UNIVERSITY OF LJUBLJANA

SCHOOL OF ECONOMICS AND BUSINESS

MASTER'S THESIS

SUSTAINABILITY STRATEGY – THE WHY'S AND HOW'S

Ljubljana, September 2023

NATASHA PANOVSKA

AUTHORSHIP STATEMENT

The undersigned Natasha Panovska, a student at the University of Ljubljana, School of Economics and Business (hereafter: SEB LU), author of this written final work of studies with the title “Sustainability strategy – the why’s and how’s”, prepared under supervision of Prof. Matej Lahovnik.

D E C L A R E

1. this written final work of studies to be based on the results of my own research;
2. the printed form of this written final work of studies to be identical to its electronic form;
3. the text of this written final work of studies to be language-edited and technically in adherence with the SEB LU’s Technical Guidelines for Written Works, which means that I cited and / or quoted works and opinions of other authors in this written final work of studies in accordance with the SEB LU’s Technical Guidelines for Written Works;
4. to be aware of the fact that plagiarism (in written or graphical form) is a criminal offence and can be prosecuted in accordance with the Criminal Code of the Republic of Slovenia;
5. to be aware of the consequences a proven plagiarism charge based on the this written final work could have for my status at the SEB LU in accordance with the relevant SEB LU Rules;
6. to have obtained all the necessary permits to use the data and works of other authors which are (in written or graphical form) referred to in this written final work of studies and to have clearly marked them;
7. to have acted in accordance with ethical principles during the preparation of this written final work of studies and to have, where necessary, obtained permission of the Ethics Committee;
8. my consent to use the electronic form of this written final work of studies for the detection of content similarity with other written works, using similarity detection software that is connected with the SEB LU Study Information System;
9. to transfer to the University of Ljubljana free of charge, non-exclusively, geographically and time-wise unlimited the right of saving this written final work of studies in the electronic form, the right of its reproduction, as well as the right of making this written final work of studies available to the public on the World Wide Web via the Repository of the University of Ljubljana;
10. my consent to publication of my personal data that are included in this written final work of studies and in this declaration, when this written final work of studies is published.
11. that I have verified the authenticity of the information derived from the records using artificial intelligence tools.

Ljubljana, September, 11, 2023 Author’s signature: ______________________

TABLE OF CONTENTS

INTRODUCTION **1**

1 WHAT IS SUSTAINABILITY AND WHY IT IS IMPORTANT? **5**

1.1 A brief history of sustainability and ESG **5**

1.2 Sustainability and the 3Ps **7**

1.3 Sustainability and the business universe **8**

2 CREATING VALUE THROUGH SUSTAINABILITY **15**

2.1 Key areas for value creation **15**

2.1.1 Reputational value 17

2.1.2 Cost management 18

2.1.3 Risk management 19

2.1.4 Growth and innovations 21

2.2 Sustainability is more than eco-friendly **23**

2.2.1 Sustainable strategy and employees 24

2.2.2 Sustainable strategy and taxes 26

2.3 The pitfalls of greenwashing **27**

3 INTEGRATING SUSTAINABILITY INTO STRATEGY **29**

3.1 Building the strategy **30**

3.2 Sustainability materiality **32**

3.3 Identification of key stakeholders **33**

3.4 Creating a materiality matrix **36**

3.4.1 Importance of Materiality Matrix 36

3.4.2 Process of Creating a Materiality Matrix 37

3.4.3 Challenges and Considerations 38

3.5 Developing a comprehensive approach addressing the main sustainability issues **39**

3.6 Developing an approach to report and disclosure metrics **42**

3.6.1 Need for reporting and disclosure metrics 42

3.6.2 Materiality Assessment 42

3.6.3 Integration with Financial Reporting 43

3.6.4 Continuous Improvement 43

3.6.5 External Assurance 43

3.7 Strategy implementation ... 43
3.7.1 The Nature of Strategy Implementation ... 43
3.7.2 Critical Success Factors ... 44
3.7.3 Challenges and Barriers ... 45
3.7.4 Strategies for Effective Implementation ... 45
4 DISCUSSION ... 45
4.1 Main findings and contributions ... 45
4.1.1 Key Themes ... 45
4.1.2 Discussion on Research Questions ... 47
4.2 Interpretation of findings ... 48
4.2.1 Integration of Sustainability into Corporate Strategy ... 49
4.2.2 Value Creation for Internal Stakeholders ... 49
4.2.3 Value Creation for External Stakeholders ... 49
4.2.4 Research Limitations ... 50
4.3 Implications and recommendations ... 50
4.3.1 Theoretical Implications ... 50
4.3.2 Practical Implications ... 51
4.3.3 Policy Implications ... 51
4.3.4 Recommendations for Future Research ... 51
CONCLUSION ... 52
LIST OF REFERENCES ... 53
APPENDIX ... 73

LIST OF FIGURES

Figure 1: Growth in retail sales in the USA, 2018-22 ... 10
Figure 2: Value creation levers in key business areas ... 16
Figure 3: Key areas for value creation ... 16

LIST OF TABLES

Table 1: ESG framework ... 7
Table 2: Overview of stock exchange sustainability reporting requirements in some Western European Countries ... 11

Table 3: Overview of stock exchange sustainability reporting requirements in countries of the Balkan region 13

LIST OF ABBREVIATIONS

PRI – United Nations Principles for Responsible Investment

IFRS – International Financial Reporting Standards Foundation

CSRD – Corporate Sustainability Reporting Directive

MSE – Macedonian Stock Exchange

OECD – Organisation for Economic Co-operation and Development

ESG – Environmental, Social and Governance

DEI – Diversity, equity, and inclusion

TBL – Triple bottom line framework

SSEI – Sustainable Stock Exchanges Initiative

NFRD – Non-financial reporting directive

EFRAG – European Financial Reporting Advisory Group

SFDR – Sustainable Finance Disclosure Regulations

GRI – Global Reporting Initiative

SASB – Sustainability Accounting Standards Board

ISSB – International Sustainability Standards Board

IIRC – International Integrated Reporting Council

CDP – Carbon Disclosure Project

TCFD – Task Force on Climate-related Financial Disclosures

IIRF – International Integrated Reporting Framework

CDSB – Climate Disclosure Standards Board

ICT – Information and communication technologies

AHP – Fuzzy Analytic Hierarchy Proce

LIST OF APPENDICES

Appendix 1: Povzetek (Summary in Slovene language)……………………………………1

INTRODUCTION

The sustainability strategies of companies have increasingly been capturing the attention of investors, regulators, and the worldwide public over the past decade. Although historically companies that have been involved in negative environmental incidents have not been facing significant capital market losses (Jones & Rubin, 2001), the attention of investors and consumers has focused on corporate sustainability as it has become a critically important issue in recent years (Alseshi, Haitham, & Khare, 2018).

Sustainability includes a multitude of aspects that influence the short-term and long-term value of companies. Sustainability in business generally addresses two main categories: the effect that the business has on the environment and the effect it has on the society. The three main pillars of sustainability are referred to as the 3 P's – People, Planet and Profit, i.e., social, environmental, and economic sustainability. The social aspect refers to the effect that a company has on the community, its well-being, opportunities for employment, organizational behavior, etc. The environmental sustainability relates to the impact of the business to the planet, such as pollution, global warming, climate change. The economic aspect refers to the general economic value of the company, its economic prosperity, ability for profit making and its competitive advantage. These three aspects of sustainability are referred to as the triple bottom line (TBL) framework, a concept introduced by John Elkington in the mid-1990s (Elkington, 1997).

As per Friedman's theory, the goal of the traditional business models was to create value for the shareholders (Friedman, 1970). For many years companies had perceived the creation of value narrowly, focusing on the creation of profit for their shareholders. This single focus on shareholders had led companies to sometimes overlook the needs of their customers, suppliers, the severe negative impact to the environment, as well as negative economic impact on the society as a whole, i.e., their stakeholders. As observed by Porter and Kramer, 'companies are widely perceived to be prospering at the expense of the broader community'. This has led companies to become aware that the traditional "take-make-waste" industrial model has become obsolete and companies must begin collaborating with their key stakeholders to achieve sustainability and create shared value. The idea of "creating shared value" was pioneered by Porter and Kramer, who stated that companies can create economic value by recognizing and solving social problems that intersect with their work (Porter & Kramer, 2011). Companies are expected not to run their business independently, as a separate entity on its own, but must manage an entire ecosystem, pro-actively, interacting will all its participants toward a common goal of prosperity and success (Reeves & Levin, 2021). Integrating strategies that are "doing well by doing good" and the transformation of companies to responsible entities that care about all their stakeholders is increasingly becoming a necessity for companies that want to become leaders in the market (Busse, 2016).

Traditionally, the measures of good corporate governance practices, the creation of corporate strategies and performance measurement are mostly in line with the shareholders perspective (Wheeler & Davies, 2004). These measures are generally focused on the duties of the board and the executive and senior management, their independence, supervision of their compensation, as well as other mechanisms applied to ensure their accountability for the wealth of the shareholders. However, the contemporary governance codes pay much more attention to the stakeholder focused governance practices, with special emphasis on the social and environmental responsibility of companies. Kaplan and Norton's Balanced Scorecard is a tool used for successful implementation of corporate strategies that links the operational and non-financial activities with the company's long-term strategies, thus facilitating the alignment and the management of all the company's activities in accordance with their strategic significance (Kaplan, 2009). This tool gives managers an opportunity to also include success factors that do not have a direct monetary value, but that have a major impact on the economic success of the company. Therefore, this approach enables the integration of environmental, as well as social aspects as part of the company's management system by including the three main pillars of sustainability into a unique tool for strategic management (Figge, Hahn, Schaltegger & Wagner, 2002).

In the past three decades, led by the increasing interest of stakeholders in sustainability issues, companies have increasingly begun to measure and report their environmental, social and governance (ESG) data. Although in the early '90s the number of companies disclosing their ESG data was less than 20, by 2016 it had increased to almost 9,000 (Amel-Zadeh & Serafeim, 2018). This was driven by the increasing interest of investors in ESG data as shown by the number of signatories of the United Nations Principles for Responsible Investment (PRI) which grew from 81 in 2006 to 4,706 in 2022 (Principles for Responsible Investment, 2022). Although currently sustainability reporting is mostly on a voluntary basis, with only large public-interest companies required to publish regular reports on their social and environmental impact, in November 2021 during the UN climate-change COP26 conference, mandatory climate risk disclosures were announced. Also, the International Financial Reporting Standards Foundation (IFRS) has created a comprehensive framework for sustainability disclosures which will be effective for annual reporting periods beginning on (or after) 1 January 2024. This accelerates the trend that moves towards mandatory non-financial disclosures, additionally reinforcing the earlier European Commission's proposal for a Corporate Sustainability Reporting Directive (CSRD). These developments indicate that companies will sooner rather than later be obligated to disclose their sustainability data as a mandatory part of their annual reports. Following this trend, although trotting behind Western countries, in late 2021 the Macedonian Stock Exchange (MSE) has introduced the Corporate Governance Code framework for reporting for public companies listed on the MSE.

Furthermore, according to the Organisation for Economic Co-operation and Development (OECD), institutional and retail investors are increasingly aware of the sustainability of their

investment choices. Sustainability and non-financial information have been in the spotlight among investors, consumers, regulators, and business leaders alike. Participants in capital markets are becoming increasingly aware of the importance of non-financial information. The use of ESG approach in investment has been mostly driven by the rising demand of investors to employ non-financial information for guidance in their decision-making process in order to improve the long-term value of their investment, while simultaneously aligning their portfolios with the societal values. This trend has been reinforced by the increasing understanding of the material impact of ESG on the economic performance of companies and accelerated by the increasing focus on climate change, as well as diversity and inclusion. The great rise in the number of PRI signatories indicates that investors are increasingly taking ESG assessments as a crucial part of their investment decisions. Taking into account the impact of ESG on creditworthiness has become the standard for financial institutions, mostly driven by the growing pressure from investors to integrate ESG in lending practices, as well as growing concerns about physical risks related to climate change and social expectations and pressure from the public on the banking sector (Organisation for Economic Co-operation and Development, 2020).

With this in mind, the purpose of this master's thesis is to identify and highlight the importance of the creation and implementation of a well-balanced and comprehensive sustainability strategy, as well as how to integrate sustainability as a core part of a company's strategy and operations.

This research was done on relevant publishing and contemporary international trends in sustainability practices in strategic management. A systematic literature review in the domains of socially responsible investment, sustainability reporting developments, and strategic management was performed with a focus on practices for integration of sustainability in business strategy. To get a better understanding of the level of development in these terms, a cross-comparative analysis of a sample of Western vs Balkan countries has been performed to identify the potential differences. Lastly, by implementing an exploratory approach, the strategic management practices for integrating sustainability as a strategy have been identified inductively.

Based on the findings of the research, it is expected that the implementation of a thoughtfully developed sustainable strategy can not only decrease the costs, but bring additional profit to companies, and added value to both internal and external stakeholders.

The findings of this research could be valuable not only because they could be used to demonstrate the impact of a comprehensive sustainability strategy to the company's internal and external environment, but also because they aim to identify the best practices for sustainability focused strategy implementation.

The aim of this master thesis is to answer the research questions regarding the necessity and significance of the implementation of a sustainability strategy in the long-term strategic

management of companies, as well as the influence of a sustainability strategy on a company's performance.

The objective of this research is to explain how and why strategic dedication of companies to sustainability can create significant value to all stakeholders and how companies can integrate sustainability in their strategy.

The research questions that have been explored in this master thesis are as follows:

- Research question 1: Why and how should companies take a strategic approach to sustainability and focus on the integration of sustainability in their strategy?
- Research question 2: How can companies create significant value for the internal stakeholders by genuine dedication to sustainability?
- Research question 3: How can companies create significant value for the external stakeholders by genuine dedication to sustainability?

In order to achieve the objective of this research, the following research approaches have been implemented:

1. Descriptive approach – a systematic literature review has been performed on the topics of sustainability in the business context, contemporary trends and developments in sustainability regulatory framework and requirements for sustainability reporting, and creating value through sustainability;
2. Cross-comparative analysis – performed for the comparison of the requirements of the stock exchanges and regulatory developments affecting publicly listed companies in the Western countries and the Balkan region in order to identify the potential differences and pinpoint the underdeveloped sustainability related issues in the Balkan region;
3. Exploratory approach – conducted for the identification of the strategic management practices for integrating sustainability as an inherent part of a company's strategy. An inductive approach has been implemented for the recognition of the most commonly used strategic management practices for the integration of sustainability into strategy.

1 WHAT IS SUSTAINABILITY AND WHY IT IS IMPORTANT?

1.1 A brief history of sustainability and ESG

The history of the sustainability concept is long, dating back to ancient civilizations. For example, the ancient Greeks acknowledged the importance of balancing the human needs with the necessity to preserve natural resources for future generations. The idea of using resources in a sustainable manner appears as a core concept of many indigenous cultures, which view the relationship between humans and the environment as interdependent and closely connected (O'Grady, 2003).

However, the contemporary concept of sustainability as it is viewed today began developing in the 1960s and 1970s with the growth of environmental awareness and rising concerns about the degradation of the environment and the depletion of natural resources. A key turning point in the development of the concept of sustainability was the 1972 report, "Limits to Growth", a study of the impact of human activity on the planet (Meadows, Meadows, Randers & Behrens III, 1972). The report was based on computer modeling that performed an analysis of the interrelated systems of population, industrialization, food production, pollution, and depletion of resources. It captured the public's attention by arguing that the continuous exponential growth of the human population and economies would ultimately lead to the depletion of limited resources as well as the degradation of the ecosystems of the planet, resulting in multiple negative consequences, including collapse of the economy and the society. It predicted that the key resources necessary for the survival of humanity would be completely depleted within the lifetime of one or two generations. The report left a significant imprint, with it being widely read and igniting many debates, thus helping the increase of awareness, and bringing the focus of the public and the policymakers to these issues. Many of the report's predictions of the degradation of the environment and its consequences, as well as the depletion of resources have been confirmed by subsequent events in the years following the report.

In the following two decades, the recognition of the issue of sustainability increased and it was accepted by many international organizations including the United Nations. In 1987 the United Nations published "Our Common Future: The Report of the World Commission on Environment and Development", also known as the Brundtland Report. This report defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Holdgate, 1987). This definition gave a sense of a "light at the end of the tunnel" by calling for an integrated approach to world development. This includes balancing environmental, social, and economic considerations and a new manner of mutual efforts of all stakeholders, i.e., governments, businesses, and the public, to address the challenges posed by development. One of the most significant aspects of the Brundtland Report, was that it showed that although the environmental concerns are important, the underlying importance of welfare in

the context of intergenerational equity must not be lost out of sight. Preserving resources for the future generations rather than caring for the environment because of its intrinsic values should be the primary goal of society (Kuhlman & Farrington, 2010). The report also called for specific actions, such as reducing greenhouse gas emissions, increasing access to health and education services, as well as improving the management of natural resources. The impact of the report on global sustainable development policy was significant as it paved the way towards further actions and its relevance has not decreased, considering the nature of the challenges of sustainable development are continuously evolving and still call for the attention of all stakeholders.

These developments paved the way towards the modern concept of sustainability, defining the three pillars of sustainability which represent the three interrelated dimensions of sustainable development: environmental sustainability, social sustainability, and economic sustainability. These three dimensions are further elaborated in section 1.2 of the thesis. Today, this modern concept of sustainability is integrated across various fields, and has become an intrinsic part of business, environmental policies and international development, as well as global policies.

The concept for sustainable development by its nature requires the implementation of the ESG principle. The ESG principle is a framework that includes environmental, social and governance factors that could have a positive or negative influence on the performance of a company, country, or individuals (European Banking Authority, 2021). The ESG framework gained traction in the late 1990s and early 2000s as a response to the increasing demands for transparency and accountability from companies by investors and the public.

The environmental factors of ESG assess a company's influence on the natural environment. Some of the key environmental issues include carbon emissions, water management, energy consumption, pollutants, product sustainability and innovations of products and services that are environmentally friendly and similar aspects. Social factors measure the influence a company has on the society and wellbeing of people. Social factors are considered to be, among others, health and safety in the workplace, training and education, child labor, diversity, equity and equality, etc. The governance factors assess a company's decision making and management processes and include the matters of transparency and disclosure, stakeholder rights and engagement, accountability, etc. The ESG factors help in measuring the impact of business activities on sustainability and the society (European Banking Authority, 2021). The ESG factors provide an insight into a company's long-term viability, as well as its capability to create value for its stakeholders.

Table 1 provides an overview of the ESG dimensions and factors that are commonly used to assess the sustainability and responsible practices of a company.

Table 1: ESG framework

Dimension	Factor
Environmental	• Carbon emissions • Energy efficiency and usage • Water usage, management, and recycling • Waste management, reduction, and recycling • Influence and dependence on biodiversity • Habitat protection • Resource depletion and conservation • Adaptation and mitigation of climate change
Social	• Labor rights • Human rights • Labor practices • Working conditions • Opportunity • Diversity, equity, and inclusion (DEI) • Community engagement and impact • Health and safety • Training and education
Governance	• Accountability • Corporate governance and board structure • Executive compensation • Alignment with shareholder interests • Transparency and disclosure • Anti-corruption measures • Political lobbying and advocacy • Data privacy and security

Source: European Banking Authority (2021).

1.2 Sustainability and the 3Ps

The Brundtland Report mentioned previously introduced the concept of sustainable development speaking of two main aspects that need to be reconciled – development and the environment. This concept has however evolved and the three pillars that must be considered together were introduced to conceptualize the interrelated nature of sustainable development – society (People), the economy (Profit), and the environment (Planet), commonly referred to as the 3Ps of sustainability (Strange & Bayley, 2008). A ubiquitous representation of this concept are the three intersecting circles, where at the center is overall sustainability (Purvis, Mao & Robinson, 2019).

Given this, the 3Ps of sustainability represent a wholesome approach to sustainable development, and a broad framework implemented for addressing the complex and intrinsically interdependent challenges of sustainability.

The economic, environmental, and social duties of companies are linked together with the TBL framework. The TBL accounting framework popularized by John Elkington in the mid-1990s is a framework for the measurement of a company's impact by taking into consideration three aspects of its performance: social (People), environmental (Planet), and economic (Profit) (Elkington, 1997). A brief overview of the 3Ps in the context of the TBL framework is provided below:

- People – The social bottom line refers to the company's impact on people, both in its internal and external environment, including its employees, customers, as well as the community in which it operates. Like the ESG framework presented previously, the social bottom line relates to matters such as working conditions, DEI, community engagement, human rights, etc. The metrics can be difficult to quantify, however their significance in the assessment of the overall performance and impact of companies is becoming increasingly higher. By taking into consideration the social bottom line, companies can show their commitment to sustainability and creating long-term value for all their stakeholders.
- Planet – Environmental bottom line represents the impact of the company on its environment, again, similarly as in the ESG framework, including emissions, water and energy usage, waste management, etc. Considering the continuing rise in concerns regarding climate change, the environmental bottom line's significance is becoming steadily rising.
- Profit – The economic bottom line refers to the company's financial performance, ability to realize profits and its competitive advantage. In traditional business thinking profit is the primary goal of a company and the economic bottom line is often considered the most important aspect of the performance. Although it can be argued that the economic bottom line is no longer considered the most important measure of companies' success, it remains an important one.

