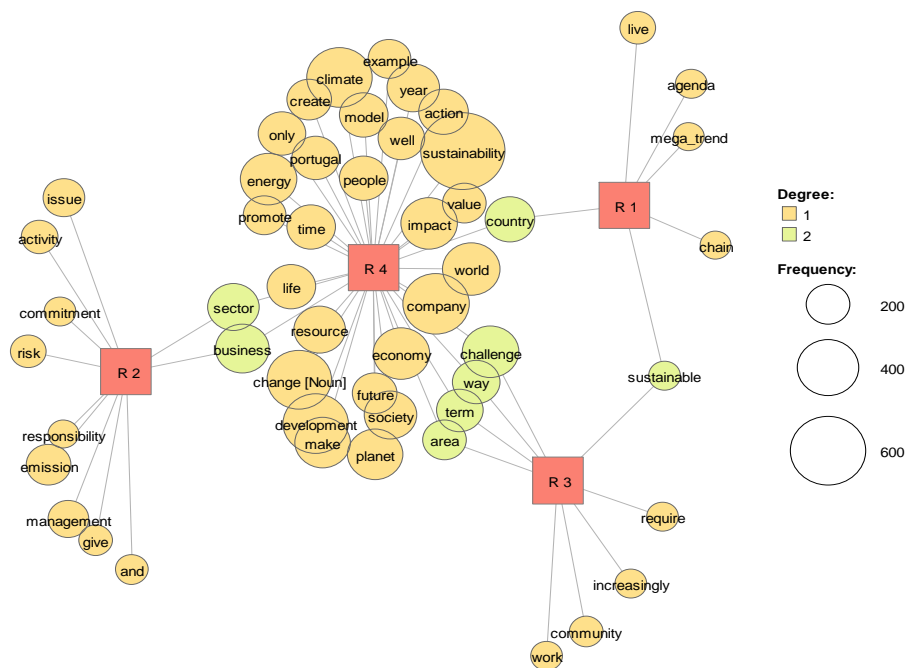


Figure 11 - Co-occurrence network: words-RQs

## Self-organizing map

The self-organizing map of word command enables to explore associations between words by creating a self-organizing map.



Figure 12 - Self-organizing map output KH Coder

This self-organizing map is important to be conducted since that can be easier to interpret and analyse than the Figure 14 when the Data to analyze starts do be in more quantity or is important to analyze more data.

## Chapter 5 - Discussion and Findings

In this chapter the research questions will be answered through the insight and contributions given by discussion of the authors from the chapter 1 and the interviewees and will also be presented the finding. It is expected not only to answer each research questions but also the key research question. An important aspect to be consider is that this discussion will have a global perspective in one side (since the authors from the existing literature have different nationalities) and on the other side is a Portuguese perspective (the interviewees are Portuguese influence names).

### 5.1 Discussion

#### *RQ1: Why do we need to care about the challenges posed by sustainability megatrends?*

To better answer this question is firstly important to conclude that the sustainability topic has a huge importance to the authors of the existing literature and to the interviews. In fact, according to the literature review chapter it is possible to conclude that this topic as a huge importance, the authors analysed stated that this topic has changing the business world, since managers are more aware and putting in practise the CSR (Padilla-Lozano & Collazzo, 2022).

In fact, due to the literature review it was also possible to conclude that managers use sustainability business to create value that responds to costumers needs, new services, create innovation (Laukkanen & Tura, 2022), all of these by aligning economic, social, and environmental concerns in company's culture (Hossain et al., 2022), and this will affect firms among all sectors (Lichtenthaler, 2021)

In addition, by the data analysis done to the interviews, is also possible to conclude that for the interviews the sustainability topic has a big impact on their answers so, on their believes, since it was the most frequent word across the interviews and "company" was the second more frequent word. Saying this, both authors (from literature and interviews) consider the sustainability topic relevant and important in this business context.

In the literature review chapter, the authors stated that the megatrends have a global impact on society and businesses, in social, economic, political, and technological fields, and to successfully adopt the megatrends, companies must reconstruct their processes and business models (Linthorst & de Waal, 2020). The data analysis chapter also conclude that the megatrends topic has influence for the interviewees, since is one of the top 10 words that most appear connected with the word sustainability.



