

Article

Dynamic Capabilities: Unveiling Key Resources for Environmental Sustainability and Economic Sustainability, and Corporate Social Responsibility towards Sustainable Development Goals

Jacqueline de Almeida Barbosa Franco ^{1,2,*}, Ary Franco Junior ³, Rosane Aparecida Gomes Battistelle ⁴
and Barbara Stolte Bezerra ⁴

- ¹ Department of Production Engineering, School of Engineering, São Paulo State University (UNESP), Av. Engenheiro Luiz Edmundo Carrijo Coube 14-01, Bauru 17033-360, SP, Brazil
- ² Department of Industrial Production Management, Federal Institute of Education, Science, and Technology of São Paulo, IFSP—Federal School, Salto 13325-047, SP, Brazil
- ³ Department of Control and Automation Engineering, Federal Institute of Education, Science and Technology of São Paulo, IFSP—Federal School, Salto 13325-047, SP, Brazil
- ⁴ Department of Civil and Environmental Engineering, School of Engineering, São Paulo State University (UNESP), Av. Engenheiro Luiz Edmundo Carrijo Coube 14-01, Bauru 17033-360, SP, Brazil; barbara.bezerra@unesp.br (B.S.B.)
- * Correspondence: jacqueline.barbosa@unesp.br or jacqueline.almeida@ifsp.edu.br; Tel.: +55-149-9114-7804



Citation: de Almeida Barbosa Franco, J.; Franco Junior, A.; Battistelle, R.A.G.; Bezerra, B.S. Dynamic Capabilities: Unveiling Key Resources for Environmental Sustainability and Economic Sustainability, and Corporate Social Responsibility towards Sustainable Development Goals. *Resources* **2024**, *13*, 22. <https://doi.org/10.3390/resources13020022>

Academic Editors: Elżbieta Jasińska and Zbigniew Leonowicz

Received: 30 October 2023
Revised: 4 January 2024
Accepted: 16 January 2024
Published: 1 February 2024



Copyright: © 2024 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Abstract: This paper examines the role of dynamic capabilities as resources for achieving environmental sustainability, economic sustainability, and corporate social responsibility within the pillars of the Sustainable Development Goals. Economic growth and technological progress, while driving societal advancements, have also contributed to challenges such as inefficient resource utilization, social inequality, climate change, and unsustainable production. Through an integrative review, the paper identifies sixteen dynamic capabilities incorporated into a business framework. These capabilities aim to support environmental and economic sustainability, along with corporate social responsibility in line with the Sustainable Development Goals. The paper emphasizes opportunities for companies and academia to adopt sustainable practices. This contribution aims to advance the broader objective of sustainable development by promoting a balance between societal progress and responsible resource management.

Keywords: dynamic capabilities; internal and external resources; business framework; sustainable development

1. Introduction

Economic growth and technological advancements have significantly shaped our society, but they have also led to some challenges like social inequality, climate change, and the unsustainable use of natural resources. Recognizing the importance of balancing economic progress with sustainable practices has become more apparent.

The concept of sustainable development has gained traction as a way to address the environmental, economic, and social needs of current generations without compromising the well-being of future ones [1]. This paradigm shift calls for adjustments in our consumption models, production methods, societal organization, and the use of essential natural resources [2]. The sustainable development concept is associated with ongoing efforts to bring about a sustainable transition, requiring collaboration across local, regional, and global networks, involving the public, private, and academic sectors [3,4]. In response to these challenges, the United Nations formalized the Sustainable Development Goals (Agenda 2030) in 2015 in New York. This global agenda aims to ensure effective and

sustainable development, urging governments, academia, companies, and society to focus on economic sustainability, environmental responsibility, and social well-being [5]. The agenda outlines seventeen Sustainable Development Goals, also known as the SDGs [6,7].

In the business sector, the sustainable development theme has gained prominence in discussions on effective business strategies. More companies are now focusing on transformative and long-term actions rooted in environmental sustainability, economic sustainability, and corporate social responsibility to achieve the SDGs. In 2000, the United Nations (UN) introduced the Global Compact (GC) to encourage companies to actively engage in sustainable development agendas. With over 12,000 signatories, including companies and organizations, the GC is considered the world's largest voluntary corporate citizenship initiative. It encourages companies to align environmental sustainability, economic sustainability, and corporate social responsibility with the Sustainable Development Goals in their strategic actions through the guidelines presented in the Sustainable Development Goals compass.

While companies face challenges in becoming sustainable [8], it is worth noting that today's businesses operate in dynamic, distributed, transparent, and global environments [9]. Strategy is crucial as it reflects a company's ability to manage resources effectively, especially in situations where resources are limited, and times and environments are uncertain [10].

To address these challenges and changes in the business environment, competitiveness, and emerging business issues, ref. [10] defined the dynamic capabilities theory. It focuses on a company's ability to react quickly to changing needs driven by the internal and external environment. Dynamic capabilities can assist companies in transitioning towards sustainability, ensuring not only economic development but also balanced economic sustainability, considering the environment's capacity to provide resources within regeneration limits and society's ability to live well.

Many authors have explored the relationship between sustainability and dynamic capabilities [11]. The studies have focused on the relationship between sustainable actions and dynamic capabilities, actions needed to facilitate dynamic capabilities development, and the reconfiguration of existing capabilities [12]. Other research has examined the impact of dynamic sustainability capabilities on corporate sustainability performance [13] explored sustainability oriented to innovation and dynamics levels [13], and analyzed the interrelationships between sustainable development and organizational skills based on dynamic capabilities [14]. However, to date, a set of dynamic capabilities linking environmental sustainability, economic sustainability, and corporate social responsibility (CSR) strategic actions to achieve each Sustainable Development Goal have not been found in the literature.

Considering this context, the gaps guiding this paper are:

- What are the main dynamic capabilities that can support the strategic business planning actions of companies to meet the Sustainable Development Goals?
- Which environmental sustainability, economic sustainability, and corporate social responsibility actions, developed by companies using the dynamic capabilities approach, can contribute to each SDG?

In the light of that, this work aims to identify the dynamic capabilities important for companies in strategic planning, particularly in environmental and economic sustainability and corporate social responsibility (CSR) to achieve the Sustainable Development Goals (SDGs) and associated strategic actions. Using an integrative review method [15,16], a key set of dynamic capabilities necessary for implementing environmental sustainability, economic sustainability, and CSR was investigated, resulting in a theoretical-practical framework for achieving the SDGs through strategic actions.

The main contribution lies in identifying dynamic capabilities associated with environmental sustainability, economic sustainability, and CSR that actively position companies not only as supporting players but as entities influencing environmental and social transformation. The proposed framework systematically guides the internalization and externalization

of these dynamic capabilities, offering a structured approach for companies to navigate toward sustainable development.

After this introduction, the paper is structured into five additional sections. Section 2 presents the theoretical background. Section 3 presents the research methods and materials. Section 4 presents the results. Section 5 presents a business framework integrating the dynamic capabilities concepts to environmental sustainability, economic sustainability, and corporate social responsibility to the SDGs. Section 6 highlights the discussion and systematizes the challenges and opportunities, and finally, Section 7 presents the final considerations.

2. Theoretical Background

2.1. Environmental Sustainability, Economic Sustainability, and Corporate Social Responsibility

The corporate social responsibility (CSR) business model diverges from traditional approaches by incorporating economic, environmental, and social sustainability factors [17,18]. Initially proposed by [19], CSR continues to be a focal point for academia, businesses, and policymakers [20]. In the CSR framework, environmental, social, and governance factors are seen as resources contributing to the sustainability performance of organizations [21]. Companies are encouraged to formulate strategies that go beyond economic returns, integrating social and environmental concerns for enhanced competitiveness [22,23].

According to [24], CSR signifies a company's ability to implement sustainable development by balancing economic prosperity, environmental quality, and social responsibility. Truly sustainable companies adopt a systemic view, addressing the interconnected pillars of environmental sustainability, economic sustainability, and corporate social responsibility [25].

Sustainability, as ref. [25] emphasizes, is achieved through aligning and enhancing these three pillars, fostering an interconnected approach at international, national, community, and individual levels [26]. Ref. [27] stresses that this alignment should be at the core of defining sustainable development for companies, supporting a balanced economic sustainability that is ecologically sound and promotes human development.

The recent years have seen a global push toward sustainability, evident in the unification of the Sustainable Development Goals by the UN [28]. This ambitious agenda encompasses social, environmental, and economic sustainability responsibilities, presenting interconnected challenges and opportunities for CSR [29,30].

In practical terms, the CSR approach emphasizes that companies should develop economic sustainability activities responsibly, considering the interests of all stakeholders [31]. Environmental, social, and governance considerations are advocated by managers across all industries not only to advance sustainable development but also to promote financial profitability [32].

2.2. Sustainable Development Goals

To support SDG 1 (eradication of poverty), companies should develop policies for positive contributions to poverty reduction. This involves raising investment and establishing public–private partnerships, as well as encouraging the implementation of environmental, social, and governance (CSR) practices among all partners. Companies can also move towards responsible investment in charitable programs for underserved communities in cities and countries of origin, reducing inequalities (SDG 2 zero hunger; SDG 10 inequalities reduction) [33–35].

Responsible companies prioritize the health of their employees and society (SDG 3 health and well-being). They promote health and well-being, improving the quality of life for all, including children, adolescents, adults, and working elderly individuals of all genders and generations (SDG 5 gender equality) [36–38]. During the pandemic, companies have intensified efforts to preserve the health and safety of their workforce, including mental health initiatives [39].

Companies can foster partnerships to offer quality learning opportunities and invest in programs to develop new skills in the local workforce. Qualified professionals are

essential for dynamic companies and their well-being (SDG 4 quality education) [40]. Efforts should be made to increase female opportunities and promote participation in sports and professional education [41]. Companies can also establish partnerships with schools to address women's health, particularly intimate and sexual health, and cultivate a safe and motivating future work environment [42,43].

Adhering to the Agenda 2030 offers growth opportunities for companies. SDG 12 (sustainable production and consumption) encourages changes in production systems and collaboration in the supply of basic needs, such as food, infrastructure, and economic growth [40]. Investing in innovative models and technology (SDG 9 industry, innovation, and infrastructure) enables companies to drive institutional change, reduce hunger, and enhance quality of life through digital, smart, and sustainable cities for the future (SDG 2 zero hunger and SDG 11 sustainable cities and communities). All innovations that increase industry efficiency and bring quality products and services to the market are desirable [41].

It is crucial to invest in expanding and maintaining decent work opportunities and economic growth, actively working to discourage human trafficking and slave-like labor (SDG 8 decent work and economic growth). Sustainable management, including green practices, is critical for environmental operations within companies. This involves selecting circular suppliers and customers for collaboration, reducing soil and water pollution, and focusing on reducing water crises (SDG 6 drinking water and sanitation) [42].

Reducing the use of fossil fuels and adopting clean, affordable, reliable, and sustainable energy sources, including the adoption of solar domestic and business systems, needs to become a reality (SDG 7 clean energy) [42,43]. Attention should also be given to reducing or eliminating greenhouse gas emissions that directly impact climate change (SDG 13 action against global climate change). This is closely connected to SDG 14 (life on water) and SDG 15 (life on land) by maintaining a perspective of life conservation in water and on land [44].

For the SDGs to be concrete, companies need to engage in a business-for-peace movement. This involves incentivizing corporate engagement, promoting good governance, and supporting peaceful development. The private sector can play a positive role in fostering peace, particularly in fragile countries affected by cultural and political conflicts (SDG 16 peace, justice, and effective institutions) [44,45].