By providing a framework for the measurement of a company's performance in all three pillars of sustainability, the TBL framework enables companies and stakeholders to gain insight in its available resources, what is consumed and what remains, as well as what can be renewed or replaced in order to create a more holistic approach essential for moving forward to sustainable development. The literature discussing sustainable development in the context of the 3Ps of the TBL framework implies that a company can create more value in the long run, with fewer risk and less adverse consequences if it has a broad perception and takes into account the planet, people and profit bottom line than it would when focusing solely on realizing economic profit (Salzmann, Ionescu-Somers & Stegers, 2005).

1.3 Sustainability and the business universe

In the business context, sustainability is a logical response to various trends, among which the continuous growth of the human population, as well as the rapid development of

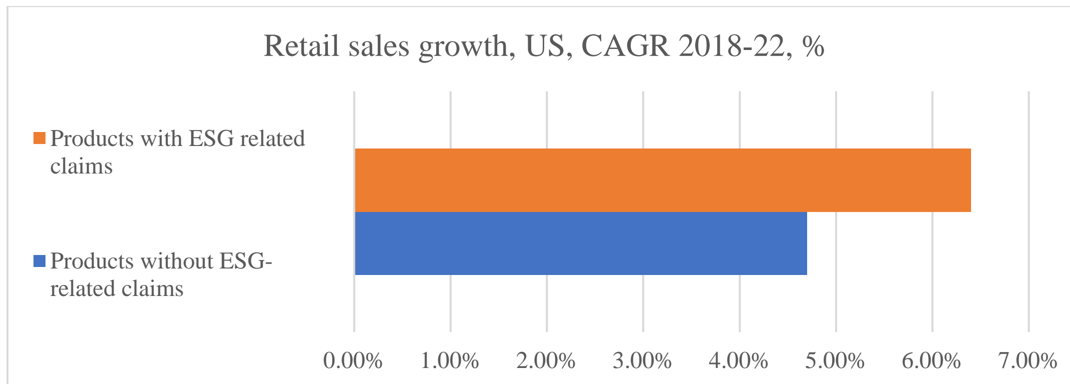
economies, which create a higher demand and shortages of resources, as well as cause volatility in the pricing of commodities (McPhee, 2014). Taking into consideration that the success and survival of a business is ultimately dependent on the wellbeing of its environment, as well as the community that supports it, the relationship between a company's focus on sustainability and its performance is evident.

Prior conventional attitude among managers, as well as researchers was that sustainability goals could not be in alignment with the pursuit of a feasible business strategy, as well as against the inherent duty of managers to provide value for shareholders (Friedman, 1970; Bower & Paine, 2017). However, more recent studies indicate a change in the attitudes of decision makers which are beginning to lean towards sustainability and shifting from focusing solely on costs to a broader strategic rationale (Unruh et al., 2016).

A recent worldwide survey performed by Ernst & Young with responses from 400 investors and CEOs indicated that CEOs are under significant pressure to address global challenges as the disruptions caused by technological change, globalization, as well as demographics can no longer be ignored. Considering the size and influence of large corporations, their customers, employees and all their stakeholders have expectations that the CEOs are responsible and should address these global challenges (Ernst & Young, 2019).

A major 2021 study conducted by Simon-Kucher & Partners of more than 10,000 participants across 17 countries revealed a trend of increasing importance of sustainability predicting it to become an expectation by consumers rather than an exception (Simon-Kucher & Partners, 2021). This study indicated that a significant group of 34% of consumers reported that they are willing to pay more for a sustainable product or a service, however when analyzed by generational group, 39% of Generation Z and 42% of Millennials are willing to accept higher prices as opposed to 31% of Generation X and 26% of Baby Boomers indicating an increasing trend among younger generations. Another study by Accenture showed that more than half of surveyed consumers stated they are willing to pay higher prices for sustainable products that could be reused or recycled and 42% of consumers have stopped buying products due to environmental concerns, with food and beverage packaging and personal care products concerns being the highest among consumers (23% and 16% respectively) (Accenture, 2019). A study by Wang, Chang and Pei-Ying further indicates that consumers tend to boycott businesses because of activities which are ideologically incompatible with their own (Wang, Chang & Pei-Ying, 2021). A research performed by Nielsen in 2018 indicated that 48% of consumers in the USA are willing to make a change of their consumption habits to decrease their impact of their environment, which, in the year when this research was performed would translate to circa $128 billion revenue from the sale of sustainable consumer goods (NielsenIQ and McKinsey & Company, 2023). This study revealed a clear and material link between products that made ESG-related claims on their packaging and consumer spending, with such products having achieved a disproportionate growth in the period between 2018 and 2022 (see Figure 1) (NielsenIQ and McKinsey & Company, 2023).

Figure 1: Growth in retail sales in the USA, 2018-22



Adapted from NielsenIQ and McKinsey & Company (2023).

On the other hand, capital markets and corporate financing are putting an increasing pressure on companies to integrate sustainability in their operations. Since the early 2000s, sustainable investing has gained traction as one of the most promising investment strategies (Fonseca, 2020). Investors are increasingly taking into consideration sustainability factors in their investment strategies requiring companies to report on their ESG practices (Appel, 2017). According to Ernst & Young's investor survey, the COVID-19 pandemic was a catalyst for an even higher integration of sustainability considerations in the process of decision making for investors, as well as corporate strategy (Ernst & Young, 2021). Investors are realizing the risks that climate change, social and demographic matters, as well as governance issues pose on their portfolios and their decisions are driven by the exposure of their portfolios to these risks. Additionally, an increasing number of stock exchanges require mandatory ESG reporting, or encourage by providing guidance and best practices. 34 of 120 stock exchanges require mandatory ESG reporting for listed companies (Sustainable Stock Exchanges Initiative, 2022). Since the launch of the Model Guidance for exchanges by the Sustainable Stock Exchanges Initiative (SSEI) in 2015, the number of stock exchanges providing guidance or requiring mandatory ESG reporting has increased from less than 10% to 58% in 2022 (Sustainable Stock Exchanges Initiative, 2022). This is further confirmed by the fact that as of 2020, 90% of the value of S&P500 companies consisted of intangible assets, including goodwill (reputation, customer loyalty, corporate culture, and similar aspects) (Ocean Tomo, 2022). On the corporate financing side, ESG factors are increasingly being taken into consideration when determining the credit ratings of non-financial institutions by the biggest credit rating agencies (Chodnicka-Jaworska, 2021).

Further to the voluntary disclosure of information, companies are under continuously increasing scrutiny with obligatory reporting regulations introduced by the EU and individual countries. The EU taxonomy for sustainable activities provides a classification system, establishing a list of environmentally sustainable economic activities. It is meant to provide all stakeholders, i.e., companies, investors, and policymakers with appropriate definitions for which economic activities can be considered environmentally sustainable. Under Directive 2014/95/EU, or the Non-financial reporting directive (NFRD), large

companies were obligated to publish information pertaining to ESG issues, such as environment, social issues, employee treatment, respect for human rights, diversity of corporate boards and similar. In 2023, the CSRD entered into force, replacing the NFRD and making sustainability reporting a compulsory part of the consolidated management reports of companies. This means that all companies listed on the stock exchange are obligated to report on sustainability issues in accordance with the sustainability reporting standards of European Financial Reporting Advisory Group (EFRAG). The Sustainable Finance Disclosure Regulations (SFDR) mandate increased transparency and disclosure of ESG characteristics of investment products. Further, the corporate sustainability due diligence Directive that is in the process of adoption by the EU will require companies to perform a detailed analysis of the entire supply chain of the companies in order to foster sustainable, as well as responsible behavior, obligating companies to publicly communicate the results of their due diligence process. This is already a requirement for German companies as set in the German Supply Chain Due Diligence Act, which took effect on 1 January 2023.

Further to the regulatory framework, multiple stock exchanges across the world have introduced mandatory sustainability reporting from listed companies, or strongly encourage it to be included in the reports published by the companies. According to SSEI, in 2023 there are 72 exchanges worldwide with written ESG Guidance for listed companies. The most used reporting instruments are as follows: Global Reporting Initiative (GRI) Standards, Sustainability Accounting Standards Board (SASB) Standards whose successor is the International Sustainability Standards Board (ISSB), International Integrated Reporting Council (IIRC) Standards, Carbon Disclosure Project (CDP) Standards, Task Force on Climate-related Financial Disclosures (TCFD) Standards, International Integrated Reporting Framework (IIRF) and the Climate Disclosure Standards Board (CDSB) Framework.

Table 2 provides an overview of ten of the biggest stock exchanges in the Western Europe region (as per the information provided on Statista, as in October 2022, latest available information), the ESG guidance issued by the stock exchanges (if any), and the reporting instruments recommended by the stock exchange, as well as whether ESG reporting is a requirement for companies to be listed on the respective stock exchange.

Table 2: Overview of stock exchange sustainability reporting requirements in some Western European Countries

Country	Stock exchange	ESG Guidance	Reporting instruments	Mandatory ESG reporting for listing
Netherlands	Euronext Amsterdam	ESG Reporting Guide – Target 1.5°C	GRI SASB TCFD IIRC CDSB CDP	Yes`

(table continues)

Table 3: Overview of stock exchange sustainability reporting requirements in some Western European Countries

(continued)

Country	Stock exchange	ESG Guidance	Reporting instruments	Mandatory ESG reporting for listing
France	Euronext Paris	ESG Reporting Guide – Target 1.5ºC	GRI SASB TCFD IIRC CDSB CDP	Yes
Germany	Deutsche Börse	Communicating Sustainability: Seven recommendations for issuers	GRI SASB IIRC CDP	No
Spain	Bolsas y Mercados Españoles	Voluntary Market Guidance for Listed Companies for Corporate Reporting on ESG Information	GRI	Yes
Belgium	Euronext Brussels	ESG Reporting Guide – Target 1.5ºC	GRI SASB TCFD IIRC CDSB CDP	Yes
Denmark	Nasdaq Copenhagen	ESG Reporting Guide 2.0: A Support Resource for Companies	GRI SASB TCFD IIRC CDP	No
United Kingdom	London Stock Exchange	Revealing the full picture: Your guide to ESG Reporting	GRI SASB TCFD IIRC CDSB CDP	No
Italy	Borsa Italiana (Euronext)	ESG Reporting Guide – Target 1.5ºC	GRI SASB TCFD IIRC CDSB CDP	No
Austria	Wiener Börse	Sustainability reporting – Guidance for issuers	GRI TCFD ISSB	Yes

(table continues)

Table 4: Overview of stock exchange sustainability reporting requirements in some Western European Countries

(continued)

Country	Stock exchange	ESG Guidance	Reporting instruments	Mandatory ESG reporting for listing
Switzerland	SIX Swiss Exchange	Investor Relations Handbook	GRI SASB TCFD	Yes

Adapted from SSEI website.

Table 3 gives a summary of the requirements for ESG reporting of the stock exchanges of the countries in the Balkan region, the ESG guidance issued by the stock exchanges (if any), as well as the reporting instruments recommended by the respective stock exchange in each country.

Table 5: Overview of stock exchange sustainability reporting requirements in countries of the Balkan region

Country	Stock exchange	ESG Guidance	Reporting instruments	Mandatory ESG reporting for listing
Serbia	Beogradska Berza	Corporate Governance Code of the Belgrade Stock Exchange	N/A	No
North Macedonia	Macedonian Stock Exchange	- Corporate Governance Code Framework - ESG Reporting Guidelines	GRI SASB TCFD IIRC CDSB CDP	Mandatory reporting on Corporate Governance only
Albania	Bursa e Tiranës	Information not available	Information not available	Information not available
Bosnia and Herzegovina	Sarajevska berza - Burza	No	N/A	No
	Banja Luka Stock Exchange	No	N/A	No
Montenegro	Montenegro Berza	No	N/A	No
Bulgaria	Bulgarian Stock Exchange	No	N/A	No

(table continues)

Table 6: Overview of stock exchange sustainability reporting requirements in countries of the Balkan region

(continued)

Country	Stock exchange	ESG Guidance	Reporting instruments	Mandatory ESG reporting for listing
Croatia	Zagrebačka burza	No	All instruments in accordance with NFRD[1]	Yes
Greece	Athens Exchange Group	ATHEX – ESG Reporting Guide	GRI SASB TCFD IIRC CDP	No
Romania	Bursa de Valori București	ESG Disclosure Guidelines	GRI SASB TCFD IIRC CDSB CDP	No

Adapted from SSEI website and individual stock exchanges websites.

Based on this overview, it is apparent that there are significant disparities in the requirements imposed on publicly listed companies between the sample of Western European countries and the Balkan region. These variations are likely caused by divergent levels of awareness of the significance of primarily sustainability as a topic itself, and the sustainability reporting even more so, as well as the varying regulatory demands and degrees of demand for sustainability related information from investors and stakeholders.

The relatively underdeveloped state of sustainability related matters in the Balkan region underscores the necessity for increased awareness regarding the importance of it, increased allocation of resources by companies to prepare sustainability reports, the implementation of more standardized sustainability reporting frameworks, as well as a greater push for disclosure of sustainability information by the stakeholders. Addressing these issues can potentially improve the region's sustainability performance and increase its attractiveness to prospective investors.

[1] Includes: Eco-Management and Audit Scheme, United Nations Global Compact, Guiding Principles on Business and Human Rights implementing the UN "Protect, Respect and Remedy" Framework, OECD Guidelines for Multinational Enterprises, International Organisation for Standardisation's ISO 26000, International Labour Organisations, Tripartite Declaration of principles concerning multinational enterprises and social policy, and GRI

Beside it being an important factor in obtaining external financing, companies that adopt strategic sustainability practices have been shown to have an increased return on capital and expectations of future performance (Ioanniou & Serafeim, 2019). For example, the implementation of energy-efficient practices and waste reduction, companies can decrease their direct material costs. The energy-efficient practices and waste reduction involve optimization of processes, which in turn leads to an improved operational efficiency. From the social aspect, an improvement in the work environment leads to increased employee productivity and satisfaction reducing employee turnover and absenteeism.

Although historically CEOs were reluctant to embed sustainability in their core strategy, often misguided by the notion that the costs for the implementation practices outweigh the benefits, academic research and business experience indicate the opposite (Whelan & Fink, 2016).

2 CREATING VALUE THROUGH SUSTAINABILITY

2.1 Key areas for value creation

Despite the underlying perception that sustainability is more of a moral obligation for companies, in the past years it has been demonstrated that it is also an economic imperative. While many companies may be motivated to implement sustainability, practices based on their moral and ethical values, the business reasons to prioritize sustainability have also proven to be compelling (Porter & Kramer, 2006).

Although the opportunities to create or preserve the most value for companies can vary significantly depending on the industry, certain key areas pertain regardless of the industry nature and operations. Regardless of the industry, the organization of the majority of companies is centered around their key functions such as sourcing, production, product distribution, sales, as well as service of customers. The common denominator of all industries, however, is that they are all focused on generating more profit with the least possible use of materials, energy, and wastage.

The business case story reported by Arthur D. Little for the company Shell connected three main actions that should be undertaken in order to strengthen the brand and reputation, and give better access to capital and talent which would result in competitive advantage (Hedstrom, Shopley & LeDuc, 2000). This included the reduction of costs and risks by decreasing energy, waste, water, resources and negative social influence, driving revenue growth by launching sustainable features into existing product lines or launching new sustainably advantaged products, and investing in technology and business activities that create opportunities for future growth which also could help the consumers to decrease their footprints (Hedstrom, Shopley & LeDuc, 2000).

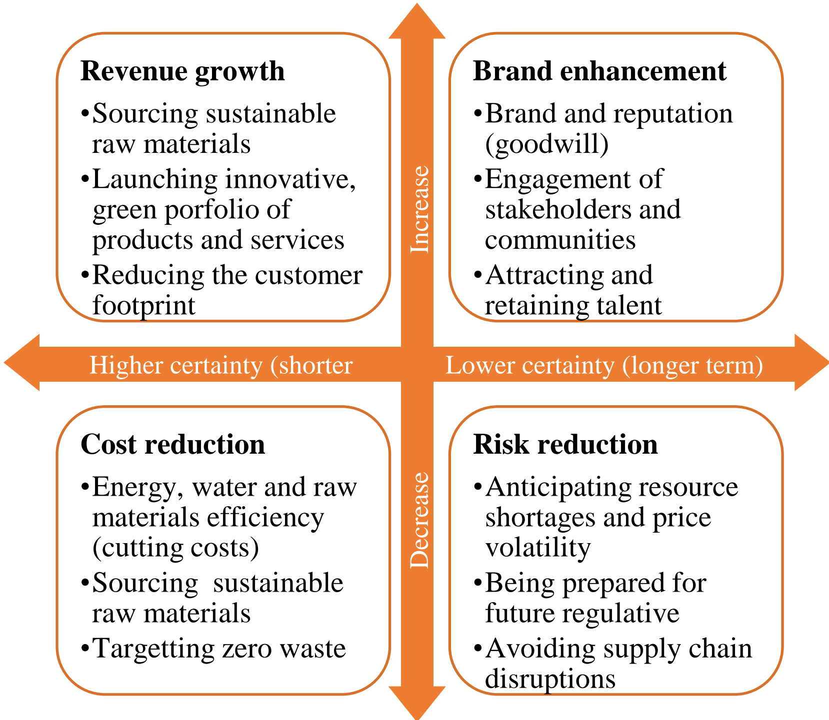
Bonini and Görner defined the key value creation levers driving the returns on capital, growth and risk management which are vital for the future prosperity of companies, presented in Figure 2 (Bonini & Görner, 2011).

Figure 2: Value creation levers in key business areas

Source: Bonini & Görner (2011).

A somewhat similar graphical representation of the key value creation levers, used by sustainability consulting companies such as Accenture for example, is a two-by-two matrix depicted in Figure 4 below.

Figure 3: Key areas for value creation



Adapted from Hedstrom, Shopley & LeDuc (2000).

2.1.1 Reputational value

A company's reputation can be significantly boosted by implementing sustainable practices. Customers' and investors' ongoing demand for ethical and eco-friendly operations encourages businesses to pursue sustainability (Lončar, Paunković, Jovanović & Krstić, 2019). This helps them stand apart from the competition, leading to a high reputation among various stakeholders. Such companies often witness increased brand loyalty, better customer retention, and an appeal to new customers who value sustainability (Attah-Boakye, Adams, Yu & Koukpaki, 2022).

Trustworthiness is another attribute frequently associated with companies promoting sustainability, leading to heightened interest and investment (Lacoste, 2016). This is especially noticeable as the ESG concept becomes essential to investment considerations. A reputable sustainability strategy substantially affects a company's valuation and investor appeal (Orsato, Garcia, Mendes-Da-Silva, Simonetti & Monzoni, 2015).

The various operational areas where companies can enhance reputational value through sustainability include people-focused ideation and product-related activities. These areas contribute to a holistic sustainability strategy that amplifies reputational value while ensuring long-term financial success (McPhee, 2014).

Education is critical in people-focused activities, particularly in cultivating a capable workforce knowledgeable about sustainability (Harre, Blythe, McLean & Khan, 2022). Companies that invest in their people and local communities earn short-term reputational value while creating a foundation for long-term success through a well-educated and skilled workforce. Also, employees' capacity to manage sustainability issues as part of core business practices augments a company's reputation by demonstrating its dedication to sustainable growth (Hatami, Hermes, Keränen & Ulkuniemi, 2023).

Furthermore, companies can generate reputational value by creating solutions to sustainability challenges within their global operations (Dangelico, 2015). For instance, IBM's Corporate Service Corps sends groups of employees to emerging markets for community economic development assignments, simultaneously enhancing IBM's reputation, and fostering employees' professional growth (IBM, 2013).

Product-focused activities, like acquiring raw materials, goods, and parts, significantly impact a company's reputation (McPhee, 2014). A transparent, sustainable supply chain is critical in the era of informed consumers, NGOs, and social media (Koberg & Longoni, 2019). Businesses can create value through better customer risk management by managing reputational risk effectively.

Likewise, delivery activities must consider reputational risks, especially social issues, working conditions, and responsible management (Lintukangas, Hallikas & Kähkönen,

2015). Ensuring customers use the products sustainably can add to a company's reputational value while improving profit margins from cost savings (Petersen & Lemke, 2015).

The reputational value of sustainability also extends to stock markets. A study on Brazil's Corporate Sustainability Index (ISE) revealed that being listed in sustainability indexes confers greater prestige and reputation. These proactive sustainability measures draw positive attention from the general public and the media, even if the gains are difficult to quantify (Orsato, Garcia, Mendes-Da-Silva, Simonetti & Monzoni, 2015).

Sustainability implementation is instrumental in enhancing a company's reputational value. With various sectors of business operations potentially contributing to reputational value, a holistic and integrated approach to sustainability can positively impact reputation, leading to increased trust, loyalty, and financial success (Dressler, 2023).

2.1.2 Cost management

Adopting sustainability can result in notable cost benefits, especially in the long run. Sustainable practices enable companies to lessen their reliance on non-renewable resources, which can mitigate the impact of price volatility and potential shortages (Tantalo & Priem, 2016).

