Víctor-Emanuel CIUCIUC

FROM CONCEPT TO PRAXIS:

THE SEMIOTICS OF SUSTAINABILITY IN MANAGERIAL COMMUNICATION ANDCORPORATE STRATEGY DISCOURSE

Universidad de Valladolid

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INTRODUCTION

The *purpose* of the present chapter is bi-fold: our first target is to present the concepts that lay at the very bedrock of the present book and to introduce the context in which the inquiry for the current research sprung. The second target is to offer a first contact with the established research strategy and objectives. The opening section aims to provide the context in which this research has been developed by highlighting significant current phenomena in sustainable business practices. It discusses the importance of embedding sustainability in managerial strategies for Romanian companies to foster competitiveness, transparency, and stakeholder engagement. The section will review various studies that underscore the necessity of integrating sustainability concepts into strategic frameworks, adopting green innovation practices, and providing transparent sustainability-related disclosures.

Hencewith, it is noteworthy to highlight that, up to a certain extent, recent studies have highlighted *the importance of embedding sustainability in managerial strategies for companies*, both Romanian and worldwide, to foster competitiveness, transparency, and stakeholder engagement. The research emphasizes the need to integrate sustainability concepts into strategic frameworks, adopt green innovation practices, and provide transparent sustainability-related disclosures (Vătămănescu et al., 2017; Landrum & Ohsowski, 2017; Ulvenblad, Ulvenblad, & Tell, 2018; Almeida, Gohr, & Santos, 2020; Băndoi et al., 2021; Dincă, Bogdan, Vasiliu, & Zamfir, 2021; Hațegan, Curea-Pitorac, & Milu, 2021; Stoian, Șimon, & Gherheș, 2021; Chong, Momin, & Narayan, 2022; Martínez Azúa & Sama-Berrocal, 2022).

Case in point, Stoian et al. (2021) and Băndoi et al. (2021) stress the explicit incorporation of sustainability concepts in the strategic plans of Romanian universities and the effects of sustainable reporting practices on economic performance. Hațegan et al. (2021) underline the importance of integrating green innovation into managerial strategies to bolster the sustainability profile of companies and ensure their enduring success. On the other hand, Chong et al. (2022) delineate a framework for analyzing visual persuasion in sustainability reports. This highlights the significance of adapting research methodologies to meticulously examine visual content within the specific contexts of sustainability and corporate reporting, underpinning the necessity of methodological precision in sustainability discourse analysis.

Complementing this perspective, Landrum and Ohsowski (2017) delve into integrating micro- and macro-level models for scrutinizing corporate sustainability

reports, elucidating how organizational narratives align with broader governmental sustainability discourses. This analysis reveals the strategic positioning of companies within the expansive narratives of sustainability, shedding light on organizational efforts to resonate with overarching sustainability agendas. Furthermore, Almeida et al. (2020) explore the assessment of collaborative capabilities within inter-organizational networks, emphasizing the pivotal role of partnerships and collaborative endeavours in advancing sustainable development goals. This study offers crucial insights into how Romanian companies can leverage inter-organizational collaborations to bolster their sustainability initiatives. Moreover, Ulvenblad et al. (2018) provide an exhaustive overview of sustainable business models within the agri-food sector, drawing out diverse strategies for integrating sustainability and innovation.

Overall, companies are increasingly adopting more scientifically informed decision-making processes, reflecting a growing sophistication in management philosophies (Vaio et al., 2020). This shift is not limited to the abstract realm of strategy but extends to the tangible domain of business models, particularly evident in sectors such as the agri-food industry (Barel-Shaked, 2023). In the Romanian landscape, Nicodim, Croitoru and Duică (2017) advocate for an evolution of organizational models that respond dynamically to the competitive landscape and suggest the imperative for businesses to pivot towards sustainability to maintain their competitive edge, while Corman & Tănăsescu (2014) provide a structured approach to evaluate and redefine organizational values.

In emerging economies, understanding the nuances of modern strategy is bottom-line (Rehman et al., 2021). Accordingly, Pop and Bordean (2012) illustrate how Romanian managers' perspectives increasingly align with global strategic management principles. Grecu and Deneș (2012) highlight the importance of extending sustainability to education to nurture a generation of leaders and employees whose ethos is steeped in sustainability. The foresight of visionary management is fundamental in steering these shifts, and Paraschiv et al. (2012) raise up the need for strategic directions that navigate the present complexities while being sustainable long-term. Stănilă, Popa and Ispas (2012) observe that large Romanian companies recognize the strategic advantage of incorporating sustainable development into their financial narratives.

However, Bachmann's (2009) insights into turnaround management reveal the significance of rapid adaptation and management overhaul in the face of market volatility, demonstrating that adaptability is a cornerstone of modern corporate strategy. Popovici, Moraru & Ionita (2011) set forth the significance of sustainability as an integral part of the corporate strategic framework, showcasing the global shift towards integrating sustainability within complex organizational structures.

Traversing back in time to these works provides a broader context for more recent contributions, as the core principles they expound upon are timeless in nature and serve as bedrocks upon which current innovations and strategies are built. By understanding these underlying frameworks and paradigms, one gains a comprehensive view of the strategic evolution in the Romanian business context, signifying its readiness to both

confront immediate challenges and navigate the long-term demands of a sustainability-oriented global economy.

Overly, this monograph endeavours to sculpt a comprehensive research context that traverses the spectrum of sustainability practices, corporate governance, and innovation, emphasizing the need for building collaborative networks within the Romanian business environment (Vătămănescu et al., 2022). The literature discussed here furnishes a panoramic vista of Romania's evolving sustainable business practices landscape, setting the stage for an in-depth exploration of how managerial strategies can be adeptly reconfigured through the prism of sustainable development. This compilation of perspectives—from the adaptation of research methodologies to the strategic alignment of business practices with sustainability goals—crafts a polymath framework for amplifying the sustainable program within Romanian businesses. Consequently, the present book is marked out within a research context where sustainability has become essential for business success, particularly in the dynamic Romanian economic landscape. The present book is thus positioned at a crucial juncture where historical insights and modern practices converge to shape a forward-looking discourse on sustainability in strategic management.

To achieve this, the research draws from a rich tapestry of empirical studies that collectively advocate for a strategic orientation toward sustainability, illustrating a paradigm shift in Romanian corporate governance and managerial strategies over the years. For instance, the retrospective analysis of studies by Nicodim, Croitoru and Duică (2017) and Pop et al. (2012) provides an understanding of the foundational strategies that continue to influence contemporary approaches, affirming the enduring importance of strategic behaviour adaptation and the contemporary grasp of strategic management concepts.

Recent contributions by authors like Stoian et al. (2021) and Băndoi et al. (2021) build upon these classical frameworks, highlighting the integration of sustainability in educational curricula and reporting practices, which are pivotal for the transparency and stakeholder engagement necessary in today's market. Furthermore, the works of Hațegan et al. (2021) and Almeida et al. (2020) stress the need for green innovation and collaborative networks to achieve sustainable competitive advantages in a rapidly evolving global marketplace.

Table 1 presents the underlying contextual significance relevant to this study, enabling a comprehensive examination and synthesizing of the various strands of literature.

Table 1. Research context: key takeaways

Research Context Element	Contextual Significance
Strategic Paradigm Shift	Romanian businesses are observed to be transitioning towards sustainable strategic management, embracing innovative practices within the sustainability paradigm.

Research Methodology	The application and critical assessment of diverse research methods provide a deep understanding of sustainability, reflecting a dedication to methodological rigour.
Sustainability in Education	Incorporating sustainability in educational curriculums is pivotal for cultivating future leaders who can integrate these principles into strategic planning.
Inter-Organizational Synergy	The focus on cooperative strategies highlights the significance of partnerships and networks in propelling sustainable initiatives and shared advancements.
Localized Economic Dynamics	Examination of Romanian economic and cultural settings provides a nuanced understanding of sustainability practices within a global context.
Temporal Integration	Bridging historical research with current practices offers a comprehensive view, which is essential for developing progressive strategies in sustainable business.

Source: Advanced by the candidate

Quite clearly, table 1 represents a conceptual summary of the subchapter, synthesizing the critical components of the research context in which this tome is situated. It delineates the strategic shifts towards sustainability within Romanian business practices and the methodological rigour applied in research. The table highlights the role of education in preparing leaders for a sustainable future and sets ahead the critical importance of collaboration between organizations to achieve sustainability goals. Additionally, Romania's unique economic and cultural environment on sustainability practices is being put forth while balancing historical perspectives with contemporary developments.

Notwithstanding, to the best of our knowledge, there is a notable scarcity of academic publications on the subject of sustainability within the Romanian business context (Hațegan, Curea-Pitorac, & Hațegan, 2019; Berinde & Corpădean, 2019; Nechita et al., 2020; Stoian, Șimon, & Ghergheș, 2021). This gap indicates an opportunity for scholarly exploration and contribution to the body of knowledge in this field, throwing into relief the potential for this publication to make a significant academic and practical impact. Jointly, these elements form a comprehensive backdrop against which the handbook positions itself, aiming to contribute to the evolving discourse on sustainable development in the Romanian business sector.

It should be recalled that as for *the aim of this tome*, the present volume investigates the evolving relationship between sustainable development and the Romanian business environment. It operates within a context where environmental, social, cultural and economic considerations of sustainability are no longer simply ethical obligations, but rather strategic advantages for nowadays' managers (Malik et al., 2020; Addison et al., 2020; Biclesanu & Dima, 2021; Ștefan et al., 2021; Stiegler, 2021; Vodă et al., 2021; Ille, 2022; Müller et al., 2022; Popescu, Ceptureanu & Ceptureanu, 2022; Tawfig & Kamarudi, 2022; Lupoae et al., 2023).

The contemporary global market narrative highlights a growing awareness of sustainability's multifaceted nature among Romanian managers (Vătămănescu & Brătianu, 2021; Pînzaru et al., 2023). This awareness translates into adopting comprehensive sustainability strategies that are seamlessly integrated into corporate governance. It subsequently represents a paradigm change, where sustainability transitions from a marginal initiative to a core component of strategic planning and execution (Bumbac et al., 2020; Dobre et al., 2021; Purcarea et al., 2022). Nevertheless, this transformation is partly driven by regulatory pressure, which propels organizations towards sustainable practices (Adu, Al-Najjar & Sitthipongpanich, 2022). However, the success of such integration hinges on leadership orientation towards sustainability. As a consequence, managers are no longer compliance enforcers; they are now advocates and architects of organizational sustainability transformation (Aguilera et al., 2021).

The present research examines the phenomenon of adopting sustainability as a strategic priority and its subsequent impact on organizational performance and reputation (Gazzola et al., 2018; Vătămănescu et al., 2019; Ferioli et al., 2022). Whereby, the present research delves into the correlation between managerial awareness of sustainable development imperatives and the resulting implementation of coherent sustainability management strategies. It further explores how these strategies, shaped by regulatory frameworks and championed by leadership, translate into concrete improvements in organizational performance (Ntow-Gyamfi et al., 2020; Santos et al., 2020; Hristov et al., 2021).

Moreover, the publication investigates the reputational benefits associated with sustainability practices. It posits that an organization's reputation is increasingly contingent on its demonstrable commitment to sustainability, which resonates with environmentally and socially conscious consumers and investors (Haque & Ntim, 2022). The adoption of sustainable management strategies thus emerges as a powerful driver of corporate prestige and trust in the marketplace (Dicuonzo et al., 2022).

In essence, this volume explores the central role that sustainability has come to play in Romanian corporate strategy and performance. It traces the journey from awareness to action, regulatory compliance to strategic orientation, and organizational effectiveness to reputational excellence. Each stage of this journey aims to be analyzed, contextualized, and interconnected, reflecting the comprehensive theoretical framework that considers sustainability's multifaceted impact on organizational performance and reputation. Employing a bibliometric approach, the study analyzes existing literature in a methodological-sound approach to identify the critical intersections between sustainability awareness, strategic management adoption, regulatory requirements, and leadership orientation – all converging to shape the modern Romanian business environment.

Furthermore, in terms of *research relevance and strategy*, one might argue that the goal of the current volume is to map managers' adoption of sustainable development techniques and clarify the causal network driving Romanian business managers toward sustainable practices. As we all know, understanding the factors that precipitate specific events is critical (Marini & Singer, 1988). Accordingly, this research strategy seeks to

disentangle the key elements that catalyze sustainability adoption, considering rising managerial awareness, stringent regulations, and a leadership orientation promoting environmental strategies. These variables hold not only academic value, but also the potential to predict future organizational behaviors within the sustainability domain.

The theoretical contribution of this work lies in mapping the process by which Romanian managers transition towards sustainability and their subsequent challenges. The empirical evidence, gleaned from a bibliometric analysis of sustainable development spotlights the significance of this transition. Nonetheless, the practical implications of this study are multifaceted. For businesses, a deeper understanding of the factors influencing sustainability adoption can inform strategic decision-making, potentially enhancing both competitive advantage and reputational integrity. Policymakers and regulators can leverage insights from the present research into how sustainability is operationalized within the corporate sector to develop more effective regulatory frameworks that foster sustainable business practices.

Finally, this volume sought to shed some light on the causal drivers of sustainability adoption in the Romanian business environment, across all levels. By elucidating the interplay between managerial awareness, regulatory pressures, leadership orientation, and strategic decision-making, the research offers valuable insights for both academic discourse and practical application for business managers and employees. Essentially, our research endeavours to elucidate the motivations driving the shift toward sustainability, to aid businesses in making well-informed decisions, while equipping policymakers with the insights necessary to craft impactful regulations that foster a more sustainable business environment in Romania.

Another element to consider, with respect to this volumes' *research objectives and research questions*, is that the following research objectives have been formulated, and aligned with the books' strategic focus:

R.O.1: To examine the impact of awareness of sustainable development and regulatory requirements on the adoption and implementation of sustainable strategies within Romanian enterprises.

R.O.2: To investigate the dynamic interplay between leadership orientation towards sustainability and the manifestation of these sustainable strategies in organizational practices.

R.O.3: To explore the cumulative influence of adopting sustainable strategies on organizational performance and reputation, thereby assessing sustainability initiatives' effectiveness and stakeholder perception.

To achieve these objectives, the research will delve into the landscape of sustainability in the Romanian business sector through the following overarching research question:

R.Q.: How do awareness of sustainable development, regulatory imperatives, and leadership orientation collectively influence the adoption and effectiveness of sustainable strategies in Romanian businesses, and what are the subsequent impacts on organizational performance and reputation?

However, it is essential to note that these initial research questions will be further developed within the methodological design matrix chapter. This chapter will utilize the findings from the literature review and explore the potential for Grounded Theory to shape the final, more focused research questions.

Additionally, with regard to *this tome' structure*, it is important to mention that the first chapter sets the stage by providing an in-depth bibliometric analysis. This section examines trends and core metrics in sustainable development research, identifying key themes and clusters. In doing so, we aimed to set the ground for further detailed consultation of the pertinent body of literature. Then, the second chapter delves into the theoretical foundations of sustainable development, discussing the environmental, economic, social, and cultural pillars. It explores how these pillars relate to organizational performance and reputation, leadership orientation towards sustainability, and regulatory requirements in sustainable business paradigms. The chapter concludes by examining the relationships between these constructs, sketching, therefore, the research hypothesis.

Subsequently, the third chapter outlines the research methodology used in this study, discussing the implementation of the qualitative and quantitative design, scale development, conceptualization, sampling technique, and, at long last, the validity and the relevance of the analyzed data. It details the refinement of the quantitative research framework, relying on the qualitative-informed data, and presents the final research model version (the whole evolution of the model, in accordance with its preliminary stages, can be followed, if one might want, in the annexes).

The fourth chapter showcases the results and the interpretation of the resulting data with an extensive mixed-method design. Namely, it begins with a qualitative approach analysis, exploring managers' perceptions of sustainable management strategies through data collection, sampling, and analysis techniques. Ergo, it includes a detailed qualitative data analysis, using both Content Analysis and Qualitative Data Analysis Software (QDAS)-generated analysis to dismantle possible insights. The chapter then transitions to a quantitative approach, presenting the results of the measurement model evaluation, structural model assessment and results discussion, consequently complementing the qualitative data.

Ultimately, the final chapter synthesises the findings of the research. It outlines the contributions and their later theoretical and practical implications, completing with this study's limitations and suggestions for a future research agenda rooted in this publications' conceptual and empirical framework. As a result, we aim further to enhance the understanding of sustainability in Romanian businesses and, on the whole, to shed even more light on sustainable development strategies and their effects on organisational performance and reputation.

CHAPTER 1
BIBLIOMETRIC ANALYSIS

1.1. Introduction

In order to comprehensively address the multifaceted reality of sustainability in business, a bibliometric analysis focused on sustainable development and its subjacent effects across all business levels was conducted. In doing so, our aim was to systematically explore sustainability research with a specific focus on its intersections with organisational performance and reputation. To conduct this analysis, we utilized the *search string* "sustainability OR sustainable development AND performance AND reputation" to search for relevant articles within the Elsevier-founded Scopus database, targeting titles, abstracts, and keywords. By utilizing Boolean operators OR and AND, we ensured the inclusion of all pertinent articles discussing sustainability and sustainable development in the context of business outcomes. This approach enabled the capture of a wide array of studies examining the implications of sustainability-informed business decisions.

Subsequently, we applied the PRISMA guidelines to guide the methodological rigor of the research, as depicted in Figure 1. This systematic process not only enhances the reliability of our findings but also provides a clearly defined framework for analysing the trends, core metrics, and thematic developments in the field of sustainability research. The present study adhered to the PRISMA guidelines (Page et al., 2021) to ensure a systematic and rigorous approach in selecting studies for this meta-analysis (Figure 1). It is worth noting that this methodological rigour underpins the credibility and replicability of the presented findings.

For this analysis, data were extracted from the Scopus database, which Elsevier founded. As a result, a comprehensive collection of the pertinent literature within the sustainable development field (which encompasses more than 87 million documents from over 7,000 international top-ranked publishers) was ensured.

Figure 1. Systematic literature review procedure, according to PRISMA guidelines
(Source: adapted from (PRISMA Group, n.d.))

1.2. Charting the sustainable scholarly landscape: analysing trends and core metrics

The bibliometric data presented herein showcases a research timeline that spans from 2000 to 2023, capturing a collection of 221 documents with an annual growth rate of 14.38%. This rate is indicative of a burgeoning interest in the intersection of managerial strategies and sustainable development, a field that is gaining momentum as companies worldwide, and particularly within Romania, grapple with the pressures and demands of sustainable practice integration. Given the expansive and cross-disciplinary nature of management and sustainable development, the present analysis includes all types of documents. The data set comprises a predominant number of articles (137), supplemented with conference papers (58), book chapters (10), and other varied document types, reflecting a polymath approach to the subject. Moreover, the data gathered emanates from various disciplines, underscoring the all-encompassing nature of the present research.

Table 2. General information about the extracted records

Description	Results
MAIN DATA INFORMATION	
Timespan	2000:2023
Sources (Journals, Books, etc)	160
Documents	221
Annual Growth Rate %	14.38
Average age of the document	5.98
Average citations per doc	19.91
References	10.225

Source: Advanced by the candidate

The mean age of the documents (5.98 years) and the average citations per document (19.91) suggest a dynamic field with influential research outputs that have garnered substantial academic attention. This indicates that the strategies and practices that fall within the purview of the present research are of significant interest and impact in the broader scholarly and practitioner communities. The breadth and depth of the existing literature are quite apparent, with a substantial collection of 10.225 references.

The bibliometric data on the annual scientific output on sustainable development strategies, as depicted in Figure 2, illustrates a clear trajectory of escalating academic interest from 2000 to 2023. This trend is marked by an initial period of tentative growth leading to a pronounced surge post-2015, peaking in 2022 with 34 articles. This indicates a flourishing recognition of the significance of sustainability in management practices, aligning with global sustainability imperatives. Although a slight dip in publications to

22 in 2023 is observed, it likely signifies a phase of consolidation within a maturing research field rather than a diminishing interest, encapsulating the field's evolution and the established importance of sustainability in managerial strategies.
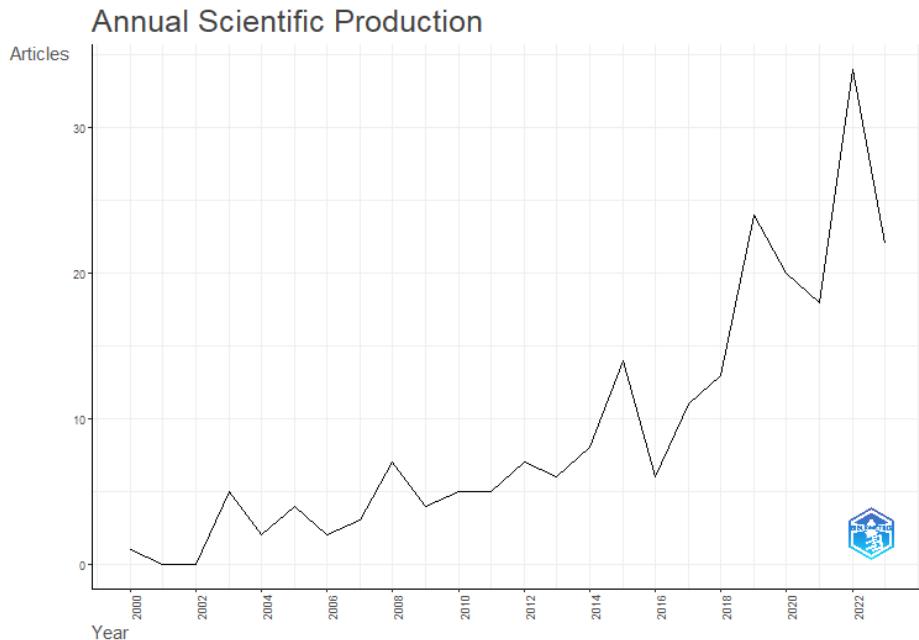
Figure 2. Annual scientific output
Source: Advanced by the candidate

Bradford's Law (Figure 3) reveals that the core literature sources for the present work are concentrated within a select group of journals that significantly contribute to sustainable development and managerial strategies. The "Journal of Cleaner Production" leads with the highest frequency of articles, underscoring its pivotal role in disseminating research relevant to the present study's focus. The subsequent sources, such as "Business Strategy and the Environment" and "Sustainability (Switzerland)", also form part of this core group, showcasing their importance in academic discourse related to sustainability in business.
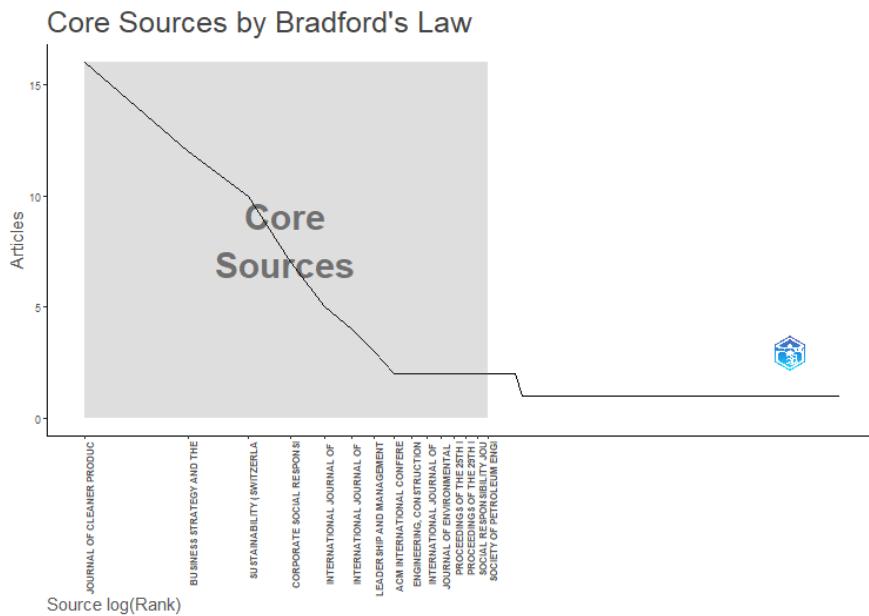
Figure 3. Bradford's Law Grouping of Sources
Source: Advanced by the candidate

The clustering of articles within a relatively small number of journals indicates that these publications are central to the research community interested in the nexus of management and sustainability. This distribution aligns with Bradford's Law, which suggests that a few core journals typically account for the most significant publications within a specific domain, while a larger number of journals contribute progressively fewer articles (Wei, 2018). The distribution of articles in the present case suggests that the most impactful and relevant research on sustainable development in managerial practices is concentrated within the aforementioned core journals, affirming their influence and importance in shaping academic discourse in this area.

Most Global Cited Documents
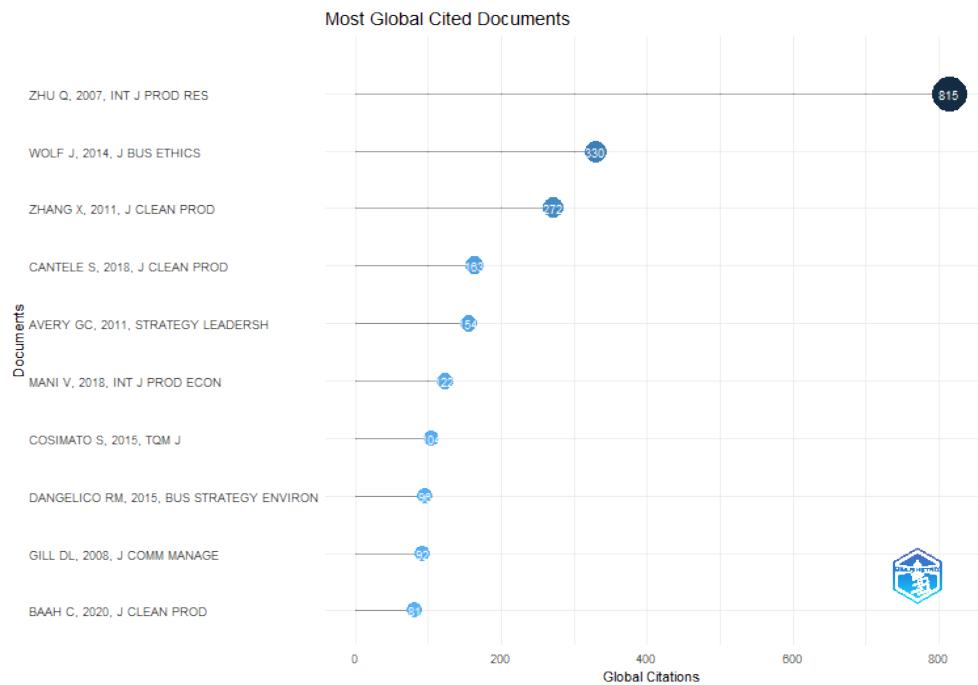
Figure 4. Top 10 most cited documents globally
Source: Advanced by the candidate

The bibliometric analysis of literature on sustainable development strategies in managerial contexts reveals a select number of highly influential articles, in line with Lotka's Law, which posits that few researchers contribute to the majority of significant publications in a given field. The preeminent article by Zhu & Sarkis (2007) in "International Journal of Production Research" garners the most citations (815), underscoring its pivotal role in the domain (Zhu, 2007). Notable works by Wolf (2014) in "Journal of Business Ethics" and Cantele & Zardini (2018) in "Journal of Cleaner Production" follow, with substantial citations (330 and 163, respectively), indicative of their significant impact on integrating ethical and sustainable prevalence in managerial practices (Wolf, 2014; Cantele & Zardini, 2018).

Table 3. Calculations for Lotka's Law

N.Articles	N.Authors	Freq
1	542	0,9426087
2	27	0,04695652
3	3	0,00521739
4	3	0,00521739

Source: Advanced by the candidate

The citation frequency corroborates the relevance of these articles and points to sustained scholarly engagement. This pattern is further reinforced by Lotka's Law, with many authors contributing singularly to the discourse, demonstrating the concentrated nature of scholarly contributions within this field. Consequently, the bibliometric findings affirm a distinct focus on sustainability, with most authors dedicating their research to core topics within the domain while a smaller number delve into related, yet distinct, areas. This highlights the field's maturity and the catalytic role of key scholarly works in shaping ongoing and future research directions.
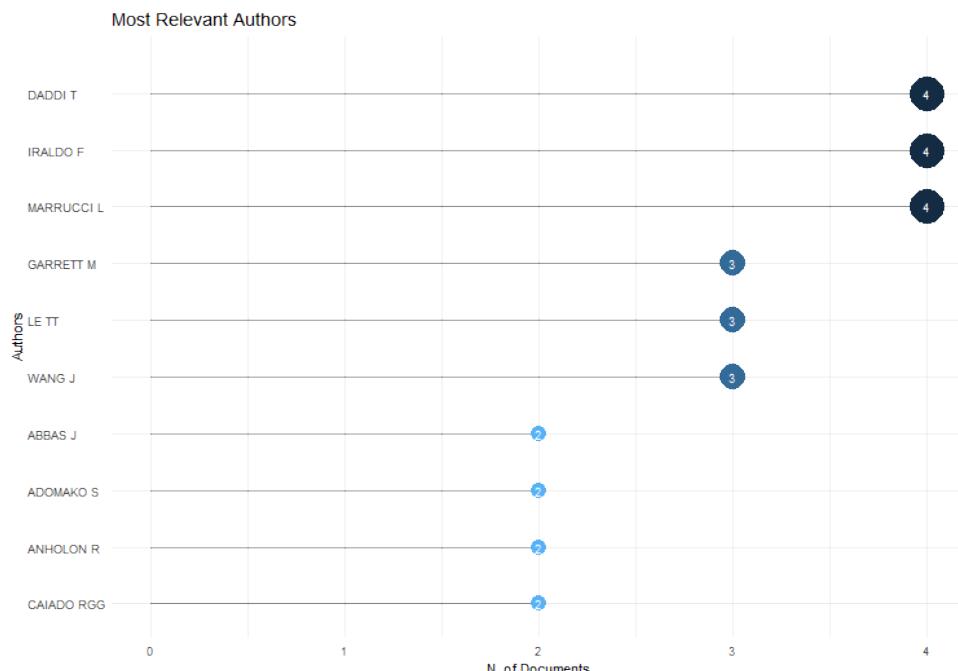
Figure 5. Top 10 most relevant authors
Source: Advanced by the candidate

When examining author productivity in the context of narrowing the scope of research on how sustainable development impacts managerial strategies, it becomes apparent that a select group of scholars have been contributing frequently and significantly to the academic narrative. Daddi, Iraldo, and Marrucci stand out as key players in this field, each having published four influential articles that have advanced our understanding of sustainable practices within management. Their work is indicative of a growing trend towards sustainable practices in management research, reflecting a heightened global awareness and a strategic local response to sustainability challenges. This shift towards a greater emphasis on sustainability in management research signals not only an expanding field but also an evolving one, with these authors at the forefront of shaping its trajectory.

The table below presents the main bibliometric indicators derived from the analysis that are relevant to the study on the influence of sustainable development strategies on managerial practices. These indicators provide a framework for understanding the academic influence and thematic focus of the literature, which underpins the research's exploration into the integration of sustainability within managerial practices.

Table 4. Quantitative bibliometric indicators: synthesis

Quantitative bibliometric indicator	Main takeaways
Lotka's Law	The concentration of single-paper authors suggests diverse perspectives, enriching the study of managerial sustainability.
Bradford's Law	Core journals identified guide the literature review, ensuring focus on the most impactful sources within the sustainability discourse.
Most Relevant Authors	Frequent contributions by key authors inform the study with relevant work on sustainability practices in management.
Core Sources	Journals identified as core sources provide authoritative insights and appropriate methodologies.
Most Cited Articles	Highly cited articles shape the theoretical framework and best practices in sustainable development, directly applicable to the business context.
Annual Scientific Output	Increasing research output reflects a heightened academic and practical interest in integrating sustainability across all business levels.

Source: Advanced by the candidate

1.3. From keywords to clusters: tracing the thematic pulse of sustainability research

In order to analyze the key themes related to sustainable development and their impact on managerial strategies, a visual representation has been provided in Figure 6. This represents the main themes being discussed and highlights the conceptual complexity of the thematic that is intended to be approached in the present tome. The "Bibliometrix" software has accordingly generated distinct clusters. The keyword co-occurrence map has identified 12 clusters, each designated by a set of keywords, such as "sustainability", "sustainable development", "commerce", "forestry" and "supply chains", reflecting the diverse facets of the field under study. These clusters showcase the various aspects of sustainability within the broader business context, covering economic, social, environmental, and technological dimensions. The most substantial cluster, consisting of "sustainability" and "sustainable development", emphasizes their central role in the discourse. On the other hand, the "distributed computer systems" cluster, while the smallest, highlights the technological aspect of sustainable strategies in management.
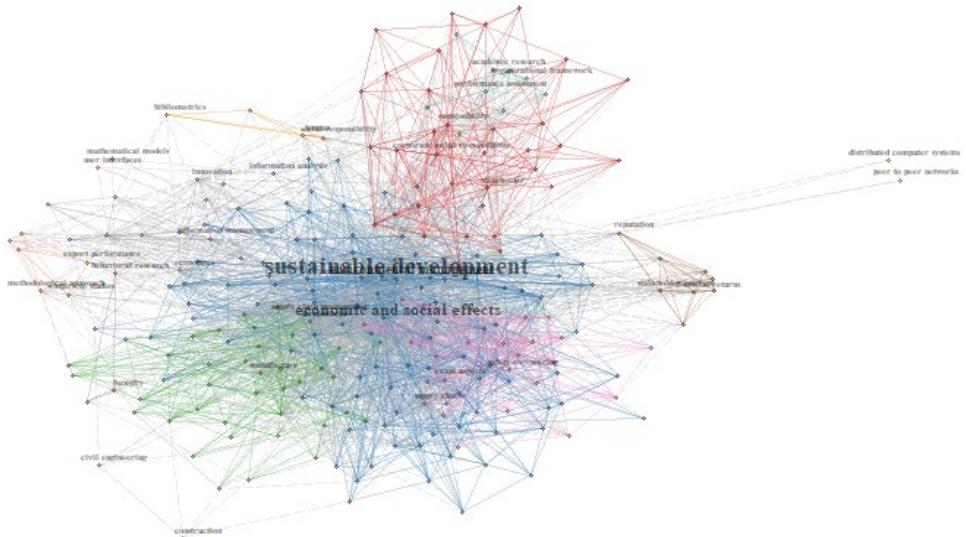
Figure 6. Keyword co-occurrences
Source: Advanced by the candidate

Expanding on the quantitative data, the thematic examination of sustainable development in managerial strategies exposes a convoluted, yet predictable, interconnection of themes. The analysis, illustrated in the strategic diagram (Figure 7) and corroborated by corresponding cluster data, classifies these themes into four quadrants based on centrality (relevance) and density (degree of development), thus

providing an intricate comprehension of the field. The Motor Themes, characterized by high centrality and density, such as "sustainable development", "economic and social effects", and "environmental management", indicate well-established areas of research that are fundamental to the discourse on sustainability in business practices. These are mature themes that continue to be central to the field and suggest a well-developed network of academic contributions with extensive interconnections between various research areas.
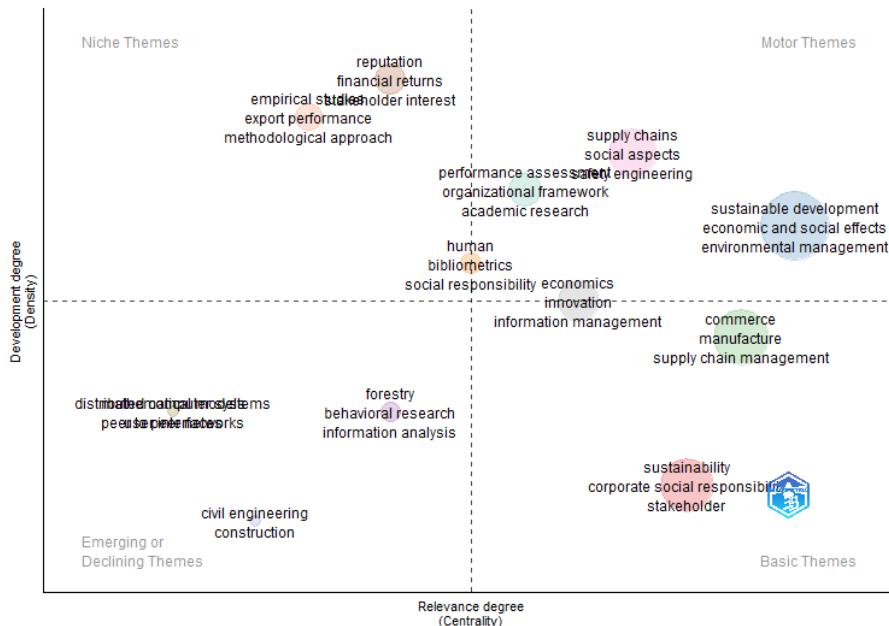
Figure 7. Thematic evolution: growth areas
Source: Advanced by the candidate

The Basic Themes, such as "sustainability", "corporate social responsibility" and "stakeholder", have high centrality despite lower density, highlighting their foundational role in the research domain. These themes represent the broad concepts that underpin much of the research in sustainability, offering far-reaching implications for managerial strategies. The Emerging or Declining Themes, with low centrality but high density, such as "distributed computer systems", reflect specialized yet well-developed research areas that may be gaining momentum or losing prominence within the scope of the field. They indicate newer avenues of research or areas that may have been thoroughly explored but are now giving way to new trends.

Lastly, the Niche Themes, characterized by low centrality and density, such as "empirical studies" and "export performance" foresee specialized topics that may be in their nascent stages of development or reflect the particular interests of a smaller segment

of the research community. These themes could represent the cutting edge of research or areas ripe for further exploration.

On top of this, a structured overview of the various themes emerging from the literature on sustainable development and its integration within management strategies is being presented in Table 4. Each theme is evaluated on the basis of five key bibliometric indicators: a) *centrality* (it refers to the significance or influence of a theme within the network); b) *density* (it measures the strength of connections within a cluster of research); c) *centrality level* (it represents the rank or quantified position of a theme compared to others); d) *density level* (it indicates the theme's density relative to others) and e) *theme frequency* (it is a simple count of how often a theme appears within the literature, providing insight into its prevalence or popularity within the research landscape) (Aria & Cuccurullo, 2017).

Put it in other words, it could be stated that a theme with high centrality is often referenced or built upon in other studies, indicating its foundational nature. On the other hand, density measures how well-developed a theme is in terms of internal coherence and connectivity between individual papers or works (Cobo et al., 2011). When a theme has both high centrality and a high centrality level, it suggests that the theme is not only influential but also consistently ranks as a primary focus across multiple studies. Similarly, when a theme has a high density and a high-density level, it indicates that the research within the theme is not only interconnected but also consistently complex or comprehensive compared to other themes. If a theme has a high theme frequency in addition to high centrality and density levels, it suggests that the theme is not only foundational and well-developed but also frequently explored in the literature. In summary, themes with high centrality, density, and frequency levels are likely to be important and well-established areas of research in a given field (Husereau et al., 2013; Dimitrovski et al., 2021).

Table 5. Works on topics of interest

Thematic	Centrality	Density	Centrality Level	Density Level	Theme Frequency
Sustainability	13,17	71,63	11	2	139
Sustainable development	31,27	90,91	13	9	569
Commerce	15,12	75,34	12	6	175
Forestry	1,42	75,00	5,5	4	8
Human	1,44	85,42	7	8	9
Reputation	1,42	129,34	5,5	13	20
Supply chains	10,05	106,00	10	11	92
Economics	5,51	80,49	9	7	50

Performance assessment		104,2 3	8	10	24
	1,68				
Empirical studies		127,7 8	4	12	15
	0,78				
Civil engineering	0,25	62,50	3	1	4
Mathematical models	-	75,00	1,5	4	4
Distributed computer systems	-	75,00	1,5	4	4

Source: Advanced by the candidate

More precisely, as we can see in Table 5, "Sustainability" and "Sustainable Development" sit prominently in the table, likely due to their high Centrality and Density levels. This reflects their broad influence across the literature and their intricate connections within the network of sustainability research, mirroring their significance in shaping corporate strategies and policies. Their high centrality indicates that these themes are central to the discourse in business literature, suggesting that companies are increasingly recognizing sustainability as integral to their operational and strategic frameworks. The high density reflects a well-established body of interconnected research, indicating a rich exchange of ideas and practices that businesses can draw upon for implementing sustainable development.

It is surprising to note that the themes of "Commerce", "Forestry", "Human", and "Reputation" emerge in varying degrees of Centrality and Density from the bibliometric analysis, indicating their varying prominence and cohesiveness within the academic landscape. This variance highlights the multifaceted nature of the "triple bottom line" (TBL), a concept coined by Elkington in 1994, which lies at the foundation of sustainable business practice. Analyzed from this standpoint, "Commerce" might be correlated with the profit and loss account, within the evolving business models that incorporate the TBL's environmental and social considerations alongside economic objectives. On the other hand, "Forestry" might be associated with the environmental dimension of the TBL, emphasizing the adoption of sustainable resource management practices. The "Human" theme might align with the social aspect of the TBL, entangling the critical role of human capital and organizational behavior in realizing sustainable outcomes. Furthermore, "Reputation" is notably interwoven with the TBL ethos, underlining how sustainable practices contribute to corporate reputation. This is not merely as a regulatory compliance mechanism, but as a strategic asset to build brand value and foster trust among stakeholders.

In other respects, "Supply Chains" and "Economics" are likely to showcase substantial centrality, illustrating their integral role in discussions about how companies manage resources and economic outcomes within the sustainable framework. Instead, "Performance Assessment", "Empirical Studies", "Civil Engineering", "Mathematical Models", and "Distributed Computer Systems" might represent more specialized areas of the field, with potentially lower centrality but varying density, suggesting differing

levels of research development and interconnections between studies. Notwithstanding, the lower centrality but varying density of these specialized themes suggests that they are emerging areas of interest within the sustainable discourse, representing niche but potentially transformative approaches that businesses could adopt for competitive advantage and innovation in sustainability. These areas, while currently less central, may hold the key to new business methodologies and strategic breakthroughs in sustainability.

Built upon the resulted occurrences inside each cluster, Table 6 represents the analysis of themes and keywords lumped together into the "Driving Themes" and "Emerging Themes" for each cluster. The table represents a combined-synthesis of the detailed data retrieved from R-studio, showcasing the most concentrated areas of research within the extracted dataset and reflect the current and the forecastable focus of sustainability in the business context, as depicted in the specialized literature.

It is important to note that this table presents key themes derived from a cluster analysis of the bibliographic data. Hence, the "Occurrences", "Centrality Measures" and "Pagerank Centrality" columns represent aggregated values for each cluster label, summarizing the detailed analysis performed using Bibliometrix software. Nevertheless, aiming at presenting an academic overview of the thematic pillars shaping research in the business sustainability domain, Table 6 highlights two categories of themes: *Driving Themes* and *Emerging Themes*.

Table 6. Identified themes from clustered data

Theme Type	Cluster Label	Occurrences	Centrality Measures	Pagerank Centrality
Driving Themes	*Sustainable Development*	142	Betweenness: 428,933; Closeness: 0,001818	0,094
	Economic and Social Effects	26	Betweenness: 2425,616; Closeness: 0,002358	0,024
	Environmental Management	18	Betweenness: 1991,702; Closeness: 0,002309	0,016
Emerging Themes	*Corporate Social Responsibility*	12	Betweenness: 578,046; Closeness: 0,002100	0,007
	Commerce	12	Betweenness: 1060,348; Closeness: 0,002207	0,011
	Supply Chain Management	12	Betweenness: 643,648; Closeness: 0,002100	0,009

Source: Advanced by the candidate

On one hand, *Driving Themes* represent well-established areas with a high frequency of research activity, denoting foundational concepts that are central to the discourse on sustainability. These themes exhibit strong centrality measures, signifying

their core role in connecting various research topics and influencing the direction of scholarly inquiry. For instance, "Sustainable Development" with the highest "Occurrence" and "Pagerank Centrality", is evidently the hypostasis of current sustainability research, emphasizing its expansive influence.

On the other hand, *Emerging Themes*, while presented less frequently, highlight areas of growing interest and potential future significance. These are topics gaining momentum within the academic sphere, as indicated by their centrality measures, which, while lower than the driving themes, still represent a considerable impact. "Corporate Social Responsibility", "Commerce" and "Supply Chain Management" suggest a research trajectory that is increasingly attentive to the integration of sustainability into business operations and strategy.

This structured overview serves not just to reflect the current state of research, but also to forecast trends, identify gaps, and guide our investigation within the business sustainability landscape. It underscores the dynamic interplay between innermost sustainability concepts and their application in commerce, suggesting a maturing, yet evolving, dialogue on integrating sustainability into the actual canvas of business models (BMCs) and supply chain processes.

Besides, as business sustainability becomes increasingly complex, the academic focus has broadened from environmental performance to include broader economic, social, and governance dimensions. This shift is reflected in the growing centrality of themes like "Corporate Social Responsibility" and "Supply Chain Management", which indicate a more holistic approach to sustainable business practices. In substance, Table 6 encapsulates this evolution, offering a clear, quantifiable representation of how sustainability is being woven into the broader tapestry of business research and practice.

Moving to the next dataset retrieved from the "Bibliometrix" R-studio-powered-software, the visual representation we're examining in Figure 8 is a network map that highlights the interconnectivity of various research topics within the panoramic perspective of sustainable development. Each node, varying in size and color intensity, represents a keyword from the bibliometric dataset, and its size is indicative of the node's degree—a measure of how many connections or edges it has to other nodes within the network. This gives us a qualitative sense of the prominence and influence of each topic in the academic specialized literature.

Figure 8. Node degree mapping
Source: Advanced by the candidate

Thereby, the map provides a snapshot of the thematic landscape, identifying which areas within the sustainable paradigm have been receiving the most attention from scholars, as well as how these areas are interconnected. Though, its quantitative counterpart details various nodes representing research topics within the sustainability domain, classified by cluster, with associated bibliometric indicators like "Betweenness centrality", "Closeness centrality", and "PageRank". To provide a more comprehensive understanding of the studied phenomena, we have synthesized key data points from the bibliometric analysis in Tables 7-12, assigning a name for each cluster, in function of its components and their conceptual delimitation within the broader theoretical framework. Hence, these tables contextualize the prominence and connectivity of various themes, grouping them for a clearer, synthetic birds' eye view.

Table 7. Cluster 1: Central Sustainability Constructs (in red)

Node	Between ness	Closen ess	PageRa nk	Network Map Interaction
Sustainable Development	9.005.531 ,00	0.020408	0.2134	Core node with extensive reach across the network
Economic and Social Effects	342.133,0 0	0.014705	0.05732	Influential in discussions on sustainable economic development
Planning	60.684,00	0.012345	0.02880	Significant role in strategic planning for sustainability
Environmental Management	52.184,00	0.012345	0.03249	Central to discussions around managing environmental impact
Manufacture	29.188,00	0.012048	0.02501	Involved in discussions on sustainable manufacturing practices
Supply Chains	23.730,00	0.011764	0.02158	Crucial for understanding the role of supply chains in sustainability
Profitability	22.501,00	0.012048	0.02436	Links economic gains to sustainable practices
Corporate Social Responsibility	15.586,00	0.010869	0.01332	Reflects the role of corporations in sustainable development
Environmental Impact	15.258,00	0.011494	0.01774	Important for assessing sustainability on environmental terms
Sales	0.9879	0.011627	0.01860	Connects commercial success with sustainable products and practices
Risk Assessment	0.8922	0.011363	0.01615	Essential for evaluating potential risks in sustainability initiatives
Costs	0.7911	0.011494	0.01406	Concerns the cost-efficiency aspect of sustainability practices
Benchmarking	0.5809	0.010989	0.01245	Used to compare sustainability performance against standards
Safety Engineering	0.5440	0.010989	0.01253	Deals with designing systems that ensure safety and sustainability
Risk Management	0.5352	0.010869	0.01242	Concerns the management of sustainability risks
Social Aspects	0.5171	0.011235	0.01570	Highlights the social dimensions of sustainable development

Supply Chain Management	0.4270	0.010989	0.01427	Pertains to the management of resources in a sustainable manner
Environmental Performance	0.3786	0.011235	0.01877	Relates to how actions and policies perform from an environmental perspective
Investments	0.1773	0.010989	0.01085	Connects financial investments with sustainable outcomes
Societies and Institutions	0.1239	0.010752	0.00962	Reflects the societal and institutional frameworks of sustainability
Decision Making	0.0359	0.010638	0.00939	Reflects the importance of informed decisions in sustainability
Project Management	0.0333	0.010526	0.00741	Involves organizing and managing projects with sustainability objectives
Construction Industry	-	0.010526	0.00674	Less central, focused on sustainability in construction
Product Design	-	0.010638	0.00933	Focuses on creating sustainable products

Source: Advanced by the candidate

By all appearances, cluster 1 is the most extensive and complex cluster within the network, serving as a focal point in the discourse of sustainability. The cluster encapsulates a broad spectrum of topics that intersect across economic, social, and environmental dimensions, adding up to its interdisciplinary nature, and putting under the limelight the necessity of sustainability studies. This cluster inextricably weaves together a narrative wherein sustainable development is at the core, connecting diverse research themes such as economic impacts, corporate social responsibility, environmental management, and strategic planning. The richness of this cluster is evident in its ability to address sustainability from multiple angles, ranging from theoretical frameworks and principles of sustainable development to practical applications and strategies for implementation in various sectors like manufacturing, supply chain management, and the construction industry.

The metrics of nodes within this first comprising cluster betoken their integral roles in the network. The highest "Betweenness centrality" of "Sustainable Development" brings out its key position in connecting disparate areas of research, acting as a central hub for the flow of ideas and discussions. This centrality points to the concept's overarching influence across the sustainability literature, depicting its role as a primary lens through which various sustainability-related issues are to be explored and understood.

Overly, the inclusion of specific nodes related to corporate practices, economic considerations, and strategic approaches to sustainability reflects a wide-ranging view that sustainability is not a niche area, but a crucial element in broader economic and social discourses. It suggests an upgrowing acknowledgment of the need to integrate sustainable practices into the fabric of global economic systems, corporate strategies, and policymaking.

In short, this first cluster embodies the complexity and multi-dimensionality of the sustainability field. It presents a holistic view that encompasses both macro-level considerations of sustainable development principles and micro-level discussions on their implementation across different sectors. This cluster's expansive nature plays up to the diverse, yet interconnected, pathways through which sustainability impacts and is integrated into our economic systems, societal structures, and environmental policies. Through its entangled network of nodes and their interactions, cluster 1 highlights the depth and breadth of sustainability research, marking its indelible importance in shaping future academic inquiry and practical action towards a more sustainable world. Therefore, the comprehensive coverage and interdisciplinary nature of the sustainable phenomenon justify the need for further research and practical solutions, making a compelling case in laying the conceptual foundations in which the present research is demarcated.

Table 8. Cluster 2: Environmental and Organizational Sustainability (in blue)

Node	Betweenness	Closeness	PageRank	Network Map Interaction
Environmental Protection	26.121	0.011494	0.01928	Strong influence in environmental sustainability discussions
Sustainability	17.357	0.011363	0.02228	Key node with extensive connections to various sustainability aspects
Environmental Economics	0.3376	0.010989	0.01426	Central to discussions on the economic impact of environmental policies
Performance Assessment	0.2339	0.010869	0.01200	Related to assessing the performance of sustainability measures
Stakeholder	0.1793	0.010869	0.01237	Important for stakeholder theory in sustainability
China	0	0.010526	0.00786	Represents the geographical focus on sustainability practices in China
Strategic Planning	0	0.010416	0.00611	Involves long-term planning for sustainable development

Source: Advanced by the candidate

As it can be initially seen in Figure 8, and further corroborated by data in Table 8, the second cluster holds a significant position in the research network, with its primary focus revolving around Environmental Management and Economics. It is a thematic aggregate that bridges the gap between environmental stewardship and economic considerations, highlighting the crucial role of sustainability within organizational

frameworks and strategic planning. The cluster's composition presents a nuanced narrative that sustainability is a foundational element of contemporary business and economic practices, rather than just an ethical or regulatory requirement. To that point, the inclusion of nodes such as "Environmental Protection", "Sustainability", and "Stakeholder" dwells on the cluster's orientation towards a holistic understanding of sustainability. It suggests a growing integration of environmental protection into the core strategy of organizations, influenced by both internal motivations and external stakeholder pressures. The high "Betweenness" scores associated with these nodes indicate their pivotal role in the discourse, acting as bridges that connect various sub-themes and facilitate a comprehensive dialogue on sustainability.

Additionally, it is worth noting the presence of specific geographical and thematic nodes, such as "China" and "Environmental Economics", which lay stress on the global and multifaceted nature of sustainability challenges and solutions. It highlights the economic implications of environmental policies and their varied impacts across different contexts and regions. We must have in mind that the cluster's relevance is further amplified by its focus on "Strategic Planning" and "Performance Assessment", indicating a shift towards more proactive and measurable sustainability initiatives. This reflects an evolving landscape where sustainability is not just about compliance but about integrating sustainable practices into the DNA of organizational strategy and operations.

Put another way, cluster 2 represents a convergence point where environmental concerns intersect with economic and strategic planning within the sustainability discourse. Its complexity lies in the interplay between these elements, offering insights into how sustainability is operationalized within various organizational contexts. The cluster serves as a testament to the increasing conceptual tapestry of sustainability research, pointing-out its critical role in shaping future economic policies and practices. The nodes within this cluster, through their metrics and interactions, present a dynamic field where sustainability has a cathalytic role in driving innovation and strategic change across sectors.

Table 9. Cluster 3: Innovation and Regional Development (in green)

NODE	BETWEE NNESS	CLOS ENES S	PAGE RANK	NETWORK MAP INTERACTION
Innovation	13.436	0.011235	0.01614	Drives forward-thinking approaches in sustainable development
ECONOMICS	0.5509	0.010989	0.01613	Connects economic theory with practical sustainability efforts
INFORMATION MANAGEMENT	0.1060	0.010869	0.01512	Key in managing data and information for sustainability
REGIONAL PLANNING	0.1060	0.010869	0.01467	Important for sustainable urban and regional development planning

Subsequently, the third cluster emphasizes the transformative role of innovation in driving sustainable economic strategies across regions. The synergy between economic development and sustainability is highlighted through the lens of innovation. The nodes within this cluster signify critical pathways through which innovation acts as a catalyst for integrating sustainability into economic practices. The cluster's focus on innovation emphasizes the forward-looking nature of sustainability research, while its connection to regional planning and information management underscores the importance of localized strategies and effective information management in achieving sustainable outcomes. Through its exploration of these themes, Cluster 3 offers insights into the complexity of integrating sustainability into economic frameworks, emphasizing the need for innovative, informed, and regionally adapted strategies.

Table 10. Cluster 4: Corporate Strategies and Finance (in purple)

Node	Between nness	Close ness	Page Rank	Network Map Interaction
Competition	66.297	0.01234	0.03211	A pivotal concept linking sustainable development with market dynamics
Corporate Social Responsibilities (CSR)	18.088	0.01176	0.02090	Reflects the growing importance of CSR in corporate strategy
Social Responsibilities	17.925	0.01176	0.01906	Indicates the role of social responsibility in sustainability discourse
Finance	16.353	0.01149	0.01801	Central to discussions on funding sustainable initiatives
Competitive Advantage	0.1494	0.01098	0.01494	Represents the strategic benefit of sustainability in business
Financial Performance	0.1407	0.01086	0.01062	Ties financial outcomes to sustainable practices
Corporate Reputations	0.1257	0.01075	0.00972	Relates the impact of sustainability on corporate image

Moving on towards cluster number four, it explores the relationship between Corporate Social Responsibility (CSR) and Finance. It holds forth how businesses can incorporate social and environmental responsibilities into their strategic and financial

frameworks, stressing the shift towards sustainable business models. The cluster focuses on CSR, competition, finance, and corporate reputations, and their respective metrics, bridging the gap between theoretical sustainability concepts and practical corporate applications.

This cluster is all the more relevant in light of the global emphasis on sustainable development goals and the growing demand for corporate transparency and responsibility. It emphasizes that sustainable business practices are essential to achieving long-term corporate success and financial resilience. That is to say, we find ourselves in front of a lookout on how CSR, financial performance, and sustainability intertwine. It contributes to a wider sweeping grasp of the role of businesses in advancing sustainability, singling out the critical importance of blending CSR and financial strategies within the extensive sustainability agenda.

Table 11. Cluster 5: Commerce and Empirical Research (in orange)

Node	Betweenness	Closeness	PageRank	Network Map Interaction
Commerce	64.196	0.01219	0.02450	Central node, likely indicating commerce's role in sustainability
Surveys	0.9277	0.01123	0.01533	Important for empirical research within the field
Marketing	0.1655	0.01075	0.01012	Relates to the dissemination and promotion of sustainable practices
Efficiency	0	0.01052	0.00601	Less central, possibly focuses on efficiency in sustainable operations

Source: Advanced by the candidate

The fifth cluster brings forth the commercial and empirical research dimensions, as part of the sustainable conceptual framework. It traces out the intersection between market-oriented practices and rigorous analysis that endorse and back up sustainable development. Despite its smaller size, it plays an utterly important role in translating sustainability principles into actionable business strategies and practices, closing the gap between theoretical concepts and their real-world implementation. The centrality of "Commerce", doubled by its "Betweenness" score showcases the hypostatical position of commercial activities in promoting and integrating sustainable practices within business models and consumer behavior.

Table 12. Cluster 6: Sustainability Integration and Reporting (in brown)

Node	Betweenness	Closeness	PageRank	Network Map Interaction
Performance	0.4683	0.01086	0.01355	Strongly influential in linking sustainability with performance metrics
Sustainability Performance	0.1393	0.01063	0.00950	Important for measuring and assessing sustainability efforts
Sustainability Reporting	0.0895	0.01075	0.01030	Critical for transparency and accountability in sustainability
Management Systems	0	0.01041	0.00654	Peripheral, suggesting a supportive role in sustainability integration

Source: Advanced by the candidate

Therewith, "Surveys" and "Marketing" heighten the importance of empirical research and strategic communication in advancing sustainability, tailoring approaches to fit with both businesses and consumers. Simply put, the fifth cluster raises the profile of the mechanisms through which sustainability can be promoted, realized, and integrated into the fabric of everyday business operations and consumer choices.

In line with the previously mentioned bridging the divide, the sixth and last cluster resulted sets forth the translation of sustainability principles into actionable strategies and their effective communication within organizational frameworks. This cluster brings forward how sustainability is implemented and accounted for in business practices. It emphasizes the importance of reporting and evaluating sustainable initiatives for transparency and progress towards sustainability goals.

The cluster's concentration on sustainability performance, reporting, and management systems highlights the determinative intersection between sustainability theory and practical application. In spite of its limited size, the nodes within this cluster play a significant role in narrowing down the sustainability narrative within organizations. They illustrate the dynamic operationalization and cognizance of sustainability as a constitutive component of organizational performance metrics, strategic planning, and reporting mechanisms. Passing over sustainability commitments into tangible actions and outcomes is, in a nutshell, what this last cluster sets ahead. Thereon, it makes a special point out of the necessity for businesses to inlay sustainable practices into their core operations, performance evaluation, and stakeholder communication strategies. This discussion can be extended into driving the agenda of transparent, accountable, and effective sustainability practices in business, with the purpose of reflecting a deepened commitment to embedding sustainability into the operational DNA of organizations.

Ergo, the bibliometric analysis of sustainable development and its impact on business, as depicted from the clustering of key themes and concepts, reveals a pluriperspective landscape of sustainability research and practice. Each cluster, from the foundational discussions of sustainable development to the strategic applications, attest to the depth and diversity of sustainability as an academic and practical field:

Table 13. Clustered data: synthesis

Cluster	**Focus**	**Main Takeaways**
1	Integrative Foundation of Sustainability	Highlights the holistic lens through which sustainability integrates economic, social, and environmental dimensions, emphasizing foundational importance.
2	Economic and Environmental Interplay	Underscores the critical balance between economic development and environmental management, stressing the synergy between economic policies and environmental conservation.
3	Innovation as a Catalyst	Points to the transformative potential of innovation in driving sustainable outcomes, emphasizing the role of technology and innovative strategies.
4	Corporate Responsibility and Strategic Finance	Illustrates the evolving role of businesses in sustainability, integrating social and environmental considerations into financial strategies.
5	Market Dynamics and Empirical Insights	Emphasizes the importance of market-oriented strategies and transparency in sustainability efforts, underlining the role of empirical research.
6	Strategic Application and Communication	Focuses on the operationalization and communication of sustainability within organizations, highlighting the need for actionable strategies and effective reporting.

Source: Advanced by the candidate

The main takeaways from this part of the literature offer insightful reflections on how sustainability is conceptualized, operationalized, and communicated across various dimensions. Summing up, table 13 encapsulates the aforesaid landscape of sustainable development, sustainable research, and practice, as raised up by the bibliometric analysis, presenting a concise overview of the diverse themes and their implications for sustainable development and its business implications.