Finally, the promotion of public lectures and workshops, supported by governments, companies, academia, and local and international partners, is crucial (SDG 17 partners and means of implementation). These initiatives contribute to developing skills, knowledge, talents, ecosystem partnerships, access to training, networking, consulting, and funding [41,44].

2.3. Dynamic Capabilities

Given the dynamism of internal and external environments, the dynamic capabilities theory arises to enhance the understanding of strategic actions, particularly those aimed at gaining a competitive advantage. These capabilities are specific skills that contribute to both the company and market evolution through the integration of knowledge, both internal and external to the company [46]. Positioned as the company's capacity to build, integrate, and reconfigure internal and external competencies, dynamic capabilities enable companies to navigate rapidly changing environments effectively [10,47]. The theory offers a modern and contemporary perspective on strategic management within companies [48,49].

Dynamic capabilities, as a macro-process, manage processes, best practices, and competencies systematically [48,49]. Uncertainty, distinct from risk, is highlighted as a crucial factor. While risks can be identified and managed using traditional tools and approaches, dynamic capabilities are rooted in three groups: identifying and assessing opportunities and threats (detection); seizing opportunities and capturing value (exploitation); and maintaining competitiveness through the increase, combination, protection, and, when necessary, reconfiguration of the company's assets for continual renewal (transformation) [50]. The integration of key elements such as an integrated perspective, effective practice, and interdependent action can position dynamic capabilities as a strategic differentiator for businesses [51].

Emphasizing their ‘strategic’ nature, dynamic capabilities are distinguished from common capabilities by their role in creating value. Skills alone are considered common, and what makes a capability dynamic is the manager’s ability to effectively orchestrate a cluster of activities that are strategically decisive [52]. Going beyond best practices and technical aptitude, dynamic capabilities require investment in evolutionary and constant aptitude development [53]. They are not static but rather derived from a company’s ability to see possibilities, inspire and mobilize employees and strategic partners for pursuing new opportunities [53].

Dynamic capabilities serve as the lifeblood of a company, not only for maintaining long-term profitability but also for designing and adjusting business models based on new environments and opportunities [54]. Strong dynamic capabilities enable companies to not only adapt to business ecosystems but also to expand businesses through innovation and collaboration with other entities and institutions [49]. Competitiveness, therefore, is essentially dynamic, tied to the company’s ability to design and implement innovative competitive strategies aligned with environmental sustainability, economic sustainability, and corporate social responsibility [55]. Integrating the SDGs into the strategy development process is crucial for generating meaningful results [56,57].

3. Research Methods and Materials

To achieve the research objective, an integrative literature review was adopted as the research method for this study [15]. Such reviews are valuable for integrating results of studies on contemporary themes. Integrative literature reviews characterize the research field and identify opportunities and challenges for future studies. This review aims to identify all relevant concepts and definitions in the academic area related to sustainable development (environmental sustainability, economic sustainability, and corporate social responsibility), companies, and the dynamic capabilities theory, as well as to detect possible research opportunities and gaps. The article search involved Scopus and Web of Science databases, known for their academic quality [58]. These databases were chosen for accuracy and quality.

Given the research’s proposal, the guiding questions for the database search were:

- What are the main dynamic capabilities supporting companies in planning strategic business actions to achieve the Sustainable Development Goals?
- Which environmental sustainability, economic sustainability, and corporate social responsibility actions, developed by companies using the dynamic capabilities approach, can contribute to each SDG?

Keywords were: (“Sustainable Development”) AND (“Dynamic Capabilities”) AND (“Company”). This combination aimed to identify articles discussing companies’ sustainable development. The term “Sustainable Development” aligns with Agenda 2030 and the internalization of environmental sustainability, economic sustainability, and CSR in companies. Keyword combinations (Table 1) ensured a comprehensive approach, preventing the omission of relevant articles not explicitly addressing sustainability and CSR.

The integrative literature review process, as outlined by [16], involves the following sequence: searching for articles, selecting articles, and data extraction and analysis. To guide the selection of articles, inclusion (I) and exclusion (E) criteria were established, aligning with the research question and general objective (as presented in Table 1), as follows:

- I1: Inclusion of papers that analyze companies, excluding specific processes such as supply chain or sales channels.
- I2: Inclusion of papers exploring dynamic capabilities (both internal and external) based on dynamic capability theory.
- I3: Inclusion of papers that illustrate sustainable development and its influence on any pillar: environmental sustainability, economic sustainability, and corporate social responsibility.

4. Results

This section details the identified dynamic capabilities and their connections to environmental sustainability, economic sustainability, and corporate social responsibility. Utilizing key research findings, a theoretical-practical framework for business interactions has been developed to actively pursue sustainable development goals (See Supplementary Material S1 with the articles analysis).

4.1. Sustainable Development in Companies and Dynamic Capabilities Theory

A total of 90 articles were identified across the Scopus and Web of Science databases. Following the application of filters and removal of duplicates, 28 articles remained within the research scope. The articles in Table S1 were read in full, and the main data and insights were systematically analyzed. The selected articles, published in reputable journals, primarily focus on management, innovation, sustainable development, business strategy, corporate social responsibility, and innovation. These findings underscore the growing relevance of exploring the interconnections between sustainable development and dynamic capabilities for effective management in various contexts of change and vulnerability.

4.2. Environmental Sustainability, Economic Sustainability, and Corporate Social Responsibility Concepts

Through the integrative review, a comprehensive understanding concept emerged, summarized in Table 2. This table encapsulates the diverse facets of environmental sustainability, economic sustainability, and corporate social responsibility explored across the analyzed studies. It serves as a concise snapshot, illustrating the varied contributions each concept makes to the current state-of-the-art.

Table 2. Environmental Sustainability, Economic Sustainability, and Corporate Social Responsibility concepts.

	Concepts
Environmental Sustainability	Shows how companies interact with environment resources, including local and global ecosystems, as well as maintain corporate transparency. Environmental sustainability encourages the development and dissemination of environmental actions and how a company assesses the environmental impacts of any project, including new or existing industrial activities, with a focus on eco-efficiency; that is, doing more with less.
Economic Sustainability	Represents the actions and economic sustainability cost contributions that a company makes in the pursuit of sustainable development, as well as corporate integrity, performance, financial resource management, and business transparency. It is about long-term profitable development without adversely affecting cultural, social, or environmental aspects, with a focus on economically sustainable prosperity.
Corporate Social Responsibility	Deals with the management of human resources, well-being, health, safety, education, working conditions, access to environmentally adequate products and services, equality, diversity, and social integration among all company members, customers, consumers, and other stakeholders, as well as guaranteeing social progress.

4.3. Environmental Sustainability, Economic Sustainability, and Corporate Social Responsibility Approach

The reviewed articles were categorized based on their focus on environmental sustainability, economic sustainability, and corporate social responsibility. Out of the 90 analyzed articles, 82% delve into factors impacting economic sustainability, 93% consider elements contributing to environmental sustainability, and 46% address corporate social responsibility. Only 57% explore factors related to both corporate social responsibility and the environmental or economic pillars. Sustainable development centralizes on the harmonious interplay of social, environmental, and financial dimensions. While numerous studies explore these dimensions individually, there is a notable gap, particularly in addressing corporate social responsibility comprehensively and aligning these aspects with the Sustainable Development Goals (SDGs). Future research should delve deeper into these complex relationships within companies. Table 3 illustrates the distribution of articles across the three pillars.

Table 3. Environmental Sustainability, Economic Sustainability, and Corporate Social Responsibility approaches.

Title	Ref.	Environmental Sustainability	Economic Sustainability	CSR
Sustainable by design: An organizational design tool for sustainable business model innovation	[61]	x	x	x
The Impact of Digital Transformation on CSR Performance Based on the Mediating Effect of dynamic capabilities	[62]	x	x	x
How do firms build dynamic capabilities to develop sustainable products? A multiple case study in the manufacturing industry	[63]	x	x	
Digital Transformation on Enterprise Green Innovation: Effect and Transmission Mechanism	[64]	x	x	
Sustainable development—Direct and indirect effects between Economic Sustainability, social, and environmental dimensions in business practices	[65]	x	x	x
Investigating the relationship among Industry 4.0 drivers, adoption, risks reduction, and sustainable organizational performance in manufacturing. . .	[66]		x	
A holistic model of dynamic capabilities and environment management system towards eco-product innovation and sustainability in automobile. . .	[67]	x	x	
A purpose-action framework for Corporate Social Responsibility in times of shock	[68]			x
Dynamic capabilities, value creation and value capture: Evidence from SMEs under COVID-19 lockdown in Poland	[69]	x	x	x
Dynamic capabilities for sustainable change in the food processing industry: A multilevel perspective	[11]	x	x	
Connecting strategic orientation, innovation strategy, and corporate sustainability: A model for sustainable development through stakeholder. . .	[70]	x	x	x
Dynamic sustainability capabilities and corporate sustainability performance: The mediating effect of resource management capabilities	[12]	x	x	x
Dynamic sustainability requirements of stakeholders and the supply portfolio	[71]	x	x	
Sustainable development and dynamic capabilities in the fashion industry: A multi-case study	[72]	x	x	
The impact of Industry 4.0 on the reconciliation of dynamic capabilities: evidence from the European manufacturing industries	[73]	x	x	
Customer functional value creation through a sustainable entrepreneurial orientation approach	[74]	x	x	x
Finnish forest-based companies in transition to the circular bioeconomic Sustainability—drivers, organizational resources, and innovations	[75]	x	x	x
Barriers to radical process innovation: a case of environmental technology in the oil industry	[76]	x	x	
Between Sustainable and Temporary Competitive Advantages in the Unstable Business Environment	[77]	x	x	
Energy eco-innovations for sustainable development: Exploring strategic organizational capabilities through an energy culture framework.	[78]	x	x	x
Sustainability oriented innovation dynamics: Levels of dynamic capabilities and their path-dependent and self-reinforcing logics	[13]	x	x	x

Table 3. Cont.

Title	Ref.	Environmental Sustainability	Economic Sustainability	CSR
Microfoundations of companies' dynamic capabilities for environmentally sustainable innovation: Case study insights from high-tech innovation in . . .	[79]	x		
Multi-Level Perspective to Facilitate Sustainable Transitions—A Pathway for German OEMS towards Electric Vehicles	[80]	x	x	
Dynamic capabilities and organizational routines for managing innovation towards sustainability.	[81]	x	x	x
Business model innovation for sustainable performance in retail and hospitality industries	[82]	x	x	x
Competencies for sustainability: A proposed method for the analysis of their interrelationships	[14]	x		
Firms' capabilities for sustainable innovation: The case of biofuel for aviation	[83]	x		
Resilience for sustainability as an eco-capability	[84]	x		

4.4. Dynamic Capabilities

According to [85], “Dynamic Capabilities” involve adapting, integrating, and reconfiguring internal and external competencies to navigate changing environments. Ref. [86] emphasizes the combination of dynamic capabilities and strategy to create sustainable business models, addressing organizational transformation. The dynamic capabilities theory focuses on a company's adaptive capacity in dynamic environments, aiming for sustainable competitive advantages.

While articles generally discuss dynamic capabilities, they often do not group them to achieve sustainable development. The role of each capability in environmental sustainability, economic sustainability, and corporate social responsibility toward Sustainable Development Goals (SDGs) is not explored. Table 4 classifies dynamic capabilities from a holistic view of the company down to specific resources, based on the integrative review.

Table 4. Dynamic Capabilities Identified.