Effective resource utilization, a crucial part of sustainable practices, can lead to significant reductions in running costs (Karcıoğlu & Öztürk, 2022). This could manifest through energy savings via efficient infrastructure and devices (Schaltegger, Christ, Wenzig & Burritt, 2022), waste reduction through recycling initiatives (Mandičák, Mésároš & Spišáková, 2021), and water conservation methods (Backović & Ilić, 2022). Additionally, sustainability-driven cost management benefits from the positive market implications of sustainability-related efforts, which improve the company's appeal to modern, eco-conscious consumers, potentially boosting revenue streams (Li & Leonas, 2019).

From Anderson's work (Anderson D. , 2006), we understand that sustainability is not simply about being environmentally friendly but includes social responsibility and ethical business practices. As businesses aim to 'internalize' the full social costs of their operations, cost management becomes a significant concern. Firms should manage their resources to sustain current activities without jeopardizing their future performance or societal impact. Integrating sustainability into cost management strategies requires comprehensive visibility of the full costs and benefits of the firm's operations, including environmental compliance.

Once these costs are fully identified, cost attribution methods, such as Activity-Based Costing (ABC), can allocate costs to activities, products, and services that consume societal resources (Anderson S. W., 2006). This, in turn, can support decisions about optimizing resource use. In addition, new monitoring and reward mechanisms can be adopted to align

managers' interests with reducing all costs, including newly internalized societal costs associated with firm operations (Serag, 2018).

Managing environmental and social costs involves structural cost management and redesigning organizational processes and products to minimize environmental and societal impacts significantly. It starts in the product design and development phase, incorporating factors like environmental impact or workplace practices that promote safety (Le & Nguyen, 2019). Once quantified, these costs can be included in target costing, value engineering, and process re-engineering to ensure the lowest total cost solution (Kumaran, Tan & Nee, 2001).

Notably, cost management in a sustainable context extends to the complete product life cycle, including the reverse supply chain. This involves designing for product take-back, remanufacture, or disassembly and disposal (Scur & Barbosa, 2017). The reverse supply chain presents opportunities for optimizing costs, especially when the product and the reverse supply chain process are jointly optimized (Jiao, Ran, Zhang, Li & Zhang, 2018). Integrating sustainable practices and corporate social responsibility may also add environmental and social welfare interest groups to the stakeholders, creating further opportunities for strategic cost management (Chuang & Huang, 2018).

Another perspective is added by discussing the role of finance in sustainable value creation. Companies with high ESG scores are more likely to secure lower-cost financing, further underlining the financial benefits of sustainability. Similarly, green financial products are instrumental in shaping businesses toward sustainable transformation. Notably, firms with low ESG scores are perceived as riskier, leading to a higher cost of debt, underscoring the importance of sustainability in cost management (Zioło, Bąk & Spoz, 2023).

Furthermore, governments often offer financial incentives and tax advantages for businesses adopting sustainable practices, providing additional savings (Akomea-Frimpong, Adeabah, Ofosu & Tenakwah, 2022). For example, green credit policies encourage heavily polluting companies to invest more in Research and Development and fixed assets, thereby securing long-term credit support with short-term investment (Hu, Wang & Wang, 2021). The green credit policy can potentially lower the debt financing cost of green enterprises, facilitating sustainable transformation (Peng, Yan, Elahi & Wan, 2022).

Incorporating sustainability in cost management has the potential to reduce running costs, mitigate risks, attract favorable financing, and boost revenue streams. Businesses must embrace sustainability as an ethical imperative and a strategic move to enhance financial performance.

2.1.3 Risk management

Risk management is another essential area where sustainability proves its worth. Businesses neglecting sustainability expose themselves to various potential hazards, including

regulatory, environmental, and reputational risks from sustainability-minded customers and investors (Anderson D. , 2006).

On the other hand, businesses prioritizing sustainability are generally better equipped to handle new environmental and social regulations. They also tend to be more prepared for climate change's physical risks, like the disruption of supply chains due to severe weather conditions.

These companies often foster stronger relationships with stakeholders, including local communities and governments, reducing potential conflicts that could disrupt their operations or tarnish their reputation.

Risk management forms a crucial pillar in value creation, especially in sustainability. Embracing sustainability can mitigate many risks companies face today, including regulatory, environmental, reputational, and operational risks, generating long-term value and resilience.

In the words of Antoncic, risk management should evolve as the nature of risk does, signifying the importance of adapting risk management strategies to incorporate sustainability (Antoncic, 2019). As noted by Beasley, in today's technology-focused world, risk management is no longer the sole responsibility of a single employee but a crucial competency expected from all business leaders (Newswire, 2022). This underscores the notion that risk management is an integral aspect of every decision, having both short and long-term implications.

In this context, sustainability is not limited to environmental issues but encompasses broader aspects, including social, governance, and business resilience. This concept, often called ESG, covers a holistic view of sustainability. Organizations that strategically integrate ESG factors into their risk management framework are better positioned to handle various challenges and create sustainable value (Niţescu & Cristea, 2020). This concept has been well-articulated by Heather Daniels, Lockheed Martin Corporation's director of enterprise risk and sustainability, noting that sustainability is fundamentally about the ongoing resilience of the corporation (Newswire, 2022).

Risk management and sustainability are two sides of the same coin. As per Daniels, one of the key achievements of Lockheed Martin Corporation has been to look at risk from two different lenses—short-term risks and long-term sustainability—and align these two perspectives to enable richer analysis and decision-making (Newswire, 2022).

Mazars' interviews with multinational companies underpin the importance of integrating sustainability into risk management systems. Their research indicates that such integration is developing, with several challenges. These include the perceived time for sustainability risks to manifest, lack of awareness of sustainability within the business context, understanding materiality when risk and sustainability intersect, transitioning from mere

reporting to making tangible differences to business models, and addressing sustainability risks that exist beyond direct contractual relationships (Mazars, 2019).

Addressing these challenges is imperative to create value and resilience. Companies such as those featured by McKinsey recognize risk management as a strategic asset that can generate significant value over the long term (Gius, Mieszala, Panayiotou & Poppensieker, 2018). Per their report, these companies adopt proactive risk management strategies, investing in quality, safety, and ethical standards and responding effectively to risks. They also understand that adhering to minimum regulatory standards and avoiding financial loss is insufficient (Gius, Mieszala, Panayiotou & Poppensieker, 2018). These proactive measures make efficient processes less prone to disruption, contributing to a company's resilience and reputation and creating value.

Scordis, Suzawa, Zwick and Ruckner highlight the principles of Sustainable Insurance (PSI), which encourages the internalization of tacit claims in insurers' operations (Scordis, Suzawa, Zwick & Ruckner, 2014). This approach expands the scope of corporate risk management, and companies that honor these claims tend to increase their value to shareholders.

Ernst & Young suggests that companies must embed sustainable solutions into their culture to manage risks effectively and create value (Ernst & Young, 2015). This includes a strategic balance between risk mitigation and risk-taking, risk modeling and analytics, scenario planning, and more. These practices enable companies to identify, assess, and prepare for risks, thereby leading with confidence (Abdelkafi & Täuscher, 2016).

A robust risk management strategy that integrates sustainability, as articulated in the ESG framework, is crucial for any organization seeking to create sustainable value. This approach mitigates risks, enhances stakeholder relationships, boosts resilience, and positively impacts the company's reputation, contributing to long-term value creation.

2.1.4 Growth and innovations

Incorporating sustainability into a business strategy is essential to meeting societal expectations and regulatory requirements and is pivotal in promoting innovation and spurring growth. By fostering sustainability, companies can tap into new markets, design innovative products and services, and satisfy the changing needs of their customers (McPhee, 2014; Wang W. , 2022; Capozucca, 2012).

Companies should focus on cultivating their most significant asset - people. Education plays an integral role in the sustainability model. It includes formal training and inculcating an understanding of sustainability issues within the workforce (Blok, Wesselink, Studynka & Kemp, 2015). This learning culture can spur innovation as employees become more adept at managing sustainability issues within the core business processes, contributing to the company's long-term financial success and reputation (Galpin, Whitttington & Bell, 2015).

Another way to drive sustainability is by integrating it into the organization's decision-making systems. By evaluating every decision's environmental and social impact, companies can foster a culture of innovative thinking, especially regarding sustainability (Sala, Ciuffo & Nijkamp, 2015). Tools like sustainability checklists or filters can assist in creating conversations and improving decision-making. These tools also help to factor in the cost of environmental and social impacts, leading to better-informed, sustainable decisions (Govindan, Rajendran, Sarkis & Murugesan, 2015).

Businesses can explore avenues to create value through their products. For example, companies like Best Buy have decided to take back any electronics, not just their products, for recycling (McPhee, 2014). Such actions improve the firm's reputation and provide opportunities to sell new products. There are also potential social benefits and business growth opportunities when repurposed products are introduced into developing economies. Businesses can foster growth and innovation through sustainable product life-cycle management (Calik & Bardudeen, 2016).

The impact of social entrepreneurship on sustainable economic growth is another important area. Social entrepreneurship and innovation can create sustainable value and stimulate growth (Rahdari, Sepasi & Moradi, 2016). Sustainability-driven innovation introduces new design constraints that shape how resources are used in products and processes. It allows companies to identify areas where innovation can be particularly beneficial and inspire new, disruptive paths to growth and value creation (Calic & Mosakowski, 2016).

Moreover, sustainability can drive innovation beyond just green products. By rigorously evaluating energy and resource use, identifying areas for improvement, and prioritizing projects based on the company strategy, businesses can become more efficient and dramatically reduce costs and waste (Adro & Fernandes, 2022). This approach not only insulates firms from the risk of resource price shocks but also delivers benefits beyond the bottom line – enhancing brand image and engaging employees meaningfully (Agarwal, Lenka, Singh, Agrawal & Agrawal, 2020).

In the supply chain context, sustainability can also drive innovation. Companies can realize substantial cost savings by examining the supply chain end-to-end to reduce inefficiency and waste. For instance, suppliers who minimize energy, water, materials, and debris use are likely to incur lower costs and provide better value to businesses (Capozucca, 2012).

Furthermore, results from a McKinsey Global Survey show that companies generating value from their sustainability programs follow specific management practices (Granskog, Hannon, Hieronimus, Klaeyle & Winkle, 2021). These companies prioritize sustainability, set clear aspirations and targets, and engage customers and partners in their sustainability agendas. This alignment on sustainability can lead to innovation and growth, proving that there is potential for value creation through sustainability (Kickul, Gundry, Mitra & Berçot, 2018).

Integrating sustainability into a business strategy can drive innovation and growth. By focusing on sustaining activities, improving decision-making systems, managing product life cycles sustainably, and prioritizing sustainability-driven innovation, companies can unlock new opportunities, enhance their reputation, and ultimately create value. Furthermore, businesses must engage their stakeholders, including employees, customers, and suppliers, in their sustainability agendas to achieve sustainable economic growth and value creation.

2.2 Sustainability is more than eco-friendly

Sustainability is a multi-faceted concept that extends far beyond just being environmentally friendly. While environmental stewardship is pivotal in achieving sustainability, sustainability is broad and encompasses social and economic dimensions. The United Nations perceptively characterizes sustainable development as "progress that fulfills today's needs without jeopardizing the capacity of future generations to satisfy their necessities" (Hidayat et al., 2021).

The broad view of sustainability is often presented as a three-legged stool, where each leg stands for a pillar of sustainability: economic progress, social equality, and ecological stewardship. This concept, often called the "triple bottom line," signifies that all three aspects are mutually reliant and equally imperative for attaining sustainability (Alhaddi, 2015).

Economic Development: The economic pillar of sustainability focuses on wealth generation to maintain a populace. It covers a spectrum of factors, from economic expansion and job creation to equitable income distribution and fair commerce (Hammer & Pivo, 2017). The objective is to establish an economic context that is not just affluent but also fair and inclusive, endorsing the welfare of all societal stakeholders (Isil & Hernke, 2017). Corporations have a crucial role in this respect by embracing sustainable business practices, such as decent job creation, ensuring just compensation, and investing in sustainable technologies and methods (Gu, Wang, Hua & Liu, 2021; Nogueira, Gomes & Lopes, 2022).

Social Equity: The social pillar of sustainability emphasizes enhancing the living standard for all individuals, ensuring equal opportunities, and fostering a fair and just society. It involves human rights, labor norms, community participation, gender parity, and health and safety (Arowoshegbe, Emmanuel & Gina, 2016). Corporations can contribute to social sustainability by advocating diversity and inclusion, ensuring safe and healthy working conditions, and engaging with local communities substantially (Sukoharsono, 2019).

Environmental Responsibility: The environmental pillar, frequently most linked with sustainability, involves protecting and rejuvenating the natural environment. It includes reducing pollution, encouraging renewable energy, preserving natural resources, and safeguarding biodiversity (Masud, Rashid, Khan, Bae & Kim, 2019). While businesses must abide by environmental regulations, they can also take proactive measures to decrease their

environmental impact, such as minimizing waste, cutting down energy use, and embracing sustainable sourcing methods (Zhang et al., 2021).

Significantly, these three pillars of sustainability are intertwined, and decisions in one sphere can influence the others. For instance, economic progress that neglects environmental health is unsustainable. Similarly, overlooking social equity issues can result in social discord, adversely affecting economic stability (Venkatraman & Nayak, 2015).

Therefore, sustainability should not be seen as merely being "environmentally conscious." Instead, it should be perceived as an inclusive strategy that harmonizes economic growth, social equality, and environmental stewardship. Achieving sustainability demands a comprehensive approach that considers the interaction of these three dimensions and seeks solutions that yield benefits on all fronts (Sukoharsono, 2019; Zhang et al., 2021; Gu, Wang, Hua & Liu, 2021).

Sustainability is indeed more than being eco-friendly. It is about making thoughtful choices to ensure the long-term well-being of our society, economy, and environment. It demands a commitment from individuals, businesses, and governments alike to make decisions today that will not compromise the ability of future generations to meet their own needs (Gu, Wang, Hua & Liu, 2021). It requires an understanding of the intricate links between the economy, society, and the environment and the willingness to make decisions that may be challenging but are necessary for the greater good.

2.2.1 Sustainable strategy and employees

An organization's employees' well-being and personal development are pivotal to an effective and comprehensive sustainable strategy (Amrutha & Geetha, 2020). Organizations prioritizing sustainability demonstrate commitment to fair remuneration, fostering a healthy work environment, providing avenues for professional growth, and maintaining an inclusive, respectful workplace ambiance (Elrayah & Semlali, 2023). Organizations that invest in their employees enhance their attractiveness as an employer and bolster overall sustainability, boosting productivity and job satisfaction, and attracting top-tier talent, reinforcing the organization's competitive edge (Davidescu, Apostu, Paul & Casuneanu, 2020).

Employee engagement plays a significant role in promoting sustainability, with employees who understand and endorse the organization's sustainability objectives becoming effective champions of the organization's mission (Tenney, 2023). They bring fresh ideas and innovative approaches to help reach sustainability objectives, amplifying the organization's impact on people, profits, and the planet.

A robust, sustainable strategy fundamentally recognizes the profound impact of organizational practices on employees, stakeholders, and the environment (Tenney, 2023). Such a strategy values people over profits and prioritizes the well-being of all stakeholders.

This long-term approach to environmental sustainability aids in ensuring business success well into the future, attracting and retaining top talent, and engaging employees who care about where their company stands on social and environmental issues (Pellegrini, Rizzi & Frey, 2018).

Current market trends reflect that employees, especially younger generations like millennials and Gen Z, value sustainability highly (Lamm, Tosti-Kharas & King, 2015). They are attracted to companies that integrate tackling social and environmental issues into their culture and business strategy, making sustainability an essential indicator of employee engagement, retention, performance, and well-being (Tenney, 2023).

An employee engagement study by Cone Communications found that 51% of employees would not work for a company that does not have strong policies addressing social or environmental sustainability issues. Moreover, 74% of employees said their job is more fulfilling when they can positively impact social and environmental problems (Tenney, 2023). These statistics underscore the importance of a sustainable strategy in attracting and retaining talent and boosting employee morale and productivity.

According to Gaskell, corporate sustainability, which is particularly relevant in the growing public demand for action on climate change, plays an essential role in talent attraction and retention (Gaskell, 2021). The Swedish approach to sustainability leadership provides a good model to follow, involving discovering one's purpose, embedding sustainability into the organization's core, and creating unconventional partnerships to amplify one's impact. This approach can help organizations achieve sustainable exponential influence and market success (Gaskell, 2021).

Employee engagement is instrumental in executing a successful sustainability strategy, as employees need to adopt sustainable practices at work and extend these behaviors to their home lives. Businesses can motivate their employees to do this through segmentation, continuous targeting, integration, and framing, among other strategies (d'Arjuzon, 2012). Examples include leveraging social media, adopting a game culture, promoting volunteering, creating green teams, and encouraging employee-led initiatives for sustainability.

The role of HR organizations in the company's sustainability strategy cannot be underestimated. They can contribute significantly by implementing an employee listening strategy with regular surveys and pulses. This provides valuable insights into employee engagement and areas for improvement (Schadewald, 2022).

Furthermore, companies can adopt sustainable total reward strategies to boost talented employees' performance, satisfaction, and motivation. These strategies should include financial and non-financial incentives, such as professional development opportunities, well-being initiatives, flexible working arrangements, base pay, allowances, and other

compensation schemes. Such a practice can help attract, retain, motivate, and improve the performance of talented employees (Elrayah & Semlali, 2023).

The alignment of sustainability strategies with employee engagement and well-being is crucial for organizations to thrive in today's competitive landscape. Employees who identify with their organization's values and mission become invaluable champions of sustainable practices. This commitment to sustainability strengthens an organization's reputation and brand image and cultivates a high-performing, motivated, and fulfilled workforce.

2.2.2 Sustainable strategy and taxes

The emergence of sustainable strategies and the implication of tax benefits signal a shift in the economic landscape, with governments incentivizing organizations to embrace sustainable practices (Bird & Davis-Nozemack, 2018). An array of tax deductions, credits, and grants are provided to companies dedicated to implementing sustainable measures, offering a financial cushion that enables these companies to commit to sustainable operations fully. However, understanding the intricate tax consequences is crucial. Tax incentives may carry specific requirements that must be adhered to (Morris & Visser, 2023).

Tax reporting is integral to ESG reporting. It discloses a company's purpose and social contribution, reflecting its societal role and commitment to its purpose. Clear, transparent tax reporting that aligns with a company's values and strategy portrays a more holistic and relevant narrative about a company's purpose, establishing trust among various stakeholders (Ma & Park, 2021). As ESG reporting standards continue to be developed, a considered approach to tax transparency and governance plays a significant role in engaging with ESG issues and building trust with stakeholders (Morris & Visser, 2023).

The tax function is central to organizations crafting more resilient and sustainable supply chains. It assists organizations in taking advantage of government green incentives and mitigating exposure to penalties. Furthermore, understanding emerging green legislation and taxes and interpreting what it means for the business financially is integral to strategic planning (Turnsek, 2021).

Sustainability is a complex issue that requires a systemic response. Tax teams can facilitate a systemic response by providing a coherent view of an organization's sustainability, compliance, and commercial goals. This holistic approach can help organizations balance their sustainability aspirations with the practical realities of achieving such aspirations (Evans-Greenwood, Auld, Robertson & D'Addona, 2023).

Tax incentives have historically been a critical driver of sustainability initiatives globally. However, with the adoption of the global 15% minimum effective tax rate rules, the effectiveness of these incentives may be reduced, diluting the financial benefits of tax incentives. As a result, some companies might reconsider their business activities' locations.

Nonetheless, governments are expected to continue offering sustainability incentives, potentially through grants or carbon pricing (Turnsek, 2021).

Tax transparency is essential for companies to demonstrate their commitment to operating for the benefit of all stakeholders. A sustainable tax strategy benefits businesses and their wider society, building long-term value. Companies can demonstrate tax transparency by publishing their tax strategy and sharing information on tax governance, risk management, and tax contribution figures (Morris & Visser, 2023).

Finally, keeping pace with global sustainability tax measures is essential for businesses committed to climate change action. These measures aim to reduce emissions, meet carbon neutrality goals, and fund policy objectives. However, these measures also pose challenges and opportunities for businesses. Therefore, being aware of the evolving sustainability tax policy landscape is critical for companies that wish to secure valuable incentives or avoid costly surprises (Turnsek, 2021).

The tax function is pivotal in an organization's shift towards sustainability. Tax teams can help navigate the complex regulatory terrain of sustainability and develop a sustainable tax strategy. Transparency in tax reporting, understanding global tax measures, and being aware of incentives and penalties are all essential components of a sustainable strategy. However, the ever-evolving sustainability tax policy landscape necessitates constant vigilance and adaptation. Nonetheless, the benefits of adopting a sustainable strategy, such as tax incentives, improved stakeholder relationships, and an enhanced reputation, make it an advantageous pursuit.