Moreover, in the literature review chapter the authors also stated that megatrends are connected to urbanization, climate, global economic, demographic, social, and technological issues (Mittelstaedt et al., 2014). In fact, when analysed the words frequency in the interviews was possible to conclude that the words “climate, social, economic” were very frequent among all the interviews what shows that the interviews are also aware of these topics.

In addition, in the data analysis chapter due to the co-occurrence network: words-QRs, is also possible to conclude that for the interviewees, the main words related to this question are “live, agenda, megatrend, sustainable, and country”.

***RQ 2: How has your organization/sector/context addressed the challenges posed by these megatrends?***

In chapter 1, with the existing literature is possible to conclude that for companies adopt megatrends they need to face the challenge of recreating their business processes, what can be a more or less difficult task regarding with the company’s maturity. In fact, to be successfully succeed in this implementation companies must be flexible and quickly to adapt to world changes (Linthorst & de Waal, 2020).

Some examples given by the existing literature is that companies must be aware of the urbanization changes and create plans for the urban areas, be aware of the climate and resource scarcity and through innovative technology discover ways to fight it, be aware of the economic power and de importance of the interconnection of the world, business and for that improve the access to information, be aware of the demographic changes and make sure that people have quality and equitable access to education, employment and healthcare resources, and to end be aware of the technologic changes and be able to provide and implement innovative technologies that contribute to society improvement (Mittelstaedt et al., 2014).

However, to better answer this question is important to look to the existing literature regarding the SDGs. The authors referred that companies stated to be more aware of the sustainable future and started to demonstrate their commitment to the SDGs and the challenges that they bring to companies. To better face these challenges, companies must incorporate the SDGs in their reports and capture on it all environmental, social, economic, and environmental issues that they are targeting, but to have a successful succeed on this implementation it is important to measure, monitor and make organizations accountable. (Erin et al., 2022).

Moreover, another topic that is important to address to better answer this question is regarding the business and digital ethics since when companies are accountable for the

technology that they use, they incorporate policies, norms and rules that drive their processes and implementation that are aligned with their goals (D’Cruz et al., 2022). Another important aspect is that since companies are accountable for their technologies it as impacts on their reputation and due to that they are more aware of the technologies they use and produce and addressing these responsibilities companies have a more sense of ethic and commitment to the society (Reck et al., 2021).

Nevertheless, when analysing the interviews, in the word association analysis was possible to conclude that are five groups of words the words more associated to the word “sustainability” (group 1 - “social”, “sustainable”, “way”, “action” and “global”; group 2 - words “development”, and “well”; group 3 - words “make”, and “society”: group 4 - words “future”, “time” and “term”; and group 5 - words “impact”, and “create”). Moreover, when conducted the correspondence analysis of words was possible to understand that the Portuguese interviewers have a stronger correspondence with the word “sustainability”, “company”, “development” and “sustainable”. With this, is possible to conclude that the interviewers understand that the most topic related with business sustainability are time, development, social, economic, sustainable, and due to that is possible to understand and conclude that the Portuguese interviewers seen these topics as the main challenges as these words are the words with a stronger correspondence.

In addition, in the data analysis chapter due to the co-occurrence network: words-QRs, is also possible to conclude that for the interviewers, the main words related to this question are “issue, activity, commitment, risk, responsibility, emission, megatrend, sector, and business”.

***RQ 3: What has your organisation/sector/context done specifically in terms of products and services to address these challenges?***

Following the existing literature and state of art, the authors referred that are some practices that can be done specifically to address the challenges that came from sustainability. In Europe some agricultural companies are acting in water waste or drugs used in the production of their products to fight climate change and resource scarcity (Debonne et al., 2022).

Moreover, other specific actions that can be addressed, including the HEIs is the implementation of e-learning education, create specific disciplines connected to sustainability or even promote sustainable initiatives in the campus that have impact on the society (Berchin et al., 2021).

On other hand, with the Portuguese interviews was possible to analyse their answers in groups of words that have similar appearance patterns conducting a multidimensional analysis of words and a cluster analysis. With the first analysis was possible to divide the words in eight groups and one of these groups had as similar appearance patterns words such as “resource, consumption, material, waste, emission, reduce, natural, system”. With the second analysis was possible to divide the words in 5 clusters, and one of these clusters has words as “carbon, emission, energy, consumption, reduce”.

In addition, in the data analysis chapter due to the co-occurrence network: words-QRs, is also possible to conclude that for the interviewers, the main words related to this question are “require, increasingly, community, work, area, term, way, and challenge”.