1.4. Shifting paradigms: understanding sustainability through thematic and factorial insights

Moving towards the thematic evolution, the bibliometric analysis captures the evolution and current state of sustainability-focused research with an emphasis on organizational practices and environmental concern, as it can be clearly observed in Figure 9. The data depicts a shift from foundational concepts like "environmental aspects" and "sustainable development" towards more actionable and nuanced themes such as "sustainability reporting" and "knowledge management". This trajectory suggests a maturing field. Early research in the 2000s laid the groundwork with broad sustainability themes, while recent studies delve deeper into specific areas of action and reporting.
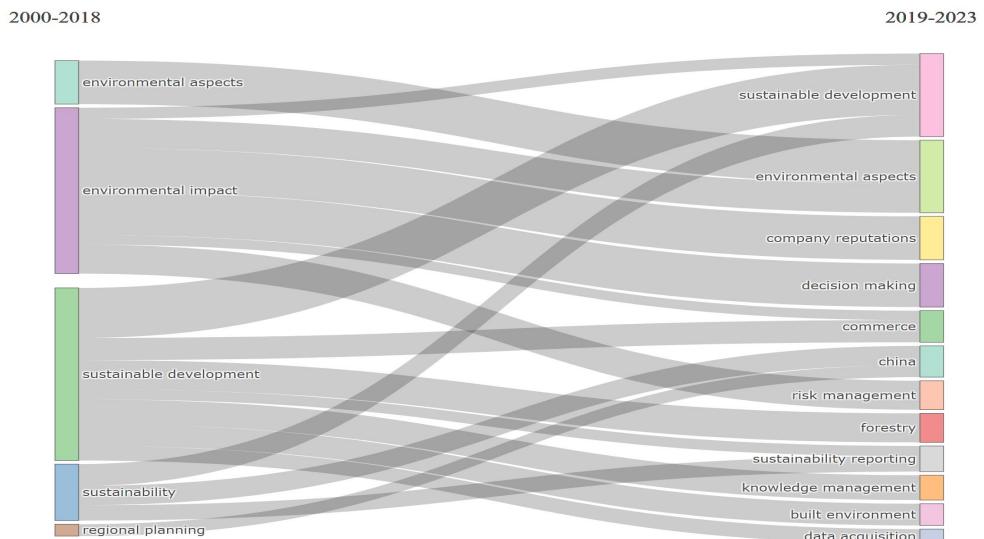
Figure 9. Thematic evolution: topic shifts
Source: Advanced by the candidate

A noteworthy observation from the data is the enduring presence of "sustainable development" across both timeframes. This highlights its continuing relevance in academic discourse. However, the emergence of associated terms like "economic and social effects" and "competitive advantage" indicates a shift towards a more holistic approach. Sustainability now encompasses a wider range of business functions and outcomes, extending beyond profitability and sales to encompass supply chain management and product design.

Interestingly, the recent focus on the intersection of "environmental impact" and "decision making" wields a more integrated approach to environmental considerations within organizational strategic planning. Additionally, the emphasis on "risk

management" related to environmental impact signals a shift towards proactive and preventive strategies in corporate policies.

What is more, the analysis also reflects a growing concern for "company reputations" linked with environmental stewardship. Consequently, it might entail a stronger connection between corporate identity and sustainable practices. Notwithstanding, the incorporation of "commerce" and the specific mention of "China" as a regional focus raise up the global and economic dimensions of sustainability. By doing so, the way in which geographic and market dynamics influence sustainability trends is being set forward.

The following table (Table 14) presents a streamlined version focused on showing the transition of themes from 2000-2018 to 2019-2023, the weighted importance of each theme (extracted from the initial "Inc_Weighted" indicator), and their occurrences (extracted from the initial "Occ" indicator). The stability factor will also be included to reflect the consistency of each theme over time.

Table 14. Streamlined version of themes transition

From (2000-2018)	To (2019-2023)	Central Themes	Importance	Occurrences	Stability
Environmental Aspects	Environmental Aspects	Environmental Concepts	0.5	2	0.25
Environmental Impact	Commerce	Economic Influence	0.11	3	0.02
Environmental Impact	Company Reputations	Health Concerns	0.5	3	0.03
Environmental Impact	Decision Making	Impact and Decisions	0.5	6	0.03
Environmental Impact	Environmental Aspects	Management Systems	0.33	4	0.03
Environmental Impact	Environmental Tech	Benchmarking	0.1	5	0.03
Environmental Impact	Risk Management	Risk Management	0.33	4	0.03
Environmental Impact	Sustainable Development	Social and Risk Factors	0.13	4	0.01
Regional Planning	China	Innovation	0.14	3	0.05
Sustainability	China	Sustainability Economics	0.22	7	0.04
Sustainability	Sustainability Reporting	Reporting Practices	0.18	4	0.04

Sustainability	Sustainable Development	CSR and Strategy	0.25	6	0.01
Sustainable Development	Built Environment	Project Management	0.25	5	0.02
Sustainable Development	Commerce	Business Performance	0.25	4	0.02
Sustainable Development	Data Acquisition	Construction Industry	0.17	3	0.02
Sustainable Development	Forestry	Modeling Techniques	0.33	3	0.02
Sustainable Development	Knowledge Management	Knowledge Strategies	0.29	2	0.02
Sustainable Development	Sustainability Reporting	Reputation	0.12	2	0.02
Sustainable Development	Sustainable Development	Comprehensiv e Sustainability	0.57	67	0.01

Source: Advanced by the candidate

As previously mentioned, Table 14 pinpoints towards a clear shift in emphasis, moving from a narrower focus on "environmental aspects" towards a more comprehensive understanding of how sustainability integrates with commerce and organizational practices. Themes with high importance scores (close to 0.5), such as "environmental aspects" and "environmental impact", remained significant throughout the analyzed period, highlighting their enduring relevance. Nevertheless, the dynamic nature of the field is evident in the "stability" column, where predominantly low values indicate a continual emergence of new concepts. Hence, "Sustainability reporting" and "knowledge management" exemplify this trend, gaining traction in recent research.

Worthy of note, the term "sustainable development" exhibits a significant increase in occurrences (67) in the later period yet possesses a low stability score (0.01). This suggests a potential expansion in the term's usage, encompassing a broader range of implications within the contemporary discourse on sustainability. However, the table serves as a microcosm of the field's evolution, capturing the growing complexity and interconnectedness of sustainability with various facets of business and society as a whole.

In essence, the bibliometric data reveals a significant evolution in sustainability research. Foundational concepts have matured into detailed strategies, reflecting an increased integration of sustainability into the core operations and strategic vision of organizations. This trajectory mirrors not only the growing complexity and urgency of sustainability challenges but also the corresponding sophistication of solutions and strategies being developed and implemented within the business world.

Stepping forward, towards the last part of the bibliometric analysis, the factorial analysis, akin to a Conceptual Structure Map, utilizes Multiple Correspondence Analysis (MCA) – a technique suitable for nominal data – to identify and visualize underlying structures within the dataset (Meghana, Mamdapur & Sahoo, 2021). Namely, the software employs MCA to generate a two-dimensional map ("Dim 1" and "Dim 2") reflecting the level of similarity between keywords based on their co-occurrence patterns. Applied to this research, these dimensions illuminate the interconnectedness of various sustainability-related terms, as shown in Figure 10.
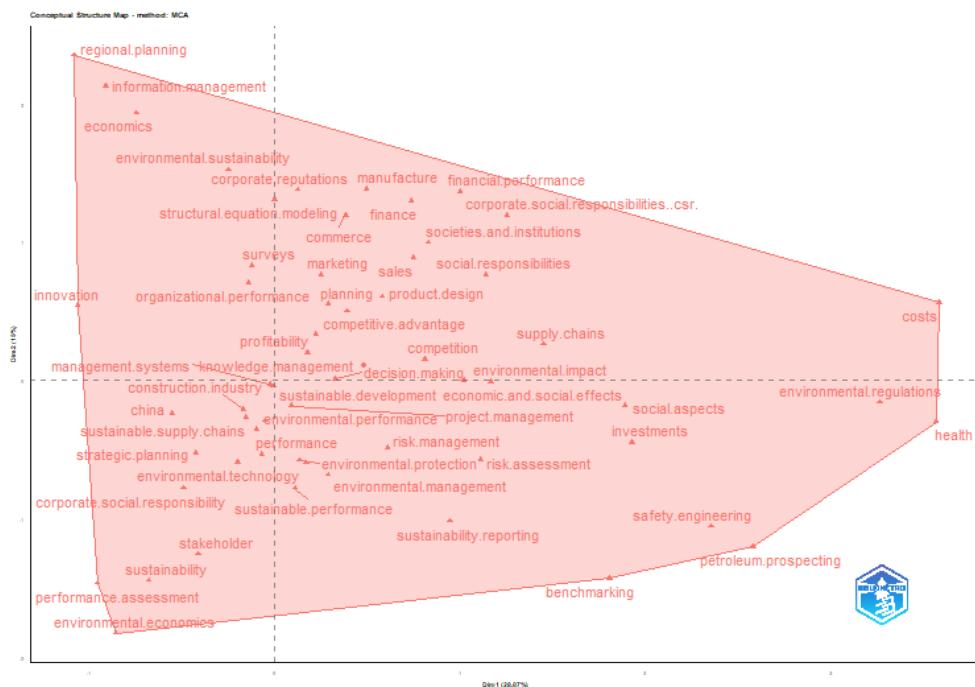
Figure 10. Factorial Analysis
Source: Advanced by the candidate

Albeit, for improved clarity and readability when it came to quantitatively analyze the co-occurrence pattern (Table 15), we have decided to rename the dimensions as follows: "Dim.1" - Primary Trend (Major Theme), and "Dim.2" - Secondary Trend (Supporting Theme). Subsequently, our interpretation focuses on the evolving focus and directional shifts within sustainability research over time.

Table 15. Adapted version of Factorial Analysis

Concept	Primary Trend (Major Theme)	Secondary Trend (Supporting Theme)
Environmental Regulations	46.447	-0.16
CSR - Corporate Social Res.	45.658	43.466
Risk Assessment	45.597	-0.57
Economic and Social Effects	45.323	0.00
Environmental Impact	42.736	-0.01
Social Responsibilities	41.640	0.76
Investments	33.970	-0.44
Social Aspects	32.509	-0.18
Benchmarking	29.587	-1.43
Costs	21.610	0.56
Petroleum Prospecting	21.217	-1.20
Health	20.880	-0.30
Supply Chains	16.438	0.26
Safety Engineering	13.181	-1.05
Financial Performance	1.00	13.516
Sustainability Reporting	0.95	-1.02
Societies and Institutions	0.83	1.00
Competition	0.81	0.15
Sales	0.75	0.88
Finance	0.74	47.119
Risk Management	0.61	-0.48
Product Design	0.58	0.60
Manufacture	0.49	14.246
Competitive Advantage	0.39	0.50
Commerce	0.38	43.466
Decision Making	0.33	0.01
Environmental Management	0.29	-0.68
Planning	0.29	0.55
Marketing	0.25	0.76

Profitability	0.22	0.34
Knowledge Management	0.18	0.20
Sustainability Performance	0.17	-0.59
Environmental Protection	0.13	-0.58
Corporate Reputations	0.12	13.881
Sustainable Performance	0.11	-0.78
Project Management	0.09	-0.18
Structural Equation Modeling	0.00	11.324
Regional Planning	-1.08	12.816
Innovation	-1.06	0.54
Performance Assessment	-0.96	-1.46
Information Management	-0.91	45.628
Environmental Economics	-0.86	-1.83
Economics	-0.75	33.970
Sustainability	-0.68	-1.44
China	-0.55	-0.24
Corporate Social Responsibility	-0.49	-0.78
Strategic Planning	-0.42	-0.52
Stakeholder	-0.41	-1.25
Environmental Sustainability	-0.25	18.994
Environmental Technology	-0.20	-0.59
Construction Industry	-0.17	-0.21
Supply Chain Management	-0.15	-0.26
Organizational Performance	-0.14	0.71
Surveys	-0.12	0.83
Sustainable Supply Chains	-0.10	-0.35
Performance	-0.07	-0.54
Environmental Performance	-0.05	-0.29
Management Systems	-0.02	-0.03
Sustainable Development	-0.01	-0.04

Source: Advanced by the candidate

Therefore, a high positive value on the "Primary Trend" axis indicates a growing emphasis on a specific area in recent studies. For instance, "Economic and Social Effects" has become increasingly central to sustainability discussions. Similarly, the strong positive movement in this dimension for "Commerce" and "Manufacture" suggests a substantial link between sustainable practices and these sectors' growth or adaptation in the current period. Moreover, "Environmental Regulations", "CSR - Corporate Social Responsibility", and "Risk Assessment" occupy the top positions, indicating their prominence in contemporary research. In all likelihood, we face a trend that holds out a growing emphasis not only on conceptualizing and approaching sustainability, but also on its practical implementation and integration into business practices and regulatory frameworks.

In the same vein, a high positive value on the "Secondary Trend" axis entails an upward trajectory in a complementary facet or an emerging area of interest. Specifically, a high value for "Information Management" might indicate the growing importance of managing information within sustainable practices, putting forward the integration of data analysis and information and communication technology (ICT) tools in environmental management. Furthermore, it is worth mentioning that concepts like "CSR - Corporate Social Responsibility" and "Commerce" score high values on both axes. This suggests that these themes are multifaceted and experiencing growth not only in prominence but also in their interconnectedness with other research areas.

Evenhandedly, concepts like "Environmental Impact" and "Social Responsibilities" hold strong positions in the "Primary Trend" but display a near-neutral "Secondary Trend". This implies that these well-established areas remain central to the discourse, but their relative growth in connection with other areas might be stabilizing.

On the flipside, negative values on the "Primary Trend" axis, such as those observed for keywords like "Sustainability", or "Corporate Social Responsibility", which may disclose a shift in the discourse, where the concept is being integrated into broader frameworks or explored in more comprehensive conceptual frameworks, rather than remaining the sole, isolated focus. In these particular cases, we could witness an emerging subjacent trend declined from the initial one (i.e. "Sustainability" and "Corporate Social Responsibility"), such as "sustainable business models" or "corporate governance", respectively.

Following the same pattern, a negative value on the "Secondary Trend" axis for a concept like "Environmental Technology" could suggest that, while the technology remains relevant, its direct association with sustainability might be evolving towards a more holistic approach to environmental management, one that doesn't solely showcase technology. A very akin situation is the one of the concepts "Benchmarking" and "Sustainability Reporting": their values may result in a change in how these concepts are applied or a need for novel methodologies as the field progresses. Nevertheless, the cases of "Environmental Economics" and "Innovation", which bear negative values on both axes, could be accompanied by a pivot towards more specific or advanced themes within these broad areas, or a paradigmatic change in scholarly focus to other emergent topics.

Further nuancing the analysis, a positive primary trend coupled with a negative secondary trend suggests that a concept is gaining prominence within the field (primary trend) while its connections with other research areas or its multifaceted development might be decreasing (secondary trend). This pattern can be observed in concepts like "Environmental Regulations". To wit, while it's becoming a central theme, its interaction with other sustainability-related areas may be diminishing. This aftermath could be due to a specialization within environmental regulations, focusing on specific issues rather than broad integration. In a resembling way, the term "Investments" presents a positive primary but negative secondary trend, which sets ahead a focus on the financial aspects of sustainability, with less emphasis on the complexity of connections between investments and other sustainability concerns. A possible explanation for this outcome might be the fact that it may reflect a period of consolidation where investments are viewed as a distinct topic. "Social Aspects" is a concept that falls within the same pattern, which might denote an increased focus on the social dimension, but potentially with less emphasis on its connection with economic or environmental aspects.

By inference, table 16 aims to systematically categorize and clearly display the key trends within sustainability research, particularly the rise in thematic complexity and the multifaceted nature of concepts.

Table 16. Factorial Analysis: a synthesis

Concept	**Primary Trend** *(Growth and Importance)*	**Secondary Trend** *(Interconnectedness)*
Economic and Social Effects	High positive value (Central to discussions)	Neutral value (Interactions may be stabilizing)
Commerce	High positive value (Substantial link with sustainability)	High positive value (Growing interconnectedness)
Manufacture	High positive value (Integral in sustainable adaptation)	Neutral value (Interactions may be stabilizing)
Environmental Regulations	High positive value (Prominent in research)	Negative value (Focused specialization)
Corporate Social Responsibility	High positive value (Essential in business practices)	High positive value (Broadening scope)
Risk Assessment	High positive value	Negative value

	(Prominent in research)	(Less emphasis on connections)
Information Management	Neutral value	High positive value
	(Consistent focus)	(Emerging importance)
Environmental Impact	High positive value	Near-neutral value
	(Continuing central theme)	(Stable growth)
Sustainability	Negative value	Negative value
	(Integrating into broader frameworks)	(Shifting focus)
Environmental Technology	Negative value	Negative value
	(Evolving association with sustainability)	(Holistic environmental management)
Benchmarking	Neutral value	Negative value
	(Steady importance)	(Changing methodologies)
Sustainability Reporting	Neutral value	Negative value
	(Consistent relevance)	(Evolving practices)
Environmental Economics	Negative value	Negative value
	(Pivoting to specific themes)	(Paradigmatic change)
Innovation	Negative value	Negative value
	(Moving towards advanced themes)	(Shifting scholarly focus)

Source: Advanced by the candidate

All things considered, from a broader theoretical perspective, these patterns highlight a stage where certain themes are solidifying their importance but may require further exploration of their wider implications. A positive primary trend with a negative secondary trend suggests a need for renewed interdisciplinary approaches or integration into larger, system-wide analyses. This can encourage researchers to delve deeper into how these concepts connect with others, fostering a holistic approach to sustainability that reflects the interconnectedness of social, economic, environmental and cultural issues. Simply put, one could state that the end-result of the factorial analysis resulted captures the dynamism of the sustainability research landscape.

1.5. Bibliometric analysis: preliminary conclusions - towards bridging gaps and charting future directions in sustainable-oriented managerial research

In the present bibliometric analysis, we pursued to map the over-complicated network of interconnected dimensions that jointly build upon the conceptualization of sustainable development at the present time. This mapping underscores the dynamic and multifaceted nature of the field, holding out its resistance to compartmentalization and its interconnectedness across various domains.

The analysis delves into the sustainability literature, uncovering the evolution of themes over time and bringing to light the primary research core, molding the current understanding of sustainability, particularly within the business environment. We launched forth the potential need for foundational theories and frameworks to adapt and encompass the growing focus on sectors like commerce and manufacturing, as well as the increasing role of technological innovation within the sustainability discourse. However, the outlined evolution of themes suggests a strategic shift in sustainability research, progressing from individual concepts towards a more integrated approach within business practices and regulatory frameworks. Table 17 provides an integrative summary of the bibliometric analysis that underpins the first part of the literature review. The tools utilized serve various purposes in constructing a thorough examination of the sustainability-related literature.

Table 17. Bibliometric analysis: overall conclusions

Bibliometric Tool	Insight	Contribution to Literature Review
Bradford's Law	Identified core journals and seminal works	Ensures the review is based on influential sources, grounding the work in relevant literature.
Lotka's Law	Recognized key authors and contributions	Highlights central figures in sustainability, guiding a focused review of significant research.
Keyword Co-occurrences	Illuminated interconnected themes	Reveals the multidimensionality of sustainability, aiding in the exploration of complex relationships.
Thematic Evolution (Growth Areas)	Traced developments in sustainability research	Offers insights into emerging trends and literature gaps, informing areas for future investigation.
Works on Topic of Interest	Provided a focused view on current research directions	Enables a targeted review of methodologies and findings specific to Romanian companies' sustainability practices.

Clustering	Structured overview of sustainability themes	Presents a comprehensive landscape of sustainability research, from foundational principles to strategic applications.
Thematic Evolution (Topic Shifts)	Traced shifts in focus within sustainability research	Identifies historical and current trends ("hot topics") in the field.
Factorial Analysis (Primary Trend)	Revealed primary directions and emerging priorities in sustainability	Provides a structured view on leading sustainability trends
Factorial Analysis (Secondary Trend)	Indicated supporting themes complementing the primary trends	Adds depth to the understanding of sustainability's multiparadigmatic nature

Source: Advanced by the candidate

The analysis of primary and secondary trends offered a nuanced picture of emerging priorities and interconnected fields within sustainability studies. These findings push the boundaries of current academic understanding, venturing into new areas of exploration. The secondary trend analyses, in particular, suggest a potential multiparadigmatic approach to sustainability. Put it in other words, this subchapter not only synthesizes the comprehensive bibliometric analysis but also lays the groundwork for the subsequent in-depth literature review, by pinpointing research gaps and suggesting potential areas for further investigation, as observed in Table 18.

Table 18. Bibliometric analysis: synthesis of main outcomes, applied to Romanian business context

Aspect	**Synthesis of Existing Knowledge**	**Identified Research Gaps**	**Areas for Further Investigation**
Foundational Theories	Integration of sustainability within economic, social, and environmental dimensions, and their evolving interplay, particularly noted in the positive primary trend for "economic and social effects".	Theories may not yet fully encompass the dynamism identified in shifts towards commerce and manufacture sectors, or account for the negative secondary trend in "sustainability".	Develop dynamic frameworks that address how foundational sustainability concepts are applied uniquely within Romania's transitional economy, with particular attention to sectors showing primary growth.
Innovation and Technology	Acknowledges innovation's role, evidenced by its shift in thematic evolution, and the increased focus on	Lack of depth in research exploring how technological innovation is integrated within	Dive into the forces driving innovation within Romanian sectors showing primary growth and

	technology's role in driving sustainability.	sustainability efforts, specifically within different sectors in Romania.	investigate how technology adoption influences sustainability.
Corporate Social Responsibility (CSR)	Reiterates CSR and finance as central themes, as shown by their positive primary trend, in sustaining ethical, social, and environmental business practices.	Requires deeper investigation into the specific impact of CSR initiatives in the Romanian context, where the negative secondary trend might indicate evolving CSR approaches.	Examine the balance between financial performance and CSR's evolving nature in Romania, and how this impacts the overall corporate strategy for sustainability.
Market Dynamics and Consumer Behavior	The importance of understanding market dynamics and consumer behavior towards sustainability, which may be inferred from the thematic shift towards sectors like commerce and the changing discourse on sustainability.	A noted absence of detailed consumer response analysis, particularly within sectors showing a positive primary trend.	Explore how Romanian consumer behaviors are adapting to the sustainability paradigm shift and the influence on corporate sustainability strategies.
Sustainability Reporting and Communication	The growing importance of transparency and communication in sustainability efforts, suggested by the positive secondary trend in "information management".	Sparse research on the effectiveness of Romanian companies' communication strategies concerning their sustainability efforts.	Investigate how Romanian companies are adapting their sustainability communication to align with the emerging importance of information management.
Empirical and Applied Research	Highlights empirical research's role in practical sustainability applications, as seen in the positive primary trends of sectors like commerce and finance.	There are gaps in empirical studies on the application of global sustainability standards in the Romanian business landscape.	Conduct sector-specific empirical research that probes into the practicalities of applying global sustainability standards in Romania, considering the primary growth sectors.

Source: Advanced by the candidate

Following the bibliometric analysis, the upcoming section of the book will delve into the scaffolding of sustainable development - specifically, the triple bottom line and its dimensions. In this segment, we will examine the environmental, economic, and social aspects that contribute to sustainability in the business environment, with a particular focus on the Romanian business context. We will approach each dimension separately to better understand its individual significance and how it interacts with the others. Furthermore, we will explore the extensive scope of culture in sustainable development and its role as a fourth pillar. Through this examination, our aim is to dismantle the undertones and connections between sustainability and organizational performance and reputation, ultimately revealing a dynamic and far-reaching perspective of sustainable development within managerial thought and the business world as a whole.

CHAPTER 2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1.1.   Theoretical foundations of sustainable development

The concept of "sustainable development", as we understand it today, can be traced back to 1994 with the introduction of Elkington's influential and continually evolving triple bottom line conceptual framework. Elkington's work reshaped the concept of corporate responsibility by emphasizing the interconnected environmental, social, and economic dimensions (Elkington, 1994). This holistic approach holds out that successful companies should not only prioritize financial performance, but also strive for environmental stewardship and social responsibility, creating synergy between shareholder interests and broader stakeholder well-being.

Therefore, the understanding of nowadays' sustainable paradigm, especially within the business context, emerges directly from these three dimensions that we will briefly put forth. The environmental dimension of the TBL is particularly crucial considering pressing global challenges, such as climate change and environmental degradation. International frameworks, including the United Nations Sustainable Development Goals (UN SDGs), emphasize environmental conservation as vital for safeguarding the planet for future generations (UN, 2015). This global commitment was further underscored by the Paris Agreement at the 2015 UN Climate Change Conference (UNFCCC, 2015), which established ambitious goals to mitigate global warming and transition towards a low-carbon economy.

2.1.2.   On the environmental pillar of sustainable development: green practices and eco-innovation

The environmental pillar of sustainable development stands as a critical axis around which modern businesses orient their strategic compass. We aim to further approach the intricate weave of ecological responsibility, innovation, and practice that define businesses' approach to sustainability. Anchored by the conceptual frameworks that lie at the very bedrock of the present publication, works of Elkington (1994) and underpinned by global commitments such as the Paris Agreement (UNFCCC, 2015),

this section scrutinizes how businesses navigate the balance between ecological stewardship and economic vitality.

Agreed-upon, companies bear a responsibility to minimize their environmental impact. This necessitates strategic decisions that reshape production processes and operational behaviors to foster both organizational success and environmental integrity. Organizational responses must be forward-thinking and long-term oriented, entailing an evolved approach to dealing with environmental regulations. Such approximation is characterized by proactive engagement and strategic stakeholder collaboration, can lead to innovation, improved sustainability outcomes, and ultimately, contribute to the sustainable growth and resilience of businesses. This emerging paradigm shift reflects an acknowledgment that navigating environmental regulations requires more than compliance—it demands active participation in the regulatory discourse and a commitment to continuous innovation in sustainability practices. (Chen et al., 2020; García-Marco, Zouaghi, & Sánchez, 2020; Shao et al., 2020; Ma, Lin, & Xiao, 2022).

In response to these challenges, there is a growing trend among businesses to engage proactively with policymakers and regulatory bodies. This collaborative approach aims not only to gain clarity and navigate the complexities of environmental regulations but also to influence the development of policies that are both effective in achieving environmental objectives and considerate of the operational realities faced by businesses (Shao et al., 2020). For instance, Ma, Lin and Xiao (2022) highlight the relationship between environmental regulation and green-technology innovation, underscoring the importance of regulations that incentivize rather than stifle innovation, leading to improved green total-factor productivity.

Moreover, stakeholder engagement has become an indispensable part of corporate environmental strategy. This involves open communication and partnership with a range of stakeholders, including customers, suppliers, local communities, and environmental groups, to address sustainability concerns collaboratively. Firms are increasingly recognizing that stakeholder engagement is not merely a regulatory compliance exercise but a strategic imperative that can lead to enhanced reputation, customer loyalty, and even the opening of new markets (García-Marco, Zouaghi, & Sánchez, 2020).

In an alike way, Huang et al. (2022) advocate for the integration of environmental social responsibility into corporate strategy as a means to achieve sustainable production. They suggest that businesses that proactively adopt environmental responsibility practices not only contribute to sustainability goals but also benefit from increased trust and support from stakeholders, which can result in tangible business benefits. Nevertheless, sustained collaboration between public and private sectors is crucial in addressing environmental challenges at all levels, from global to local and regional (UNFCCC, 2015). Such collaboration is particularly vital in driving the transition towards renewable energy solutions that can mitigate climate change.

Contrary to concerns about a negative relationship between environmental regulations and business performance, research suggests that environmental initiatives aimed at sustainability and pollution prevention can actually enhance profitability (Elbana, Benedetto & Gherib, 2015; Friedman, Carmeli & Tishler, 2016; Mu, Wang &

Mohiuddin, 2022). Elbanna, Benedetto and Gherib (2015) shed light on how incorporating environmental considerations into the decision-making process can positively influence organizational success. They suggest that, rather than being a hindrance, environmental strategies can be integral to the broader strategic objectives of a company. In line with this, Friedman, Carmeli and Tishler (2016) provide evidence that CEOs and top management teams who foster adaptive capacity, including responsiveness to environmental concerns, can enhance the performance and sustainability of small entrepreneurial firms.

The notion that environmental initiatives lead to profitability is further supported by Mu, Wang and Mohiuddin (2022), who through the lens of the Porter Hypothesis, assert that well-designed environmental regulations can spur innovation and lead to improved corporate performance. This hypothesis posits that the right kind of environmental standards can stimulate innovation that may offset the costs of complying with these regulations and lead to a net improvement in profitability.

Consequently, research spanned over more than a decade endorsee that integration environmental standards into business operations offers strategic benefits that yield substantial returns, despite the associated costs of capital investment and waste management (Perri et al., 2009; Chen & Montes Sancho, 2017; Dima et al., 2019; Ghadge et al., 2020).

The investment in environmental standards, while it may involve initial costs, is seen to confer financial benefits for the long run. Perri et al. (2009) argue that the integration of these standards promotes long-term efficiency and innovation, leading to sustained profitability. Chen and Montes Sancho (2017) highlight that the perception of operational impacts influenced by environmental regulations affects the adoption of carbon-abatement technologies, which in turn can optimize operational processes and reduce long-term costs. Additionally, Dima et al. (2019) provide an insight into how sustainability practices, such as telework, can yield sustainable social and individual implications, further supporting the business case for integrating environmental considerations. Ghadge et al. (2020) discuss the sustainability implementation challenges faced by UK artisan cheese producers, illustrating the practical difficulties yet eventual benefits of adhering to environmental standards. All these studies underline the potential for a symbiotic relationship between environmental stewardship and business performance, where the pursuit of sustainability does not just comply with regulations but also aligns with and supports the strategic and financial objectives of the company. Convergently, it can be stated that various scholars in different points in time advocate for a re-framing of environmental regulations as an opportunity for growth and innovation, rather than a mere obligation or cost burden.

What is more, recent studies point out that reducing pollution and adopting innovative environmental processes can facilitate access to equity markets, reinforcing the link between environmental measures and organizational performance (Yu et al., 2022; Li, Zhang, & Lyu, 2023).

Quite clearly, environmental stewardship is increasingly being recognized not just as a moral imperative, but also as a strategic financial decision. The interplay between

environmental measures and organizational performance is becoming ever more apparent, Yu et al. (2022) illustrating that innovation in reducing CO_2 emissions, coupled with financial development, can create a threshold effect that positively impacts organizational performance. This finding suggests that environmental innovation can be a lever for accessing equity markets, appealing to investors who are increasingly mindful of environmental performance as a criterion for investment decisions. Likewise, Li, Zhang and Lyu (2023) explore the concept of inclusive green growth, proposing that environmentally oriented labor market strategies can lead to sustainable development that includes equitable growth. This perspective aligns with the notion that environmentally conscious practices can and do contribute to a company's overall performance and market competitiveness. It also suggests that environmental measures, when integrated into broader business strategies, can help rectify labor market distortions and contribute to a more balanced economic development.

Just as well, enhancing a company's reputation through environmental efforts can expand market share and attract environmentally conscious consumers, further bolstering brand equity and competitive advantage (Temiz, 2022). Besides, embracing clean technologies and pollution-prevention practices not only fulfils legal obligations but also presents an opportunity to exceed regulatory standards, thereby elevating brand value and product appeal (Dewi, 2020; Wang et al., 2022). Dewi (2020) backstops that companies can build a strong reputation through environmental disclosure. Such transparency can have a ripple effect, increasing consumer trust and loyalty, which are essential components of brand equity. On top of it, Wang et al. (2022) evaluate the effect of Chinese environmental regulation on corporate sustainability performance and find that green technology innovation mediates this relationship. They argue that by exceeding mere compliance and adopting pollution-prevention practices, companies can significantly enhance their brand value and appeal to a market that values sustainability.

Overly, the inferred implication is clear: engaging in proactive environmental policies is no longer just about compliance; it's about seizing an opportunity to differentiate a business in the market, to drive innovation, and to build a sustainable brand that resonates with the values of consumers, investors, and wider stakeholders. In essence, the strategic integration of environmental considerations into business operations is becoming a main factor in achieving a sustainable competitive advantage in the overall contemporary business landscape.

On a regulatory note, The Cleaner Production program advocated by the United Nations Environment Programme (UNEP) promotes cost-effective approaches over reactive measures, offering a range of benefits including reduced compliance costs, enhanced consumer trust, and market expansion (UNEP, 2020). Briefly put, the environmental pillar of the TBL necessitates a conscientious approach to resource allocation and emission reduction. As highlighted by UNEP (2020), businesses are tasked with addressing critical environmental challenges, including effective resource management, climate action, and biodiversity preservation. These efforts transcend regulatory compliance and are fundamental to securing new market opportunities and contributing to a sustainable future.

Summing up all the information presented, the following table brings forward the operationalization of the "Environmental Dimension" concept, which will be used as a basis for approaching how Romanian businesses align with global sustainability goals. This evaluation will focus on their contributions to environmental protection and their broader commitment to sustainability.

Advancing towards a working definition, in the context of this book, the *Environmental Dimension* will be defined as the conflation of practices, strategies, and policies enacted by Romanian businesses that aim to minimize their ecological footprint while promoting sustainability. This encompasses efforts to efficiently use resources, prevent pollution, comply with and exceed environmental regulations, innovate with eco-friendly technologies, engage stakeholders in environmental initiatives, and enhance corporate reputation through environmental responsibility. For the analysis, companies that demonstrate a commitment to these environmental objectives, regardless of their size, industry, or ownership structure, will be considered as actively engaging with the Environmental Dimension.

2.1.3.   On the economic pillar of sustainable development: beyond financial metrics

Conceptually delimiting an organization's performance and its contribution to the economic dimension of sustainability is crucial, as the latter encompasses a broader spectrum of impacts beyond mere financial indicators (Mohua & Shafi, 2022). While a positive financial performance is indicative of a businesses' ability to sustain its workforce and ensure stability, the economic dimension extends into the conceptual sphere of economic sustainability, stakeholders' financial well-being, and the broader economic development of communities and nations (Kusuma & Soenarno, 2022). Thus, organizational performance, while vital, represents just one facet of the expansive economic influence exerted by businesses and will be accordingly treated in a distinct chapter.

Thereby, this dimension focuses on fostering a sustainable economy and ensuring equitable economic practices. Research points out that the economic dimension's contribution to sustainable development is multifaceted, driving economic growth, promoting equity, and ensuring environmental sustainability (Barska et al., 2020; Gunnarson et al., 2020; Perényi et al., 2020; Jędrzejczak-Gas, Barska, & Wyrwa, 2021; Lazar, Klimecka-Tatar & Obrecht, 2021; Suharto et al., 2021; Silveira et al., 2022).

The pursuit of a sustainable economy, as portrayed by the economic dimension of sustainability, emphasizes creating a growth paradigm that is socially tolerable, economically fair, and environmentally viable. The discourse, enriched by Jędrzejczak-Gas, Barska and Wyrwa (2021), suggests that such development is paramount to attaining overarching sustainability objectives, highlighting the need for growth strategies that align with these principles. Gunnarsson et al. (2020) further elaborate on the necessity of fostering economic system growth while judiciously investing in the

capital of firms, thereby ensuring the sustainability of investments and, by extension, the firms themselves. To boot, Lazar, Klimecka-Tatar and Obrecht (2021) explore the intricate weave of economic activities with social and environmental threads, positing a holistic sustainable system that thrives across all fronts.

On the flipside, the imperative for sustainable economic development extends beyond mere economic metrics, touching upon the well-being of societies and communities, as Barska et al. (2020) argue. Consequently, this aspect of sustainability underlines the significance of embedding environmentally sustainable practices within business operations, not as a compliance measure but as a strategic approach to enhance organizational performance and secure long-term benefits, as supported by Kusuma and Soenarno (2022). Then, Perényi et al. (2020) reinforce the notion of economic sustainability as an integral component of the broader sustainable development agenda, stressing the role of economic growth in fostering social welfare and environmental preservation.

As it can be seen, the integration of economic sustainability practices within business operations, transcends the fulfillment of legal mandates to enhance brand value and appeal (Silveira et al., 2022; Suharto et al., 2021). Such practices, albeit associated with initial capital investments and waste management costs, pave the way for significant returns and long-term benefits, marking a hypostatic, yet compulsory shift towards a more sustainable and equitable economic landscape.

To the best of our knowledge, Porter and Kramer (2006) were the first ones in highlighting that effective management practices and transparency are pivotal for endorsing the economical pillar of sustainable development. However, the trustworthiness and economic robustness of a firm are key factors considered by financial institutions when allocating funds (Walker et al., 2021). Conversely, any action jeopardizing relationships with investors or financial partners can severely limit a company's financing options.

Still more, sustainable business growth opens up additional investment avenues, providing a more stable and transparent framework for various financial actors, especially critical for small enterprises that face greater scrutiny due to their limited assets (Abeysekera, Li, & Lu, 2021). The sustainability of a business' supply chain and its corporate network plays a significant role in determining its overall sustainability. Unreliable practices towards suppliers, such as defaulting on payments or exploiting bargaining power, can have detrimental effects on the quality and availability of resources (Saeed et al., 2020). Hence, maintaining ethical relations with suppliers is paramount for preserving business standards and reputation.

Moreover, when tackling with the economic dimension of sustainable development it is of the essence to keep an eye on maintaining robust, ethical relationships with suppliers and fostering a competitive yet equitable market environment (Schulte & Hallstedt, 2018; Cioca et al., 2020; Kodasheva, Piontkevich & Sheina, 2020; Mustapha & Hassan, 2022; Manaswi, Singh & Gupta, 2023). More precisely, Cioca et al. (2020) delve into the dynamics within family businesses, highlighting the crucial role of internal drivers in achieving not only financial goals but also fostering a foundation for

sustainable decisions. With it all, this perspective is vital, suggesting that the commitment to sustainability begins from within and is a significant determinant of a company's performance.

Yet, Kodasheva, Piontkevich and Sheina (2020) navigate the creation of financial mechanisms that cater to sustainable economic growth, especially in times of global challenges. Accordingly, their work emphasizes the need for businesses to adopt stability and growth-oriented emergency measures, illustrating the financial aspect of sustainability as a bulwark against unforeseen global crises. This approach aligns with the principles of the triple bottom line by ensuring that companies not only survive, but actually thrive in challenging times through sustainable growth strategies. Besides this, Schulte and Hallstedt (2018) redraw the discussion from the risk management standpoint, advocating for the integration of sustainability practices within risk management frameworks. In doing so, it puts forth the evolving corporate landscape, where navigating the sustainability transition successfully is contingent upon a company's ability to imbue sustainability into its risk management strategies, thus safeguarding against future uncertainties.

Further exploring the intersection of the economic dimension within the sustainable paradigm, Mustapha and Hassan (2022) shed light on the construction industry, demonstrating how corporate sustainability frameworks are instrumental in monitoring and assessing sustainable practices. Put it in other words, they uncover the broader applicability of sustainability across different sectors, underscoring the importance of economic implicatures in enhancing organizational efficacy and, by extension, industry-wide sustainability. In addition to this, Manaswi, Singh and Gupta (2023) extend the narrative by focusing on the long-term benefits of sustainable investment practices. Through an examination of recent research findings, the study highlights that sustainable investments are not merely ethical choices but are foundational to building a better future with positive societal impacts. This outcome consequently reinforces the notion that sustainability, when embedded in investment practices, serves as a lever for long-term success and societal well-being.

It is worth mentioning that these research streams converge on showcasing the imperative of nurturing ethical supplier relationships, advocating for a fair yet competitive market, and embracing sustainability principles across all business operations. By integrating sustainability into the fabric of business strategies - from internal decision-making and financial mechanisms to risk management and investment practices - companies can navigate the path to sustainable development more effectively. This not only aligns with the triple bottom line principles but also contributes to building a resilient, sustainable economic ecosystem that benefits all stakeholders.

Moving on within the context of the economic dimension of sustainability, the consumer engagement is brought into question. Various studies make mention of the enlarging character of consumer engagement, which extends beyond mere satisfaction to include active participation in environmental sustainability efforts (Jaegler & Goessling, 2020; Moon, Amasawa, & Hirao, 2020; Kabel, Elg, & Sundin, 2021; Chirilli, Molino, & Torri, 2022; Siraj et al., 2022). Thereby, studies such as those by Chirilli,

Molino and Torri (2022) indicate that consumers with a higher awareness of environmental sustainability are more likely to engage in sustainable behaviors, highlighting the pivotal role of consumer awareness in driving sustainable actions. And furthermore, Jaegler and Goessling (2020) delve into the luxury sector, revealing that French luxury consumers have distinct sustainability expectations, thus underscoring the importance of aligning business practices with consumer demands across various market segments. Avaunt, this becomes crucial for maintaining a competitive edge while adhering to fairness and ethical standards in market practices.

Even so, the challenge of consumer reluctance to embrace remanufactured products, as explored by Kabel, Elg and Sundin (2021), exemplifies the hurdles in shifting towards sustainable consumption patterns. Accordingly, this lack of interest may significantly impact the adoption of sustainable practices, emphasizing the need for businesses to understand and influence consumer preferences towards sustainability. All the more, the study by Siraj et al. (2022) on sustainable labeling points out how effective communication of sustainability efforts can influence consumer purchasing behaviors. In doing so, the critical role of transparency and sustainability communication in fostering consumer trust and engagement is being called int question, thereby directly impacting sustainable purchasing behaviors. Also, Moon, Amasawa and Hirao (2020) dwell with consumer motivations for sharing laundry machines, linking in their study sustainable consumption practices to consumer lifestyles. Notwithstanding, the connection found between lifestyle choices and sustainability props up the potential for innovative business models that align with consumer preferences for sustainability, inherently facilitating sustainable consumption practices.

Once more, these insights lay stress on the importance of fostering ethical supplier relationships, creating a competitive, yet fair market environment, and integrating sustainability principles into business operations. Such practices not only enhance societal welfare, but also bolster up business standards and reputation by meeting and exceeding consumer expectations for sustainability. These findings contribute to our understanding of the economic dimension of sustainability, illustrating that economic practices intertwined with ethical considerations and consumer engagement strategies are foundational to achieving broader sustainability goals.

Concluding, based on the information presented, we can infer about the economic dimension of sustainable development that it encapsulates an extensive domain, comprising not only financial performance and growth, but also the intertwining of ethical, environmental, and social considerations into the very nature of business operations. This dimension is defined by its commitment to promoting practices that are equitable, environmentally responsible, and economically beneficial over the long term.

Within this conceptual framework, drawing near a working definition for the *Economic Dimension,* it will be operationalized as the integration and application of sustainable practices within business operations and economic systems that aim to achieve growth and development which is environmentally viable, socially equitable, and economically efficient. As such, it encompasses the adoption of sustainable investment practices, ethical supplier relationships, consumer engagement in

sustainability, and the implementation of innovative and green technologies to foster long-term economic resilience and prosperity, whilst ensuring the well-being of communities and the protection of the environment.

2.1.4.   On the social pillar of sustainable development: bridging business actions with community value

We now turn to the social dimension, the final pillar of the TBL framework. This subchapter argues that the social dimension, encompassing social equity, community well-being, and cultural preservation, represents a critical yet often under-researched aspect of sustainable development Boldermo & Ødegaard, 2019; Copperdock et al., 2021; Wang et al., 2022). Despite its undeniable importance, the social dimension has historically received less attention compared to its economic and environmental counterparts (Dobrovolskienė, Pozniak, & Tvaronavičienė, 2021; Jamaludin, Zaki & Fernandez, 2022). Boldermo and Ødegaard (2019) put under the limelight the decisive nature of social sustainability, pointing up its conclusive role in fostering social equity and enhancing the welfare of communities. Their insights uphold a more pronounced recognition of social factors as *sine qua non* elements of sustainable development. Likewise, Cooperdock et al. (2021) call for a balanced approach to sustainability, arguing that social sustainability requires increased emphasis to align with its economic and environmental matches. Their discussion gravitates around the necessity of integrating social equity and cultural preservation more deeply into sustainability efforts.

In an alike manner, Dobrovolskienė, Pozniak, and Tvaronavičienė (2021) contribute to this dialogue by reinforcing the significance of the social pillar within sustainable development policies. They spot out social cohesion, equity, and safety as outright components that must be approached to achieve holistic sustainability. This perspective is echoed by Jamaludin, Zaki, and Fernandez (2022), who put forward in a pointblank way social sustainability as an integral dimension of sustainable development, throwing into relief its coexistence with economic, environmental, and technological dimensions.

Subsequently, Wang et al. (2022) further on the need for a sharpened focus on social wellbeing within sustainable development initiatives. They boost that the orientation, practices, and performances related to social sustainability of a firm play a substantial role in shaping the firm's overall sustainable trajectory. Their research raises up the interconnectedness of social practices with broader sustainability outcomes, suggesting that social sustainability should be viewed as an ongoing orientation rather than a static achievement.

In force, these scholarly contributions underscore a growing consensus on the indispensability of the social dimension in sustainable development. They built a compelling case for a nuanced understanding of sustainability that goes beyond environmental butlership and economic growth to include social justice, equity, and the nurturing of cultural diversity. This broader perspective is essential for crafting policies

and practices that are not only sustainable, but also equitable and inclusive, thereby ensuring a resilient and thriving future for all communities.

Nevertheless, this oversight is beginning to be mended in contemporary research, which calls for a balanced approach to sustainability that fully integrates social considerations (Ballet, Bazin & Mahieu, 2020; Gelashvili, Martínez-Navalón, & Saura, 2021; Itma & Monna, 2022; Liyanage et al., 2022). Hence with, Gelashvili, Martínez-Navalón and Saura (2021) contribute to this discussion by acknowledging the indispensable role of social sustainability in achieving comprehensive sustainable objectives. Their study points out the necessity of incorporating social metrics alongside economic and environmental measures to ensure a holistic approach to development. Itma and Monna (2022) further articulate the disparity in research attention, advocating for an expanded focus on social sustainability to understand its complexities and potential for contributing to sustainable development more fully.

On the same note, Ballet, Bazin, and Mahieu (2020) delve into specific elements of the social pillar, emphasizing social cohesion, equity, and safety. Their findings underline and endorse the importance of these components in crafting sustainable development policies that are truly inclusive and capable of fostering societal wellbeing, while keeping an eye on the other business facets. Moreover, Liyanage et al. (2022) address the challenge of defining and prioritizing social welfare within sustainability efforts. Noteworthy among their findings is the fact that they call into question the relative vagueness of social sustainability criteria compared to the more delineated economic and environmental dimensions, calling for clearer frameworks that can guide effective integration of social aspects into sustainable business practices.

All together, these studies put special emphasis on the essential role of the social dimension within the sustainable development framework, whilst bringing out the need for enhanced clarity, gained throughout further research, and policy focus. Jointly, they call fort for a sustainable development paradigm that not only mitigates environmental impact and promotes economic growth, but also ensures social equity, enhances community engagement, and safeguards cultural heritage. Subsequently, this "call to action" depicted from the body of research implies a growing recognition of the interconnectedness of sustainability's dimensions, advocating for a comprehensive approach that values and nurtures the social fabric of communities alongside their physical and economic environments.

Though, it is worthy of mentioning the fact that if we follow the evolution in time of the academic narrative on this topic, to the best of our knowledge, we can trace it back once more in Porter and Kramer's work (2006). They make a clear-cut distinction between comprehensive and particular impacts of corporate conduct, laying by doing so the groundwork for understanding the broad spectrum of a business's social responsibility. More specifically, on the one hand, comprehensive impacts refer to the wider societal contexts where a business's actions contribute to general societal outcomes without direct control or sole influence. Thereafter, effects on societal standards of living, employment levels, and discrimination practices are being showcased, which can hinder cultural, financial, and societal development by fostering

divisions within communities. On the other hand, particular impacts are direct consequences of a business's operations on its stakeholders, including employees and the immediate community. This encompasses a range of activities from environmental stewardship, diversity and inclusion, job security, to ethical corporate practices and health and safety standards. These actions directly contribute to the social fabric of the community and the welfare of individuals within it.

Following upon that, another seminal concept is raised for discussion, namely "the standard of work life", as discussed by Gallie (2007). It encompasses various facets of employment quality that are vital for individual well-being and societal progress. These include job security, work autonomy, work-life balance, skills development, and fair remuneration. A focus on these aspects not only benefits the employees but also positions the company as an attractive employer, thereby enhancing its competitiveness and societal contribution. Consonantly, Eurofound (2011) puts under the limelight the importance of a shared approach in corporate reshaping to mitigate adverse impacts on employees and the community. In accordance with that, later on, The European Commission (2013) emphasizes the dangers of societal fragmentation, urging businesses to integrate civil and community-related dimensions into their operations to foster financial advancement and social cohesion. Such fragmentation, arising from discrimination, job losses, and workplace instability, among others, poses a threat to societal welfare and sustainable development. Along the same lines, the principles laid out by Social Accountability International (2014) in the SA8000 standard further underscore the importance of maintaining a dignified, safe, and equitable work environment for all employees. Differently put, the social actions a company can engage in—ranging from societal contributions like supporting underprivileged groups or cultural initiatives, to internal company policies promoting diversity, training, and work-life balance—reflect its commitment to social responsibility. Henceforth, these actions not only enhance the company's reputation, but also contribute to building a more inclusive and equitable society altogether.

Thereon, the emergent catalytic role of the social dimension as a driver for strategic changes in sustainable development is being sketched. This alignment of social values with business objectives not only fosters a more inclusive and equitable society but also positions businesses at key social actors, assuming a leading role (Dempsey et al., 2011; Crespo et al., 2017; Medeiros, 2020; Dobrovolskienė, Pozniak, & Tvaronavičienė, 2021). In line with this framework, Dempsey et al. (2011) delve into the essence of urban social sustainability, offering insights into how the social fabric of communities is an integral component of sustainable development. Their findings argument the necessity of integrating social sustainability into the urban planning and development processes to ensure that societal well-being is preserved and enhanced alongside environmental and economic objectives.

Hereafter, Crespo et al. (2017) extend this conversation into the grounds of higher education, illustrating how academia, through its managerial-oriented courses and specializations could parallel the efforts carried out by the business sector. This approach not only familiarize students with the sustainable paradigm, but also equips them with

the knowledge and skills to integrate these principles into various professional contexts, underpinning a strategic long-term perspective. On the flipside, Medeiros (2020) examines Portugal's policy framework for promoting sustainable territorial development, highlighting the interconnectedness of economic, environmental, and social strategies in achieving comprehensive sustainability objectives. His analysis suggests that a holistic approach to policy formulation and implementation, which encompasses the social dimension of sustainability, is essential for the successful realization of sustainable development goals.

As it can be inferred from the academic discourse presented so far, within their pursuit of integrating sustainable development into their day-to-day activity, business should focus also on the integration of social considerations into their strategic and operational frameworks. Overall, a need for a more structured, clear-cut delimitated, and detail-conscious social-oriented approach emerges as a critical pathway to achieving not only ethical and equitable practices but also long-term viability and success. It transcends mere compliance with ethical standards, but it embodies the creation of a corporate culture where ethical practices, equitable treatment of individuals, and the overall social welfare are held in as high regard as economic achievement. This perspective is progressively being recognized not merely as a moral obligation, but as a strategic imperative that substantiates a company's competitive edge, enhances its reputation, and amplifies its contribution towards fostering a sustainable future.

Narrowing down, it can be stated, from what has been presented along this subchapter, that the social dimension emerges as a critical factor for achieving sustainability goals comprehensively. Encompassing practices that ensure equitable treatment, foster social well-being, and preserve cultural heritage within the corporate context, the social dimension complements and interrelates with the economic and environmental dimensions. As we have seen, this approach aligns with the focus on ethical business conduct and equitable stakeholder treatment within the sustainability discourse. Consequently, integrating social considerations into strategic planning and operational practices becomes essential for businesses to contribute to sustainable development goals. In fact, this acknowledgement is the very bedrock of our working definition.

Bearing down on operationalizing the *Social Dimension* to better render the purpose of this book, we advance as working definition the following comprehension: the ensemble of concerted efforts and practices that businesses undertake to promote social equity, community well-being, and cultural preservation. This is achieved through the creation and maintenance of a work environment that respects diversity, ensures job security, and promotes health and safety; engagement in social actions that extend beyond the immediate business operations to include contributions to societal development, such as support for underprivileged groups, and initiatives in education, culture, and community rehabilitation; and the incorporation of corporate practices that are not only legally compliant but also exceed statutory requirements in fostering social welfare, thereby enhancing the business's contribution to societal prosperity and sustainability.

2.1.5. Sustaining culture: the missing piece of the sustainable development puzzle

In the present subchapter we aim to explore the burgeoning recognition of culture as an essential dimension of sustainable development, positioned alongside the traditional economic, social, and environmental pillars. The integration of cultural sustainability within the broader sustainable development discourse underscores the imperative to incorporate cultural considerations into sustainability strategies, thereby fostering a more holistic approach to achieving sustainability goals. Spanning for over a decade, scholarly works underscore this shift towards a more inclusive understanding of sustainability (Murphy, 2012; Facchini et al., 2019; Pop et al., 2019; Wang, Fu & Hu, 2020; Prabowo & Salaj, 2023). Murphy's (2012) review of the social pillar of sustainable development, with a focus on cultural sustainability, provides a critical framework for understanding how cultural considerations can be effectively integrated into policy analysis. Murphy's research insists on the need for policies that not only shield environmental and economic interests, but also unwind the cultural heritage and practices that define and enrich communities.

In agreement with this framework, Pop et al. (2019) highlight the role of cultural sustainability in museums, arguing for its vital place in broader sustainable development objectives. Their research puts forth how cultural institutions can contribute to the preservation and propagation of cultural values, enhancing societal resilience and continuity. Conversely, Facchini et al. (2019) bring to the forefront a perspective from the logistics sector, presenting a maturity model for Logistics 4.0 that incorporates cultural considerations into logistics practices. Their study suggests that for logistics and supply chain management to contribute to sustainable development effectively, they must embrace cultural aspects, ensuring that practices are aligned with the values and expectations of all stakeholders involved.

Otherwise, Wang, Fu and Hu (2020) delve into public cultural participation patterns in China, revealing how engagement with cultural institutions plays a significant role in the social fabric, influencing community cohesion and individual well-being. Further expanding on this theme, Prabowo and Salaj (2023) explore urban heritage management within World Heritage Sites, presenting how urban-scale facility management integrates cultural heritage preservation with the principles of sustainable development. Notably, this intersection of cultural heritage and sustainability spotlights the importance of protecting cultural assets as part of comprehensive sustainability efforts, ensuring that cultural dimensions are not overlooked in the quest for sustainable urban environments.

The second part of the present chapter draws heavily on the work "The Missing Pillar: Culture's Contribution to the UN Sustainable Development Goals" authored by the British Council (2020). The reason why we chose this document as a guiding source for our second part of the chapter lies in the study's depth of analysis and the broad spectrum of perspectives it entangles. It synthesizes academic research with insights

from cultural organizations, providing a rich tapestry of evidence demonstrating how culture underpins social cohesion, drives economic innovation, and contributes to environmental stewardship. On top of that, the selection of the British Council's comprehensive and methodical approach is rooted in its authoritative and collective authorship. The document represents a thorough effort to scan, map, and report the state of the art concerning culture's integration into sustainable development efforts, standing out for its sound methodological approach.

This being said, the first section of the report delves into the role of culture in achieving the UN Sustainable Development Goals (SDGs) through a comprehensive literature review conducted by Nordicity. This review analyzes international publications from academic institutions and cultural organizations, including the British Council. The review identifies key thematic areas where arts and culture intersect with several SDGs, including education, tangible and intangible cultural heritage, social development, gender equality, and technology. This analysis emphasizes the crosscutting nature of the SDGs and culture, suggesting that connections can be made across various thematic areas, and a "one-size-fits-all" approach is definitely out of question.

Furthermore, the review identifies a significant gap in research on implementing the SDGs through a cultural lens. Culture is only explicitly mentioned once within the SDGs, highlighting the need to strengthen narratives that connect culture and the SDGs. The review also emphasizes the importance of developing precise tools, including targets and indicators, to measure and demonstrate culture's contribution to each dimension of sustainable development. Building on these insights, the literature review provides a comprehensive overview of culture's potential to contribute to the SDGs. Naturally, it points out the need for further research and action to solidify the connection between culture and sustainable development.

In the same fashion, the second section focuses on analyzing the Sustainable Development Goals (SDGs) through a cultural lens. It explores the correlations between culture and specific SDGs, highlighting how cultural perspectives can contribute to achieving the goals, targets, and indicators. Based on the analysis, 11 SDGs emerged as particularly relevant to arts and culture initiatives. The report acknowledges this is not an exhaustive list, recognizing that other SDGs, particularly those focusing on environmental sustainability ("the planet"), can also be relevant, as elaborated on in the recommendations section. The report concludes by outlining a series of actionable recommendations to strengthen the integration of culture into sustainable development strategies. These recommendations prioritize fostering a deeper understanding of the multifaceted ways culture contributes to achieving the SDGs.

Table 19. Summary of Recommendations for Integrating Culture and Sustainable Development

Recommend ation	Description	Goal
1. Strengthen Narratives	Amplify the connection between culture and achieving SDGs across social, economic, and environmental aspects.	Highlight the potential of cultural initiatives for policymakers and stakeholders.
2. Engage Communitie s	Develop participatory approaches that utilize local knowledge and diverse voices in decision-making.	Ensure cultural initiatives are relevant, empowering communities to shape their sustainable future.
3. Improve Monitoring & Evaluation	Enhance information systems to measure the impact of cultural initiatives on sustainable development.	Track progress towards achieving SDGs through data collection and analysis.
4. Conduct Longitudina l Studies	Conduct long-term studies to understand the lasting effects of cultural interventions.	Maximize the impact of cultural initiatives by recognizing the need for sustained efforts.
5. Foster Partnerships	Encourage stronger and more diverse collaborations across sectors and government levels.	Improve understanding between stakeholders for more effective policymaking and project delivery.
6. Value Cultural Participatio n	Recognize the importance of cultural participation and heritage for a peaceful, inclusive, and prosperous future.	Unlock the transformative potential of culture for achieving a sustainable future.

Source: Adapted from (British Council, 2020).

Further on, the report delves into the multifaceted ways culture contributes to achieving the Sustainable Development Goals (SDGs). For a clearer perspective, the table below synthesizes the relevant information accordingly.

Table 20. Culture's Contribution to the SDGs

SDG	Contribution of Culture	Example
1. No Poverty	Creates green economies with sustainable practices and employment opportunities, empowers marginalized groups through arts and cultural engagement.	Cultural heritage tourism, income generation through cultural and creative industries.
3. Good Health and Well-being	Arts-based interventions in healthcare settings promote well-being and mental	Arts programs in hospitals, educational campaigns using artistic expression.

	health, raise awareness on specific health topics.	
4. Quality Education	Provides lifelong learning opportunities, promotes access to quality education for all.	Museums, cultural centers offering educational programs, incorporating arts into traditional education.
5. Gender Equality	Empowers women and girls through participation in the arts and cultural sector, provides platforms for advocating for equal rights.	Women's arts festivals, cultural programs promoting gender equality.
8. Decent Work and Economic Growth	Generates income, creates jobs, and supports marginalized individuals and groups through cultural and creative industries and cultural tourism.	Film industries, fashion industries, cultural heritage preservation projects.
9. Industry, Innovation, and Infrastructure	Fosters innovation through development of cultural and creative industries, promotes sustainable production and consumption practices within the cultural sector.	Innovative artistic expressions, sustainable practices in museums and cultural centers.
10. Reduced Inequalities	Addresses poverty reduction, skill development, and inclusive growth through cultural initiatives.	Arts programs for underprivileged communities, cultural exchange programs.
11. Sustainable Cities and Communities	Promotes social inclusion, reduces inequalities, and transforms public spaces into areas for dialogue through cultural heritage and initiatives.	Revitalization of historical areas, cultural events fostering community engagement.
12. Responsible Consumption and Production (Further Exploration)	Potential to promote sustainable practices within cultural industries (e.g., eco-friendly events).	Research on sustainable practices in festivals, museums, etc.
16. Peace, Justice, and Strong Institutions (Further Exploration)	Potential to foster peace and understanding through intercultural dialogue and artistic expression.	Cultural exchange programs, art projects promoting social justice.
17. Partnerships for the Goals (Further Exploration)	Collaboration between cultural institutions, policymakers, and communities for achieving SDGs.	Partnerships for cultural heritage preservation projects with a focus on sustainability.

Source: Adapted from (British Council, 2020).

In addition to this, the report strengthens its arguments by showcasing real-world examples through a series of compelling case studies, briefly presented in the table below.

Table 21. Case Studies: Culture and Sustainable Development

Project Name	SDG Focus	Description	Impact on SDGs
The Ark for Iraq Project	SDG 11: Sustainable Cities and Communities	Revitalizes and documents endangered watercraft heritage in Iraq.	Preserves cultural heritage, fosters sense of place and community identity, promotes inclusive growth through job creation in boat restoration, ecotourism, and cultural education.
Cultural Heritage for Inclusive Growth	Multiple SDGs (depending on local needs)	Grassroots co-designed program implemented in Kenya, Vietnam, and Colombia.	Responds to community needs for cultural preservation, social and economic development, ensures program sustainability through local partnerships.
Artivism in the Horn of Africa	Multiple SDGs	Program engages participants in the evaluation process, fostering ownership and diverse voices.	Participant-driven impact addressing various SDGs, highlights multifaceted contributions of cultural initiatives.
British Council's Arts & Cultural Programs Mapping	Multiple SDGs	Maps 15 arts and cultural programs to the SDGs, analyzing alignment with targets and indicators.	Provides a comprehensive overview of how culture contributes to achieving SDGs, demonstrates tangible impact on various aspects of sustainable development.

Source: Adapted from (British Council, 2020).

In its pursuit on providing strategies for maximizing culture's impact on sustainable development, the report emphasizes two key community engagement and cross-sectoral partnerships: "Community at the Center: Respecting Local Knowledge" (SDGs 10, 11, 16), and "Participatory Approaches: Harnessing Creativity and Expertise" (SDGs 4, 8, 9). Community engagement is paramount for ensuring that cultural initiatives respect and integrate local practices, traditions, and knowledge. By actively involving communities in the planning and implementation stages of development projects, interventions can be tailored to address specific needs and aspirations. This fosters a sense of ownership and inclusivity, ultimately leading to more effective and sustainable development efforts (SDGs 10, 11, 16). Jointly, the report advocates for participatory approaches, actively involving individuals and groups in the design and execution of cultural initiatives. This strategy taps into the collective creativity, knowledge, and skills

of community members, leading to more innovative and sustainable solutions (SDGs 4, 8, 9). It is therefore pointed out that participatory approaches empower communities and foster a sense of ownership, promoting long-term sustainability.

Notwithstanding, the report highlights the importance of fostering partnerships across various sectors – government agencies, civil society organizations, private entities, and cultural institutions. Collaboration allows stakeholders to pool resources, share expertise, and coordinate efforts to address complex development challenges in a holistic manner. This cross-sectoral approach maximizes the potential of cultural initiatives and unlocks synergies for achieving the SDGs (SDG 17). By embracing community engagement, participatory approaches, and cross-sectoral partnerships, stakeholders can harness the diverse cultural assets and resources within communities. This empowers communities to drive positive change and ultimately achieve sustainable development goals.