2.3 The pitfalls of greenwashing

The aspect of greenwashing is a term used for misleading or unverified allegations about environmental advantages. These aspects can be related to a company's product, service, or operations. The practice of companies misleading their consumers about the ingredients of products or services is not new. Many companies use greenwashing (terms such as organic, sustainable, etc.) for their products to gain consumers' trust. This aspect has increased with the increasing demand of consumers to eat organic and sustainable products in the 21st century. However, false advertisements have many repercussions that can lead to disastrous outcomes for consumers and companies (Friedman & Campbell, 2023; Fella & Bausa, 2023; Ye, Jiang, Li, Tan & Kumar, 2022).

If the consumers discover misleading environmental claims, companies can be regulated in a court of law against their actions. This can lead to hard-fought battles in the court of law and millions of dollars lost due to the damage done (More, 2019). Greenwashing can lead to significant problems for companies in the long run, which is why companies must take strict action against such practices (Friedman & Campbell, 2023).

Companies that engage in greenwashing must be aware of the risks it carries. Aside from it leading to harm to the movements of sustainability in society, such practices can develop a negative image of the company, which can be challenging to remove in the future (Friedman & Campbell, 2023).

An analysis of the literature shows that consumers often struggle to identify greenwashing, particularly concerning their purchasing decisions. As a study by Fella & Bausa suggested, consumers often fall for greenwashing, which could undermine the market for genuinely green products and potentially harm society and the environment. These challenges develop a market for authentic green products and threaten to erode trust in sustainable initiatives. In response, academic circles have been working to develop more nuanced understandings of consumers' perceptions of green and greenwashed products (Fella & Bausa, 2023).

This highlights a vital pitfall of greenwashing - the erosion of consumer trust. The deliberate or unintentional greenwashing of products can decrease brand trust and negatively impact brand loyalty (Ye, Jiang, Li, Tan & Kumar, 2022; More, 2019). Additionally, according to Friedman and Campbell's (2023) experimental study, the greenwashing efforts of fossil fuel corporations may successfully sway individuals to adopt more positive attitudes towards such companies, creating a false perception of their environmental stewardship (Friedman & Campbell, 2023).

Beyond trust erosion, legal and financial consequences present another major pitfall of greenwashing (Vollero, Palazzo, Siano & Elving, 2016). Companies that engage in greenwashing may face legal ramifications, as depicted in the legislation initiatives launched by the European Commission and the Federal Trade Commission in the United States. These initiatives aim to substantiate sustainability claims and empower consumers to make informed decisions, thereby highlighting the role of policy in curbing greenwashing (Schmuck, Matthes & Naderer, 2018).

Furthermore, greenwashing may lead to detrimental environmental impacts. Ye et al. (2022) raise the issue of the double marginalization effect, where misleading signals could decrease product prices, leading to a surge in demand and, consequently, a higher environmental footprint (Ye, Jiang, Li, Tan & Kumar, 2022). This raises ethical questions about the consequences of consumer deception and suggests that greenwashing impacts companies' reputations, financials, and the sustainability movement as a whole (Helsel, 2022).

The pitfalls of greenwashing have directly impacted social sustainability movements by deceiving consumers about the sustainability of products or operations; companies contribute to cynicism and distrust in the sustainability movement (Friedman & Campbell, 2023). This can hinder genuine efforts towards environmental stewardship and climate change mitigation, damaging the collective drive towards a greener, more sustainable future.

Finally, greenwashing can foster consumer confusion, as identified by Fella & Bausa (2023). The complexity of sustainability certifications and supply chain processes, paired with

misleading marketing, can leave consumers bewildered and unable to make informed decisions. This confusion can erode the effectiveness of consumer-driven demand for sustainability and dampen the impetus for companies to invest in sustainable practices genuinely (Ye, Jiang, Li, Tan & Kumar, 2022).

The pitfalls of greenwashing are manifold, impacting not only companies' reputations and financials but also the broader sustainability movement. The failure of consumers to identify greenwashing, the erosion of trust, legal and financial consequences, detrimental environmental impacts, and consumer confusion are among the significant pitfalls that underscore the urgency for industry and policymakers to take concerted action against greenwashing (Helsel, 2022). At the same time, consumers must be equipped with the knowledge and tools to discern genuinely sustainable products from greenwashed ones, underpinning the collective march towards a more sustainable world.

3 INTEGRATING SUSTAINABILITY INTO STRATEGY

Integrating sustainability into business strategy is a multidimensional task that requires a robust paradigm shift from traditional corporate operations toward more sustainable practices. Despite the increasing global recognition of the importance of sustainability, businesses still face significant challenges in translating and integrating the normative sustainability concept into day-to-day business and management practices (Scherrer, Daub & Burger, 2007).

A critical element of this integration process is developing sustainable management systems that could track the impact of business products and services on society and the environment and communicate the process's success. Traditional performance measurement systems based only on shareholder value are inadequate. Bonacchi and Rinaldi (2007) proposed a multi-dimensional and multi-level performance measurement system that combines financial indicators with social and environmental metrics. This system allows businesses to identify potential win-win and trade-off situations, effectively addressing stakeholder satisfaction.

Equally crucial is the process of communication in sustainability strategies. Normative financial reports are replaced by complex and integrated reporting practices catering to stakeholder expectations regarding companies' social and ecological performance (Stiller & Daub, 2007). The emergence of digital reporting approaches, facilitated by information and communication technologies (ICT), offers more tailored sustainability reports, and promotes an interactive stakeholder dialogue (Isenmann, Bey & Welter, 2007).

The integration of sustainability is not just limited to established corporations. Small-to-Medium Enterprises (SMEs) are also expected to address sustainability considerations proactively. Shields and Shelleman (2015) suggested a structured approach to identifying

current sustainability issues, assessing the external business environment, and determining company capabilities to formulate a sustainability strategy.

Moreover, strategic decision-making must account for the holistic treatment of all sustainability areas. The Fuzzy Analytic Hierarchy Process (AHP), proposed by Calabrese et al. (2019a), effectively selects sustainability issues most relevant for creating shared value for both business and society.

In software engineering, Cabot et al. (2009) proposed modeling early requirements to visualize the impact of alternative options on sustainability goals. This approach allows for the integration of sustainability requirements in decision-making processes, thus contributing to the sustainable development of society.

Integrating sustainability into business strategy necessitates a comprehensive change in corporate culture, management practices, and performance measurement systems. While this transformation presents substantial obstacles, it allows corporations to cultivate long-term economic expansion while endorsing social welfare and environmental guardianship (Chen, Huang, Wang & Chen, 2020). The reviewed papers propose several innovative tools and strategies that could ease the shift towards a more sustainable business model, signifying the growing significance and urgency of incorporating sustainability into business strategy in the present global scenario.

3.1 Building the strategy

Building a sustainable strategy within a business context involves more than just implementing a collection of practices designed to minimize environmental harm. It demands a systemic transformation across the entire organization that requires the alignment of strategic initiatives, managerial methods, and performance measurement systems to create long-lasting value for the business and society.

A foundational step in building a sustainable strategy is to gain a thorough understanding of the sustainability landscape pertinent to the organization. This step assesses the current environmental, social, and economic issues relevant to business, industry, and the broader societal context. Shields and Shelleman (2015) emphasized the significance of this stage for SMEs, emphasizing the necessity for adaptive planning innovation to handle sustainability challenges effectively. Larger organizations also gain from such knowledge because it allows them to customize their plans to their stakeholders' sustainability demands and expectations.

Another crucial step involves outlining the company's enduring aspirations and targets. This process often entails identifying the fundamental sustainability challenges paramount to the organization and its stakeholders. Calabrese et al. (2019a) suggested employing the Fuzzy Analytic Hierarchy Process (AHP) technique. This approach enables the identification of

sustainability challenges that can yield shared benefits for both the business and society. Moreover, incorporating the ISO 26000 standard within this method allows for a comprehensive approach encompassing all aspects of sustainability. Such a process ensures that the developed sustainable strategy remains focused, targeted, and capable of effectively addressing the company's most significant sustainability concerns.

Following establishing sustainability goals and objectives, the subsequent phase involves formulating an action plan. This strategy should delineate how the organization intends to achieve the established goals and objectives. It encompasses specific actions to be undertaken, necessary resources, implementation timelines, and assigned responsibilities. In this context, Bonacchi and Rinaldi (2007) underscore the importance of adopting novel sustainability planning and control approaches. The authors devised a multidimensional and multilevel performance measurement system that aids in integrating social and environmental norms into management practices. By employing DartBoards and Clovers as management tools, this system enables the exploration of win-win scenarios, trade-offs, and balancing financial indicators with social and environmental criteria.

Since sustainability is a complex and ever-evolving concept, organizations must remain adaptable and responsive to changes in the sustainability landscape. Thus, a sustainability strategy must incorporate overseeing, assessing, and rectifying (Baumgartner & Rauter, 2017). This is due to the reason that it would help the organization track its progress toward its sustainability goals, evaluate the effectiveness of its actions, and modify its approach based on its internal and external circumstances. Furthermore, seeking to demonstrate the interconnections between an organization's financial performance and its larger social, environmental, and economic context, integrated reporting aligns with this process. It strives to give rise to a more cohesive and efficient approach to corporate reporting (Stiller & Daub, 2007).

Developing a viable approach includes integrating sustainability into decision-making procedures. Cabot et al. (2009) suggested employing the requirements modeling method to achieve this aim. This method aids organizations in making well-informed and sustainable choices by visually representing the impact of different solutions on sustainability objectives and analyzing conflicts between sustainability and other goals.

Efficient stakeholder involvement is equally crucial in the development of a sustainability strategy. The sustainability objectives and goals should reflect the company's requirements, expectations, and those of its stakeholders (Torelli, Balluchi & Furlotti, 2020). Engaging all stakeholders in the process yields valuable insights for strategy formulation, fosters trust and collaboration, and enhances the company's social acceptance (Herremans, Nazari & Mahmoudian, 2016).

Developing a sustainable strategy encompasses various actions and considerations that require a holistic transformation of the entire organization. This undertaking calls for a

comprehensive understanding of the sustainability landscape, a tailored action plan, a framework for monitoring and evaluation, the integration of sustainability into decision-making processes, and effective stakeholder engagement (Lloret, 2016). Although this endeavor poses significant challenges, it allows businesses to enhance their long-term viability and positively contribute to society and the natural world.

3.2 Sustainability materiality

Materiality within the realm of sustainability pertains to recognizing and prioritizing ESG matters that are most important to a company's operations, stakeholders, and society. Ascertaining materiality is pivotal in incorporating sustainability into corporate strategy and aligning it with the company's fundamental principles, vision, and mission.

Materiality in sustainability originated from financial materiality, which centers around quantifiable financial data (Beske, Haustein & Lorson, 2020). However, it has since expanded to encompass non-financial issues associated with ESG factors that can impact a company's ability to generate long-term value (Khan, Serafeim & Yoon, 2016). This expansion reflects the growing recognition that businesses operate within a broader societal, environmental, and economic framework, extending their responsibilities beyond mere financial gains.

The procedure of identifying material sustainability issues commences with an extensive engagement of stakeholders. Companies must identify their key stakeholders, including employees, customers, investors, suppliers, local communities, regulators, and others, and grasp their expectations and concerns regarding the company's social and environmental impacts. It is recommended even for smaller enterprises which can greatly benefit from such exercises, aiding them in responding to sustainability demands from stakeholders and the wider market (Shields & Shelleman, 2015).

Another approach combines stakeholder engagement with utilizing decision-making tools like the Fuzzy Analytic Hierarchy Process (AHP) (Calabrese, Costa, Levialdi & Menichini, 2019a). This tool identifies and prioritizes the most relevant sustainability issues that should be the focal point of strategic planning and management. By merging qualitative input from stakeholders with quantitative decision-making tools, companies can ensure that their sustainability strategy centers around the most critical and impactful issues.

Once material issues are identified, they must seamlessly integrate into the company's strategy, operations, and reporting. According to Scherrer et al. (2007) studies, assimilating sustainability necessitates updating managerial practices, recalibrating performance measurement systems, and constructing novel communication strategies. For instance, businesses might have to modify their operations to reduce environmental damage, revamp their performance indicators to include ecological and social aspects, and devise innovative methods to convey their sustainability ventures and advancements to their stakeholders.

The incorporation of crucial sustainability matters also requires the formation of more exhaustive and integrated reporting practices. This shift from mere financial reporting to intricate and integrated reporting is pivotal in catering to the progressing demands of stakeholders. Stiller and Daub (2007) accentuated the significance of infusing sustainability into accounting methods and spotlighted the potential of corporate reporting in providing insights into an enterprise's sustainability approach. Additionally, Isenmann et al. (2007) delineated the benefits of adopting digital reporting methods, which offer more flexibility and interactivity than traditional paper-based reports.

The concept of materiality in sustainability is not fixed but evolving. Given the changing socio-economic and environmental contexts, companies must constantly oversee and reassess their material issues (Baumüller & Sopp, 2022). Moreover, determining materiality should be transparent and inclusive, considering varied stakeholder viewpoints. This approach enhances the credibility and dependability of the materiality process and cultivates stakeholder trust and collaboration.

Sustainability materiality is instrumental in directing companies' sustainability endeavors and ensuring they concentrate on the most crucial and impactful matters. It involves an active and inclusive procedure of identifying and prioritizing sustainability issues, incorporating them into the company's strategy, operations, and reporting, and continuously supervising and revising them under changing circumstances (Wu, Shao & Chen, 2018). While this process may present considerable challenges, it allows businesses to synchronize their commercial practices with societal expectations, generate long-term value, and contribute to a more sustainable world.

3.3 Identification of key stakeholders

Identifying key stakeholders is a core aspect of integrating sustainability into an organization's strategy. Engaging stakeholders forms an essential component of sustainability, guiding the creation of approaches, reporting practices, and disclosure mechanisms (Herremans, Nazari & Mahmoudian, 2016). Vital phases of stakeholder engagement include identification, consultation, dialogue, participation in sustainability initiatives, and forming partnerships to achieve sustainability goals (Beske, Haustein & Lorson, 2020).

Identifying key stakeholders in the context of sustainability might differ based on the organization and its particular areas of focus. Therefore, when formulating a sustainability strategy, it is imperative to pinpoint individuals within the company who are accountable for pertinent activities and operations (Aarseth, Ahola, Aaltonen, Økland & Andersen, 2017). This process should encompass fostering relationships with stakeholders both internally and externally, including those within the supply chain (Aarseth, Ahola, Aaltonen, Økland & Andersen, 2017; Engert & Baumgartner, 2016).

Internal stakeholders may include the Corporate Responsibility Team, Business Team, Accounting, Finance, Operations, Legal, Compliance, Human Resources, Communications, and C-Suite & Leadership (Engert & Baumgartner, 2016). The engagement of internal stakeholders facilitates an internal environment conducive to sustainability practices and provides an understanding of their role in the strategic sustainability framework.

On the other hand, external stakeholders can comprise entities that interact directly with the company's focus area, either upstream or downstream. In the context of agriculture, for instance, this would include farmers and veterinarians (Aarseth, Ahola, Aaltonen, Økland & Andersen, 2017). Including these stakeholders ensures the integration of perspectives potentially influencing the company's sustainability trajectory.

Prioritizing stakeholders in the sustainability integration process can be achieved through materiality assessment and stakeholder mapping. Materiality assessment identifies the areas of the largest potential impact and helps determine the stakeholders crucial to engage with (Torelli, Balluchi & Furlotti, 2020).

Stakeholder mapping, on the other hand, classifies stakeholders based on their level of influence, impact, and interest, allowing the development of targeted engagement strategies (Bocken, Rana & Short, 2015). A visual representation of all potential influencers of the sustainability project and their connections is created. One prevalent method involves a four-quadrant influence-interest matrix, measuring the level of interest and influence to plot stakeholders accordingly (Galpin, Whitttington & Bell, 2015).

Nevertheless, the stakeholder mapping process is not without potential pitfalls. One common mistake is overlooking key stakeholders, leading to gaps in communication, resistance, conflict, or missed opportunities (Catzín-Tamayo, Frausto-Martínez & Arroyo-Arcos, 2022). To circumvent this, it is vital to use a comprehensive approach to stakeholder identification.

Another frequent error is the assumption of uniformity within stakeholder groups. Such oversimplification could fail to address stakeholders' diverse concerns and needs (Zingraff-Hamed et al., 2020). Hence, segmentation and differentiation based on their level of interest, influence, power, or expectations are necessary.

Neglecting relationships and interactions among stakeholders can be detrimental. Ignoring potential synergies, conflicts, or influences from the stakeholder network might pose challenges in implementing the sustainability strategy (Meixell & Luoma, 2015). A thorough analysis of the relationships and dependencies among stakeholders is required to avoid this pitfall.

Identifying and understanding key stakeholders is pivotal to integrating sustainability into an organization's strategy. Engaging diverse stakeholders, prioritizing them, and avoiding common pitfalls in the stakeholder mapping process are critical to successfully integrating

sustainability in strategic planning and implementation (Wijethilake & Lama, 2019; Zingraff-Hamed et al., 2020). This process not only promotes the organization's sustainability goals but also aligns the interests of all stakeholders toward achieving sustainable operations.

The Role of Technology in Stakeholder Identification: In the era of digitalization, technology plays a pivotal role in stakeholder identification. Leveraging social media and online platforms can facilitate organizations in identifying and engaging with stakeholders efficiently (Colvin, Witt & Lacey, 2016). Social media networks enable organizations to tap into broader communities and provide platforms for discussion and engagement. Moreover, firms can monitor digital activities, remarks, and disseminated content to glean insights into stakeholder sentiments, anticipations, and actions (Polese, Botti, Grimaldi, Monda & Vesci, 2018). Furthermore, big data analytics can extract valuable understanding from copious amounts of online data produced by stakeholders, helping shape an efficient sustainability tactic (Caputo, Evangelista & Russo, 2018).

Continuous Stakeholders Monitoring: The stakeholder panorama is not static but dynamic, evolving per environmental factors, regulatory shifts, and market fluctuations (Battistella, Cicero & Preghenella, 2021). Thus, ongoing supervision of stakeholders and their interests is critical to keep the sustainability strategy pertinent and flexible. This encompasses routine revisions of the stakeholder map and modifications in tune with changes in stakeholders' interests, sway, and authority (Malone et al., 2021).

Ethics in Stakeholder Engagement: Ethical aspects should be the core of stakeholder identification and engagement. As corporate social responsibility burgeons, organizations are increasingly expected to operate ethically (Camilleri, 2015). This demands respect for stakeholders' rights and values, upholding transparency, and honesty in all interactions, and prioritizing collective benefit over short-term profits. For example, when interacting with local communities as stakeholders, organizations should honor their cultural values, traditions, and norms (Mella & Gazzola, 2018).

Stakeholder Capacity Building: Investing in capacity enhancement among stakeholders might be necessary to ensure the successful implementation of the sustainability strategy (Shiel, Leal Filho, do Paço & Brandli, 2016). This includes equipping stakeholders with needed information, resources, training, and assistance to partake in sustainability initiatives effectively. For instance, training sessions can be arranged to acquaint stakeholders with the organization's sustainability aims, strategies, and the role they can fulfill in achieving them (Gorman-Murray & Lane, 2016).

Inclusion of Marginalized Stakeholders: It is common to overlook marginalized or less influential stakeholders during identification. However, neglecting these stakeholders can lead to power disparities, representation deficit, and the inability to achieve comprehensive sustainability objectives (Huq, Chowdhury & Klassen, 2016). Therefore, it is crucial to

identify and incorporate marginalized stakeholders in sustainability planning and execution processes. An inclusive approach ensures that the voices of all pertinent stakeholders are heard and their interests are considered.

Risk Assessment: Identifying key stakeholders should be tied to understanding the potential risks associated with them (Lucchetti, Arcese, Martucci & Montauti, 2019). These risks could range from reputational risks to operational and financial risks. For instance, neglecting key stakeholders could result in resistance to the sustainability strategy, leading to reputational damage. Therefore, as part of stakeholder identification, a risk mitigation strategy should be developed to manage any potential risks related to stakeholder engagement (Miemczyk & Luzzini, 2018).

Identifying key stakeholders is a continuous and multidimensional activity that needs to be adapted based on the changing needs and dynamics of the stakeholders. Integrating these additional aspects into the discussion enriches our understanding of stakeholder identification in sustainability strategy development and implementation.

3.4 Creating a materiality matrix

The Materiality Matrix is a visual representation tool widely used in corporate sustainability to identify and prioritize ESG issues that are important to an organization and its stakeholders (Calabrese, Costa, Levialdi & Menichini, 2019b). Materiality analysis in sustainability reporting is a tool for directing corporate sustainability toward emerging economic, environmental, and social opportunities. The following section provides a literature review on the process and importance of creating a materiality matrix in integrating sustainability into business strategy.

3.4.1 Importance of Materiality Matrix

Steering Strategic Choices: A materiality matrix influences organizations' strategic choices. This instrument enables organizations to comprehend their business environment and navigate their strategy (Ferrero-Ferrero, León & Muñoz-Torres, 2021). Essentially, the materiality matrix offers a roadmap to concentrate on the enterprise's and its stakeholders' most pressing sustainability issues. This prioritization enables organizations to make knowledgeable decisions about resource allocation, leading to enhanced operational proficiency and efficacy (Jørgensen, Mjøs & Pedersen, 2022).