Dynamic Capabilities	Definition	Internal Resources	External Resources
1. Systemic View	Develop a holistic model that details company understanding about the importance of sustainable development for business. Analyze the set of SDGs (social, environmental, and economic) by assessing the extent to which progress towards an objective has positive or negative impacts (synergies and trade-offs) on the other SDGs, both internally and externally.	x	x
2. Corporate governance	Liability linked and aligned. Having a board of directors capable of identifying governance instruments to qualify decisions in favor of social and environmental impact, in the short and long term, through ethical, voluntary, and cultural engagement of the company. Ability to periodically transform the company and cultural aspects to proactively reposition itself to deal with new threats and opportunities as they arise.	x	x
3. Risk and Crisis Management	Organized and strategic risks and crisis management. Risks identification at an early stage, so that the company can face environmental, social, and economic challenges. It is about the capacity to strengthen capacities and establish best practices to minimize or mitigate possible negative impacts and shocks.	x	x

Table 4. Cont.

Dynamic Capabilities	Definition	Internal Resources	External Resources
4. Interdependent Performance	Understand that objectives are not tasks for a company or sector, requiring the construction of business models, knowledge that favors synergy, and productive cooperation between all actors, thus, promoting effective, responsible, and inclusive institutions, including partnerships with governments, tax reductions, and support to develop business activities.		x
5. Strategic Scenario Planning	Scenario planning is not about getting the future right but rather beneficially shaping the focus of decision makers and drawing attention to areas that would otherwise have been overlooked. Detect paths to the future, continuous process of strategic renewal for organizations, direct the business to take advantage of new paths, improve corporate financial performance, create strategic interventions, and identify opportunities due to internal and external changes. Resolve issues and determine the best configuration for the company based on its existing form and new plans.	x	x
6. Organizational Flexibility	Flexibility, so that companies can transform themselves in a sustainable way; that is, an organizational design, permissibility for decision-making that is internally decentralized and fast but integrated to developing a sustainable business model.	x	
7. Long Term Investments	Sustainable businesses are, by definition, developed with longer deadlines, so that facing the global challenges of sustainability requires investments to achieve results in the three pillars (triple bottom line). Commitment to deadlines and results, resource investment, and monitoring. Sustainable growth and development need support from investors and governance.	x	x
8. Human Resources	Recruit, train, and deploy talent in a timely and efficient manner ('the right people, in the right places, doing the right thing, with the right people, at the right time') and ensure the well-being of employees. Allow people to understand internal and external changes in a natural way to constantly reinforce the importance of the commitment of work teams to the sustainable business model; that is, to develop evolutionary aptitude in employees.	x	
9. Decision-making	Decision-making in companies must be facilitated through the exchange of information and communications between stakeholders. Companies with strong dynamic capabilities have greater freedom to develop and adapt business models that involve changes or radical changes in either resources, activities, or processes.	x	
10. Management Capabilities	The creation of leadership and management structures to effectively coordinate and redistribute internal and external competences. It is up to the manager to conceive and refine the business model, as well as to take advantage of new opportunities through the creation of non-routine strategies. Strategic leadership to feel, apprehend, and transform are necessary to sustain dynamic capabilities, as well as manage activities well, in addition to being important to minimize internal conflicts and maximize complementarities inside and outside the company. A dynamic manager inspires and mobilizes both employees and strategic partners to pursue new opportunities and overcome challenges.	x	x
11. Research and Development (R&D)	Scientific and technological development from internal and external information sources. Collaborative and digitalized education with applied research to seek innovations for sustainable development in products and services, in addition to market research to understand what competitors and customers have developed and demanded; that is, an individual, organizational combination of partnerships.	x	x
12. Technologies	In a deeply uncertain environment, acting is a dynamic capability, as is the ability to "see around corners" using supporting technological tools, such as e-commerce, big data, IoT, digitization, the cloud, and systems integration (Industry 4.0). Although technology is not the center of sustainable practices, it is a facilitator; that is, an enabler of execution. Technology supports the achievement of sustainable corporate goals and helps to gain <i>insights</i> for the development of improvements.	x	x

Table 4. Cont.

Dynamic Capabilities	Definition	Internal Resources	External Resources
13. Innovations	Promote internal changes in corporate cultures to overcome the challenges and opportunities of global markets, in addition to understanding that innovation is not restricted to technology but also encompasses social, environmental, and political innovations. Innovation also oriented towards sustainable development, such as eco-product design innovation, CSR transformation, and digital innovation, influences changes in consumer behavior and consumption and brand positioning. It is up to the company to develop new business activities that encourage fast and flexible innovation, so that it is recognized as a source of future competitive advantage.	x	
14. Stakeholders Partnerships and Management	Companies need to plan, prepare, align, develop, and evaluate strategic actions together with stakeholders. Creating partnerships with various stakeholders helps to achieve strategies linked to collaborative sustainability and to create shared value; it also allows companies and their respective networks to fulfill their economic, social, and environmental responsibilities and generate benefits.	x	x
15. Production processes	Process-based strategies that seek “operational excellence”, such as the adoption of manufacturing processes focused on energy efficiency, circular and lean production, quality improvement and waste elimination, as well as the use of sustainable processes, such as recycling, reuse, reconditioning, and remanufacturing processes.	x	
16. Customer management	Customer management is the ability the company develops to meet customer needs, with a focus on “doing it the right way”, “being in the right place at the right time”, and “doing the right things”. It is the way companies maintain real-time communication, the way they inform actions, including sustainability, and how they manage the maintenance and retention of customer relationships during crises such as the pandemic. A leading company is not only transparent but also allows opinions and complaints from all parties, especially customers, and acts accordingly.		x

For companies, adopting a systemic view is crucial to manage internal and external resources effectively in changing environments, aligning with corporate governance. The studies (Table 4) connect organizational flexibility to performance, but this is insufficient; this involves a mindset of management capabilities and swift decision-making in response to sustainable development emergencies.

In the era of Industry 4.0, achieving innovative and environmentally sustainable development through digital transformation is a key concern for companies [64]. Many authors emphasize dynamic capabilities, particularly in production processes and eco-products. Despite the limited exploration of other inter-relationships, integrating these capabilities with environmental sustainability, economic sustainability, and corporate social responsibility for Sustainable Development Goals is essential. This includes forming partnerships with unconventional stakeholders like academia (research and development), government (interdependent performance), and consumer management. Long-term investments, strategic scenario planning, and mitigating negative impacts from unsustainable practices and risks are crucial components.

5. Internal and External Sustainable Strategic Actions

Supported by the integrative literature review, the identification of internal and external sustainable strategic actions that companies can undertake to achieve each SDG was established. Table 5 outlines the connection between dynamic capabilities, sustainable strategic actions, and the accomplishment of SDGs.

Table 5. Internal and External Sustainable Strategic Actions.





















Sustainable Development Goals			
			
Dynamic Capabilities			
			
			
			
			
			
	Environmental Sustainability	Economic Sustainability	Corporate Social Responsibility
			
Internal and External Sustainable Strategic Actions			
1. Systemic View	<ul style="list-style-type: none"> Realize that the company's main dynamic capability is to be sustainable; Top from bottom up and bottom up to top conscience to promote the environmental sustainability; 	<ul style="list-style-type: none"> Develop a systematic and continuous view that the sustainable business can grow forever; Seek public and government incentives to expand sustainable businesses; 	<ul style="list-style-type: none"> Consider broader social and environmental needs when taking decisions; Demand government efficiency, governance actions and bureaucracy reduction to stimulate social programs; Understand that society is an extension of business and that the company survives when it considers the environment in which it operates;
2. Corporate Governance	<ul style="list-style-type: none"> Create a voluntary organizational culture, ethical, voluntary, and cultural green engagement of the company; Stimulate the turnover of the local supply chain with the purchase of agricultural products and partnerships with cooperatives. 	<ul style="list-style-type: none"> Balancing societal, environmental and shareholders interests; Valuing business sustainability; Ensure transparency of the environmental sustainability, economic sustainability, and corporate social responsibility of actions; 	<ul style="list-style-type: none"> Generate jobs for the local population and stimulate activity and economic growth in the region through partnerships with cooperatives. family farming and support institutions to reduce inequalities; Communicate all actions via the CSR communication department; guarantee that all shareholders and stakeholders have access; Participate with health support and resources basics for local communities.
3. Risk and Crisis Management	<ul style="list-style-type: none"> Combating global warming, deforestation, use of fossil fuels; Formation of a committee with directors and managers to combat environmental issues. 	<ul style="list-style-type: none"> Have legal security; Uncertainty avoidance; Strengthening partnerships allows you to share risks and crises and minimize negative impacts on business; 	<ul style="list-style-type: none"> Not only financial risks and crisis but be prepared to lead quickly and efficiently with public health crisis such as the COVID-19 pandemic, wars and food insecurities. Combat racial and inequality crises, as well as the lack of first job options, especially for young people, women, the elderly and black people.
4. Interdependent Performance	<ul style="list-style-type: none"> Participate in environmental discussions to stimulate the sustainable bussiness; 	<ul style="list-style-type: none"> Promote industrial symbiosis with different suppliers and customers; Constant search for new stakeholders aligned with the sustainable principles; 	<ul style="list-style-type: none"> Provide access to living conditions in partnership with public governance;
5. Strategic Scenario Planning	<ul style="list-style-type: none"> Invest in implementing an environmental management system; Internalize environmental sustainability in strategic planning as a mandatory pillar, as well as an economic one. 	<ul style="list-style-type: none"> Align competitiveness with environmental sustainability, economic sustainability, and CSR; Mindset change. 	<ul style="list-style-type: none"> Include comprehensive programs in the strategy, marked for inclusion and diversity of genders and other vulnerable groups; Include social improvements on the strategic scenario planning. Invest in the local community so that in the future they can return as human and with differentiated capital to the company.

Table 5. Cont.

Sustainable Development Goals			
6. Organizational Flexibility	<ul style="list-style-type: none"> Ability to adapt to include circular economy practices; Accept and receive criticism and suggestions for changes in favor of environmental sustainability and react immediately. 	<ul style="list-style-type: none"> Decentralize decision making; Create performance metrics for sustainability; Keep up with market trends and demands to become an environmentally and socially appropriate company. 	<ul style="list-style-type: none"> Contribute to the empowerment of vulnerable populations and professional training; Actions to combat infantile labor, analogous to slavery; Take responsibility to promote active environmental education;
7. Long Term Investments	<ul style="list-style-type: none"> Environmental education for the actual and new employees; 	<ul style="list-style-type: none"> Prepare for vision 2050, as the Sustainable Development Goals will not be met until 2030; Patient investments in sustainability; 	<ul style="list-style-type: none"> Prioritize long-term organizational resilience; Develop the organizational culture based on long-term sustainability; Investment in human capital to seek improvement and specialization, including postgraduate courses, MBAs, and even international exchanges.
8. Human Resources	<ul style="list-style-type: none"> Incentive scheme for environmental sustainability; Insert green human resources management (GHRM). Green training. 	<ul style="list-style-type: none"> People capability development; Social and environmental development needs to be linked to eco-organizational innovation. 	<ul style="list-style-type: none"> Impulse internal and external changes not only in employees but in society in general; Gradual increase in women in leadership positions Ensure quality of life at work and social integration, including mental health. Health. Develop human relationships at work Pay fair wages that guarantee income that meets at least basic needs
9. Decision-making	<ul style="list-style-type: none"> The company must rely on internal policies combined with public to combat the deforestation and the exacerbated use of natural resources; Develop the ability to see the future. 	<ul style="list-style-type: none"> Dedicate time and energy to developing strategic business plans for environmental sustainability, economic sustainability, and CSR; Invest in human resource management practices. 	<ul style="list-style-type: none"> Adjust strategies to achieve the long-term benefits of projects; Require suppliers to comply with the organization's environmental policy through training and awareness actions, as well as assess and monitor the environmental risks of suppliers and contractors.
10. Management Capabilities	<ul style="list-style-type: none"> Training and education managers for environmental and social business; Manage the natural resources and understand the regeneration needs; 	<ul style="list-style-type: none"> Invest in education; Information and knowledge management; Preparing future leaders. 	<ul style="list-style-type: none"> Promote equal opportunities between men and women in the business environment; Facilitate mothers' access to the job market, even with young children Ensure diversity within companies through different profiles, multidisciplinary, and knowledge;
11. Research and Development (R&D)	<ul style="list-style-type: none"> Develop products and services with environmental proposals, not only financial values; Point out eco-innovation solutions; 	<ul style="list-style-type: none"> Invest in the carbon credits market, mainly to reduce the use and commercialization of credits; Investment in research and development (R&D). 	<ul style="list-style-type: none"> Workforce development; Partnerships with universities to develop new sustainable solutions;
12. Technologies	<ul style="list-style-type: none"> Elimination of the use of toxins and pollutants, as well as land preservation supported by 4.0 technologies; Invest in technologies for waste treatment and water reuse; 	<ul style="list-style-type: none"> Implement management systems to monitor economic, environmental, and social metrics; Using technology as an ally to make the company safe and aligned with the values of the Agenda 2030. 	<ul style="list-style-type: none"> Facilitate digital transformation on CSR performance; Promote access to technology for employees; Support local communities to digitally enter the job market; Help small local producers and partners implement the use of technologies.
13. Innovations	<ul style="list-style-type: none"> Invest in renewable energy, such as photovoltaic energy, green hydrogen, or biomass; Enabling environmental sustainability innovation structure; 	<ul style="list-style-type: none"> Sustainable Business Model Innovation (SBMI) exist at the organizational level; Innovation in the way of thinking and acting towards sustainability. 	<ul style="list-style-type: none"> Colaborative innovation; Innovation that generates environmental and social value for the business; Innovation that generates value for the brand beyond economic return.