In terms of building the evidence base for a better quantifiable charting of the impact of culture on sustainable development, the report recognizes the critical need for robust mechanisms to assess the impact of cultural initiatives on sustainable development. This requires a shift towards longer program timelines and a more longitudinal approach to evaluation. Employing long-term tracking and monitoring systems allows for a deeper understanding of a program's lasting effects.

Additionally, establishing baseline data is fundamental for accurately measuring a program's contribution to achieving the SDGs. It is important to mention that this baseline data serves as a benchmark against which progress can be tracked. The report also emphasizes the importance of monitoring stakeholder, media, and digital engagement. Developing clear and consistent approaches for these areas allows researchers to link cultural initiatives with broader political and societal changes. Tracking tools can be used to quantify engagement with programs, such as the number of participants or media appearances generated.

The British Council's DICE program serves as a valuable example. This program incorporates indicators directly linked to the SDGs within its monitoring and evaluation framework. DICE focuses on the role of arts and culture in addressing the SDGs, ensuring that social creative enterprises demonstrably contribute to achieving these goals and raising environmental awareness. However, the report underscores the importance of digital technologies in increasing engagement with the SDGs. Digital tools and platforms can facilitate communication and outreach efforts. Subsequently, the report advocates for the development of precise tools, including clear targets and indicators, to measure and demonstrate culture's contribution to sustainable development. What is more, the report offers a compelling call to action for integrating the SDGs into cultural initiatives. It emphasizes the importance of adopting the language of the SDGs, ensuring programs directly engage with and respond to these goals. Selecting key targets and indicators allows for mainstreaming the SDGs throughout cultural initiatives, fostering a more focused and impactful approach.

In the third and last section, the report delves into the critical role of integrating the Sustainable Development Goals (SDGs) into the heart of arts and culture programs. It

emphasizes the need to move beyond simply acknowledging these goals and instead, actively measure the contributions of cultural initiatives towards achieving them. A comprehensive roadmap for achieving this integration is being presented, highlighting the importance of aligning cultural programs with specific SDG targets, fostering cross-sectoral collaboration, and ensuring participant-led engagement. Besides, it underscores the need for a more holistic approach to health and well-being, recognizing the immense potential of arts and culture in this domain. By adopting a long-term perspective through longitudinal evaluation approaches, the report argues that the true impact of cultural initiatives on sustainable development can be fully understood. This comprehensive approach extends beyond the British Council's work, offering valuable insights for the wider cultural sector in its ongoing efforts to contribute to a more sustainable future.

In the following table we will present the nine key recommendations made by the British Council (2020) as an outcome of their manifest report.

Table 22. Key Recommendations for Integrating SDGs into Arts & Culture Programs

Cluster	Description	Specific Recommendations
Integration & Alignment	Strengthen the connection between arts & culture and the SDGs for practitioners and audiences.	Adopt SDG language in programs.
		Empower practitioners to framework around SDGs.
Community-Driven & Target-Oriented Initiatives	Design and implement cultural initiatives that address specific community needs and SDG targets.	Collaborate with communities on program development, delivery, and evaluation (in line with SDGs).
		Advocate for specific SDG outcomes through arts and culture.
Monitoring & Evaluation	Effectively measure the impact of cultural initiatives on SDGs.	Select key targets and indicators to mainstream throughout projects.
		Conduct baseline data collection and longitudinal evaluations.
Technology & Evidence-Building	Leverage technology and strengthen the data on culture's contribution to SDGs.	Utilize digital tools to increase SDG engagement and bridge the culture-SDG gap (quantitative & qualitative indicators).
Focus Areas	Integrate specific SDGs into cultural programming.	Address climate change as a cross-cutting theme (SDG 13: Climate Action).
		Conduct further research to strengthen the evidence base on culture's contribution to

	social, economic, and environmental development (all SDGs).

Source: Adapted from (British Council, 2020).

Ultimately, the report underscores the significance of monitoring and evaluation practices. Effective measurement allows for a deeper understanding of the impact cultural initiatives have on achieving the SDGs. The report outlines recommendations for quantifiably incorporating the SDGs into cultural programs and measuring therefore their subsequent contributions of culture to sustainable development. Further, the report emphasizes the need for fostering stronger partnerships and continuous learning to advance progress in this area.

The table summarizes the key takeaways from the British Council Report and their alignment with the broader academic literature on cultural sustainability. As evidenced by the report and these scholarly works, integrating cultural considerations into sustainability strategies fosters a more holistic approach to achieving the SDGs.

Table 23. Culture and Sustainable Development: Key Takeaways

Report Takeaway (British Council, 2020)	Aligning Literature	Description
Cultural Considerations in Sustainability Strategies	Murphy (2012)	Cultural considerations are essential for effective sustainability policies, protecting cultural heritage alongside environmental and economic interests.
Role of Cultural Institutions	Pop et al. (2019)	Museums and cultural institutions contribute to sustainable development by preserving cultural values and fostering societal resilience.
Culture in Logistics and Supply Chains	Facchini et al. (2019)	Integrating cultural aspects into logistics practices ensures alignment with stakeholders' values for sustainable development (e.g., Logistics 4.0).
Public Cultural Participation and Social Well-being	Wang et al. (2020)	Engagement with cultural initiatives strengthens social fabric, community cohesion, and individual well-being – all crucial aspects of sustainable development.
Cultural Heritage Preservation in Sustainable Urban Environments	Prabowo and Salaj (2023)	Protecting cultural assets is integral to comprehensive sustainability efforts in urban environments, requiring integration with broader sustainability principles.

Source: Advanced by the candidate

Briefly put, this analysis underscores the growing recognition of culture as a cornerstone of sustainable development. By embracing the recommendations outlined in the British Council Report and fostering a more inclusive approach to sustainability, policymakers, cultural practitioners, and stakeholders across sectors can harness the transformative potential of culture to create a more sustainable future.

Verging upon a working definition for the *Cultural Dimension* for better pondering the purposes of this volume, we advance the following understanding: the dynamic process of weaving cultural values, practices, and knowledge systems into the very fabric of strategies and actions aimed at achieving a sustainable future.

2.1.6.   On organizational performance

In this section, we seek to gain a better understanding of the widely discussed topic of organizational performance, a complex concept that remains a central focus in discussions of corporate success. Lee and Miller (1996) identify the key components of organizational performance as monetary outcomes, efficiency, and efficacy. These elements, measured through metrics such as ROA and employee satisfaction, are not just independent measures but are essential to a company's development, enabling innovation and the ability to respond to market needs. This emphasizes the necessity for continuous adaptation to both internal and external changes, ensuring sustained organizational growth and flexibility.

Recent research expands on this understanding by incorporating emerging paradigms such as Quality 4.0 and Industry 4.0 into the framework of organizational performance (Richard et al., 2009; Hamann et al., 2013; Anthony et al., 2021; Pillai, 2021; Pansare et al., 2022). Antony et al. (2021) delve into how Quality 4.0 affects various performance aspects, including financial indicators and customer value, demonstrating the crucial role of quality management practices in enhancing performance across diverse areas. Similarly, Pansare et al. (2022) discuss the alignment between operational excellence strategies and advanced manufacturing technologies, particularly in the context of challenges posed by events like the COVID-19 pandemic, highlighting the need for manufacturing sectors to remain competitive and adaptable. Regarding human resources, Pillai (2021) emphasizes the significance of HR metrics in strategic decision-making, indicating that effective use of these metrics can strengthen HR practices and, consequently, overall organizational well-being.

Building on earlier work, Richard et al. (2009) and Hamann et al. (2013) delve into the multifaceted nature of organizational performance. They contend that performance isn't solely determined by internal operations but is also shaped by the interplay of stakeholder expectations, market dynamics, and temporal factors. Together, these dimensions influence both an organization's operational effectiveness and its strategic achievements.

In essence, the ongoing research into organizational performance reveals a complex interplay of factors. Quality management, technology integration, strategic human

resource management, and broader stakeholder relationships all contribute to an organization's success in an increasingly dynamic and interconnected marketplace. This body of work provides valuable insights into the diverse elements that influence organizational performance, emphasizing the need for a comprehensive and adaptable approach to business management in today's world.

Innovation plays a crucial role in the intricate relationship between organizational performance and the triple bottom line, which encompasses environmental, social, and economic sustainability (Subramanian & Nilakanta, 1996; Elkington, 1998; Hahn et al., 2014; Longoni & Cagliano, 2016; Damanpour & Gopalakrishnan, 2001; Jalil et al., 2021). Hahn et al. (2014) argue that neglecting innovation in this analysis could lead to overlooking the profound alignment between organizational activities and sustainability goals. This perspective is especially relevant in situations where traditional growth drivers, like labor utilization and technological advancements, reach their limits, as noted by Damanpour and Gopalakrishnan (2001). Therefore, cultivating an innovative environment becomes paramount for sustaining long-term organizational growth and competitiveness.

Subramanian and Nilakanta (1996) shed light on the inner workings of innovation within organizations, examining the various factors that drive innovativeness and its subsequent impact on performance. Their work emphasizes the importance of understanding the nuances of innovation – whether incremental or radical – and how they shape a company's overall performance trajectory. Building on this, Longoni and Cagliano (2016) delve into the temporal aspect, exploring how an organization's time orientation influences sustainable innovativeness, ultimately affecting outcomes related to the triple bottom line. This temporal dimension of innovation strategy underscores the significance of long-term planning in achieving sustainable goals, echoing Elkington's (1998) foundational concepts of the triple bottom line.

Furthermore, the direct impact of innovation on organizational success is particularly evident in the context of small and medium enterprises (SMEs), as highlighted by Jalil et al. (2021). Their research delves into the pivotal role of innovation capability and technology adoption in boosting SME performance, offering practical insights into how innovative practices can be leveraged for substantial improvements in both sustainability and business outcomes. This work not only reinforces the theoretical framework established by earlier studies but also provides empirical evidence of innovation's positive influence on a firm's ability to effectively meet triple bottom line objectives.

Overly, one can state that innovation is a cornerstone for elevating organizational performance within the triple bottom line framework. It not only fosters sustainable business practices but also ensures that organizations remain competitive and adaptive to the ever-changing demands of their internal and external environments. Thus, organizations must prioritize innovation as a strategic imperative to navigate the complexities of sustainability and achieve long-term success. In modern business management, organizational performance is viewed holistically. It encompasses not only traditional financial metrics like return on assets (ROA) and profit margins, but also

innovation and adaptability to both internal and external environmental shifts. This understanding stems from a combination of historical and contemporary research, revealing that performance extends beyond financial success to include efficiency, effectiveness, and ongoing adaptation to market and technological advancements. Key factors such as quality management practices, integration with Industry 4.0 technologies, and strategic human resource management are identified as crucial in enhancing performance across various areas, including financial outcomes, customer value, internal business processes, and overall organizational well-being (Antony et al., 2021; Pansare et al., 2022; Pillai, 2021).

Besides, innovation plays a central role in aligning organizational performance with the triple bottom line – social, environmental, and economic sustainability. Numerous studies support this view, arguing that innovation not only drives competitive advantage but is fundamental for sustainable growth and effectiveness (Subramanian & Nilakanta, 1996; Longoni & Cagliano, 2016). Research emphasizes the importance of fostering environments that encourage innovative action, enabling organizations to effectively meet and adapt to evolving sustainability goals and market demands. Innovation, particularly in its ability to integrate and respond to the triple bottom line, is thus positioned as a strategic and operational necessity within the organizational framework.

Centring on a working definition for the *Organizational Performance* in the context of this volume, we suggest the following cognizance: the setup made out of financial metrics, stakeholder expectations, and innovative practices woven into the very fabric of strategies and actions aimed at achieving both competitiveness and sustainability. This encompasses the firm's track record in financial performance, customer satisfaction, employee engagement, environmental impact, and social responsibility. For the analysis, companies that demonstrate a commitment to enhancing efficiency and efficacy, ensuring the continued relevance of organizational processes and goals, and fostering adaptability and resilience through technological integration, strategic human resource management, and a commitment to continuous improvement, regardless of their size, industry, or geographic location, will be considered as actively cultivating high organizational performance.

2.1.7.   On organizational reputation

In this part of our literature review, we want to have a closer look at the organizational reputation phenomena, as research shows that it is inextricably intertwined with the triple bottom line, representing a company's social, environmental, and economic impact as perceived by its stakeholders (Gray & Balmer, 1998; Berens & van Riel, 2004; Hosain et al., 2020; Hossin et al., 2021; Kim et al., 2021; Boon, 2022). The concept of organizational reputation has evolved to encompass both observable and perceived dimensions of a company's actions and their consequences, as outlined by Gray and Balmer (1998) and Berens and van Riel (2004). It is recognized as a dynamic construct, shaped over time through stakeholder interactions and evaluations, in contrast

to the static nature of brand perception. This dynamism implies that reputation not only influences but is also influenced by a company's adherence to sustainable practices, serving as a critical mediator between organizational actions and stakeholder perceptions. This brings under the limelight the importance of integrity and transparency in all aspects of business operations.

Recent research delves deeper into the interconnectedness of organizational reputation and sustainable performance. Hossin et al. (2021) investigate how perceived organizational support and sustainable organizational reputation contribute to sustainable organizational performance, emphasizing that stakeholders' perceptions of support and commitment to sustainability goals are paramount for bolstering organizational reputation and, consequently, performance. In doing so, the significance of maintaining a positive reputation as a sustainable entity is also understandable via cultivating stakeholder trust and support.

Theoretically, Boon (2022) introduces a strategic-relational framework for reputation management, positing that the development of organizational reputation is shaped by both internal structures and external stakeholder interactions. This perspective enhances our comprehension of how organizations can effectively manage their reputation by aligning internal practices with external expectations and perceptions, thereby strengthening their sustainability profiles. What is more, the research conducted by Hosain et al. (2020) reveals that sustainable organizational reputation can mediate the relationship between the utilization of social networking information in pre-employment screenings and the outcomes of these processes. This finding suggests that maintaining a robust sustainability reputation can positively influence organizational practices and decisions, particularly within human resources management.

As a counterpoint, Kim et al. (2021) investigate the volatility and momentum inherent in organizational reputation and status, emphasizing that reputation management involves not only upholding a positive image but also navigating the fluctuations that arise from market and societal shifts. This study underscores the need for organizational agility and responsiveness to changes in perception, enabling them to leverage their reputation more effectively for competitive advantage and resource acquisition.

By approaching organizational reputation through this lens, one may understand better the valence of integrating a strategic and relational approach to reputation management within the broader context of sustainability. The aforementioned viewpoints convergently pave the ground by uttering that a well-managed organizational reputation can serve as a valuable asset in achieving and sustaining organizational performance, balancing the expectations of diverse stakeholders while navigating the evolving competitive landscapes and sustainability standards.

Back in the 90's, Wartick (1992) and later Sandberg (2002) approached the concept of organizational reputation by shedding light on the importance of stakeholder perceptions of a company's actions, both in terms of predictability and favorability. This perception is pivotal as it forms the foundation of stakeholder trust and shapes future expectations. Stakeholder perceptions, whether positive or negative, accumulate to form

an overall reputation that can significantly influence a company's capacity to attract investment, talent, and consumer loyalty, as noted by Helm (2007). Fombrun and Gardberg (2002) further emphasized the role of internal realities, when communicated externally, in shaping a company's reputation, which subsequently dictates operational boundaries and growth potential within the sustainable development framework.

It appears that organizational reputation has always involved evaluating a business' impact through various dimensions, as defined by Fombrun and Gardberg (2002) and further elaborated by Helm (2007) and Schwaiger (2004). These frameworks suggest that reputation encompasses not only financial performance but also a company's adherence to social responsibilities and environmental practices. Helm (2007) discusses reputation management through cost-effectiveness, regulatory compliance, and the integration of corporate social responsibility into business operations, emphasizing transparency and stakeholder engagement as key to reinforcing reputation. Schwaiger (2004) identifies emotional and cognitive aspects of reputation - affinity and ability - which interact to shape stakeholder perceptions that ultimately affect organizational performance and sustainability.

Approaching the relationship between organizational reputation and the triple bottom line reveals that, regardless of the time, reputation was never envisaged as a merely result, but a dynamic process encompassing a firm's social, environmental, and economic engagements. Organizational reputation is shaped by both tangible actions and stakeholder perceptions, highlighting its evolving nature beyond static brand image. This dynamic perspective necessitates that organizations continuously engage with and adapt to stakeholder expectations regarding sustainability practices, aligning their operations accordingly to maintain a positive and sustainable reputation.

Hence, operationalizing organizational reputation within the triple bottom line framework triggers an intrinsic complexity, as it involves integrating various dimensions that influence how stakeholders perceive and interact with a company. Accordingly, in the context of this publiclication, we advance as working definition for *Organizational Reputation* the very next grip: the coalescence of perceptions, beliefs, and evaluations held by stakeholders regarding a company's actions, performance, and overall impact on society and the environment. This encompasses the firm's track record in financial performance, ethical conduct, social responsibility, environmental stewardship, and adherence to regulatory requirements. For the analysis, companies that demonstrate a commitment to building and maintaining a positive reputation through transparent communication, stakeholder engagement, and responsible business practices, regardless of their size, industry, or geographic location, will be considered as actively cultivating a strong organizational reputation.

2.1.8.   On leadership orientation towards sustainability

A leadership orientation toward sustainability is a *sine qua non* condition when it comes to integrating sustainable development principles within organizations. This

orientation is particularly pertinent within the framework of the triple bottom line, encompassing the social, environmental, and economic impacts as perceived by stakeholders (Saleem et al., 2021; Azizi, 2022; Chan et al., 2022; Živković, 2022; Hu et al., 2023). Analyzing leadership practices through this lens allows for a deeper understanding of how managerial strategies can be adapted to foster sustainability within Romanian enterprises.

Saleem et al. (2021) offer valuable insights into the application of leadership theories, such as the Path-Goal Theory, to enhance and sustain job-oriented development across various sectors, including education. This study emphasizes the significance of responsible leadership in advancing sustainability agendas. Responsible leaders are instrumental in guiding their organizations towards sustainable futures by establishing clear objectives, allocating necessary resources, and supporting their teams in achieving these goals. Within companies, adopting responsible leadership practices can cultivate an organizational culture that prioritizes sustainable development, thereby enhancing the social, environmental, and economic outcomes of their operations.

In the same fashion, Chan et al. (2022) investigate the mediating role of Corporate Social Responsibility (CSR) in effective leadership beliefs when addressing resource dilemmas during sustainability development. Their study highlights how CSR initiatives can connect leadership intentions with sustainable outcomes. By emphasizing responsible resource utilization, leaders can guide their organizations towards sustainable trajectories. In the corporate context, integrating CSR into leadership practices can aid companies in addressing resource management challenges, promoting ethical conduct, and bolstering stakeholder trust. Leaders who effectively incorporate CSR principles into their strategic decision-making processes can drive sustainable development while simultaneously balancing the triple bottom line.

On his side, Živković (2022) presents a conceptual framework on sustainability leadership and boards, emphasizing self-awareness and moral perspectives as foundational elements of authentic leadership. Authentic leadership, characterized by self-awareness, transparency, and ethical behavior, is recognized as essential for fostering sustainable orientations within organizations. This framework posits that leaders who possess self-awareness and are guided by strong moral principles are more likely to embed sustainable practices in their organizational strategies. For companies, cultivating authentic leadership can lead to more effective implementation of sustainability initiatives, ensuring that social, environmental, and economic considerations are integrated into the core business strategy.

Interestingly enough, Hu et al. (2023) examine the influence of sustainable leadership on the adoption of environmental innovation strategies within organizations. Their research highlights the mediating role of environmental identity in this relationship, providing insights into the mechanisms through which leadership can drive sustainability initiatives. The findings suggest that leaders who emphasize sustainability can foster a strong environmental identity among employees, which in turn encourages the adoption of innovative environmental practices. This relationship underscores the

importance of leadership in shaping organizational identity and promoting sustainable innovations.

Also, Azizi (2022) delves into leadership processes that facilitate sustainable transitions within universities, emphasizing the importance of employing rigorous methodologies, such as in-depth qualitative and quantitative exploration, to develop a comprehensive theoretical framework addressing leadership issues in the context of sustainable transformation. This research suggests that effective leadership in sustainability requires a nuanced understanding of organizational dynamics and the ability to implement holistic strategies that facilitate sustainable transitions. Consequently, for Romanian companies, this implies the necessity of methodologically sound approaches to studying and enhancing leadership practices that drive sustainability.

In essence, leadership should not only emphasize sustainability to foster environmental identity but also employ robust methodologies to develop effective strategies. Moreover, promoting ethical behavior is crucial for organizational change, aligning with the triple bottom line and leveraging CSR initiatives to navigate sustainability challenges and enhance stakeholder trust. Leadership orientation towards sustainability is thus vital for embedding sustainable development principles within organizations, particularly within the framework of the triple bottom line, which encompasses the social, environmental, and economic impacts perceived by stakeholders.

Even so, by examining leadership practices through this lens, we can better understand how managerial strategies can be reconfigured to promote sustainability in Romanian companies. Emphasizing responsible leadership can advance sustainable development agendas by setting clear goals and supporting teams, while integrating Corporate Social Responsibility (CSR) into leadership practices helps address resource management challenges and promotes ethical behaviors, ultimately enhancing stakeholder trust. Furthermore, self-awareness and moral perspectives are foundational elements of authentic leadership, essential for fostering sustainable orientations within organizations.

Drawing nearer towards a working definition for *Leadership Orientation Towards Sustainability* that suffices the framework of this publiclication, we hand in the ensuing conceptualization: the merging of values, practices, and decision-making frameworks adopted by leaders that aim to minimize environmental impact, enhance social well-being, and promote long-term economic viability. This encompasses efforts to integrate sustainability principles into organizational strategy, foster a culture of environmental responsibility, encourage ethical conduct, and promote innovation in sustainable practices. For the analysis, leaders who demonstrate a commitment to these sustainability objectives, regardless of their industry, organizational level, or leadership style, will be considered as actively engaging with a leadership orientation towards sustainability.

2.1.9.   On regulatory requirements in sustainable business paradigms

Reconfiguring managerial strategies through the lens of sustainable development necessitates a thorough understanding and adaptation to regulatory requirements in sustainable business paradigms. This adaptation not only ensures compliance but also fosters long-term business viability and competitiveness. Recent research offers valuable insights into how companies can effectively navigate this regulatory landscape (Hallinger & Suriyankietkaew, 2018; Alafeshat & Tanova, 2019; Castillo-Villar, 2020; Naciti et al., 2021; Tan, 2021; Çuhadar & Rudnák, 2022).

Moreover, effective sustainability reporting practices are pivotal in embedding sustainable business behaviours. Tan (2021) emphasizes the importance of transitioning beyond mere compliance with regulatory requirements to effecting structural changes within core firm behavior. This approach underscores the need for companies to integrate sustainability deeply into their operational and strategic frameworks, fostering a culture of sustainability that permeates all organizational levels. Such integration enables businesses to not only adhere to regulations but also to build resilience and achieve long-term sustainability goals.

The dynamic nature of regulatory frameworks necessitates that companies remain attuned to sustainable goals and adaptable to regulatory shifts. Naciti et al. (2021) emphasize the significance of corporate governance in navigating these changes, suggesting that companies must enhance product quality while reducing costs to meet regulatory demands and improve their organizational reputation. By prioritizing quality and cost-efficiency, companies can maintain a competitive edge while adhering to sustainability regulations, thus balancing regulatory compliance with operational excellence and ensuring that sustainability becomes a core aspect of their strategy.

Furthermore, institutional pressure from the regulatory system plays a crucial role in motivating companies to engage in sustainable practices. Castillo-Villar (2020) underscores the importance of regulatory requirements in driving businesses to form partnerships and collaborate on sustainability initiatives, aligned with Sustainable Development Goal (SDG) 17. These partnerships can enhance a company's capacity to achieve sustainability objectives by pooling resources and expertise. Therefore, understanding and leveraging regulatory pressures can facilitate the formation of strategic alliances that promote sustainability and compliance.

In addition to these findings, Hallinger and Suriyankietkaew (2018) conduct a science mapping of the knowledge base on sustainable leadership, offering a comprehensive overview of the existing research landscape. This study serves as a valuable reference for scholars entering the domain of sustainable leadership, providing insights into high-value frameworks, future research directions, and practical implications. To boot, Alafeshat and Tanova (2019) explore the impact of servant leadership style and high-performance work system practices on organizational sustainability within the Jordanian airline industry. This study examines the effects of

servant leadership on organizational sustainability, the relationship between high-performance work systems and sustainability, and the mediating role of employee engagement in these relationships.

Finally, Çuhadar and Rudnák (2022) provide a literature review on sustainable leadership, aiming to enhance the understanding of the concept by situating sustainability within the context of leadership. This study clarifies sustainable leadership based on sustainability and sustainable development, sustainable leadership styles, characteristics of sustainable leaders, and sustainable leadership practices, offering valuable insights for organizations seeking to integrate sustainability into their leadership approaches.

By synthesizing the insights presented, companies can develop a comprehensive understanding of the regulatory landscape surrounding sustainability, which is crucial for aligning managerial strategies with sustainable development goals. To achieve this alignment, companies must adapt to regulatory requirements by integrating sustainability into their core operations, emphasizing quality and cost-efficiency, and forming strategic partnerships. These strategies not only ensure regulatory compliance but also enhance overall reputation and competitiveness in a rapidly evolving business environment.

Effective sustainability reporting practices are pivotal in embedding sustainable business behaviors, necessitating a shift beyond mere compliance towards the deep integration of sustainability into operational and strategic frameworks. This approach fosters a culture of sustainability across all organizational levels, enabling businesses to build resilience and achieve long-term goals.

The dynamic nature of regulatory frameworks further necessitates that companies remain attuned to sustainable goals and adaptable to regulatory changes. Corporate governance plays a pivotal role in navigating these changes, with an emphasis on enhancing product quality while reducing costs to meet regulatory demands and improve organizational reputation. Additionally, institutional pressures can motivate companies to form partnerships and collaborate on sustainability initiatives, thereby enhancing their capacity to achieve sustainability objectives.

In conclusion, by embedding sustainability into their core operations, focusing on quality and cost-efficiency, and leveraging regulatory pressures for strategic alliances, companies can ensure regulatory compliance, enhance their reputation, and bolster their competitiveness in a rapidly evolving business environment. In consequence of it, touching on to a working definition for the *Regulatory Requirements* in the broader conceptual framework of the present publiclication, we set ahead the follow-on insight: the concrescence of laws, regulations, and standards enacted by governing bodies that aim to minimize the environmental and social impact of businesses while promoting sustainability. This encompasses efforts to ensure compliance, reduce waste, conserve resources, prevent pollution, adopt ethical practices, engage stakeholders in sustainability initiatives, and enhance corporate reputation through social responsibility. For the analysis, companies that demonstrate a commitment to meeting and exceeding these regulatory requirements, regardless of their size, industry, or ownership structure,

will be considered as actively engaging with the regulatory dimension of sustainable business paradigms.

2.2.   Hypothesizing construct relationships

In this subchapter, we delve into the dynamics among several key managerial constructs relevant to sustainable development within organizations. These constructs include the *Awareness Degree of Sustainable Development* (ADSD), *Adoption of Sustainable Strategies* (ASS), *Leadership Orientation towards Sustainability* (LOS), *Regulatory Requirements* (RR), *Organizational Performance* (OP), and *Organizational Reputation* (OR).

Nevertheless, it is important to note that all of the aforementioned concepts have been developed through a thorough review of specialized literature. The research process, guided by the principles of Grounded Theory (Easterby-Smith et al., 2012; Bryant, 2014; Corbin & Strauss, 2015), has allowed us to generate and refine these hypotheses based on qualitative research findings. Naturally, this qualitative endeavour, often exploratory in nature, aimed to generate hypotheses rather than test them. Detailed information on the methodology will be provided in the subsequent Methodological chapter. However, this process aimed to capture the essence of the triple bottom line framework, which includes economic, environmental, and social dimensions, with culture as a fourth pillar of sustainability as previously proposed. This process spanned multiple versions, as explained in the methodology chapter. By doing so, we ensured that the current conceptualization was tailored to the Romanian business context, reflecting the unique challenges and opportunities encountered by businesses and managers in this region.

Concisely, the present chapter is built on the hypothesis of the book. Videlicet, we propose that the *Awareness Degree of Sustainable Development* (ADSD) has a positive influence on the *Adoption of Sustainable Strategies* (ASS). Similarly, *Regulatory Requirements* (RR) are expected to have a positive impact on the *Adoption of Sustainable Strategies* (ASS). We also hypothesize that *Leadership Orientation towards Sustainability* (LOS) positively affects the *Adoption of Sustainable Strategies* (ASS). Furthermore, we hypothesize that the *Adoption of Sustainable Strategies* (ASS) will positively impact both *Organizational Performance* (OP) and *Organizational Reputation* (OR). Lastly, we propose that *Organizational Performance* (OP) will have a positive impact on *Organizational Reputation* (OR). Therefore, the following subchapters will appropriately follow the aforementioned conceptual compartmentalization, with the sole aim of theoretically showcasing the dynamic established between these constructs.

2.2.1.   Exploring the link between the *Awareness Degree of Sustainable Development* (ADSD) and the *Adoption of Sustainable Strategies* (ASS)

Recent research unequivocally draws upon a correlation between *Awareness Degree of Sustainable Development* (ADSD) and the *Adoption of Sustainable Strategies* (ASS) across diverse sectors. Multiple studies confirm that awareness of sustainability serves as a catalyst for implementing sustainable practices (Bager & Lambin, 2020; Hernández-Chea et al., 2021; Bajza, 2022; Kumar et al., 2022; Calderon, 2023; Akthar et al., 2024).

Specifically, Akthar et al. (2024) highlight the significant influence of education on pro-environmental behaviors, demonstrating that knowledge acquisition through formal education is positively associated with the adoption of sustainable practices. This finding suggests that educational initiatives aimed at raising sustainability awareness can lead to broader implementation of such strategies.

Calderon (2023) reinforces this notion by revealing a positive relationship between sustainability practices and service innovation in the food services sector. This study illustrates that increasing awareness and promoting sustainability-oriented innovation among businesses can drive the adoption of sustainable strategies, facilitate regulatory compliance, meet consumer demand for sustainable products, and achieve competitive advantage.

Furthermore, Kumar et al. (2022) underscore that managerial awareness of sustainability is a critical factor in the successful development and adoption of sustainable practices within organizations. Cultivating awareness among decision-makers is essential, as it facilitates the integration of sustainable strategies into core business processes. Moreover, Bager and Lambin (2020) observe that mainstream companies are facing escalating pressure from stakeholders to adopt sustainability policies. This heightened recognition of the importance of sustainable strategies underscores their role in enhancing competitiveness and mitigating risks. Stakeholder pressure, stemming from consumers, investors, and regulatory bodies, compels companies to adopt sustainable practices to maintain market position and ensure long-term viability.

To add, Hernández-Chea et al. (2021) emphasize the importance of a shared vision, strategic dialogues, and collaboration among firms to develop sustainable business models and value propositions. This collaborative approach is essential for driving sustainable practices and ensuring long-term sustainability within organizations. By engaging in strategic dialogues and fostering collaboration, organizations can align their goals and efforts towards common sustainability objectives, ultimately developing innovative solutions and creating value through sustainable business models that address environmental, social, and economic challenges. In the same fashion, Bajza (2022) discusses the implementation of sustainability into business strategy as a means of creating long-term value. By developing strategies that support the enduring prosperity of both businesses and society, organizations can enhance their sustainability efforts and

contribute to positive outcomes. Integrating sustainability into business strategy involves incorporating sustainable practices into every facet of the business, from operations to product development and stakeholder engagement.

Briefly put, the convergence point of these studies reinforces the notion that a heightened awareness of sustainable development is positively associated with the adoption of sustainable strategies across diverse sectors. It underscores the necessity for educational efforts to raise awareness, managerial awareness to facilitate implementation, stakeholder pressure to motivate change, and innovation to drive sustainable practices. Through increased awareness and understanding of sustainability, businesses can more effectively implement strategies that not only satisfy regulatory requirements but also enhance their competitiveness and contribute to long-term sustainable development.

Proceeding towards a streamlined version of the relationship between *Awareness Degree of Sustainable Development* (ADSD) and *Adoption of Sustainable Strategies* (ASS), the pursuant synthesis is being propounded: the *Awareness Degree of Sustainable Development* (ADSD) drives the *Adoption of Sustainable Strategies* (ASS) by enhancing pro-environmental behaviours, fostering managerial commitment, and promoting innovation. Likely, stakeholder pressure and strategic collaboration further motivate businesses to integrate sustainability into core operations, ensuring long-term value creation and competitive advantage.

2.2.2.   Exploring the link between the *Regulatory Requirements* (RR) and the *Adoption of Sustainable Strategies* (ASS)

The relationship between *Regulatory Requirements* (RR) and the *Adoption of Sustainable Strategies* (ASS) in the business sector is a treacherous area of inquiry. Regulatory frameworks significantly influence how organizations integrate sustainable practices, driving compliance and fostering long-term environmental stewardship. Several recent studies provide valuable insights into this dynamic (Sexton & Linder, 2014; Xing et al., 2019; Burkynskyi et al., 2021; Li, 2022; Silva et al., 2023; Durrani, 2024; Oduro, 2024; Helfaya, 2024).

Durrani (2024), for instance, emphasizes that external pressures such as regulatory compliance and legal certainty are primary motivators for firms to adopt environmental practices. Regulatory frameworks incentivize businesses to implement sustainable strategies by providing clear guidelines and enforcement mechanisms, ensuring that firms can effectively navigate the complexities of sustainability requirements and leading to broader adoption of environmentally responsible practices.

Similarly, Oduro (2024) discusses recommendations for optimizing energy sustainability through compliance, renewable energy integration, and maritime efficiency. This study underscores the importance of regulatory clarity and enforcement in promoting sustainable practices within industries. Effective regulations not only

mandate compliance but also encourage innovation in sustainability, driving industries towards more efficient and environmentally friendly operations.

Moreover, Xing et al. (2019) explore the impact of environmental regulation on firm sustainable development, revealing that environmental commitment and sustainability innovation mediate the relationship between regulatory requirements and business performance. This highlights the complex interplay between regulations and organizational outcomes, where regulatory mandates stimulate both compliance and innovation, ultimately enhancing overall sustainability performance.

To a fault, Sexton and Linder (2014) advocate for an integrated assessment of risk and sustainability in regulatory decision-making processes. By incorporating sustainability goals into regulatory frameworks, organizations can make informed decisions that balance environmental, economic, and social considerations, ensuring that regulatory requirements not only drive compliance but also support broader sustainability objectives. What's more, Burkynskyi et al. (2021) propose an innovative approach to implementing sustainable business ideology in Ukraine. Their study underscores the significance of integrating sustainability principles into business operations to meet regulatory requirements, thereby fostering a broader culture of environmental responsibility and sustainable development.

For another thing, Li (2022) explores the interactions between regulation, lobbying, and innovation in the energy sector, highlighting regulatory intervention as a key driver of sustainable innovation. Regulatory frameworks are essential for encouraging businesses to adopt sustainable practices by providing incentives and guidelines for innovation in this area. Furthermore, Helfaya (2024) investigates the influence of corporate sustainability governance on corporate labor rights in Indian listed companies, emphasizing the importance of robust governance structures in promoting sustainability initiatives and ensuring compliance with labor rights regulations. Such frameworks provide the necessary oversight and accountability mechanisms to ensure compliance and promote ethical behavior.

Similarly, Silva et al. (2023) discuss the achievements and challenges of regulatory compliance programs in a large philanthropic hospital institution, highlighting the increasing pressure from regulatory authorities to mitigate risks. This pressure has led to the development of corporate governance and regulatory compliance programs aligned with organizational objectives, underscoring the importance of regulatory alignment in promoting sustainable practices.

Put it in other words, these studies share as common ground the all-encompassing impact of regulatory requirements on businesses. Expectably, regulatory compliance and legal certainty are present in all business sectors, which make them hard to approach, due to their heterogenic manifestations. However, the body of literature seem to point that regulations might serve as primary motivators for firms to adopt environmental practices, while regulatory frameworks incentivize the implementation of sustainable strategies by providing clear guidelines and enforcement mechanisms. This clarity facilitates broader adoption of environmentally responsible practices, optimizes energy

sustainability, and encourages innovation in sustainability, driving industries towards more efficient and environmentally friendly operations.

Standing the test of a streamlined version of the relationship between *Regulatory Requirements* (RR) and *Adoption of Sustainable Strategies* (ASS), the following synthesis is being advanced: *Regulatory Requirements* (RR) drive the *Adoption of Sustainable Strategies* (ASS) by providing clear guidelines, enforcement mechanisms, and incentives. This clarity and regulatory pressure ensure compliance, foster innovation, and integrate sustainability into core business operations.

Compliance with regulations not only mandates sustainable practices but also encourages businesses to innovate and adopt efficient, environmentally friendly operations. Regulatory frameworks support broader sustainability objectives by balancing environmental, economic, and social considerations, promoting a culture of environmental responsibility and long-term development.

2.2.3.   Exploring the link between *Leadership Orientation towards Sustainability* (LOS) and the *Adoption of Sustainable Strategies* (ASS)

The body of literature consulted brings forth the correlation between *Leadership Orientation towards Sustainability* (LOS) and the *Adoption of Sustainable Strategies* (ASS). Leadership practices are instrumental in shaping organizational sustainability efforts, fostering a culture of sustainability, and driving long-term environmental and social goals (Gerard et al., 2017; Lopez-Cabrales & DeNisi, 2021; Rahi et al., 2021; Saleem et al., 2021; Zainab et al., 2021; Aung & Hallinger, 2022; Hu et al., 2023; Seroka-Stolka, 2023).

Addressing this relationship, Hu et al. (2023) propose a connection between sustainable leadership and the adoption of environmental innovation strategies, emphasizing the mediating role of environmental identity. This suggests that sustainable leadership can facilitate the implementation of such strategies, offering a novel organizational management approach for achieving sustainable development goals. By fostering a strong environmental identity among employees, leaders can drive innovation and integrate sustainable practices into core business operations.

Moreover, Aung and Hallinger (2022) conducted a scoping review on sustainability leadership in higher education, highlighting the significance of responsible leadership in promoting sustainability values and encouraging educative discourse among stakeholders. This underscores the importance of leadership orientation towards sustainability in shaping organizational culture and priorities. Responsible leaders play a pivotal role in embedding sustainability into the organizational ethos, thereby fostering a culture of continuous improvement and commitment to sustainable practices.

Empirical evidence from Zainab et al. (2021) further supports the advantages of proactive sustainability strategies and sustainable leadership in improving corporate sustainability performance. The study indicates that organizations can enhance sustainability outcomes by implementing proactive measures and embracing sustainable

leadership practices. Leaders who adopt proactive approaches to sustainability are better positioned to anticipate and respond to environmental challenges, thus improving overall corporate performance.

In other respects, Gerard et al. (2017) conceptualize sustainable leadership by emphasizing the importance of respecting past and present values to inform future sustainability initiatives. This underscores the significance of adopting sustainable leadership principles to propel organizational sustainability efforts and promote long-term value creation. Leaders who value historical and cultural contexts are more likely to create sustainable strategies that are both innovative and respectful of the organization's legacy.

Withal, Saleem et al. (2021) explore the application of leadership path-goal theory in enhancing job-oriented development in the education sector, highlighting the role of supportive and achievement-oriented leadership behaviors in improving directive leadership practices. This emphasizes the importance of leadership styles in sustaining organizational development, as leaders who support and motivate their teams can drive the successful implementation of sustainable strategies. In the same vein, Lopez-Cabrales and DeNisi (2021) stress the importance of balancing economic, social, and environmental objectives to facilitate global recovery from the pandemic crisis. This equilibrium underscores the significance of sustainable leadership in addressing challenges and promoting sustainable practices within organizations, as leaders who balance these objectives are better equipped to navigate complex sustainability landscapes and drive holistic organizational success.

Meanwhile, Chan (2021) investigates the influence of chief information officers' regulatory focus on green information technology strategies and corporate performance, shedding light on the impact of regulatory measures and leadership orientation in advancing corporate sustainability through green technology strategies. Leaders who prioritize regulatory compliance and innovation in green technologies can significantly enhance corporate sustainability performance. Further, Seroka-Stolka (2023) further examines the relationship between environmental strategy choice, environmental performance, and the moderating role of stakeholder pressure, highlighting the different environmental strategies adopted by companies and emphasizing the importance of stakeholder engagement in shaping sustainable practices. Leaders who actively engage with stakeholders can better align their strategies with environmental goals and improve performance.

Lastly, Rahi et al. (2021) study the impact of sustainability practices on financial performance in the Nordic financial industry, revealing that integrating sustainable practices can enhance competitiveness, boost productivity, and reduce systematic risk exposure. This emphasizes the financial benefits of sustainability initiatives, as leaders who integrate sustainability into their strategic planning can drive financial performance and long-term success.

Ultimately, it appears that leadership orientation towards sustainability encompasses valuing historical and cultural contexts, fostering supportive and achievement-oriented behaviours, balancing economic, social, and environmental

objectives, prioritizing regulatory compliance and innovation in green technologies, engaging with stakeholders, and integrating sustainability into strategic planning. All this conceptual complexity pictures it as a multiparadigmatic phenomenon that significantly influences the adoption of sustainable strategies within organizations. By embracing these various aspects of sustainable leadership, organizations can enhance their sustainability performance, improve overall organizational performance, and contribute to a more sustainable future.

Keeping pace with the challenge of synthesizing the relationship between *Leadership Orientation towards Sustainability* (LOS) and the *Adoption of Sustainable Strategies* (ASS), the succeeding streamlined caption is being drawn up: *Leadership Orientation towards Sustainability* (LOS) significantly influences the *Adoption of Sustainable Strategies* (ASS) within organizations. Sustainable leadership fosters a strong environmental identity, shapes organizational culture, and drives innovation. That is, leaders who balance economic, social, and environmental objectives, engage with stakeholders, and integrate sustainability into strategic planning enhance corporate sustainability performance and long-term value creation. Proactive sustainability strategies and supportive leadership behaviours improve overall organizational performance and competitiveness.

2.2.4.   Exploring the link between the *Adoption of Sustainable Strategies* (ASS) and *Organizational Performance* (OP)

The relationship between the *Adoption of Sustainable Strategies* (ASS) and *Organizational Performance* (OP) has garnered significant attention in recent research, with various studies highlighting the positive impact of sustainable practices on organizational outcomes (Iqbal & Ahmad, 2020; Iqbal et al., 2021; Zainab et al., 2021; Hu et al., 2023).

Iqbal and Ahmad (2020) establish a significant positive effect of sustainable leadership on organizational learning, which in turn influences sustainable performance. This underscores the pivotal role of sustainable leadership in cultivating a culture of continuous learning and adaptation, crucial for maintaining high performance standards in a dynamic business landscape. Similarly, Hu et al. (2023) further draw on this relationship by proposing a linkage between sustainable leadership and environmental innovation strategy adoption, with environmental identity as a mediating factor. This suggests that sustainable leadership can drive the adoption of innovative strategies that contribute to both organizational sustainability and performance.

Then, Zainab et al. (2021) provide empirical evidence supporting the benefits of proactive sustainability strategies and sustainable leadership in enhancing corporate sustainability performance. Their findings underscore the positive impact of such practices on organizational success, demonstrating that organizations that adopt a forward-thinking approach to sustainability are better equipped to anticipate and address environmental challenges. Finally, Iqbal et al. (2021) conceptualize sustainable

leadership as a means to respect past and present values while influencing future sustainability initiatives. By adopting sustainable leadership principles, organizations can drive innovation, enhance competitiveness, and create long-term value.

Convergently, these studies underscore the critical role of adopting sustainable strategies in improving organizational performance. By embracing sustainable leadership practices, implementing proactive sustainability strategies, and fostering a culture of continuous learning, organizations can enhance their performance, drive innovation, and contribute to long-term sustainability goals. Such an approach not only improves immediate organizational outcomes but also ensures that the organization remains competitive and resilient in the face of future challenges, ultimately leading to enhanced job satisfaction, operational efficiency, and overall corporate sustainability.

Bordering on a streamlined version of the relationship between the Adoption of Sustainable Strategies and Organizational Performance, the farther synthesis is being hold out: *Adoption of Sustainable Strategies* (ASS) enhances *Organizational Performance* (OP) by fostering continuous learning, improving work efficiency, and increasing job satisfaction. Sustainable leadership drives innovation through environmental identity, promotes proactive sustainability measures, and integrates sustainability into daily operations. These strategies improve corporate sustainability performance, address environmental challenges, and ensure long-term competitiveness and resilience. It could be undoubtedly inferred, thence, that embracing sustainability leads to operational efficiency, enhanced job satisfaction, and long-term value creation.

2.2.5.   Exploring the link between the *Adoption of Sustainable Strategies* (ASS) and *Organizational Reputation* (OR)

Recent research has lucratively examined the correlation between the *Adoption of Sustainable Strategies* (ASS) and *Organizational Reputation* (OR), revealing how shifting towards a sustainable paradigm can significantly boost both reputation and overall performance (Rehman et al., 2020; Dominic et al., 2021; Fonseca et al., 2021; Hossin et al., 2021; Kantrabutra, 2021; Sarna et al., 2021; Shahzad et al., 2021; Becker, 2023).

For instance, Dominic et al. (2021) emphasize that addressing stakeholder needs and expectations for reputational sustainability and organizational performance is crucial, particularly during crises. This highlights the pivotal role of stakeholder engagement in maintaining and even bolstering organizational reputation during challenging times. Furthermore, Becker (2023) elucidates how sustainable strategies contribute to organizational reputation through participation in high-reputation initiatives and the enhancement of transparency and accountability standards. These initiatives, in turn, strengthen compliance and certification processes, which positively influence organizational reputation.

In addition to that, Kantrabutra (2021) explores the relationship between sustainability-oriented organizational culture and performance, indicating that a shared

cultural focus on sustainability drives corporate sustainability practices, leading to enhanced stakeholder satisfaction and brand equity. Meanwhile, Sarna et al. (2021) highlight the emotional aspects of organizational sustainability and reputation, demonstrating that a strong sustainability reputation fosters positive emotions such as pride and satisfaction among stakeholders, further bolstering organizational reputation.

On top of that, Hossin et al. (2021) delve into the roles of perceived organizational support and sustainable organizational reputation in driving sustainable organizational performance, suggesting that enhancing reputation through adequate support can lead to improved performance and sustainability outcomes. Similarly, Fonseca et al. (2021) discuss the implications of the EFQM 2020 model and Industry 4.0 relationships on organizational performance. They highlight the transformation and improvement associated with these modern quality and industry practices and underline their importance in enhancing sustainability and organizational success.

Apart from that, Shahzad et al. (2021) investigate the interaction between knowledge management processes and sustainable development practices in boosting corporate green innovation. Their findings reveal that green innovations deployed in manufacturing industries to promote organizational sustainability through sustainable development practices positively impact corporate green innovation, emphasizing the importance of integrating sustainability into innovation processes.

Finally, Rehman et al. (2020) explore the role of environmental management control systems in ecological sustainability and sustainable performance, demonstrating their significant influence on ecological sustainability, sustainable performance, and environmental strategies. This highlights the importance of effective environmental management practices in driving organizational sustainability and performance.

All things considered, these studies collectively portray a connection between the adoption of sustainable strategies and organizational reputation. That is, by implementing sustainable practices, organizations can not only enhance their reputation and build stakeholder trust, but also nurture positive emotions and ultimately improve overall performance and sustainability outcomes. However, being tantamount to a streamlined version of the relationship between the *Adoption of Sustainable Strategies* and *Organizational Reputation*, the farther synthesis is being ventured: the *Adoption of Sustainable Strategies* (ASS) empower *Organizational Reputation* (OR) by addressing stakeholder needs, participating in high-reputation initiatives, and improving transparency and accountability. Sustainable practices drive stakeholder satisfaction, brand equity, and positive emotions such as pride and satisfaction, which in turn bolster reputation. Offhandedly, effective environmental management and innovation strategies further improve reputation and overall organizational performance by aligning with modern quality and industry standards and promoting ecological sustainability.

Exploring the link between *Organizational Performance* (OP) and *Organizational Reputation* (OR)

Approaching the relationship between *Organizational Performance* (OP) and *Organizational Reputation* (OR) one might argue that it caught the eye of various academics in recent times. There are numerous studies that provide valuable insights into the reciprocal influence between these two constructs (Bahta et al., 2020; Kim & Lim, 2020; Rehman et al., 2020; Khan et al., 2021; Shahzad et al., 2021; Aylak, 2022; Fleischer & Pruin, 2023; Wang et al., 2022; Yue & Thelen, 2023).

Bahta et al. (2020) and Rehman et al. (2020) found that corporate social responsibility (CSR) significantly influences the performance of small and medium-sized enterprises (SMEs), with this relationship partially mediated by firm reputation. Furthermore, Bacinello et al. (2020) discussed how CSR practices can lead to sustainable practices in SMEs, creating value that generates competitive advantage and superior business performance. These findings highlight the importance of CSR as a strategic tool for enhancing both reputation and performance.

Kim and Lim (2020) suggest that managing a favorable pre-crisis internal reputation and utilizing appropriate crisis communication strategies can promote employee voice contributions and cooperation in crisis situations, ultimately enhancing organizational performance. This underscores the importance of reputation management in mitigating the negative impacts of crises and fostering employee engagement, which can contribute to organizational resilience and success.

On the flipside, Fleischer and Pruin (2023) discuss how reputation management in public sector organizations impacts organizational dynamics and performance through resource allocation and adaptations of internal procedures and structures. Similarly, Bustos (2021) highlighted the importance of perceived performance in building and maintaining a positive reputation in public administration, emphasizing how reputation can enhance organizational performance and contribute to overall success.

Moreover, Khan et al. (2021) found that organizational reputation is influenced by staff retention and organizational commitment, indicating that a positive reputation can lead to improved organizational performance in the hotel industry. This suggests that reputation serves as a valuable asset in attracting and retaining talent, which in turn can enhance organizational performance. On top of that, Fernández-Gámez et al. (2020) explored the impact of health and environmental conditions on restaurant reputation, showing that establishments can improve their reputation by actively protecting customers' health and the environment. This underscores the importance of considering environmental and social factors in reputation management, as these can significantly impact organizational performance.

Apart from that, Aylak (2022) underscored the significant impact of sustainability practices on core operational functions such as procurement, manufacturing, and logistics, which are integral to supply chain management and ultimately affect OP. Also, Wang et al. (2022) proposed a comprehensive framework highlighting the relationships

among environmental innovation strategy, green knowledge sharing, organizational green learning, and green competitiveness. Their findings suggest that environmental innovation strategies positively influence green competitiveness, emphasizing the importance of sustainable strategies in enhancing OP.

Then, Shahzad et al. (2021) investigated the interaction between knowledge management processes and sustainable development practices in boosting corporate green innovation. They revealed that green innovations deployed in manufacturing industries to promote organizational sustainability through sustainable development practices positively impact corporate green innovation, emphasizing the importance of integrating sustainability into innovation processes.

To boot, Rehman et al. (2020) explored the role of environmental management control systems in ecological sustainability and sustainable performance, demonstrating their significant influence on ecological sustainability, sustainable performance, and environmental strategies. This brings forth the importance of effective environmental management practices in driving organizational sustainability and performance. Finally, Yue and Thelen (2023) emphasized that a strong organizational reputation attracts investors and customers, increases positive media coverage, retains top talent, and boosts employee productivity, ultimately enhancing organizational performance.

Upon the whole, the aforementioned framework holds out the ongoing dynamic between Organizational Performance and Organizational Reputation. By focusing on CSR, crisis communication, employee engagement, sustainability practices, and effective management strategies, organizations can enhance their reputation, attract stakeholders, and achieve long-term success, leading to improved Organizational Performance.

Non obstante, heading for a streamlined version of the relationship between *Organizational Performance* (OP) and *Organizational Reputation* (OR) puts up the following synthesis: it is more than evident that *Organizational Performance* (OP) and *Organizational Reputation* (OR) are closely linked to each other. *Organizational Performance* (OP), driven by effective CSR activities, crisis communication, and sustainability practices, enhances *Organizational Reputation* (OR) by attracting stakeholders, increasing media coverage, retaining top talent, and boosting productivity. Openly, as a counterpoint, a strong *Organizational Reputation* (OR) supports *Organizational Performance* (OP) by ensuring stakeholder trust, resource allocation, and overall business success.

CHAPTER 3. RESEARCH METHODOLOGY

In this methodological chapter, we will outline the approach undertaken to investigate the adoption and impact of sustainable management strategies within Romanian companies. This chapter builds on the conceptual foundation established in the preceding sections, which encompassed a multi-faceted analysis incorporating bibliometric, conceptual, and relational analyses.

The initial phase of our research involved a bibliometric analysis, conducted using R Studio and the Bibliometrix package. This analysis provided a quantitative overview of the existing literature on sustainable management strategies, identifying key trends, influential studies, and gaps in the research. Following this, a conceptual analysis was performed to delve deeply into the main theoretical frameworks, with the aim of operationalizing the main concepts. This involved synthesizing various theoretical perspectives to construct a working theory grounded in the extant literature.

A relational analysis was carried out to further understand the relationships between the identified constructs. This analysis brought to light the interconnections between concepts as depicted in the literature, synergizing with insights derived from the Grounded Theory approach (Easterby-Smith et al., 2012; Corbin & Strauss, 2015). The qualitative aspect of Grounded Theory allowed us to explore these relationships in greater depth, providing a nuanced understanding of the theoretical constructs.

Building on this foundation, we implemented a qualitative approach utilizing in-depth interviews as the primary research method. These interviews were conducted with both top and middle managers to gain insights into their experiences and perspectives on sustainable management strategies in their daily business operations. This qualitative phase served a dual purpose: it acted as a pilot test for the initial outcomes derived from the literature review and, at the same time, complemented the existing body of literature by aligning it with the practical realities of Romanian businesses. Relying on the principles of Grounded Theory, this step was instrumental in refining and narrowing down the theoretical constructs to better reflect the practical, on-the-ground realities. The insights gathered from these interviews enriched our understanding, allowing us to shape a more accurate and context-specific conceptual model.

The final stage of our methodological approach was the quantitative phase, which utilized a sociological survey as the research method, specifically a self-completed questionnaire as the instrument. This survey was designed to collect data to test the

research hypotheses developed from the literature review and validated by the Grounded Theory approach. The collected data was analyzed using SmartPLS 4 and SPSS software to rigorously test the hypothesized relationships and provide empirical support for our theoretical model.

Hence, in this chapter, we will detail the methodological steps taken, including the design and implementation of the in-depth interviews and the sociological survey, as well as the data collection and analysis processes. By integrating both theoretical and empirical approaches, we aim to provide a robust methodological framework that underpins the subsequent empirical investigation and supports the development of sustainable management strategies tailored to the Romanian business context. On a closing note, all the intermediary stages, as well as the processuality entangled by the development of the final research model and its subsequent objectives and hypotheses are to be found, for a close look, in the in the first two Annexes.

3.1.   Exploring managers' perceptions on sustainable management strategies: a qualitative approach

Grounded theory is a systematic methodology widely used in the social sciences, particularly in fields such as economics and management (Suddaby, 2006; Easterby-Smith et al., 2012; Belfrage & Hauf, 2015; Corbin & Strauss, 2015; Peattie & Samuel, 2015; Zhao et al., 2020; Chu & Guo, 2021; Trat et al., 2022; Mohajan & Mohajan, 2023). This approach facilitates the development of explanatory theories directly from qualitative data, emphasizing the emergence of new concepts and theories from the data rather than relying solely on pre-existing theories or personal assumptions (Trat et al., 2022). Originating in the 1960s through the work of Barney Glaser and Anselm Strauss, grounded theory has matured into a robust qualitative research tool, valued for its ability to construct rich conceptual frameworks or "grounded theories" from ethnographically produced data (Zhao et al., 2020; Belfrage & Hauf, 2015).

Grounded theory is distinct in its aim to elicit fresh understandings about patterned relationships between social actors and how these interactions actively shape reality. It does not seek to make definitive statements about reality, but rather to uncover the nuanced, dynamic processes that define social phenomena (Suddaby, 2006). Over the years, grounded theory has evolved to incorporate various ontological and epistemological perspectives, making it a versatile and widely adopted research approach in many branches of social science (Mohajan & Mohajan, 2023).

Its' scientific rigour and objective nature make it a favoured choice among scholars in management research whenever it comes to a qualitative endeavour (Chu & Guo, 2021). Despite its extensive application across various social science fields, grounded theory remains relatively underutilized in marketing research (Peattie & Samuel, 2015). The methodology's focus on discovering theory grounded in data underscores its potential for exploring consumer behavior and consumption experiences, given its

emphasis on context, theoretical emergence, and the social construction of realities (Goulding, 1998).

In the context of the present research on sustainable management strategies in Romanian businesses, grounded theory provides a structured and systematic approach within the qualitative paradigm to develop theories directly from the data collected through in-depth interviews. By doing so, we were able to gain insights from both top and middle managers about their experiences and perspectives on sustainable management strategies in their day-to-day business operations. Subsequently, this qualitative phase served as both a pilot test of the initial outcomes derived from the literature review and a means to complement and refine the existing body of literature.

Therefore, it is worth mentioning that the insights gathered from the qualitative data were instrumental in narrowing down and shaping our theoretical constructs to better reflect the practical realities of Romanian businesses. As the unfolding of this chapter will bring forth, this step was crucial in validating our initial theoretical assumptions and enriching our understanding of the complex interactions between the various constructs of sustainable management, especially from a Romanian managers' viewpoint, enabling us to grasp and, subsequently, to better address the real challenges Romanian businesses had to tackle with.

3.1.1. Data collection, sampling and analysis techniques

In-depth interviews are a valuable method for gathering rich and detailed data, because they allow researchers to obtain a holistic understanding of participants' experiences, which is often unattainable through other methods. Ergo, this could result in incredibly lucrative research (Seet et al., 2015; Cleave et al., 2016; İyigün & Yalçıntaş, 2018; Nedelea et al., 2018; Kusuma & Kautsar, 2020; Kézai et al., 2022). Case in point, Seet et al. (2015) emphasized that in-depth interviews provide a comprehensive insight into managers' experiences, revealing nuances that other methodologies might overlook. Similarly, Nedelea et al. (2018) utilized in-depth interviews to explore the interdependencies between intellectual capital, the circular economy, and economic growth, demonstrating the method's effectiveness in dismantling overly complex relationships.

Cleave et al. (2016) highlighted the utility of in-depth interviews in qualitative research for thoroughly investigating research issues. Their research in economic development and regional studies employed semi-structured, in-depth interviews to gather data from economic development practitioners and site selectors, illustrating how this method bridges the gap between policy and practice. Additionally, Kézai et al. (2022) used in-depth interviews with decision-makers and institutional leaders to assess economic development opportunities in a specific cross-border area, underscoring the method's utility in capturing local stakeholders' perceptions.

What is more, this approach resulted insightful in crisis management and organizational studies, as İyigün and Yalçıntaş (2018) conducted in-depth interviews

with top executives, contributing significantly to the literature on crisis management practices. In the same vein, Kusuma and Kautsar (2020) showcased the role of in-depth interviews in analyzing issues related to change management and talent management in SMEs, showcasing the depth of understanding that can be achieved through this method.

To enhance the data analysis process, there is a growing trend in utilizing Qualitative Data Analysis Software (QDAS) in order to methodically address qualitative data (i.e. to code, annotate, run queries, transcribe, collate, facilitate the spotlighting of underlying patterns and, lastly, to visualize). Therefore, we identified in the specialized literature a recurrent number of software, among which are to be mentioned: NVivo, AtlasTI, Provalis Research Text Analytics Software, Quirkos, MAXQDA, etc. (Schmider, n.d.). Thereafter, AtlasTI was selected as the software for the computer-aided coding program in this PhD research, aiming to enhance the efficacy and efficiency of data processing and interpretation. Avaunt, it is well-established in the literature that AtlasTI is one of the software that offers a structured way to handle qualitative data, enhancing data processing and analysis efficiency and efficacy, making it a methodologically-informed pick (Seet et al., 2015; Cleave et al., 2016).

Eventually, one must note that the structured interviews were administered via e-mail, adhering to the sample selection unique criterion: middle and top managers from various Romanian businesses were targeted, who were knowledgeable about sustainable development. In the cover letter that accompanied the interview guide, respondents were informed about our research study and were encouraged to reach out to the researcher at any time using the provided contact information, should they have any inquiries or apprehensions. Non obstante, it should be recalled that, by the very nature of convenience sampling, participants' real contact and collected data are known, though, it has been anonymised to protect privacy and as per academic ethical guidelines. Moreover, participants were offered the opportunity to share their contact email addresses in order to receive the study's findings by email, if only they wished to do so.

Last of all, reference should be made that the above-mentioned "knowledgeability" of the respondents was ensured by the very nature of the interview design, which, despite being exploratory, targeted very specific questions. These questions were meticulously crafted to align with the objectives, research questions, variables, and indicators as they were perceived at that stage of the research, emerging solely from the revision of the specialized body of literature. In order to ensure the transparency of the methodological approach, the methodological matrix will be presented in the following subchapters in its evolution, up to the final stage. Though, it is worth noting that these interviews were conducted during the COVID-19 pandemic. As the specialized body of literature postulates, electronic research methods have gained increased relevance for researchers in the context of the COVID-19 pandemic and climate change (Lobe et al., 2020; Teti et al., 2020; Dahlin, 2021). Subsequently, the use of e-mail interviews not only facilitated the participation of active professionals, but also ensured the safety and feasibility of data collection during a period of significant public health concern.

The respondents were selected based on their roles in top or middle management positions within various businesses that are present on the Romanian market, ensuring

they possess relevant experience and insight into sustainable development practices. Table 24 provides a comprehensive overview of the interview respondents, including their current field of activity, number, code, sex, company, business market field, and overall managerial experience.

3.2. Exploring managers' perceptions on sustainable management strategies: a quantitative approach

This chapter presents the quantitative research findings related to testing the previously conceived model of sustainable development awareness and its impact on various managerial strategies and organizational outcomes. In our study, we have already highlighted the importance of sustainable development awareness, social and environmental responsibility, and economic and cultural management strategies as key themes identified by Romanian business managers. Additionally, we have identified a set of indicators describing each of these concepts.