This tool also aids in defining feasible sustainability targets (Ferrero-Ferrero, León & Muñoz-Torres, 2021). By highlighting and illustrating what holds importance and what does not, organizations can commit to attainable sustainability goals reflecting stakeholder interests and the organization's capabilities.

Enriching Sustainability Reports and Communication: The Materiality Matrix is also pivotal in enhancing sustainability reporting and communication. Numerous organizations utilize the materiality matrix for their sustainability reports (Torelli, Balluchi & Furlotti, 2020). Using a materiality matrix enables organizations to exhibit their receptiveness to their worries and interests to stakeholders.

This transparency bolsters the trustworthiness of the organization's sustainability reporting, as it allows for lucid communication about how sustainability issues are prioritized and tackled. It also enables clear communication about the organization's sustainability performance, plans, and progress, fostering an informed dialogue with stakeholders (Calabrese, Costa, Levialdi & Menichini, 2019b).

Boosting Stakeholder Involvement: The Materiality Matrix serves to engage stakeholders deeply. Developing a materiality matrix necessitates dialogues with diverse stakeholders, assigning them an essential part of the process (Stocker, de Arruda, de Mascena & Boaventura, 2020). This inclusive methodology can extract invaluable insights into stakeholders' apprehensions and expectations, cultivating resilient relationships between the organization and its stakeholders (Ferrero-Ferrero, Fernández-Izquierdo, Muñoz-Torres & Bellés-Colomer, 2018).

The engagement process also can fortify stakeholder trust and loyalty, evidencing the organization's dedication to integrating stakeholder viewpoints into its sustainability programs. This degree of transparency can amplify the organization's reputation and social permit to operate, eventually steering its continuous prosperity (Bellucci, Simoni, Acuti & Manetti, 2019).

Risk Management: A materiality matrix can be fundamental in risk management. By discerning and arranging the most critical sustainability issues, a materiality matrix can support organizations in recognizing potential sustainability risks and opportunities, thereby contributing to a sturdier and more efficient risk management approach (Whitehead, 2017).

The Materiality Matrix assumes a pivotal role in corporate sustainability practices. It molds strategic decision-making, enriches sustainability reporting and communication, boosts stakeholder engagement, and facilitates effective risk management (Reimsbach, Schiemann, Hahn & Schmiedchen, 2020). Organizations can formulate a more effective and victorious sustainability strategy by leveraging this tool.

3.4.2 Process of Creating a Materiality Matrix

Constructing a materiality matrix involves three primary steps: spotting, ranking, and validating material issues (Geldres-Weiss, Gambetta, Massa & Geldres-Weiss, 2021).

Identifying Material Issues: The initial step involves identifying potential material issues that could impede or enhance an organization's ability to generate value in the short, medium, or long term. These issues could be internal (like operational efficiency) or external (such as climate change, human rights). Organizations can unearth these issues through various sources, including stakeholder discussions, industry scrutiny, peer benchmarking, and sustainability reporting standards.

Assessing Material Issues: The next step entails evaluating these issues based on their relevance to stakeholders and their potential influence on the organization. This process often involves dialogue with internal and external stakeholders to understand their views on the significance and urgency of different issues. The outcomes are typically charted on a two-dimensional matrix: one axis indicates the importance of the problem to stakeholders, while the other portrays the potential impact of the issue on the organization.

Verifying Material Issues: The concluding step involves verifying the materiality assessment. This process may include an internal review by management and an external review by stakeholders or independent third parties. Its purpose is to ensure the accuracy of the assessment, aligning it with the organization's context, stakeholder perspectives, and applicable reporting standards.

3.4.3 Challenges and Considerations

Navigating the complexities and challenges of creating and utilizing a materiality matrix requires careful consideration. An extensive literature review reveals several fundamental aspects that organizations need to address.

Balancing Diverse Stakeholder Interests: A crucial challenge lies in harmonizing the diverse interests of stakeholders (Garst, Maas & Suijs, 2022). Stakeholders often possess varying and occasionally conflicting opinions regarding the relative significance of different sustainability issues. Achieving equilibrium necessitates meticulous dialogue, negotiation, and management, which can be intricate and demanding. Additionally, reconciling divergent stakeholder perspectives extends to defining materiality itself. While some prioritize immediate and tangible impacts, others focus on long-term strategic matters. Such divergences make consensus-building a formidable task (van Tulder & Lucht, 2019).

Ensuring Objectivity and Rigor: Maintaining objectivity and rigor during the materiality assessment process is another vital consideration. Subjectivity in determining what qualifies as 'material' can introduce biases and inconsistencies (Brand et al., 2018). Organizations face the risk of selectively choosing issues that portray them favorably or excluding challenging matters. Thus, it is essential to adopt a systematic, evidence-based approach that incorporates external sustainability indices, peer benchmarking, and structured stakeholder engagement processes to determine material issues (Jones, Hillier & Comfort, 2016).

Keeping Up with Dynamic Business Environment: The dynamic nature of the business environment, where sustainability issues evolve, presents an ongoing challenge (Jones, Comfort & Hillier, 2016). Regularly revisiting and updating the materiality matrix demands continuous commitment and resources. Ensuring its relevance involves constant monitoring of the external environment, stakeholder perceptions, and internal business dynamics. Additionally, significant changes in the business context, such as mergers, acquisitions, or market entries, necessitate revisiting the matrix (Guix, Font & Bonilla-Priego, 2019).

Broad Scope of Sustainability: The vast scope of sustainability encompasses diverse issues, ranging from environmental concerns like climate change and resource scarcity to social matters such as labor rights and community development, as well as governance issues like corruption and transparency (Jones, Hillier & Comfort, 2016). Encompassing a wide range of topics within a single matrix can be daunting. Moreover, organizations must consider direct impacts, such as their operations, and indirect impacts, such as supply chain issues, further complicating the task (Brand et al., 2018).

Integration into Business Strategy: Lastly, effectively integrating the materiality matrix into the overall business strategy poses a significant challenge. Mere identification of material issues is insufficient; they must be seamlessly embedded within the organization's strategic decision-making processes (van Tulder & Lucht, 2019). This entails aligning the materiality matrix with the organization's mission, values, and strategic objectives and treating it as a dynamic document that guides decision-making across all levels (Garst, Maas & Suijs, 2022).

3.5 Developing a comprehensive approach addressing the main sustainability issues

Understanding the main sustainability issues is the first step toward developing an effective strategy for sustainability management. These sustainability challenges, as identified in the literature, are vast and complex, cutting across various sectors and spheres of human activity. They are often interrelated, with impacts in one area leading to consequences in others. A thorough identification and understanding of these issues help develop a comprehensive approach to sustainability.

The three pillars of sustainability - environmental, social, and economic - each have specific issues. These are explored below:

1) Environmental Sustainability Issues
    a) Climate Change: Widely regarded as the most pressing environmental issue of our time, climate change, primarily caused by increased greenhouse gas emissions, is leading to rising global temperatures (Owusu & Asumadu-Sarkodie, 2016). It has severe consequences, including more frequent and intense weather events, sea-level rise, and changes in precipitation patterns that affect agriculture and water supply.

b) Biodiversity Loss: The accelerated loss of plant and animal species due to human activities is another key environmental concern. Habitat loss, overexploitation, pollution, and climate change contribute to this loss, threatening ecosystems' health and resilience (Arora et al., 2018).
c) Natural Resource Depletion: Excessive extraction and use of natural resources, such as minerals, fossil fuels, and timber, without allowing for their replenishment are leading to resource scarcity, affecting economic stability and ecological balance (Arora et al., 2018).
d) Waste Generation and Management: Rapid urbanization, industrialization, and consumerism have increased plastic, electronic, and hazardous waste. The inadequate management of this waste leads to pollution, public health issues, and resource inefficiency (Brunner & Rechberger, 2015).
e) Water Scarcity: Freshwater resources are increasingly strained due to population growth, agricultural demand, industrial use, and climate change, leading to water stress in many regions (Arora et al., 2018).

2) Social Sustainability Issues
   a) Inequality and Poverty: Despite progress in poverty reduction, income, and wealth disparities continue to grow, both within and between countries, exacerbating social and economic instability (Mani, Agrawal & Sharma, 2015).
   b) Labor Standards: Child labor, forced labor, discrimination, low wages, and poor working conditions are prevalent in many sectors and regions, affecting workers' rights and well-being (Duran, Gogan, Artene & Duran, 2015).
   c) Community Impact and Development: Businesses' operations can significantly impact local communities. Issues include land rights, displacement, cultural preservation, local employment, and economic development (Mani, Agrawal & Sharma, 2015).
   d) Health and Safety: This includes occupational health and safety in workplaces and the impact of businesses' products and operations on public health, such as air and water pollution, food safety, and consumer product safety (de Andrade et al., 2015).
3) Economic Sustainability Issues
   a) Economic Viability: For businesses, long-term financial viability is crucial. This involves profitability, resilience to shocks, and adapting to changing market conditions and societal expectations (Das, 2020).
   b) Corporate Governance: Good governance practices, such as accountability, transparency, ethical behavior, and respect for stakeholder interests, is essential for business sustainability and trust (Grabs, 2020).
   c) Fair Trade: Fair trade principles promote equitable trade conditions, including reasonable prices, decent working conditions, and sustainable practices for producers and workers in developing countries (Grabs, 2020).

The comprehensive identification of sustainability issues necessitates a system-thinking approach, recognizing the interconnectedness of these challenges. Each issue does not stand

alone but is part of a complex web of causes and impacts that need to be addressed holistically and integrated for effective sustainability management.

In the face of numerous and interrelated sustainability issues, organizations must develop a comprehensive and strategic approach to sustainability. This approach should mitigate negative impacts and create positive value for the environment, society, and the economy. Developing a comprehensive approach to sustainability issues involves several fundamental steps identified below.

Understanding the Context: Understanding the context in which an organization operates is the first step. The process requires acknowledging the physical, social, and economic environments and the regulatory, cultural, and market influences that affect an organization's sustainability outcomes and performance (Turnheim et al., 2015). Analytical frameworks like PESTEL (Political, Economic, Social, Technological, Environmental, Legal) can aid organizations in navigating their external environment. At the same time, SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis offers insights into their internal environment (Vardopoulos et al., 2021).

Identifying Sustainability Issues and Impacts: As previously discussed, pinpointing sustainability matters and grasping the organization's effects related to these matters is crucial. It necessitates considering the direct and indirect impacts of the organization's operations and products across its value chain. Life Cycle Assessment (LCA) is a tool that can be employed to measure the environmental impacts of a product or service from production to disposal (Artz et al., 2018).

Engaging Stakeholders: A crucial element of an effective sustainability strategy is encouraging the involvement of stakeholders. The collective wisdom of stakeholders can bring valuable insights into various aspects of sustainability, such as understanding its impacts, recognizing risks, and identifying opportunities. They can also help companies understand their expectations and concerns, thereby influencing the development of sustainability objectives and tactics (Manetti & Bellucci, 2016).

Setting Objectives and Targets: Based on the understanding of the landscape, sustainability impacts, and stakeholder insights, companies can formulate their sustainability objectives and key performance indicators (KPIs). These objectives should be SMART (Specific, Measurable, Achievable, Relevant, and Time-bound) and should align with recognized sustainability standards and frameworks like the UN Sustainable Development Goals (SDGs) (Wilson, 2021).

Developing and Implementing Sustainability Strategies and Actions: After goals and performance indicators are established, companies must develop and execute plans to achieve them. This could entail enhancing efficiency, cutting waste, transitioning to renewable energy, investing in sustainable technologies, improving worker well-being, advocating for social equity, etc. (Dyllick & Muff, 2016).

Monitoring, Reviewing, and Improving: A thorough approach to sustainability necessitates regular oversight and review of the organization's sustainability performance. This requires measuring progress against the outlined goals and benchmarks, identifying gaps and hurdles, and implementing necessary enhancements. Sustainability reporting, based on standards such as the GRI or the SASB, can aid organizations in transparently conveying their performance (Vigneau, Humphreys & Moon, 2015; Truant, Corazza & Scagnelli, 2017).

Integrating Sustainability into the Organizational Culture: For effective addressing of sustainability matters, it needs to be incorporated into the organization's culture. This implies instilling sustainability into the organization's mission, values, leadership, decision-making processes, and employee behaviors (Roscoe, Subramanian, Jabbour & Chong, 2019).

A comprehensive approach to sustainability involves a strategic and integrated procedure of comprehending the context, determining sustainability matters and effects, involving stakeholders, setting goals, applying strategies, monitoring performance, and cultivating a sustainability culture. Organizations can effectively address sustainability matters, fulfill stakeholder expectations, and contribute to sustainable development by adopting such an approach.

3.6 Developing an approach to report and disclosure metrics

Metrics for reporting and revealing are integral to corporate endeavors toward sustainability. A methodical and open strategy for these aspects signifies an organization's devotion to sustainability, concurrently permitting stakeholders to evaluate its accomplishments and advances toward sustainability objectives.

3.6.1 Need for reporting and disclosure metrics

The escalated focus on corporate sustainability has resulted in a rising need for transparency from diverse stakeholders like investors, consumers, employees, regulators, and society at large. They demand authentic details on organizations' performance and effects in sustainability, the strategies and actions are taken to resolve sustainability issues, and the progress towards sustainability objectives. Therefore, vigorous reporting and disclosing metrics approaches are crucial (Braam, de Weerd, Hauck & Huijbregts, 2016).

3.6.2 Materiality Assessment

The principle of materiality is critical in deciding what to report. The assessment of materiality assists in identifying the sustainability issues and metrics that are most pertinent and significant to an organization and its stakeholders. This usually involves factoring in the organization's effects, stakeholder interests, business strategy, and the economic, environmental, and social context it operates within (Beske, Haustein & Lorson, 2020).

3.6.3 Integration with Financial Reporting

The trend of incorporating sustainability reporting with financial reporting is gaining momentum. This acknowledges the understanding that sustainability performance is closely intertwined with financial performance and can impact an organization's long-term value. Integrated reporting frameworks, like the ones provided by the IIRC, can guide this process (Adams C. , 2015).

3.6.4 Continuous Improvement

The creation of reporting and disclosure metrics should be perceived as a continual process. As an organization's sustainability strategy evolves, its effects and stakeholder expectations change or new issues and standards arise, the reporting and disclosure metrics must be reassessed and updated. Persistent enhancement of reporting practices can boost their quality, relevance, and credibility (Adams, Jeanrenaud, Bessant, Denyer & Overy, 2016).

3.6.5 External Assurance

External assurance can further reinforce the dependability and trustworthiness of sustainability reporting. Assurance providers, such as audit firms, can evaluate whether the reported information is precise, consistent, and compliant with reporting standards. They can also suggest recommendations for advancing reporting practices (Jones, Comfort & Hillier, 2015).

Formulating an approach to report and disclosure metrics entails consideration of reporting frameworks and standards, materiality, amalgamation with financial reporting, continuous improvement, and external assurance. By adopting this approach, organizations can amplify their transparency, accountability, and stakeholder relations while acquiring insights for improving their sustainability performance.

3.7 Strategy implementation

The act of enforcing a sustainability strategy is multifaceted and fluid. It demands careful planning, decision-making, and multiple stakeholders' commitment, and active participation. Scholarly research and practical experiences in strategic management offer crucial perspectives to comprehend and successfully navigate the enforcement process.

3.7.1 The Nature of Strategy Implementation

The term 'strategy implementation' pertains to the practices, procedures, and decisions involved in carrying out a strategic blueprint. This encompasses setting sustainability objectives and benchmarks, formulating sustainability programs and initiatives, allocating

resources, modifying business practices and operations, interacting with stakeholders, tracking, and revealing sustainability performance, and managing transformations (Engert & Baumgartner, 2016).

3.7.2 Critical Success Factors

Several elements can impact the success of implementing a strategy. Some of the most crucial are:

Leadership: Potent leadership is fundamental in directing the implementation course, motivating, and inspiring employees, cultivating a culture of sustainability, handling change, and making critical decisions. Leadership for sustainability often requires transformative and ethical qualities, going beyond traditional transactional and transformational styles (Wijethilake & Lama, 2019).

Organizational structure: The organization's structure can facilitate or hinder strategy implementation. A structure that supports sustainability includes elements such as a dedicated sustainability function or team, cross-functional integration, decentralized decision-making, and open communication channels (Galpin, Whitttington & Bell, 2015).

Resources: Adequate resources (financial, human, technological, etc.) are necessary for implementing sustainability initiatives. Resource allocation should reflect the priorities of the sustainability strategy (Baumgartner & Rauter, 2017).

Capabilities: Organizations need specific competencies to implement a sustainability strategy effectively. Capabilities such as strategic (e.g., strategic thinking and decision-making), operational (e.g., project management and process enhancement), and relational (e.g., stakeholder engagement and building partnerships) are significant (Aarseth, Ahola, Aaltonen, Økland & Andersen, 2017).

Stakeholder engagement: Interaction with internal and external stakeholders can offer valuable contributions to strategy implementation, stimulate collaboration and partnerships, and amplify the authenticity and acceptance of sustainability endeavors (Martín-de Castro, Amores-Salvadó & Navas-López, 2016).

Performance measurement: Performance evaluation systems, like balanced scorecards or sustainability dashboards, can assist in tracking and assessing the progress of strategy implementation. They can offer feedback for learning and readjustment, enforce accountability, and share results with stakeholders (Aarseth, Ahola, Aaltonen, Økland & Andersen, 2017).

3.7.3 Challenges and Barriers

Enforcing a sustainability strategy can face multiple obstacles and hindrances. These may encompass resistance to change, clashing priorities or interests, deficiency of knowledge or skills, inadequate resources, organizational resistance, or short-term focus. Acknowledging these challenges and barriers can aid in devising strategies to surmount them (Engert & Baumgartner, 2016).

3.7.4 Strategies for Effective Implementation

Strategies for effective implementation typically incorporate a blend of hard (structural, formal) and soft (cultural, informal) elements. Hard strategies entail the design of a suitable organizational structure, defining clear roles and responsibilities, setting performance objectives, and utilizing formal control systems. Soft strategies entail shaping corporate culture and values, fostering commitment and ownership, promoting learning and innovation, and enabling collaboration and communication (Rossi, Germani & Zamagni, 2016).

Enforcing a sustainability strategy is a composite and dynamic process that demands leadership, suitable organizational structures, resources, capabilities, stakeholder interaction, performance evaluation, and approaches to surmount challenges. By understanding and addressing these aspects, organizations can augment their ability to actualize their sustainability aspirations.

4 DISCUSSION

4.1 Main findings and contributions

4.1.1 Key Themes

There are a number of fundamental themes that have been discovered through a comprehensive review of related literature, which focus on how sustainability is incorporated into a corporation's strategic planning:

- Strategic Approach to Sustainability: Studies suggest that sustainability should be ingrained within a company's primary strategy instead of being considered a standalone initiative. Incorporating sustainability in decision-making processes such as business planning, developing new products, and managing operations is crucial (Galpin, Whitttington & Bell, 2015). It is also essential to set well-defined sustainability objectives that align with the organization's more comprehensive strategy, thereby stimulating activities throughout the organization (Baumgartner & Rauter, 2017).

Moreover, integrating sustainability into the main business strategy boosts a company's capacity to adapt by predicting regulatory changes in the future, mitigating risks, and recognizing fresh market prospects (Engert & Baumgartner, 2016).

- Stakeholder Identification and Engagement: Various entities, including employees, consumers, suppliers, local communities, and investors, significantly affect a firm's sustainability efforts (Meixell & Luoma, 2015). Identifying these stakeholders and comprehending their needs and expectations is essential to shape an effective sustainability strategy. By actively interacting with stakeholders via transparent communication, cooperation, and partnership, a company can ensure its sustainability endeavors meet stakeholder needs and interests, thus enhancing its image and fostering trust (Herremans, Nazari & Mahmoudian, 2016).
- Materiality Assessment: Materiality, a concept that identifies the most pertinent social and environmental issues for a company and its stakeholders, is a fundamental element in devising a focused and efficient sustainability strategy (Khan, Serafeim & Yoon, 2016). A rigorous materiality assessment allows companies to understand where their impact is most significant, align sustainability initiatives with strategic objectives, and allocate resources effectively (Whitehead, 2017).
- Value Generation: Weaving sustainability into a corporation's strategic plan can generate substantial value for all internal and external stakeholders. For employees, a sustainability-oriented approach can result in a healthier, more diverse workplace environment, enhanced job satisfaction, and increased productivity and retention (Tantalo & Priem, 2016). External stakeholders can benefit from improved customer loyalty, better supplier relationships, and increased acceptance within the community. Moreover, sustainability can create financial value by minimizing costs, stimulating innovation, and exploring new market opportunities.
- Sustainability Reporting and Disclosure: Open reporting of a company's sustainability achievements is vital to maintain trust among stakeholders and showcase accountability (Herremans, Nazari & Mahmoudian, 2016). These reports should cover the company's successes, challenges, and areas for improvement, thereby presenting a balanced evaluation of its performance (Baumüller & Sopp, 2022). Reporting can also facilitate industry benchmarking and promote continuous improvement (Tóth & Suta, 2021).
- Implementation of the Strategy: Successfully implementing a sustainability strategy requires aligning different components like organizational culture, operational procedures, and performance indicators (Dyllick & Muff, 2016). It is vital for companies to ensure that their employees comprehend the strategy and possess the required skills and resources to implement it. Establishing clear responsibilities, holding individuals accountable, and periodically monitoring progress towards sustainability objectives are also critical (Adams, Jeanrenaud, Bessant, Denyer & Overy, 2016).
- Continuous Improvement: Companies must be adaptable and responsive to the rapidly evolving sustainability landscape. Regular reviews and updates of the sustainability strategy, ongoing stakeholder engagement, and a commitment to learning and innovation can enable companies to stay ahead of emerging trends, continually enhance their

sustainability performance, and deliver long-term value to their stakeholders (Adams, Jeanrenaud, Bessant, Denyer & Overy, 2016).