Table 5. Cont.

Sustainable Development Goals			
14. Stakeholders Partnerships and Management	<ul style="list-style-type: none"> Develop sustainable and green supply chain; 	<ul style="list-style-type: none"> Partnerships with national and international stakeholders, including competitors in the same sector; 	<ul style="list-style-type: none"> Encourage collaboration between departments and all stakeholders; Public-private partnerships, mainly for the construction of local infrastructure and improvement of cities.
15. Productive processes	<ul style="list-style-type: none"> Adopt and change the production process based on a circular economy approach; Work on product development projects, from the idea, from the cradle to the grave, focusing on truly sustainable products and services; The entire chain has traceability and is auditable, ensuring reliability and environmental sustainability. 	<ul style="list-style-type: none"> Establish sustainable industrial policy; Ring-fenced resources for sustainable business model innovation. 	<ul style="list-style-type: none"> Ensuring the productive infrastructure aligns with the pillars of the environmental sustainability, economic sustainability, and corporate social responsibility; Work so that all products and production processes used become sustainable; Develop social engagement for sustainable products and consumption; Safe production processes;
16. Customer management	<ul style="list-style-type: none"> Work on the mindset of the company and consumers on the importance of migrating from productization to servitization and how beneficial it can be for both parties (win-win) when aligned with the environmental sustainability; 	<ul style="list-style-type: none"> Encourages environmental, economic, and CSR friendly marketing practices (product, price, place, promotion). Constantly explores new open opportunities and reaches new markets. 	<ul style="list-style-type: none"> Grow closer to the customer and show the positive impacts of conscious consumption; Certified products and services; Strengthening the relationship with the customer, guarantee of supply and ease of payment methods to allow everyone to have access to quality and sustainable products.

Table 5 emphasizes the idea that companies aspiring to sustainability must consistently enhance their capacity to navigate changes in both internal and external environments. This involves adaptation, integration, and reconfiguration to gain a competitive advantage and stand out in the pillars of environmental sustainability, economic sustainability, and corporate social responsibility.

Dynamic capabilities, the unique competencies that set a company apart, should be consistently maintained and periodically renewed alongside sustainable strategic actions. This is crucial as these capabilities gradually become less adapted to changing circumstances. Sustainable strategic actions play a pivotal role in fostering the potential growth of a company, guided by both theoretical principles and practical insights.

Framework Proposal

Companies play a crucial role as a funding source, innovation driver, technological developer, and job creator contributing to the achievement of SDGs [57]. Forward-thinking companies are moving towards disruptive and sustainable business models [87]. However, despite the interest shown by several companies, the incorporation of SDGs into business strategies has been slower than expected. Most companies align with the SDGs for specific projects, but there is no transformative shift in production or strategic decision-making [88].

The opportunities and challenges presented by different contexts, including the post-pandemic scenario, will strengthen companies, making them resilient and fostering abrupt changes in thinking, acting, and producing [89]. It is time to exercise business resilience, the company's ability to react to rapid changes in the environment and manage internal and external resources, essential for sensing, seizing, and reconfiguring.

To navigate changes, crises, and uncertainties like the pandemic, many companies can adopt dynamic capabilities as a differentiator to face adversity. Therefore, considering the need for companies to outline strategic actions to overcome the effects of the pandemic and recent scenarios of crises and uncertainties, the dynamic capabilities theory (DCT) can be a key support in formulating business strategies for environmental sustainability, economic sustainability, and corporate social responsibility. Companies should adopt sustainable initiatives through a shared vision, fostering collaboration in environmental, social, and economic sustainability. This collaborative approach can transform challenges into business opportunities and growth strategies, even in the pandemic and post-pandemic context [72,90].

This study proposes a framework that integrates sixteen dynamic capabilities identified in the literature, illustrating their relationships and indicating a sequence for implementing each of these resources towards sustainability, economic sustainability, and corporate social responsibility. Figure 2 illustrates the integration of dynamic capabilities into environmental sustainability, economic sustainability, and corporate social responsibility to achieve the Sustainable Development Goals.

The integration process guided by the dynamic capabilities theory provides a distinctive perspective on both the internal and external environments concerning sustainability, economic sustainability, and corporate social responsibility. This theory plays a crucial role in comprehending the internal and external resources that can impact firms' performance, making it a valuable tool for broader application in these types of studies.

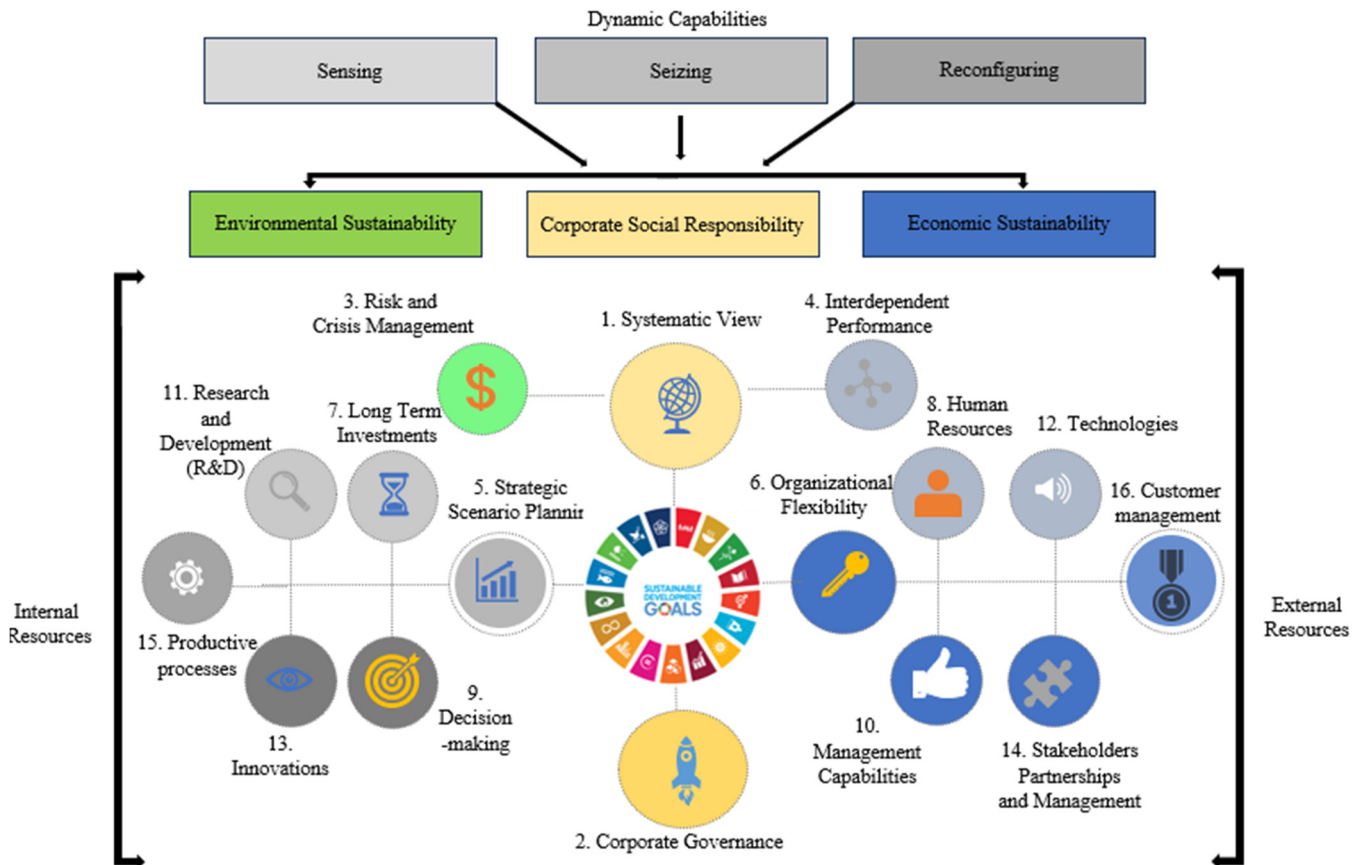


Figure 2. Framework oriented to the dynamic capabilities integration to environmental sustainability, economic sustainability, and CSR to achieve the Sustainable Development Goals.

6. Discussion

It is evident that there is already a consensus that the traditional model of doing business is unsustainable and that it is unable to effectively deliver the changes that are needed in the business environment [91]. Companies have standards that cause distancing from the CSR mindset; there are implications on the board model typology (traditional, management, and corporation models) that yet have barriers such as inequality (SDG 10) and gender disparities (SDG 5) [92].

Developing countries in particular face many challenges [93], because despite having vast reserves of natural resources, few pay attention to the climate damage caused by devastation and deforestation; the reduction of natural reserves of fresh water and clean energy; increased hunger and poverty; untenable working conditions, even analogous to slavery, exacerbated by exposure to diseases such as the COVID-19 pandemic [94]; a lack of guaranteed decent employment or qualified labor as a result of economic growth, in addition to the excessive growth of cities; and difficulty in accessing education, housing and transport. Most of the main problems of the modern world and society are accelerated by companies and their economic activities and, respectively, unsustainable business models. The gap is growing, as is the inequality between social classes and genders.

Thus, new business models and well-defined strategies emphasize a comprehensive approach, which helps companies understand and explain not only how value is captured but how it is created and how extra value can be obtained and decisions made with a focus on social and environmental issues [78]. Therefore, companies recognize the importance of creating strategies that reach the stage where the benefits for all stakeholders [11,72] and long-term sustainability results are closely connected [70].

Ref. [95] argues that designing flexible organizational strategies within sustainable management capabilities ensures growth for companies and societies that want to be

sustainable. The systematic view, integrating economic sustainability, environmental, and social issues into the decision-making processes of companies, is indispensable and must be treated like a large and complex puzzle where all the parts need to fit perfectly [78]. Ref. [96] considers that sustainable development is only possible through the integration of economic sustainability, environmental, and social issues in decision-making processes.