***RQ 4: In personal terms, how do you see the future of our planet, what are the main threats and what are the great opportunities?***

The chapter 1 helps up to understand that one opportunity for the future of our planet is the sustainable future agents. These agents are the HEIs, and they are considered as an opportunity since these institutions are capable of implement, develop and promote an environmental awareness in future business leaders (Berchin et al., 2021).

The main threat presented in chapter 1 is regarding the unpredictable circumstances that can occur such as social and environmental changes, customers’ needs, expectations, and market conditions that can in a rapidly way change the market and lead companies to adapt themselves and their sustainable strategy, that’s also a reason when they decide to implement a sustainable strategy that they need to focus on a long-term perspective (Villamil et al., 2022).

With the analysis of the interviews was possible to conclude with a co-occurrence network (words- interviews) the words most referred by interviewer and is possible to concluded in global perspective that the top words were “climate, energy, company, economy, business, resource”.

In addition, in the data analysis chapter due to the co-occurrence network: words-QRs, is also possible to conclude that for the interviewers, the main words related to this question are “sustainability, climate, company, development, planet, change, promote, economy, suture, society, resource, country, business, challenge, energy, create, model, action”.

## 5.2 Findings

The first finding is that regarding the challenges posed by sustainability megatrends an interesting conclusion is that the Portuguese interviews do not refer demographic and technologic words as much as the other words what can be a signal the Portuguese companies, and awareness is more focus on the climate, social and economic fields and not such in demographic and technological ones (such as for the author in the literature review), what is, an opportunity for companies as well an awareness for them.

The second finding is regarding the addressing the challenges posed by megatrends and here is possible to conclude that the authors from the existing literature and the Portuguese interviews are in concordance since both understand that exists challenges and that these challenges are related with the environmental, social, and economic issues that companies must address to be successfully succeed in their implementation through innovative and important ways that lead them to a sustainable business and with a future or long-term perspective. Although, the Portuguese interviewers do not refer in such detail how they address these challenges and do not refer as many topics as the authors from the existing literature.

The third finding is regarding what is specifically done in terms of products and services to address these challenges is possible to conclude that Portuguese interviews are more aware of environmental challenges and actions to be addressed and the worldwide authors from the literature are more aware of technological, digital, and corporate actions. With these is possible to conclude that these ones are possible actions to be addressed in Portugal.

The fourth finding is regarding the main threats and opportunities to the future of our planet and is possible to conclude that for the authors from the literature review one huge opportunity is sustainable education given by the HEIs, and a future threat is all the unpredictable circumstances that may occur in customers' needs, market changes as well as social and environmental changes.

The last, and de main finding is that this thesis has a point of view of important Portuguese names and the variously background of each interviewer since there are a lot of different background areas (political, economy, arts, education) and is a new paper to add to the literature since the is no paper with this so important insight and data analysis.

Author, Year	Main Topic	Main Theoretical / Pratical Contribution
<b>Padilla-Lozano &amp; Collazzo, 2022</b>	Identification of the relationship between CSR, competitiveness, and green innovation.	RQ1: Importance of sustainability and CRS.
<b>Laukkanen &amp; Tura, 2022</b>	Identification from a customer and corporate perspective the sustainability impacts, sustainable value proposition and values.	RQ1: Importance of sustainability and managers value creation through sustainability
Hossain et al., 2022	Identification of the effects among corporate sustainability, culture, and leadership.	RQ1: Importance of sustainability and the introduction of economic, social, and environmental issues in company's culture.
<b>Linthorst &amp; de Waal, 2020</b>	Description of how can HPOs address megatrends to secure sustainable performance and at the same time work on the United Nations (UN) sustainable development goals.	RQ1: Global impact of megatrends as well in business processes and models. RQ2: Importance of companies be flexible and quickly to adapt to change to recreate business processes connected to megatrends.
Mittelstaedt et al., 2014	Megatrend's concept and sustainability description.	RQ1: Megatrends' connection with urbanization, climate, global economy, demographic, social and technological issues. RQ2: Urbanization, climate, resource scarcity, innovative technology, economic power, and demographic actions that can be addressed by companies.
Erin et al., 2022	Organizations' SDGs activities and their contribution to the organization' performance.	RQ2: The importance of incorporate the SDGs in company' reports.
D'Cruz et al., 2022	Description of the business ethic aspects, and issues of the organizations.	RQ2: Business and digital ethics and the incorporation of norms, politics, and rules.
Reck et al., 2021	Identification of ethical decision-makers and processes conducted by family firms.	RQ2: Companies' reputation and more sense of ethic and commitment to the society.
Debonne et al., 2022	Identification, quantification, and mapping megatrends related to the European agriculture.	RQ3: Specific sustainable action done in European agriculture.
Berchin et al., 2021	Identification of how sustainable development is promoted by HEIs.	RQ3: Specific sustainable action addressed by HEIs. RQ4: HEIs as sustainable future agents and future opportunities.
Villamil et al., 2022	The importance of implement strategic sustainability in products processes.	RQ4: Sustainable future threats.