The interplay among these themes highlights corporate sustainability's complexity and integrated nature. Addressing these themes holistically and strategically can enable companies to navigate sustainability challenges and transform them into value creation and growth opportunities.

4.1.2 Discussion on Research Questions

Reviewing existing literature and exploring theoretical frameworks present a comprehensive insight into the significant aspects of integrating sustainability into corporate strategy, delivering value to internal and external stakeholders, and maintaining a genuine dedication to sustainability. The main findings of this research and their corresponding contributions to the broad field of sustainability in business are summarized as follows:

1. Research question 1: Why and how should companies take a strategic approach to sustainability and focus on integrating sustainability into their strategy?

Intrinsic and extrinsic motivations that prompt companies to weave sustainability into their strategic frameworks were revealed through the research. Inner motivations are closely related to ethical matters and dedication to preserving the environment and promoting social welfare (Eizenberg & Jabareen, 2017). External motivations stem from the promise of an improved brand image, customer fidelity, efficient operations, and sustainable financial growth (Lloret, 2016). Organizations must establish a systematic methodology for integrating sustainability, encompassing strategy development, assessing materiality, identifying stakeholders, creating a materiality matrix, and devising comprehensive tactics to tackle sustainability issues.

This research adds a new layer of understanding to the methods businesses can employ to navigate their sustainability journey. It proposes a structured methodology for infusing sustainability into corporate strategies, which could assist companies in maintaining a strategic focus on sustainability, thus promoting long-term advantages, and positively impacting the environment and society.

2. Research question 2: How can companies create significant value for internal stakeholders through a genuine dedication to sustainability?

The study illuminates that a sincere commitment to sustainability can generate significant value for internal stakeholders, including employees, management, and investors. This is accomplished by creating enhanced working conditions, personal and professional growth opportunities, improved decision-making processes, and augmented long-term financial performance (Herremans, Nazari & Mahmoudian, 2016). It has also been observed that

employee motivation, satisfaction, and productivity can be boosted when organizations espouse sustainable practices and value-driven goals (Pellegrini, Rizzi & Frey, 2018).

This research provides practical evidence to back the proposition that sustainable practices are not just good for the environment but also beneficial for internal stakeholders. It outlines how organizations can amplify value for their internal stakeholders through sustainable practices, promoting a sustainability-oriented culture, improving communication, and incentivizing stakeholder engagement.

3. Research question 3: How can companies create significant value for external stakeholders through a genuine dedication to sustainability?

Adoption of sustainable practices can allow businesses to deliver significant value to external stakeholders, including customers, suppliers, and local communities (Meixell & Luoma, 2015). The study suggests that dedication to sustainability can foster customer loyalty, sturdy supplier relationships, and proactive community interaction (Bocken, Rana & Short, 2015). Companies can establish robust connections with external stakeholders by investing in eco-friendly processes, endorsing fair trade, practicing ethical sourcing, and initiating community development projects (Chuang & Huang, 2018).

The research contributes to the existing literature by outlining how a genuine commitment to sustainability can create value for external stakeholders. This includes supplying top-tier sustainable products, practicing fair business conduct, demonstrating transparency, and investing in community enrichment initiatives.

This research underlines the critical role of strategic sustainability integration in business operations. The findings shine a light on the mechanisms through which sustainability can be embedded within an organization's DNA, thus delivering significant value to internal and external stakeholders, and contributing positively to broader societal and environmental health.

4.2 Interpretation of findings

The principal aim in deciphering the outcomes of this research is to comprehend the necessity of intertwining sustainability with corporate strategies, the ways it fabricates value for internal and external stakeholders, and the mechanisms that facilitate this process. The interpretation of these outcomes aligns closely with the prevailing literature on this topic, thereby contributing to the theoretical understanding and practical application of sustainability within the corporate sphere.

4.2.1 Integration of Sustainability into Corporate Strategy

Connecting to Research Question 1, the investigation illuminated that intrinsic and extrinsic motivations propel the infusion of sustainability into corporate strategies. These revelations reaffirm the principles of Stakeholder Theory, which contend that businesses are accountable to all their stakeholders (Galpin, Whitttington & Bell, 2015). Intrinsic motivations align with the normative dimension of this theory, implying that organizations intertwine sustainability as it is ethically appropriate. Extrinsic motivations correlate with the instrumental aspect of the theory, positing that sustainable practices can lead to positive business outcomes, such as enhanced reputation and customer loyalty (Orsato, Garcia, Mendes-Da-Silva, Simonetti & Monzoni, 2015).

The systematic approach to sustainability integration identified in the study is congruous with the existing literature, further confirming the importance of a well-structured sustainability strategy (Turnheim et al., 2015). This research augments the understanding of sustainability integration by presenting a comprehensive roadmap for businesses, making a unique contribution to the field.

4.2.2 Value Creation for Internal Stakeholders

For Research Question 2, the study findings reveal that a genuine commitment to sustainability creates value for internal stakeholders, enhancing their work environment and professional development, thus improving long-term financial performance. This aligns with the literature on the Resource-Based View (RBV), which emphasizes the importance of internal resources and capabilities in driving competitive advantage (Lloret, 2016). In this context, employees are a key resource, and improving their motivation, satisfaction, and productivity through sustainability initiatives can help businesses gain an edge (Davidescu, Apostu, Paul & Casuneanu, 2020).

This research extends the existing knowledge by demonstrating how sustainability initiatives can be specifically tailored to deliver value to internal stakeholders. It reveals that a culture of sustainability, enhanced communication, and stakeholder engagement are instrumental in this value-creation process.

4.2.3 Value Creation for External Stakeholders

In addressing Research Question 3, the research finds that companies can create substantial value for external stakeholders by genuinely dedicating themselves to sustainability. These stakeholders appreciate businesses that demonstrate sustainable practices, often leading to increased customer loyalty and stronger supplier relationships. This aligns with the Relationship Marketing Theory, which accentuates the significance of enduring stakeholder relationships for business prosperity (Meixell & Luoma, 2015).

This research expands on this theory by elucidating how businesses can offer value to external stakeholders through sustainability endeavors. It uniquely contributes by identifying pivotal strategies, such as open reporting and ethical supply chain administration, as critical for fortifying these relationships.

4.2.4 Research Limitations

While this research offers valuable insights into integrating sustainability into corporate strategy, it is not without limitations. As the study relies on a literature review approach, it does not include primary data from specific businesses. Therefore, the findings may not reflect the nuances and complexities that individual organizations face when implementing sustainability strategies. Furthermore, the study's scope is limited by the breadth of the existing literature, implying that less-explored areas of sustainability strategy might not have been thoroughly addressed.

Additionally, potential biases exist in the interpretation of the findings. Although the interpretation is grounded in theoretical frameworks, subjectivity cannot be eliminated, which may affect the generalizability of the findings. Despite these limitations, the research offers a comprehensive understanding of sustainability integration into corporate strategy and its value to internal and external stakeholders, paving the way for further empirical studies.

4.3 Implications and recommendations

4.3.1 Theoretical Implications

The findings of this research have considerable theoretical implications, extending the understanding of how sustainability can be systematically integrated into corporate strategies. In line with the Stakeholder Theory, the study contributes to a deeper comprehension of the intrinsic and extrinsic motivations driving companies to adopt sustainable practices (Dyllick & Muff, 2016). Furthermore, the study's insights into how sustainability practices influence stakeholder value resonate with the principles of the Resource-Based View (Lloret, 2016) and Relationship Marketing Theory (Meixell & Luoma, 2015), respectively.

The study breaks new ground by providing a comprehensive roadmap for sustainability integration, a resourceful contribution to the field's literature. The theoretical viewpoints offered by this research contribute to the academic discourse surrounding sustainability within the corporate context and its ramifications for stakeholders.

4.3.2 Practical Implications

This research provides practical and beneficial insights for businesses intending to weave sustainability into their strategic plan. It details a roadmap for corporations to follow, pinpointing significant sustainability challenges, designing a meticulous strategy to address these, and eventually, the declaration and exhibition of their sustainability indexes.

Defining clear KPIs plays a pivotal rule in the successful implementation of a sustainability strategy. Such KPIs should be well defined and adhere to the SMART criteria, providing a roadmap for measuring and monitoring the progress of the sustainability strategy implementation and development. SMART KPIs can be an essential tool for managers to effectively measure the implementation of the strategy and guiding the organization on its path to transformation.

The study emphasizes the critical need for constant stakeholder recognition, involvement, and capacity development. It signals corporations need to consider the anticipations of often overlooked stakeholders, thereby fostering inclusivity and variety. Additionally, it brings into light the regulatory and legal framework that is expected to increasingly affect companies, as well as their leadership. Members of boards of directors, supervisory boards as well as managers must be aware of their future ESG due diligence obligations and proactively implement the necessary measures to ensure compliance within their companies. These insights carry meaningful implications for managers, providing them with the essential understanding required to oversee sustainability practices effectively.

4.3.3 Policy Implications

The policy implications of this research are manifold. The findings could inform public policy development, advocating for regulations that foster and incentivize sustainable practices in corporations. Insights regarding the benefits of sustainability to both internal and external stakeholders could help shape policies that encourage businesses to adopt a more inclusive, ethical, and sustainable approach.

The recommendations put forth in this study regarding reporting and disclosing metrics could play a pivotal role in shaping more rigid and standardized reporting structures, thereby promoting increased transparency in corporate sustainability practices.

4.3.4 Recommendations for Future Research

Although this investigation offers significant insights into the amalgamation of sustainability into corporate strategy, it opens multiple paths for prospective research. Firstly, the present study's reliance on a literature review calls for empirical investigations exploring actual business practices and experiences with sustainability integration. Case studies or surveys could help better understand this context's challenges and success factors.

Secondly, the research touches upon the significance of technology in stakeholder identification and continuous monitoring. Future research could delve deeper into the role of digital technologies and big data in facilitating sustainable practices.

Lastly, given the increasing global focus on climate change, future studies could explore how businesses can integrate climate resilience into their corporate strategies. Future research following these lines could yield a more comprehensive understanding of the business implications of climate change and propose strategies to alleviate potential risks.

By taking into account the insights and recommendations made by this research, future investigations can build on this foundation and continue to evolve the comprehension of sustainability integration into corporate strategy.

CONCLUSION

In this research, an in-depth examination was undertaken on the integration of sustainability into corporate strategy, an area growing in relevance in the contemporary global business environment. The reasons and methodologies for integrating sustainability into a company's strategy were explored, underscoring the potential value it can generate for both internal and external stakeholders. The extensive literature review conducted during the research established a solid theoretical foundation and identified several vital themes and concepts pertinent to the central objectives of the investigation.

The initial exploration revolved around the motivations and strategic approaches to sustainability. It was discovered that a mix of intrinsic and extrinsic factors influences corporations to adopt sustainability practices. Ethical considerations and commitment to societal and environmental well-being represented the intrinsic factors. In contrast, enhancing brand reputation, customer loyalty, operational efficiency, and financial performance acted as extrinsic motivators. The need for a strategic approach to sustainability that includes strategy formation, stakeholder identification, materiality assessment, and a comprehensive plan to tackle sustainability issues was emphasized.

Regarding the value generated for stakeholders, the study's findings reaffirmed the critical importance of a genuine commitment to sustainability. For internal stakeholders such as employees, managers, and shareholders, sustainable practices could improve work environments, professional development opportunities, better decision-making, and increased financial performance in the long run. For external stakeholders, including customers, suppliers, and the local community, sustainable practices could yield benefits such as customer loyalty, stronger supplier relationships, and positive community engagement.

Moreover, the research also considered the reporting and disclosure of sustainability metrics and the implementation of sustainability strategies, highlighting the importance of transparency and actionability.

The study's primary findings were critically examined and interpreted against the research objectives and relevant theoretical frameworks, providing an opportunity to link theoretical perspectives with businesses' concerns and motivations. The research extended existing knowledge in the field by shedding light on how companies could navigate their sustainability journey and providing evidence of the value sustainable practices could create for stakeholders.

The implications of the study are manifold. Theoretically, the research contributes to scholarly dialogue in stakeholder theory, resource-based view, and relationship marketing theory. On a practical level, it offers actionable insights for businesses and managers aiming to incorporate sustainability into their strategic framework. On a policy level, the findings could inform the development of public policies and regulations that encourage and incentivize sustainable practices in corporations.

Future research was recommended to further explore the integration of sustainability into corporate strategy, especially from an empirical standpoint. Other potential avenues for exploration included the role of digital technologies and big data in facilitating sustainable practices and integrating climate resilience into corporate strategies.

This research underscores the importance of integrating sustainability into corporate strategy and illuminates the potential value it can deliver to internal and external stakeholders. As businesses face mounting pressure from various stakeholders to act responsibly and contribute positively to societal and environmental well-being, this study is a valuable resource for companies seeking to embark on their sustainability journey. It reiterates the significance of sustainability and provides a structured approach to integrating sustainability into corporate strategy. It is hoped that the insights and recommendations from this study will spur further academic inquiry in this field and guide businesses in their sustainable strategic planning.

LIST OF REFERENCES

1. Aarseth, W., Ahola, T., Aaltonen, K., Økland, A., & Andersen, B. (2017). Project sustainability strategies: A systematic literature review. *International Journal of Project Management 35*(6), 1071–1083.

2. Abdelkafi, N., & Täuscher, K. (2016). Business models for sustainability from a system dynamics perspective. *Organization & Environment, 29*(1), 74–96. doi:10.1177/1086026615592930

3. Accenture. (2019). *Accenture Chemicals Global Consumer Sustainability Survey.* Accenture. Retrieved May 15, 2023, from https://www.slideshare.net/accenture/accenture-chemicals-global-consumer-sustainability-survey-2019

4. Adams, C. (2015). The international integrated reporting council: a call to action. *Critical Perspectives on Accounting, 27*, 23–28. doi:10.1016/j.cpa.2014.07.001

5. Adams, R., Jeanrenaud, S., Bessant, J., Denyer, D., & Overy, P. (2016). Sustainability-oriented innovation: A systematic review. *International Journal of Management Reviews, 18*(2), 180–205. doi:10.1111/ijmr.12068

6. Adro, F., & Fernandes, C. (2022). Social entrepreneurship and social innovation: Looking inside the box and moving out of it. *Innovation: The European Journal of Social Science Research, 35*(4), 704–730. doi:10.1080/13511610.2020.1870441

7. Agarwal, S., Lenka, U., Singh, K., Agrawal, V., & Agrawal, A. (2020). A qualitative approach towards crucial factors for sustainable development of women social entrepreneurship: Indian cases. *Journal of Cleaner Production, 274*, 123135. doi:10.1016/j.jclepro.2020.123135

8. Akomea-Frimpong, I., Adeabah, D., Ofosu, D., & Tenakwah, E. (2022). A review of studies on green finance of banks, research gaps and future directions. *Journal of Sustainable Finance & Investment, 12*(4), 1241–1264. doi:10.1080/20430795.2020.1870202

9. Alhaddi, H. (2015). Triple bottom line and sustainability: A literature review. *Business and Management Studies, 1*(2), 6–10. doi:10.11114/bms.v1i2.752

10. Alseshi, A., Haitham, N., & Khare, N. (2018). The impact of sustainability practices on corporate financial performance: Literature trends and future research potential. *Sustainability 10*(2), 494.

11. Amel-Zadeh, A., & Serafeim, G. (2018). Why and how investors use ESG information: Evidence from a global survey. *Financial Analysts Journal, 74*(3), 87–103.

12. Amrutha, V., & Geetha, S. (2020). A systematic review on green human resource management: Implications for social sustainability. *Journal of Cleaner Production, 247*, 119–131. doi:10.1016/j.jclepro.2019.119131

13. Anderson, D. (2006). The critical importance of sustainability risk management. *Risk Management, 53*(4), 66–72.

14. Anderson, S. W. (2006). Managing costs and cost structure throughout the value chain: research on strategic cost management. *Handbooks of Management Accounting Research, 2*, 481–506. doi:10.1016/S1751-3243(06)02001-3

15. Antoncic, M. (2019). Why sustainability? Because risk evolves and risk management should too. *Journal of Risk Management in Financial Institutions, 12*(3), 206–216.

16. Appel, D. (2017, June 05). *Investors move to limit impact of climate change on their portfolios*. Retrieved May 28, 2023, from Pensions&Investments: https://www.pionline.com/article/20170605/ONLINE/170609953/investors-move-to-limit-impact-of-climate-change-on-their-portfolios

17. Arora, N., Fatima, T., Mishra, I., Verma, M., Mishra, J., & Mishra, V. (2018). Environmental sustainability: challenges and viable solutions. *Environmental Sustainability, 1*, 309–340. doi:https://doi.org/10.1007/s42398-018-00038-w

18. Arowoshegbe, A., Emmanuel, U., & Gina, A. (2016). Sustainability and triple bottom line: An overview of two interrelated concepts. *Igbinedion University Journal of Accounting, 2*(16), 88–126. Retrieved June 02, 2023, from https://www.researchgate.net/publication/322367106_SUSTAINABILITY_AND_TRIPLE_BOTTOM_LINE_AN_OVERVIEW_OF_TWO_INTERRELATED_CONCEPTS

19. Artz, J., Müller, T., Thenert, K., Kleinekorte, J., Meys, R., Sternberg, A., . . . Leitner, W. (2018). Sustainable conversion of carbon dioxide: an integrated review of catalysis and life cycle assessment. *Chemical reviews, 118*(2), 434–504. doi:10.1021/acs.chemrev.7b00435

20. Attah-Boakye, R., Adams, K., Yu, H., & Koukpaki, A. (2022). Eco-environmental footprint and value chains of technology multinational enterprises operating in emerging economies. *Strategic Change, 31*(1), 99–116. doi:10.1002/jsc.2479

21. Backović, N., & Ilić, B. (2022). Managing Costs of Renewable Energy Companies for Sustainable Business. In M. Mihić, S. Jednak, & G. Savić, *Sustainable Business Management and Digital Transformation: Challenges and Opportunities in the Post-COVID Era* (pp. 343–359). Cham: Springer International Publishing. doi:10.1007/978-3-031-18645-5_21

22. Battistella, C., Cicero, L., & Preghenella, N. (2021). Sustainable organisational learning in sustainable companies. *The Learning Organization, 28*(1), 15–31. doi:10.1108/TLO-05-2019-0074

23. Baumgartner, R., & Rauter, R. (2017). Strategic perspectives of corporate sustainability management to develop a sustainable organization. *Journal of Cleaner Production, 140*, 81–92. doi:10.1016/j.jclepro.2016.04.146

24. Baumüller, J., & Sopp, K. (2022). Double materiality and the shift from non-financial to European sustainability reporting: Review, outlook and implications. *Journal of Applied Accounting Research, 23*(1), 8–28. doi: 10.1108/JAAR-04-2021-0114

25. Bellucci, M., Simoni, L., Acuti, D., & Manetti, G. (2019). Stakeholder engagement and dialogic accounting: Empirical evidence in sustainability reporting. *Accounting, Auditing & Accountability Journal, 32*(5), 1467–1499. doi:10.1108/AAAJ-09-2017-3158

26. Beske, F., Haustein, E., & Lorson, P. (2020). Materiality analysis in sustainability and integrated reports. *Sustainability Accounting, Management and Policy Journal, 11*(1), 162–186. doi:10.1108/SAMPJ-12-2018-0343

27. Bird, R., & Davis-Nozemack, K. (2018). Tax avoidance as a sustainability problem. *Journal of Business Ethics, 151*, 1009–1025. doi:10.1007/s10551-016-3162-2

28. Blok, V., Wesselink, R., Studynka, O., & Kemp, R. (2015). Encouraging sustainability in the workplace: A survey on the pro-environmental behaviour of university employees. *Journal of cleaner production, 106*, 55–67. doi:10.1016/j.jclepro.2014.07.063

29. Bocken, N., Rana, P., & Short, S. (2015). Value mapping for sustainable business thinking. *Journal of Industrial and Production Engineering, 32*(1), 67–81. doi:10.1080/21681015.2014.1000399

30. Bonacchi, M., & Rinaldi, L. (2007). DartBoards and Clovers as new tools in sustainability planning and control. *Business Strategy and the Environment, 16*(7), 461–473. doi:10.1002/bse.596

31. Bonini, S., & Görner, S. (2011, October 1). *The business of sustainability: Putting it into practice*. Retrieved October 01, 2021, from McKinsey: https://www.mckinsey.com/business-functions/sustainability/our-insights/the-business-of-sustainability-mckinsey-global-survey-results

32. Bower, J., & Paine, L. (2017). The error at the heart of corporate leadership. *Harvard Business Review 95*(3), 50–60.