For [79,81,83], the carrying out of business model innovations, utilizing dynamic resources and establishing strategic management capabilities, both intertwine to help companies thrive in an increasingly volatile, uncertain, and complex world. Ref. [97] suggests that there is an alignment between the concepts of sustainable development, resilience, and robustness such that sustainability is seen as a basis for analysis that supports decision-making even in different contexts, like changes, risks, and crises [13]. Continuous learning is the key to risk and crisis management from internal and external resources [82]. Ref. [98] emphasizes that the sustainability strategy is directly interconnected with management commitment and capabilities.

Ref. [21] highlights that creating a CSR policy enhances the innovation capacity, innovative activities (SDG 9), value creation, and financial performance of businesses. Overall, social, and environmental performance has a positive relationship with business sustainability, indicating that economic business sustainability and creating value for society are mutually dependent. For companies, understanding that sustainable and social resources can improve and accelerate the performance and organizational innovations of firms is fundamental [98]. Ref. [98] adds that companies need to focus on sustainable strategic scenario planning which counts on top management commitment.

Companies also play a prominent role oriented by a corporate governance to education development [99]. Ref. [100] highlights that it is important to adapt the higher education curriculum (SDG 4), especially focused in business, to prepare managers with an environmental sustainability, economic sustainability, and corporate social responsibility mindset and develop management capabilities to acquire competences for sustainable development [101]. The systemic view and dynamic management capabilities must be polished during the graduation and post-graduation courses, where professionals are prepared to face the new challenges of managing internal and external resources in a sustainable way. Management dynamic CEO capabilities facilitate CSR performance by enabling capable CEOs to navigate complex stakeholder expectations effectively [92].

Companies should promote an industry-guided integration (SDG 9) of responsible investing from the partnership between academia and industry (SDG 17) and research and development (R&D) [102,103], a change of mindset in favor of an organizational culture perspective and flexibility, in other words, a partnership combination [103]. Governments must take a prominent role in regulating corporate social responsibility, peace, and justice (SDG 16) in resource-heavy consumer sectors, such as agriculture, civil construction, and other manufacturing sector industries, especially in developing countries [104]. An alternative is exploring tax incentives and environmental, social, and governance performance to encourage sustainable behavior by companies and create an interdependent relationship [105]. This suggests that companies understand the relevance of establishing independent partnerships in favor of synergy and productive cooperation between all actors and sectors [13].

The sustainable production process (SDG 12) can be adjusted to save natural resources; look for efficiency, eco-product development innovation, or transit to circular economic sustainability; reduce energy use with alternative energy sources, such as solar, wind, marine, and even green hydrogen (SDG 7); rethink strategies to mitigate the generation of pollution, marine, and land deforestation and burning (SDG 14 and SDG 15) [11] supported by 4.0 industry technologies and considering opportunities in both pillars (environmental, economic sustainability, and social) [106]. The sustainable production process [75] (SDG 12) can be reinforced by corporate social responsibility to stimulate the creation of green jobs that consider human resources [107]; that is, job creation (SDG 8) based on job security, quality of life and well-being and, not least, a reduction in poverty and hunger (SDG 1 and

SDG 2) through the conscious use of natural resources, in addition to the development of new green 4.0 technologies driven by “green” professionals. Taking care of a company’s human resources and investing in employee–organization well-being and health are vital (SDG 3) [94] if the work–life balance for employees is to be continually improved [108].

Digital corporate governance aimed at addressing environmental, social, and economic sustainability performance challenges represents disruptive changes in the way to manage corporate governance and become more competitive and aligned with all stakeholder relationships (SDG 17) [109]. Digital transformation 4.0 technologies (SDG 9) accelerate the implementation process of green practices [110].

The success of green marketing is reflected in society’s ability to curb environmental problems [111]. Moreover, businesses invest in CSR activity to create long-term value by way of enhancing their public image and reputation [112]. Creating business market opportunities and developing company brands that convey sustainable and environmental values [113] influence consumer–employee–suppliers–organization behavior [94]. Inspiring conscious consumption (SDG 12) [74] and then, investing in and create green products and services focused on green marketing encourages environment friendly marketing practices (product, price, people, place, and promotion).

According to several components of the CSR, environmental resources may especially influence the number the companies focused on SDG 2, given the significant strengths of companies implementing CSR actions to ensure sustainable resource management. In their study about agricultural companies, ref. [114] identified that improving human capital positively and significantly effects income (SDG 2), environmental quality, and renewable energy consumption. Therefore, investing in energy diversification to drive the growth in economic sustainability is important (SDG 8) [115].

Another factor, driven by urban industrialization is access to drinking water, whether for the surrounding communities (SDG 11) or for the production activities carried out by companies, water treatment plants, as well as for their own subsistence. There is also the evident necessity to look for alternative sources of water (SDG 6) [116]. Due to progressive climate change (SDG 13), the available water resources are limited. A transdisciplinary framework, the involvement of stakeholders, and guidelines for adopting appropriate processes and techniques based in 4.0 technologies may improve the sustainability of stressed urban water systems [117].

Thus, refs. [73,118] uphold that the SDGs are relevant to the organizational innovation processes of businesses seeking to build partnerships and strategic positioning, which are important to mitigate, adapt, and achieve resilience in a changing future. According to ref. [87], companies play a key role in achieving the SDGs, and many have already made efforts to integrate sustainable development as a central part of long-term growth strategies, to guide the decision-making processes, and define a corporate governance structure. It is time to establish a long-term relationship between the indicators of corporate financial performance and those reflecting corporate CSR performance. There is a co-integration relationship between corporate financial performance metrics and corporate environmental sustainability and corporate social responsibility performance. CSR corporate performance is highly conditioned by the level of resources affected by this purpose, directly impacting company cash flow [119].

According to [120], companies must understand that CSR is not corporate charity but is economically sustainable social responsibility actions that support the environment and the surrounding communities. It is also about taking advantage of dynamic capabilities as a key to managing internal and external resources as a means of achieving the SDGs: joint actions in which society is empowered through smart surveillance, peace, and justice for environmental sustainability, economic sustainability, and corporate social responsibility to achieve the sustainable development goals (SDG 16 and SDG 17) [121].

Sustainable development promotes corporate green transformation on posture, people, products, consumers, and suppliers [110]. CSR emphasizes its role in sustainable global development and competitiveness among modern economies [122]. Companies should be

seen as part of sustainable development transformation, through corporate responsibility and governance, social entrepreneurship, and pro-environmental behavior [77].

6.1. Practical Implications and Future Directions

Strategies aimed at environmental sustainability, economic sustainability, and corporate social responsibility have become part of the agenda of companies that want to remain competitive in the current scenario and in the long term. Although the SDGs clearly demonstrate which goals must be achieved, companies still find it difficult to outline strategic actions aimed at the business sector. Ref. [123] reinforces the view that companies that want to go global or be better in management need to have connections everywhere, not only in the corporate world but also within academia, society, and governments. Thus, we propose insights for companies, academia, society, and governments based on dynamic capabilities that drive sustainability, economic sustainability, and corporate social responsibility towards the Agenda 2030.

For future studies, we suggest that dynamic capabilities could be validated by specialists in different sectors, looking at the mediating and moderating influence of dynamic capabilities based on empirical application within environmental sustainability, economic sustainability, and strategic corporate social responsibility actions and the contribution to each SDG, utilizing qualitative–quantitative methods, in addition to detecting improvements in the set of dynamic capabilities by action research. Table 6 explores these future directions.

Table 6. Future Directions.

	Companies	Academia	Society	Government
Environmental sustainability	From ref. [107], there is an opportunity to explore the direct and indirect relationship between the dynamic capabilities and the creation of green jobs within the circular economic sustainability context.	Include and adapt school curricula to form leaders by including an assessment of environmental sustainability integration in higher education for future experts and leaders [100]	Invest and create green products and services focused on green marketing and encourage environment friendly marketing practices (product, price, place, promotion). Success of green marketing reflects in the success of society to curb environmental problems [111]	Search for regulation on corporate social responsibility in energy, extraction, and other manufacturing sector industries, especially in developing countries [104]
Economic Sustainability	Creating market opportunities, business development, and company brands that convey sustainable, environmental values [113] CSR and firm performance: explore the moderation of sustainability strategy and top management commitment [98]	Teaching the local digital society to acquire competences for sustainable development [101]. Research corporate sustainability integration: Analyze corporate leadership experience and academic teaching from an organizational culture perspective; in the other words, a partnership combination [103].	As suggested by ref. [94], investigate the post COVID-19 pandemic and consumer–employee–organization wellbeing based on the dynamic capability theory approach.	Digital governance for addressing environmental, social, and economic sustainability performance challenges [109] Citizen empowerment through smart surveillance for sustainable development goals [121] Challenges for innovation and sustainable development in Latin America and emerging developing countries and the significance of institutions and human capital [93]
Corporate social responsibility	As indicated by ref. [120], understand how corporate charitable and economic sustainability social responsibility practices help to improve the quality of work life for employees. Furthermore, investigate the potential of responsible business to promote sustainable work as an analysis of CSR/CSR instruments aimed at the Agenda 2030 [108]	Promote an industry-guided review of responsible investing: Bridging the divide between academia and industry [102]	Establish health policies aimed at healthy lives and wellbeing for older employees–consumers–society, based on the Agenda 2030 [124]	Explore tax incentives and environmental, social, and governance performance [105]

6.2. Limitations

As in the research study, this article has limitations. Factors related to the selection of articles by means of a literature review and the subsequent concepts adopted may have resulted in relevant papers not being included. Similarly, the cognitive process used to identify and analyze the content may have resulted in subjective bias. Nevertheless, care

was taken to group different authors, articles, and dates to minimize this point. These limitations should be noted by academics considering future research directions as they continue to investigate this important and timely topic.

7. Conclusions

This work aims to identify dynamic capabilities important for companies in strategic planning, particularly in environmental and economic sustainability and corporate social responsibility (CSR) to achieve the Sustainable Development Goals (SDGs) and associated strategic actions. The main contribution lies in identifying dynamic capabilities associated with environmental sustainability, economic sustainability, and CSR that actively position companies not just as supporting players but as entities influencing environmental and social transformation. The proposed framework systematically guides the internalization and externalization of these dynamic capabilities, offering a structured approach for companies to navigate toward sustainable development.

Our assessment highlights the importance for companies of understanding environmental sustainability, economic sustainability, and corporate social responsibility (CSR) in their strategic business planning, a strategy that is not only used to measure and increase financial investment but also understand that being sustainable means breaking through the challenges of competitiveness and being aligned with the Sustainable Development Goals. In other words, the main contribution of the work is understanding which dynamic capabilities of environmental sustainability, economic sustainability, and corporate social responsibility are responsible for ensuring that companies are actively seen not as supporting players but as global environmental and social transformers and collaborators. The internalization and externalization directions driven by the dynamic capabilities are guided through a framework.

Many studies have explored environmental sustainability, economic sustainability, and corporate social responsibility simultaneously. However, there is still a lack of studies that explore the complexities of these relationships in companies. This remains a challenge for the future, one in which understanding the mediating and moderating influence of these pillars on the SDGs is vital. The present work also identifies opportunities, especially for private companies and academia, to expand and adopt practical actions and initiatives to achieve sustainable development.