In the upcoming section, we will present the quantitative research model, explain the implemented process of scale development and item validation, and present and analyze in detail the results of our research using Partial Least Squares Structural Equation Modelling (PLS-SEM).

Our scale development is grounded in the reputable Global Reporting Initiative (GRI) Standards, incorporating up-to-date criteria at the time of our methodological design, in 2023. The GRI Standards serve as a comprehensive framework for businesses to report on their environmental, social, and governance (ESG) impacts. The adoption of GRI standards in our study ensures that our scale development aligns with a globally recognized framework that emphasizes transparency, accountability, and comparability in sustainability reporting.

Forthwith, the Global Reporting Initiative (GRI) acts as a roadmap for businesses navigating sustainability. It provides a clear and consistent way to communicate efforts, fostering trust with investors, customers, and employees. This transparency allows for easy comparison between companies, encouraging all to raise the bar. Beyond reporting, GRI empowers businesses to integrate sustainability into their core strategies, fostering dialogue with stakeholders and mitigating potential risks. GRI's adaptability ensures its usefulness for companies of all sizes, promoting continuous improvement and alignment with evolving sustainability challenges. Ultimately, GRI empowers businesses to be not only transparent but also more sustainable, creating a win-win situation for the environment, society, and the company itself. Ergo, the GRI standards are, therefore, the natural choice, ensuring, beyond the reasonable doubt, the transparency and veracity of our research

In this chapter, we will suitably leverage the insights from the content analysis and the structure provided by the GRI Standards to conduct a solid, well-grounded quantitative analysis. Accordingly, we aim to validate our conceptual model and gain

deeper insights into the integration of sustainability practices in the Romanian business context.

3.2.1. Data collection, sampling, analysis techniques and degree of validity and credibility of the research

In order to achieve the objectives of this study and to test the proposed hypotheses, the quantitative research method was employed. There are several reasons for this choice. As noted by Șandor (2013), the quantitative research method, compared to the qualitative one, utilizes statistical techniques to collect, interpret, and present numerical data. Given that this method involves the use of numbers, the information can be quantified, measured, and replicated, owing to the confidence coefficient associated with this approach. Although this method might be criticized for not providing contextual details or specific nuances of the problem, it captures the opinions of a larger sample size, making it more suitable than qualitative methods for achieving the study's objectives.

In terms of data collection method and instruments, this research was designed to collect numerical data related to managers' perspectives on sustainable development and its components by using questionnaires as the primary quantitative research instrument. The questionnaires were divided into several sub-sections, as exemplified in Table 37. A Likert scale survey was conducted to gauge managers' perceptions of these components at various levels. The Likert scale format allows respondents to express their degree of agreement, and the resulting numerical data can be easily interpreted. The initial section of the questionnaire gathers personal data of the respondents to help build profiles. Subsequent sections include closed-ended questions addressing each construct, ensuring comprehensive data collection with an average completion time of 5-10 minutes. The survey was distributed to managers across various sectors to test the hypotheses. The collected data were then statistically analysed and visualized using both SPSS Statistics and Smart PLS 4.

In the matter of sample selection, the sampling method chosen was non-random sampling, particularly convenience sampling, to guide the research. Participants included managers from diverse sectors, ensuring a broad representation of perspectives on sustainable development. Nevertheless, it should be recalled that this sampling method is backed up in the consulted body of literature in the study of adoption and implementation of sustainable management strategies (Ameer & Khan, 2020; Martín-Ríos et al., 2021; Wijesundara, 2024).

Exempli gratia, Ameer and Khan (2020) utilized a quantitative approach, based on the same sampling selection to demonstrate the significant impact of younger managers adopting holistic sustainable practices to enhance firms' environmental, social, and economic performance. Their findings underscore the crucial role individuals play in driving sustainability initiatives within organizations. Likewise, Martín-Ríos et al. (2021) employed quantitative, convenience sampling-wise methods to emphasize the

importance of adopting sustainable business models and implementing sustainability innovations in service organizations. Their research highlights the strategic necessity of integrating sustainability into business practices to facilitate transitions towards sustainability. On top of it, Wijesundara (2024) used a quantitative approach relying on the same sampling criteria to underscore the crucial role of upper management in making strategic decisions for adopting business sustainability agendas. This study illustrates the managerial influence on promoting sustainability initiatives within companies.

Overly, it is evident that the adoption of sustainable management strategies in business often relies on quantitative, convenience sample-oriented methodologies to capture with ease the multifaceted approach needed. These methodologies help reveal the combined efforts of younger managers and upper management in driving organizational sustainability through comprehensive and strategic practices.

In addition, with reference to the degree of validity and credibility of the research, if we are to look at what Andrei (2001) stated, validity indicates the extent to which the collected evidence covers the actual research domain, while credibility refers to the consistency and repeatability of the results. Validity pertains to the accuracy of the results, which was ensured by carefully designing the questionnaires with clear, closed-ended questions, jointly made by previously tested scales, and distributing them to a representative sample of managers. Analysing the opinions of managers from a single sector would not provide a realistic picture of the general perception on sustainable development strategies, potentially leading to subjective interpretations.

Similarly, credibility implies that if the study were repeated, it would yield consistent results. If the research were conducted again shortly after the initial study, similar results would likely be obtained. However, considering the rapidly evolving business contexts and the increasing emphasis on sustainability in Romania, the results might differ in a few years. More organizations in Romania are likely to embrace sustainable practices and understand the importance of regulatory requirements, leadership orientation, and sustainability adoption in enhancing organizational performance and reputation.

3.2.2.   Implementation of quantitative design: scale development and conceptualization

The following table will present the breakdown of the steps performed in order to reach the final stage of the whole methodological matrix. It aims to gradually explain the undergoing process of scale development, adjustment and final conceptualization.

Table 24. Step-by-Step Breakdown of the Implementation of Quantitative Design

Step	Description	Construct Operationalization	Logic and Synergy
1. Literature Review	Conducted a comprehensive literature review,	Identified initial constructs: *sustainable development awareness*, *economic*	The literature review provided a theoretical

(v1.0)	including bibliometric and thematic analysis.	*management strategies*, *social management strategies*, *environmental management strategies*, *cultural management strategies*, and their impact on *organizational performance* and *organizational reputation*.	foundation, helping identify key themes and constructs relevant to the study.
			This informed both the qualitative and quantitative phases of the research.
			The v1.0 of the Research Model was ideated.
2. Qualitative Data Collection	Conducted interviews with 12 Romanian business managers from various sectors.	Explored managers' perspectives on sustainability and its integration into business practices.	Empirical findings from interviews provided rich, contextual insights that helped refine the constructs and identify emerging themes.
		Stopped the investigation when empirical saturation was reached.	
3. Literature Review (v2.0)	Analyzed interview transcripts to identify key patterns and themes.	Revisit the body of literature to help us operationalize the emerging constructs, based on interview insights: *Awareness Degree of Sustainable Development* (ADSD), *Regulatory Requirements* (RR), *Propensity towards Culture-oriented Managerial Strategies* (PTCOMS), *Propensity towards Environment-oriented Managerial Strategies* (PTEOMS), *Propensity towards People-oriented Managerial Strategies* (PTPOMS), and *Propensity towards Profit-oriented Managerial Strategies* (PTPROMS).	The qualitative analysis ensured that the constructs were grounded in the real-world experiences of Romanian managers, making them more relevant and accurate.
			The revisitng of the specialized literature corroborated the findings and unveiled new layers of investigation.
	Cross-referenced qualitative findings with existing literature to ensure	Adjusted constructs and hypotheses based on both	Constant interplay between empirical findings and theoretical

	theoretical alignment.	qualitative insights and literature.	frameworks ensured a comprehensive understanding and refinement of the research scope. Accordingly, the v2.0 of the Research Model was ideated.
4. Scale Development	Developed scales based on qualitative insights and GRI Standards criteria.	Created items for each construct to be tested in the quantitative phase.	GRI Standards provided a reputable framework for scale development, ensuring the scales were comprehensive and aligned with global best practices.
5. Pilot Testing	Conducted a pilot study to test the reliability and validity of the scales, as portrayed in the reserach instrument (i.e. questionnaire). I have adjusted the model to exclude the construct WAS due to the long-lasting completion time of the questionnaire and a small account of answered received.	Refined scales based on pilot test feedback, leading to a final model with the exclusion of WAS and its corresponding indicators.	Pilot testing ensured that the scales were reliable and valid, making necessary adjustments before the full quantitative analysis (objectives and hypothesis adaptation, among other changes). The final Research Model (v3.0) was streamlined for better respondent engagement.
6. Quantitative Data Collection	Collected data using the developed scales through a survey distributed to a larger sample of Romanian employees	Gathered quantitative data to test the hypotheses and model.	The quantitative phase was informed by qualitative insights, backed up by the literature review, to ensure their soundness.

			The scales were therefore relevant and accurately captured the real-life manifestations of the constructs.
8. Quantitative Data Analysis	Analyzed quantitative data using PLS-SEM.	Tested the hypothesized relationships between constructs and their impact on organizational performance and reputation.	The quantitative analysis provided statistical validation of the qualitative findings, ensuring a robust and comprehensive understanding of the constructs.
	Refined the conceptual model based on quantitative analysis results.	Adjusted the model to better reflect the observed relationships, now without the WAS construct.	The iterative process ensured that the model was constantly refined and validated against both empirical data and theoretical frameworks.

<center>Source: Advanced by the candidate</center>

The steps implemented for qualitative research and the construct operationalization for quantitative research are delineated in this table, emphasizing the ongoing interaction between empirical findings and theoretical frameworks throughout the research process. A research framework that is contextually pertinent and robust is guaranteed by the iterative model refinement, which includes the exclusion of the WAS construct.

3.2.3. Refining the quantitative research framework: final research model version[1]

After an iterative process of scale development, pilot testing, and refinements, we arrived at the final version of our research model. This model (Figure 12) was based on the integration of empirical findings from our qualitative analysis and theoretical insights from the literature. The final questionnaire, reflecting this refined model, went online on the 8th of April 2024, after the pilot testing and its subsequent round of adjustments, as explained earlier.

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[1] All previous intermediary stages can be found in the first two appendixes.
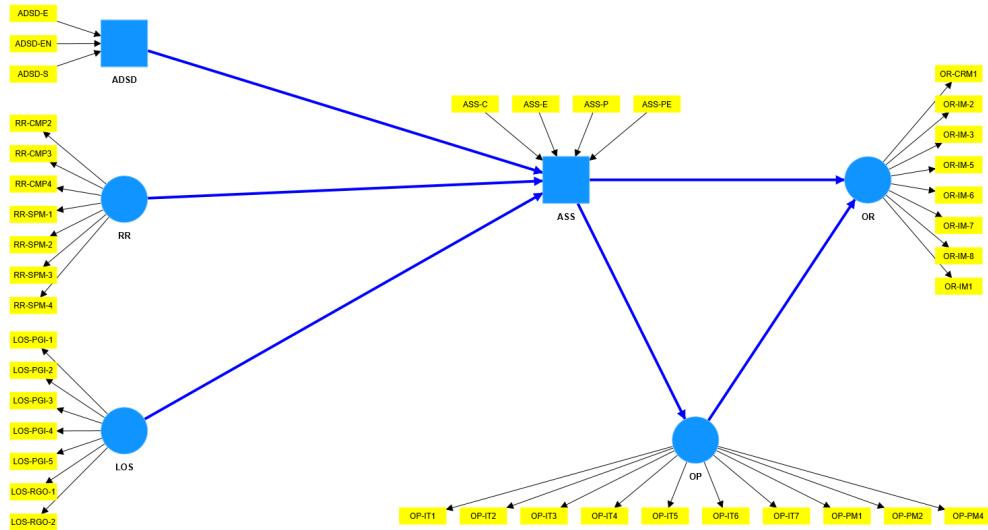
Figure 12. Final Research Model (v.3.0)
Source: Advanced by the candidate

Naturally, the final adjustment of the theoretical conceptual model triggered a change in the Research Objectives, Research Hypotheses, and Methodological Matrix. Table 25 presents the Research Objectives and Research Hypothesis revisited accordingly.

Table 25. Research Objectives and Hypotheses (v2.0 - final version)

Objective	Hypothesis
O1: To determine the influence of the *Awareness Degree of Sustainable Development* on the *Adoption of Sustainable Strategies* from the perspective of Romanian businesses.	**H1:** There is a positive relationship between the *Awareness Degree of Sustainable Development* and the *Adoption of Sustainable Strategies*.
O2: To evaluate how *Regulatory Requirements* affect the *Adoption of Sustainable Strategies* from the perspective of Romanian businesses.	**H2:** There is a positive relationship between *Regulatory Requirements* and the *Adoption of Sustainable Strategies*.
O3: To analyze the effect of *Leadership Orientation Towards Sustainability* on the *Adoption of Sustainable Strategies* from the perspective of Romanian businesses.	**H3:** There is a positive relationship between *Leadership Orientation Towards Sustainability* and the *Adoption of Sustainable Strategies*.
O4: To explore the impact of the *Adoption of Sustainable Strategies* on the *Organizational Performance* from the perspective of Romanian businesses.	**H4:** There is a positive relationship between the *Adoption of Sustainable Strategies* and the *Organizational Performance*.
O5: To study the relationship between the *Adoption of Sustainable Strategies* and the *Organizational Reputation* from the perspective of Romanian businesses.	**H5:** There is a positive relationship between the *Adoption of Sustainable Strategies* and the *Organizational Reputation*.
O6: To investigate the relationship between the *Organizational Performance* and the *Organizational Reputation* from the perspective of Romanian businesses.	**H6:** There is a positive relationship between the *Organizational Performance* and the *Organizational Reputation*.

Source:Advanced by the candidate

In accordance with these adjusted objectives and hypotheses, the following constructs and indicators operationalization were also revisited based on grounded theory findings and supported by the literature review, as depicted in Table 26. The final version of the questionnaire is available for consultation in Annex 2. It also has to be mentioned that some questions were deleted in order to avoid possible confusion caused by an apparent redundancy / hard conceptual discrimination in the mind of the respondents, as per the feedback received during the pilot testing phase:

Table 26. Final Methodological matrix (v2.0)

Second Order Construct	Lower Order Construct	Sources	Questions
Awareness Degree of Sustainable Development (ADSD) *Formative construct*	**Awareness of economic factors related to Sustainable Development (ADSD-E)** *Reflective construct*	Adapted from (Ackay et al., 2018; Artvinli & Demir, 2018; Atmaca et al., 2019)	• *Sustainable Economic Policies* (ADSD-E-SEP) ADSD-E-SEP.1. In our company, I firmly believe that we should utilize our current economic resources by keeping the welfare of future generations in mind. ADSD-E-SEP.2. For me, it's critical that we shape our economic policies with the goal of sustainable production, to ensure the long-term viability of our business. ADSD-E-SEP.3. I consider it vital that our economic policies are structured in a way that prevents the degradation of our natural resources, safeguarding our environment.
			• *Economic Development Strategies* (ADSD-E-EDS) ADSD-E-EDS.1. I believe that when we take on debt for development, we need to keep our economic stability in mind. ADSD-E-EDS.2. I believe that our economic development plans should be strategically designed to prevent the occurrence of unemployment. ADSD-E-EDS.3. For me, focusing on non-production

			sectors is key when we aim for economic development.
			• *Consumer and Production Practices* (ADSD-E-CPP) ADSD-E-CPP.1. I think we should motivate customers to shop based on a balance of their desires and essential needs. ADSD-E-CPP.2. I believe our production focus should prioritize sustainable and long-term profitability methods. ADSD-E-CPP.3. For me, it's crucial to ensure environments that guarantee safety for both life and property when making economic investments in our company.
	Awareness of social factors related to Sustainable Development (ADSD-S) *Reflective construct*		• *Equal Opportunities and Access* (ADSD-S-EOA) ADSD-S-EOA.1. I uphold that we should provide equal opportunities to everyone in our society, regardless of gender, economic status, race, or religion. ADSD-S-EOA.2. For me, it's essential that access to education and health services is granted to all individuals in our society. ADSD-S-EOA.3. I believe in creating environments that encourage lifelong learning for everyone in our society.
	Awareness of environmental		• *Energy and Resource Conservation* (ADSD-EN-ERC) ADSD-EN-ERC.1. I am convinced that we should prefer energy-saving products to extend

factors related to Sustainable Development (ADSD-EN) *Reflective construct*		the lifespan of our energy sources. ADSD-EN-ERC.2. I believe we need to promote the use of renewable energy sources to create a more sustainable world for future generations. ADSD-EN-ERC.3. I think it's important that we strive to minimize our ecological footprint to maintain the world's liveability.
		• *Waste Management and Recycling* (ADSD-EN-WMR) ADSD-EN-WMR.1. I believe that each business has a role to play in recycling waste to ensure raw material resources are available for future generations. ADSD-EN-WMR.2. I believe that waste should be sorted according to its characteristics and reused to conserve raw material sources for future generations. ADSD-EN-WMR.3. In my view, preserving green areas while balancing urbanization and industrialization is essential.
Regulatory Requirements (RR) *Reflective construct*	Adapted from (Abdel-Basset et al., 2019; Khurshid et al., 2021)	• *Strategic Planning Management* (RR-SPM) RR-SPM.1. I recognize that our company operates with clear short-term and long-term business plans. RR-SPM.2. I attest that our commitment to total quality and social responsibility is reflected in the formulation of our mission statement, policy, and strategy. RR-SPM.3. I acknowledge that our planning and policy-making

			processes consistently incorporate the needs of customers, capabilities of suppliers, and interests of other stakeholders, including the community. RR-SPM.4. I affirm that our mission statement has been effectively disseminated throughout the company and is embraced by our employees.
		Adapted from (Cao & Chen, 2018; Scholz et al., 2021)	• *Compliance Management Policy* (RR-CMP) RR-CMP.1. I am aware that pertinent laws, regulations, or rules set stringent pollutant discharge standards, such as concentration or total amount of pollutant discharge. RR-CMP.2. I acknowledge that relevant laws, regulations, or rules prescribe strict production technical standards. RR-CMP.3. I understand that for organizations failing to meet environmental standards, relevant laws, regulations, or rules impose stringent remediation timelines, or enforce stringent measures such as closure or cessation of production. RR-CMP.4. I recognize that the environmental protection department formulates detailed environmental plans in accordance with relevant laws, regulations, or rules.
	Leadership Orientation towards Sustainability	Adapted from (Ordonez-Ponce & Khare, 2020;	• *Proactiveness in Green Innovations* (LOS-PGI)

	(LOS) *Reflective construct*	Tuan, 2020, 2022)	LOS-PGI.1. Our organization strives to put a lot of focus on leading in green technology and innovations. LOS-PGI.2. Our organization has added many new green services in the past five years. LOS-PGI.3. There are often major changes in our organization's green services. LOS-PGI.4. Our organization often takes the lead in green initiatives, which are then followed by competitors. LOS-PGI.5. Our organization is usually the first to introduce new green services and technologies.
			• *Risk-taking for Green Objectives* (LOS-RGO) LOS-RGO.1. Our organization tends to take on high-risk projects if they have potential for green sustainability. LOS-RGO.2. To reach our green objectives, our organization needs to take bold and extensive steps due to the environmental conditions. LOS-RGO.3. In uncertain situations related to green decisions, our organization tends to make bold choices to achieve our sustainability goals.
Adoption of Sustainability Strategies **(ASS)** *Formative construct*	**Adoption of sustainability strategies regarding people** **(ASS-PE)** *Reflective construct*	Adapted from (Fahimnia et al., 2017; Abdel-Basset et al., 2019; Global Reporting Initiative, 2023)	• *Personnel Management Policies* (ASS-PE-PMP) ASS-PE-PMP.1. Our company maintains a clear understanding and regularly monitors new employee hires as well as employee turnover rates.

			ASS-PE-PMP.2. Our full-time employees receive benefits that might not be provided to temporary or part-time employees.
			ASS-PE-PMP.3. Our company's managers support the importance of family responsibilities.
			ASS-PE-PMP.4. Our company recognizes family responsibilities.
			ASS-PE-PMP.5. Our company consistently identifies hazards, assesses risks, and investigates incidents in our workplace.
			ASS-PE-PMP.6. All our workers are covered by an occupational health and safety management system.
			ASS-PE-PMP.7. Our company allocates a significant number of hours each year to employee training and career development reviews.
			ASS-PE-PMP.8. Our company implements programs that upgrade employee skills and provide transition assistance.
			ASS-PE-PMP.9. Our company conducts regular performance reviews.
			• *Supply Chain Responsibility* (ASS-PE-SCR) ASS-PE-SCR.1. Our company scrutinizes our operations and suppliers to eliminate any risk of forced or compulsory labour.
			ASS-PE-SCR.2. Our staff is well-trained in human rights policies and procedures.

			ASS-PE-SCR.3. Our company screens new suppliers using social criteria.
			ASS-PE-SCR.4. Our company addresses any negative social impacts in our supply chain and takes necessary actions.
			• *Community Engagement* (ASS-PE-CE)
			ASS-PE-CE.1. Our company engages with local communities, conducts impact assessments, and implements development programs.
			ASS-PE-CE.2. Our company minimizes our operations' significant negative impacts on local communities.
			ASS-PE-CE.3. Our company upholds transparency and propriety in our political contributions.
			• *Customer Welfare* (ASS-PE-CW)
			ASS-PE-CW.1. Our company assesses the health and safety impacts of our product and service categories.
			ASS-PE-CW.2. Our company reduces incidents of non-compliance concerning the health and safety impacts of our products and services.
			ASS-PE-CW.3. Our company upholds customer privacy and swiftly addresses any breaches and losses of customer data.
			ASS-PE-CW.4. Our company meets all requirements for product and service information and labelling.

			ASS-PE-CW.5. Our company minimizes incidents of non-compliance concerning product and service information and labelling.
			ASS-PE-CW.6. Our company abides by regulations in all our marketing communications to avoid incidents of non-compliance.
	Adoption of sustainability strategies regarding the environment (ASS-E) *Reflective construct*		• *Resource Management* (ASS-E-RM)
			ASS-E-RM.1. Our company monitors the volume and weight of materials used in our operations to minimize waste.
			ASS-E-RM.2. Our company utilizes recycled materials in our business operations.
			ASS-E-RM.3. Our company uses sustainable products and packaging materials.
			ASS-E-RM.4. Our company tracks our organization's energy consumption.
			ASS-E-RM.5. Our company monitors the energy consumption outside our organization.
			ASS-E-RM.6. Our company lowers our energy intensity.
			ASS-E-RM.7. Our company reduces the energy requirements of our products and services.
			• *Environmental Conservation* (ASS-E-EC)
			ASS-E-EC.1. Our company reduces our greenhouse gases (GHG) emissions.
			ASS-E-EC.2. Our company monitors waste generation and

			addresses significant waste-related impacts.
			ASS-E-EC.3. Our company manages significant waste-related impacts and reduces waste.
			ASS-E-EC.4. Our company implements recycling or reusing strategies.
			ASS-E-EC.5. Our company minimizes operational waste disposal.
			• *Supply Chain Sustainability* (ASS-E-SCS)
			ASS-E-SCS.1. Our company screens new suppliers using environmental criteria.
			ASS-E-SCS.2. Our company takes appropriate actions to rectify any negative environmental impacts in our supply chain.
			ASS-E-SCS.3. Our company collaborates with suppliers to promote environmentally friendly practices and innovations.
	Adoption of sustainability strategies regarding profit (ASS-P) *Reflective construct*		• Economic Sustainability and Influence (ASS-P-ESI)
			ASS-P-ESI.1. Our company is transparent and equitable in the economic value we generate and distribute.
			ASS-P-ESI.2. Our company proactively addresses financial implications and other risks and opportunities due to climate change.
			ASS-P-ESI.3. Our company honours our obligations

			concerning benefit plan and other retirement plans. ASS-P-ESI.4. Our company is transparent about any financial assistance received from the government. ASS-P-ESI.5. Our company supports infrastructure investments and services that bring long-term value to society. ASS-P-ESI.6. Our company is responsible for the significant indirect economic impacts on the wider society.
			• *Market Presence* (ASS-P-MP) ASS-P-MP.1. Our company offers standard entry level wages that respect gender parity and are not below the local minimum wage. ASS-P-MP.2. Our company hires senior management from the local community. ASS-P-MP.3. Our company spends on local suppliers to stimulate local economic growth.
			• *Ethical Business Practices* (ASS-P-EBP) ASS-P-EBP.1. Our company regularly assesses risks related to corruption in our operations. ASS-P-EBP.2. Our company provides comprehensive communication and training about anti-corruption policies and procedures. ASS-P-EBP.3. Our company promptly addresses any confirmed incidents of corruption.

			ASS-P-EBP.4. Our company takes legal actions for anti-competitive behaviour, anti-trust, and monopoly practices seriously. ASS-P-EBP.5. Our company has a clear and responsible approach to tax. ASS-P-EBP.6. Our company meticulously handles tax governance, control, and risk management. ASS-P-EBP.7. Our company prioritizes stakeholder engagement and manages concerns related to tax.
	Adoption of sustainable strategies regarding culture (ASS-C) ***Reflective construct***		• *Diversity, Non-Discrimination, and Equal Opportunities* (ASS-C-DNDEO) ASS-C-DNDEO.1. Our company implements diversity within our governance bodies and workforce. ASS-C-DNDEO.2. Our company ensures gender equality in pay. ASS-C-DNDEO.3. Our company tackles incidents of discrimination appropriately.
		Adapted from (Scholz et al., 2021; Tuan, 2020, 2022)	• *Green Creative Behaviour* (ASS-C-GCB) ASS-C-GCB.1. Our organization advocates for novel methods to reach our environmental objectives. ASS-C-GCB.2. Our organization promotes the proposal of new green ideas to enhance performance.

			ASS-C-GCB.3. Our organization promotes and champions new green ideas from others.
			ASS-C-GCB.4. Our organization develops plans for implementing new green ideas.
			ASS-C-GCB.5. Our organization reconsiders and refines new green initiatives.
			ASS-C-GCB.6. Our organization endorses inventive solutions to environmental issues.
	Organizational Performance (OP) *Reflective construct*	Adapted from (Calik & Bardudeen, 2016; Scholtz et al., 2021)	• *Innovation Technology* (OP-IT) OP-IT.1. Our organization's sustainability performance is improved by green innovation in the production processes.
			OP-IT.2. Our organization's sustainability performance is reflected in reduced emissions of hazardous substances or waste.
			OP-IT.3. Our organization's sustainability performance is improved through effective waste management.
			OP-IT.4. Our organization's sustainability performance can be improved through increased spending on environmentally and socially beneficial process innovations.
			OP-IT.5. Our organization's sustainability performance is improved through development and commercialization of new sustainable products.
			OP-IT.7. Our organization's sustainability performance has improved through development of new products, which comply with environmental criteria and regulations.

		Adapted from (Scholtz et al., 2021; Khurshid et al., 2021)	• *Process Management* (OP-PM) OP-PM.1. Our company strives to identify issues of quality and social responsibility related to our products and services. OP-PM.2. Our company aims to implement various inspections related to sustainable product and service design. OP-PM.4. Our company strives to conduct audits of our current sustainability practices.
	Organizational Reputation (OR) ***Reflective construct***	Adapted from (Singh & Misra, 2021; Hongjun Cao, 2018)	• *Innovation Management* (OR-IM) OR-IM. 1. Relative to industry peers, I consider that our organization's level of fixed assets and technical equipment is elevated. OR-IM. 2. Compared to industry counterparts, I believe that the quality of our human resources, particularly in scientific research, typically ensures the high-quality completion of innovative projects. OR-IM. 3. I acknowledge that our organization's investment in scientific research is at a forefront within our industry. OR-IM. 4. I believe that our organization's number of patent applications is among the top in our industry. OR-IM. 5. I uphold that our organization's financial resources are superior compared to other enterprises in the same industry.

			OR-IM. 6. I affirm that the level of technology our organization possesses outpaces that of other enterprises within our industry.
			OR-IM. 7. I believe that our enterprise's fixed assets and technical equipment surpass those of other organizations in the same sector.
			OR-IM. 8. I believe that the quality of our human resources, specifically in terms of scientific research capabilities, is high and often leads to the successful completion of innovative projects, distinguishing us from other enterprises in the industry.
	Adapted from (Singh & Misra, 2021; Khurshid et al., 2021)	• *Customer Relationship Management* (OR-CRM) OR-CRM.1. I uphold the principle that quality-related customer complaints are handled with utmost priority.

Source: Advanced by the candidate

To sum up, the research model we propose comprises eleven lower-order constructs (LOCs) and two higher-order constructs (HOCs). Lower-order constructs, also known as first-order constructs or dimensions, are derived from the data collected using the research instrument (Hair et al., 2022). For instance, the lower-order construct *Leadership Orientation towards Sustainability* (LOS) is assessed through various indicators that measure leadership commitment to sustainable practices.

Higher-order constructs (HOCs) are formulated by aggregating these dimensions or lower-order constructs (Hair et al., 2022). In our model, we introduce two HOCs: *Awareness Degree of Sustainable Development* (ADSD) and *Adoption of Sustainable Strategies* (ASS). These HOCs, set as Mode B in PLS-SEM, represent constructs of higher abstraction that encapsulate the underlying LOCs identified in the theoretical framework of this book.

The ADSD construct is composed of the following LOCs:

- Sustainable Development Awareness Regarding Environment (ASDS - EN);
- Sustainable Development Awareness Regarding Social (ASDS - S);
- Sustainable Development Awareness Regarding Economic (ASDS - E).

The ASS construct includes the following LOCs:

- Adoption of Sustainable Strategies Regarding Profit (ASS - P);
- Adoption of Sustainable Strategies Regarding Culture (ASS - C);
- Adoption of Sustainable Strategies Regarding People (ASS - PE);
- Adoption of Sustainable Strategies Regarding Environment (ASS - E).

Additionally, the model includes four more LOCs:

- Leadership Orientation towards Sustainability (LOS);
- Regulatory Requirements (RR);
- Organizational Performance (OP);
- Organizational Reputation (OR).

Our approach aligns with prior research, who advocated for measuring complex constructs through HOCs to capture broader conceptual domains effectively (Alharbi et al., 2020; Islam & Shamsuddoha, 2021; Manley et al., 2022; Lee & Wang, 2023). The rationale behind adopting this approach in our study is to address the limitations of using individual indices for LOCs, which might fail to fully encompass the multifaceted nature of constructs like "sustainability adoption and awareness".

Utilizing higher-order constructs in our research model facilitates the application of partial least squares modelling (PLS-SEM) to more sophisticated and intricate models. This method allows for the reduction of the number of relationships in the structural model, leading to more parsimonious path models that cover a broader conceptual bandwidth. Advancing hierarchical component models (HCM) or higher-order models helps streamline the structural model, making it more efficient and comprehensive (Hair et al., 2022). Consequently, our model is *a formative-reflective model* (Type III), which is adept at capturing the complexity of sustainable development within organizational contexts. This model forms the basis for the subsequent quantitative analysis, providing a compelling framework for examining the intricate dynamics of sustainable development awareness and the actual adoption of sustainable managerial strategies in Romanian companies.

CHAPTER 4. DATA ANALYSIS AND INTERPRETATION

In this chapter, we tackle with the analysis, discussion, and interpretation of the data collected through both qualitative and quantitative methodologies. The goal is to provide a nuanced understanding of the sustainable management strategies adopted by businesses and their impact on organizational performance and reputation. This chapter is structured to first present the qualitative findings, derived from in-depth interviews with managers, followed by a detailed quantitative analysis using survey data. By integrating these two approaches, we aim to offer a holistic view of the research findings, highlighting key themes, patterns, and correlations that emerge from the data. This analysis not only corroborates the statistical validity of hypotheses posited earlier, but also offers new insights into the practical implications of sustainability in business practices.

4.1. Qualitative data analysis

As we have previously presented, the main focus of our qualitative approach is to gain an in-depth understanding of managers' thoughts and beliefs within the context of sustainability in Romanian businesses. This approach is grounded in descriptive research, which involves characterizing a fact, phenomenon, individual, or group to establish its structure or behavior (Arias, 2012; Sampieri et al., 2014). Hence, rather than explaining, our aim at this stage is to get a clearer mapping of managers' perspectives on the multifaceted concept of sustainability and their perceptions on the follow-on challenges that sustainable management strategies adoption and/or implementation rise. We opted for a structured interview technique to ensure consistency and straightforwardness, enabling fair comparison between interviewees' responses on specific matters.

In other respects, it is pertinent to note that we consider the nature of this research an exploratory one as it addresses a subject that is relatively unknown or little studied, to the best of our knowledge — in this case, Romanian business managers and their views on sustainable business management. Further to our previous mentions, the interviews were conducted online during the summer of 2021, with a sample of 12 interviewees from diverse backgrounds: architecture, sales, software engineering, telecommunications, sports, public administration, IT&C, fashion, oil & gas, banking,

healthcare and installations engineering, respectively. It may be noted that all respondents have at least five years of experience in senior or managerial positions. Thereon, the table below provides a comprehensive overview of the interview respondents, including their current field of activity, number, code, sex, company, business market field, and overall managerial experience.

Table 29. Qualitative Data Sampling: Interviewees' Profile

No.	Code	Sex	Company	Company Type	Business Market Field	Position held within the company	Overall managerial experience (years)
1.	V.A.	M	Senal-Com	SME	Installations Engineering	General Manager	10
2.	G.C.	M	Papillon Laboratoires Cosmetiques	SME	FMCG (cosmetics)	Sales Manager	15
3.	D.A.	M	Embryon Atelier	SME	Architecture	General Manager	14
4.	R.S.	F	Mindit Services	SME	Software Engineering (IT)	Chief People Officer & Key Account Manager	6
5.	R.R.	M	Oakleaf TTC	SME	Sports	General Manager	10
6.	E.D.	F	Public Administration	Public Institution	Government / European Government	Senior Manager	-
7.	I.M.	M	Deutsche Bank	Enterprise / International Corporation (Bank)	Banking	Lead Technology Manager	18

8.	L.S.	F	Shell	Enterprise / International Corporation	Oil & gas	Eastern Europe Marketing Manager	20
9.	M.R.	F	BCR	Enterprise / International Corporation (Bank)	Banking	CSR Programs Manager	5
10.	P.P.	F	Sustainable Fashion Company	SME	Fashion	Human and Cultural Organization Development Manager	5
11.	A.B.	F	Boehringer Ingelheim	Enterprise / International Corporation	Health Innovation	Regional Multichannel Manager (Customer Experience)	5
12.	E.B.	F	Digi Communications N.V.	Enterprise / International Corporation	Telecommunications	CSR Manager	7

Source: Advanced by the candidate

The inclusion of these diverse profiles serves as vital for our study, as it fits into our objective of designing the research instrument sampling criteria. More exactly, sustainability is a ubiquitous concept that covers all business sectors and facets, as demonstrated in the analysed body of literature and by its intrinsic all-encompassing nature. Withal, we will further present the sampling framework for our qualitative research, detailing the selection criteria and characteristics of our interview respondents. Altogether, this information brings under the limelight the diversity and relevance of our sample, ensuring that the collected data offers a rich and nuanced understanding of sustainability in Romanian businesses. It is noteworthy to mention that the interview

process was concluded upon reaching empirical saturation, where additional interviews no longer contributed new information or insights (Naeem et al., 2024).

Building upon these initial envisions of the qualitative methodological design, our next step involves a qualitative data analysis. This analysis will be divided into two main categories: content analysis and QDAS (Qualitative Data Analysis Software) generated analysis, utilizing AtlasTI. The content analysis will focus on identifying themes, patterns, and insights directly from the interview transcripts, while the QDAS-generated analysis will leverage AtlasTI's capabilities to systematically code and categorize the data, ensuring a comprehensive and rigorous examination of the qualitative information gathered, heightening a perusal approach of the expected qualitative outcome.

Therefore, as a counterpoint, we aim to gain through the present research a proportionally comprehensive understanding of sustainability phenomena in Romanian businesses across different markets, by looking at various managerial perspectives. Hereupon, similar responses from such varied profiles enhance and nuance the value of the findings, while dissimilar responses can trigger valuable discussions on market-oriented perspectives and adaptations of sustainable phenomena. Once a satisfactory number of responses is obtained, we will shift from quantity to content, aiming to reach a point where significant content becomes repetitive, trying to avoid, therefore, empirical saturation (Naeem et al., 2024). At this juncture, qualitative data analysis will be divided into two main steps: *content analysis* and *QDAS-generated analysis*, using AtlasTI.

On the one hand, the first step involves manually coding and categorizing the interview transcripts to identify recurring themes, patterns, and insights. By systematically examining the content, we aim to uncover the underlying perceptions, attitudes, and beliefs of managers regarding sustainable business practices. This detailed understanding of the qualitative data will provide a rich context for interpreting the findings. On the other hand, in the latter step, QDAS-generated analysis using AtlasTI software will be utilized to enhance the rigour and systematic processing of the data. More precisely, AtlasTI will assist in coding, categorizing, and visualizing the qualitative data, ensuring a homogeneous and objective analysis. As outlined above, the implementation of QDAS facilitates the identification of complex relationships and patterns within the data, reducing researcher bias and increasing the reliability and validity of the qualitative analysis.

Definitively, our qualitative data analysis involves a structured and systematic approach to understanding managers' perceptions of sustainable business strategies. By employing both content analysis and QDAS-generated analysis, we aim to provide a careful perusal and dismantling of the qualitative data, ensuring flat, robust and dependable findings.

On a final note, we end the introduction to the qualitative data analysis process and the presentation of the Qualitative Data Analysis subchapter by formally introducing the design of our research instrument: the in-depth interview guide. Therein, the interview guide consists of seven sections, comprising a total of 19 questions. The introductory section gathers relevant managerial information, including self-presentation, current position, managerial experience, and specific experience in sustainability-related

projects. This foundational information sets the stage for the subsequent sections. Following the introduction, the interview themes are introduced gradually. The questions progress from general inquiries about sustainability to more specific questions addressing each variable and research question, as described in the tables above. Naturally, each question is aligned with a corresponding research hypothesis and research objective, ensuring that the collected data directly contributes to our overall research goals. The whole interview guide can be consulted in Annex 1, and the relationship between variables, research questions and their corresponding research questions are described above in Tables 27 and 28.

4.1.1. Content analysis

The content analysis of this study was conducted to explore the underlying polymath entangled by Romanian business managers' perceptions of sustainable development and its integration into their organizational strategies. This analysis aimed to delve into the many-sided understanding and practical application of sustainability principles across various management domains, including economic, social, environmental, and cultural strategies. By examining in-depth interviews with managers from diverse industries, we sought to explore and, thereby, map the key constructs that define their approach to sustainability and to understand, at least at a glance, how these constructs influence organizational performance and reputation. The insights derived from this qualitative analysis provide a rich contextual foundation that informs and supports the subsequent QDAS-generated analysis, ensuring a comprehensive examination of the research objectives and questions.

Addressing our first construct, *sustainable development awareness*, most interviewees demonstrated an insightful self-operationalization of the "sustainable development" concept. For example, V.A. emphasized community welfare and environmental care, while G.C. highlighted reducing environmental impact through packaging and ingredient changes. D.A. highlights the integration of sustainable principles in architectural design, emphasizing the need for sustainability in building environments due to their extensive environmental, social, economic, and cultural influences: "In managing an architecture firm, it comes naturally to implement the sustainable principles in such a manner that the whole company has a positive impact on the pillars of sustainable development".

In addition to this, as mentioned earlier in the working definition, this construct reflects how well individuals within organizations understand and recognize the principles and importance of sustainable development. As appropriate, this construct encompasses three key dimensions: economic, social, and environmental awareness. In line with that, I.M. articulates an economic perspective on sustainable development, emphasizing the need for growth without externalities and hidden costs associated with nonrenewable resources: "I see sustainable development as a way to grow a business or society without externalities, without the hidden cost of nonrenewable resources". Along

with that, R.M. emphasized the need to align business strategies with social and economic trends to reduce environmental impact. This involves creating business strategies to increase natural product portfolios, changing recipes to reduce chemicals, and adopting new packaging materials. Properly, this not only pinpoints a clear understanding of the economic implications of sustainability, but also accents the importance of integrating sustainable practices into economic strategies.

Similarly, M.R. underscores the social dimension of sustainability by highlighting the importance of financial health, equity, and social inclusion: "For us, it means financial health, equity, and social inclusion, supporting local communities with a strong focus on financial education". In the same fashion, both A.D and E.B. mentioned the significance of sustainable community investment, buildings, a constant focus on education, digitalization, volunteering, and health from their businesses' perspectives. In doing so, this indicates a deep awareness of the social responsibilities linked to sustainable development.

On the environmental front, G.C. discusses the company's efforts to reduce environmental impact through various strategies such as using new packing materials and sustainable delivery procedures: "Reduction of company impact in day-to-day business from production to consumer usage of our products – new packing materials, new ingredients, new labels, a more sustainable delivery pattern and procedure to reduce environment impact".

Hereupon, it might be argued that high awareness leads to proactive strategy adoption, as seen in BCR and Mindit Services, which have comprehensive sustainability programs in place. Altogether, these insights confirm that awareness itself is a crucial first step towards adopting sustainable strategies, as it lays the groundwork for further actions and policies.

A novelty in the output of the qualitative analysis is the highlighting of the exogenous factors that trigger a sustainable-oriented managerial perspective. More specifically common *regulatory requirements* came into question, as both a challenge and a motivator. Namely, E.D. highlighted the lack of comprehensible actions and procedures, while I.M. pointed out that regulatory pressures shape their sustainability measures. Besides, A.B. discusses the integration of sustainable practices in line with regulatory requirements and the challenge of aligning these practices across a large and diverse workforce: "The major challenge in creating and implementing sustainability policies has been aligning with the Global Reporting Initiative (GRI) standards each year and fostering sustainable behavior annually". Therefore, the catalytic role of this variable is being sketched.

Moving on to the next "novel" factor with an external origin that triggers a sustainable-oriented managerial perspective, *leadership commitment* was a recurring theme. By way of illustration, R.S. emphasized the role of leadership in building a culture of sustainability, and A.B. discussed integrating sustainability into multichannel strategies. All the more, M.R. underscores leadership's commitment to sustainable financing and green investments: "At BCR, we want to open more towards 'sustainable financing' as a new way of banking but also a new way of thinking. Sustainable

financing means a shift in the way we evaluate our clients, and we look at different projects". That is, leadership orientation towards sustainability plays, as expected, a critical role in fostering, promoting and implementing sustainable business strategies. Proof to that lies in examples such as Mindit Services and Boehringer Ingelheim, where embedding sustainability into core operations appears to be of utmost importance.

The aforestated lines clearly distinguish between "sustainable orientation" and the clear-cut act of *adoption of sustainable strategies*. This concept is another novelty underpinned by the qualitative pursuit. Examples include, but are not limited to, the following: V.A. focused his discourse on employee well-being and community investment, while M.R. discussed a comprehensive approach integrating economic, social, and environmental hands-on strategies. This is in line with our previously inferred literature review viewpoint, which could be seen in our working definition, through which we expressed in definite terms that we operate on the assumption that this construct illustrates the extent to which organizations integrate and implement sustainable practices within their operations. This construct includes dimensions focusing on people, the planet, economic factors, and cultural aspects, nonetheless.

P.P., from a sustainable fashion company, emphasizes the importance of social sustainability by focusing on helping people in need and creating good working conditions: "the social part is the highlighted part in our business, because our company value is linked to working for other humans". In contrast, E.B. highlights the environmental strategies adopted by her organization - initiatives such as eliminating printed materials in favor of digital alternatives to reduce the company's carbon footprint: "We have eliminated printed material that sales representatives were using for their visits to healthcare professionals and replaced it with iPads".

To boot, economic strategies are evident in the practices described by R.S., who discusses the company's data-driven approach to economic sustainability: "We look at trends such as revenue, attrition, P&L, revenue/employee, chargeability rate etc. We are a data-driven company and make decisions based on all the information we get from our actions, combined with economic market trends and our strategic goals". And furthermore, cultural sustainability is reflected in the practices of D.A., who integrates cultural care management into architectural projects: "Care about the cultural background of the employees, integration of cultural care management in architectural projects".

By common agreement among interviewees, it can be inferred that various factors, including awareness, regulatory pressures, and leadership, have a direct take on sustainable strategy adoption. Thereby, high awareness leads to proactive strategy adoption, as can be seen in businesses such as BCR or Mindit Services, both of which have comprehensive sustainability programs that integrate economic, social, and environmental dimensions. Overly, seamless incorporation of sustainability into business processes is conjointly notable in SMEs and Enterprises/International companies such as Digi Communications' digital initiatives and in Boehringer Ingelheim's multichannel strategies.

Changing the focus towards the added value of the orientation and, respectively, adoption of the sustainable paradigm in business, *performance* was highlighted by multiple respondents. Case in point, R.S. mentions increased productivity and efficiency due to social initiatives: "Opportunities offered for people when it comes to getting involved in social initiatives have an impact outside the business world. This makes them find more purpose in their day-to-day activity and make them more motivated, which is then converted into being more efficient and productive". Equally, E.B. emphasized the role of digital transformation in enhancing operational performance. Put it in other words, the actual adoption of sustainable-oriented management, embedded in the very strategy of the business, affects organizational performance as a whole. In an alike way, G.C. noted that changes in products to lower environmental impact are crucial, yet challenging due to consumer expectations. On top of that, I.M. discussed how environmental management strategies, such as energy consumption and data centre efficiency, directly affect organizational performance. Conversely, the enhanced performance through sustainable practices is evident in Digi Communications' digital transformation efforts and BCR's financial health focus, jointly proving that while approaches to sustainability may differ, the commitment to adopting sustainable strategies is evident across various organizations.

On the flip side, there are grounds to believe that sustainability efforts clearly take upon *organizational reputation*. To cite an instance, G.C. noted the importance of a consistent sustainability message for reputation, and A.B. highlighted that sustainability practices bolster stakeholder trust. Together with that, interviewees put forth a presumably strong link between the concepts of "performance" and "reputation", at an organizational level. *Exempli gratia*, I.M. discussed how financial stability and ethical practices enhance their reputation. Also, R.M. stressed the need for transparency and a 360-degree message to maintain reputation, whereas R.R. brought out that bad environmental practices could leak to the public, naturally affecting reputation.

To a fault, reputation gains are significant for companies actively promoting sustainability, aiming to build an active engagement with stakeholders, as was jointly highlighted by management representatives from Mindit Services, BCR and Boehringer Ingelheim. In other respects, E.D. links reputation with the integrity and ethical practices promoted through sustainability: "An organization's reputation is linked to its staff integrity, but also to its HR policies. For example, an organization that promotes gender equality and equal opportunities for employees is a trustworthy employer". At full length, these examples demonstrate that sustainable strategies spur on organizational reputation.

Notwithstanding, the heterogeneity of the responses should be also recalled: the responses formulated by the interviewees, coming from different sectors and organizations, reveal a diverse range of perspectives and experiences regarding sustainable development. For example, the IT sector, may focus on education and innovative project implementations, whereas the banking sector, may emphasize economic and compliance aspects of sustainability.

The variability in implementation strategies is also evident. By way of illustration, G.C. emphasizes changes in products and consumer challenges, whereas D.A. focuses on integrating cultural care into projects. This dynamic is also noted when it comes to leadership and organizational commitment to sustainability. M.R. demonstrates a comprehensive approach by integrating all dimensions of sustainability, while E.B. discusses balancing digital transformation with sustainability goals. Nevertheless, it is important to remember that this multifaceted output is commendable and was totally expected at this stage, as our main purpose was to process a rich tapestry of insights into how businesses perceive and implement the sustainable development paradigm.

As a consequence of these previous outlines, it may be told that the Awareness Degree of Sustainable Development (ADSD) emerged as a multidimensional construct encompassing economic, social, and environmental aspects. Managers emphasized the importance of integrating sustainability into business strategies, community investments, and environmental practices in a comprehensive way. Organizational Performance (OP) and Organizational Reputation (OR) were closely linked to sustainability practices, with managers highlighting the direct impact of environmental and social strategies on performance and reputation. A propensity towards various managerial strategies (culture, environment, people, and profit) also emerged as possible significant constructs, reflecting the diverse approaches managers take towards integrating sustainability.

In doing so, the constructs — Awareness Degree of Sustainable Development (ADSD), Regulatory Requirements (RR), Propensity towards People-Oriented Managerial Strategies (PTPOMS), Propensity towards Culture-Oriented Managerial Strategies (PTCOMS), Propensity towards Environment-Oriented Managerial Strategies (PTEOMS), and Propensity towards Profit-Oriented Managerial Strategies (PTPROMS)—emerged as natural categorizations of the themes and priorities articulated by the interviewed managers. However, mention should be made that one of the limitations assumed in the present research is that, due to the simultaneously preparing the data for the QDAS-generated analysis, the Regulatory Requirement (RR) construct could not be incorporated as such into the AtlasTI software. Nevertheless, it was included in the quantitative methodological design, as it will be further detailed.

In what follows, we will clear up the emergence of these concepts by commenting upon the cognitive analytical process. This process involves both thematic analysis of the interviews and the integration of insights from the body of literature on sustainability and management. In order to prepare QDAS-generated analysis, a previous coding and clustering of the data was performed: each interview was coded for recurring themes and statements that aligned with the broad concepts expounded in the literature review. Statements were categorized into clusters based on common themes. For example, statements about reducing environmental impact, improving social conditions, and integrating economic considerations were grouped.

In the same vein, patterns emerged from the clusters, revealing how different aspects of sustainability were perceived and implemented by the managers. This involved recognizing the emphasis placed on different sustainability dimensions (economic,

social, environmental) and management strategies (culture, environment, people, profit). From a conceptual framework standpoint, existing literature on sustainable development, corporate social responsibility (CSR), and organizational performance provided a key of viewing, interpreting and compartmentalizing the themes. Constructs such as the triple bottom line (economic, social, environmental), stakeholder theory, and sustainable management practices were foundational. The identified themes and patterns were cross-referenced with established theories and models in the literature to validate and refine the emerging constructs.

Acting upon the previously described outcome helped us in realizing a breakdown of the emerging constructs, as further indicated. Firstly, the *Awareness Degree of Sustainable Development* (ADSD), mirroring the Triple Bottom Line and jointly portraying culture as the fourth pillar of sustainability, was subdivided into:

1. *Economic Dimension* (ADSD-E): Managers frequently discussed how sustainability integrates with economic strategies, reflecting an awareness of sustainable economic practices. For example, M.R, emphasized developing business strategies that align with social and economic trends to reduce environmental impact.

2. *Social Dimension* (ADSD-S): The importance of social sustainability was highlighted, among others, by A.D. and V.A. who focused on sustainable communities and social well-being.

3. *Environmental Dimension* (ADSD-EN): Environmental sustainability awareness was evident in discussions about reducing environmental footprints through new packaging materials and sustainable delivery patterns, as noted by G.C.

Also mirroring the TBL and maintaining our view on cultural aspects, we decided to make a clear distinction between *knowing* (i.e. *Awareness Degree*) and having the *intention* to adopt sustainability. This is why we decided to derive the umbrella-construct *Propensity towards TBL-Oriented Managerial Strategies*, which was subdivided into:

1. *The Propensity towards Culture-Oriented Managerial Strategies* (PTCOMS) - Cultural Integration: managers recognized the need for integrating cultural aspects into sustainability strategies. E.D. pointed out the risks of misfit cultural management strategies leading to inequalities. Parallelly, A.D. emphasized cultural care in projects: "Care about the cultural background of the employees, integration of cultural care management in architectural projects is very important in our business".

2. *The Propensity towards Environment-Oriented Managerial Strategies* (PTEOMS) - Environmental Strategies: the necessity of proactive environmental strategies was a common recurrent theme. M.R. discussed legislative impacts: "The rapid changes in the legislation impact our medium and long-terms strategy". G.C. mentioned the need for quick adaptation to new regulations: "This very short period to implement an environmental strategy can impact our reputation if the quality of the new product is not in line with company standards".

3.   *The Propensity towards People-Oriented Managerial Strategies (PTPOMS)* - Employee and Community Focus: the focus on employee well-being and community engagement was definitely a common ground. M.R. emphasized the importance of clear communication and employee motivation: "It's important to share all the steps that you made to decrease the impact on the environment for your products, but it is very important to deliver products with some benefits like the old one". Conjointly, P.P. highlighted the importance of training and awareness campaigns within the fashion industry.

4.   *The Propensity towards Profit-Oriented Managerial Strategies* (PTPROMS) - Economic Strategies: economic management strategies balancing profitability with sustainability were definitely a debated topic. I.M. noted the critical nature of economic management in banking: "economic management strategies are critical for a bank operating with market, credit or liquidity risk". Acting in the same market sector, M.R. emphasized financial education and clear KPIs: "We are a data-driven company and make decisions based on all the information we get from our actions".

In conclusion, the content analysis part notes that the constructs emerged through a structured analytical process, combining detailed thematic analysis of interview data with validation against existing literature. This process ensured that the constructs were not only reflective of the managers' insights but also aligned with established theories and models of sustainability and management. Each construct represents a critical aspect of how organizations perceive and implement sustainability, providing a comprehensive framework for understanding, mapping, and analyzing their sustainable development efforts. A streamlined version of the key insights from the interviews and their corresponding construct aligned with relevant concepts derived from the body of literature to validate the emergence of the constructs is being provided in Table 30.

Table 30. A streamlined version of the main *Content Analysis*-derived insights

Construct	Interview Insights	Supporting Quotes	Literature Alignment
Awareness Degree of Sustainable Development (ADSD)	Integration of economic, social, and environmental sustainability into business strategies. Mirroring the TBL structure into this construct: • *Economic Dimension* (ADSD-E) - emphasis on sustainable economic practices;	"The business starts to align to social economical trends, is more sustainable" (M.R.)	Triple bottom line (economic, social, environmental)
		"Sustainable communities, sustainable	Sustainable economic growth

		buildings" (A.D.)	
	• *Social Dimension* (ADSD-S) - focus on social well-being and community engagement; • *Environmental Dimension* (ADSD-EN) - reducing environmental footprints through innovation.	"Care about the cultural background of the employees" (A.D.)	Stakeholder theory
		"New packing materials, new labels, new ingredients" (G.C.)	Environmental sustainability
Organizational Performance (OP)	Impact of sustainability on operational efficiency and cost management.	"The focus is on the building energy rating" (I.M.)	Organizational performance metrics
Organizational Reputation (OR)	Maintaining reputation through sustainable practices and communication.	"The company needs to deliver a 360 message" (M.R.)	Corporate social responsibility (CSR)
Regulatory Requirements (RR)	Clearly dealineating RR as a trigger (i.e. both a challange and a motivator) for *Propensity towards TBL-Oriented Managerial Strategies*.	"Lack of comprehensible actions and procedures" (E.D.) "Regulatory measures shape our sustainability measures" (I.M.)	Local and European legislation. Compliance with broader SDGs and ESGs.
Propensity towards TBL-Oriented Managerial Strategies	Clearly distinguish between *knowing* (i.e. being knowledgeable about) and *adopting* sustanable-oriented managerial strategies.	"Care about the cultural background of the employees" (A.D.)	Cultural management

Mirroring the TBL structure, corroborated with "the fourth pillar of sustianability" paradigm into this construct:
    • *Propensity towards Culture-Oriented Managerial Strategies* (PTCOMS) - integrating cultural aspects into sustainability strategies;
    • *Propensity towards Environment-Oriented Managerial Strategies* (PTEOMS) - proactive environmental strategies and legislative adaptation;
    • *Propensity towards People-Oriented Managerial Strategies* (PTPOMS) - employee well-being and community engagement focus;
    • *Propensity towards Profit-Oriented Managerial Strategies* (PTPROMS) - balancing profitability with sustainability.
	"The rapid changes in the legislation impact our strategy" (M.R.)	Environmental management practices

	"Trainings, Campaigns, Raising Awareness" (P.P.)	Human resource management
	"Economic management strategies are critical" (I.M.)	Economic sustainability

Source: Advanced by the candidate

To further develop the findings of the current content analysis, Table 31 displays each respondent's primary construct contributions, which are connected to the theoretical concepts that their insights reinforce. In doing so, we try to ensure the methodical rigour in approaching the qualitative data—known for its subjectiveness—

in our pursuit of synthesizing the information obtained from the interviews and linking it to the corresponding constructs.

Table 31. A streamlined version of the main construct contribution insights derived from each interviewee

Interviewee Code	Main Takeaways	Primary Construct Contribution	Defining Quotes
V.A.	Emphasis on sustainable engineering practices. Challenges in implementing sustainable projects within budget constraints.	ADSD-E, PTEOMS	"Sustainable engineering is critical, but it's often hard to stay within budget." "We strive to reduce environmental impact, but financial constraints are a major challenge."
G.C.	Focus on reducing environmental impact through new materials and ingredients in cosmetics. Challenges with consumer acceptance of sustainable products.	ADSD-EN, PTEOMS	"We are changing our recipes to reduce chemicals and use more sustainable ingredients." "The main challenge is getting consumers to accept these sustainable products."
D.A.	Integration of sustainable principles in architectural design. Focus on sustainable communities and buildings.	ADSD-E, ADSD-S	"Sustainable development is a main parameter in architectural design." "We aim to create sustainable communities and buildings."
R.S.	Development of plant-based digital configurator. Focus on education and sustainability in software development.	ADSD-S, PTPOMS	"We support education through initiatives like Teach for Romania." "Our focus is on building sustainable software solutions."
R.R.	Focus on recycling waste and residue in sports. Importance of handling negative waste and social impact.	ADSD-EN, PTEOMS	"Recycling waste and residue is crucial in our business." "Handling the negative impact of our business is a top priority."
E.D.	Challenges in implementing sustainability policies due to lack of comprehensible actions and follow-up in public administration.	ADSD-E, RR	"There is a lack of follow-up on sustainability measures." "We need clear actions and procedures for effective implementation."

I.M.	Sustainability as part of project decisions in banking. Focus on balancing sustainability with project objectives.	ADSD-EN, PTPROMS	"We consider sustainability in all our project decisions." "Balancing sustainability with project goals is challenging."
L.S.	Focus on people as the core for sustainability in oil & gas. Challenges in changing mindsets towards sustainability.	ADSD-S, PTPOMS	"People are the base of success in sustainability." "Changing mindsets towards sustainability is difficult."
M.R.	Equal attention to ESG dimensions in banking. Focus on sustainable financing and social inclusion.	ADSD-E, ADSD-S, PTPROMS	"We pay equal attention to all ESG dimensions." "Sustainable financing is a new way of thinking for us."
P.P.	Social pillar focus in sustainable fashion, helping people in need and creating good working conditions.	ADSD-S, PTPOMS	"Our company value is linked to working for other humans." "We focus on creating good working conditions and helping those in need."
A.B.	Reducing digital carbon footprint in health innovation. Integrating sustainable practices into customer experience.	ADSD-EN, PTEOMS	"Reducing our digital carbon footprint is a priority." "We integrate sustainable practices into our customer experience strategies."
E.B.	Promoting environmentally-friendly practices and renewable energy adoption in telecommunications.	ADSD-EN, PTEOMS	"We promote renewable energy and environmentally-friendly practices." "Our focus is on reducing our environmental footprint through various initiatives."

Source: Advanced by the candidate

Last of all, Table 32 presents an overall perspective of the main takeaways from each interview section of the in-depth interview guide (available in Annex 1), broken down for each interviewee, and backed up with direct quotes from their interviews.

Table 32. An overview of the key points discussed in every section of the interviews, backed up by actual quotations from the interviewees.

Interviewee Code	Interview Section	Main Takeaway	Direct Quotes
V.A.	Generic aspects	Emphasis on integrating sustainability within installations engineering	"Sustainable engineering is critical, but it's often hard to stay within budget."
	Sustainable development awareness	Challenges in balancing budget constraints with sustainable projects	"We strive to reduce environmental impact, but financial constraints are a major challenge."
	Social management strategies	Focus on employee well-being and social initiatives	"Creating good work conditions is part of our sustainable approach."
	Economical management strategies	Budget constraints are the primary challenge	"Financial constraints are a major challenge for implementing sustainable projects."
	Environmental management strategies	Prioritizing reduction in environmental impact through better materials and processes	"We aim to use better materials to reduce our environmental impact."
	Cultural management strategies	Promoting sustainability within company culture	"We need to foster a culture that embraces sustainability."
G.C.	Generic aspects	Focus on sustainable practices in cosmetics industry	"Sustainability is integral to our product development."
	Sustainable development awareness	Consumer acceptance is a major challenge	"The main challenge is getting consumers to accept these sustainable products."
	Social management strategies	Importance of educating consumers about sustainable products	"Educating consumers is key to getting them to accept sustainable products."
	Economical management strategies	Challenges in maintaining economic viability while adopting sustainable practices	"We need to balance cost and sustainability."