33. Braam, G., de Weerd, L., Hauck, M., & Huijbregts, M. (2016). Determinants of corporate environmental reporting: The importance of environmental performance and assurance. *Journal of cleaner production, 129*, 724–734. doi:10.1016/j.jclepro.2016.03.039

34. Brand, F. B., Katharina, H., EU, S., Marie-Christin, W., Herbert, W., & Claus-Heinrich, D. (2018). Overcoming current practical challenges in sustainability and integrated reporting: insights from a Swiss field study. *Sustainability Management Forum, 26*(1-4), 35–46. doi:10.1007/s00550-018-0474-y

35. Brunner, P., & Rechberger, H. (2015). Waste to energy–key element for sustainable waste management. *Waste management, 37*, 3–12. doi:10.1016/j.wasman.2014.02.003

36. Busse, C. (2016). Doing well by doing good? The self-interest of buying firsm and sustainable supply chain management. *Journal of Suuply Chain Management, 52(2)*, 28–47.

37. Cabot, J., Easterbrook, S., Horkoff, J., Lessard, L., Liaskos, S., & Mazón, J. (2009). Integrating sustainability in decision-making processes: A modelling strategy. In *2009 31st International Conference on Software Engineering-Companion Volume* (pp. 207–210). IEEE. doi:10.1109/ICSE-COMPANION.2009.5070983

38. Calabrese, A., Costa, R., Ghiron, N., & Menichini, T. (2017). Materiality analysis in sustainability reporting: a method for making it work in practice. *European Journal of Sustainable Development, 6*(3), 439–439. doi:10.14207/ejsd.2017.v6n3p439

39. Calabrese, A., Costa, R., Levialdi, N., & Menichini, T. (2019a). A fuzzy AHP method for the selection of relevant sustainability issues. *Technological Forecasting and Social Change, 139*, 155–168.

40. Calabrese, A., Costa, R., Levialdi, N., & Menichini, T. (2019b). Materiality analysis in sustainability reporting: A tool for directing corporate sustainability towards emerging economic, environmental and social opportunities. *Technological and Economic Development of Economy, 25*(5), 1016–1038. doi:10.3846/tede.2019.10550

41. Calic, G., & Mosakowski, E. (2016). Kicking off social entrepreneurship: How a sustainability orientation influences crowdfunding success. *Journal of Management Studies, 53*(5), 738–767. doi:10.1111/joms.12201

42. Calik, E., & Bardudeen, F. (2016). A measurement scale to evaluate sustainable innovation performance in manufacturing organizations. *Procedia Cirp, 40*, 449–454. doi:10.1016/j.procir.2016.01.091

43. Camilleri, M. (2015). Valuing stakeholder engagement and sustainability reporting. *Corporate Reputation Review, 18*, 210–222. doi:10.1057/crr.2015.9

44. Capozucca, P. (2012, January 1). *Sustainability 2.0 - Using sustainability to drive business innovation and growth*. Retrieved May 23, 2023, from Deloitte Insights: https://www2.deloitte.com/us/en/insights/deloitte-review/issue-10/sustainability-2-0-innovation-and-growth-through-sustainability.html

45. Caputo, F., Evangelista, F., & Russo, G. (2018). The role of information sharing and communication strategies for improving stakeholder engagement. In *Business models for strategic innovation* (pp. 25–43). London: Routledge. doi:10.4324/9781351257923-3

46. Catzín-Tamayo, A., Frausto-Martínez, O., & Arroyo-Arcos, L. (2022). Stakeholder mapping and promotion of Sustainable Development Goals in local management. *Journal of Environmental Studies and Sciences, 12*(3), 611–626. doi:10.1007/s13412-022-00761-1

47. Chen, Y., Huang, A., Wang, T., & Chen, Y. (2020). Greenwash and green purchase behaviour: the mediation of green brand image and green brand loyalty. *Total Quality Management & Business Excellence, 31*(1-2), 194–209. doi:10.1080/14783363.2018.1426450

48. Chodnicka-Jaworska, P. (2021). ESG as a Measure of Credit Ratings. *Risks, 9* (12), 226. doi:10.3390/risks9120226

49. Chuang, S., & Huang, S. (2018). The effect of environmental corporate social responsibility on environmental performance and business competitiveness: The mediation of green information technology capital. *Journal of business ethics, 150*, 991–1009. doi:10.1007/s10551-016-3167-x

50. Colvin, R., Witt, G., & Lacey, J. (2016). Approaches to identifying stakeholders in environmental management: Insights from practitioners to go beyond the 'usual suspects'. *Land use policy, 52*, 266–276. doi:10.1016/j.landusepol.2015.12.032

51. Dangelico, R. M. (2015). Improving Firm Environmental Performance and Reputation: The Role of Employee Green Teams. *Business Strategy and the Environment, 24*(8), 735–749.

52. d'Arjuzon, R. (2012, October 20). *We're all in this together: engaging employees on sustainability*. Retrieved May 28, 2023, from The Guardian: https://www.theguardian.com/sustainable-business/employees-engaged-sustainability-how

53. Das, K. (2020). Planning environmental and economic sustainability in closed-loop supply chains. *Operations and Supply Chain Management: An International Journal, 13*(1), 64–81. doi:10.31387/oscm0400253

54. Davidescu, A., Apostu, S., Paul, A., & Casuneanu, I. (2020). Work flexibility, job satisfaction, and job performance among Romanian employees—Implications for sustainable human resource management. *Sustainability, 12*(15), 60–86. doi:10.3390/su12156086

55. de Andrade, L., Pellegrini Filho, A., Solar, O., Rígoli, F., de Salazar, L., Serrate, P., . . . Atun, R. (2015). Social determinants of health, universal health coverage, and sustainable development: case studies from Latin American countries. *The Lancet, 385*(9975), 1343–1351. doi:10.1016/S0140-6736(14)61494-X

56. Dressler, M. (2023). Sustainability as Vehicle for Strategic Entrepreneurship: The German Wine Industry. In *Handbook of Research on Sustainability Challenges in the Wine Industry* (pp. 95–120). IGI Global. doi:10.4018/978-1-6684-6942-2.ch007

57. Duran, D., Gogan, L., Artene, A., & Duran, V. (2015). The components of sustainable development-a possible approach. *Procedia Economics and Finance, 26*, 806–811. doi:10.1016/S2212-5671(15)00849-7

58. Dyllick, T., & Muff, K. (2016). Clarifying the meaning of sustainable business: Introducing a typology from business-as-usual to true business sustainability. *Organization & Environment, 29*(2), 156–174. doi:10.1177/1086026615575176

59. Eizenberg, E., & Jabareen, Y. (2017). Social sustainability: A new conceptual framework. *Sustainability, 9*(1), 68. doi:10.3390/su9010068

60. Elkington, J. (1997). The triple bottom line. *Environmental management: Readings and cases, 2.* Los Angeles - London - New Delhi - Singapore: Sage Publications.

61. Elrayah, M., & Semlali, Y. (2023). Sustainable Total Reward Strategies for Talented Employees' Sustainable Performance, Satisfaction, and Motivation: Evidence from the Educational Sector. *Sustainability, 15*(2), 1605. doi:10.3390/su15021605

62. Engert, S., & Baumgartner, R. (2016). Corporate sustainability strategy–bridging the gap between formulation and implementation. *Journal of cleaner production, 113*, 822–834. doi:10.1016/j.jclepro.2015.11.094

63. Ernst & Young. (2015). *There's no reward without risk - EY's global governance, risk and compliance survey.* Retrieved May 21, 2023, from Ernst & Young: https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/digital/theres-no-reward-without-risk-EYs-global-governance-risk-and-compliance-survey-2015.pdf

64. Ernst & Young. (2019, July). *For CEOs, are the days of sidelining global challenges numbered?* Retrieved May 28, 2023, from Ernst & YoungTopics: https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/growth/ey-ceo-imperative-exec-summ-single-spread-final.pdf

65. Ernst & Young. (2021). *Is your ESG data unlocking long-term value?* Ernst & Young. Retrieved April 14, 2023, from https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/assurance/assurance-pdfs/ey-institutional-investor-survey.pdf

66. European Banking Authority. (2021). *EBA Report on Management and Supervision of ESG Risks for Credit Institutions and Investment Firms.* Paris: European Banking Authority.

67. Evans-Greenwood, P., Auld, L., Robertson, R., & D'Addona, A. (2023, January 30). *How tax can help untangle the Gordian sustainability knot*. Retrieved May 29, 2023, from Deloitte: https://www.deloitte.com/global/en/our-thinking/insights/topics/environmental-social-governance/tax-strategy-sustainability-and-climate-change.html

68. Fella, S., & Bausa, E. (2023). Green or Greenwashed? Examining Whether and When Consumers Are Able to Identify Greenwashing. *Business Research Proceedings, 1*(1), 52–52. doi:10.51300/BRP-2023-95

69. Ferrero-Ferrero, I., Fernández-Izquierdo, M., Muñoz-Torres, M., & Bellés-Colomer, L. (2018). Stakeholder engagement in sustainability reporting in higher education: An analysis of key internal stakeholders' expectations. *International Journal of Sustainability in Higher Education, 19*(2), 313–336. doi:10.1108/IJSHE-06-2016-0116

70. Ferrero-Ferrero, I., León, R., & Muñoz-Torres, M. (2021). Sustainability materiality matrices in doubt: may prioritizations of aspects overestimate environmental performance? *Journal of Environmental Planning and Management, 64*(3), 432–463. doi:10.1080/09640568.2020.1766427

71. Figge, F., Hahn, T., Schaltegger, S., & Wagner, M. (2002). The sustainability balanced scorecard- linking sustainability management to business strategy. *Business strategy and the environment, 11*(5), 269–284.

72. Fonseca, J. (2020). The rise of ESG investing: How aggresive tax avoidance affects corporate governance & ESG analysis. *Illinois Business Law Journal*, 1–18.

73. Friedman, M. (1970). A Friedman doctrine- The Social Responsibility of Business Is to Increase Its Profits. *The New York Times*, 13–17.

74. Friedman, R., & Campbell, D. (2023). An Experimental Study of the Impact of Greenwashing on Attitudes toward Fossil Fuel Corporations' Sustainability Initiatives. *Environmental Communication*, 1–16. doi:10.1080/17524032.2023.2215959

75. Galpin, T., Whitttington, J., & Bell, G. (2015). Is your sustainability strategy sustainable? Creating a culture of sustainability. *Corporate Governance, 15*(1), 1–17. doi:10.1108/CG-01-2013-0004

76. Garst, J., Maas, K., & Suijs, J. (2022). Materiality Assessment Is an Art, Not a Science: Selecting ESG Topics for Sustainability Reports. *California Management Review, 65*(1), 64–90. doi:10.1177/00081256221120692

77. Gaskell, A. (2021, October 31). *Employees Demand That We Become More Sustainable*. Retrieved May 28, 2023, from Forbes: https://www.forbes.com/sites/adigaskell/2021/10/31/employees-demand-that-we-become-more-sustainable/?sh=629237c3f807

78. Geldres-Weiss, V., Gambetta, N., Massa, N., & Geldres-Weiss, S. (2021). Materiality matrix use in aligning and determining a firm's sustainable business model archetype and triple bottom line impact on stakeholders. *Sustainability, 13*(3), 1065. doi:10.3390/su13031065

79. Gius, D., Mieszala, J.-C., Panayiotou, E., & Poppensieker, T. (2018, October 1). *Value and resilience through better risk management*. Retrieved May 22, 2023, from https://www.mckinsey.com/capabilities/risk-and-resilience/our-insights/value-and-resilience-through-better-risk-management

80. Gorman-Murray, A., & Lane, R. (2016). Rethinking Responsibility? Household Sustainability in the Stakeholder Society. In *Material Geographies of Household Sustainability* (pp. 189–206). Routledge. doi:10.4324/9781315594293

81. Govindan, K., Rajendran, S., Sarkis, J., & Murugesan, P. (2015). Multi criteria decision making approaches for green supplier evaluation and selection: a literature review. *Journal of cleaner production, 98*, 66–83. doi:10.1016/j.jclepro.2013.06.046

82. Grabs, J. (2020). Assessing the institutionalization of private sustainability governance in a changing coffee sector. *Regulation & governance, 14*(2), 362–387. doi:10.1111/rego.12212

83. Granskog, A., Hannon, E., Hieronimus, S., Klaeyle, M., & Winkle, A. (2021, April 28). *How companies capture the value of sustainability: Survey findings*. Retrieved May 25, 2023, from McKinsey Sustainability: https://www.mckinsey.com/capabilities/sustainability/our-insights/how-companies-capture-the-value-of-sustainability-survey-findings

84. Gu, W., Wang, J., Hua, X., & Liu, Z. (2021). Entrepreneurship and high-quality economic development: Based on the triple bottom line of sustainable development. *International entrepreneurship and management journal, 17*, 1–27. doi:10.1007/s11365-020-00684-9

85. Guix, M., Font, X., & Bonilla-Priego, M. (2019). Materiality: stakeholder accountability choices in hotels' sustainability reports. *International Journal of Contemporary Hospitality Management, 31*(6), 2321–2338. doi:10.1108/IJCHM-05-2018-0366

86. Hammer, J., & Pivo, G. (2017). The triple bottom line and sustainable economic development theory and practice. *Economic Development Quarterly, 31*(1), 25–36. doi:10.1177/0891242416674808

87. Harre, N., Blythe, C., McLean, L., & Khan, S. (2022). A People-Focused Systems Approach to Sustainability. *American Journal of Community Psychology, 69*(1-2), 114–133. doi:10.1002/ajcp.12550

88. Hatami, A., Hermes, J., Keränen, A., & Ulkuniemi, P. (2023). Creating Social Sustainability Through Distributing Leadership and Co-Responsibility in Corporate Volunteering. *South Asian Journal of Business and Management Cases, 12*(1), 81–96. doi:10.1177/22779779231154648

89. Hedstrom, G. S., Shopley, J. B., & LeDuc, C. M. (2000). Realizing the Sustainable Development Premium. *Prism-Cambridge Massachusetts-,*(1), 5–20.

90. Helsel, S. (2022). The Truth Is Always in Style: Targeting Greenwashed Advertising in the Fashion Industry. *Sustainable Development Law & Policy, 21*(2)*,* 15–16.

91. Herremans, I., Nazari, J., & Mahmoudian, F. (2016). Stakeholder relationships, engagement, and sustainability reporting. *Journal of business ethics, 138*, 417–435. doi:10.1007/s10551-015-2634-0

92. Hidayat, B., Yuliana, E., Wicaksono, B., Matara, K., Wulandari, S., Amri, N., & Saksono, H. (2021). Objectives of Sustainable Development and Analysis of People's Economy Improvement. In *International Conference on Sustainable Innovation Track Humanities Education and Social Sciences (ICSIHESS 2021)* (pp. 182–186). Atlantis Press. doi:10.2991/assehr.k.211227.030

93. Holdgate, M. W. (1987). *Our Common Future: The Report of the World Commission on Environment and Development.* Oxford & New York: Oxford University Press.

94. Hu, G., Wang, X., & Wang, Y. (2021). Can the green credit policy stimulate green innovation in heavily polluting enterprises? Evidence from a quasi-natural experiment in China. *Energy Economics, 98*, 105134. doi:10.1016/j.eneco.2021.105134

95. Huq, F., Chowdhury, I., & Klassen, R. (2016). Social management capabilities of multinational buying firms and their emerging market suppliers: An exploratory study of the clothing industry. *Journal of Operations Management, 46*, 19–37. doi:10.1016/j.jom.2016.07.005

96. IBM. (2013). *IBM Corporate Service Corps Program*. Retrieved May 25, 2023, from https://www.ibm.com/ibm/history/ibm100/us/en/icons/corporateservicecorps/

97. Ioanniou, I., & Serafeim, G. (2019, February 11). *Yes, Sustainability Can Be a Strategy*. Retrieved October 1, 2021, from Harvard Business Review: https://hbr.org/2019/02/yes-sustainability-can-be-a-strategy

98. Isenmann, R., Bey, C., & Welter, M. (2007). Online reporting for sustainability issues. *Business Strategy and the Environment, 16*(7), 487–501. doi:10.1002/bse.597

99. Isil, O., & Hernke, M. (2017). The triple bottom line: A critical review from a transdisciplinary perspective. *Business Strategy and the Environment, 26*(8), 1235–1251. doi:10.1002/bse.1982

100. Jiao, Z., Ran, L., Zhang, Y., Li, Z., & Zhang, W. (2018). Data-driven approaches to integrated closed-loop sustainable supply chain design under multi-uncertainties. *Journal of Cleaner Production, 185*, 105–127. doi:10.1016/j.jclepro.2018.02.255

101. Jones, K., & Rubin, P. H. (2001). Effects of harmful environmental events on reputations of firms. *Advances in financial economics* (pp.161–182). Emerald Group Publishing Limited.

102. Jones, P., Comfort, D., & Hillier, D. (2015). Materiality and external assurance in corporate sustainability reporting: An exploratory study of UK house builders. *Property Management, 33*(5), 430–450. doi:10.1108/PM-03-2015-0014

103. Jones, P., Comfort, D., & Hillier, D. (2016). Materiality in corporate sustainability reporting within UK retailing. *Journal of Public Affairs, 16*(1), 81–90. doi:10.1002/pa.1570

104. Jones, P., Hillier, D., & Comfort, D. (2016). Materiality and external assurance in corporate sustainability reporting: An exploratory study of Europe's leading commercial property companies. *Journal of European Real Estate Research, 9*(2), 147–170. doi:10.1108/JERER-07-2015-0027

105. Jørgensen, S., Mjøs, A., & Pedersen, L. (2022). Sustainability reporting and approaches to materiality: Tensions and potential resolutions. *Sustainability Accounting, Management and Policy Journal, 13*(2), 341–361. doi:10.1108/SAMPJ-01-2021-0009

106. Kaplan, R. S. (2009). Conceptual foundations of the balanced scorecard. *Handbooks of management accounting research, 3*, 1253–1269.

107. Karcıoğlu, R., & Öztürk, S. (2022). Sustainable cost management in the supply chain: A case analysis. *Holistic economics, 1*(1), 49–64. doi:10.55094/hoec.1.1.05

108. Khan, M., Serafeim, G., & Yoon, A. (2016). Corporate sustainability: First evidence on materiality. *The accounting review, 91*(6), 1697–1724. doi:10.2308/accr-51383

109. Kickul, J., Gundry, L., Mitra, P., & Berçot, L. (2018). Designing with purpose: advocating innovation, impact, sustainability, and scale in social entrepreneurship education. *Entrepreneurship Education and Pedagogy, 1*(2), 205–221. doi:10.1177/2515127418772177

110. Koberg, E., & Longoni, A. (2019). A systematic review of sustainable supply chain management in global supply chains. *Journal of cleaner production, 207*, 1084–1098. doi:10.1016/j.jclepro.2018.10.033

111. Kuhlman, T., & Farrington, J. (2010). What is Sustainability? *Sustainability 2*(11), 3436–3448.

112. Kumaran, D., Tan, R., & Nee, A. (2001). Environmental life cycle cost analysis of products. *Environmental Management and Health, 12*(3), 260–276. doi:10.1108/09566160110392335

113. Lacoste, S. (2016). Sustainable value co-creation in business networks. *Industrial Marketing Management, 52*, 151–162. doi:10.1016/j.indmarman.2015.05.018

114. Lamm, E., Tosti-Kharas, J., & King, C. (2015). Empowering employee sustainability: Perceived organizational support toward the environment. *Journal of Business Ethics, 128*, 207–220. doi:10.1007/s10551-014-2093-z

115. Le, T., & Nguyen, T. (2019). Practice environmental cost management accounting: The case of Vietnamese brick production companies. *Management Science Letters, 9*(1), 105–120. doi:10.5267/j.msl.2018.10.012

116. Li, J., & Leonas, K. (2019). Trends of sustainable development among luxury industry. In M. Gardetti, & S. Muthu, *Sustainable Luxury. Environmental Footprints and Eco-design of Products and Processes* (pp. 107–126). Singapore: Springer. doi:10.1007/978-981-13-0623-5_6

117. Lintukangas, K., Hallikas, J., & Kähkönen, A. (2015). The role of green supply management in the development of sustainable supply chain. *Corporate Social Responsibility and Environmental Management, 22*(6), 321–333. doi:10.1002/csr.1348

118. Lloret, A. (2016). Modeling corporate sustainability strategy. *Journal of Business Research, 69*(2), 418–425. doi:10.1016/j.jbusres.2015.06.047

119. Lončar, D., Paunković, J., Jovanović, V., & Krstić, V. (2019). Environmental and social responsibility of companies cross EU countries–Panel data analysis. *Science of the total environment, 657*, 287–296. doi:10.1016/j.scitotenv.2018.11.482

120. Lucchetti, M., Arcese, G., Martucci, O., & Montauti, C. (2019). Risk Assessment and Environmental Impacts: Economic and Social Implications. In P. De Vincentiis, F.