In terms of its theory, the study shows that dynamic capabilities must be considered more frequently as a set, because although current theory explores dynamic capabilities, it does not determine which set can be used by companies and the logical sequence to build, integrate, and reconfigure capabilities throughout the changes and uncertainties that occur internally and externally in companies, especially when linked to environmental sustainability, economic sustainability, and corporate social responsibility. In practice, this study highlights the integration of dynamic capabilities in strategic management to fulfill the SDGs and suggests that it can be absorbed and used within different sectors, in addition to showing that companies are not only restricted to SDG 12 (sustainable production and consumption) but are directly or indirectly linked to all SDGs. Companies, therefore, need to develop actions and processes from a systemic viewpoint of their business. From the perspective of policymakers, there is an opportunity to enter specific public–private partnerships that support the adoption of sustainable actions by companies, in addition to financial and tax incentives, as well as private sector support to not only generate local economic growth but also to promote the social development of society without compromising the environment.

Our article reinforces that there is a long way to go for the sustainable growth of companies, which still barely relates environmental sustainability, economic sustainability, and corporate social responsibility with global agendas such as the SDGs, as they are still marked by small and specific actions. The paper reinforces that there is potential for sustainable business growth, and that can make a leap through theoretical and practical guidance on which strategic actions to take linked to the SDGs and beyond. Overall, by

presenting a systemic and original insight through a grouping analysis of the dynamic capabilities and the strategic actions findings to the direct company's participation and relevant role in the sustainable development goals, we provide a small contribution to the global effort to mitigate the effects of not fully achieving the Agenda 2030, and consequently, paving the way to start business discussions to the next step, view 2050, in other words, initiate future discussions to adapt, integrate, and reconfigure the necessary changes to continue transforming the business world for the benefit of environmental sustainability, economic sustainability, and corporate social responsibility.

Supplementary Materials: The following are available online at <https://www.mdpi.com/article/10.3390/resources13020022/s1>, Table S1. Articles analysis.

Author Contributions: Conceptualization, J.d.A.B.F. and R.A.G.B.; methodology, J.d.A.B.F. and R.A.G.B.; validation, J.d.A.B.F. and R.A.G.B.; formal analysis, J.d.A.B.F.; investigation, J.d.A.B.F.; data curation, J.d.A.B.F. and A.F.J.; writing—original draft, J.d.A.B.F. and A.F.J.; writing—review and editing, R.A.G.B. and B.S.B.; supervision, R.A.G.B. All authors have read and agreed to the published version of the manuscript.

Funding: This study was financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior—Brasil (CAPES)—Finance Code 001 and PROAP via PROPG/UNESP. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.

Data Availability Statement: Data are contained within the article and supplementary materials.

Acknowledgments: The authors would like to thank the post-graduation program in Production Engineering of School of Engineering (UNESP Bauru) for administrative and technical support. We would like to use this article as an opportunity to express our sincere thanks to Barbara Stolte Bezerra and Isabela Battistello Espíndola, who have taken the time to carefully review our manuscript.

Conflicts of Interest: The authors declare no conflicts of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.

References

1. UN. UN Documents: Gathering a Body of Global Agreements. Our Common Future, Chapter 10: Managing the Commons. Available online: <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf> (accessed on 6 September 2020).
2. Leite, C.M. Implementação Dos Objetivos de Desenvolvimento Sustentável Em Empresas: Contribuições Do Investimento Social Privado No Brasil. Master's Thesis, Universidade Estadual de Campinas, Campinas, Brasil, 2018.
3. Modgil, S.; Gupta, S.; Bhushan, B. Building a Living Economy through Modern Information Decision Support Systems and UN Sustainable Development Goals. *Prod. Plan. Control* **2020**, *31*, 967–987. [[CrossRef](#)]
4. Gómez Martín, E.; Giordano, R.; Pagano, A.; van der Keur, P.; Máñez Costa, M. Using a System Thinking Approach to Assess the Contribution of Nature Based Solutions to Sustainable Development Goals. *Sci. Total Environ.* **2020**, *738*, 139693. [[CrossRef](#)] [[PubMed](#)]
5. Le Caous, E.; Huarng, F. Economic Complexity and the Mediating Effects of Income Inequality: Reaching Sustainable Development in Developing Countries. *Sustainability* **2020**, *12*, 2089. [[CrossRef](#)]
6. Fritz, M.M.C.; Cordova, M. Developing Managers' Mindset to Lead More Sustainable Supply Chains. *Clean. Logist. Supply Chain* **2023**, *7*, 100108. [[CrossRef](#)]
7. Cordova, M.F.; Celone, A. SDGs and Innovation in the Business Context Literature Review. *Sustainability* **2019**, *11*, 7043. [[CrossRef](#)]
8. Palmer, T.B.; Flanagan, D.J. The Sustainable Company: Looking at Goals for People, Planet and Profits. *J. Bus. Strategy* **2016**, *37*, 28–38. [[CrossRef](#)]
9. Almeida, C.M.V.B.; Agostinho, F.; Giannetti, B.F.; Huisingh, D. Integrating Cleaner Production into Sustainability Strategies: An Introduction to This Special Volume. *J. Clean. Prod.* **2015**, *96*, 1–9. [[CrossRef](#)]
10. Teece, D.J.; Pisano, G.; Shuen, A. Dynamic Capabilities and Strategic Management. *Strateg. Manag. J.* **1997**, *18*, 509–533. [[CrossRef](#)]
11. Gruchmann, T.; Timmer, V.; Gold, S.; Gefner, C. Dynamic Capabilities for Sustainable Change in the Food Processing Industry: A Multilevel Perspective. *J. Clean. Prod.* **2021**, *311*, 127534. [[CrossRef](#)]
12. Shang, H.; Chen, R.; Li, Z. Dynamic Sustainability Capabilities and Corporate Sustainability Performance: The Mediating Effect of Resource Management Capabilities. *Sustain. Dev.* **2020**, *28*, 595–612. [[CrossRef](#)]

13. Inigo, E.A.; Albareda, L. Sustainability Oriented Innovation Dynamics: Levels of Dynamic Capabilities and Their Path-Dependent and Self-Reinforcing Logics. *Technol. Forecast. Soc. Chang.* **2019**, *139*, 334–351. [[CrossRef](#)]
14. de Oliveira, A.C.; Sokulski, C.C.; da Silva Batista, A.A.; de Francisco, A.C. Competencies for Sustainability: A Proposed Method for the Analysis of Their Interrelationships. *Sustain. Prod. Consum.* **2018**, *14*, 82–94. [[CrossRef](#)]
15. Jabbour, C.J.C. Environmental Training in Organisations: From a Literature Review to a Framework for Future Research. *Resour. Conserv. Recycl.* **2013**, *74*, 144–155. [[CrossRef](#)]
16. Lopes de Sousa Jabbour, A.B.; Ndubisi, N.O.; Roman Pais Seles, B.M. Sustainable Development in Asian Manufacturing SMEs: Progress and Directions. *Int. J. Prod. Econ.* **2020**, *225*, 107567. [[CrossRef](#)]
17. Igwe, P.A.; Icha-Ituma, A.; Madichie, N.O. The Evaluation of CSR and Social Value Practices among Uk Commercial and Social Enterprises. *Entrep. Bus. Econ. Rev.* **2018**, *6*, 37–52. [[CrossRef](#)]
18. Prokopiou, D.; Mavridoglou, G.; Toanoglou, M.; Tselentis, B. Tourism Development of the Cyclades Islands: Economic, Social and Carrying Capacity Assessment and Consequences. *WIT Trans. Ecol. Environ.* **2018**, *217*, 509–521. [[CrossRef](#)]
19. Bowen, H. *Social Responsibility of the Businessman* Pub; Harper: New York, NY, USA, 1953; Volume 6.
20. Mostepaniuk, A.; Nasr, E.; Awwad, R.I.; Hamdan, S.; Aljuhmani, H.Y. Managing a Relationship between Corporate Social Responsibility and Sustainability: A Systematic Review. *Sustainability* **2022**, *14*, 11203. [[CrossRef](#)]
21. Ahmad, H.; Yaqub, M.; Lee, S.H. Environmental-, Social-, and Governance-Related Factors for Business Investment and Sustainability: A Scientometric Review of Global Trends. *Environ. Dev. Sustain.* **2023**, 1–23. [[CrossRef](#)]
22. Sargani, G.R.; Zhou, D.; Raza, M.H.; Wei, Y. Sustainable Entrepreneurship in the Agriculture Sector: The Nexus of the Triple Bottom Line Measurement Approach. *Sustainability* **2020**, *12*, 3275. [[CrossRef](#)]
23. Taliento, M.; Favino, C.; Netti, A. Impact of Environmental, Social, and Governance Information on Economic Performance: Evidence of a Corporate ‘Sustainability Advantage’ from Europe. *Sustainability* **2019**, *11*, 1738. [[CrossRef](#)]
24. Liang, Y.; Lee, M.J.; Jung, J.S. Dynamic Capabilities and an ESG Strategy for Sustainable Management Performance. *Front. Psychol.* **2022**, *13*, 887776. [[CrossRef](#)]
25. Hussain, N.; Rigoni, U.; Orij, R.P. Corporate Governance and Sustainability Performance: Analysis of Triple Bottom Line Performance. *J. Bus. Ethics* **2018**, *149*, 411–432. [[CrossRef](#)]
26. Mensah, J. Sustainable Development: Meaning, History, Principles, Pillars, and Implications for Human Action: Literature Review. *Cogent. Soc. Sci.* **2019**, *5*, 1653531. [[CrossRef](#)]
27. Gosling-Goldsmith, J. Sustainable Development Goals and Uncertainty Visualization. Master’s Thesis, Faculty of Geo-Information Science and Earth Observation, Enschede, The Netherlands, 2018.
28. Littlewood, D.; Holt, D. How Social Enterprises Can Contribute to the Sustainable Development Goals (SDGs)—A Conceptual Framework. In *Contemporary Issues in Entrepreneurship Research*; Emerald Group Publishing Ltd.: Bingley, UK, 2018; Volume 8, pp. 33–46.
29. Avtar, R.; Aggarwal, R.; Kharrazi, A.; Kumar, P.; Kurniawan, T.A. Utilizing Geospatial Information to Implement SDGs and Monitor Their Progress. *Environ. Monit. Assess.* **2020**, *192*, 35. [[CrossRef](#)]
30. Sachs, I. Entering the Anthropocene: The Twofold Challenge of Climate Change and Poverty Eradication. In *Transitions to Sustainability*; Springer: Berlin/Heidelberg, Germany, 2015; pp. 7–18. [[CrossRef](#)]
31. Vrabcová, P.; Urbancová, H. Approaches of Selected Organisations in the Czech Republic to Promoting the Concept of Sustainable Development and Corporate Social Responsibility. *Agric. Econ.* **2021**, *67*, 255–265. [[CrossRef](#)]
32. Cristea, M.; Noja, G.G.; Thalassinou, E.; Cîrciumaru, D.; Ponea, C.Ş.; Durău, C.C. Environmental, Social and Governance Credentials of Agricultural Companies—The Interplay with Company Size. *Resources* **2022**, *11*, 30. [[CrossRef](#)]
33. Hudaefi, F.A. How Does Islamic Fintech Promote the SDGs? Qualitative Evidence from Indonesia. *Qual. Res. Financ. Mark.* **2020**, *12*, 353–366. [[CrossRef](#)]
34. Plastun, A.; Makarenko, I.; Grabovska, T.; Situmeang, R.; Bashlai, S. Sustainable Development Goals in Agriculture and Responsible Investment: A Comparative Study of the Czech Republic and Ukraine. *Probl. Perspect. Manag.* **2021**, *19*, 65–76. [[CrossRef](#)]
35. Ramani, S.V.; Parihar, R.; Sen, S. On Nudging MNE Toward SDG1: A Policy Perspective. *Int. Bus. Manag.* **2017**, *33*, 89–129. [[CrossRef](#)]
36. Mina, H.; Kannan, D.; Gholami-Zanjani, S.M.; Biuki, M. Transition towards Circular Supplier Selection in Petrochemical Industry: A Hybrid Approach to Achieve Sustainable Development Goals. *J. Clean. Prod.* **2021**, *286*, 125273. [[CrossRef](#)]
37. Priyadarshini, P.; Abhilash, P.C. Policy Recommendations for Enabling Transition towards Sustainable Agriculture in India. *Land Use Policy* **2020**, *96*, 104718. [[CrossRef](#)]
38. Saari, U.A.; Herstatt, C.; Tiwari, R.; Dedehayir, O.; Mäkinen, S.J. The Vegan Trend and the Microfoundations of Institutional Change: A Commentary on Food Producers’ Sustainable Innovation Journeys in Europe. *Trends Food Sci. Technol.* **2021**, *107*, 161–167. [[CrossRef](#)]
39. Macassa, G. Social Enterprise, Population Health and Sustainable Development Goal 3: A Public Health Viewpoint. *Ann. Glob. Health* **2021**, *87*, 52–59. [[CrossRef](#)]
40. Laraia, L.; Robke, L.; Waldmann, H. Bioactive Compound Collections: From Design to Target Identification. *Chem* **2018**, *4*, 705–730. [[CrossRef](#)]