		Environmental management strategies	Reducing environmental impact through innovative materials	"We are changing our recipes to reduce chemicals and use more sustainable ingredients."
		Cultural management strategies	Encouraging a shift in consumer culture towards sustainability	"Changing consumer culture is a big part of our sustainability strategy."
D.A.		Generic aspects	Integrating sustainability in architectural design	"Sustainable development is a main parameter in architectural design."
		Sustainable development awareness	Importance of sustainable communities and buildings	"We aim to create sustainable communities and buildings."
		Social management strategies	Focus on employee well-being and community impact	"Employee well-being and community impact are crucial."
		Economical management strategies	Economic sustainability through responsible financial management	"Responsible management of financial issues is key."
		Environmental management strategies	Sustainable design practices to minimize environmental impact	"We incorporate sustainable design principles to reduce our environmental footprint."
		Cultural management strategies	Promoting sustainability in organizational culture	"Our organizational culture strongly supports sustainability."
R.S.		Generic aspects	Emphasis on sustainable practices in software engineering	"Our focus is on building sustainable software solutions."
		Sustainable development awareness	Importance of education in promoting sustainability	"We support education through initiatives like Teach for Romania."
		Social management strategies	Employee engagement in sustainability initiatives	"Engaging employees in sustainability is essential."
		Economical management strategies	Balancing sustainability with economic growth	"We aim to grow sustainably while maintaining economic viability."
		Environmental management strategies	Incorporating sustainable practices in software development	"Sustainability is integrated into our

			software development processes."
	Cultural management strategies	Creating a culture of sustainability within the organization	"We promote a culture that values sustainability."
R.R.	Generic aspects	Recycling and waste management in sports business	"Recycling waste and residue is crucial in our business."
	Sustainable development awareness	Importance of handling negative waste and social impact	"Handling the negative impact of our business is a top priority."
	Social management strategies	Promoting social responsibility among employees	"We encourage our employees to participate in social initiatives."
	Economical management strategies	Economic viability through sustainable practices	"Sustainability helps us maintain economic viability."
	Environmental management strategies	Emphasis on reducing environmental impact through recycling	"Recycling is a key part of our environmental strategy."
	Cultural management strategies	Fostering a culture of sustainability within the organization	"Our organizational culture supports sustainability."
E.D.	Generic aspects	Challenges in implementing sustainability in public administration	"There is a lack of follow-up on sustainability measures."
	Sustainable development awareness	Need for clear actions and procedures for effective implementation	"We need clear actions and procedures for effective implementation."
	Social management strategies	Importance of staff development and well-being	"Staff development and well-being are crucial for our performance."
	Economical management strategies	Economic sustainability through efficient resource allocation	"Efficient resource allocation is key to our economic sustainability."
	Environmental management strategies	Focus on rational utilization of resources and waste reduction	"We focus on rational utilization of resources and waste reduction."
	Cultural management strategies	Promoting a culture of sustainability within the public sector	"We need to foster a culture of sustainability within our organization."

I.M.	Generic aspects	Balancing sustainability with project objectives in banking	"Balancing sustainability with project goals is challenging."
	Sustainable development awareness	Integrating sustainability in all project decisions	"We consider sustainability in all our project decisions."
	Social management strategies	Engaging employees in sustainability initiatives	"Engaging employees in sustainability is essential."
	Economical management strategies	Economic sustainability through responsible financial management	"Responsible financial management is key to our sustainability."
	Environmental management strategies	Minimizing environmental impact through energy-efficient practices	"We focus on energy efficiency to reduce our environmental impact."
	Cultural management strategies	Creating a culture of sustainability within the organization	"We promote a culture that values sustainability."
L.S.	Generic aspects	Focus on people as the core for sustainability in oil & gas	"People are the base of success in sustainability."
	Sustainable development awareness	Importance of changing mindsets towards sustainability	"Changing mindsets towards sustainability is difficult."
	Social management strategies	Promoting social responsibility among employees	"We encourage our employees to participate in social initiatives."
	Economical management strategies	Balancing economic growth with sustainability	"We aim to grow sustainably while maintaining economic viability."
	Environmental management strategies	Emphasis on reducing environmental impact through innovative practices	"We focus on innovative practices to reduce our environmental impact."
	Cultural management strategies	Fostering a culture of sustainability within the organization	"Our organizational culture supports sustainability."
M.R.	Generic aspects	Equal attention to ESG dimensions in banking	"We pay equal attention to all ESG dimensions."
	Sustainable development awareness	Focus on sustainable financing and social inclusion	"Sustainable financing is a new way of thinking for us."
	Social management strategies	Promoting financial health and social inclusion	"Our focus is on financial health and social inclusion."

		Economical management strategies	Economic sustainability through responsible financial management	"Responsible financial management is key to our sustainability."
		Environmental management strategies	Reducing environmental impact through green investments	"Green investments are a key part of our environmental strategy."
		Cultural management strategies	Promoting a culture of sustainability within the organization	"We promote a culture that values sustainability."
P.P.		Generic aspects	Social pillar focus in sustainable fashion, helping people in need and creating good working conditions	"Our company value is linked to working for other humans."
		Sustainable development awareness	Focus on social responsibility and community impact	"We focus on creating good working conditions and helping those in need."
		Social management strategies	Promoting social responsibility among employees	"We encourage our employees to participate in social initiatives."
		Economical management strategies	Balancing economic viability with social responsibility	"We need to balance cost and sustainability."
		Environmental management strategies	Reducing environmental impact through sustainable practices	"We aim to use better materials to reduce our environmental impact."
		Cultural management strategies	Fostering a culture of social responsibility within the organization	"Our organizational culture supports social responsibility."
A.B.		Generic aspects	Reducing digital carbon footprint in health innovation	"Reducing our digital carbon footprint is a priority."
		Sustainable development awareness	Integrating sustainable practices into customer experience	"We integrate sustainable practices into our customer experience strategies."
		Social management strategies	Promoting social responsibility among employees	"We encourage our employees to participate in social initiatives."
		Economical management strategies	Balancing economic growth with sustainability	"We aim to grow sustainably while maintaining economic viability."

	Environmental management strategies	Reducing environmental impact through innovative digital practices	"We focus on innovative digital practices to reduce our environmental impact."
	Cultural management strategies	Creating a culture of sustainability within the organization	"We promote a culture that values sustainability."
E.B.	Generic aspects	Promoting environmentally-friendly practices and renewable energy adoption in telecommunications	"We promote renewable energy and environmentally-friendly practices."
	Sustainable development awareness	Focus on reducing environmental footprint through various initiatives	"Our focus is on reducing our environmental footprint through various initiatives."
	Social management strategies	Promoting social responsibility among employees	"We encourage our employees to participate in social initiatives."
	Economical management strategies	Balancing economic growth with sustainability	"We aim to grow sustainably while maintaining economic viability."
	Environmental management strategies	Reducing environmental impact through renewable energy and recycling initiatives	"Renewable energy and recycling are key parts of our environmental strategy."
	Cultural management strategies	Fostering a culture of sustainability within the organization	"Our organizational culture supports sustainability."

Source: Advanced by the candidate

4.1.1.1.   Content analysis: Preliminary conclusions

The detailed analysis of the interviews reveals a nuanced understanding of how sustainability integrates into various aspects of organizational strategy and operations. The emergent constructs -Awareness Degree of Sustainable Development (ADSD), Regulatory Requirements (RR), Propensity towards Culture-oriented Managerial Strategies (PTCOMS), Propensity towards Environment-oriented Managerial Strategies (PTEOMS), Propensity towards People-oriented Managerial Strategies (PTPOMS), and Propensity towards Profit-oriented Managerial Strategies (PTPROMS) -each capture essential dimensions of sustainability as discussed by the managers.

From the interviews, it became clear that sustainable development awareness (ADSD) lies at the very bedrock of the present research, as it influences various management strategies, as we previously laid out. Referring back to E.B., the integration of sustainability in daily operations and the importance of aligning sustainability goals with business practices were pointed up. Similarly, V.A. emphasized the importance of waste reduction and recycling as key components of their sustainability strategy, indicating a strong awareness of sustainable development's environmental dimension.

Not only that, but R.S.'s hypostatical remark on the relationship between sustainable development awareness and social management strategies was really insightful from the Romanian market's viewpoint, as it spotlighted an underlying principle that we have previously signaled out in the body of literature. In congruence with that, the aforementioned awareness drives social initiatives that enhance employee well-being and community engagement. The emphasis on social sustainability is further echoed by P.P. from a sustainable fashion company, highlighting the intrinsic value placed on social responsibility.

Furthermore, economic management strategies appear to also be significantly influenced by sustainable development awareness. To illustrate, G.C. discussed the focus on the development of sustainable products. To put it more exactly, this approach not only aligns with sustainability goals but also fosters long-term financial stability and operational efficiency. Seemingly, M.R. also reinforced this by emphasizing the role of financial education in promoting sustainable economic growth, which she described as key to a strong society.

On the flip side, environmental management strategies are a critical area where sustainable development awareness plays a vital role. In other words, I.M. highlighted energy consumption as a focal point. This reflects the broader trend among managers to implement strategies that reduce environmental impact and promote resource efficiency. D.A. also noted the importance of sustainable practices for maintaining a positive organizational reputation, illustrating how environmental strategies are intertwined with broader organizational goals, especially in such an important sector as urbanism, building design, and construction.

For another thing, cultural management strategies are also sketched as influenced by sustainable development awareness, and fostering an internal culture that supports sustainability. E.D. stressed the importance of trust in creating a productive work environment, which she linked to sustainable cultural practices. R.R. echoed this sentiment, holding forth the role of cultural strategies in attracting and retaining talent, thereby enhancing organizational reputation.

Juxtaposed, social management strategies appear to be closely linked to organizational performance and reputation. More precisely, managers like A.B. emphasized the critical role of social strategies in attracting talent with strong sustainability values. This connection is further illustrated by E.B., who noted that social initiatives, such as community engagement and CSR projects, heighten the organization's reputation and foster stakeholder trust.

Besides, economic management strategies, when aligned with sustainability principles, are depicted as positively impacting organizational performance and reputation. In this line, M.R. discussed how financial education initiatives contribute to sustainable economic growth, thereby improving organizational performance. G.C. pulled up the development of sustainable products as a strategy that upholds both organizational performance and reputation.

All in all, the interviews call attention to the fact that sustainable development awareness is a driving force behind various managerial strategies: it influences economic, social, environmental, and cultural management practices, ultimately incrementing organizational performance and reputation. This wide-ranging approach to sustainability reflects the complex and interrelated nature of sustainable business practices as a result of the diverse portrayal of perspectives of Romanian business managers. This first part of our qualitative analysis also reveals that managers are aware of the broad and diverse range of subjacent vectors that altogether contribute to a decodification of a rather eclectic sustainable paradigm into a wide-ranging set of business practices, balancing, therefore, various organizational priorities, from financial performance to community involvement and environmental stewardship.

All considered, the initial content analysis has set a solid foundation for our research, stressing the conclusive role of sustainability in contemporary business practices. In assent with this outline, Table 33 articulates our main takeaways, i.e., our conclusions, latching them on with the research objectives and research questions, pictured in the transitional stage at that time.

Table 33. An overview of the conclusions of the content analysis stage in relation with the Research Objectives and the Research Questions.

Research Objectives	Research Questions	Key Takeaways	Supporting Quotes
O1: To investigate the relationship between sustainable development awareness and economic management strategies, from the Romanian business managers' perspective.	RQ1: Is there a positive relationship between *sustainable development awareness* and *economic management strategies*?	Sustainable development awareness drives the creation and implementation of sustainable economic strategies. Managers emphasize the long-term financial stability and operational efficiency gained through sustainable practices.	"We have focused on creating new sustainable products." - G.C. "Financial education is key to a strong society." - M.R.
O2: To investigate the relationship between	RQ2: Is there a positive relationship	Managers with a strong awareness of sustainable development integrate	"We aim to organically contribute to

sustainable development awareness and social management strategies, from the Romanian business managers' perspective.	between *sustainable development awareness* and *social management strategies*?	social initiatives that enhance employee well-being and community engagement. This is seen as essential for both internal and external stakeholder satisfaction.	achieving these objectives by 2030." - R.S. "Social, because our company value is linked to working for other humans." - P.P.
O3: To investigate the relationship between sustainable development awareness and environmental management strategies, from the Romanian business managers' perspective.	RQ3: Is there a positive relationship between *sustainable development awareness* and *environmental management strategies*?	Awareness of sustainable development leads to the implementation of environmental strategies that focus on reducing energy consumption, waste, and overall environmental impact.	"Energy consumption is a key focus." - I.M. "Sustainable practices are important for maintaining a positive organizational reputation." - D.A.
O4: To investigate the relationship between sustainable development awareness and cultural management strategies, from the Romanian business managers' perspective.	RQ4: Is there a positive relationship between *sustainable development awareness* and *cultural management strategies*?	Cultural strategies that support sustainability foster an internal culture of trust and ethical behavior, enhancing both performance and reputation.	"Trust is essential for creating a productive work environment." - E.D. "Cultural strategies attract and retain talent." - R.R.
O5: To investigate the relationship between social management strategies and organizational performance from the Romanian business managers' perspective.	RQ5: Is there a positive relationship between *social management strategies* and *organizational performance*?	Social strategies that prioritize employee well-being and community engagement improve organizational performance through increased employee productivity and satisfaction.	"Social strategies attract talent with strong sustainability values." - A.B. "Social initiatives enhance organizational reputation and foster stakeholder trust." - E.B.

O6: To investigate the relationship between social management strategies and organizational reputation, from the Romanian business managers' perspective.	RQ6: Is there a positive relationship between *social management strategies* and *organizational reputation*?	Social initiatives, such as community engagement and CSR projects, as well as cohesve and unitary communication platform enhance the organization's reputation by demonstrating a commitment to ethical practices and stakeholder well-being.	"Implementing sustainable practices is essential for our reputation"- D.A. "The company needs to deliver a 360 message" - M.R.
O7: To investigate the relationship between economic management strategies and organizational performance, from the Romanian business managers' perspective.	RQ7: Is there a positive relationship between *economic management strategies* and *organizational performance*?	Economic strategies aligned with sustainability principles improve organizational performance by fostering long-term financial stability and operational efficiency.	"In our business, the focus is on the building energy rating and the energy rating of the data centers running the bank applications."- I.M. "Creating new sustainable products improves performance (…) but yet, the major challenge is from consumer that want to use a product that can deliver the expected results but don't want to pay more for a sustainable product" - G.C.
O8: To investigate the relationship between economic management strategies and organizational reputation, from the Romanian business managers' perspective.	RQ8: Is there a positive relationship between *economic management strategies* and *organizational reputation*?	Sustainable economic strategies enhance organizational reputation by demonstrating a commitment to long-term viability and ethical financial practices.	"Financial education initiatives contribute to sustainable economic growth." - M.R. "Certain economic shortings at a product / supply chain level can also leak out to the public and, depending on the impact, they can

			either create a bad image or even start a social dispute / bad publicity, that would fire back at the overall reputation of the business"- R.R.
O9: To investigate the relationship between environmental management strategies and organizational performance, from the Romanian business managers' perspective.	RQ9: Is there a positive relationship between *environmental management strategies* and *organizational performance*?	Environmental strategies that reduce energy consumption and promote sustainability improve organizational performance by enhancing efficiency, reducing costs, and even bringing new client leads (in function of the operationalization of the concept "organizational performance" for each business in each market – apparently assimilated closely to a KPI).	"Reducing energy consumption improves performance." - I.M.

"Sustainable practices maintain a positive public image which, in specialized areas like ours, translates into performance, as they represent leads to new clients." - D.A. |
| *O10: To investigate the relationship between environmental management strategies and organizational reputation, from the Romanian business managers' perspective.* | RQ10: Is there a positive relationship between *environmental management strategies* and *organizational reputation*? | Robust environmental management strategies enhance organizational reputation by demonstrating a commitment to environmental stewardship and sustainability.

Nevertheless, it is pointed out that, if not ellaborated and implemented properly, these strategies may easily backfire on the organizational reputation. | "This very short period to implement an environmental strategy can impact our reputation if the quality of the new product is not in line with company standards." – G.C.

"Sustainable practices maintain a positive public image." - D.A. |
| *O11: To investigate the relationship between cultural management strategies and organizational performance,* | RQ11: Is there a positive relationship between *cultural management strategies* and *organizational performance*? | Cultural management strategies that support sustainability foster an internal culture of trust and ethical behavior, which enhances organizational performance (viewd as | "Misfit cultural management strategies can lead to inequalities and thus affect organizational reputation and organizational performance, |

from the Romanian business managers' perspective.		human resource's productivity). Still, cultural-perceived elements are also leveraged when it comes to employer branding (which, through the 'employer value proposition' might be looked upon as 'organizational performance').	especially in cross-cultural teams." - E.D. "Cultural strategies attract and retain talent." - R.R.
O12: To investigate the relationship between cultural management strategies and organizational reputation, from the Romanian business managers' perspective.	RQ12: Is there a positive relationship between *cultural management strategies* and *organizational reputation*?	Cultural strategies that support sustainability make more relevant organizational reputation, by promoting ethical behavior and inclusivity. More often than not, it appears that cultural management gains also an educational mission. Thist take on culture is also prone to impact the overall image of the business.	"We want to open more towards 'sustainable financing' as a new way of banking, but also a new way of thinking and enviewing banking." - M.R. "Care about the cultural background of the employees, integration of cultural care management in architectural projects is a sine qua non condition in our market, with high stakes regarding our reputation." – A.D.

Source: Advanced by the candidate

To further deepen the understanding of these relationships and to be able to realize a mapping of the implementation and its bottom-line challenges of the sustainable paradigm in Romanian businesses, we will transition to the second phase of our analysis using Qualitative Data Analysis Software (QDAS), namely AtlasTI. The QDAS-generated analysis will provide a more structured and systematic examination of the data, allowing us to explore patterns, correlations, and themes that may not be immediately apparent through manual content analysis.

By leveraging AtlasTI, we aim to enhance the rigour and reliability of our findings, ensuring that the constructs identified are robust and grounded in the data. This software-assisted analysis will also enable us to visualize the connections between different constructs, facilitating a more user-friendly, yet comprehensive understanding of how sustainable development awareness and management strategies interplay to influence organizational performance and reputation.

4.1.2.   QDAS-generated analysis

Having laid a self-supporting foundation through the initial content analysis, we now advance to the next phase of our qualitative endeavour: the Qualitative Data Analysis Software (QDAS)-generated analysis. This phase employs AtlasTI, a tool designed to facilitate the systematic and rigorous analysis of qualitative data. AtlasTI allows us to delve deeper into the intricate relationships and patterns within our data, offering a more structured and comprehensive examination of the managers' perspectives on sustainable development.

AtlasTI is renowned for its ability to handle complex qualitative datasets, providing robust tools for coding, categorizing, and visualizing data. More specifically, the added value of this tool is represented by its user-friendly coding and classification, which, as we indicated previously, is critical within the grounded theory approach (Das & Mishra, 2022; Santos et al., 2022; Román-Chaverra et al., 2023). Coding fundamentally entails the allocation of labels and the establishment of categories for distinct semantic clusters/chunks or characteristics of the collection. The categorized data has distinct, defined features that enable the software to link these data with case data. (Iyere & Misopoulos, 2022). Accordingly, AtlasTI (8th version of the software) includes advanced categorization features that enable researchers to precisely define and categorize data, hence making it a suitable option for the present research quest.

In this phase, we focus on validating and expanding the key constructs identified in the initial content analysis: *Awareness Degree of Sustainable Development* (ADSD), *Organizational Performanc*e (OP), *Organizational Reputation* (OR), and the *Propensities Towards Culture-Oriented, Environment-Oriented, People-Oriented*, and *Profit-Oriented Managerial Strategies* (PTCOMS, PTEOMS, PTPOMS, PTPROMS). Through AtlasTI, we aim to systematically explore these constructs, examining how they interrelate and influence each other. However, it must be noted that, as indicated previously, one of the limitations of the present phase, which we acknowledge from the very beginning, is that we fell short in running the *Regulatory Requirements* (RR) dimension in the software due to technicalities during data processing.

The QDAS-generated analysis will involve several steps. First, we will code the interview transcripts using AtlasTI (8th version), ensuring that each relevant segment of text is appropriately categorized. Next, we will use the software's visualization tools to create network views and diagrams, illustrating the connections between different constructs and themes. In generating these visualizations, we aim to narrow down to

patterns and trends in the data, providing a clearer understanding of how managers perceive and implement sustainability in their businesses.

4.1.2.1.   *Awareness Degree of Sustainable Development (ADSD)*

Following the grounded theory and the described implementation strategy, our first step in the QDAS-generated analysis was identifying, coding, and visually representing the expected knotty network of linkages and impacts that result from the recognition and understanding of sustainable development principles among Romanian business managers.

The ADSD diagram (Figure 13) reveals several interconnected themes that make a point of the importance of sustainable development in business operations. One of the most prominent patterns is the *focus on reducing environmental impact*. Managers frequently mentioned initiatives such as adopting better packaging, creating more sustainable delivery patterns, and altering product recipes to minimize chemical usage. For example, one manager emphasized, "Changing the recipes to reduce the chemicals", while another highlighted effort "through tree planting and cleaning the forests of plastic waste". These initiatives not only aim at environmental conservation but also upgrade the company's market reputation and customers' trust.

Another significant pattern is the integration of sustainable development into *long-term business strategies*. Managers are increasingly developing business plans that span several years, aiming to incorporate more natural products and sustainable practices. One respondent noted, "Creating business strategies for 3-5 years to increase natural products", pondering hence a proactive approach to aligning business goals with sustainable development principles.

The diagram (Figure 13) also highlights the *broader economic and social dimensions of sustainable development awareness*. Managers recognize the importance of responsible financial management and the well-being of employees. This is self-apparent in statements like "Responsible management of financial issues" and "Care about employees and the working conditions". This well-rounded view ensures that sustainability is not just an environmental concern but is integrated into all facets of business operations.

Cultural and educational impacts also crop up as significant themes in the ADSD diagram (Figure 13). Businesses that focus on high-quality education and community support are perceived as more sustainable. One interviewee explained, "We are focused on high-quality education, supporting young people and building products which have a great impact on society". This approach fosters a culture of sustainability within the organization and extends its benefits to the broader community.

Correlation with Content Analysis

The patterns identified in the ADSD diagram (Figure 13) closely align with the insights gathered from the content analysis. For instance, both the diagram and the interviews emphasize the importance of reducing environmental impact through various sustainable practices, consistent with responses about the strong focus on environmental management strategies (Q12, Q13). A good illustration is through the following mentions: "Changing the recipes to reduce the chemicals" (V.A.) and "through tree planting and cleaning the forests of plastic waste" (G.C.).

The strategic incorporation of sustainability into business plans highlighted in the diagram correlates with managers' discussions about the challenges and approaches to implementing sustainability policies (Q2, Q3). The emphasis on responsible financial management and social well-being seen in the diagram is supported by interviewees' comments on the economic and social dimensions of sustainability (Q4, Q5, Q8, Q9). *Exempli gratia*, "Creating business strategies for 3-5 years to increase natural products" (R.S.) and "Sustainable financing means a shift in the way we evaluate our clients, and we look at different projects" (R.R.), both highlighting the embedment of the sustainable paradigm into strategic management planning.

Finally, the focus on education and cultural impact observed in the diagram is reinforced by managers' statements about the importance of cultural management strategies and educational initiatives (Q14, Q15). These findings illustrate the multidimensional nature of sustainability, encompassing environmental, economic, social, and cultural aspects. Some illustrative examples are the following: "Responsible management of financial issues" (E.D.) and "Care about employees and the working conditions" (I.M.), both showing up economic and social concerns.
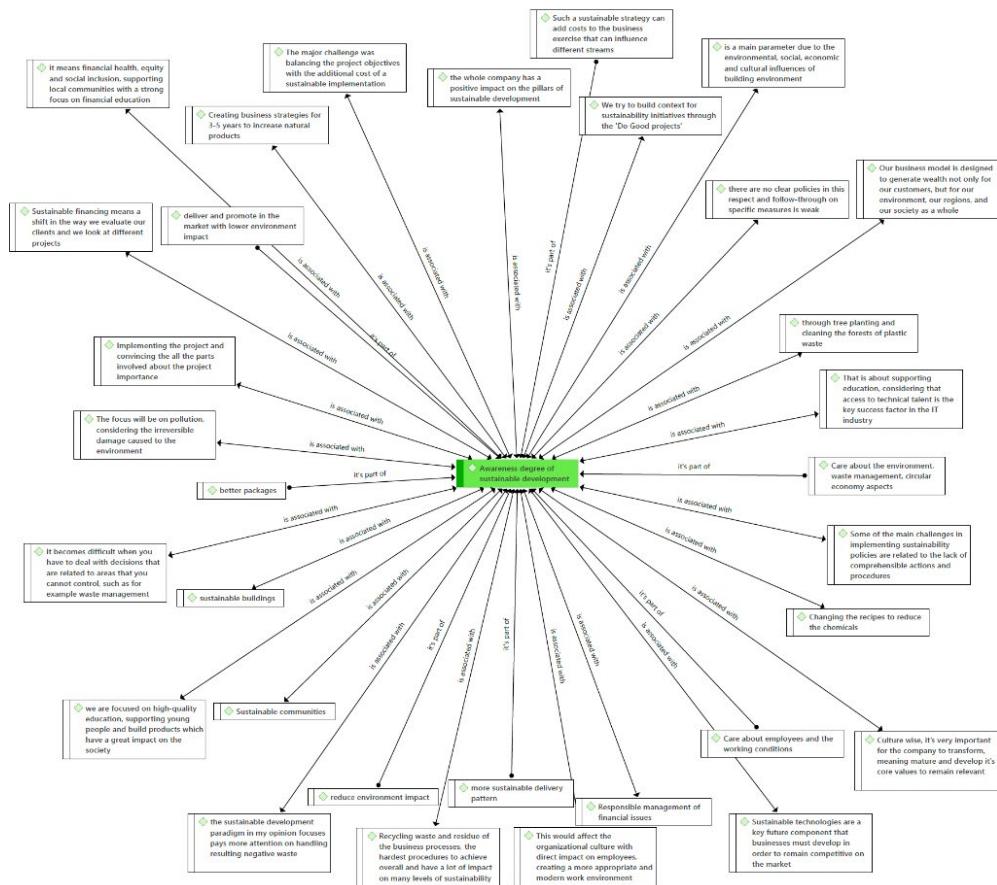
Figure 13. Exploration diagram of ADSD construct in AtlasTI software
Source: Advanced by the candidate

Lead-off conclusion

The analysis of the ADSD diagram from AtlasTI, interrelated with content analysis, provides a hands-on understanding of how Romanian business managers perceive and implement sustainable development principles. The identified patterns dwell on the multidimensional nature of sustainability, integrating environmental, economic, social, and cultural aspects into business operations. This comprehensive approach bright lines that sustainability is deeply embedded in organizational practices, contributing to long-term success and societal well-being.

This narrative sets the stage for further exploration of other constructs identified in the QADS phase, using AtlasTI to delve deeper into organizational practices and strategies related to sustainability. By understanding the broader patterns and their specific manifestations, we can gain richer insights into how businesses can effectively integrate sustainability into their core operations.

4.1.2.2.   *Organizational Performance (OP)*

The analysis of Organizational Performance (OP) using AtlasTI (Figure 14) juts out several significant patterns and cognizance. One of the key observations is the strong and multifaceted *link between sustainable development practices and enhanced organizational performance*. Managers frequently highlighted that integrating sustainable principles not only fosters a dynamic internal atmosphere but also drives long-term business growth and operational efficiency. This observation is consistent across different sectors, indicating a broad recognition of sustainability's part played in incrementing performance. For instance, one manager mentioned, "Brand promotion, investments in technology and software for improving the results performance, specialization training for employees", as essential factors that contribute to improved performance.

Another uprooted pattern is the emphasis on the *dual nature of sustainability's impact*. While many managers see sustainability as a driver of innovation and employee engagement, they also acknowledge the challenges associated with implementing sustainable practices. These challenges include the initial costs and the need to balance sustainability with immediate business goals. A particular example from the analysis mentions, "Unfortunately, at this moment, sustainability is much more an expensive trend for the majority of our clients". That is, the financial and strategic hurdles that organizations must navigate to fully integrate sustainability are being fetched out.

Additionally, the analysis points out that *remote working* and *digital transformation* are increasingly recognized as *critical components of sustainability strategies*. To illustrate, managers noted that adopting remote working policies can significantly reduce the organization's carbon footprint and improve employee satisfaction. However, they also warned that if left unchecked, remote working might lead to reduced productivity. This concern is captured in the following observation: "One of the most impactful decisions is working from home/distance, which can be a favourable strategy for the employees but, if left unchecked, can lead to lazy results". In other words, the nuanced approach required to manage sustainability effectively is plucked.

Correlation with Content Analysis

The findings from the AtlasTI analysis (Figure 14) strongly correlate with the initial content analysis, providing a practical application understanding of the relationship between the sustainable paradigm and organizational performance. The content analysis

already suggested that sustainability initiatives could drive employee engagement, improve operational efficiency, and foster long-term growth. The AtlasTI analysis corroborates these findings and extends them, offering a mutual understanding of how specific sustainability practices contribute to these outcomes.

A relevant case in point is that the content analysis made relevant that managers view sustainability as essential for nurturing a dynamic and innovative internal atmosphere. This is echoed in the AtlasTI findings, where managers consistently mentioned that sustainable practices lead to enhanced performance metrics. The recurrent mention of technology and training investments as critical performance drivers in both analyses insists on the importance of continual improvement and innovation. In addition, the challenges associated with sustainability, such as the high costs and balancing short-term and long-term goals, were evident in both analyses. The content analysis pointed out that managers are aware of the financial implications of sustainable practices, a theme that is further explored in the AtlasTI analysis. This correlation indicates a far-reaching understanding of the complexities involved in integrating sustainability into business strategies.

Both analyses also emerged with the role of remote working and digital transformation as part of sustainability strategies. Managers in the content analysis noted the benefits of these practices in terms of reducing environmental impact and improving employee well-being. The AtlasTI analysis provides additional context, throwing into relief the need for careful management to avoid potential downsides, such as decreased productivity rooted in demotivation.

Lead-off conclusion

At last, the extended discussion of key patterns and observations from the AtlasTI analysis provides a diligent apprehension of how sustainable development practices enhance organizational performance. These practices are seen as essential for bolstering up innovation, improving efficiency, and driving long-term, strategic growth. Notwithstanding, they also present challenges, particularly in terms of cost and strategic alignment. The strong correlation between the AtlasTI findings and the initial content analysis brings along the comprehensive and multifaceted impact of sustainability on organizational performance. This analysis sets the stage for a more detailed exploration of sustainability's various dimensions and impacts in the subsequent phases of the present research.
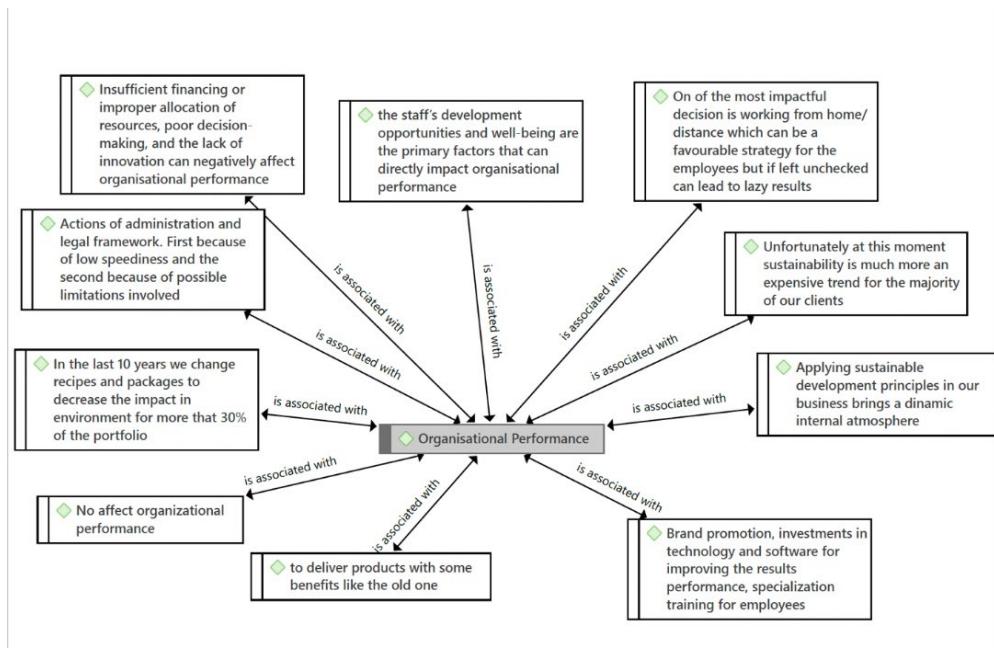
Figure 14. Exploration diagram of OP construct in AtlasTI software
Source: Advanced by the candidate

4.1.2.3.   *Organizational Reputation (OR)*

The analysis of Organizational Reputation (OR) using AtlasTI (Figure 15) spotlighted several key patterns and themes that insist on the importance of sustainability in enhancing a business's reputation. One of the primary patterns derived is the *significant impact of transparency*. Stakeholders and customers increasingly value clear, honest communication about the company's sustainability initiatives and overall operations. This transparency fosters trust and loyalty, as seen in companies that openly share their environmental impact assessments, social responsibility efforts, and the outcomes of their sustainability projects.

Another dawning pattern noted is the *role of social and environmental responsibility*. Companies perceived as leaders in social and environmental responsibility tend to enjoy a stronger, more positive reputation. This responsibility is put into practice by reducing carbon footprints, engaging in community development projects, and promoting inclusivity and diversity within the organization. For clarification, firms that actively engage in environmental conservation or support educational programs in local communities are viewed more favourably.

Ethical practices, including *fairness in the workplace* and *responsible sourcing*, also significantly influence how a company is perceived. Organizations that keep up high ethical standards in their operations, such as ensuring fair labour practices and avoiding

greenwashing, tend to build a more convincing reputation. Ethical lapses, on the other hand, can quickly erode trust and damage reputation. Thus, maintaining ethical integrity is crucial for sustaining a positive organizational reputation.

Correlation with Content Analysis

The recurrent habitual practices identified in the AtlasTI analysis (Figure 15) closely correlate with the outcomes depicted from the content analysis of the interviews. As a demonstration, the emphasis on transparency aligns with several interviewees' views on the importance of clear and honest communication. R.S. highlighted that "transparent communication can enhance customer trust and improve reputation," accentuating the necessity for companies to be open about their practices. This sentiment is reverberated across multiple interviews, where transparency is consistently mentioned as a cornerstone for building trust with stakeholders.

Moving onwards, the importance of social and environmental responsibility also finds strong support in the interviews. A prime example: "For us, it means financial health, equity, and social inclusion, supporting local communities with a strong focus on financial education" (M.R.). This outline lays bare how companies that invest in social and environmental initiatives not only contribute positively to society but also enhance their own reputations. G.C. also pointed out that "the company needs to deliver a 360 message because a very small deviation can impact all the work for a better environment" raking up the interconnectedness of comprehensive social and environmental strategies and reputational outcomes.

Ethical practices, another crucial theme, are reflected in interviewees' concerns about fairness and responsibility. More specifically: "An organization that promotes gender equality and equal opportunities for employees is a trustworthy employer" (E.D.) This statement comes across with the broader observation depicted in Figure 15, according to which ethical behaviour, particularly in terms of inclusivity and fair treatment, enhances organizational reputation. The negative impact of unethical practices, such as greenwashing, is also noted, with respondents like D.A. warning that bad investments and failures in management can severely damage reputation.

Lead-off conclusion

The QDAS-generated analysis of Organizational Reputation (OR), cross-referenced with the content analysis, jointly heightens the undiminished role of transparency, social and environmental responsibility, and ethical practices in shaping a company's reputation. The findings from AtlasTI endorse the patterns identified in the content analysis, demonstrating a strong alignment between qualitative insights and thematic analysis. Businesses that prioritize these aspects may be better positioned to build and sustain a positive reputation, ultimately contributing to their long-term success and trustworthiness in the eyes of stakeholders and the community on the whole.

Henceforth, transparency is not just a buzzword but a hypostatic practice that builds trust. To put it more exactly, social and environmental responsibilities are not mere obligations but opportunities to enhance reputation. Ethical practices are the bedrock of trust and credibility. The convergence of these themes from both interview insights and AtlasTI analysis features their critical importance. To wit, organizations that integrate these elements into their strategic mindset will likely see significant benefits in their reputation and overall success.
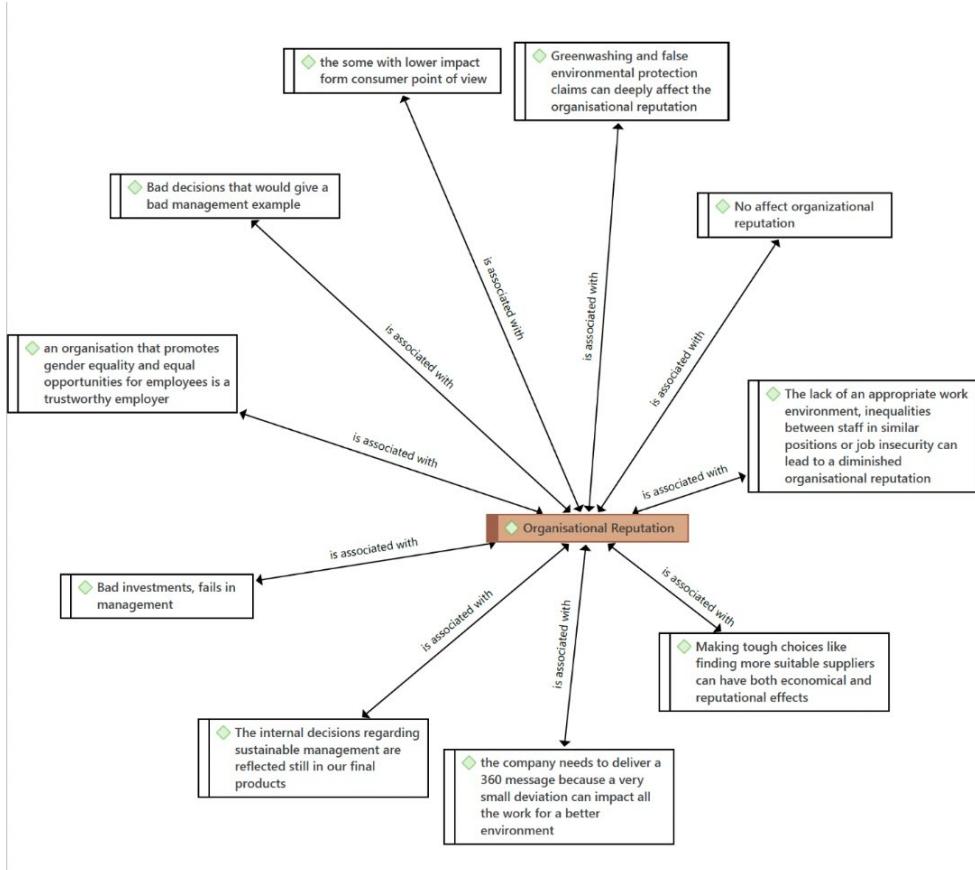
Figure 15. Exploration diagram of OR construct in AtlasTI software
Source: Advanced by the candidate

4.1.2.4.   Propensity towards Culture-Oriented Managerial Strategies (PTCOMS)

The analysis of the propensity towards culture-oriented managerial strategies (PTCOMS) diagram (Figure 16) brings to light several conceptual recurrencies. To begin with, *the operationalization and implementation of 'cultural awareness' within organizations* is a repetitive theme. Interviewees consistently brightlined that cultural management strategies are essential for shaping both organizational performance and reputation, yet they show a heterogenic way of approaching it. Mainly, as can be clearly seen in Figure 16, the interviewed managers talk about culture deeply related to employees' well-being and engagement, as well as to organizational cohesion. The other facets of this manifold concept were not included. Therefore, a semantic discrimination between *culture-oriented managerial strategies* and *people-oriented managerial strategies* should be brought under the limelight.

Secondly, the challenge posed by *generational shifts and differing cultural values* is another emergent pattern. As the figure below shows, "generational differences require tailored cultural strategies to address varying expectations and values". That is, organizations must develop flexible and adaptive cultural management strategies to accommodate diverse generational perspectives. This outcome entangles a broader issue: the one of cultural adaptation and the need for tailored strategies that consider local cultural contexts.

Additionally, the diagram demonstrates *the impact of cultural mismanagement on organizational outcomes*. Statements like "Misfit cultural strategies can lead to internal conflicts and damage organizational reputation" and "Poor cultural integration negatively affects employee morale and performance" put forth the necessity for deliberate and well-considered cultural management practices. Ego, the necessity for deliberate and well-considered cultural management practices to ensure alignment with broader organizational goals is being set out. On the flipside, we can observe in Figure 16 that it also holds forth **the positive effects of effective cultural management**, noting, "Successful cultural strategies promote innovation and creativity within teams" and "Cultural alignment with organizational values enhances overall performance".

Correlation with Content Analysis

The disparate insights from the patterns identified in the PTCOMS diagram bring on an unobserved alterity in the content analysis. It seems that it passed unremarked the fact that Romanian managers operationalize 'cultural awareness' and 'culture orientation' in miscellaneous ways. Even if their common ground is that they acknowledge the importance and the presumed take of 'cultural awareness' and 'managers' orientation towards culture' on the organizational reputation and organizational performance, respectively, they seem to follow it out diversely. Upon thorough analysis, we have chosen to proceed with the assumption that the concept of

'culture' may be closely linked to 'people' for Romanian managers due to the apparent conceptual overlap between the two.

Consequently, we posit that Romanian managers do employ culturally related managerial strategies in their daily activities, albeit without accurately identifying them, as they conceptualize these strategies within the people-oriented paradigm. The theoretical conceptual model and subsequent SmartPLS analysis will elucidate this proposed working theory.

For another thing, many interviewees put special stress on the significance of cultural management strategies in both internal and external contexts. For example, L.S. noted that cultural management strategies could enhance organizational performance by creating a collaborative and supportive work environment. This aligns with the diagram's finding that cultural strategies contribute to increased employee attachment and reduced attrition rates. Furthermore, the content analysis highlighted the need for cultural strategies to adapt to societal changes. A.B. discussed how organizations must stay relevant by adapting to significant and disruptive changes in society and the environment. This perspective is in line with the diagram's indication that cultural management strategies are vital for maintaining relevance and adapting to evolving societal expectations.

Furthermore, the analysis also revealed the importance of cultural strategies in promoting innovation and maintaining organizational cohesion. Interviewees like D.A. and R.S. pointed out that effective cultural management can drive creativity and innovation, which are crucial for organizational success. On its part, the diagram supports this insight, linking cultural strategies to enhanced employee engagement and reduced turnover. To boot, the content analysis dwelled on the necessity for cultural strategies to address local cultural contexts. P.P.'s observation about Romanian customers' lower valuation of sustainable strategies puts special emphasis on the need for tailored cultural approaches. Thence, the mentioned outline aligns with the diagram's emphasis on the challenges of generational shifts and the importance of adapting strategies to specific cultural environments.

Lead-off conclusion

The analysis of the propensity towards culture-oriented managerial strategies (PTCOMS) surfaces both a homogeneous and a heterogeneous perspective. On the one hand, the role of cultural awareness and management in enhancing organizational performance and reputation is acknowledged, yet, the results may stress the disparity in the actual conceptualization and operationalization of the very term 'culture'. Nevertheless, after careful examination, we have decided to proceed with the presumption that Romanian managers may closely associate the term 'culture' with 'people' because of the outward apparent conceptual similarity between the two. It is our firm belief that Romanian managers do utilize management strategies that are influenced by cultural aspects in their daily activities, even though they may conceive them under

the widespread umbrella term 'people'. The proposed working theory will be further tested in the quantitative analysis.

On the other hand, a point agreed upon is the one according to which cultural strategies not only foster a supportive and innovative work environment but also help organizations adapt to societal changes and generational shifts. These findings emphasize the importance of integrating cultural considerations into managerial strategies to ensure long-term sustainability and employee engagement. For that cause, effective cultural management practices are essential in driving innovation, maintaining organizational cohesion, and ensuring that strategies are culturally appropriate and aligned with extensive organizational goals thereby ensuring organizational performance and organizational reputation.
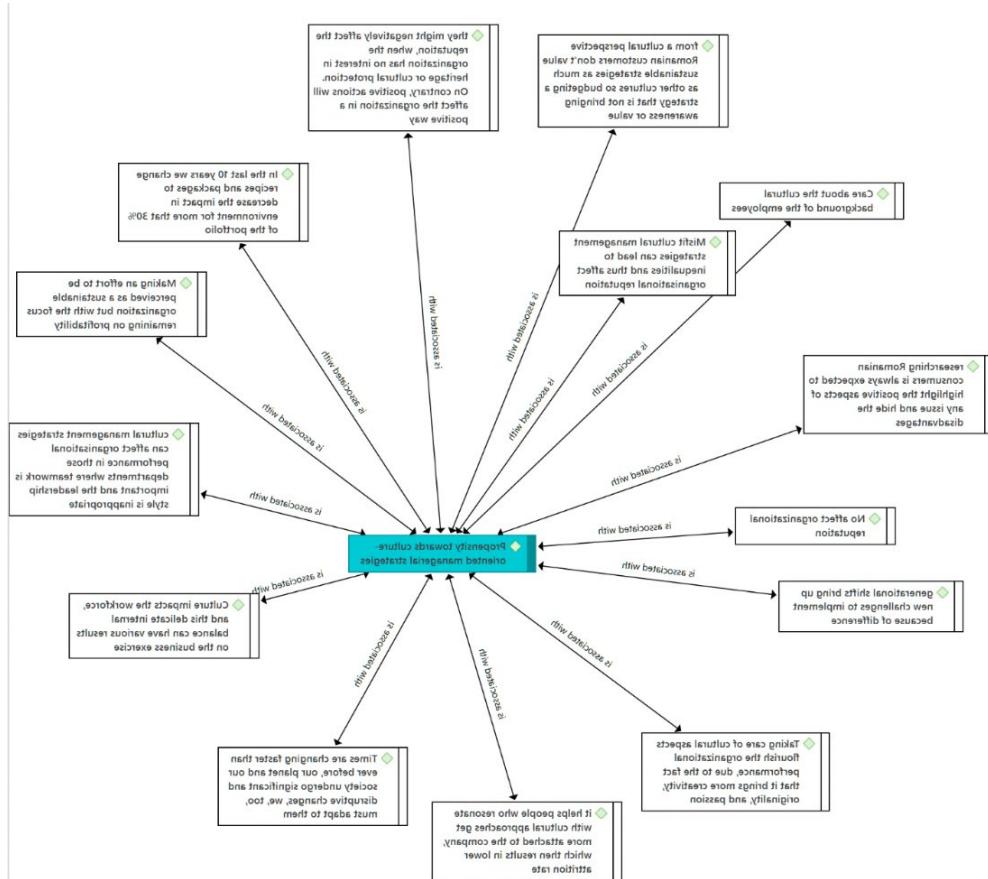
Figure 16. Exploration diagram of PTCOMS construct in AtlasTI software
Source: Advanced by the candidate

4.1.2.5. Propensity towards Environment-Oriented Managerial Strategies (PTEOMS)

The analysis of the propensity towards environment-oriented managerial strategies (PTEOMS) diagram (Figure 17) brings out insightful managerial perspectives. First and foremost, there is a clear emphasis on *the importance of environmental management* in terms of *compliance with legislative* norms and directives. Statements such as "The rapid changes in the legislation impact our medium- and long-term strategy, because we are forced to launch products in a short period to respect the government deadlines" illustrate how companies must quickly adapt to evolving regulations, which can strain their strategic planning and product quality.

Additionally, the diagram pinpoints the association between *environmental management strategies* and *organizational performance*. A helpful illustration to prove our point: "(we are) always looking for more efficient and less pollution-generated solutions that have a clear contribution" - suggests that companies actively seek innovative and sustainable solutions to enhance efficiency and reduce pollution. This proactive stance not only aligns with environmental goals but is also alleged to contribute to the overall performance of the organization.

Another noteworthy observation is the *focus on climate change initiatives* and the *promotion of environmental awareness within corporate culture*. As noted, "Getting involved in climate change initiatives and trying to promote a culture where environmental awareness is supported and encouraged" emphasizes the importance of embedding environmental consciousness into the company ethos. In line with the previous subchapter (i.e. 3.2.3.2.4), cultural integration is again proven vital for fostering a sustainable organizational identity.

Besides, the *impact of environmental management* on *organizational reputation* is also prominently noted. Statements such as "Certain bad environmental practices can leak out to the public and depending on the impact can either create a bad image" indicate that environmental missteps can severely damage a company's reputation, holding out the need for careful and responsible environmental practices.

Correlation with Content Analysis

The insights from the PTEOMS diagram correlate strongly with the themes identified during the content analysis of the interviews. To prove the point, D.A. stressed the importance of environmental management by stating, "Care about the environment, waste management, circular economy aspects". This aligns with the observed pattern of integrating environmental management into the broader operational strategies of the organization. On a similar note, M.R. discussed their proactive approach to environmental sustainability, highlighting initiatives such as "the credit for energy efficiency for companies, the green leasing for the electric cars, the credit for green buildings." This is in consonance with the diagram's emphasis on adopting efficient,

low-pollution solutions and the positive impact these have on both organizational performance and reputation.

In addition, E.B. also emphasized the significance of environmental responsibility: "Supporting a carbon-neutral economy should be our common goal." Once again, this utterance is echoed in Figure 17, which indicates that climate initiatives and the promotion of environmental awareness are crucial for building a sustainable and reputable organizational culture.

Lead-off conclusion

Briefly put, the PTEOMS diagram (Figure 17) and the corresponding content analysis highlight the multiparadigmatic impact of environment-oriented managerial strategies on organizational performance and reputation. The consistent emphasis on legislative compliance, innovative solutions for pollution reduction, and the integration of environmental consciousness into corporate culture advances the catalytic role these strategies play on the way of achieving sustainable development goals.

Otherwise, the potential reputational risks associated with poor environmental practices stick with the need for diligent and proactive environmental management. These findings collectively launch forth the necessity for organizations to embed environmental sustainability into their core operational and strategic frameworks to ensure long-term success and a positive public image (i.e. reputation).
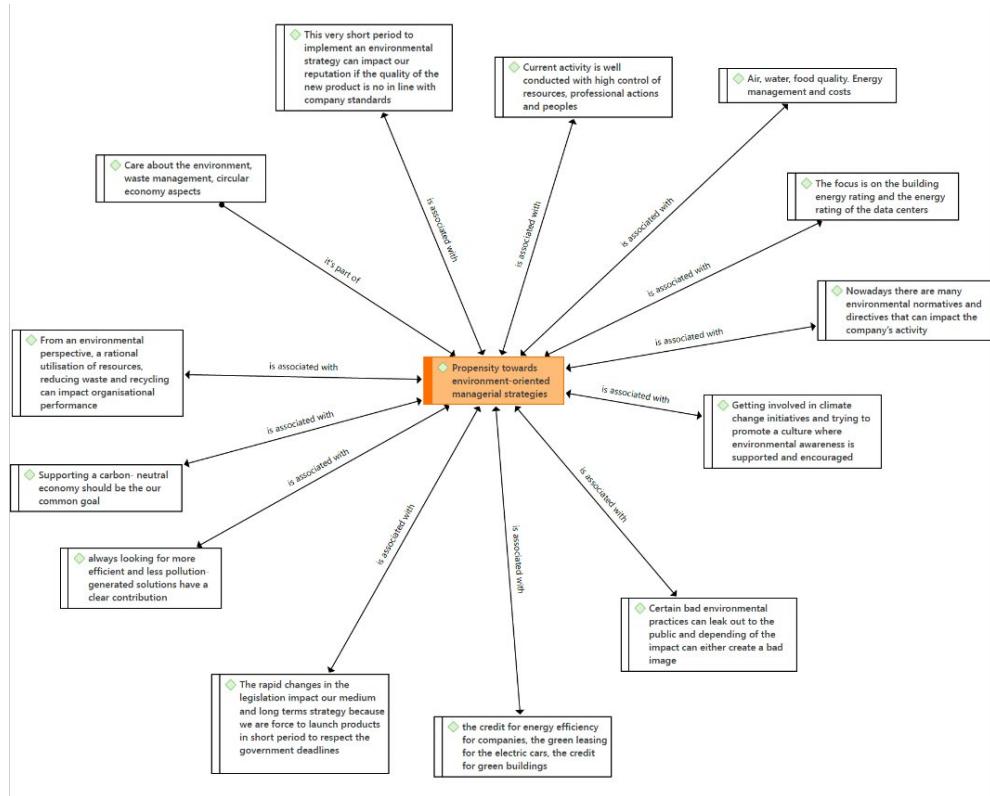
Figure 17. Exploration diagram of PTEOMS construct in AtlasTI software
Source: Advanced by the candidate

4.1.2.6. Propensity towards People-Oriented Managerial Strategies (PTPOMS)

The breakout of the propensity towards people-oriented managerial strategies (PTPOMS) brings to light several significant thematic co-occurrences concentrated upon *the importance of working conditions, employee engagement, and social responsibility*. Key patterns identified from the AtlasTI output highlight interconnected themes, emphasizing the necessity of maintaining good working conditions and a supportive work environment. The diagram (Figure 18) presents that "working conditions, quality of the working spaces" are crucial for organizational performance, which is a sentiment echoed across multiple interviews.

Along with that outcome, the relationship between employee motivation, efficiency, and overall organizational performance is well-contoured. The diagram (Figure 18) includes the assertion that "*motivation* which is then converted in *being more*

efficient and *productive*, hence a better *organizational performance*," reflecting a widespread belief among managers that *motivated employees drive better organizational outcomes*. This idea upholds the insights from the content analysis, where, for instance, E.B. highlighted the importance of work conditions and internally friendly procedures as vital to employee satisfaction and productivity.

In the same key, *volunteer activities and community involvement* also emerge as significant factors in *enhancing employee morale and organizational reputation*. The diagram notes that "volunteer activities or other social actions they can get involved together as a community" are vital for fostering a positive workplace culture. R.S.'s interview reinforced this outline, prompting the importance of providing opportunities for employees to engage in social initiatives, helping them find more purpose in their day-to-day activities and consequently boosting organizational performance.

Empathy is another key concept identified in the diagram. The assertion that "the most important in my opinion is to have an empathic mindset regarding this type of management strategies" highlights empathy's role in fostering a positive organizational culture. This perspective is consistent with the content analysis, where R.R. discussed the critical role of empathy in social management strategies, noting its importance in effectively addressing social impact.

What is more, *attracting and retaining talent through social management strategies* is brought to effect. The diagram (Figure 18) postulates that "social management strategies are important to attract talent with strong sustainability values," giving cause for the importance of aligning organizational values with those of potential and current employees. This insight is mirrored in I.M.'s interview, just to name one, where the ability to attract talent with similar values was highlighted as pivotal, particularly in the IT and banking sectors.

Correlation with Content Analysis

It has to be noted that the patterns identified in the PTPOMS diagram (Figure 18) are in consonance with the insights from the content analysis. A prime example, E.B.'s emphasis on creating a supportive work environment and offering development opportunities aligns with the pattern of prioritizing employee well-being and engagement identified in the QDAS-generated analysis. E.B.'s discussion on the importance of work conditions and internal procedures echoes the broader theme of employee satisfaction and productivity.

As it were, R.S.'s narrowing down to providing opportunities for employees to engage in social initiatives is attuned to the QDAS-generated analysis which singles out volunteer activities and community involvement. Avaunt, a consistent recognition of the benefits of social engagement for both employees and the organization is being set forward. A lucrative example lies under R.S.'s declaration: "Opportunities offered for people when it comes to getting involved in social initiatives...make them more

motivated, motivation which is then converted in being more efficient and productive, hence a better organizational performance".

To a fault, both the QDAS-generated analysis and the interviews' content analysis reinforce the critical role of empathy. For instance, R.R. emphasized that "the most important in my opinion is to have an empathic mindset regarding this type of management strategies," which lines up with the diagram's emphasis on empathy in social management strategies. Then again, the importance of social management strategies in attracting and retaining talent is another repeated theme in both the QDAS-generated analysis and the interviews. A telling example: I.M. noted that social strategies are essential for attracting talent with strong sustainability values, reflecting the broader understanding that aligning organizational and employee values is crucial for long-term success.

Despite everything, the analysis reveals a conceptual overlapping between people-oriented and culture-oriented managerial strategies. Many of the themes identified in PTPOMS, such as empathy, employee engagement, and the importance of a supportive work environment, are also central to cultural management strategies. The emphasis on creating a positive workplace culture to enhance organizational performance and reputation suggests that people-oriented strategies cannot be entirely disentangled from cultural considerations. For example, R.R. mentioned the need for an empathic mindset in social management, which aligns closely with the broader cultural goal of fostering an inclusive and supportive organizational environment. Likewise, the focus on volunteer activities and community engagement reflects a cultural commitment to social responsibility and collective well-being. Therefore, while PTPOMS focuses specifically on employees and their direct engagement, it inherently overlaps with PTCOMS, which shapes the broader organizational ethos and values. This overlap suggests that further research (i.e. our quantitative endeavour) is expected to make a clear-cut distinction between the two.

Lead-off conclusion

Bottom line, the analysis of the propensity towards people-oriented managerial strategies (PTPOMS) underscores the critical role of working conditions, employee engagement, and social responsibility in enhancing organizational performance and reputation. The output identified from the AtlasTI software aligns closely with the insights from the content analysis, demonstrating that Romanian managers prioritize creating a supportive work environment, fostering employee motivation, and engaging in community activities. These strategies not only improve organizational efficiency and productivity but also attract and retain talent, ultimately contributing to a positive organizational reputation and long-term success.

Notwithstanding, referring to our previous argument, at a theoretical level, there is reasonable doubt regarding the conceptualization and the clear-cut distinction between PTPOMS and PTCOMS from a Romanian managers' perspective. Yet, regardless of

their compartmentalization, it does not appear to influence managerial practice and the actual appropriate enactment of these principles.

Overall, effective people-oriented strategies are essential for creating a motivated, engaged, and productive workforce. By focusing on employee well-being, providing opportunities for social engagement, and fostering an empathic organizational culture, managers can drive better organizational outcomes and enhance their organizations' overall reputation. The alignment between the patterns identified in the AtlasTI, QADS-generated analysis and the conceptual analysis from the interviews puts special emphasis on the importance of integrating people-oriented strategies into managerial practices to ensure sustainable organizational performance and reputation.
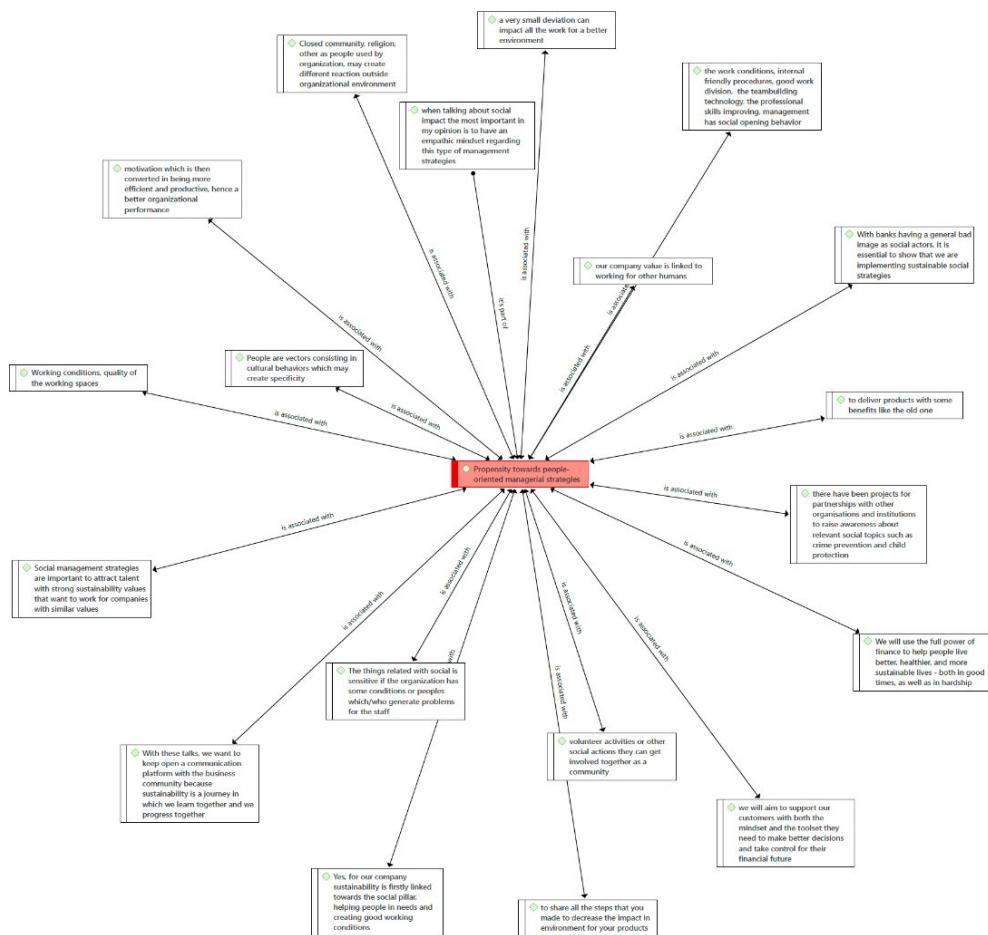
Figure 18. Exploration diagram of PTPOMS construct in AtlasTI software
Source: Advanced by the candidate

4.1.2.7.   Propensity towards Profit-Oriented Managerial Strategies (PTPROMS)

A close look at the QDAS-generated analysis of the construct addressing propensity towards profit-oriented managerial strategies (PTPROMS) of Romanian business managers unveils several worthy-of-notice conceptual co-occurrences. Primarily, it is important to stress the need to stand in line with *new sustainable product trends, as well as with the market's specific needs and regulations*. The statement, "The new sustainable products that you deliver to the market need to be better than the old ones", advances the necessity for continuous innovation in product development to maintain profitability while adopting sustainable practices. This straightens with reference to the concept that businesses must not only adopt sustainable practices, but also ensure these practices are economically viable and competitive.

Another highlight is the *importance of setting realistic targets that align with company strategies for market development*. The QADS-generated analysis highlights this with insights such as "Setting up realistic targets that align to the company strategy of developing on the market." In accordance with that, a direction that raises the need for strategic planning and goal setting is being pinpointed to ensure economic stability and growth. This underlying pattern indicates that *profit-oriented strategies are not just about immediate financial gains but also about long-term strategic alignment* and sustainability.

The QADS-generated analysis also puts over the critical role of economic management strategies in managing various types of risks, especially in sectors like banking. Take, for instance, the following statement which can be found in Figure 19: "Economic management strategies are critical for a bank operating with market, credit, or liquidity risk". As we can observe, the importance of robust financial strategies to effectively manage economic risks is being raised. Outstretching this insight, it can be stated that *profit-oriented strategies must also include risk management to ensure long-term viability*.

On top of that, *the conflicting perspectives of stakeholders*, particularly investors and the public, *on profit and sustainability is another emergent pattern*. Illustratively, the following utterance renders: "The conflicting perspective of investors asking for higher returns and the public image of banks making huge profits at the expense of the public good". In other words, the challenge of balancing profitability with public perception and ethical considerations is being set out. Following this lead and running it against the consulted body of literature, it may be argued that *profit-oriented strategies must navigate the complexities of stakeholder expectations and ethical business practices*.