*Table 15 - Discussion and Finding Resume*

# Chapter 6 – Conclusion

## 6.1 Final Considerations

Following the previous analysis of the data collected from the interviews and the discussion with the previous authors from the literature review, this chapter aims to short answer the key research question, short describe the key findings, describe theoretical and practical contributions, and suggest future lines of research.

Firstly, lets remind the key research question: “How to implement sustainability is business strategy?”. With this research was possible to conclude that for managers implement sustainability in their business strategy there are some significant topics that they must be aware of. It is crucial for a successful implementation that managers think in their strategic management, they must complete each step and have their goals and vision in mind and recognize that is a process with long-term goals.

When the strategy started to be defined is crucial for managers to include in their first step of define their vision, mission and goals, the sustainability topic they want to address or perform. When they keep in mind since the first step that they want to implement the sustainability topic, it will be much easier to achieve a sustainable strategy.

In order to choose what sustainable topic they want to address in their strategy, companies must to look to their culture, their products, services, they must look to their supply chain and recognize where they are failing in sustainability aspects and try to develop their business to start to implement sustainable topics, and these topics must to be align with the triple bottom line and SDGs created by the UN and must also be incorporated in their reports. Moreover, companies can also implement megatrends are incorporated into their strategy these megatrends, in fact, megatrends are starting to have a global expansion and importance in business world.

An important aspect of the implementation of the sustainability in business strategy is related to business and digital ethics because when companies make a commitment to be more sustainable, they reputation change and the customers perspectives about their business change as well, so companies must always to follow an ethical behaviour to be coherent with they are performing and creating.

To finish, for a good implementation, companies must to look to the future and recognize all future possibilities of implement sustainability and a huge possibility is about employees behaviours and since HEIs are agents of future change due to the fact that are

implementing a sustainable education in future leaders it is important for companies to recognize and understand that sustainability is not only connected to environmental and innovation issues it is also connected to mind changing and those future leaders knowledge and sustainable mind-set that can help to develop a more sustainable culture and processes that can influence in a positive way the society.

With this research was possible to conclude key finding. The key finding is that exists a huge importance related to sustainable megatrends not only for author from the existing literature but also for the Portuguese interviewers. However, there are some opportunities to be addressed in Portugal regarding with the megatrends related to demographic and technological as well as specific activities that can be done in Portuguese companies related to these topics. Moreover, in a general point of view, megatrends have a huge importance in companies worldwide and Portugal is not an exception, in fact, in Portugal exists a sustainable mind-set among companies from different sectors that also recognize the implications that a sustainable strategy will have in company's future.

Saying this, the theoretical contribution of this thesis has a point of view of important Portuguese names and the variously background of each interviewer since there are a lot of different background areas (political, economy, arts, education) with a discussion of these Portuguese author and with worldwide authors from the existing literature.

To future research is suggested to perform a deeper analysis only to Portuguese companies and compare two different sectors, understand digital innovation that they are performing and what are the main SDGs implemented in Portuguese companies.

## **6.2 Limitations**

This thesis was conducted on existing literature on the topic and the data collected from the interviews. The main limitation of this research related to the problem statement and research objectives is that these questions are limited to the sustainability topic and the implementation of this topic in business strategy and companies.

The sample characterization is 101 interviewers very important to Portugal and some to the world, so I do not consider that the sample is a limitation of this thesis, in fact it is a strong and important data since are very different backgrounds, sector and representations in this sample. However, for a strict analysis of a determinate sector this sample is not representative of any specific sector, and to better analyse just one sector is better to collect data from a specific sector or filter these 101 interviews and select the sector that want to analyse.

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