41. Nguyen, M.H.T.; Carr, S.C.; Hodgetts, D.; Fauchart, E. Why Do Some Social Enterprises Flourish in Vietnam? A Comparison of Human and Ecosystem Partnerships. *Sustain. Account. Manag. Policy J.* **2021**, *12*, 1312–1347. [[CrossRef](#)]
42. Gao, L.; Bryan, B.A. Finding Pathways to National-Scale Land-Sector Sustainability. *Nature* **2017**, *544*, 217–222. [[CrossRef](#)]
43. Conway, D.; Robinson, B.; Mudimu, P.; Chitekwe, T.; Koranteng, K.; Swilling, M. Exploring Hybrid Models for Universal Access to Basic Solar Energy Services in Informal Settlements: Case Studies from South Africa and Zimbabwe. *Energy Res. Soc. Sci.* **2019**, *56*, 101202. [[CrossRef](#)]
44. Woo, W.T.; Koh, H.L.; Teh, S.Y. Achieving Excellence in Sustainable Development Goals in Sunway University Malaysia. In *World Sustainability Series*; Springer: Berlin/Heidelberg, Germany, 2020; pp. 265–282. [[CrossRef](#)]
45. Ganson, B. Business (Not) for Peace: Incentives and Disincentives for Corporate Engagement on Good Governance and Peaceful Development in the African Context. *S. Afr. J. Int. Aff.* **2019**, *26*, 209–232. [[CrossRef](#)]
46. Kay, N.M.; Leih, S.; Teece, D.J. The Role of Emergence in Dynamic Capabilities: A Restatement of the Framework and Some Possibilities for Future Research. *Ind. Corp. Chang.* **2018**, *27*, 623–638. [[CrossRef](#)]
47. Zollo, M.; Winter, S.G. Deliberate Learning and the Evolution of Dynamic Capabilities. *Organ. Sci.* **2002**, *13*, 339–351. [[CrossRef](#)]
48. Shuen, A.; Feiler, P.F.; Teece, D.J. Dynamic Capabilities in the Upstream Oil and Gas Sector: Managing next Generation Competition. *Energy Strategy Rev.* **2014**, *3*, 5–13. [[CrossRef](#)]
49. Teece, D.J. Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance. *Strateg. Manag. J.* **2007**, *28*, 1319–1350. [[CrossRef](#)]
50. Teece, D.; Peteraf, M.; Leih, S. Dynamic Capabilities and Organizational Agility: Risk, Uncertainty, and Strategy in the Innovation Economy. *Calif. Manag. Rev.* **2016**, *58*, 13–35. [[CrossRef](#)]
51. GVces As Empresas Frente Aos Objetivos Do Desenvolvimento Sustentável. Available online: <https://www.estrategiaods.org.br/as-empresas-frente-aos-objetivos-do-desenvolvimento-sustentavel-ods/> (accessed on 11 March 2021).
52. Petit, N.; Teece, D.J. Innovating Big Tech Firms and Competition Policy: Favoring Dynamic over Static Competition. *Ind. Corp. Chang.* **2021**, *30*, 1168–1198. [[CrossRef](#)]
53. Baden-Fuller, C.; Teece, D.J. Market Sensing, Dynamic Capability, and Competitive Dynamics. *Ind. Mark. Manag.* **2020**, *89*, 105–106. [[CrossRef](#)]
54. Teece, D.J. Business Models and Dynamic Capabilities. *Long Range Plan.* **2018**, *51*, 40–49. [[CrossRef](#)]
55. Bhattacharya, S.; Momaya, K.S. Actionable Strategy Framework for Digital Transformation in AECO Industry. *Eng. Constr. Archit. Manag.* **2021**, *28*, 1397–1422. [[CrossRef](#)]
56. Engert, S.; Baumgartner, R.J. Corporate Sustainability Strategy—Bridging the Gap between Formulation and Implementation. *J. Clean. Prod.* **2016**, *113*, 822–834. [[CrossRef](#)]
57. Grainger-Brown, J.; Malekpour, S. Implementing the Sustainable Development Goals: A Review of Strategic Tools and Frameworks Available to Organisations. *Sustainability* **2019**, *11*, 1381.
58. Nylander, E.; Österlund, L.; Fejes, A. Exploring the Adult Learning Research Field by Analysing Who Cites Whom. *Vocat. Learn.* **2018**, *11*, 113–131. [[CrossRef](#)]
59. Ayuso, S.; Rodríguez, M.Á.; Ricart, J.E. Responsible Competitiveness at the “Micro” Level of the Firm—Using Stakeholder Dialogue as a Source for New Ideas: A Dynamic Capability Underlying Sustainable Innovation. *Corp. Gov.* **2006**, *6*, 475–490. [[CrossRef](#)]
60. Fetscherin, M.; Heinrich, D. Consumer Brand Relationships Research: A Bibliometric Citation Meta-Analysis. *J. Bus. Res.* **2015**, *68*, 380–390. [[CrossRef](#)]
61. Coffay, M.; Bocken, N. Sustainable by Design: An Organizational Design Tool for Sustainable Business Model Innovation. *J. Clean. Prod.* **2023**, *427*, 139294. [[CrossRef](#)]
62. Su, X.; Wang, S.; Li, F. The Impact of Digital Transformation on ESG Performance Based on the Mediating Effect of Dynamic Capabilities. *Sustainability* **2023**, *15*, 13506. [[CrossRef](#)]
63. Kortus, L.; Gutmann, T. How Do Firms Build Dynamic Capabilities to Develop Sustainable Products? A Multiple Case Study in the Manufacturing Industry. *J. Clean. Prod.* **2023**, *415*, 137887. [[CrossRef](#)]
64. Feng, H.; Wang, F.; Song, G.; Liu, L. Digital Transformation on Enterprise Green Innovation: Effect and Transmission Mechanism. *Int. J. Environ. Res. Public Health* **2022**, *19*, 10614. [[CrossRef](#)] [[PubMed](#)]
65. Andersson, S.; Svensson, G.; Molina-Castillo, F.J.; Otero-Neira, C.; Lindgren, J.; Karlsson, N.P.E.; Laurell, H. Sustainable Development—Direct and Indirect Effects between Economic, Social, and Environmental Dimensions in Business Practices. *Corp. Soc. Responsib. Environ. Manag.* **2022**, *29*, 1158–1172. [[CrossRef](#)]
66. Gaddekar, R.; Sarkar, B.; Gaddekar, A. Investigating the Relationship among Industry 4.0 Drivers, Adoption, Risks Reduction, and Sustainable Organizational Performance in Manufacturing Industries: An Empirical Study. *Sustain. Prod. Consum.* **2022**, *31*, 670–692. [[CrossRef](#)]
67. Al-Shami, S.; Rashid, N. A Holistic Model of Dynamic Capabilities and Environment Management System towards Eco-Product Innovation and Sustainability in Automobile Firms. *J. Bus. Ind. Mark.* **2022**, *37*, 402–416. [[CrossRef](#)]
68. Forcadell, F.J.; Aracil, E. A Purpose-Action Framework for Corporate Social Responsibility in Times of Shock. *J. Clean. Prod.* **2021**, *312*, 127789. [[CrossRef](#)]
69. Dyduch, W.; Chudziński, P.; Cyfert, S.; Zastempowski, M. Dynamic Capabilities, Value Creation and Value Capture: Evidence from SMEs under COVID-19 Lockdown in Poland. *PLoS ONE* **2021**, *16*, e0252423. [[CrossRef](#)] [[PubMed](#)]