Correlation with Content Analysis

The co-occurrences identified in the PTPROMS diagram (Figure 19) correlate strongly with the findings from the content analysis of the interviews. In particular, interviewees frequently emphasized the importance of aligning sustainable products with market needs to maintain profitability. By doing so, they highlighted the necessity of continuous innovation in product offerings, thereby reinforcing the diagram's emphasis on innovation and market 360 alignment.

On the side, several interviewees also highlighted the importance of setting realistic targets aligned with strategic goals. To exemplify: "We make decisions based on all the information we get from our actions, combined with economic market trends and our strategic goals" (R.S.). This viewpoint is in line with the diagram's emphasis on strategic planning and goal setting for market development, indicating a cohesive understanding among managers about the necessity of integrating strategic planning into profit-oriented strategies.

The critical role of economic management strategies in managing risks was also a preferred theme among the interviewees. I.M. stated that "economic management strategies are critical for a bank operating with market, credit, or liquidity risk" which clearly resounds with the diagram's findings on the importance of hefty financial strategies in risk management. This correlation spotlights that managers recognize the need for comprehensive economic strategies to manage various risks effectively.

Furthermore, interviewees like E.B. echoed the conflicting perspectives of investors and the public on profitability and sustainability, noting: "The conflicting perspective of investors asking for higher returns and the public image of banks making huge profits at the expense of the public good." This is in compliance with the QADS-generated analysis indication of the challenges faced in balancing profit with public and ethical considerations. This line-up shows that managers are acutely aware of - and sensitive to- the ethical and public perception challenges associated with profit-oriented strategies.

Lead-off conclusion

In sum, the analysis of the PTPROMS diagram clearly puts under the limelight the necessity for companies to innovate and align new sustainable products with market needs, if they aim to maintain profitability. Hence, strategic, tactical and operational planning, as well as setting realistic targets are crucial for economic stability and growth. The role of deeply rooted economic management strategies in managing risks is vital, particularly in highly regulated sectors, such as banking. On top of it, the conflicting perspectives of investors and the public on profitability and sustainability highlight the challenges companies face in balancing these aspects.

The above-mentioned insights showcase the importance of integrating sustainable practices into profit-oriented strategies if what we want is to ensure long-term economic viability and positive public perception. The findings suggest that profit-oriented

strategies must not only focus on immediate financial gains, but also incorporate long-term strategic alignment, risk management, and ethical considerations to navigate the complex landscape of modern business environments. This comprehensive approach will enable organizations to achieve sustainable profitability while maintaining a positive reputation and meeting stakeholder expectations.
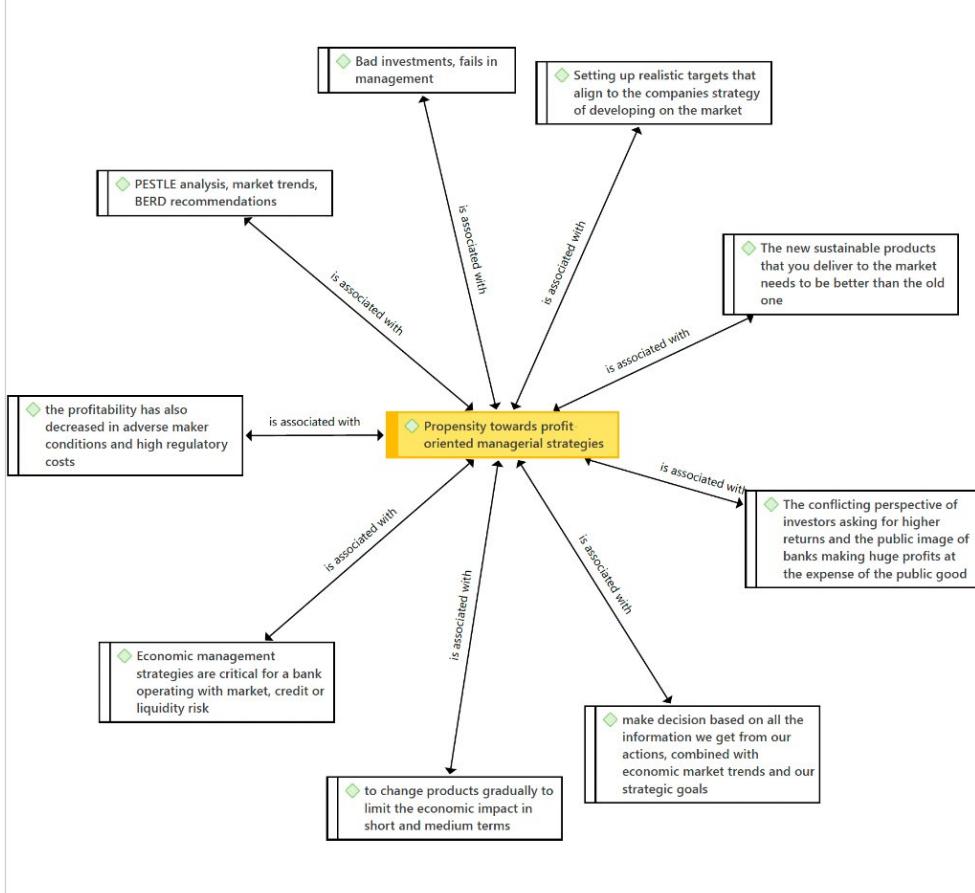
Figure 19. Exploration diagram of PTPROMS construct in AtlasTI software
Source: Advanced by the candidate

A Sankey diagram is a powerful visualization tool that depicts the flow of resources, information, or energy between different entities or processes. Its importance lies in its ability to highlight the proportions and directions of these flows, making it easier to identify key patterns, inefficiencies, and areas for improvement. In the context of this study, the Sankey diagram (Figure 20) provides a comprehensive view of how various sustainability-oriented managerial strategies interact with each other and contribute to overall organizational performance and reputation.
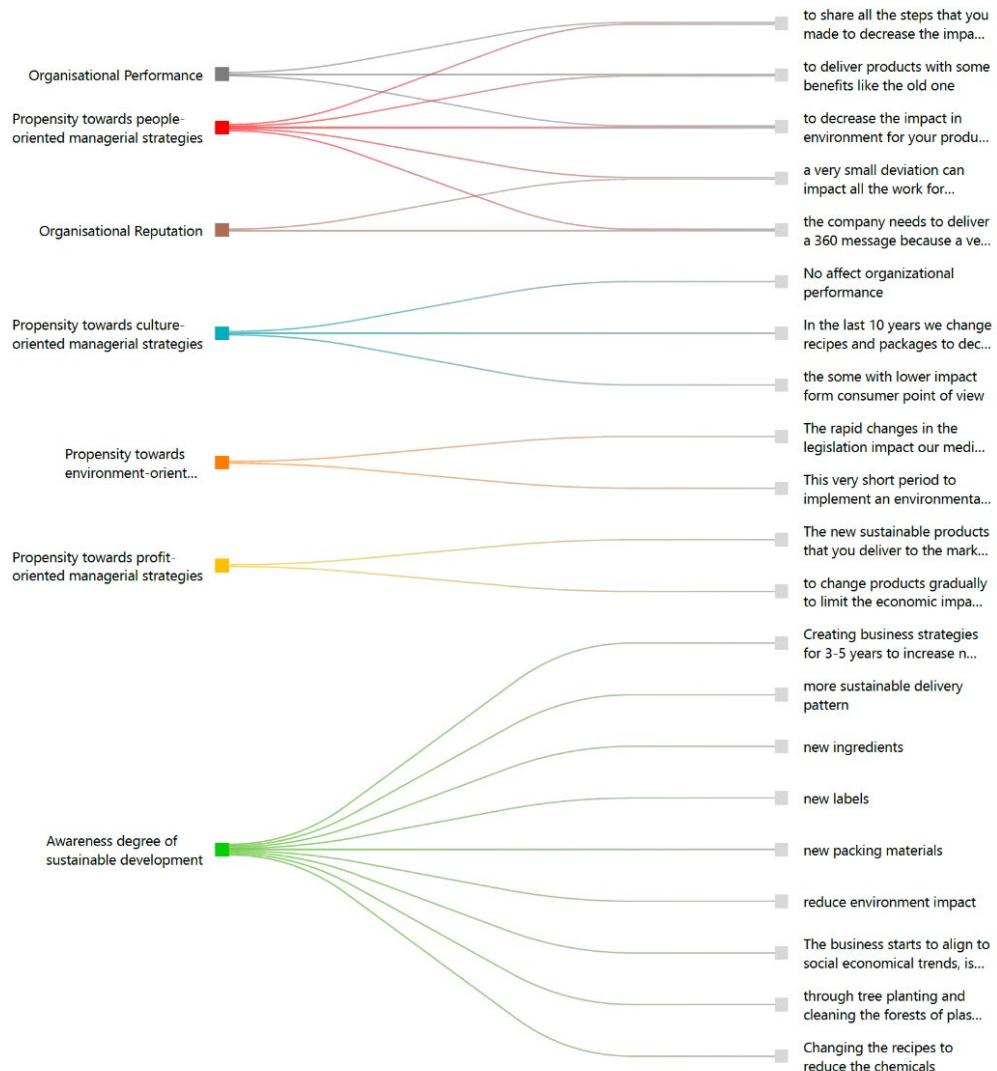
Figure 20. AtlasTI-generated Sankey diagram of all the analysed constructs
Source: Advanced by the candidate

The Sankey diagram pencils several conclusive insights into the interconnections between different constructs and their descriptors, quantified by means of occurrences. Therefore, as we can see, the diagram prominently features the *Awareness Degree of Sustainable Development* (ADSD), showcasing its multifaceted impacts and interrelations with various managerial strategies and organizational outcomes.

One noticeable thing is the strong connection between ADSD and various actions aimed at reducing environmental impact. These actions include changing recipes to reduce chemicals, implementing tree planting, cleaning forests of plastics, reducing

environmental impact, using new packing materials, labels, and ingredients, and creating more sustainable delivery patterns. This indicates that *organizations with a high degree of sustainable development awareness are actively engaged in diverse environmental initiatives*.

It should also be emphasized that the linkage between *Propensity towards Environment-Oriented Managerial Strategies* (PTEOMS) and the rapid changes in legislation, the short period to implement environmental strategies, and the challenges these pose can be more accurately seen. This connection highlights the *adaptive pressures organizations face due to evolving regulatory landscapes*. Also, *Propensity towards People-Oriented Managerial Strategies* (PTPOMS) shows significant ties to both organizational performance and reputation's descriptors. As we have previously mentioned during this qualitative endeavour, this is exemplified by statements about delivering products with benefits, sharing steps taken to decrease environmental impact, and the need for a comprehensive message to ensure consistency and trust. The focus here is on the internal and external communication of sustainability efforts, indicating that *people-oriented strategies are crucial for maintaining both performance and reputation*.

The diagram also underscores the role of *Propensity towards Culture-Oriented Managerial Strategies* (PTCOMS), which is *linked to actions that may not directly affect organizational performance but are essential for long-term sustainability*. This graphic representation confirms once again the validity of our findings, in which we highlighted the heterogenic nature of the overall conclusions for this construct.

Lead-off conclusion

The Sankey diagram illustrates the interrelationships between sustainable development awareness, various managerial strategies, and their organizational outcomes. It highlights ADSD's multifaceted impact, particularly in driving environmental initiatives and adapting to legislative changes and it graphically represents the dynamic conceptualization and actions' compartmentalization for the PTCOMS construct. Otherwise, the diagram puts forth the importance of cultural considerations, aligning them with the need for tailored strategies to meet local consumer preferences and cultural contexts. This highlights the necessity for organizations to develop flexible and adaptive strategies that incorporate cultural awareness into their sustainability efforts.

However, the strong connections between people-oriented strategies and both organizational performance and reputation emphasize the important role of internal and external communication in sustainability efforts. This is consistent with the interview findings, where transparency and stakeholder engagement were frequently mentioned as key to maintaining trust and performance.

In a nutshell, the Sankey diagram provides a user-friendly visualization of how sustainable development, through our defined constructs, intertangles with and

influences various managerial strategies and organizational outcomes. The findings from the content analysis support these connections, emphasizing the importance of environmental, people-oriented, and culturally sensitive strategies in achieving long-term sustainability and organizational success.

4.1.3. Qualitative analysis: final conclusions and impact

In this final part of the chapter, we will synthesize the findings from the qualitative analysis take on how sustainable development awareness influences various managerial strategies within Romanian businesses. The analysis, derived from in-depth interviews with business managers, highlights the previously acknowledged all-encompassing nature of sustainability and its profound impact on economic, social, environmental, and cultural management strategies. In accordance with the Grounded theory principles, the emergent constructs—*Awareness Degree of Sustainable Development* (ADSD), *Regulatory Requirements* (RR), *Propensity towards Culture-oriented Managerial Strategies* (PTCOMS), *Propensity towards Environment-oriented Managerial Strategies* (PTEOMS), *Propensity towards People-oriented Managerial Strategies* (PTPOMS), and *Propensity towards Profit-oriented Managerial Strategies* (PTPROMS)—provide a nuanced understanding of sustainability's role in organizational strategy and performance.

Addressing the relationship between *Sustainable Development Awareness* and *Economic Management Strategies*, the analysis creates the premises of a presumably strong relationship between sustainable development awareness and the implementation of sustainable economic strategies. Managers emphasized that integrating sustainability into economic management drives long-term financial stability and operational efficiency. They provided illustrative insights into how sustainability can align with and enhance economic strategies, promoting financial resilience and operational effectiveness.

Furthermore, the relationship between *Sustainable Development Awareness* and *Social Management Strategies* revealed that managers who are aware of sustainable development principles tend to naturally integrate social initiatives that enhance employee well-being and community engagement. This is seen as vital for both internal and external stakeholder satisfaction, as these strategies not only foster a supportive work environment but also strengthen community ties, ultimately enhancing organizational performance and reputation.

Further, the analysis of the relationship between *Sustainable Development Awareness* and *Environmental Management Strategies* surfaced that sustainable development awareness leads to the implementation of environmental strategies focused on reducing energy consumption, waste, and overall environmental impact. The importance of sustainable practices for maintaining a positive organizational reputation is acknowledged by Romanian managers, as they perceive the aforementioned strategies' positive effect on operational efficiency and also in the public's eye.

Moving onto the relationship between *Sustainable Development Awareness* and cultural management strategies, the analysis stresses that cultural strategies that support sustainability are shown to foster an internal culture of trust and ethical behaviour, enhancing both performance and reputation. Put it in other words, integrating cultural considerations into managerial strategies is essential for long-term sustainability and employee engagement.

Adjacently, the analysis showed that the relationship between *Social Management Strategies* and *Organizational Performance* showcases that social management strategies significantly influence organizational performance by attracting talent with strong sustainability values and enhancing employee productivity and satisfaction. A recurrent theme was the critical role of social initiatives in fostering a positive organizational reputation and stakeholder trust. Briefly, these social strategies appear to be crucial for creating a motivated and engaged workforce, which in turn drives organizational success.

In addition, regarding the relationship between *Social Management Strategies* and *Organizational Reputation,* the analysis underpinned those social initiatives, such as community engagement and CSR projects, are found to enhance the organization's reputation by demonstrating a commitment to ethical practices and stakeholder well-being. Managers emphasized the importance of delivering consistent and ethical messages to build and maintain a positive reputation. Overly, these strategies are presumed to be essential for earning and sustaining stakeholder trust.

Also, the analysis of the relationship between *Economic Management Strategies* and *Organizational Performance* pointed out that economic management strategies aligned with sustainability principles presumably improve organizational performance by fostering long-term financial stability and operational efficiency. Various managers highlighted the development of sustainable products and financial education as key elements that support economic growth and organizational performance. Withal, these strategies are alleged to ensure the organization's economic viability and competitive advantage.

Further on, the analysis of the relationship between *Economic Management Strategies* and *Organizational Reputation* appears to indicate that sustainable economic strategies enhance organizational reputation by demonstrating a commitment to ethical financial practices and long-term viability. That is, these strategies are likely enough to be essential for maintaining a positive public image and stakeholder trust.

Besides this, the analysis of the relationship between *Environmental Management Strategies* and *Organizational Performance* appears to reveal that environmental strategies that reduce energy consumption and promote sustainability are presumptively improving organizational performance by enhancing efficiency and reducing costs. Managers noted that these strategies also bring new client leads and maintain a positive public image. Consequently, these findings appear to point towards the importance of integrating environmental sustainability into core business operations.

Then, the analysis of the relationship between *Environmental Management Strategies* and *Organizational Reputation* suggests that environmental management strategies enhance organizational reputation by demonstrating a commitment to environmental stewardship and sustainability. Notwithstanding, it is worth mentioning that managers singled out the potential reputational risks if these strategies are not properly implemented. On the whole, these findings put special emphasis on the need for diligent and proactive environmental management to ensure long-term success and a positive public image.

Additionally, the analysis of the relationship between *Cultural Management Strategies* and *Organizational Performance* appears to show that cultural management strategies that support sustainability are likely enough to enhance organizational performance by fostering an internal culture of trust and ethical behaviour. Distinct managers emphasized the importance of cultural strategies in creating a supportive and innovative work environment. Ergo, it could be stated that these strategies are crucial for maintaining organizational cohesion and driving long-term success.

Counterpartyed, the analysis of the relationship between *Cultural Management Strategies* and *Organizational Reputation* showcased that cultural strategies that support sustainability are expected to enhance organizational reputation by promoting ethical behaviour and inclusivity. In line with this, managers brought out the importance of cultural considerations in shaping the organization's public image. What is clear is that these strategies help businesses in building and sustaining a positive reputation.

From an overall perspective, the qualitative analysis concludes that sustainable development awareness is a driving force behind various managerial strategies, influencing economic, social, environmental, and cultural management practices. This awareness, almost vectorially in its empiric nature, results hard to grasp and operationalize into managerial practice, as it has a long reach. The findings reflect the complex and interrelated nature of sustainable business practices, as articulated by Romanian business managers. The initial content analysis provides a solid foundation for understanding how sustainability integrates into business operations, balancing financial performance with community involvement and environmental stewardship.

As a result of the QADS-generated analysis and of the content analysis and relying on the principles of grounded theory, the constructs initially identified—Propensity Towards Culture-oriented Managerial Strategies (PTCOMS), Propensity Towards Environment-oriented Managerial Strategies (PTEOMS), Propensity Towards People-oriented Managerial Strategies (PTPOMS), and Propensity Towards Profit-oriented Managerial Strategies (PTPROMS)—were further refined into two distinct but interconnected constructs: *Willingness to Adopt Sustainability* (WAS) and the actual *Adoption of Sustainable Strategies* (ASS). This distinction underscores the difference between the intention to embrace sustainability and the actual implementation of sustainable practices. In the next subchapter, we will try to briefly fathom out the emergence of these constructs.

4.1.3.1.   The emergence of new constructs: *willingness to adopt sustainability* (WAS), *adoption of sustainable strategies* (ASS), *leadership orientation towards sustainability* (LOS) and *regulatory requirements* (RR)

Referring back to what we previously mentioned, the *Willingness to Adopt Sustainability* (WAS) construct emerged in order to address the *intention* of managers to integrate sustainability into their organizational strategies. To better render this reality, it is divided into four underlying constructs:

- *WAS Regarding Profit*: This aspect captures the managerial intent to align profit-oriented strategies with sustainable development goals. It reflects a readiness to balance financial objectives with sustainability, even if it requires overcoming initial resistance or investing in new capabilities.

- *WAS Regarding Planet*: This dimension highlights the commitment to environmental sustainability, focusing on reducing ecological footprints and adopting eco-friendly practices. It represents the intention to prioritize environmental stewardship in business operations.

- *WAS Regarding Culture*: This construct encompasses the willingness to foster a corporate culture that values sustainability, ethics, and inclusivity. It reflects the desire to build a workplace environment that supports sustainable principles and behaviors.

- *WAS Regarding People*: This aspect addresses the intent to implement social sustainability practices that enhance employee well-being and community engagement. It signifies a commitment to social responsibility and stakeholder satisfaction.

The equal counterpart of the previous construct, the Adoption of Sustainable Strategies (ASS) construct, represents the actual *implementation* of sustainability initiatives within organizations. Mirroring the structure of WAS, it is also divided into four underlying constructs:

- *ASS Regarding Profit*: This dimension reflects the tangible steps taken to integrate sustainability into profit-driven strategies. It includes the development of sustainable products, financial education initiatives, and practices that ensure long-term financial stability.

- *ASS Regarding Planet*: This aspect captures the actual environmental strategies adopted by organizations, such as energy conservation measures, waste reduction, and pollution control. It represents the concrete actions taken to minimize environmental impact.

- *ASS Regarding Culture*: This construct involves the practical steps taken to cultivate a sustainability-oriented corporate culture. It includes initiatives that promote ethical behavior, trust, and inclusivity within the organization.

- *ASS Regarding People*: This dimension highlights the implementation of social sustainability strategies, such as community engagement projects, CSR activities, and programs aimed at improving employee well-being and productivity.

In addition to these two constructs, the qualitative analysis revealed that the *Adoption of Sustainable Strategies* (ASS) has a presumable impact on both *Organizational Performance* (OP) and *Organizational Reputation* (OR). This linkage is crucial in distinguishing between *intentionality* (WAS) and *tangible outcomes* (ASS).

On top of that, two new constructs emerged as significant influencers of sustainable development awareness and the willingness/adoption dichotomy: *Leadership Orientation towards Sustainability* (LOS) and *Regulatory Requirements* (RR):

- *Leadership Orientation towards Sustainability* (LOS): This construct captures the role of leadership in driving sustainability within organizations. It reflects the degree to which top management is committed to and advocates for sustainable practices. Leadership orientation significantly influences ADSD, WAS, and ASS by setting the tone for organizational priorities and culture.
- *Regulatory Requirements* (RR): This construct represents the external pressures and legislative frameworks that compel organizations to adopt sustainable practices. RR can trigger both ADSD and the progression from WAS to ASS by creating a compliance-driven imperative for sustainability.

When it comes to the impact of our qualitative pursuit, it must be pointed out that the findings of our qualitative review - guided by grounded theory - indicate that the impact of sustainable development awareness on Romanian business managers' strategies is ponderable and, most importantly, liable to change or alteration depending on the particularities of each business and each corresponding market. Building on existing literature and our comprehensive qualitative breakdown, we have uncovered several layers of insights about sustainability practices through in-depth interviews with 12 managers across various business sectors:

1. *Awareness of Sustainable Development*: we identified that sustainable development awareness (ADSD) is a conclusive and catalytic driver in shaping economic, social, environmental, and cultural management strategies. This awareness manifests in managers' efforts to align long-term business goals with sustainable practices, emphasizing financial stability, operational efficiency, and ethical behaviour.

2. *Integration of the Sustainable Paradigm into Management Strategies*: Exploring deeper into each management dimension, our semi-structured interviews revealed that managers integrate sustainability into their strategies in diverse ways. For instance, economic strategies are aligned with sustainability to foster financial stability and efficiency, while social strategies focus on enhancing employee well-being and community engagement. These insights will be further examined in the quantitative phase of our research.

3. *Impact on Organizational Outcomes*: By implementing theories related to sustainability and organizational behavior, we demonstrated significant effects of sustainable practices on organizational performance and reputation. Managers noted that environmental management strategies reduce costs and improve efficiency, while social and cultural strategies enhance employee satisfaction and

organizational cohesion. These transformations will be quantitatively assessed to understand their broader implications.

   4.   *Development of a Conceptual Model*: The primary outcome of our qualitative research is the development of a conceptual model that outlines the influence of sustainable development awareness on various managerial strategies and organizational outcomes. This model will be tested in the subsequent section of our book, specifically in chapter 5, Quantitative research, to validate the qualitative findings and to explore the broader applicability of these insights within the Romanian business context.

These findings provide a robust foundation for our quantitative analysis, offering a comprehensive understanding of how sustainability is integrated into business practices and its impact on organizational success. The qualitative insights set the stage for a detailed exploration of the relationships between sustainability awareness and managerial strategies, ultimately contributing to the development of effective sustainability practices in the Romanian business environment.

As a consequence, Figure 21 (Annex 2) shows the new version of the conceptual theoretical model with which we proceed to the quantitative part of our analysis.

4.2. Quantitative data analysis

The study's analytical process begins with a comprehensive descriptive analysis, using SPSS, that includes the mean, standard deviation, and range of each variable response. Additionally, a business and sustainability engagement profile overview was provided in pie charts for a grasp of the data. To further delve into the intricate relationships between variables, SmartPLS4 is utilized for Structural Equation Modelling (SEM). Confirmatory Factor Analysis (CFA), which verifies that the chosen measurement scales accurately measure the intended variables, is then used to evaluate the construct validity and reliability. Furthermore, a two-stage disjoint approach is used to establish the Higher Order constructs and validates them, including ADSD and ASS. Moreover, multi-collinearity and common method bias were also thoroughly investigated, which might affect the results.

Our aim is to evaluate the influence of Awareness Degree of Sustainable Development, Regulatory Requirements, and Leadership Orientation Toward Sustainability on the Adoption of Sustainable Strategies and to explore the subsequent impact of these strategies on Organizational Performance and Organizational Reputation in Romanian businesses. At the end of the data analysis process, the explanatory power of the model is evaluated using R-squared (R2) analysis. Finally, the effect size (f^2) was tested to determine the significance of these relationships within the model.

4.2.1.   Business overview and sustainability engagement profile

The data on the roles of respondents within the organization reveals a diverse distribution across different management levels and employee positions. As illustrated in Table 34, the largest proportion of respondents (39%) occupy top management positions, indicating a significant representation from the highest tier of organizational leadership. This is followed by middle management, which accounts for 25% of the respondents. Line management and employee roles constitute smaller segments, representing 13% and 23% respectively.

Furthermore, the distribution of respondents by work experience within the organization shows a varied range of tenures. The largest group of respondents has more than five years of experience, comprising 35% of the sample. This is indicative of a workforce with substantial organizational knowledge and expertise. The next significant group includes those with 1-3 years of experience, representing 30% of the respondents. Employees with 3-5 years of experience account for 20%, while those with less than 1 year make up 15% of the respondents.

Table 34. Business Overview

Demographics	Categories	Frequency	Percentage
Role	Employee	27	23
	Line Management	15	13
	Middle Management	29	25
	Top Management	46	39
Experience	1-3 years	35	30
	3-5 years	23	20
	Less than 1 year	18	15
	More than 5 years	41	35

Source: Advanced by the candidate

The distribution of roles within the sample reveals a hierarchy that is predominantly led by top management, comprising 39% of the respondents. Middle management represents 25%, indicating a strong layer of intermediate leadership as shown in Figure 22. Employees who are not in managerial positions constitute 23%, reflecting a significant portion of the workforce that executes day-to-day operations. Line management, responsible for overseeing frontline workers, accounts for 13%. This distribution illustrates a company structure where leadership and managerial roles are prominently represented, suggesting an emphasis on strategic and operational oversight within the organization. Moreover, this accounts for the reliability of the results.

Moving onto the next part of the business overview of our sample, the tenure distribution within the company indicates a diverse range of experience levels among the staff as shown in Figure 23. Employees with more than five years in their current roles form the largest group at 35%, demonstrating a significant level of stability and long-term commitment within the company. Those with 1-3 years of experience follow closely at 30%, suggesting a strong presence of relatively new yet established members. Employees with 3-5 years in their roles account for 20%, indicating a substantial middle tier of experience. Meanwhile, 15% of the staff have been in their positions for less than one year, reflecting a steady influx of new talent. A balance between experienced employees and new hires is highlighted in this distribution, which may set the premises towards an active encouragement in terms of innovation and continuity within the analyzed businesses.

As seen in Figure 24, the workforce distribution of the sample is noticeably diverse, representing a range of organizational sizes. There is a considerable presence of large-scale operations in the survey sample, as evidenced by the fact that 38% of respondents work for large companies with more than 250 employees. Meanwhile, 26% of respondents work in small companies with fewer than 50 employees, suggesting a notable representation of smaller firms. Micro-enterprises, defined as having under 10 employees, account for 24% of the respondents, highlighting a considerable segment of very small businesses. Medium-sized companies with fewer than 250 employees comprise 13% of the respondents. This distribution underscores a diverse, yet proportional employment landscape within the survey, with a pronounced emphasis on both large corporations and smaller business entities.

Addressing another important aspect of our business overview, the respondents' company's annual turnover data reveals a significant economic footprint, with half of the respondents (50%) indicating an annual turnover of more than 1 million EUR, highlighting the company's substantial financial strength as shown in Figure 25. A notable segment (21%) reports a turnover of less than 250 thousand EUR, indicating the presence of smaller-scale operations within the company. Those with turnovers between 250 thousand EUR and 500 thousand EUR account for 15%, while 14% fall within the 500 thousand EUR to 1 million EUR range. This distribution suggests a diverse economic structure within our sample, with a majority contributing to a high turnover bracket, yet also a considerable portion representing smaller financial operations, reflecting a wide range of business activities and scales within the company.

Besides, the data on our respondents' company ownership reveals a predominant presence of Romanian-owned businesses, accounting for 56% of the respondents, as shown in Figure 26. This majority indicates a strong domestic entrepreneurial base within the sample. Conversely, 44% of the companies are foreign-owned subsidiaries operating in Romania, illustrating a significant representation within the sample of foreign investment, enabling us, therefore, to grasp its influence in the Romanian market. Regardless, this distribution highlights a balanced economic landscape where local businesses play a crucial role, while foreign subsidiaries also maintain a substantial presence, contributing to the sample's economic diversity.

In addition, the sectoral distribution of respondents' companies is shown in Figure 27. The Services sector dominates our sample, representing 25% of the companies, highlighting its take on the final results. Both the IT&C and Retail sectors are equally prominent, each comprising 12% of the sample, underscoring the importance of technology and consumer goods in the market. Finance (7%) and Energy (6%) also have notable representations. Other sectors such as Banking and Education, each at 3%, and Construction and Manufacturing, each at 3%, indicate a wide array of industries contributing to the economic fabric of the sample, yet not proportionally incorporated into our study's sample. The remaining sectors, including niche fields like Climate Education, Social Entrepreneurship, and Steel Pipe Distribution, each constitute a smaller portion of the sample at 1%, showcasing the varied, yet interconnected nature of the business environment that we aimed to picture within our research.

In terms of internationalization, a large portion of firms comprised within our sample, 47%, operate both locally and internationally, indicating a diversified approach that leverages both domestic and global markets as shown in Figure 28. This dual presence suggests a strategic balance that we managed to capture, which allows companies to mitigate risks and capitalize on broader opportunities. Meanwhile, 32% of companies within the sample operate exclusively in the local market, which may reflect a focus on solidifying their domestic presence or limitations in expanding internationally. Nevertheless, 21% of our respondents' companies operate solely on an international scale, highlighting their focus on global market dynamics and international growth.

Moving onto the Sustainability Engagement Profile of the analysed sample, according to the results, 45% of respondents' firms have dedicated CSR or sustainability structures, reflecting a significant commitment, at an organizational architecture level, to integrating social and environmental considerations into their operations, as shown in Figure 29. This indicates that nearly half of the firms comprised within our sample recognize the importance of structured approaches to sustainability and their role in fostering positive societal impact.

On the flip side, 43% of firms do not have such structures in place, highlighting a substantial portion that may either be in the early stages of developing their CSR/Sustainability strategies or may not prioritize these initiatives to the same extent, due to various factors (i.e. for example, the size of the company, the annual turnover, etc.). Additionally, 12% of respondents are unsure about the existence of such structures in their companies, which could indicate a lack of communication or awareness regarding internal sustainability efforts.

If we look also at the designated senior executive with a Sustainable/CSR-oriented portfolio, the results provided by our respondents reveal that 41% of companies have a designated senior executive, such as a VP, CSO, or Director, specifically responsible for sustainability. That is, we can note a significant acknowledgement of the importance of sustainability at the leadership level, as well as a good correspondence between organizational structures and actual positions opened between the analysed businesses.

The other way around, Figure 30 shows that 46% of the analysed companies do not have such a dedicated position, suggesting that nearly half of the companies may either

integrate sustainability responsibilities across various roles or have yet to prioritize them at an executive level. Additionally, 13% of respondents are unaware of the presence of a senior executive dedicated to sustainability, which could indicate a lack of communication or awareness within the organization regarding sustainability efforts.

With regard to our sample's knowledge about sustainability-oriented policies ongoing within their business, Figure 31 shows that 56% of the respondents' companies have established clear sustainability policies, demonstrating a majority awareness and recognition of the importance of formalizing sustainability efforts to guide their operations and strategies. Notwithstanding, 35% of the respondents indicate that their companies do not have such policies in place. This fact pinpoints a possible lack of structured guidelines for sustainability, or, at least, businesses' potential communicational shortcomings. Corroborating our last statement, 9% of respondents are unaware of the existence of sustainability policies within their companies, which underlines the possible existence of an internal communication/awareness gap.

In the same vein, among our respondents, 49% indicated their awareness regarding ongoing efforts to improve sustainability or the imposition of new sustainability standards, while 36% reported no such activities. Interestingly, a notable proportion (13%) expressed uncertainty regarding the existence of sustainability-focused R&D within the organization, as depicted in Figure 32. In other words, these findings bring to the surface the importance of further investigation into the factors influencing the implementation and prioritization of sustainability initiatives within the companies active in the Romanian market. This might potentially underpin lapses in organizational culture, as well as possible market pressures or regulatory frameworks driving such a significant lack of awareness among employers/managers/entrepreneurs across all business levels. Such insights could inform strategic decision-making processes aimed at fostering sustainability within Romanian companies, regardless of their industry context.

Continuing the same line of sustainability-related positions within the companies, the research results, as shown in Figure 33, showcase that a majority of respondents, that is, 62%, reported that sustainability is not a part of their job descriptions. In contrast, 39% indicated that sustainability is indeed a component of their job responsibilities. This distribution underscores a notable heterogeneity in the integration of sustainability considerations into job roles within the company, especially if we run these numbers against those in Figures 29, 30 and 31. Therefore, one might argue that an "isolated" sustainability agenda, in terms of job positions that actively contribute to the sustainable endeavours, is being sketched.

Pursuant to better grasp the sustainable engagement profile of the sample, the research results show that a slight majority of respondents, constituting 53%, reported dealing with sustainability issues in their day-to-day work, while 47% indicated that they do not, as Figure 34 depicts. This distribution shows a significant level of engagement with sustainability considerations among the respondents, indicating that sustainability issues are relatively prevalent within the operational context of the company. However, a sort of discrepancy comes into question, as job descriptions do not mention directly sustainable-related responsibilities, yet sustainable-related tasks appear in our sample's daily agenda.

To sum up our business overview and sustainability engagement profile subchapter, the present analysis paints a polymath picture of the Romanian business landscape, showcasing a diverse range of roles, experiences, company sizes, and sectors. The substantial presence of both large corporations and smaller enterprises, with varying degrees of internationalization, ensures a dynamic proportion of our sample, with respect to the market. Moreover, while a majority of companies operate with significant annual turnovers, a notable portion represents smaller-scale operations, reflecting the diversity in financial capacities of our respondents' backgrounds. Additionally, the coexistence of Romanian-owned businesses and foreign subsidiaries portrays a balanced economic environment influenced by both domestic entrepreneurship and foreign investment.

Notwithstanding, the integration of sustainability into business practices appears to be less consistent. While a considerable number of companies have dedicated structures and leadership roles for sustainability, a significant portion lacks such formalization. The prevalence of established sustainability policies contrasts with a notable lack of awareness among some respondents regarding ongoing sustainability efforts or the presence of sustainability-focused research and development. What is more, the discrepancy between the inclusion of sustainability in job descriptions and its actual presence in daily work suggests a potential disconnect between formal recognition and practical implementation.

Briefly put, the initial part of our quantitative study, the percentage frequency distribution one, displays a tangled yet evolving landscape where sustainability considerations are gaining traction but have not yet been fully integrated across all organizations and job roles. This comprehensiveness emphasizes the need for further investigation into the factors influencing the adoption and prioritization of sustainability practices in Romanian businesses. By unravelling these complexities, we can gain valuable insights to guide strategic decision-making processes and foster a more sustainable future for Romanian companies.

Having examined the broader context of sustainability integration within Romanian businesses, we now turn our attention to a more granular analysis. Descriptive statistics for lower-order and higher-order constructs were calculated using SPSS, while SmartPLS 4 was employed for Confirmatory Factor Analysis (CFA) to validate the measurement model.

4.2.2.   Results of the measurement model evaluation: descriptive analysis

Table 37 presents the descriptive statistics for **the lower-order constructs** assessed in the present study. The HOC *Adoption of Sustainable Strategies* (ASS) includes, as previously mentioned, the following LOCs: *Adoption of Sustainability Strategies regarding People* (ASS-PE), *Adoption of Sustainability Strategies regarding the Environment* (ASS-E), *Adoption of Sustainability Strategies regarding Profit* (ASS-P), and *Adoption of Sustainability Strategies regarding Culture* (ASS-C).

The other HOC, *Awareness Degree of Sustainable Development* (ADSD), includes the following LOCs: *Awareness of Economic Factors related to Sustainable Development* (ADSD-E), *Awareness of Social Factors related to Sustainable Development* (ADSD-S), and *Awareness of Environmental Factors related to Sustainable Development* (ADSD-EN). The other LOCs analysed are: *Leadership Orientation towards Sustainability* (LOS), *Organizational Performance* (OP), *Organizational Reputation* (OR), and *Regulatory Requirements* (RR).

Table 37. Descriptive Statistics of Low– Order Constructs

LOC	Mean	Std. Dev	Min	Max
ASS_P	3.80	0.89	1	5
ASS_E	3.37	1.00	1	5
ASS_C	3.70	0.97	1	5
ADSD_E	4.23	0.73	1.17	5
ADSD_S	4.59	0.72	1	5
ADSD_EN	4.43	0.71	1.25	5
LOS	3.16	1.09	1	5
OP	3.38	0.98	1	5
OR	3.49	0.83	1.25	5
RR	3.93	0.77	1.29	5

Source: Advanced by the candidate

The mean for the assessment of ASS's underlying constructs' values indicates moderate to high levels, with ASS-P (M = 3.80, SD = 0.89), ASS-E (M = 3.37, SD = 1.00) representing the effectiveness of assessment, and ASS-C (M = 3.70, SD = 0.97), pointing out the comprehensiveness of assessment. Furthermore, ADSD's underlying constructs' values are higher on the mean, showing stronger awareness among the participants. ADSD-E (M = 4.23, SD = 0.73) measures awareness of economic factors, ADSD-S (M = 4.59, SD = 0.72) evaluates awareness of social factors, and ADSD-EN (M = 4.43, SD = 0.71) reflects awareness of environmental factors.

Besides, *Leadership Orientation towards Sustainability* (LOS) has a mean of 3.16 (SD = 1.09), showing a more variable response. Additionally, the means for *Organizational Reputation* (OR) and *Organizational Performance* (OP) were 3.49 (SD = 0.83) and 3.38 (SD = 0.98), respectively, therefore suggesting moderate levels of perceived operational efficiency and reputation within the organization. Then, *Regulatory Requirements* (RR) reported a mean of 3.93 (SD = 0.77), indicating that respondents generally felt adequately prepared in terms of compliance with regulations, though there is some variation in responses as noted by the standard deviation.

It is important to stress the fact that the range of scores for each construct spans from 1 to 5, with some constructs, such as ADSD-E and OR, showing slightly higher minimum values (1.17 and 1.25, respectively), indicating that even the lowest responses were above the minimum possible score. This suggests that while there is variability, there is also a baseline level of agreement or capability across the sample.

As a counterpart, Table 38 provides the descriptive statistics for *the higher-order constructs* analysed in our book. Namely, as outlined above, *Adoption of Sustainable Strategies* (ASS) and *Awareness Degree of Sustainable Development* (ADSD).

Table 38. Descriptive Statistics of Higher–Order Constructs

HOC	Mean	Std. Dev	Min	Max
ASS	3.68	0.82	1	5
ADSD	4.42	0.65	1.53	5

Source: Advanced by the candidate

The mean of the *Adoption of Sustainable Strategies* (ASS) is 3.68 (SD = 0.82). The data indicates that, on average, respondents had a positive perception of their experiences adopting sustainability strategies, as their rating was slightly above the midpoint of the scale. The moderate degree of variability in these perceptions, as indicated by the standard deviation of 0.82, implies that individual experiences with strategy adoption may differ slightly. To boot, the scores represent a wide range of responses, from extremely negative to extremely positive assessments, with a minimum of 1 and a maximum of 5.

On the other hand, the *Awareness Degree of Sustainable Development* (ADSD) construct, has a smaller standard deviation of 0.65 and a larger mean value, of 4.42. This suggests that respondents generally perceive their awareness of sustainable development as high. The relatively lower standard deviation indicates less variability in responses, implying a more consistent perception of high awareness among the sample. The minimum value for ADSD is 1.53, indicating that even the lowest ratings of awareness are above the lowest possible score, further reinforcing the overall positive trend in this construct. The maximum value is 5, showing that some respondents rated their awareness of sustainable development at the highest possible level.

All in all, a noteworthy output of this descriptive analysis of both LOCs and HOCs is that the adoption of strategies concerning profit (ASS-P) garnered the highest average rating (M = 3.80, SD = 0.89), while strategies related to the environment (ASS-E) received a slightly lower, but still favourable rating (M = 3.37, SD = 1.00). This suggests a pronounced emphasis on the economic dimension of sustainability, though environmental considerations are not neglected.

Additionally, it is interesting that the assessment of ADSD consistently scored high, with economic factors (ADSD-E) showing the strongest awareness (M = 4.23, SD = 0.73), followed closely by environmental (ADSD-EN) and social factors (ADSD-S) (M = 4.43, SD = 0.71 and M = 4.59, SD = 0.72, respectively). This reveals a well-rounded understanding of sustainability across its economic, environmental, and social dimensions. Leadership orientation towards sustainability (LOS) displayed a moderate average rating (M = 3.16, SD = 1.09), indicating some variability in leadership approaches towards sustainability. Perceptions of *Organizational Performance* (OP) and *Organizational Reputation* (OR) were also moderate (M = 3.38, SD = 0.98 and M = 3.49, SD = 0.83, respectively), suggesting room for improvement in these areas. *Regulatory requirements* (RR) were perceived as adequately met, with a mean rating of 3.93 (SD = 0.77).

On a side note, it is peculiar that while scores for all constructs ranged from 1 to 5, some constructs, like (ADSD-E) and (OR), had minimum values slightly above 1, indicating a baseline level of agreement or capability across the sample.

4.2.3.   Results of the measurement model evaluation: confirmatory factor analysis, construct reliability and validity

The research model for this study is tested using Smart PLS 4. Confirmatory Factor Analysis (CFA) was performed to validate the measurement model (outer model) by examining the relationship between the indicators and their underlying constructs, as shown in Figure 32, and the structural model, as shown in Figure 34 (testing the hypothesized relationships).

Approaching path coefficients for each HOC, it can be noticed that in ADSD's case - which comprises three lower-order constructs: ADSD-E (Economic), ADSD-S (Social), and ADSD-EN (Environmental)-, results indicate that the economic, social, and environmental dimensions are strong contributors to the overall awareness of sustainable development. Economic awareness has the highest path coefficient (0.428), followed by environmental (0.381) and social awareness (0.297).

On its side, ASS - composed of four lower-order constructs: ASS-P (Profit), ASS-C (Culture), ASS-PE (People), and ASS-E (Environment)-, has also strong loadings and significant path coefficients, indicative of the fact that all four dimensions—profit, culture, people, and environment—are essential components of the overall adoption of sustainable strategies. For ASS-P the path coefficient is 0.307, for ASS-C the path coefficient is of 0.194, with very high indicators load (0.883 to 0.942), ASS-PE has a path coefficient of 0.325, and lastly, ASS-E has a path coefficient of 0.307. As we can see, in this HOC's case, the constructs ASS-P and ASS-E both have the highest path coefficients (0.307), highlighting the critical role of profit and environmental strategies in adopting sustainable strategies.

Figure 35. The structural model with path coefficients
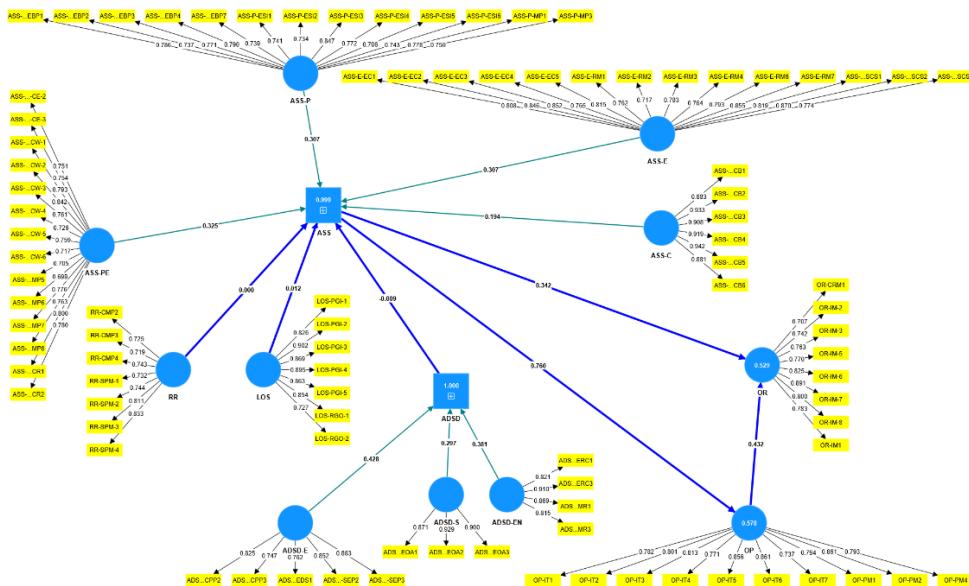
Source: Advanced by the candidate

Now, moving to The SmartPLS results for the reliability and validity of constructs, it can be stated that they indicate an overall reliability on the measurement model in capturing the underlying constructs of the research model. The variable's convergent validity is examined using the average variance extracted (AVE), composite reliability (CR), and factor loadings (outer loadings). The acceptable value of outer loadings must be at least 0.7; AVE must be at least 0.5 and the CR value should be at least 0.7 in the research (Hair et al., 2022). It has to be recalled that in each construct's case we proceeded with the deletion of an indicator as instructed by Hair et al. (2022), that is, whenever the indicators might have had weaker loadings or contributed less to the construct's reliability.

Even though the result summary provided is self-explanatory, we will proceed with briefly commenting on each construct's results. Accordingly, the indicators for ADSD-E demonstrate strong loadings ranging from 0.747 to 0.863, indicating that they effectively measure the economic dimension of sustainable development awareness. The Average Variance Extracted (AVE) for ADSD-E is 0.658, exceeding the recommended threshold of 0.5, indicating convergent validity. The Composite Reliability (CR) of 0.906 suggests good internal consistency reliability. Moreover, the indicators for ADSD-EN exhibit strong loadings ranging from 0.815 to 0.910, indicating effective measurement of the environmental dimension of sustainable development awareness. AVE of 0.731 and CR of 0.915 demonstrate convergent validity and internal consistency reliability, respectively. In the case of the indicators for ADSD-EN exhibit strong loadings ranging

from 0.815 to 0.910, indicating effective measurement of the environmental dimension of sustainable development awareness. AVE of 0.731 and CR of 0.915 demonstrate convergent validity and internal consistency reliability, respectively. Further, ADSD-S indicators demonstrate strong loadings ranging from 0.871 to 0.929, indicating effective measurement of the social dimension of sustainable development awareness. High AVE (0.811) and CR (0.928) values suggest convergent validity and internal consistency reliability, respectively.

Moving on, the indicators for ASS-C exhibit strong loadings ranging from 0.883 to 0.942, indicating effective measurement of cultural adoption of sustainable strategies. AVE of 0.831 and CR of 0.967 demonstrate convergent validity and internal consistency reliability, respectively. In addition, ASS-E indicators demonstrate moderate to strong loadings ranging from 0.717 to 0.855, indicating effective measurement of environmental adoption of sustainable strategies. AVE of 0.644 and CR of 0.962 suggest convergent validity and internal consistency reliability, respectively. Overly, the indicators for ASS-P exhibit moderate to strong loadings ranging from 0.737 to 0.847, indicating effective measurement of profit-oriented adoption of sustainable strategies. VE of 0.580 and CR of 0.947 suggest convergent validity and internal consistency reliability, respectively. On its their part, ASS-PE indicators demonstrate moderate to strong loadings ranging from 0.699 to 0.842, indicating effective measurement of people-oriented adoption of sustainable strategies. AVE of 0.577 and CR of 0.950 suggest convergent validity and internal consistency reliability, respectively.

The LOS indicators exhibit strong loadings ranging from 0.727 to 0.902, indicating effective measurement of leadership orientation towards sustainability. AVE of 0.722 and CR of 0.948 demonstrate convergent validity and internal consistency reliability, respectively. The OP indicators demonstrate strong loadings ranging from 0.737 to 0.861, indicating effective measurement of organizational performance. AVE of 0.653 and CR of 0.949 suggest convergent validity and internal consistency reliability, respectively. OR indicators exhibit moderate to strong loadings ranging from 0.707 to 0.891, indicating effective measurement of organizational reputation. AVE of 0.619 and CR of 0.928 demonstrate convergent validity and internal consistency reliability, respectively. Lastly, RR indicators demonstrate moderate to strong loadings ranging from 0.719 to 0.833, indicating effective measurement of regulatory requirements. AVE of 0.577 and CR of 0.905 suggest convergent validity and internal consistency reliability, respectively.

Briefly put, the SmartPLS results indicate that the constructs in the present research model have strong reliability and validity, thereby providing a solid foundation for our analysis, in the context of sustainable development within Romanian companies.

Table 39. Result Summary for Reliability and Validity of Constructs

Constructs	Indicators	Loadings	AVE	CR	Deleted Indicators
ADSD-E	ADSD-E-CPP2	0.825	0.658	0.906	ADSD-E-CPP1, ADSD-E-EDS2, ADSD-E- EDS3, ADSD-E-SEP1
	ADSD-E-CPP3	0.747			
	ADSD-E-EDS1	0.762			
	ADSD-E-SEP2	0.852			
	ADSD-E-SEP3	0.863			
ADSD-EN	ADSD-EN-ERC1	0.821	0.731	0.915	ADSD-EN-ERC2, ADSD-EN-WMR2
	ADSD-EN-ERC3	0.910			
	ADSD-EN-WMR1	0.869			
	ADSD-EN-WMR3	0.815			
ADSD-S	ADSD-S-EOA1	0.871	0.811	0.928	--
	ADSD-S-EOA2	0.929			
	ADSD-S-EOA3	0.900			
ASS-C	ASS-C-GCB1	0.883	0.831	0.967	--
	ASS-C-GCB2	0.933			
	ASS-C-GCB3	0.908			
	ASS-C-GCB4	0.919			
	ASS-C-GCB5	0.942			
	ASS-C-GCB6	0.881			
ASS-E	ASS-E-EC1	0.808	0.644	0.962	ASS-E-RM5
	ASS-E-EC2	0.846			
	ASS-E-EC3	0.852			
	ASS-E-EC4	0.765			
	ASS-E-EC5	0.815			
	ASS-E-RM1	0.762			
	ASS-E-RM2	0.717			
	ASS-E-RM3	0.783			
	ASS-E-RM4	0.764			
	ASS-E-RM6	0.793			
	ASS-E-RM7	0.855			
	ASS-E-SCS1	0.819			
	ASS-E-SCS2	0.87			

	ASS-E-SCS3	0.774			
ASS-P	ASS-P-EBP1	0.786	0.580	0.947	ASS-P-EBP5, ASS-P-EBP6, ASS-P-MP2,
	ASS-P-EBP2	0.737			
	ASS-P-EBP3	0.771			
	ASS-P-EBP4	0.79			
	ASS-P-EBP7	0.739			
	ASS-P-ESI1	0.741			
	ASS-P-ESI2	0.734			
	ASS-P-ESI3	0.847			
	ASS-P-ESI4	0.772			
	ASS-P-ESI5	0.706			
	ASS-P-ESI6	0.743			
	ASS-P-MP1	0.778			
	ASS-P-MP3	0.75			
ASS-PE	ASS-PE-CE-2	0.751	0.577	0.950	ASS-PE-CE1, ASS-PE-PMP1, ASS-PE-PMP2, ASS-PE-PMP3, ASS-PE-PMP4, ASS-PE-PMP9, ASS-PE-SCR3
	ASS-PE-CE-3	0.754			
	ASS-PE-CW-1	0.793			
	ASS-PE-CW-2	0.842			
	ASS-PE-CW-3	0.761			
	ASS-PE-CW-4	0.726			
	ASS-PE-CW-5	0.759			
	ASS-PE-CW-6	0.717			
	ASS-PE-PMP5	0.705			
	ASS-PE-PMP6	0.699			
	ASS-PE-PMP7	0.776			
	ASS-PE-PMP8	0.763			
	ASS-PE-SCR1	0.8			
	ASS-PE-SCR2	0.78			
LOS	LOS-PGI-1	0.826	0.722	0.948	-
	LOS-PGI-2	0.902			
	LOS-PGI-3	0.869			
	LOS-PGI-4	0.895			
	LOS-PGI-5	0.863			
	LOS-RGO-1	0.854			
	LOS-RGO-2	0.727			
OP	OP-IT1	0.782	0.653	0.949	OP-PM3

	OP-IT2	0.801			
	OP-IT3	0.813			
	OP-IT4	0.771			
	OP-IT5	0.856			
	OP-IT6	0.861			
	OP-IT7	0.737			
	OP-PM1	0.794			
	OP-PM2	0.861			
	OP-PM4	0.793			
OR	OR-CRM1	0.707	0.619	0.928	OR-CRM-2, OR-CRM-3, OR-CRM-4, OR-IM-4
	OR-IM-2	0.742			
	OR-IM-3	0.763			
	OR-IM-5	0.77			
	OR-IM-6	0.825			
	OR-IM-7	0.891			
	OR-IM-8	0.8			
	OR-IM1	0.783			
RR	RR-CMP2	0.725	0.577	0.905	RR-CMP-1
	RR-CMP3	0.719			
	RR-CMP4	0.743			
	RR-SPM-1	0.732			
	RR-SPM-2	0.744			
	RR-SPM-3	0.811			
	RR-SPM-4	0.833			

Source: Advanced by the candidate

Furthermore, the Discriminant validity was tested in order to examine how truly distinct a variable is from the other variables. Measurements of the correlations between the constructs and the square root of the average variance derived for each construct were used to test the discriminant validity (Kline, 2016). More exactly, discriminant validity ensures that a construct is distinct and captures phenomena not represented by other constructs in the model. The criterion compares the square root of the Average Variance Extracted (AVE) of each construct with the correlation values between the constructs. For discriminant validity to be established, the square root of each construct's AVE should be greater than its highest correlation with any other construct.

Table 40. Fornell-Larcker Criterion Analysis for Checking Discriminant Validity of Construct

	ADSD-E	ADSD-EN	ADSD-S	ASS-C	ASS-E	ASS-P	ASS-PE	LOS	OP	OR	RR
ADSD-E	0.811										
ADSD-EN	0.728	0.855									
ADSD-S	0.704	0.736	0.900								
ASS-C	0.358	0.387	0.295	0.911							
ASS-E	0.212	0.163	0.078	0.62	0.803						
ASS-P	0.389	0.433	0.373	0.695	0.654	0.762					
ASS-PE	0.258	0.291	0.188	0.636	0.692	0.701	0.76				
LOS	0.415	0.353	0.226	0.731	0.603	0.514	0.432	0.85			
OP	0.283	0.275	0.117	0.673	0.686	0.621	0.675	0.603	0.808		
OR	0.312	0.327	0.283	0.611	0.551	0.61	0.591	0.500	0.692	0.787	
RR	0.504	0.549	0.439	0.551	0.434	0.493	0.413	0.608	0.526	0.467	0.759

Note: ADSD-E – Awareness of Economic Factors related to Sustainable Development, ADSD-S – Awareness of Social Factors related to Sustainable Development, ADSD-EN – Awareness of Environmental Factors related to Sustainable Development, ASS-PE – Adoption of Sustainability Strategies regarding People, ASS-E – Adoption of Sustainability Strategies regarding the Environment, ASS-P – Adoption of Sustainability Strategies regarding Profit, ASS – C – Adoption of Sustainability Strategies regarding Culture, LOS – Leadership Orientation Towards Sustainability, OP – Organizational Performance, OR – Organizational Reputation, RR – Regulatory Requirements.

Source: Advanced by the candidate

As Table 40 shows, the Fornell-Larcker Criterion analysis confirms that all constructs exhibit good discriminant validity. The square root of the AVE for each construct is higher than the correlations with other constructs, suggesting that each construct is unique and captures distinct phenomena within the model. This validation step is crucial for ensuring the robustness of the structural equation model and the reliability of the findings regarding sustainable development awareness and the adoption of sustainability strategies in organizations.

Moving on to the Heterotrait-Monotrait Ratio (HTMT), an advanced method used to assess the discriminant validity of constructs within a structural equation model, we know that discriminant validity is achieved if the constructs are truly distinct from one another. For HTMT, a commonly accepted threshold is 0.85 (strict) or 0.90 (lenient), where values below these thresholds indicate adequate discriminant validity (Hair et al., 2022).

Table 41. Heterotrait-Monotrait Ratio (HTMT) Analysis for Checking Discriminant Validity of Inner Model

	ADSD-E	ADSD-EN	ADSD-S	ASS-C	ASS-E	ASS-P	ASS-PE	LOS	OP	OR	RR
ADSD-E											
ADSD-EN	.830										
ADSD-S	.797	0.835									
ASS-C	.387	0.424	0.322								
ASS-E	.237	0.188	0.144	.646							
ASS-P	.427	0.481	0.416	.725	.675						
ASS-PE	.287	0.322	0.225	.666	.721	0.848					
LOS	.450	0.385	0.245	.765	.633	.533	.448				
OP	.314	0.301	0.142	.703	.719	.646	.709	.634			
OR	.354	0.37	0.323	.647	.583	.654	.636	.531	.735		
RR	.589	0.642	0.519	.59	.458	.528	.437	.652	.55	.508	

Note: ADSD-E – Awareness of Economic Factors related to Sustainable Development, ADSD-S – Awareness of Social Factors related to Sustainable Development, ADSD-EN – Awareness of Environmental Factors related to Sustainable Development, ASS-PE – Adoption of Sustainability Strategies regarding People, ASS-E – Adoption of Sustainability Strategies regarding the Environment, ASS-P – Adoption of Sustainability Strategies regarding Profit, ASS – C – Adoption of Sustainability Strategies regarding Culture, LOS – Leadership Orientation Towards Sustainability, OP – Organizational Performance, OR – Organizational Reputation, RR – Regulatory Requirements.

Source: Advanced by the candidate

As Table 41 clearly shows, no value is above the recommended cutoff point of 0.85. The HTMT analysis confirms that all constructs exhibit strong discriminant validity. All HTMT values are below the stricter threshold of 0.85, indicating that each construct is distinct and not highly correlated with other constructs. As we can observe, in the case of ASS-PE, there is one HTMT value (0.848) that is just within the acceptable range, suggesting discriminant validity. Overall, all other values confirm discriminant value or even situate it under the threshold of "good" or "strong" discriminant validity (Hair et al., 2022).

This validation is crucial as it ensures that the constructs used in the model are unique and accurately represent different dimensions of sustainable development awareness and the adoption of sustainability strategies. The HTMT results, combined with the Fornell-Larcker Criterion, provide clear-cut evidence for the discriminant validity of the model's constructs, hence confirming that the constructs in the model are distinct and accurately represent different dimensions of sustainable development awareness and the adoption of sustainability strategies.

4.2.4. Results of the measurement model evaluation: establishment of second-order constructs, assessment of the structural model

Through the extraction of latent variable scores from the measurement model, a two-stage disjoint approach was used to establish second-order constructs, thereby enriching the structural model and enabling a nuanced understanding of the intricate relationships within the organizational context. Using this approach, the second-order constructs of Adoption of Sustainable Strategies (ASS) and Awareness Degree of Sustainable Development (ADSD) were formed by carefully aggregating LOCs. T Statistics, P-values, and Outer Weights for each dimension are shown in Table 44.

In what follows, we will briefly explain the relevance of each indicator from Table 44, and we will afterwards comment upon its impact on our model based on Hair et al. (2022)'s postulations. Accordingly, outer weights refer to the coefficients that represent the contribution of each indicator (first-order construct) to a higher-order construct in a formative measurement model. These weights indicate the relative importance of each indicator in forming the construct. In this case, there is no strict threshold for outer weights; however, they should be statistically significant, which is typically evaluated using T statistics and P-values. Significant outer weights (P-values < 0.05) indicate that the indicator is an important part of the construct. More often than not, higher outer weights suggest that the indicator has a greater contribution to the higher-order construct. It's crucial that all outer weights are statistically significant to ensure the construct validity of the formative model.

In addition, T statistics are used to determine the statistical significance of the outer weights and loadings. They are derived from the ratio of the estimated parameter to its standard error. It should be taken into account that a T statistic value greater than 1.96 (for a 95% confidence level) or greater than 2.58 (for a 99% confidence level) is typically considered statistically significant. More precisely, if the T statistic is above the threshold (e.g., >1.96 for 95% confidence), the corresponding outer weight or loading is considered statistically significant, indicating that the indicator contributes meaningfully to the construct. Their "counterparts", the P-values, indicate the probability that the observed results occurred by chance. In the context of outer weights and loadings, they are used to test the null hypothesis that the coefficient is equal to zero (no effect). Overly, a P-value less than 0.05 is generally considered statistically significant, indicating that the null hypothesis can be rejected. Low P-values (e.g., <0.05) suggest that the indicator significantly contributes to the construct. If P-values are high (e.g., >0.05), it may indicate that the indicator does not significantly contribute to the construct, and further investigation or modification may be needed.