Culasso, & S. Cerrato, *The Future of Risk Management, Volume I* (pp. 109–129). Cham: Palgrave Macmillan. doi:10.1007/978-3-030-14548-4_5

121. Ma, H., & Park, S. (2021). Relationship between Corporate Sustainability Management and Sustainable Tax Strategies. *Sustainability, 13*(13), 7429. doi:10.3390/su13137429

122. Malone, S., Prewitt, K., Hackett, R., Lin, J., McKay, V., Walsh-Bailey, C., & Luke, D. (2021). The Clinical Sustainability Assessment Tool: measuring organizational capacity to promote sustainability in healthcare. *Implementation Science Communications, 2*, 1–12. doi:10.1186/s43058-021-00181-2

123. Mandičák, T., Mésároš, P., & Spišáková, M. (2021). Impact of information and communication technology on sustainable supply chain and cost reducing of waste management in Slovak construction. *Sustainability, 13*(14), 7966. doi:10.3390/su13147966

124. Manetti, G., & Bellucci, M. (2016). The use of social media for engaging stakeholders in sustainability reporting. *Accounting, Auditing & Accountability Journal, 29*(6), 985–1011. doi:10.1108/AAAJ-08-2014-1797

125. Mani, V., Agrawal, R., & Sharma, V. (2015). Social sustainability in the supply chain: analysis of enablers. *Management Research Review, 38*(9), 1016–1042. doi:10.1108/MRR-02-2014-0037

126. Martín-de Castro, G., Amores-Salvadó, J., & Navas-López, J. (2016). Environmental management systems and firm performance: Improving firm environmental policy through stakeholder engagement. *Corporate social responsibility and Environmental Management, 23*(4), 243–256. doi:10.1002/csr.1377

127. Masud, M., Rashid, M., Khan, T., Bae, S., & Kim, J. (2019). Organizational strategy and corporate social responsibility: The mediating effect of triple bottom line. *International journal of environmental research and public health, 16*(22), 4559. doi:10.3390/ijerph16224559

128. Mazars. (2019, September 20). *Integrating sustainability into risk management*. Retrieved May 22, 2023, from https://www.mazars.com/Home/Insights/Latest-insights/Integrating-sustainability-into-risk-management

129. McPhee, W. (2014). A new sustainability model: engaging the entire firm. *Journal of Business Strategy, 35*(2), 4–12. doi:10.1108/jbs-11-2013-0106

130. Meadows, D. H., Meadows, D. H., Randers, J., & Behrens III, W. W. (1972). *The limits to growth: a report to the club of Rome (1972).* New York: Universe Books.

131. Meixell, M., & Luoma, P. (2015). Stakeholder pressure in sustainable supply chain management: A systematic review. *International Journal of Physical Distribution & Logistics Management, 45*(1/2), 69–89. doi:10.1108/IJPDLM-05-2013-0155

132. Mella, P., & Gazzola, P. (2018). Corporate social responsibility through stakeholder engagement and entrepreneurial communication processes. *International Journal of Business Performance Management, 19*(1), 36–54. doi:10.1504/IJBPM.2018.088495

133. Miemczyk, J., & Luzzini, D. (2018). Achieving triple bottom line sustainability in supply chains: The role of environmental, social and risk assessment practices. *International Journal of Operations & Production Management, 39*(2), 238–259. doi:10.1108/IJOPM-06-2017-0334

134. More, P. (2019). The Impact of Greenwashing on Green Brand Trust from an Indian Perspective. *Asian Journal of Innovation & Policy, 8*(1), 162–179.

135. Morris, W., & Visser, E. (2023). *Tax is a crucial part of the ESG conversation*. Retrieved May 29, 2023, from PwC: https://www.pwc.com/gx/en/services/tax/publications/tax-is-a-crucial-part-of-esg-reporting.html

136. Newswire. (2022, February 14). *The Role of Risk Management in Sustainability Efforts*. Retrieved May 20, 2023, from Poole Thought Leadership: https://poole.ncsu.edu/thought-leadership/article/the-role-of-risk-management-in-sustainability-efforts/

137. NielsenIQ and McKinsey & Company. (2023). *Consumers care about sustainability - and back it up with their wallets.* NielsenIQ and McKinsey & Company. Retrieved May 20, 2023, from NielsenIQ: https://nielseniq.com/wp-content/uploads/sites/4/2023/02/Consumers-care-about-sustainability%E2%80%94and-back-it-up-with-their-wallets-FINAL.pdf

138. Niţescu, D., & Cristea, M. (2020). Environmental, Social and Governance Risks–New Challenges for the Banking Business Sustainability. *Amfiteatru Economic, 22*(55), 692–706. doi:10.24818/EA/2020/55/692

139. Nogueira, E., Gomes, S., & Lopes, J. (2022). The key to sustainable economic development: a triple bottom line approach. *Resources, 11*(5), 46. doi:10.3390/resources11050046

140. Ocean Tomo. (2022). *Intangible Asset Market Value Study.* Retrieved May 21. 2023, from Ocean Tomo: https://oceantomo.com/intangible-asset-market-value-study/

141. O'Grady, J. P. (2003). How sustainable is the idea of sustainability? . *Interdisciplinary Studies in Literature and Environment*, 1–10.

142. Organisation for Economic Co-operation and Development. (2020). *OECD Business and Finance Outlook 2020 Sustainable and resilient finance.* OECD.

143. Orsato, R., Garcia, A., Mendes-Da-Silva, W., Simonetti, R., & Monzoni, M. (2015). Sustainability indexes: why join in? A study of the 'Corporate Sustainability Index (ISE)'in Brazil. *Journal of Cleaner Production, 96*, 161–170. doi:10.1016/j.jclepro.2014.10.071

144. Owusu, P., & Asumadu-Sarkodie, S. (2016). A review of renewable energy sources, sustainability issues and climate change mitigation. *Cogent Engineering, 3*(1), 1167990. doi:10.1080/23311916.2016.1167990

145. Pellegrini, C., Rizzi, F., & Frey, M. (2018). The role of sustainable human resource practices in influencing employee behavior for corporate sustainability. *Business Strategy and the Environment, 27*(8), 1221–1232. doi:10.1002/bse.2064

146. Peng, B., Yan, W., Elahi, E., & Wan, A. (2022). Does the green credit policy affect the scale of corporate debt financing? Evidence from listed companies in heavy pollution industries in China. *Environmental Science and Pollution Research, 29*(1), 755–767. doi:10.1007/s11356-021-15587-7

147. Petersen, H., & Lemke, F. (2015). Mitigating reputational risks in supply chains. *Supply Chain Management: An International Journal, 20*(5), 495–510. doi:10.1108/SCM-09-2014-0320

148. Polese, F., Botti, A., Grimaldi, M., Monda, A., & Vesci, M. (2018). Social innovation in smart tourism ecosystems: How technology and institutions shape sustainable value co-creation. *Sustainability, 10*(1), 140. doi:10.3390/su10010140

149. Porter, M. E., & Kramer, M. R. (2006). The Link Between Competitive Advantage and Corporate Social Responsibility. *Harvard Business Review*, *84*(12), 78–92.

150. Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review*, *89*(4), 62–77.

151. Principles for Responsible Investment. (2022, January). *Signatory directory*. Retrieved May 25, 2023, from unpri.org: https://www.unpri.org/signatories/signatory-resources/signatory-directory

152. Purvis, B., Mao, Y., & Robinson, D. (2019). Three pillars of sustainability: in search of conceptual origins. *Sustainability Science 14*, 681–695.

153. Rahdari, A., Sepasi, S., & Moradi, M. (2016). Achieving sustainability through Schumpeterian social entrepreneurship: The role of social enterprises. *Journal of cleaner production, 137*, 347–360. doi:10.1016/j.jclepro.2016.06.159

154. Reeves, M., & Levin, S. (2021). Think biologically: messy management for a complex world. *Mastering the Science of Organizational Change*, 13–26.

155. Reimsbach, D., Schiemann, F., Hahn, R., & Schmiedchen, E. (2020). In the eyes of the beholder: Experimental evidence on the contested nature of materiality in sustainability reporting. *Organization & Environment, 33*(4), 624–651. doi:10.1177/1086026619875436

156. Roscoe, S., Subramanian, N., Jabbour, C., & Chong, T. (2019). Green human resource management and the enablers of green organisational culture: Enhancing a firm's environmental performance for sustainable development. *Business Strategy and the Environment, 28*(5), 737–749. doi:10.1002/bse.2277

157. Rossi, M., Germani, M., & Zamagni, A. (2016). Review of ecodesign methods and tools. Barriers and strategies for an effective implementation in industrial companies. *Journal of Cleaner Production, 129*, 361–373. doi:10.1016/j.jclepro.2016.04.051

158. Sala, S., Ciuffo, B., & Nijkamp, P. (2015). A systemic framework for sustainability assessment. *Ecological Economics, 119*, 314–325. doi:10.1016/j.ecolecon.2015.09.015

159. Salzmann, O., Ionescu-Somers, A., & Stegers, U. (2005). The business case for corporate sustainability: Literature review and research options. *European Management Journal, 23*, 27–36.

160. Schadewald, N. (2022, June 15). *How Your Drive for Sustainability Can Impact the Employee Experience*. Retrieved May 28, 2023, from SAP News Center: https://news.sap.com/2022/06/how-sustainability-impact-employee-experience/

161. Schaltegger, S., Christ, K., Wenzig, J., & Burritt, R. (2022). Corporate sustainability management accounting and multi-level links for sustainability–A systematic review. *International journal of management reviews, 24*(4), 480–500. doi:10.1111/ijmr.12288

162. Scherrer, Y., Daub, C., & Burger, P. (2007). Toward integrating sustainability into business strategy. *Business Strategy and the Environment, 16*(7), 459–460. doi:10.1002/bse.594

163. Schmuck, D., Matthes, J., & Naderer, B. (2018). Misleading consumers with green advertising? An affect–reason–involvement account of greenwashing effects in environmental advertising. *Journal of Advertising, 47*(2), 127–145. doi:10.1080/00913367.2018.1452652

164. Scordis, N., Suzawa, Y., Zwick, A., & Ruckner, L. (2014). Principles for Sustainable Insurance: Risk Management and Value. *Risk Management and Insurance Review, 17*(2), 265–276. doi:10.1111/rmir.12024

165. Scur, G., & Barbosa, M. (2017). Green supply chain management practices: Multiple case studies in the Brazilian home appliance industry. *Journal of cleaner production, 141*, 1293–1302. doi:10.1016/j.jclepro.2016.09.158

166. Serag, M. (2018). Towards A Consistent System of Sustainable Management Accounting for Enhancing Decisions Making: An Experimental Study. *Journal of Accounting and Auditing, 7*(1), 150–188. doi:10.21608/NAUS.2018.90024

167. Shiel, C., Leal Filho, W., do Paço, A., & Brandli, L. (2016). Evaluating the engagement of universities in capacity building for sustainable development in local communities. *Evaluation and program planning, 54*, 123–134. doi:10.1016/j.evalprogplan.2015.07.006

168. Shields, J., & Shelleman, J. M. (2015). Integrating sustainability into SME strategy. *Journal of Small Business Strategy, 25*(2), 59–78. Retrieved from https://libjournals.mtsu.edu/index.php/jsbs/article/view/561/529

169. Simon-Kucher & Partners. (2021, October). *Global Sustainability Study 2021 - Consumers are key players for sustainable future.* Simon-Kucher & Partners. Retrieved May 26, 2023, from simon-kucher.com: https://www.simon-kucher.com/sites/default/files/studies/Simon-Kucher_Global_Sustainability_Study_2021.pdf

170. Stiller, Y., & Daub, C. (2007). Paving the way for sustainability communication: evidence from a Swiss study. *Business Strategy and the Environment, 16*(7), 474–486. doi:10.1002/bse.599

171. Stocker, F., de Arruda, M., de Mascena, K., & Boaventura, J. (2020). Stakeholder engagement in sustainability reporting: a classification model. *Corporate Social Responsibility and Environmental Management, 27*(5), 2071–2080. doi:10.1002/csr.1947

172. Strange, T., & Bayley, A. (2008). *OECD insights sustainable development linking economy, society environment: Linking economy, society, environment.* OECD Publishing.

173. Sukoharsono, E. (2019). Sustaining a sustainability report by modifying triple bottom line to pentaple bottom line: an imaginary research dialogue. *The International Journal of Accounting and Business Society, 27*(1), 119–127. doi:10.21776/ub.ijabs.2019.27.1.7

174. Sustainable Stock Exchanges Initiative. (2022, February). *ESG Disclosure*. Retrieved June 09, 2023, from SSE Initiative: https://sseinitiative.org/esg-disclosure/

175. Tantalo, C., & Priem, R. (2016). Value creation through stakeholder synergy. *Strategic management journal, 37*(2), 314–329. doi:10.1002/smj.2337

176. Tantalo, C., & Priem, R. L. (2016). Value creation through stakeholder synergy. *Strategic management journal, 37*(2), 314–329.

177. Tenney, M. (2023). *How Important Sustainability Is To Employees*. Retrieved May 27, 2023, from Business Leadership Today: https://businessleadershiptoday.com/how-important-sustainability-is-to-employees/#:~:text=Sustainability%20is%20very%20important%20to%20employees%20and%20is,it%20gives%20meaning%20to%20the%20work%20they%20do.

178. Torelli, R., Balluchi, F., & Furlotti, K. (2020). The materiality assessment and stakeholder engagement: A content analysis of sustainability reports. *Corporate Social Responsibility and Environmental Management, 27*(2), 470–484. doi:10.1002/csr.1813

179. Tóth, Á., & Suta, A. (2021). Global Sustainability Reporting in the Automotive Industry via the eXtensible Business Reporting Language. *Chemical Engineering Transactions, 88*, 1087–1092. doi:10.3303/CET2188181

180. Truant, E., Corazza, L., & Scagnelli, S. (2017). Sustainability and risk disclosure: An exploratory study on sustainability reports. *Sustainability, 9*(4), 636. doi:10.3390/su9040636

181. Turnheim, B., Berkhout, F., Geels, F., Hof, A., McMeekin, A., Nykvist, B., & van Vuuren, D. (2015). Evaluating sustainability transitions pathways: Bridging analytical approaches to address governance challenges. *Global environmental change, 35*, 239–253. doi:10.1016/j.gloenvcha.2015.08.010

182. Turnsek, A. (2021, November 15). *How tax is influencing the design of sustainable supply chains*. Retrieved May 29, 2023, from Ernst & Young Global Ltd.: https://www.ey.com/en_gl/tax/how-tax-is-influencing-the-design-of-sustainable-supply-chains

183. Unruh, G., Kiron, D., Kruschwitz, N., Reeves, M., Rubel, H., & Meyer zum Felde, A. (2016). Investing for a sustainable future: Investors care more about sustainability than many executives believe. *MIT Sloan Management Review, 57*(4).

184. van Tulder, R., & Lucht, L. (2019). Reversing materiality: from a reactive matrix to a proactive SDG agenda. In *Innovation for sustainability: Business transformations towards a better world* (pp. 271–289). Cham: Palgrave Macmillan. doi:10.1007/978-3-319-97385-2_15

185. Vardopoulos, I., Tsilika, E., Sarantakou, E., Zorpas, A., Salvati, L., & Tsartas, P. (2021). An integrated SWOT-PESTLE-AHP model assessing sustainability in adaptive reuse projects. *Applied Sciences, 11*(15), 7134. doi:10.3390/app11157134

186. Venkatraman, S., & Nayak, R. (2015). Relationships among triple bottom line elements: Focus on integrating sustainable business practices. *Journal of Global Responsibility, 6*(2), 195–214. doi:10.1108/JGR-04-2012-0013

187. Vigneau, L., Humphreys, M., & Moon, J. (2015). How do firms comply with international sustainability standards? Processes and consequences of adopting the global reporting initiative. *Journal of business ethics, 131*, 469–486. doi:10.1007/s10551-014-2278-5

188. Vollero, A., Palazzo, M., Siano, A., & Elving, W. (2016). Avoiding the greenwashing trap: between CSR communication and stakeholder engagement. *International journal of innovation and sustainable development, 10*(2), 120–140. doi:10.1504/IJISD.2016.075542

189. Wang, C. C., Chang, S. C., & Pei-Ying, C. (2021). The Brand Sustainability Obstacle: Viewpoint Incompatibility. *Sustainability, 13*(9), 5174.

190. Wang, W. (2022). Toward Economic Growth and Value Creation Through Social Entrepreneurship: Modelling the Mediating Role of Innovation. *Frontiers in Psychology, 13,* 914700. doi:10.3389/fpsyg.2022.914700

191. Wheeler, D., & Davies, R. (2004). Gaining goodwill: developing stakeholder approaches to corporate governance. *Journal of General Management 30*(2), 51–74.

192. Whelan, T., & Fink, C. (2016). The Comprehensive Business Case for Sustainability. *Harvard Business Review, 21(*2016).

193. Whitehead, J. (2017). Prioritizing sustainability indicators: Using materiality analysis to guide sustainability assessment and strategy. *Business Strategy and the Environment, 26*(3), 399–412. doi:10.1002/bse.1928

194. Wijethilake, C., & Lama, T. (2019). Sustainability core values and sustainability risk management: Moderating effects of top management commitment and stakeholder pressure. *Business Strategy and the Environment, 28*(1), 143–154. doi:10.1002/bse.2245

195. Wilson, J. (2021). Making Information Measurement Meaningful: The United Nations' Sustainable Development Goals and the Social and Human Capital Protocol. *Information, 12*(8), 338. doi:10.3390/info12080338

196. Wu, S., Shao, C., & Chen, J. (2018). Approaches on the screening methods for materiality in sustainability reporting. *Sustainability, 10*(9), 3233. doi:10.3390/su10093233

197. Ye, F., Jiang, S., Li, Y., Tan, K., & Kumar, A. (2022). The Value and Pitfall of CM's Sustainability Signal Considering OEM's Greenwash. In *IEEE Transactions on Engineering Management* (pp. 1–15). IEEE. doi:10.1109/TEM.2022.3199788

198. Zhang, H., Zhang, M., Yan, W., Liu, Y., Jiang, Z., & Li, S. (2021). Analysis the drivers of environmental responsibility of Chinese auto manufacturing industry based on triple bottom line. *Processes, 9*(5), 751. doi:10.3390/pr9050751

199. Zingraff-Hamed, A., Hüesker, F., Lupp, G., Begg, C., Huang, J., Oen, A., . . . & Pauleit, S. (2020). Stakeholder mapping to co-create nature-based solutions: who is on board? *Sustainability, 12*(20), 8625. doi:10.3390/su12208625

200. Ziolo, M., Bąk, I., & Spoz, A. (2023). Theoretical framework of sustainable value creation by companies. What do we know so far? *Corporate Social Responsibility and Environmental Management*, 1–18. doi:10.1002/csr.2489

APPENDIX

Appendix 1: Povzetek (Summary in Slovene language)

V zadnjem obdobju se investitorji, regulatorni organi in javnost vse bolj osredotočajo na vprašanje trajnostne strategije. Magistrsko delo obravnava različne vidike trajnosti, vključno z dimenzijami družbe, okolja in ekonomskimi vidiki. Vse več je spodbud, da podjetja spremenijo svoj pristop in sicer od pristopa, ki se predvsem osredotoča na lastnike, v pristop ustvarjanja in delitve vrednosti vsem deležnikom. Podjetja vse bolj aktivno sodelujejo s ključnimi deležniki pri uresničevanju trajnostnih ciljev. Magistrsko delo poudarja pomembnost integracije trajnosti v korporacijsko strategijo, s posebnim poudarkom na praksah upravljanja in uporabe različnih orodij, s katerimi usklajujemo nefinančne aktivnosti s trajnostnimi strategijami.

Magistrsko delo tudi poudarja, da podjetja, zaradi vse večjega zanimanja investitorjev in finančnih ustanov, merijo in objavljajo svoje podatke v povezavi z ESG. Številni pravni in regulatorni okvirji za objavljanje podatkov o trajnostnosti odražajo globalno približevanje obveznemu nefinančnemu poročanju. Magistrsko delo kaže povezavo trajnostnih strategij z okoljem podjetij in prikazuje najboljše prakse za uresničevanje trajnostno naravnane strategije.

Za dosego ciljev magistrskega dela so uporabljeni: deskriptivni pristop, navzkrižna primerjalna analiza in eksploratorni pristop, s katerimi se raziskuje vključevanje trajnosti v korporacijske strategije in ustvarjanje pomembne vrednosti za deležnike. Magistrsko delo prikazuje strateški pristop k trajnosti, ustvarjanje vrednosti za deležnike in pomen trajnostne strategije pri dolgoročnem upravljanju. Delo poudarja pomen dobro uravnoteženih strategij in povezavo s poslovnimi aktivnostmi, z namenom spodbujanja trajnostne rasti in ustvarjanja vrednosti za vse deležnike.

Za podjetja postaja ključno vključevanje trajnosti v korporacijsko strategijo, kar je zelo koristno tako za interne kot za eksterne deležnike. Podjetja se soočajo z vse večjimi zahtevami, da se vedejo odgovorno in da imajo pozitiven vpliv na družbo in okolje, zato lahko to magistrsko delo podjetjem, ki so na začetku svoje trajnostne poti, pomaga kot koristen vir.

Ključne besede: trajnostna strategija, strateški management, uresničevanje trajnosti