70. Van Lieshout, J.W.F.C.; Nijhof, A.H.J.; Naarding, G.J.W.; Blomme, R.J. Connecting Strategic Orientation, Innovation Strategy, and Corporate Sustainability: A Model for Sustainable Development through Stakeholder Engagement. *Bus. Strat. Environ.* **2021**, *30*, 4068–4080. [CrossRef]
71. Chowdhury, P.; Shumon, R. Minimizing the Gap between Expectation and Ability: Strategies for Smes to Implement Social Sustainability Practices. *Sustainability* **2020**, *12*, 6408. [CrossRef]
72. Da Giau, A.; Foss, N.J.; Furlan, A.; Vinelli, A. Sustainable Development and Dynamic Capabilities in the Fashion Industry: A Multi-Case Study. *Corp. Soc. Responsib. Environ. Manag.* **2020**, *27*, 1509–1520. [CrossRef]
73. Felsberger, A.; Qaiser, F.H.; Choudhary, A.; Reiner, G. The Impact of Industry 4.0 on the Reconciliation of Dynamic Capabilities: Evidence from the European Manufacturing Industries. *Prod. Plan. Control* **2020**, *33*, 277–300. [CrossRef]
74. Criado-Gomis, A.; Iniesta-Bonillo, M.Á.; Cervera-Taulet, A.; Ribeiro-Soriano, D. Customer Functional Value Creation through a Sustainable Entrepreneurial Orientation Approach. *Econ. Res. Ekon. Istraz.* **2020**, *33*, 2360–2377. [CrossRef]
75. Näyhä, A. Finnish Forest-Based Companies in Transition to the Circular Bioeconomy—Drivers, Organizational Resources and Innovations. *For. Policy Econ.* **2020**, *110*, 101936. [CrossRef]
76. Radnejad, A.B.; Osiyevskyy, O.; Vredenburg, H. Barriers to Radical Process Innovation: A Case of Environmental Technology in the Oil Industry. *J. Strat. Manag.* **2020**, *13*, 453–476. [CrossRef]
77. Sołoducho-Pelc, L.; Sulich, A. Between Sustainable and Temporary Competitive Advantages in the Unstable Business Environment. *Sustainability* **2020**, *12*, 8832. [CrossRef]
78. Walton, S.; Zhang, A.; O’Kane, C. Energy Eco-Innovations for Sustainable Development: Exploring Organizational Strategic Capabilities through an Energy Cultures Framework. *Bus. Strat. Environ.* **2020**, *29*, 812–826. [CrossRef]
79. Mousavi, S.; Bossink, B.; van Vliet, M. Microfoundations of Companies’ Dynamic Capabilities for Environmentally Sustainable Innovation: Case Study Insights from High-Tech Innovation in Science-Based Companies. *Bus. Strat. Environ.* **2019**, *28*, 366–387. [CrossRef]
80. Krätzig, O.; Franzkowiak, V.; Sick, N. Multi-Level Perspective to Facilitate Sustainable Transitions—A Pathway for German Oems towards Electric Vehicles. *Int. J. Innov. Manag.* **2019**, *23*, 1940006. [CrossRef]
81. Mousavi, S.; Bossink, B.; van Vliet, M. Dynamic Capabilities and Organizational Routines for Managing Innovation towards Sustainability. *J. Clean. Prod.* **2018**, *203*, 224–239. [CrossRef]
82. Cheah, S.; Ho, Y.P.; Li, S. Business Model Innovation for Sustainable Performance in Retail and Hospitality Industries. *Sustainability* **2018**, *10*, 3952. [CrossRef]
83. Mousavi, S.; Bossink, B.A.G. Firms’ Capabilities for Sustainable Innovation: The Case of Biofuel for Aviation. *J. Clean. Prod.* **2017**, *167*, 1263–1275. [CrossRef]
84. Souza, A.A.A.; Alves, M.F.R.; Macini, N.; Cezarino, L.O.; Liboni, L.B. Resilience for Sustainability as an Eco-Capability. *Int. J. Clim. Chang. Strateg. Manag.* **2017**, *9*, 581–599. [CrossRef]
85. TEECE, D.; PISANO, G. The Dynamic Capabilities of Firms: An Introduction. *Ind. Corp. Chang.* **1994**, *3*, 537–556. [CrossRef]
86. Teece, D.J. Dynamic Capabilities as (Workable) Management Systems Theory. *J. Manag. Organ.* **2018**, *24*, 359–368. [CrossRef]
87. WBCSD Guia Para CEOs Sobre Os Objetivos de Desenvolvimento Sustentável. Available online: <https://cebds.org/publicacoes/guia-do-ceo-para-os-objetivos-de-desenvolvimento-sustentavel/#.X8-7PthKjIU> (accessed on 7 December 2020).
88. Bhattacharya, C.; Jekielek, R. Sustainability Progress Is Stalled at Most Companies. *MIT Sloan Manag. Rev.* **2023**, *64*, 1–4.
89. Mitreğa, M.; Choi, T.M. How Small-and-Medium Transportation Companies Handle Asymmetric Customer Relationships under COVID-19 Pandemic: A Multi-Method Study. *Transp. Res. E Logist. Transp. Rev.* **2021**, *148*, 102249. [CrossRef]
90. CEBDS. *Planejando o Brasil Pós-Pandemia*; SciELO: Rio de Janeiro, Brasil, 2020.
91. Abram, N.K.; MacMillan, D.C.; Xofis, P.; Ancrenaz, M.; Tzanopoulos, J.; Ong, R.; Goossens, B.; Koh, L.P.; Del Valle, C.; Peter, L.; et al. Identifying Where REDD+ Financially Out-Competes Oil Palm in Floodplain Landscapes Using a Fine-Scale Approach. *PLoS ONE* **2016**, *11*, e0156481. [CrossRef]
92. Heubeck, T. Walking on the Gender Tightrope: Unlocking ESG Potential through CEOs’ Dynamic Capabilities and Strategic Board Composition. *Bus. Strat. Environ.* **2023**. [CrossRef]
93. Zapata-cantu, L.; González, F. Challenges for Innovation and Sustainable Development in Latin America: The Significance of Institutions and Human Capital. *Sustainability* **2021**, *13*, 4077. [CrossRef]
94. Nayal, P.; Pandey, N.; Paul, J. COVID-19 Pandemic and Consumer-Employee-Organization Wellbeing: A Dynamic Capability Theory Approach. *J. Consum. Aff.* **2022**, *56*, 359–390. [CrossRef]
95. Yang, L.X. From General Principles of Civil Law to General Provisions of Civil Law: A Historical Leap in Contemporary Chinese Civil Law. *Soc. Sci. China* **2019**, *2*, 85–91.
96. Kolk, A. The Social Responsibility of International Business: From Ethics and the Environment to CSR and Sustainable Development. *J. World Bus.* **2016**, *51*, 23–34. [CrossRef]
97. Anderies, J.M.; Folke, C.; Walker, B.; Ostrom, E. Aligning Key Concepts for Global Change Policy: Robustness, Resilience, and Sustainability. *Ecol. Soc.* **2013**, *18*, 16. [CrossRef]
98. Rahman, H.U.; Zahid, M.; Al-Faryan, M.A.S. ESG and Firm Performance: The Rarely Explored Moderation of Sustainability Strategy and Top Management Commitment. *J. Clean. Prod.* **2023**, *404*, 136859. [CrossRef]
99. Jasińska, E.; Jasiński, M. Mining Industry Corporate Social Responsibility to Education Development. *Resources* **2022**, *11*, 65. [CrossRef]

100. Obrecht, M.; Feodorova, Z.; Rosi, M. Assessment of Environmental Sustainability Integration into Higher Education for Future Experts and Leaders. *J. Environ. Manag.* **2022**, *316*, 115223. [[CrossRef](#)]
101. Bagur-Femenías, L.; Buil-Fabrega, M.; Aznar, J.P. Teaching Digital Natives to Acquire Competences for Sustainable Development. *Int. J. Sustain. High. Educ.* **2020**, *21*, 1053–1069. [[CrossRef](#)]
102. Fan, J.H.; Omura, A.; Roca, E. An Industry-Guided Review of Responsible Investing: Bridging the Divide between Academia and Industry. *J. Clean. Prod.* **2022**, *354*, 131685. [[CrossRef](#)]
103. Weerts, K.; Vermeulen, W.; Witjes, S. On Corporate Sustainability Integration Research: Analysing Corporate Leaders' Experiences and Academic Learnings from an Organisational Culture Perspective. *J. Clean. Prod.* **2018**, *203*, 1201–1215. [[CrossRef](#)]
104. Hassan, Q.M.; Khudir, I.M.; Olawuyi San, D.S. Regulating Corporate Social Responsibility in Energy and Extractive Industries: The Case of International Oil Companies in a Developing Country. *Resour. Policy* **2023**, *83*, 103607. [[CrossRef](#)]
105. Zhu, N.; Zhou, Y.; Zhang, S.; Yan, J. Tax Incentives and Environmental, Social, and Governance Performance: Empirical Evidence from China. *Environ. Sci. Pollut. Res.* **2023**, *30*, 54899–54913. [[CrossRef](#)]
106. Franco, J.d.A.B.; Domingues, A.M.; Africano, N.d.A.; Deus, R.M.; Battistelle, R.A.G. Sustainability in the Civil Construction Sector Supported by Industry 4.0 Technologies: Challenges and Opportunities. *Infrastructures* **2022**, *7*, 43. [[CrossRef](#)]
107. Sulich, A.; Sołoducho-Pelc, L. The Circular Economy and the Green Jobs Creation. *Environ. Sci. Pollut. Res.* **2022**, *29*, 14231–14247. [[CrossRef](#)]
108. Torres, L.; Ripa, D.; Jain, A.; Herrero, J.; Leka, S. The Potential of Responsible Business to Promote Sustainable Work—An Analysis of CSR/ESG Instruments. *Saf. Sci.* **2023**, *164*, 106151. [[CrossRef](#)]
109. Leoni, G.; Maione, G.; Mazzara, L. Digital Governance for Addressing Performance Challenges within Inter-Municipalities. In *Big Data and Decision-Making: Applications and Uses in the Public and Private Sector*; Emerald Publishing Limited: Bingley, UK, 2023; pp. 27–42. [[CrossRef](#)]
110. Wang, Z.; Chu, E.; Hao, Y. Towards Sustainable Development: How Does ESG Performance Promotes Corporate Green Transformation. *Int. Rev. Financ. Anal.* **2024**, *91*, 102982. [[CrossRef](#)]
111. Akhtar, M.F.; Suki, N.M. Green Consumer Behaviour: Integration of Theory of Planned Behaviour and Technology Acceptance Model. *Res. Anthol. Meas. Achiev. Sustain. Dev. Goals* **2022**, *3*, 863–871. [[CrossRef](#)]
112. Arena, M.; Azzone, G.; Mapelli, F. Corporate Social Responsibility Strategies in the Utilities Sector: A Comparative Study. *Sustain. Prod. Consum.* **2019**, *18*, 83–95. [[CrossRef](#)]
113. Escribano, M.; Gaspar, P.; Mesias, F.J. Creating Market Opportunities in Rural Areas through the Development of a Brand That Conveys Sustainable and Environmental Values. *J. Rural. Stud.* **2020**, *75*, 206–215. [[CrossRef](#)]
114. Radmehr, R.; Shayanmehr, S.; Ali, E.B.; Ofori, E.K.; Jasińska, E.; Jasiński, M. Exploring the Nexus of Renewable Energy, Ecological Footprint, and Economic Growth through Globalization and Human Capital in G7 Economics. *Sustainability* **2022**, *14*, 12227. [[CrossRef](#)]
115. Ahmed, N.; Sheikh, A.A.; Mahboob, F.; Ali, M.S.E.; Jasińska, E.; Jasiński, M.; Leonowicz, Z.; Burgio, A. Energy Diversification: A Friend or Foe to Economic Growth in Nordic Countries? A Novel Energy Diversification Approach. *Energies* **2022**, *15*, 5422. [[CrossRef](#)]
116. Żywiec, J.; Szpak, D.; Piegdoń, I.; Boryczko, K.; Pietrucha-Urbanik, K.; Tchórzewska-Cieślak, B.; Rak, J. An Approach to Assess the Water Resources Reliability and Its Management. *Resources* **2023**, *12*, 4. [[CrossRef](#)]
117. Rehman, R.; Aslam, M.S.; Jasińska, E.; Javed, M.F.; Goño, M. Guidelines for the Technical Sustainability Evaluation of the Urban Drinking Water Systems Based on Analytic Hierarchy Process. *Resources* **2023**, *12*, 8. [[CrossRef](#)]
118. Sullivan, K.; Thomas, S.; Rosano, M. Using Industrial Ecology and Strategic Management Concepts to Pursue the Sustainable Development Goals. *J. Clean. Prod.* **2018**, *174*, 237–246. [[CrossRef](#)]
119. Ivascu, L.; Domil, A.; Sarfraz, M.; Bogdan, O.; Burca, V.; Pavel, C. New Insights into Corporate Sustainability, Environmental Management and Corporate Financial Performance in European Union: An Application of VAR and Granger Causality Approach. *Environ. Sci. Pollut. Res.* **2022**, *29*, 82827–82843. [[CrossRef](#)]
120. Pham, Q.M.; Dhir, M.; Carrier Guillomet, T. How Do Corporate Charitable and Economic Social Responsibility Practices Help to Improve the Quality of Work Life for Employees? *Worldw. Hosp. Tour. Themes* **2022**, *14*, 300–311. [[CrossRef](#)]
121. Khanna, P.; Khanra, S. Citizen Empowerment through Smart Surveillance: Evidence from Indian Smart Cities. *Digit. Policy Regul. Gov.* **2023**, *25*, 385–401. [[CrossRef](#)]
122. La Rocca, T.; La Rocca, M.; Fasano, F.; Cariola, A. Does a Country's Environmental Policy Affect the Value of Small and Medium Sized Enterprises Liquidity in the Energy Sector? *Corp. Soc. Responsib. Environ. Manag.* **2023**, *30*, 277–290. [[CrossRef](#)]
123. Herrmann, J.D.; Sangalli, L.C.; Teece, D.J. Dynamic Capabilities: Fostering an Innovation-Friendly Environment in Brazil. *RAE Rev. Adm. De Empresas* **2017**, *57*, 283–287. [[CrossRef](#)]
124. Patterson, I.; Balderas-Cejudo, A. Tourism towards Healthy Lives and Well-Being for Older Adults and Senior Citizens: Tourism Agenda 2030. *Tour. Rev.* **2022**, *78*, 427–442. [[CrossRef](#)]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.