What's more, outer loadings measure the correlation between each indicator and the latent construct in reflective measurement models. They indicate how well each indicator represents the construct. Outer loadings should generally be greater than 0.70. Loadings between 0.40 and 0.70 can be considered if the overall model is strong and other indicators are well above 0.70. Loadings below 0.40 are typically not acceptable. Higher outer loadings indicate that the indicator is a good measure of the construct. Loadings

above 0.70 suggest that the indicator strongly correlates with the construct, contributing positively to its validity. Lastly, the Variance Inflation Factor (VIF) measures the extent of multicollinearity among indicators in formative measurement models. High VIF values indicate that an indicator is highly correlated with other indicators, which can inflate the standard errors of the coefficients (Kock, 2015). Generally, VIF values should generally be below 5. Values above 5 suggest moderate multicollinearity and values above 10 indicate high multicollinearity, which is problematic, beyond the reasonable doubt. VIF values below 5 indicate acceptable levels of multicollinearity, ensuring that the indicators provide unique information. High VIF values suggest redundancy among indicators, which can distort the model's estimates and should be addressed, possibly by removing or combining indicators.

Table 42. Second-order constructs (ADSD & ASS) and their relationship with first-order constructs

Second-order Constructs	First-order Constructs	Outer Weights	T Statistics	P-values	Outer Loadings	VIF
ADSD	ADSD-E	0.136	13.867	0.000	0.908	2.446
	ADSD-EN	0.117	12.499	0.000	0.927	2.697
	ADSD-S	0.115	13.421	0.000	0.668	2.510
ASS	ASS-C	0.579	6.883	0.000	0.932	2.146
	ASS-E	0.357	3.961	0.000	0.848	2.173
	ASS-P	0.179	13.744	0.000	0.814	1.845
	ASS-PE	0.186	17.169	0.000	0.790	2.299

Note: ASDS- Awareness Degree of sustainable development, ADSD-E – Awareness of Economic Factors related to Sustainable Development, ADSD-S – Awareness of Social Factors related to Sustainable Development, ADSD-EN – Awareness of Environmental Factors related to Sustainable Development, ASS- Adoption of Sustainable Strategies, ASS-PE – Adoption of Sustainability Strategies regarding People, ASS-E – Adoption of Sustainability Strategies regarding the Environment, ASS-P – Adoption of Sustainability Strategies regarding Profit, ASS – C – Adoption of Sustainability Strategies regarding Culture, LOS – Leadership Orientation Towards Sustainability, OP – Organizational Performance, OR – Organizational Reputation, RR – Regulatory Requirements.

Source: Advanced by the candidate

Taking the aforementioned synthesized information into account, Table 42 helps to understand how well the first-order constructs contribute to the overall second-order constructs, which is crucial for validating the hierarchical component models in partial least squares structural equation modelling (PLS-SEM).

The second-order construct ADSD is comprised of three first-order constructs: ADSD-E (Economic), ADSD-EN (Environmental), and ADSD-S (Social). For the ADSD-E (Economic) LOC, the outer weight of 0.136 indicates a positive contribution

of economic awareness to the overall ADSD construct. The high T-statistic and low P-value indicate this contribution is statistically significant. The outer loading of 0.908 is very high, suggesting that ADSD-E is a strong component of ADSD. The VIF value of 2.446 is well below the commonly accepted threshold of 5, indicating no significant multicollinearity issues. The ADSD-EN (Environmental) has the outer weight of 0.117, which implies a significant positive impact of environmental awareness on ADSD. The T-statistic of 12.499 and P-value of 0.000 confirm statistical significance. The outer loading of 0.927 is very high, indicating that ADSD-EN is a strong contributor to ADSD. The VIF value of 2.697 suggests no multicollinearity issues whatsoever. The analysis for the ADSD-S (Social) marks the outer weight of 0.115, which shows a significant positive contribution of social awareness to ADSD. The T-statistic and P-value corroborate this significance. The outer loading of 0.668, while still substantial, is lower compared to ADSD-E and ADSD-EN, indicating a relatively smaller, but still important contribution of social factors to ADSD. The VIF value of 2.510 indicates no significant multicollinearity issues.

Consequently, the second-order construct ASS includes four first-order constructs: ASS-C (Culture), ASS-E (Environment), ASS-P (Profit), and ASS-PE (People). In the case of ASS-C (Culture), a construct for which we highly advocated, the high outer weight of 0.579 indicates that cultural strategies significantly contribute to the adoption of sustainable strategies. The T-statistic and P-value indicate statistical significance. The very high outer loading of 0.932 suggests that ASS-C is a crucial component of ASS. The VIF value of 2.146 is within acceptable limits, indicating no multicollinearity issues. ASS-E (Environment) has an outer weight of 0.357, which pinpoints a significant contribution of environmental strategies to ASS. The T-statistic and P-value double-check that this contribution is statistically significant. The outer loading of 0.848 indicates a strong contribution, and the VIF of 2.173 shows no multicollinearity issues. Moving onto the ASS-P (Profit), the outer weight of 0.179 suggests a positive contribution of profit-oriented strategies to ASS, with high statistical significance indicated by the T-statistic and P-value. The outer loading of 0.814 is strong, and the VIF of 1.845 indicates no multicollinearity issues. Lastly, ASS-PE (People) presents an outer weight of 0.186, a fact that shows a significant contribution of people-oriented strategies to ASS. The T-statistic and P-value confirm this contribution is statistically significant. The outer loading of 0.790 is strong, and the VIF of 2.299 indicates no multicollinearity issues.

In the aggregate, the results indicate that all first-order constructs significantly contribute to their respective second-order constructs, ADSD and ASS. The high outer loadings and statistically significant outer weights confirm that the economic, environmental, and social awareness factors are vital components of the overall awareness of sustainable development (ADSD). Similarly, cultural, environmental, profit-oriented, and people-oriented strategies are crucial elements of the adoption of sustainable strategies (ASS). The VIF values for all first-order constructs are well within acceptable limits, suggesting no significant multicollinearity issues. All these conclusions further strengthen the validity of the constructs and the reliability of the model, contributing therefore to an in-depth understanding of how different dimensions

of sustainability awareness and sustainable strategy adoption contribute to organizational performance and reputation.
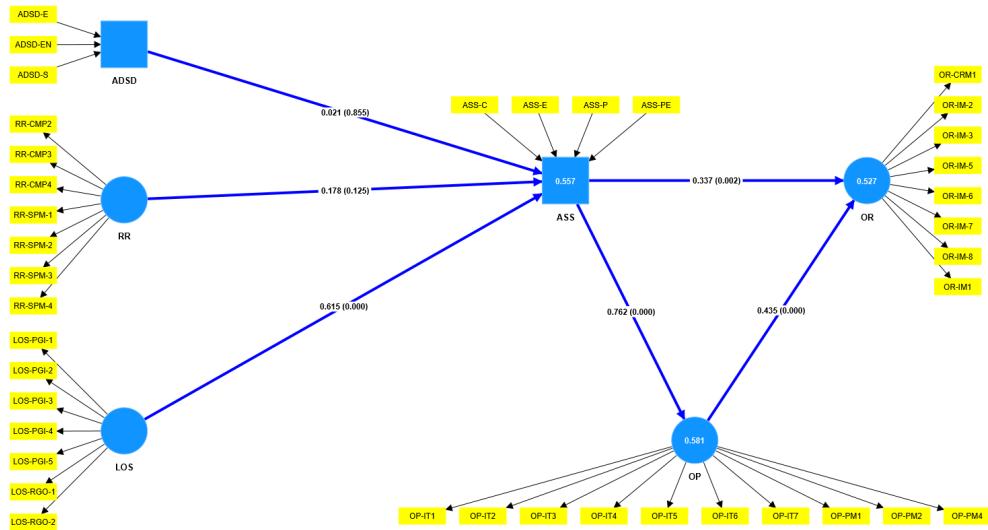

Figure 36. The structural model – testing the hypothesized relationships
Source: Advanced by the candidate

Figure 36 pictures the structural model focused primarily on the constructs and their direct relationships without detailing the individual indicators. It simplifies the presentation by omitting the individual measurement items. As we direct our analysis to the hypothesis testing part, we opted to use a figure that emphasizes the hypotheses tested within the model, showing the direct paths between major constructs in the study. In this vein, the structural model can be obtained through a bootstrapping method (Zhao et al., 2010). To test the proposed hypotheses, the structural model evaluation was conducted. When there is no violation in the measurement model, this test can be conducted. In this line, the R^2 (R-squared) value, also known as the coefficient of determination, indicates the proportion of variance in the dependent (endogenous) variables that can be explained by the independent (exogenous) variables in the model. In the context of PLS-SEM, R^2 values are used to assess the predictive power of the model (Hair et al., 2022).

Table 43. R^2 of Endogenous Latent Variables

Constructs	R^2	Result
ASS	0.557	Moderate
OP	0.581	Moderate
OR	0.527	Moderate

ASS- Adoption of Sustainable Strategies, OP – Organizational Performance, OR –
Organizational Reputation

Source: Advanced by the candidate

Table 43 showcases the R² values for three endogenous constructs: *Adoption of Sustainable Strategies* (ASS), *Organizational Performance* (OP), and *Organizational Reputation* (OR). In the case of *Adoption of Sustainable Strategies* (ASS), an R² value of 0.557 indicates that approximately 55.7% of the variance in the adoption of sustainable strategies (ASS) is explained by the exogenous variables in the model (i.e., *Awareness Degree of Sustainable Development* (ADSD), *Leadership Orientation Towards Sustainability* (LOS), and *Regulatory Requirements* (RR)). This is considered a moderate level of explanatory power. In the context of social sciences, an R² value above 0.50 is generally deemed respectable, especially in complex models with multiple variables (Moksony & Heged, 1990; Chin, 1998; Duarte & Raposo, 2010; Hair et al., 2014; Hair et al., 2017; Hair et al., 2022). In terms of implications, the moderate R² suggests that while the model explains a substantial portion of the variance in (ASS), there are still other factors not captured by the model that may influence the adoption of sustainable strategies. Further research could explore additional variables or refine the existing constructs to improve explanatory power.

For the *Organizational Performance* (OP) construct, an R² value of 0.581 means that 58.1% of the variance in organizational performance (OP) is explained by the independent variables, particularly the adoption of sustainable strategies (ASS). This moderate R² value indicates a solid level of predictive accuracy, suggesting that the model's constructs significantly contribute to explaining variations in organizational performance. As for the implications, the model is effective in demonstrating the impact of *Adoption of Sustainable Strategies* (ASS) on *Organizational Performance* (OP), reinforcing the importance of sustainability in achieving organizational goals. However, other factors influencing performance should be considered to enhance the model's explanatory power.

Lastly, from the point of view of *Organizational Reputation* (OR), an R² value of 0.527 indicates that 52.7% of the variance in Organizational Reputation (OR) is accounted for by the predictors in the model, including *Adoption of Sustainable Strategies* (ASS) and *Organizational Performance* (OP). This is also classified as a moderate level of explanatory power. It shows that while the model captures a significant portion of the factors affecting reputation, there remains nearly half of the variance unaccounted for in the current model. As for the implications, the moderate R² value

suggests that *Adoption of Sustainable Strategies* (ASS) and *Organizational Performance* (OP) play crucial roles in shaping *Organizational Reputation* (OR). However, other determinants of reputation, such as external market conditions, competitive actions, and public relations efforts, may need to be included in future models to provide a more comprehensive explanation.

To sum up, the R^2 values for ASS (0.557), OP (0.581), and OR (0.527) are all in the moderate range, indicating that the model has substantial explanatory power for these constructs, though not exhaustive. Correlating these values with the overall research, it could be told that the advanced model effectively explains a considerable portion of the variance in ASS, OP, and OR, affirming that the hypothesized relationships and constructs are relevant and significant. However, there is significant room for improvement, as R^2 values are commendable, but yet put forth the potential for model enhancement. In this note, incorporating additional relevant variables could provide a more comprehensive understanding of the factors influencing sustainable strategies, performance, and reputation.

All in all, the findings highlight the critical role of leadership orientation towards sustainability and the adoption of sustainable strategies in driving organizational performance and reputation. This emphasizes the need for organizations to foster strong leadership commitment to sustainability and integrate sustainable practices into their core operations.

Stepping forward in our analysis, Table 44 provides a summary of the direct effects in the structural equation model, detailing the relationships between constructs (hypotheses), the path coefficients (Beta), standard errors (SE), t-values, p-values, and the statistical decision regarding the support for each hypothesis.

Before commenting and interpreting the results, let's be mindful of the value of each indicator, as portrayed in the body of literature (Moksony & Heged, 1990; Chin, 1998; Duarte & Raposo, 2010; Hair et al., 2014; Hair et al., 2017; Hair et al., 2022). Ergo, the Beta coefficient represents the strength and direction of the relationship between two constructs. In more technical words, it indicates how much change in the dependent variable is expected with a one-unit change in the independent variable. A higher absolute value of Beta indicates a stronger relationship. Simply put, positive Beta values indicate a positive relationship, while negative values indicate a negative relationship. Next, the *Standard Error* (SE) measures the accuracy with which the Beta coefficient is estimated. It reflects the variability of the estimate and helps in assessing the reliability of the Beta value. Said differently, Smaller SE values indicate more precise estimates of the Beta coefficient, leading to more reliable conclusions about the relationship between the constructs. To add, the t-value is a statistically used test which aims to determine the significance of the Beta coefficient. It is calculated as the ratio of the Beta coefficient to its Standard Error. To wit, higher absolute t-values indicate that the Beta coefficient is significantly different from zero. Generally, a t-value greater than 1.96 (for a 95% confidence level) or 2.58 (for a 99% confidence level) suggests statistical significance. At long last, the p-value indicates the probability that the observed relationship between the constructs occurred by chance. It helps in testing the null hypothesis that there is no

effect (Beta coefficient equals zero). That is to say, lower p-values (typically < 0.05) indicate that the relationship is statistically significant, meaning the null hypothesis can be rejected. A p-value less than 0.05 suggests strong evidence against the null hypothesis, supporting the presence of a significant relationship between the constructs (Hair et al., 2022).

Table 44. Summary of the Direct Effect

Hypotheses	Relationship	Beta	SE	t-value	p-value	Statistic Decision
H1	ADSD -> ASS	0.021	0.079	0.182	0.855	Not – Supported
H2	RR -> ASS	0.178	0.171	1.536	0.125	Not – Supported
H3	LOS -> ASS	0.615	0.587	6.603	0.000	Supported
H4	ASS -> OP	0.762	0.769	16.151	0.000	Supported
H5	ASS -> OR	0.337	0.35	3.06	0.002	Supported
H6	OP -> OR	0.435	0.43	4.059	0.000	Supported

ASDS- Awareness Degree of sustainable development, ASS- Adoption of Sustainable Strategies, LOS – Leadership Orientation Towards Sustainability, OP – Organizational Performance, OR – Organizational Reputation, RR – Regulatory Requirements.

Source: Advanced by the candidate

Moving on to the analysis and interpretation of the information presented in Table 44, we will briefly address each hypothesis in the following lines.

H1: There is a positive relationship between the Awareness Degree of Sustainable Development (ADSD) and the Adoption of Sustainable Strategies (ASS).

The beta coefficient of 0.021 indicates a very weak relationship between ADSD and ASS. The high p-value (0.855) and low t-value (0.182) suggest that this relationship is not statistically significant. Therefore, *Awareness Degree of Sustainable Development* (ADSD) *does not* significantly influence the *Adoption of Sustainable Strategies* (ASS) as rendered by this model.

H2: There is a positive relationship between Regulatory Requirements (RR) and the Adoption of Sustainable Strategies (ASS).

The beta coefficient of 0.178 suggests a moderate positive relationship between RR and ASS. Notwithstanding, the p-value (0.125) indicates that this relationship is not statistically significant at the 0.05 level. Thus, *Regulatory Requirements* (RR) *do not* significantly drive the *Adoption of Sustainable Strategies* (ASS), as per this model.

H3: There is a positive relationship between Leadership Orientation towards Sustainability (LOS) and the Adoption of Sustainable Strategies (ASS).

The beta coefficient of 0.615 indicates a strong positive relationship between LOS and ASS. The t-value (6.603) and p-value (0.000) attest that this relationship *is highly significant*. As a result, this finding supports the hypothesis that *Leadership Orientation towards Sustainability* (LOS) significantly influences the *Adoption of Sustainable Strategies* (ASS), as far as this model is concerned.

H4: There is a positive relationship between the Adoption of Sustainable Strategies (ASS) and Organizational Performance (OP).

The beta coefficient of 0.762 indicates a very strong positive relationship between ASS and OP. The extremely high t-value (16.151) and p-value (0.000) confirm that this relationship *is highly significant*. Hence, this result strongly supports the hypothesis that *Adopting Sustainable Strategies* (ASS) significantly enhances *Organizational Performance* (OP).

H5: There is a positive relationship between the Adoption of Sustainable Strategies (ASS) and Organizational Reputation (OR).

The beta coefficient of 0.337 indicates a moderate positive relationship between ASS and OR. The t-value (3.06) and p-value (0.002) show that this relationship *is statistically significant*. Suitably, this finding supports the hypothesis that *Adopting Sustainable Strategies* (ASS) positively impacts *Organizational Reputation* (OR).

H6: There is a positive relationship between the Organizational Performance (OP) and Organizational Reputation (OR).

The beta coefficient of 0.435 indicates a strong positive relationship between OP and OR. The high t-value (4.059) and p-value (0.000) confirm that this relationship *is statistically significant*. Thereon, this result supports the hypothesis that better *Organizational Performance* (OP) enhances *Organizational Reputation* (OR).

As a result of this analysis, on one hand, the model shows that *Leadership orientation Towards Sustainability* (LOS) has a significant positive impact on the Adoption of Sustainable Strategies (ASS). Furthermore, the adoption of sustainable strategies significantly enhances both *Organizational Performance* (OP) and *Organizational Reputation* (OR). Finally, improved *Organizational Performance* (OP) also significantly boosts *Organizational Reputation* (OR). On the other hand, the direct effects of *Awareness Degree of Sustainable Development* (ADSD) and *Regulatory Requirements* (RR) on the *Adoption of Sustainable Strategies* (ASS) were found to be non-significant. This suggests that while awareness and regulations are important, they may not directly drive the adoption of sustainable practices without strong leadership commitment in Romanian businesses.

Altogether, these findings emphasize the crucial role of leadership in driving sustainability initiatives. Organizations seeking to improve performance and reputation through sustainability should focus on enhancing leadership commitment to sustainable practices. Additionally, while regulatory requirements alone may not suffice, they can complement strong leadership in encouraging and seconding a sustainable culture.

For the last part of this analysis, we will move towards the Table 45, which presents the f² (effect size) values for our model. More specifically, this final analysis measures the impact of a specific exogenous construct on an endogenous construct. That is, it indicates how much an exogenous construct contributes to explaining the variance of an endogenous construct when it is included in the model. Effect sizes can be classified as small, medium, or large based on their values (Hair et al., 2022). The table provides the f² values for various relationships in the model, indicating their respective effect sizes.

Table 45. The effect size of the model

Latent variables	F²	Result
ADSD -> ASS	0.001	Small
ASS -> OP	1.387	Large
ASS -> OR	0.100	Medium
LOS -> ASS	0.531	Large
OP -> OR	0.168	Medium
RR -> ASS	0.037	Small

ASDS- Awareness Degree of sustainable development, ASS- Adoption of Sustainable Strategies, LOS – Leadership Orientation Towards Sustainability, OP – Organizational Performance, OR – Organizational Reputation, RR – Regulatory Requirements

Source: Advanced by the candidate

In the case of ADSD -> ASS, an f² value of 0.001 indicates a very small effect size, suggesting that *Awareness Degree of Sustainable Development* (ADSD) has a negligible impact on the *Adoption of Sustainable Strategies* (ASS). In other words, although ADSD is included in the model, its contribution to explaining the variance in ASS is minimal. This suggests that other factors (e.g., LOS, RR) play a more significant role in influencing the adoption of sustainable strategies.

As for the ASS -> OP relationship, an f² value of 1.387 indicates a large effect size, meaning that *Adoption of Sustainable Strategies* (ASS) has a substantial impact on *Organizational Performance* (OP). Rather, this strong effect puts forth the importance of *Adopting Sustainable Strategies* (ASS) in enhancing *Organizational Performance* (OP). According to this result, organizations that implement sustainable practices are likely to see significant improvements in performance metrics.

Regarding the ASS -> OR relationship, an f² value of 0.100 indicates a medium effect size, suggesting that *Adoption of Sustainable Strategies* (ASS) moderately influences *Organizational Reputation* (OR). More exactly, while the adoption of sustainable strategies contributes to a better organizational reputation, other factors (such as OP and external perceptions) also play a role. This indicates that *Adoption of Sustainable Strategies* ASS is an important, but not the sole determinant of *Organizational Reputation* (OR).

In so far as the relation LOS -> ASS is concerned, an f² value of 0.531 signifies a large effect size, indicating that *Leadership Orientation towards Sustainability* (LOS) has a significant impact on the *Adoption of Sustainable Strategies* (ASS). This strong effect highlights the highly important role of leadership in driving the adoption of sustainable strategies. Said in other words, effective leadership that prioritizes sustainability can significantly influence organizational practices and strategic direction.

With reference to OP -> OR relationship, an f² value of 0.168 indicates a medium effect size, suggesting that *Organizational Performance* (OP) has a moderate impact on *Organizational Reputation* (OR). To be more exact, good organizational performance enhances reputation, but other factors also contribute to reputation building. This underscores the multifaceted nature of organizational reputation, which depends on both internal performance and external perceptions.

With respect to RR -> ASS relationship, an f² value of 0.037 indicates a small effect size, suggesting that *Regulatory Requirements* (RR) have a minor impact on the *Adoption of Sustainable Strategies* (ASS). While regulatory requirements influence the adoption of sustainable strategies, their effect is limited. More accurately, this result suggests that compliance alone is not enough to drive substantial changes in sustainable practices: other factors, such as leadership and organizational culture are more influential.

To sum up, the effect size analysis provides insights into the relative importance of different constructs in explaining the variance in the model's endogenous variables. LOS has a large effect on ASS, and ASS has a large effect on OP, indicating these are critical areas for organizational focus. Leadership commitment and the adoption of sustainable strategies are, therefore, depicted as key drivers of performance improvements. In terms of moderate contributors, ASS has a medium effect on OR, and OP has a medium effect on OR. This highlights that while sustainable strategies and performance are important for reputation, other factors also play a role in shaping organizational reputation. Whereas minor contributors, ADSD and RR, have small effects on ASS, indicating that awareness and regulatory requirements, while important, are not the primary drivers of sustainable strategy adoption. This suggests a need for additional supportive factors to enhance their impact.

In the aggregate, the f² values and their respective effect sizes offer valuable insights into the dynamics of the model. The large effect sizes of LOS on ASS and ASS on OP emphasize the crucial role of leadership and sustainable practices in driving organizational success. Medium effect sizes indicate important but not dominant relationships, while small effect sizes highlight areas where additional factors may be

needed to strengthen the impact. Understanding these effect sizes helps in prioritizing areas of focus for organizational strategy and policymaking to foster sustainability and performance.

4.2.5.   Quantitative analysis: final conclusions and impact

The quantitative analysis of the structural equation model provides hands-on insights into the dynamics of *Sustainable Development Awareness* (ADSD), the *Adoption of Sustainable Strategies* (ASS), and their effects on *Organizational Performance* (OP) and *Organizational Reputation* (OR) within Romanian companies. The analysis leverages some other key constructs, such as *Leadership Orientation towards Sustainability* (LOS) and *Regulatory Requirements* (RR). This subchapter synthesizes the findings and discusses their implications for theory and practice.

Among the main takeaways from the present quantitative analysis, it is important to note that, as seen in Table 46, the first two, out of the total of six hypothesized relationships were deemed to be statistically not significant:

- **H1** - the direct effect of ADSD on ASS was non-significant ($\beta = 0.021$, p = 0.855), and the f^2 value of 0.001 further confirmed the negligible impact; therefore, awareness alone is proved, in our research model, to be insufficient to drive the adoption of sustainable strategies, suggesting that mere knowledge or awareness of sustainable development principles does not automatically translate into action;

- **H2** – the direct effect of RR on ASS was also proved to be not significant ($\beta = 0.178$, p = 0.125), with a small effect size ($f^2 = 0.037$); that is, regulatory pressures, while important, are not the primary drivers of sustainable strategy adoption, hence, compliance with regulations needs to be second by other factors such as leadership commitment and organizational culture.

- **H3** – the direct effect of LOS on ASS was proved to be relevant ($\beta = 0.615$, p = 0.000), supported by a large effect size ($f^2 = 0.531$); namely, leadership commitment to sustainability is crucial for the successful adoption of sustainable strategies, thereon, leaders who prioritize and actively promote sustainability create an environment conducive to sustainable practices.

- **H4** – the direct effect of ASS on OP was significantly confirmed ($\beta = 0.762$, p = 0.000), with a large effect size ($f^2 = 1.387$); i.e. the business case for sustainability has once again been proven, demonstrating, therefore, that sustainable practices lead to operational efficiencies and improved performance outcomes.

- **H5** – the direct effect of ASS on OR was confirmed, but with some moderation, ($\beta = 0.337$, p = 0.002), with a medium effect size ($f^2 = 0.100$); to be more specific, sustainable practices contribute to a positive public image and stakeholder trust, but not as clear-cut as they do on the business performance.

- **H6** – the direct effect of OP on OR is also "moderately" approved, ($\beta = 0.435$, p = 0.000), with a medium effect size ($f^2 = 0.168$); namely, high organizational performance enhances reputation.

Table 46. Hypotheses Summary

No.	Hypotheses	Results
H1	There is a positive relationship between the Awareness Degree of Sustainable Development and the Adoption of Sustainable Strategies.	Not – Supported
H2	There is a positive relationship between Regulatory Requirements and the Adoption of Sustainable Strategies.	Not – Supported
H3	There is a positive relationship between Leadership Orientation Towards Sustainability and the Adoption of Sustainable Strategies.	Supported
H4	There is a positive relationship between the Adoption of Sustainable Strategies and the Organizational Performance.	Supported
H5	There is a positive relationship between the Adoption of Sustainable Strategies and the Organizational Reputation.	Supported
H6	There is a positive relationship between the Organizational Performance and the Organizational Reputation.	Supported

Source: Advanced by the candidate

However, it is safe to say that the results validate the proposed model, while bringing under the limelight the utmost important role of leadership in driving sustainability within organizations. The significant pathways from LOS to ASS, and ASS to OP and OR, support the theoretical framework that emphasizes leadership and strategic adoption as key to achieving sustainability goals. The analysis confirms discriminant validity for the constructs, ensuring that the constructs measure distinct aspects of sustainable development and strategy adoption. This outcome is all the more important given the all-encompassing nature of the sustainable phenomena.

Among the practical implications derived from this quantitative endeavour, the leadership focus is the most preeminent one: this research will build on the managerial body of literature that exposes the need for organizations, in general, and Romanian ones, in particular, to invest in developing and promoting sustainability-oriented leadership. Training programs and incentives for leaders who champion sustainability are much needed, as they can play a catalytical role in the adoption of sustainable practices.

Another practical implication would be that businesses should go the "extra mile" beyond awareness and conjugate some efforts into actionable initiatives and leadership support to translate awareness into practice. Moreover, the managerial approach to regulations should be consolidated, as regulatory norms are vital, but they should also be designed to support and incentivize leadership-driven initiatives rather than relying solely on compliance. In addition, performance and reputation, viewed as a "dual pack"

of benefits should make a compelling case for integrating sustainability into core business strategies.

In sum, the quantitative analysis highlights the pivotal role of leadership in driving sustainability, the significant performance benefits of adopting sustainable practices, and the resultant enhancement of organizational reputation. These insights provide a roadmap for organizations and policymakers aiming to foster sustainability in the business environment, endorsing the importance of leadership and strategic action in achieving sustainable development goals.

CONCLUSIONS, CONTRIBUTIONS AND FUTURE RESEARCH AVENUES

This volume aimed to elucidate the multifaceted relationships between *Awareness Degree of Sustainable Development* (ADSD), the *Adoption of Sustainable Strategies* (ASS), and their impacts *Organizational Performance* (OP) and *Organizational Reputation* (OR) in Romanian businesses. by integrating qualitative and quantitative methodologies and analyzing data through tools such as R Studio (Bibliometrix), AtlasTI, SPSS, and SmartPLS. By doing so, it was managed to elaborate and, subsequently, test a theoretical model connecting these constructs. Moreover, this publication also aimed to present a detailed profile of Romanian business managers' perspectives on sustainability.

The findings of this study confirm the previously acknowledged significance of sustainability in influencing various managerial strategies and organizational outcomes. The main contribution of this work is the subtle shades of meaning it provides regarding the factors that drive the adoption of sustainable strategies and their subsequent impact on performance and reputation. Specifically, the research identifies *Leadership Orientation towards Sustainability* (LOS) as a critical driver, alongside *Regulatory Requirements* (RR), in promoting sustainable practices within organizations.

This translates as follows: managers who exhibit strong leadership commitment to sustainability, coupled with a proactive approach to regulatory compliance, are likely to successfully implement sustainable strategies. These strategies, in turn, lead to improved organizational performance and enhanced reputation. Managers who are aware of sustainable development principles and integrate these into their economic, social, environmental, and cultural strategies can achieve long-term financial stability, operational efficiency, and stakeholder trust.

In view of the *theoretical implications*, one might argue that the findings of this research contribute to the understanding of sustainable development altogether within the context of organizational management. By employing a qualitative approach grounded in in-depth interviews with business managers, the study identified several key constructs that provide a deeper insight into how sustainability awareness influences managerial strategies. These constructs - *Awareness Degree of Sustainable Development* (ADSD), *Regulatory Requirements* (RR), *Propensity towards Culture-oriented*

*Managerial Strategie*s (PTCOMS), *Propensity towards Environment-oriented Managerial Strategies* (PTEOMS), *Propensity towards People-oriented Managerial Strategies* (PTPOMS), and *Propensity towards Profit-oriented Managerial Strategies* (PTPROMS) - offer a nuanced understanding of sustainability's role in shaping organizational practices.

Another dimension of the managerial mindset - their propensity towards adopting sustainability across profit, planet, culture, and people - has also been found, during our qualitative quest, to be crucial for organizational success. Managers who demonstrate a strong willingness to adopt sustainability in these areas tend to implement effective strategies that drive performance and reputation. The distinction between willingness (WAS) and actual adoption (ASS) is vital in understanding the full impact of sustainability on business outcomes, as captured in the content analysis.

The theoretical model developed from this research, which integrates these constructs, underscores the complexity and interrelated nature of sustainable business practices. It highlights how sustainability awareness drives not only economic, social, and environmental strategies but also cultural ones. This comprehensive framework advances the academic discourse on sustainability by illustrating the multifaceted ways in which sustainability awareness can influence various aspects of organizational strategy and performance.

What is more, the quantitative analysis provided empirical validation for the proposed theoretical model, particularly emphasizing the critical role of leadership in driving the adoption of sustainable practices. The significant pathways from *Leadership Orientation towards Sustainability* (LOS) to the *Adoption of Sustainable Strategies* (ASS), and subsequently to *Organizational Performance* (OP) and *Organizational Reputation* (OR), bring forth the pivotal influence of leadership. This empirical evidence supports the theoretical framework that prioritizes leadership and strategic adoption as essential components for achieving sustainability goals. The study thus contributes to a growing body of literature that emphasizes the importance of leadership in the context of sustainability, offering a robust theoretical basis for future research.

With relevance to the *practical implications* of the present research, they span over various conceptual areas of particular importance for organizations seeking to integrate sustainability into their core strategies. The findings suggest that while awareness of sustainable development is crucial, it alone is insufficient to drive the adoption of sustainable practices. Organizations must move beyond mere awareness and focus on actionable initiatives that translate sustainability principles into practical strategies.

In an alike manner, leadership emerges as a crucial factor in this process. According to the results of the empirical investigation presented in this publication, leadership qualities of managers who effectively drive sustainable practices include strong analytical skills, a comprehensive understanding of sustainability principles, and the ability to inspire and mobilize their teams towards shared sustainability goals. Managers who prioritize sustainability create a positive work environment that fosters innovation, efficiency, and ethical behaviour, ultimately leading to superior organizational performance and reputation.

Accordingly, the study highlights the need for businesses to invest in developing and promoting sustainability-oriented leadership. Training programs and incentives for leaders who prioritize sustainability can play a catalytic role in fostering a culture of sustainability within organizations. This finding aligns with the practical necessity for organizations to cultivate leaders who not only comply with regulatory requirements but also proactively champion sustainability initiatives.

For good measure, the study adds to the importance of designing regulatory frameworks that support and incentivize leadership-driven sustainability initiatives. Regulatory requirements are vital, but they should be complemented by policies that encourage innovative and proactive approaches to sustainability. This dual approach can enhance the effectiveness of sustainability efforts, ensuring that compliance is accompanied by genuine strategic commitment.

Moreover, the practical implications of adopting sustainable strategies are also evident in the findings. Sustainable practices contribute to operational efficiencies, cost reductions, and improved organizational performance. Furthermore, these practices enhance organizational reputation, building stakeholder trust and a positive public image. Organizations that integrate sustainability into their core strategies are likely to experience a dual advantage of enhanced performance and reputation, making a compelling case for the strategic importance of sustainability.

As respects the managerial implications of the present endeavor, it might be argued that the output of the theoretical model provides hands-on, clear-cut guidance for Romanian managers on how to drive sustainability within their organizations. The study emphasizes that leadership is key to the successful adoption of sustainable practices. Managers should prioritize sustainability in their strategic agendas and actively promote a culture that supports sustainable initiatives.

Withal, this involves not only ensuring compliance with regulatory requirements but also going beyond compliance to implement innovative and proactive sustainability strategies. Managers should focus on integrating sustainability into all aspects of their operations, from economic and social strategies to environmental and cultural ones. By doing so, they can foster a holistic approach to sustainability that enhances organizational performance and reputation.

Besides, managers should recognize the significant performance benefits of adopting sustainable practices. These benefits include improved operational efficiency, cost reductions, and long-term financial stability. By focusing on these aspects, managers can drive sustainable growth and competitive advantage for their organizations.

The study also highlights the importance of effective communication in building stakeholder trust and enhancing organizational reputation. Managers should ensure that sustainability efforts are communicated clearly and consistently to stakeholders, demonstrating the organization's commitment to ethical behavior and sustainable practices. This can enhance the public image of the organization and build a strong foundation of stakeholder trust.

On a different level, this study contributes to a better understanding of the profiles of Romanian business managers concerning sustainability. It reveals that there are managers who are highly knowledgeable about sustainable development and actively integrate these principles into their business strategies, achieving notable improvements in performance and reputation. Conversely, managers who lack a comprehensive understanding or commitment to sustainability face challenges in realizing these benefits.

On a closing note, it may be said that the present book offers a comprehensive insight into the theoretical, practical, and managerial aspects of sustainable development in organizational management. By emphasizing the critical role of leadership and the strategic integration of sustainability practices, the study offers a comprehensive roadmap for Romanian businesses aiming to achieve sustainable development goals. Altogether, the aforementioned findings and their implications portray the need for a strategic holistic approach to sustainability, integrating economic, social, environmental, and cultural dimensions to drive organizational success and build a positive reputation in the business environment.

Despite the comprehensive approach, the present study has several acknowledgeable limitations[2]. Firstly, one major limitation is the potential for a lack of generalizability of the findings across different types of cultures, organizations and industries. The study primarily focuses on Romanian businesses, which may limit the applicability of the results to other national or cultural contexts. This ties into Research Topic 1, *Integration of Sustainable Practices into Management Strategies*, specifically Research Questions 1.1 *How can innovative frameworks enhance the integration of sustainability into core business strategies?* and 1.2 *What role do leadership and culture play in this integration?*, which call for innovative frameworks that can enhance the integration of sustainability into core business strategies across various contexts. Future research could explore different industries and international settings to develop more universally applicable frameworks.

Secondly, another limitation is the cross-sectional nature of the data, which only provides a snapshot of the current state of sustainable practices within the studied organizations. Longitudinal studies (i.e. research designs that involve repeated observations of the same variables over extended periods of time) are necessary to understand the long-term impacts of sustainable strategy adoption on organizational performance and reputation. This aligns with Research Topic 2, *Longitudinal Studies on Sustainability Impacts*, particularly Research Questions 2.1 *What are the long-term impacts of sustainable strategy adoption on organizational performance and reputation?* and *2.2 How can longitudinal data help establish causal relationships between sustainability practices and outcomes?*, which seek to explore the long-term impacts and establish causal relationships between sustainability practices and outcomes. Naturally, future studies should employ longitudinal designs to track changes

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[2] All these limitations are comprised into a streamlined version in Table 47, available for consultation in Appendix 5.

and impacts over time, providing a more robust analysis of sustainability efforts, as showcased in Research Topic number 3, *Cross-Cultural and Transnational Comparative Analyses*, and underpinned by the Research Questions 3.1 *How do sustainable practices vary across different cultural and national contexts?* and 3.2 *What factors contribute to these variations?*, which both put forth the cross-cultural and longitudinal viewpoints and their subsequent added value.

Thirdly, the measurement of the *Willingness to Adopt Sustainability* (WAS) construct presents another limitation. While the qualitative insights provide a solid foundation, there is a need for more refined and validated quantitative measures. This is directly related to Research Topic 4, *Operationalizing the Willingness to Adopt Sustainability (WAS)*, especially Research Questions 4.1 *How can the WAS construct be accurately measured?* and 4.2 *What is the relationship between WAS and actual adoption (ASS)?*, which seek accurate measurement methods for the WAS construct. Future research should focus on developing and testing robust scales and metrics for WAS to enhance the reliability and validity of the findings.

In the fourth place, the present tome highlights the crucial role of leadership commitment but does not delve deeply into the specific mechanisms through which leadership drives sustainability. Understanding these mechanisms is vital for effectively fostering sustainability within organizations. This limitation is addressed by Research Topic 5, *Impact of Leadership Commitment on Sustainability Outcomes*, particularly Research Questions 5.1 *To what extent does leadership commitment influence the successful adoption of sustainable strategies?* and 5.2 *What are the specific mechanisms through which leadership drives sustainability?*, which aim to uncover the specific mechanisms of leadership influence. Future research should investigate the detailed processes and actions by which leaders can effectively promote and implement sustainable practices.

In the fifth place, the present research recognizes the importance of regulatory requirements but lacks a thorough examination of different regulatory frameworks and their effectiveness. This ties into Research Topic 6, *Role of Regulatory Frameworks in Promoting Sustainability*, namely Research Questions 6.1 *How do different regulatory frameworks impact the adoption of sustainable strategies?* and 6.2 *What are the best practices for regulatory approaches in promoting sustainability?*, which seek to understand the impact of various regulatory approaches on sustainability adoption. Future research should compare different regulatory environments to identify best practices and effective regulatory strategies for promoting sustainability.

Lastly, despite efforts to ensure objectivity, qualitative research inherently carries the risk of researcher bias in data interpretation and analysis. The use of software tools like AtlasTI helps mitigate this risk, but it cannot be entirely eliminated. Future studies should incorporate multiple coders and cross-validation techniques to enhance the reliability of qualitative findings. Based on the presented limitations and their assumed implications at both business and social levels, future research avenues might be tailored around the aforementioned proposed research avenues.

In summation, it is our firm belief that addressing these emergent research topics would yield benefits and commendable implications for academics, managers, employees, companies, and policymakers, altogether. In doing so, future studies can provide more comprehensive and actionable insights into sustainable business practices, ultimately contributing to a more sustainable and equitable global business environment.

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APPENDIX

Appendix 1 – Preliminary research framework: 1st research model version (literature review-informed[3])

The methodological conceptual framework will be presented in the following lines in the same format as it was during the data collection phase of the interviews. As a result, the presented conceptual theoretical model reflects a preliminary and transitory phase in our research, specifically designed for the qualitative data collection stage. The model presented in Figure 11 aimed to capture the relationships between Sustainable Development Awareness and various managerial dimensions that declined from the TBL conceptualization of managerial strategies, as well as their subsequent impact on Organizational Performance and Organizational Reputation, as delineated by the consulted body of literature.

[3] i.e. Prior to the qualitative data gathering.
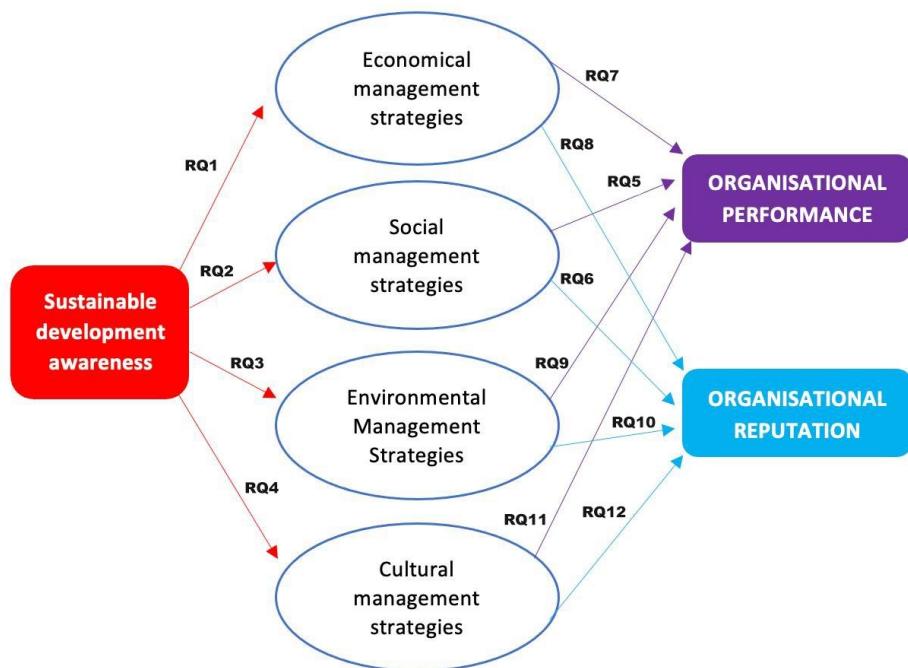
Figure 11. Preliminary Research Model
Source: Advanced by the candidate

As an outcome, the following table showcases the preliminary operationalization of the variables considered back in that particular stage of the present research:

Table 27. Preliminary Construct Matrix (I)

Variable	Operationalization	Definition	Indicators
1. Sustainable Development Awareness	The degree to which the manager is aware of the main aspects that build the sustainable paradigm.	"Essentially, it is the economic sustainability of the business, in the medium and long term, to maintain the economic profitability of its productive activities. For this, it is necessary to contemplate new concepts of risk and opportunity associated with the	1. Reducing environmental impact by purchasing and consuming high-quality, durable products. 2. Use of recyclable materials or products 3. Splitting waste 4. Do not mix hazardous waste

		triple bottom line aspects. Furthermore, it requires that the economic, environmental and social dimensions are integrated and interact in balance and are managed in an integrated manner" (KPMG, 2019). In other words, the ecosystem provides the factors of production that underpin economic growth: land, natural resources, labour and capital. Economic sustainability manages these resources, so they are not depleted and remain available for future generations (Beattie 2021).	with general waste.
2. Economic Management Strategies	Concrete business strategies applied that may fall under the sustainable development paradigm.	Economic sustainability is the use of different strategies to employ, safeguard and maintain human and material resources optimally, to create a responsible, beneficial and sustainable balance in the long term (Bascom, 2016). Moreover, as a business strategy, sustainability emerges as a new paradigm for the internal management	For a company to be economically sustainable, it must be profitable, but not at any cost: 1. Compliance, good governance and risk management. 2. Immediately stop using fossil fuels or chemical fertilizers. 3. Pay for or repair the damage done. 4. Unemployment rate 5. Poverty rate

		of organizations, presenting itself as a new option to the traditional growth and maximization model of profitability (Portoles de la Torre et al., 2009).	
3. Social Management Strategies	Concrete inclusive and equalitarian policies adopted in the decision-making process.	Figueroa López & García de la Torre (2018) highlight that the sustainable paradigm, from a strategic perspective, takes into account stakeholders so that managers take on the challenge of sustainability and achieve more significant competitive advantages and benefits in general. They argue that adopting corporate responsibility policies, improve corporate performance and brand positioning. Notwithstanding, it aims to ensure that economic activity improves the quality of life for all, not just a few (Barrios Vera, 2010).	1. Employee training policies. 2. Policies for work-life balance. 3. Women's participation 4. Strengthening of a development that does not perpetuate or deepen poverty and social exclusion, 5. Social justice and social participation in decision-making, so citizenship is a fundamental part of the development process. Cultural diversity *Monitoring the results obtained
4. Environmental Management Strategies	Concrete business strategies applied that take into account the environmental dimension.	Corporate environmental responsibility is essential to protect future generations and to achieve sustainable and equitable development for	1. Reduce water consumption Policies for efficient water use: 2. Reduce energy consumption * Policies for efficient use of resources

		humanity. However, current production and consumption patterns do not guarantee that future generations will have the same capacity as today to meet their needs (Gollier, 2016).	*Promote employee participation *Monitor results achieved
5. Cultural Management Strategies	Concrete business strategies applied that may fall under the sustainable development paradigm.	Only through the public promotion of a sustainable culture that reaches all levels (business, consumers and citizens) and a sound policy based on the long term, will it be possible to redirect the current problem towards a viable and lasting solution. Therefore, undermining the prevailing mindset is the first and most crucial step toward developing new forms of governance and operations. Altering the values and norms that govern the choices of every aspect of a company is the key (Doppelt, 2010).	1. Decent and stable workplaces 2. Access to health care 3. Incorporate ethical principles voluntarily, not by imposition of regulations. 4. Culture of responsible consumption
6. Organizational Performance	The concrete set of financial and non-financial indicators that are taken into account in addressing the organization's needs and objectives, that may fall under the sustainable	Organizational performance focuses on explaining how organizational performance can be improved, shaped and sustained to help firms improve their long-term profitability and	1. Relationships between HR practices and firm performance. 2. Effects of people management on operational performance measured in terms

	development paradigm.	survival (Bititci et al., 2012). It can also be defined as a set of both financial and non-financial indicators capable of assessing the extent to which organizational goals and objectives are being met (Kaplan and Norton, 1992). It refers to performance in achieving shareholder return, organizational effectiveness, financial performance, operations efficiency, customer satisfaction, corporate social responsibility and other outcomes beyond financial quantification (Richard et al., 2009).	of cost, quality, delivery, and flexibility. 3. Profitability. Establishing that both organizational commitment and HR practices are significantly related to operational performance measures. 4. ROA and ROE to measure the variation in performance caused by new management practices with the involvement of HR functions within the business and corporate strategy.
7. Organizational Reputation	Concrete intangible assets that are taken into account in addressing the organization's needs and objectives, that may fall under the sustainable development paradigm.	Corporate reputation is a driver of economic performance. Therefore, corporate reputation has become an essential field for academic research and the development of reputation management actions (Barnett, Jermier & Lafferty, 2006). There are empirical studies with approaches to	1. Delivery of high-quality products. 2. Fair treatment of employees 3. Good financial performance 4. Satisfaction to explain loyalty 5. Meeting expectations

		measuring corporate reputation, ranging from specific exploratory approaches that simply describe the construction of reputation (Walsh & Beatty 2007) to studies that incorporate more sophisticated models of corporate reputation into a broader nomological network. The latter regards corporate reputation as an intangible asset that interacts with antecedents and economic consequences related to the firm (Money & Hillebrand 2006). The increase in corporate reputation is due to new policies, which generates being prepared to face adverse situations that may arise due to profits obtained over a long period (Pérez, Espinoza & Peralta, 2016).	

Source: Advanced by the candidate

In addition, and in order to maintain transparency in our methodological pursuit, Table 28 presents a snapshot triggering back at that transitional point of the present research, setting out the way in which the variables, objectives, research questions, and their corresponding interview questions were conceived. Please keep in mind that they were crafted in consonance with the aforementioned research model.

Table 28. Preliminary Construct Matrix (II)

Variables	Objectives	Research Questions	Interview Questions
1. Sustainable development awareness	**O1:** To investigate the relationship between *sustainable development awareness* and *economical management strategies*, from the Romanian business managers' perspective.	**R.Q.1:** Is there a positive relationship between *sustainable development awareness* and *economical management strategies*?	Q1: Are you familiar with the sustainable development paradigm? What does it mean for you, in your specific area of business? Q2: How would you describe your experience with creating and implementing sustainability policies? What is the major challenge?
	O2: To investigate the relationship between *sustainable development awareness* and *social management strategies*, from the Romanian business managers' perspective.	**R.Q.2:** Is there a positive relationship between *sustainable development awareness* and *social management strategies*?	Q3: If you had to choose one area of sustainability to focus on, what would it be? Why?
	O3: To investigate the relationship between *sustainable development awareness* and *environmental management strategies*, from the Romanian business managers' perspective.	**R.Q.3:** Is there a positive relationship between *sustainable development awareness* and *environmental management strategies*?	Q4: Which is the primary input from financial/economic data to your business' sustainable strategy (if any)? Q5: Which is the primary input brought by social management strategies to your business' sustainable strategy (if any)?
	O4: To investigate the relationship between *sustainable development awareness* and *cultural management strategies*, from the Romanian business managers' perspective.	**R.Q.4:** Is there a positive relationship between *sustainable development awareness* and *cultural management strategies*?	Q6: Which is the primary input from environmental management strategies to your business' sustainable strategy (if any)? Q7: What is the primary input of cultural management strategies to your

			business' sustainable strategy (if any)?
2. Social management strategies	**O5:** To investigate the relationship between *social management strategies* and *organizational performance* from the Romanian business managers' perspective. **O6:** To investigate the relationship between *social management strategies* and *organizational reputation*, from the Romanian business managers' perspective.	**R.Q.5:** Is there a positive relationship between *social management strategies* and *organizational performance*? **R.Q.6:** Is there a positive relationship between *social management strategies* and *organizational reputation*?	Q8: When it comes to social management strategies, what are the things that you would say that can directly affect organizational performance? Q9: When it comes to social management strategies, what are the things that you would say that can directly affect the organizational reputation?
3. Economical management strategies	**O7:** To investigate the relationship between *economical management strategies* and *organizational performance*, from the Romanian business managers' perspective. **O8:** To investigate the relationship between *economical management strategies* and *organizational reputation*, from the Romanian business managers' perspective.	**R.Q.7:** Is there a positive relationship between *economical management strategies* and *organizational performance*. **R.Q.8:** Is there a positive relationship between *economical management strategies* and *organizational reputation*?	Q10: Whenever we talk about economic management strategies, what are the things that you would say that can directly affect organizational performance? Q11: Whenever we talk about economic management strategies, what are the things that you would say that can directly affect the organizational reputation?

4. Environmental management strategies	**O9:** To investigate the relationship between *environmental management strategies* and *organizational performance*, from the Romanian business managers' perspective. **O10:** To investigate the relationship between *environmental management strategies* and *organizational reputation*, from the Romanian business managers' perspective.	**R.Q.9:** Is there a positive relationship between *environmental management strategies* and *organizational performance*? **R.Q.10:** Is there a positive relationship between *environmental management strategies* and *organizational reputation*?	Q12: Regarding the environmental management strategies, what are the things that you would say that directly affect organizational performance? Q13: Regarding the environmental management strategies, what are the things that you would say that directly affect the organizational reputation?
5. Cultural management strategies	**O11:** To investigate the relationship between *cultural management strategies* and *organizational performance*, from the Romanian business managers' perspective. **O12:** To investigate the relationship between *cultural management strategies* and *organizational reputation*, from the Romanian business managers' perspective.	**R.Q.11:** Is there a positive relationship between *cultural management strategies* and *organizational performance*? **R.Q.12:** Is there a positive relationship between *cultural management strategies* and *organizational reputation*?	Q14: Do you think that cultural management strategies affect organizational reputation? How? Q15: Do you think that cultural management strategies affect organizational performance? How? Q16: How would you describe the organizational performance in your business sector, from a sustainable point of view? Q17: How would you describe the organizational reputation in your business sector, from a sustainable point of view?

Appendix 2
Refining the quantitative research framework: 2nd research model version
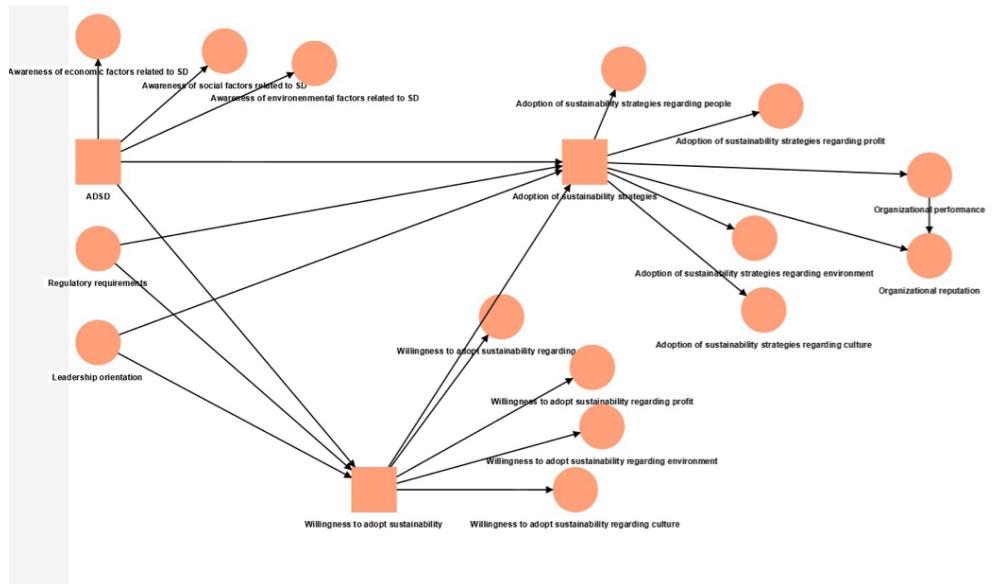
Figure 21. Preliminary Research Model (v.2.0)

Source: Advanced by the candidate

Figure 21 sketches the second version of the Higher-Order Model / Hierarchical Component Model (HCM) (Hair et al., 2022). Thereby, Table 35 presents the research objectives and research hypothesis formulated accordingly.

Table 35. Research Objectives and Hypotheses (v1.0)

Objective	Hypothesis
O1: To examine the extent to which the *Awareness Degree of Sustainable Development* influences the *Willingness to Adopt Sustainability* from the perspective of Romanian businesses.	**H1:** There is a positive relationship between the *Awareness Degree of Sustainable Development* and the *Willingness to Adopt Sustainability*.
O2: To assess the impact of *Regulatory Requirements* on the *Willingness to Adopt Sustainability* from the perspective of Romanian businesses.	**H2:** There is a positive relationship between *Regulatory Requirements* and the *Willingness to Adopt Sustainability*.

O3: To investigate the relationship between *Leadership Orientation Towards Sustainability* and the *Willingness to Adopt Sustainability* from the perspective of Romanian businesses.	**H3:** There is a positive relationship between *Leadership Orientation Towards Sustainability* and the *Willingness to Adopt Sustainability*.
O4: To determine the influence of the *Awareness Degree of Sustainable Development* on the *Adoption of Sustainable Strategies* from the perspective of Romanian businesses.	**H4:** There is a positive relationship between the *Awareness Degree of Sustainable Development* and the *Adoption of Sustainable Strategies*.
O5: To evaluate how *Regulatory Requirements* affect the *Adoption of Sustainable Strategies* from the perspective of Romanian businesses.	**H5:** There is a positive relationship between *Regulatory Requirements* and the *Adoption of Sustainable Strategies*.
O6: To analyze the effect of *Leadership Orientation Towards Sustainability* on the *Adoption of Sustainable Strategies* from the perspective of Romanian businesses.	**H6:** There is a positive relationship between *Leadership Orientation Towards Sustainability* and the *Adoption of Sustainable Strategies*.
O7: To ascertain the relationship between the *Willingness to Adopt Sustainability* and the *Adoption of Sustainable Strategies* from the perspective of Romanian businesses.	**H7:** There is a positive relationship between the *Willingness to Adopt Sustainability* and the *Adoption of Sustainable Strategies*.
O8: To explore the impact of the *Adoption of Sustainable Strategies* on the *Organizational Performance* from the perspective of Romanian businesses.	**H8:** There is a positive relationship between the *Adoption of Sustainable Strategies* and the *Organizational Performance*.
O9: To study the relationship between the *Adoption of Sustainable Strategies* and the *Organizational Reputation* from the perspective of Romanian businesses.	**H9:** There is a positive relationship between the *Adoption of Sustainable Strategies* and the *Organizational Reputation*.
O10: To investigate the relationship between the *Organizational Performance* and the *Organizational Reputation* from the perspective of Romanian businesses.	**H10:** There is a positive relationship between the *Organizational Performance* and the *Organizational Reputation*.

Source: Advanced by the candidate

In accordance with these objectives and hypotheses, the following constructs and indicators operationalization were designed, based on grounded theory findings and supported by literature review:

Table 36. Methodological matrix (v1.0)

Second Order Construct	Lower Order Construct	Sources	Questions
Awareness Degree of Sustainable Development (ADSD) *Formative construct*	**Awareness of economic factors related to Sustainable Development (ADSD-E)** *Reflective construct*	Adapted from (Ackay et al., 2018; Artvinli & Demir, 2018; Atmaca et al., 2019)	• *Sustainable Economic Policies* (ADSD-E-SEP) ADSD-E-SEP.1. In our company, I firmly believe that we should utilize our current economic resources by keeping the welfare of future generations in mind. ADSD-E-SEP.2. For me, it's critical that we shape our economic policies with the goal of sustainable production, to ensure the long-term viability of our business. ADSD-E-SEP.3. I consider it vital that our economic policies are structured in a way that prevents the degradation of our natural resources, safeguarding our environment.
			• *Economic Development Strategies* (ADSD-E-EDS) ADSD-E-EDS.1. I believe that when we take on debt for development, we need to keep our economic stability in mind. ADSD-E-EDS.2. I believe that our economic development plans should be strategically designed to prevent the occurrence of unemployment. ADSD-E-EDS.3. For me, focusing on non-production

			sectors is key when we aim for economic development.
			• *Consumer and Production Practices* (ADSD-E-CPP)
			ADSD-E-CPP.1. I think we should motivate customers to shop based on a balance of their desires and essential needs.
			ADSD-E-CPP.2. I believe our production focus should prioritize sustainable and long-term profitability methods.
			ADSD-E-CPP.3. For me, it's crucial to ensure environments that guarantee safety for both life and property when making economic investments in our company.
	Awareness of social factors related to Sustainable Development (ADSD-S) *Reflective construct*		• *Equal Opportunities and Access* (ADSD-S-EOA)
			ADSD-S-EOA.1. I uphold that we should provide equal opportunities to everyone in our society, regardless of gender, economic status, race, or religion.
			ADSD-S-EOA.2. For me, it's essential that access to education and health services is granted to all individuals in our society.
			ADSD-S-EOA.3. I believe in creating environments that encourage lifelong learning for everyone in our society.
			• *Energy and Resource Conservation* (ADSD-EN-ERC)
			ADSD-EN-ERC.1. I am convinced that we should prefer

	Awareness of environmental factors related to Sustainable Development (ADSD-EN) **Reflective construct**		energy-saving products to extend the lifespan of our energy sources. ADSD-EN-ERC.2. I believe we need to promote the use of renewable energy sources to create a more sustainable world for future generations. ADSD-EN-ERC.3. I think it's important that we strive to minimize our ecological footprint to maintain the world's liveability.
			• *Waste Management and Recycling* (ADSD-EN-WMR) ADSD-EN-WMR.1. I believe that each business has a role to play in recycling waste to ensure raw material resources are available for future generations. ADSD-EN-WMR.2. I believe that waste should be sorted according to its characteristics and reused to conserve raw material sources for future generations. ADSD-EN-WMR.3. In my view, preserving green areas while balancing urbanization and industrialization is essential.
	Regulatory Requirements (RR) **Reflective construct**	Adapted from (Abdel-Basset et al., 2019; Khurshid et al., 2021)	• *Strategic Planning Management* (RR-SPM) RR-SPM.1. I recognize that our company operates with clear short-term and long-term business plans. RR-SPM.2. I attest that our commitment to total quality and social responsibility is reflected in the formulation of our mission statement, policy, and strategy. RR-SPM.3. I acknowledge that our planning and policy-making processes consistently incorporate the needs of customers, capabilities of suppliers, and

			interests of other stakeholders, including the community.
			RR-SPM.4. I affirm that our mission statement has been effectively disseminated throughout the company and is embraced by our employees.
		Adapted from (Cao & Chen, 2018; Scholz et al., 2021)	• *Compliance Management Policy* (RR-CMP)
			RR-CMP.1. I am aware that pertinent laws, regulations, or rules set stringent pollutant discharge standards, such as concentration or total amount of pollutant discharge.
			RR-CMP.2. I acknowledge that relevant laws, regulations, or rules prescribe strict production technical standards.
			RR-CMP.3. I understand that for organizations failing to meet environmental standards, relevant laws, regulations, or rules impose stringent remediation timelines, or enforce stringent measures such as closure or cessation of production.
			RR-CMP.4. I recognize that the environmental protection department formulates detailed environmental plans in accordance with relevant laws, regulations, or rules.
	Leadership Orientation towards Sustainability (LOS) *Reflective construct*	Adapted from (Ordonez-Ponce & Khare, 2020; Tuan,	• *Proactiveness in Green Innovations* (LOS-PGI) LOS-PGI.1. Our organization strives to put a lot of focus on leading in green technology and innovations.

		2020, 2022)	LOS-PGI.2. Our organization has added many new green services in the past five years.
			LOS-PGI.3. There are often major changes in our organization's green services.
			LOS-PGI.4. Our organization often takes the lead in green initiatives, which are then followed by competitors.
			LOS-PGI.5. Our organization is usually the first to introduce new green services and technologies.
			• *Risk-taking for Green Objectives* (LOS-RGO) LOS-RGO.1. Our organization tends to take on high-risk projects if they have potential for green sustainability.
			LOS-RGO.2. To reach our green objectives, our organization needs to take bold and extensive steps due to the environmental conditions.
			LOS-RGO.3. In uncertain situations related to green decisions, our organization tends to make bold choices to achieve our sustainability goals.
Willingness to Adopt Sustainability (WAS) *Formative construct*	**Willingness to adopt sustainability regarding people (WAS-PE)** *Reflective construct*	Adapted from (Fahimnia et al., 2017; Abdel-Basset et al., 2019; Global Reporting Initiative, 2023)	• *Personnel Management Policies* (WAS-PE-PMP) WAS-PE-PMP.1. Our company strives to maintain a clear understanding and regular monitoring of new employee hires as well as employee turnover rates.
			WAS-PE-PMP.2. Our company aims that full-time employees should receive benefits that might

			not be provided to temporary or part-time employees.
			WAS-PE-PMP.3. In our company, managers are committed to support the importance of family responsibilities.
			WAS-PE-PMP.4. Our company is committed to ensure that family responsibilities are recognized.
			WAS-PE-PMP.5. For our company it's essential that we consistently identify hazards, assess risks, and investigate incidents in our workplace.
			WAS-PE-PMP.6. In our company, we support the need for all our workers to be covered by an occupational health and safety management system.
			WAS-PE-PMP.7. In our company, we are dedicated to allocate a significant number of hours each year to employee training and career development reviews.
			WAS-PE-PMP.8. In our company, we are committed to implementing programs that upgrade employee skills and provide transition assistance.
			WAS-PE-PMP.9. In our company, we endorse regular performance reviews.
			• *Supply Chain Responsibility* (WAS-PE-SCR) WAS-PE-SCR.1. In our company, we aim towards scrutinizing our operations and suppliers to eliminate any risk of forced or compulsory labour.
			WAS-PE-SCR.2. In our company, we aim towards our staff being well-trained in human rights policies and procedures.

			WAS-PE-SCR.3. In our company, we aim towards thoroughly screening new suppliers using social criteria.
			WAS-PE-SCR.4. In our company, we aim towards addressing any negative social impacts in our supply chain and taking necessary actions.
			• *Community Engagement* (WAS-PE-CE)
			WAS-PE-CE.1. In our company, we aim towards engaging with local communities, conducting impact assessments, and implementing development programs.
			WAS-PE-CE.2. In our company, we aim towards minimizing our operations' significant negative impacts on local communities.
			WAS-PE-CE.3. In our company, we aim towards upholding transparency and propriety in our political contributions.
			• *Customer Welfare* (WAS-PE-CW)
			WAS-PE-CW.1. In our company, we aim towards assessing the health and safety impacts of our product and service categories.
			WAS-PE-CW.2. In our company, we aim towards reducing incidents of non-compliance concerning the health and safety impacts of our products and services.
			WAS-PE-CW3. In our company, we aim towards upholding customer privacy and swiftly addressing any breaches and losses of customer data.

			WAS-PE-CW.4. In our company, we aim towards meeting all requirements for product and service information and labelling.
			WAS-PE-CW.5 In our company, we aim towards minimizing incidents of non-compliance concerning product and service information and labelling.
			WAS-PE-CW.6. In our company, we aim towards abiding by regulations in all our marketing communications to avoid incidents of non-compliance.
	Willingness to adopt sustainability regarding the environment (WAS-E) *Reflective construct*		• *Resource Management* (WAS-E-RM) WAS-E-RM.1. In our company, we pay attention to the volume and weight of materials used in our operations to ensure we minimize waste. WAS-E-RM.2. In our company, we believe in the importance of utilizing recycled materials in our business operations whenever feasible. WAS-E-RM.3. In our company, we aim towards utilizing sustainable products and packaging materials as part of our sustainable practices. WAS-E-RM.4. In our company, we strive towards tracking our organization's energy consumption in order to identify opportunities for energy conservation. WAS-E-RM.5. In our company, we strive towards monitoring the energy consumption outside our organization, ensuring that our business partners also uphold energy-efficient practices.

			WAS-E-RM.6. In our company, we strive towards lowering our energy intensity as part of our commitment to sustainability. WAS-E-RM.7. In our company, we strive towards reducing the energy requirements of our products and services to minimize our ecological footprint.
			• *Environmental Conservation* (WAS-E-EC) WAS-E-EC.1. In our company, we aim towards reducing our greenhouse gases (GHG) emissions. PTEOMS-EC.9. In our company, we aim towards implementing strategies to reduce our greenhouse gases (GHG) emissions. WAS-E-EC.2. In our company, we aim towards monitoring waste generation and address significant waste-related impacts. WAS-E-EC.3. In our company, we aim towards efficient management of significant waste-related impacts, aiming for waste reduction. WAS-E-EC.4. In our company, we aim towards recycling or reusing strategies. WAS-E-EC.5. In our company, we aim towards minimizing the operational waste disposal.
			• *Supply Chain Sustainability* (WAS-E-SCS) WAS-E-SCS.1. In our company, we aim towards screening new suppliers using environmental

			criteria to ensure they align with our sustainability values.
			WAS-E-SCS.2. In our company, we aim towards addressing any negative environmental impacts in our supply chain.
			WAS-E-SCS.3. In our company, we aim towards collaborating with suppliers to promote environmentally friendly practices and innovations in the supply chain.
Willingness to adopt sustainability regarding profit (WAS-P) *Reflective construct*			• *Economic Sustainability and Influence* (WAS-P-ESI) WAS-P-ESI.1. Our company believes that economic value generated and distributed by our organization must be transparent and equitable.
			WAS-P-ESI.2. Our company believes that the financial implications and other risks and opportunities due to climate change must be proactively addressed.
			WAS-P-ESI.3. Our company believes that our obligations concerning benefit plan and other retirement plans should be honoured.
			WAS-P-ESI.4. Our company believes that it is important to be transparent about any financial assistance received from the government.
			WAS-P-ESI.5. Our company considers that it is crucial to support infrastructure investments and services that bring long-term value to society.
			WAS-P-ESI.6. Our company believes that businesses are responsible for the significant

			indirect economic impacts on the wider society.
			• *Market Presence* (WAS-P-MP)
			WAS-P-MP.1. Our company strives towards offering standard entry level wages that respect the gender parity and are not below the local minimum wage.
			WAS-P-MP.2. Our company strives towards hiring senior management from the local community.
			WAS-P-MP.3. Our company strives towards spending on local suppliers as it stimulates local economic growth.
			• *Ethical Business Practices* (WAS-P-EBP)
			WAS-P-EBP.1. Our company believes that our operations must be regularly assessed for risks related to corruption.
			WAS-P-EBP.2. Our company stands for comprehensive communication and training about anti-corruption policies and procedures across our organization.
			WAS-P-EBP.3. Our company believes that any confirmed incidents of corruption should be promptly addressed, and the actions taken should be transparent.
			WAS-P-EBP.4. Our company believes that any legal actions for anti-competitive behaviour, anti-trust, and monopoly practices

			should be dealt with utmost seriousness.
			WAS-P-EBP.5. Our company believes that businesses should have a clear and responsible approach to tax.
			WAS-P-EBP.6. Our company believes tax governance, control, and risk management should be meticulously handled in our organization.
			WAS-P-EBP.7. Our company believes that stakeholder engagement and management of concerns related to tax should be a priority in our organization.
	Willingness to adopt sustainability regarding culture (WAS-C) **_Reflective construct_**		• *Diversity, Non-Discrimination, and Equal Opportunities* (WAS-C-DNDEO) WAS-C-DNDEO.1. Our company values diversity within our governance bodies and workforce. WAS-C-DNDEO.2. Our company stands for gender equality in pay. WAS-C-DNDEO.3. Our company believes that incidents of discrimination should be tackled appropriately.
		Adapted from (Wong et al., 2016; Tuan, 2020, 2022)	• *Green Creative Behaviour* (WAS-C-GCB) WAS-C-GCB.1. In our organization, we believe in advocating for novel methods to reach our business' environmental objectives. WAS-C-GCB.2. In our organization, the proposal of new green ideas to enhance environmental performance is essential.

			WAS-C-GCB.3. In our organization, we believe in promoting and championing new green ideas from others.
			WAS-C-GCB.4. In our organization, we stand for the development of comprehensive plans for implementing new green ideas in our organization.
			WAS-C-GCB.5. In our organization, we uphold reconsidering and refining new green initiatives.
			WAS-C-GCB.6. In our organization, we are committed to endorse inventive solutions to environmental issues.
Adoption of Sustainability Strategies (ASS) *Formative construct*	**Adoption of sustainability strategies regarding people (ASS-PE)** *Reflective construct*	Adapted from (Fahimnia et al., 2017; Abdel-Basset et al., 2019; Global Reporting Initiative, 2023)	• *Personnel Management Policies* (ASS-PE-PMP) ASS-PE-PMP.1. Our company maintains a clear understanding and regularly monitors new employee hires as well as employee turnover rates. ASS-PE-PMP.2. Our full-time employees receive benefits that might not be provided to temporary or part-time employees. ASS-PE-PMP.3. Our company's managers support the importance of family responsibilities. ASS-PE-PMP.4. Our company recognizes family responsibilities. ASS-PE-PMP.5. Our company consistently identifies hazards, assesses risks, and investigates incidents in our workplace. ASS-PE-PMP.6. All our workers are covered by an occupational

			health and safety management system. ASS-PE-PMP.7. Our company allocates a significant number of hours each year to employee training and career development reviews. ASS-PE-PMP.8. Our company implements programs that upgrade employee skills and provide transition assistance. ASS-PE-PMP.9. Our company conducts regular performance reviews.
			• *Supply Chain Responsibility* (ASS-PE-SCR) ASS-PE-SCR.1. Our company scrutinizes our operations and suppliers to eliminate any risk of forced or compulsory labour. ASS-PE-SCR.2. Our staff is well-trained in human rights policies and procedures. ASS-PE-SCR.3. Our company screens new suppliers using social criteria. ASS-PE-SCR.4. Our company addresses any negative social impacts in our supply chain and takes necessary actions.
			• *Community Engagement* (ASS-PE-CE) ASS-PE-CE.1. Our company engages with local communities, conducts impact assessments, and implements development programs. ASS-PE-CE.2. Our company minimizes our operations' significant negative impacts on local communities.

			ASS-PE-CE.3. Our company upholds transparency and propriety in our political contributions.
			• *Customer Welfare* (ASS-PE-CW)
			ASS-PE-CW.1. Our company assesses the health and safety impacts of our product and service categories.
			ASS-PE-CW.2. Our company reduces incidents of non-compliance concerning the health and safety impacts of our products and services.
			ASS-PE-CW.3. Our company upholds customer privacy and swiftly addresses any breaches and losses of customer data.
			ASS-PE-CW.4. Our company meets all requirements for product and service information and labelling.
			ASS-PE-CW.5. Our company minimizes incidents of non-compliance concerning product and service information and labelling.
			ASS-PE-CW.6. Our company abides by regulations in all our marketing communications to avoid incidents of non-compliance.
	Adoption of sustainability strategies regarding the environment (ASS-E) ***Reflective construct***		• *Resource Management* (ASS-E-RM) ASS-E-RM.1. Our company monitors the volume and weight of materials used in our operations to minimize waste. ASS-E-RM.2. Our company utilizes recycled materials in our business operations.

			ASS-E-RM.3. Our company uses sustainable products and packaging materials.
			ASS-E-RM.4. Our company tracks our organization's energy consumption.
			ASS-E-RM.5. Our company monitors the energy consumption outside our organization.
			ASS-E-RM.6. Our company lowers our energy intensity.
			ASS-E-RM.7. Our company reduces the energy requirements of our products and services.
			• *Environmental Conservation* (ASS-E-EC)
			ASS-E-EC.1. Our company reduces our greenhouse gases (GHG) emissions.
			ASS-E-EC.2. Our company monitors waste generation and addresses significant waste-related impacts.
			ASS-E-EC.3. Our company manages significant waste-related impacts and reduces waste.
			ASS-E-EC.4. Our company implements recycling or reusing strategies.
			ASS-E-EC.5. Our company minimizes operational waste disposal.
			• *Supply Chain Sustainability* (ASS-E-SCS)
			ASS-E-SCS.1. Our company screens new suppliers using environmental criteria.
			ASS-E-SCS.2. Our company takes appropriate actions to rectify any

			negative environmental impacts in our supply chain.
			ASS-E-SCS.3. Our company collaborates with suppliers to promote environmentally friendly practices and innovations.
	Adoption of sustainability strategies regarding profit (ASS-P) *Reflective construct*		• Economic Sustainability and Influence (ASS-P-ESI) ASS-P-ESI.1. Our company is transparent and equitable in the economic value we generate and distribute. ASS-P-ESI.2. Our company proactively addresses financial implications and other risks and opportunities due to climate change. ASS-P-ESI.3. Our company honours our obligations concerning benefit plan and other retirement plans. ASS-P-ESI.4. Our company is transparent about any financial assistance received from the government. ASS-P-ESI.5. Our company supports infrastructure investments and services that bring long-term value to society. ASS-P-ESI.6. Our company is responsible for the significant indirect economic impacts on the wider society.
			• *Market Presence* (ASS-P-MP) ASS-P-MP.1. Our company offers standard entry level wages that respect gender parity and are not below the local minimum wage.

			ASS-P-MP.2. Our company hires senior management from the local community.
			ASS-P-MP.3. Our company spends on local suppliers to stimulate local economic growth.
			• *Ethical Business Practices* (ASS-P-EBP)
			ASS-P-EBP.1. Our company regularly assesses risks related to corruption in our operations.
			ASS-P-EBP.2. Our company provides comprehensive communication and training about anti-corruption policies and procedures.
			ASS-P-EBP.3. Our company promptly addresses any confirmed incidents of corruption.
			ASS-P-EBP.4. Our company takes legal actions for anti-competitive behaviour, anti-trust, and monopoly practices seriously.
			ASS-P-EBP.5. Our company has a clear and responsible approach to tax.
			ASS-P-EBP.6. Our company meticulously handles tax governance, control, and risk management.
			ASS-P-EBP.7. Our company prioritizes stakeholder engagement and manages concerns related to tax.
	Adoption of sustainable startegies regarding culture (ASS-C) *Reflective construct*		• *Diversity, Non-Discrimination, and Equal Opportunities* (ASS-C-DNDEO) ASS-C-DNDEO.1. Our company implements diversity within our governance bodies and workforce.

			ASS-C-DNDEO.2. Our company ensures gender equality in pay. ASS-C-DNDEO.3. Our company tackles incidents of discrimination appropriately.
		Adapted from (Scholz et al., 2021; Tuan, 2020, 2022)	• *Green Creative Behaviour* (ASS-C-GCB) ASS-C-GCB.1. Our organization advocates for novel methods to reach our environmental objectives. ASS-C-GCB.2. Our organization promotes the proposal of new green ideas to enhance performance. ASS-C-GCB.3. Our organization promotes and champions new green ideas from others. ASS-C-GCB.4. Our organization develops plans for implementing new green ideas. ASS-C-GCB.5. Our organization reconsiders and refines new green initiatives. ASS-C-GCB.6. Our organization endorses inventive solutions to environmental issues.
	Organizational Performance (OP) ***Reflective construct***	Adapted from (Calik & Bardudeen, 2016; Scholtz et al., 2021)	• *Innovation Technology* (OP-IT) OP-IT.1. Our organization's sustainability performance is improved by green innovation in the production processes. OP-IT.2. Our organization's sustainability performance is reflected in reduced emissions of hazardous substances or waste. OP-IT.3. Our organization's sustainability performance is improved through effective waste management.

			OP-IT.4. Our organization's sustainability performance can be improved through increased spending on environmentally and socially beneficial process innovations.
			OP-IT.5. Our organization's sustainability performance is improved through development and commercialization of new sustainable products.
			OP-IT.7. Our organization's sustainability performance has improved through development of new products, which comply with environmental criteria and regulations.
			OP-IT.8. Our organization's sustainability performance has improved by the diminishing of product return and recall rates.
		Adapted from (Scholtz et al., 2021; Khurshid et al., 2021)	• *Process Management* (OP-PM) OP-PM.1. Our company strives to identify issues of quality and social responsibility related to our products and services. OP-PM.2. Our company aims to implement various inspections related to sustainable product and service design. OP-PM.3. Our company strives to gather stakeholders' feedback for continuous development. OP-PM.4. Our company strives to conduct audits of our current sustainability practices.
	Organizational Reputation (OR) ***Reflective construct***	Adapted from (Singh & Misra, 2021; Hongjun Cao, 2018)	• *Innovation Management* (OR-IM) OR-IM. 1. Relative to industry peers, I consider that our organization's level of fixed assets

			and technical equipment is elevated.
			OR-IM. 2. Compared to industry counterparts, I believe that the quality of our human resources, particularly in scientific research, typically ensures the high-quality completion of innovative projects.
			OR-IM. 3. I acknowledge that our organization's investment in scientific research is at a forefront within our industry.
			OR-IM. 4. I believe that our organization's number of patent applications is among the top in our industry.
			OR-IM. 5. I uphold that our organization's financial resources are superior compared to other enterprises in the same industry.
			OR-IM. 6. I affirm that the level of technology our organization possesses outpaces that of other enterprises within our industry.
			OR-IM. 7. I believe that our enterprise's fixed assets and technical equipment surpass those of other organizations in the same sector.
			OR-IM. 8. I believe that the quality of our human resources, specifically in terms of scientific research capabilities, is high and often leads to the successful completion of innovative projects, distinguishing us from other enterprises in the industry.
		Adapted from (Singh & Misra, 2021; Khurshid et al., 2021)	• *Customer Relationship Management* (OR-CRM) OR-CRM.1. I uphold the principle that quality-related customer complaints are handled with utmost priority.

			OR-CRM.2. I advocate for maintaining good customer communication, as evidenced by our developed programs. OR-CRM.3. I affirm that we provide high-quality products/services to our customers at competitive prices. OR-CRM.4. I confirm that our company has a policy/management system in place for customer care, health, and safety.

Source: Advanced by the candidate

Appendix 3
The interview guide

INVITATION TO PARTICIPATE IN A PhD RESEARCH PROJECT ON SUSTAINABLE MANAGEMENT STRATEGIES

Dear Mr. / Mrs.,

I am Victor-Emanuel Ciuciuc, PhD student in Management at SNSPA (National University of Political Studies and Public Administration), Bucharest, Romania. I am currently carrying out a study that aims to get an overview of Romanian managers' perceptions regarding sustainable management strategies at all business levels. In this way, we can better understand the main challenges and opportunities a Romanian business manager has when adopting a sustainable paradigm. Nevertheless, there are some aspects that I would like to mention:

- **Purpose** – this study aims at collecting the perceptions of professionals in the business field regarding sustainable management strategies and their impact on their everyday lives.
- **Confidentiality** - any information collected during the course of the study will be held as confidential, and access will be restricted to people conducting the study (my PhD coordinator, Full Professor PhD Florina Pînzaru, and myself included). Your name and the one of your company will not be disclosed, nor will details of your answers be given to anyone.
- **The results of the research study** – the study's overall findings will be part of my PhD thesis; however, they may also form part of various scientific articles or might be presented both national and international at scientific conferences. Nonetheless, these will not mention you in any way. If you would like to receive information about the results of the study, please let me know, and I will forward a summary of the findings to you at the end of the study.
- **Data gathering** - If you give consent to be part of the research study, please let me know when you could be available for a 30-minute meeting or send your written responses, as detailed as possible, by email at victor.ciuciuc@facultateademanagement.ro, no later than the 30th of August, 2022.

If you have any questions about the research, please contact me by phone at +40724.369.836 or by email at victor.ciuciuc@facultateademanagement.ro .

Thank you for your support!

Victor-Emanuel Ciuciuc

Multidisciplinary Doctoral School of the National University of Political Studies and Public Administration (SNSPA)
Expozitiei Ave., no. 30A, district 1, Bucharest

Structured Interview

1.   Introduction

1.1   Presentation of the manager: name, firm, position, and previous & actual experience.
1.2   Manager's previous experience in sustainable-related projects (please give details).

2.   Generic aspects

2.1.   Are you familiar with the sustainable development paradigm? What does it mean for you, in your specific area of business?
2.2.   How would you describe your experience with creating and implementing sustainability policies? What is the major challenge?
2.3.   If you had to choose one area of sustainability to focus on, what would it be? Why?

3.   Sustainable development awareness

3.1.   Which is the primary input from financial/economic data to your business' sustainable strategy (if any)?
3.2.   Which is the primary input brought by social management strategies to your business' sustainable strategy (if any)?
3.3.   Which is the primary input from environmental management strategies to your business' sustainable strategy (if any)?
3.4.   What is the primary input of cultural management strategies to your business' sustainable strategy (if any)?

4.   Social management strategies

4.1. When it comes to social management strategies, what are the things that you would say can directly affect organizational performance?

4.2. When it comes to social management strategies, what are the things that you would say can directly affect the organizational reputation?

5.   Economical management strategies

5.1   When we talk about economic management strategies, what are the things you would say can directly affect organizational performance?

5.2   When we talk about economic management strategies, what are the things you would say can directly affect the organizational reputation?

6.   Environmental management strategies

6.1.   Regarding the environmental management strategies, what are the things that you would say directly affect organizational performance?
6.2.   Regarding the environmental management strategies, what are the things that you would say directly affect the organizational reputation?

7.   Cultural management strategies

7.1.   Do you think that cultural management strategies affect organizational reputation? How?
7.2.   Do you think that cultural management strategies affect organizational performance? How?
7.3.   How would you describe the organizational performance in your business sector, from a sustainable point of view?
7.4.   How would you describe the organizational reputation in your business sector, from a sustainable point of view?

Appendix 4 – Visual data representation using SPSS pie charts
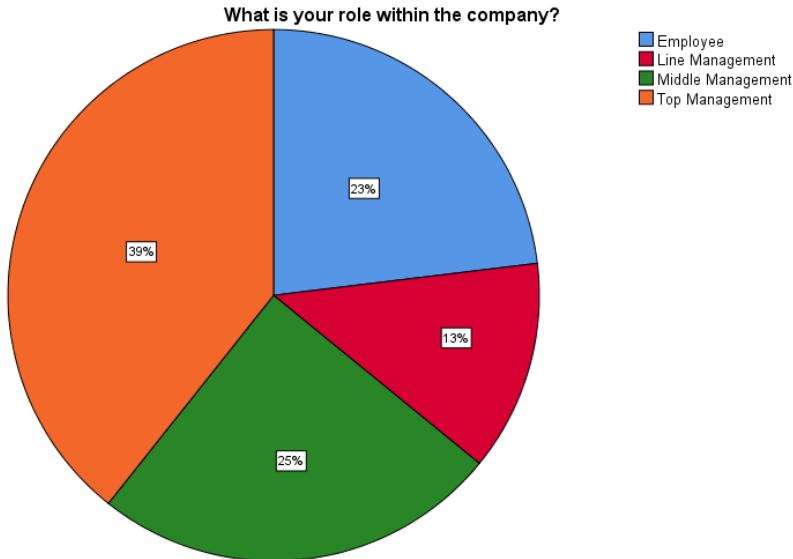
Figure 22. Respondents' role within the company
Source: Advanced by the candidate
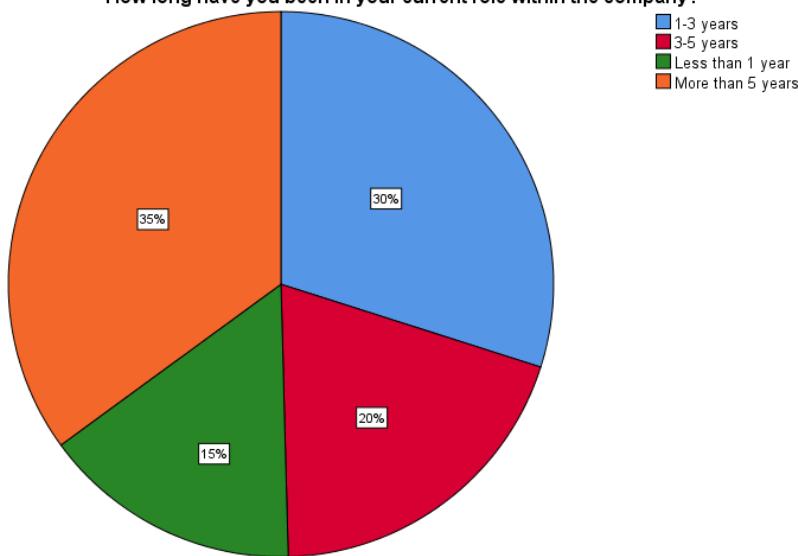
Figure 23. Respondents' work experience within the company
Source: Advanced by the candidate

How many employees are there in your company?
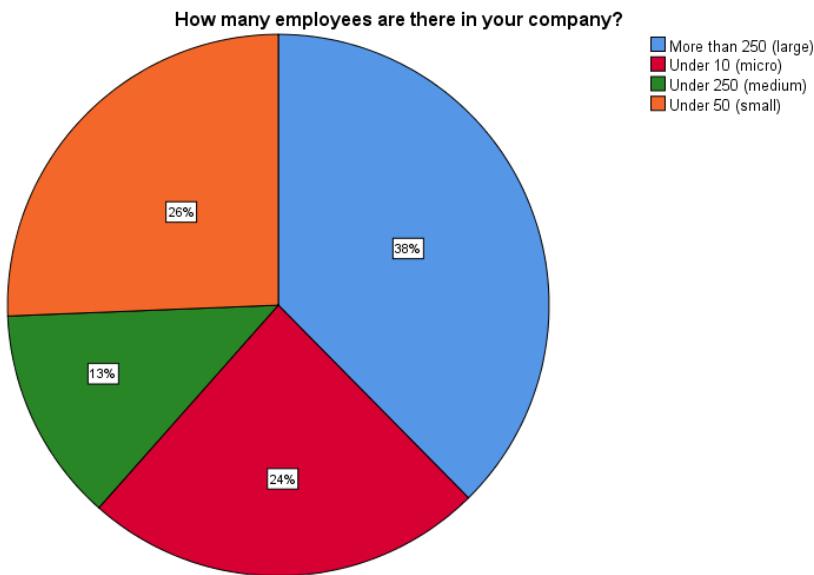
Figure 24. Respondents' company types
Source: Advanced by the candidate

What is the approximate annual turnover of your company?
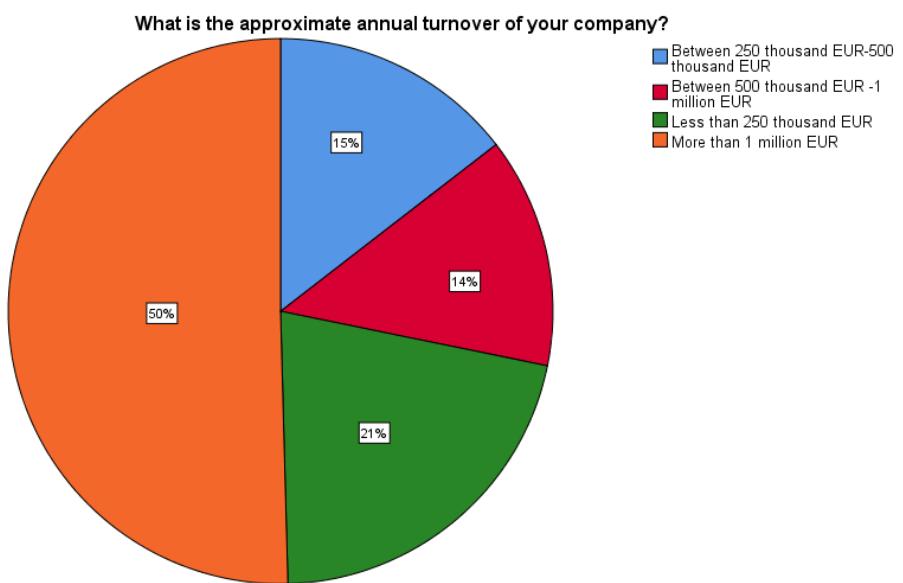
Figure 25. Respondents' company annual turnover
Source: Advanced by the candidate

In terms of ownership, would you classify your company as a Romanian business or a foreign-owned subsidiary operating in Romania?
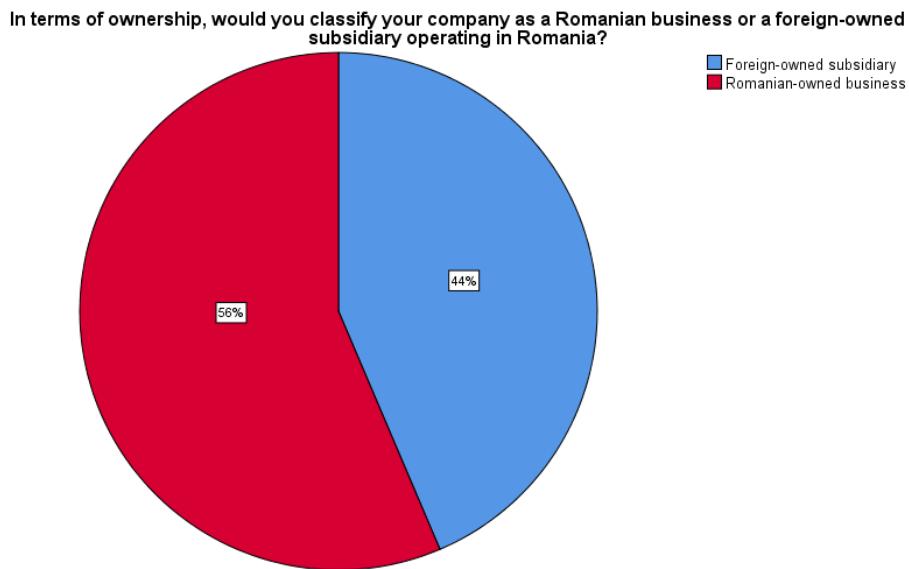
Figure 26. Respondents' company ownership
Source: Advanced by the candidate

Which sector does your company operate in?
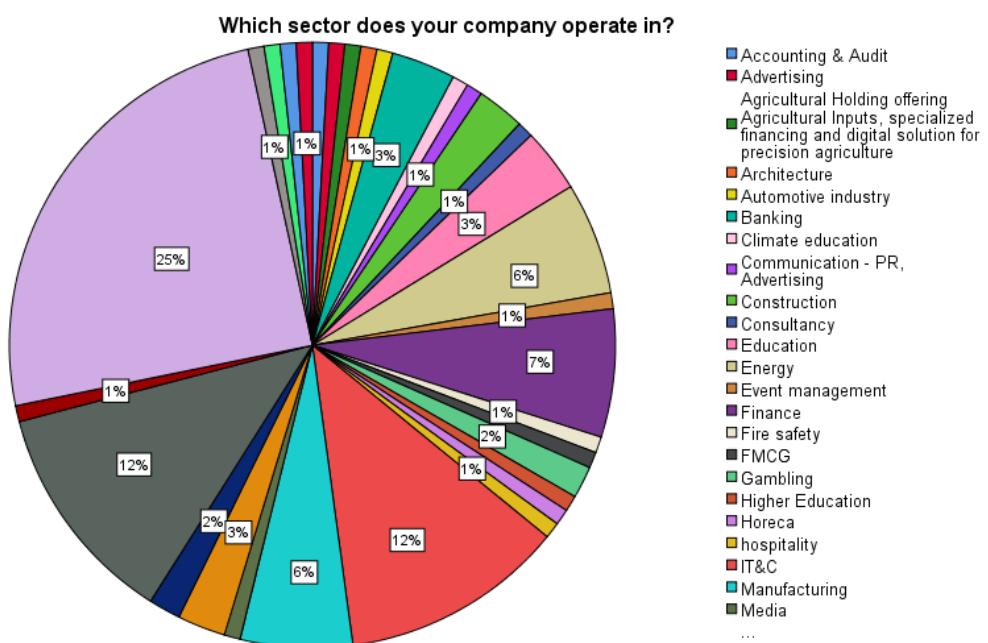
Figure 27. Respondents' companies' operating markets
Source: Advanced by the candidate

Is your company mainly operating in the local market or does it have international operations?
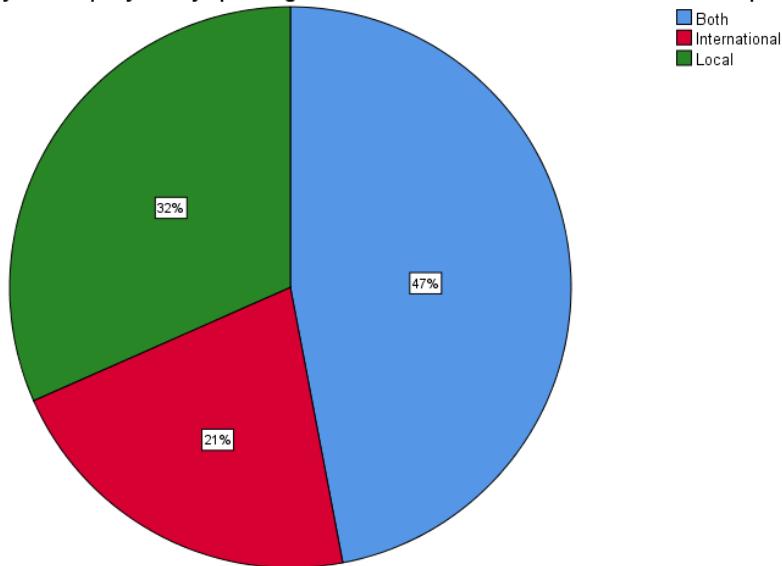
Figure 28. Respondents' companies' level of internationalization
Source: Advanced by the candidate

Does your company have a dedicated CSR/Sustainability structure?
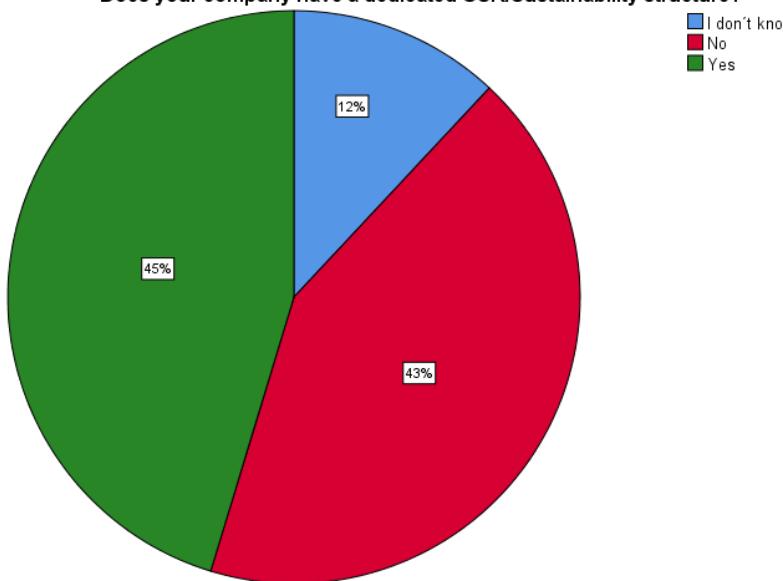
Figure 29. Respondents' companies' CSR/Sustainable-oriented structure
Source: Advanced by the candidate

Is there a dedicated senior executive (VP/CSO/Director) in charge of sustainability issues in your company?
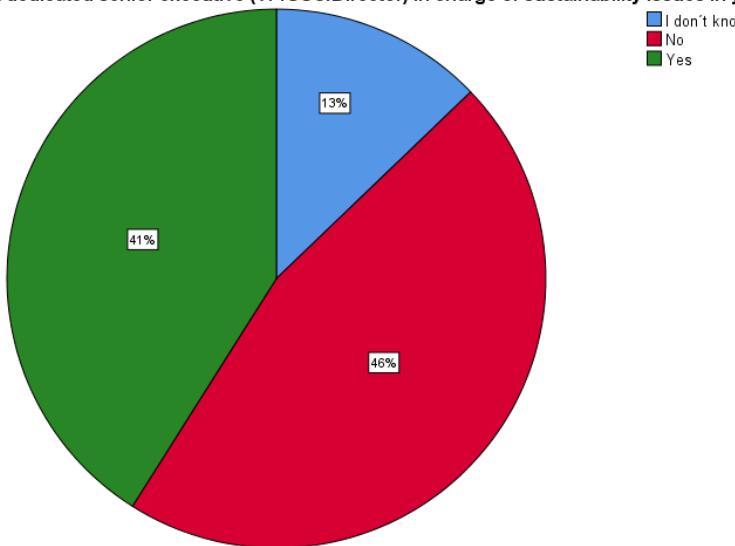
Figure 30. Respondents' companies' CSR/Sustainable-oriented position
Source: Advanced by the candidate

Does your company have clear sustainability-oriented policies in place?
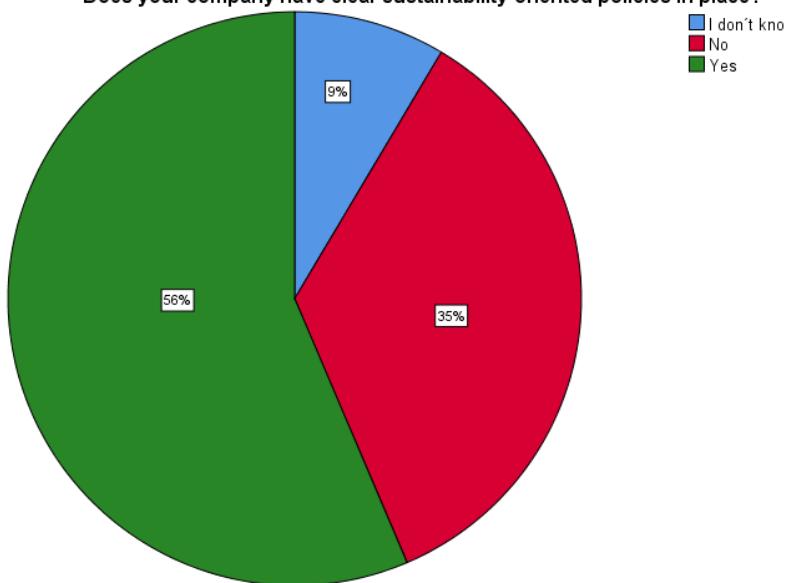
Figure 31. Respondents' companies' CSR/Sustainable active policies
Source: Advanced by the candidate

Does your company actively aim to lead in sustainability within your industry?

I don´t kno
No
Yes

13%

56%

32%
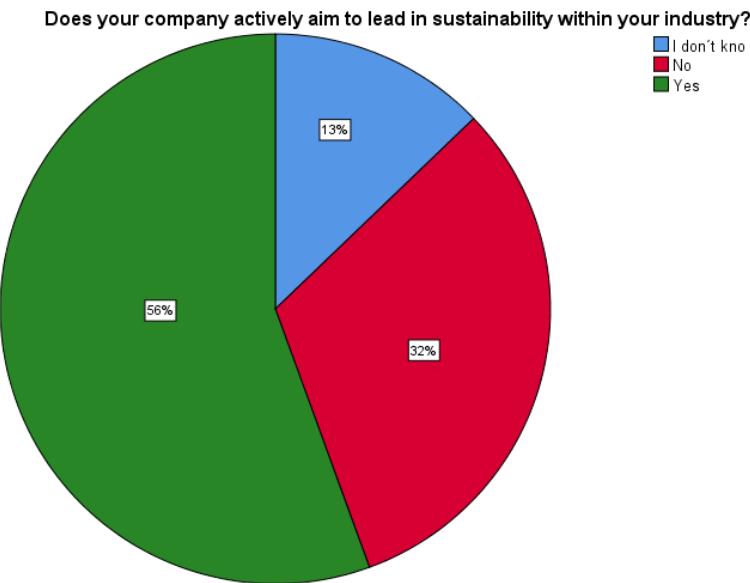
Figure 32. Respondent's awareness of company's aim for sustainability leadership
Source: Advanced by the candidate

Is sustainability part of your job description?

No
Yes

38%

62%
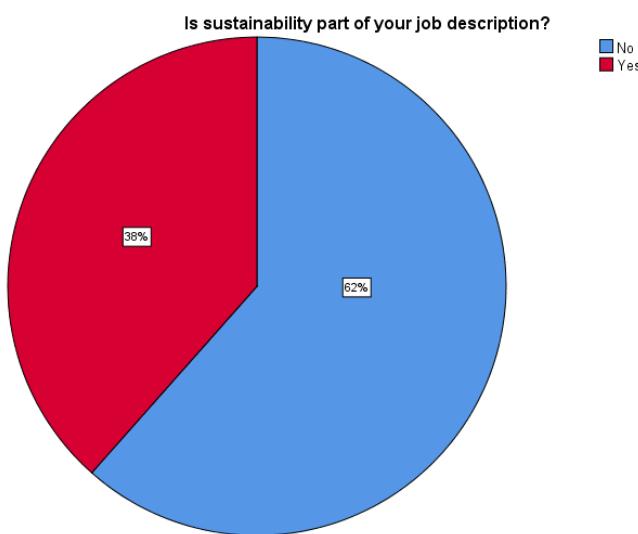
Figure 33. Sustainable actions included in respondents' job descriptions
Source: Advanced by the candidate

Do you deal with sustainability issues in your day-to-day work?
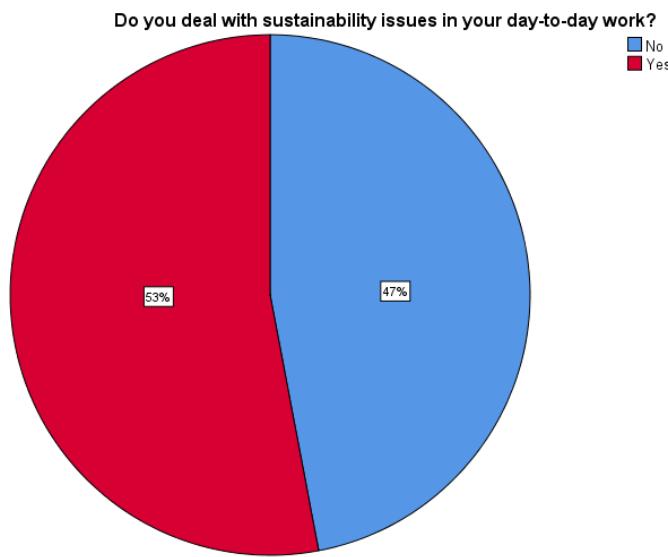
Figure 34. Sustainable actions included in respondents' daily work
Source: Advanced by the candidate

Appendix 5 – Future research agenda

Table 47. Future Research Agenda

Research Topics	Future Research Questions
1. Integration of Sustainable Practices into Management Strategies	1.1 How can innovative frameworks enhance the integration of sustainability into core business strategies? 1.2 What role do leadership and culture play in this integration?
2. Longitudinal Studies on Sustainability Impacts	2.1 What are the long-term impacts of sustainable strategy adoption on organizational performance and reputation? 2.2 How can longitudinal data help establish causal relationships between sustainability practices and outcomes?
3. Cross-Cultural and Transnational Comparative Analyses	3.1 How do sustainable practices vary across different cultural and national contexts? 3.2 What factors contribute to these variations?
4. Operationalizing the Willingness to Adopt Sustainability (WAS)	4.1 How can the WAS construct be accurately measured? 4.2 What is the relationship between WAS and actual adoption (ASS)?
5. Impact of Leadership Commitment on Sustainability Outcomes	5.1 To what extent does leadership commitment influence the successful adoption of sustainable strategies? 5.2 What are the specific mechanisms through which leadership drives sustainability?
6. Role of Regulatory Frameworks in Promoting Sustainability	6.1 How do different regulatory frameworks impact the adoption of sustainable strategies? 6.2 What are the best practices for regulatory approaches in promoting sustainability?

Source: Advanced by the candidate

Appendix 6 – The survey

Assessing Sustainable Development in Romanian Businesses

emanuelciuciuc@gmail.com Cambiar de cuenta

No compartido

* Indica que la pregunta es obligatoria

Business Overview and Sustainability Engagement Profile

This section gathers basic information about your company and your role in it, providing a foundational understanding of the business's size, industry, and sustainability engagement. It helps contextualize your responses within the broader scope of your company's operations and sustainability efforts.

BO.1. What is your role within the company? *

○ Top Management

○ Middle Management

○ Line Management

○ Employee

BO.2. How long have you been in your current role within the company? *

○ Less than 1 year

○ 1-3 years

○ 3-5 years

○ More than 5 years

BO.3. How many employees are there in your company? *

○ Under 10 (micro)

○ Under 50 (small)

○ Under 250 (medium)

○ More than 250 (large)

BO.4. What is the approximate annual turnover of your company? *

○ Less than 250 thousand EUR

○ Between 250 thousand EUR-500 thousand EUR

○ Between 500 thousand EUR -1 million EUR

○ More than 1 million EUR

BO.5. In terms of ownership, would you classify your company as a Romanian *
business or a foreign-owned subsidiary operating in Romania?

○ Romanian-owned business

○ Foreign-owned subsidiary

BO.6. Which sector does your company operate in? *

○ Energy

○ Manufacturing

○ Services

○ Retail

○ Finance

○ IT&C

○ Banking

○ Oil & Gas

○ Otro: _____

BO.7. Is your company mainly operating in the local market or does it have international operations? *

○ Local

○ International

○ Both

BO.8. Does your company have a dedicated CSR/Sustainability structure? *

○ Yes

○ No

○ I don´t know

BO.9. Is there a dedicated senior executive (VP/CSO/Director) in charge of sustainability issues in your company? *

○ Yes

○ No

○ I don´t know

BO.10. Does your company have clear sustainability-oriented policies in place? *

○ Yes

○ No

○ I don´t know

BO.11. Is there ongoing R&D in your company to improve sustainability and/or   *
impose new sustainability standards in your field?

○ Yes

○ No

○ I don´t know

BO.12. Does your company actively aim to lead in sustainability within your   *
industry?

○ Yes

○ No

○ I don´t know

BO.13. Is sustainability part of your job description? *

○ Yes

○ No

BO.14. Do you deal with sustainability issues in your day-to-day work? *

○ Yes

○ No

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Awareness Degree of Sustainable Development

This section explores how your company understands the economic, social, and environmental aspects of sustainable development. Your responses will help assess the level of awareness within your company and its potential influence on sustainability practices.

Please indicate the extent to which you agree with the following statements by marking on a scale from 1 to 5, where 1 represents 'Strongly Disagree' and 5 represents 'Strongly Agree'. Your responses will help evaluate the company's awareness of sustainable development.

ADSD.1. In our company, I firmly believe that we should utilize our current economic resources by keeping the welfare of future generations in mind. *

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

ADSD.2. For me, it's critical that we shape our economic policies with the goal of sustainable production, to ensure the long-term viability of our business. *

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

ADSD.3. I consider it vital that our economic policies are structured in a way that prevents the degradation of our natural resources, safeguarding our environment. *

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

ADSD.4. I believe that when we take on debt for development, we need to keep *
our economic stability in mind.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

ADSD.5. I believe that our economic development plans should be strategically *
designed to prevent the occurrence of unemployment.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

ADSD.6. For me, focusing on non-production sectors is key when we aim for *
economic development.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

ADSD.7. I think we should motivate customers to shop based on a balance of *
their desires and essential needs.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

ADSD.8. I believe our production focus should prioritize sustainable and long-term *
profitability methods.

	1	2	3	4	5

ADSD.9. For me, it's crucial to ensure environments that guarantee safety for both *
life and property when making economic investments in our company.

	1	2	3	4	5	
Strongly Disagree	O	O	O	O	O	Strongly Agree

ADSD.10. I uphold that we should provide equal opportunities to everyone in our *
society, regardless of gender, economic status, race, or religion.

	1	2	3	4	5	
Strongly Disagree	O	O	O	O	O	Strongly Agree

ADSD.11. For me, it's essential that access to education and health services is *
granted to all individuals in our society.

	1	2	3	4	5	
Strongly Disagree	O	O	O	O	O	Strongly Agree

ADSD.12. I believe in creating environments that encourage lifelong learning for *
everyone in our society.

	1	2	3	4	5	
Strongly Disagree	O	O	O	O	O	Strongly Agree

ADSD.13. I am convinced that we should prefer energy-saving products to extend *
the lifespan of our energy sources.

	1	2	3	4	5

ADSD.14. I believe we need to promote the use of renewable energy sources to   *
create a more sustainable world for future generations.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

ADSD.15. I think it's important that we strive to minimize our ecological footprint   *
to maintain the world's liveability.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

ADSD.16. I believe that each business has a role to play in recycling waste to   *
ensure raw material resources are available for future generations.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

ADSD.16. I believe that waste should be sorted according to its characteristics   *
and reused to conserve raw material sources for future generations.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

ADSD.17. In my view, preserving green areas while balancing urbanization and   *
industrialization is essential.

	1	2	3	4	5

ADSD.18. I recognize that our company operates with clear short-term and long-   *
term business plans.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

ADSD.19. I attest that our commitment to total quality and social responsibility is   *
reflected in the formulation of our mission statement, policy, and strategy.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

ADSD.20. I acknowledge that our planning and policy-making processes   *
consistently incorporate the needs of customers, capabilities of suppliers, and
interests of other stakeholders, including the community.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

ADSD.21. I affirm that our mission statement has been effectively disseminated   *
throughout the company and is embraced by our employees.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

ADSD.22. I am aware that pertinent laws, regulations, or rules set stringent   *
pollutant discharge standards, such as concentration or total amount of pollutant
discharge.

	1	2	3	4	5	
Strongly Disagree	O	O	O	O	O	Strongly Agree

ADSD.23. I acknowledge that relevant laws, regulations, or rules prescribe strict   *
production technical standards.

	1	2	3	4	5	
Strongly Disagree	O	O	O	O	O	Strongly Agree

ADSD.24. I understand that for organizations failing to meet environmental   *
standards, relevant laws, regulations, or rules impose stringent remediation
timelines, or enforce stringent measures such as closure or cessation of
production.

	1	2	3	4	5	
Strongly Disagree	O	O	O	O	O	Strongly Agree

ADSD.25. I recognize that the environmental protection department formulates   *
detailed environmental plans in accordance with relevant laws, regulations, or
rules.

	1	2	3	4	5	
Strongly Disagree	O	O	O	O	O	Strongly Agree

ADSD.26. Our organization strives to put a lot of focus on leading in green technology and innovations. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

ADSD.27. Our organization has added many new green services in the past five years. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

ADSD.28. There are often major changes in our organization's green services. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

ADSD.29. Our organization often takes the lead in green initiatives, which are then followed by competitors. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

ADSD.30. Our organization is usually the first to introduce new green services and technologies. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

ADSD.31. Our organization tends to take on high-risk projects if they have   *
potential for green sustainability.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

ADSD.32. To reach our green objectives, our organization needs to take bold and   *
extensive steps due to the environmental conditions.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

ADSD.33. In uncertain situations related to green decisions, our organization   *
tends to make bold choices to achieve our sustainability goals.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

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Adoption of Sustainable Strategies

In this section, we focus on the actual implementation of sustainability strategies within your business. Unlike the willingness to adopt, which is about the intent, this construct is about the **actions** taken and the **tangible strategies** your company has put into practice.

Please rate the degree to which each of the following practices is institutionalized in your company, using a scale from 1 to 5, where 1 means 'Not Institutionalized' and 5 means 'Fully Institutionalized'.

ASS.1.   Our company maintains a clear understanding and regularly monitors   *
new employee hires as well as employee turnover rates.

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.2.   Our full-time employees receive benefits that might not be provided to   *
temporary or part-time employees.

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.3.   Our company's managers support the importance of family   *
responsibilities.

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.5. Our company consistently identifies hazards, assesses risks, and *
investigates incidents in our workplace.

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.6. All our workers are covered by an occupational health and safety *
management system.

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.7. Our company allocates a significant number of hours each year to *
employee training and career development reviews.

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.8. Our company implements programs that upgrade employee skills and *
provide transition assistance.

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.9. Our company conducts regular performance reviews. *

	1	2	3	4	5	
	○	○	○	○	○	

ASS.10.   Our company scrutinizes our operations and suppliers to eliminate any *
risk of forced or compulsory labour.

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.11.   Our staff is well-trained in human rights policies and procedures. *

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.12.   Our company screens new suppliers using social criteria. *

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.13.   Our company engages with local communities, conducts impact   *
assessments, and implements development programs.

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.14.   Our company minimizes our operations' significant negative impacts on *
local communities.

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.15.   Our company upholds transparency and propriety in our political   *
contributions.

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.16.   Our company assesses the health and safety impacts of our product   *
and service categories.

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.17.   Our company reduces incidents of non-compliance concerning the   *
health and safety impacts of our products and services.

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.18.   Our company upholds customer privacy and swiftly addresses any   *
breaches and losses of customer data.

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.19.   Our company meets all requirements for product and service   *
information and labelling.

	1	2	3	4	5

ASS.20.   Our company minimizes incidents of non-compliance concerning   *
product and service information and labelling.

                            1   2   3   4   5

Not Institutionalized   O   O   O   O   O   Fully Institutionalized

ASS.21.   Our company abides by regulations in all our marketing   *
communications to avoid incidents of non-compliance.

                            1   2   3   4   5

Not Institutionalized   O   O   O   O   O   Fully Institutionalized

ASS.22.   Our company monitors the volume and weight of materials used in our *
operations to minimize waste.

                            1   2   3   4   5

Not Institutionalized   O   O   O   O   O   Fully Institutionalized

ASS.23.   Our company utilizes recycled materials in our business operations. *

                            1   2   3   4   5

Not Institutionalized   O   O   O   O   O   Fully Institutionalized

ASS.24.   Our company uses sustainable products and packaging materials. *

                            1   2   3   4   5

Not Institutionalized   O   O   O   O   O   Fully Institutionalized

ASS.25. Our company tracks our organization's energy consumption. *

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.26. Our company monitors the energy consumption outside our organization. *

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.27. Our company lowers our energy intensity. *

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.28. Our company reduces the energy requirements of our products and services. *

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.29. Our company reduces our greenhouse gases (GHG) emissions. *

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.30.   Our company monitors waste generation and addresses significant   *
waste-related impacts.

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.31.   Our company manages significant waste-related impacts and reduces   *
waste.

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.32.   Our company implements recycling or reusing strategies. *

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.33.   Our company minimizes operational waste disposal. *

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.34.   Our company screens new suppliers using environmental criteria. *

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.35.   Our company takes appropriate actions to rectify any negative   *
environmental impacts in our supply chain.

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.36.   Our company collaborates with suppliers to promote environmentally   *
friendly practices and innovations.

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.37.   Our company is transparent and equitable in the economic value we   *
generate and distribute.

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.38.   Our company proactively addresses financial implications and other   *
risks and opportunities due to climate change.

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.39.   Our company honours our obligations concerning benefit plan and   *
other retirement plans.

	1	2	3	4	5

ASS.40.   Our company is transparent about any financial assistance received   *
from the government.

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.41.   Our company supports infrastructure investments and services that   *
bring long-term value to society.

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.42.   Our company is responsible for the significant indirect economic   *
impacts on the wider society.

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.43.   Our company offers standard entry level wages that respect gender   *
parity and are not below the local minimum wage.

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.44.   Our company hires senior management from the local community. *

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.45.   Our company spends on local suppliers to stimulate local economic growth. *

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.46.   Our company regularly assesses risks related to corruption in our operations. *

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.47.   Our company provides comprehensive communication and training about anti-corruption policies and procedures. *

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.48.   Our company promptly addresses any confirmed incidents of corruption. *

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.49.   Our company takes legal actions for anti-competitive behaviour, anti-trust, and monopoly practices seriously. *

	1	2	3	4	5

ASS.50.   Our company has a clear and responsible approach to tax. *

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.51.   Our company meticulously handles tax governance, control, and risk   *
management.

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.52.   Our company prioritizes stakeholder engagement and manages   *
concerns related to tax.

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.53.   Our company implements diversity within our governance bodies and   *
workforce.

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.54.   Our company ensures gender equality in pay. *

	1	2	3	4	5	
Not Institutionalized	○	○	○	○	○	Fully Institutionalized

ASS.55.   Our company tackles incidents of discrimination appropriately. *

                      1   2   3   4   5

Not Institutionalized   O   O   O   O   O   Fully Institutionalized

ASS.56.   Our organization advocates for novel methods to reach our   *
environmental objectives.

                      1   2   3   4   5

Not Institutionalized   O   O   O   O   O   Fully Institutionalized

ASS.57.   Our organization promotes the proposal of new green ideas to enhance *
performance.

                      1   2   3   4   5

Not Institutionalized   O   O   O   O   O   Fully Institutionalized

ASS.58.   Our organization promotes and champions new green ideas from   *
others.

                      1   2   3   4   5

Not Institutionalized   O   O   O   O   O   Fully Institutionalized

ASS.59.   Our organization develops plans for implementing new green ideas. *

                      1   2   3   4   5

Not Institutionalized   O   O   O   O   O   Fully Institutionalized

ASS.60. Our organization reconsiders and refines new green initiatives. *

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

ASS.61. Our organization endorses inventive solutions to environmental issues. *

	1	2	3	4	5	
Not Institutionalized	O	O	O	O	O	Fully Institutionalized

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Organizational Reputation

This section addresses how your company is perceived in terms of sustainability efforts by external parties. It's about the external image and status your company holds, particularly in relation to sustainable practices, and how this might affect your standing in the industry.

Please evaluate each statement regarding your organization's capabilities and customer relations, using a scale from 1 to 5, where 1 means 'Far Below Industry Standard' and 5 means 'Industry Leading'.

O.R. 1.   Relative to industry peers, I consider that our organization's level of fixed *
assets and technical equipment is elevated.

	1	2	3	4	5	
Far Below Industry Standard	○	○	○	○	○	Industry Leading

O.R. 2.   Compared to industry counterparts, I believe that the quality of our *
human resources, particularly in scientific research, typically ensures the high-
quality completion of innovative projects.

	1	2	3	4	5	
Far Below Industry Standard	○	○	○	○	○	Industry Leading

O.R. 3.   I acknowledge that our organization's investment in scientific research is *
at a forefront within our industry.

	1	2	3	4	5	
Far Below Industry Standard	○	○	○	○	○	Industry Leading

O.R. 4.   I believe that our organization's number of patent applications is among *
the top in our industry.

	1	2	3	4	5	
Far Below Industry Standard	O	O	O	O	O	Industry Leading

O.R. 5.   I uphold that our organization's financial resources are superior   *
compared to other enterprises in the same industry.

	1	2	3	4	5	
Far Below Industry Standard	O	O	O	O	O	Industry Leading

O.R. 6.   I affirm that the level of technology our organization possesses   *
outpaces that of other enterprises within our industry.

	1	2	3	4	5	
Far Below Industry Standard	O	O	O	O	O	Industry Leading

O.R. 7.   I believe that our enterprise's fixed assets and technical equipment   *
surpass those of other organizations in the same sector.

	1	2	3	4	5	
Far Below Industry Standard	O	O	O	O	O	Industry Leading

O.R. 8.   I believe that the quality of our human resources, specifically in terms   *
of scientific research capabilities, is high and often leads to the successful
completion of innovative projects, distinguishing us from other enterprises in the
industry.

	1	2	3	4	5	
Far Below Industry Standard	○	○	○	○	○	Industry Leading

O.R. 9.   I uphold the principle that quality-related customer complaints are   *
handled with utmost priority.

	1	2	3	4	5	
Far Below Industry Standard	○	○	○	○	○	Industry Leading

O.R. 10.   I advocate for maintaining good customer communication, as   *
evidenced by our developed programs.

	1	2	3	4	5	
Far Below Industry Standard	○	○	○	○	○	Industry Leading

O.R. 11.   I affirm that we provide high-quality products/services to our   *
customers at competitive prices.

	1	2	3	4	5	
Far Below Industry Standard	○	○	○	○	○	Industry Leading

O.R. 11.   I affirm that we provide high-quality products/services to our   *
customers at competitive prices.

	1	2	3	4	5	
Far Below Industry Standard	○	○	○	○	○	Industry Leading

O.R. 12.   I confirm that our company has a policy/management system in place *
for customer care, health, and safety.

	1	2	3	4	5	
Far Below Industry Standard	○	○	○	○	○	Industry Leading

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Organizational Performance

This section delves into the effectiveness and outcomes of your company's sustainability strategies. We aim to understand how these practices have impacted your company's performance across various domains, including financial, operational, and market performance.

Please rate the level of improvement in your organization's sustainability performance for each of the following aspects, using a scale from 1 to 5, where 1 means 'No Improvement' and 5 means 'Significant Improvement'.

O.P. 1. Our organization's sustainability performance is improved by green innovation in the production processes. *

	1	2	3	4	5	
No Improvement	○	○	○	○	○	Significant Improvement

O.P. 2. Our organization's sustainability performance is reflected in reduced emissions of hazardous substances or waste. *

	1	2	3	4	5	
No Improvement	○	○	○	○	○	Significant Improvement

O.P. 3. Our organization's sustainability performance is improved through effective waste management. *

	1	2	3	4	5	
No Improvement	○	○	○	○	○	Significant Improvement

O.P. 4.   Our organization's sustainability performance can be improved through   *
increased spending on environmentally and socially beneficial process
innovations.

	1	2	3	4	5	
No Improvement	O	O	O	O	O	Significant Improvement

O.P. 5.   Our organization's sustainability performance is improved through   *
development and commercialization of new sustainable products.

	1	2	3	4	5	
No Improvement	O	O	O	O	O	Significant Improvement

O.P. 6.   Our organization's sustainability performance has improved through   *
development of new products, which comply with environmental criteria and
regulations.

	1	2	3	4	5	
No Improvement	O	O	O	O	O	Significant Improvement

O.P. 7.   Our organization's sustainability performance has improved by the   *
diminishing of product return and recall rates.

	1	2	3	4	5	
No Improvement	O	O	O	O	O	Significant Improvement

O.P. 8.   Our company strives to identify issues of quality and social   *
responsibility related to our products and services.

                        1   2   3   4   5

No Improvement   ○   ○   ○   ○   ○   Significant Improvement

O.P. 9.   Our company aims to implement various inspections related to   *
sustainable product and service design.

                        1   2   3   4   5

No Improvement   ○   ○   ○   ○   ○   Significant Improvement

O.P. 10.   Our company strives to gather stakeholders' feedback for continuous   *
development.

                        1   2   3   4   5

No Improvement   ○   ○   ○   ○   ○   Significant Improvement

O.P. 11.   Our company strives to conduct audits of our current sustainability   *
practices.

                        1   2   3   4   5

No Improvement   ○   ○   ○   ○   ○   Significant Improvement

[Atrás]   [Enviar]   ━━━━━━━━━━━━━━━   Página 6 de 6   Borrar formulario