

Review

Toward a System Theory of Corporate Sustainability: An Interim Struggle

Sooksan Kantabutra 

Center for Research on Sustainable Leadership, College of Management, Mahidol University, Bangkok 10400, Thailand; sooksan.kan@mahidol.ac.th

Abstract: In response to the prevailing sustainability problems that are difficult to solve since they are characterized by complex interdependencies, and the effort to solve one aspect of a sustainability problem may lead to other problems, the present study's objective is to develop an interim, system-based theory of corporate sustainability to fill in significant gaps in the corporate sustainability field. The paper starts by outlining the gaps, introducing a theory building approach, followed by discussing components of the emerging theory. As a system-based theory, the emerging theory is demonstrated through the Corporate Sustainability system, comprising Sustainability Culture, Resilience and Corporate Sustainability Performance subsystems. These subsystems interact to ensure a continuous delivery of sustainability performance outputs and outcomes. The resulting theory is highly dynamic in nature with a feedback loop of learning to reflect the actual reality of high-velocity environment. Implications for corporate practitioners and theorists are also discussed.

Keywords: corporate sustainability; theory building; resilience; sustainability practices; sustainability performance; sustainability organizational culture; sufficiency economy



Citation: Kantabutra, S. Toward a System Theory of Corporate Sustainability: An Interim Struggle. *Sustainability* **2022**, *14*, 15931. <https://doi.org/10.3390/su142315931>

Academic Editor: David K. Ding

Received: 2 October 2022

Accepted: 25 November 2022

Published: 29 November 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the author. 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/>).

1. Introduction

Corporate sustainability has become an overarching goal for corporate leaders since, for their corporations to survive and thrive, they need to daily deal with uncertainties or “wicked problems” [1] introduced by the high-velocity environment. These uncertainties are a result of the deep interconnections among the society, the environment and the economy, which in the past were viewed as three separate entities, and are often characterized by contraposition and multiple tensions [2–4] as a result of the prevailing imbalanced development of the three domains, mounting social pressure, and growing stringent regulations. To survive in such a context, corporate leaders are required to effectively respond to these concurrent, multiple and yet conflicting demands via a holistic, system-based perspective [5–8].

While many relevant theories [9–14] have been introduced, no single holistic, system-based approach exists to help scholars and practitioners to understand the process of corporate sustainability and allow them to advance toward sustainability as soon as needed [15,16]. In the domain of corporate sustainability alone, only a limited number of interim theories is reported scholarly [15,17]. This limited theoretical knowledge indicates a need for a more comprehensive theory to explain the process of corporate sustainability since researchers, whether adopting the positivist or phenomenological paradigm in any field, often need a full-blown theory to start forming their research. The full-blown theory helps the researchers to comprehend, describe and predict situations, behavioral actions and/or context. It guides the researchers to either go against orthodoxy or to continue with it to enrich the current knowledge domain.

Specifically, scholars have employed a number of sustainability-related theories [15], such as stakeholder theory [9], stewardship theory [13], institutional theory [14], and legitimacy theory [11], and practitioners need to use these theories together on their own

discretion to achieve corporate sustainability [16]. None of them alone appears as a holistic approach that scholars can use to inform the development of their studies and practitioners can adopt/adapt toward corporate sustainability as quickly as appears needed [15].

Although an interim theory of corporate sustainability was introduced in 2020 [15] and has since informed the development of various studies around the globe [18–32], it is only an interim struggle [15]. Therefore, the present study's objective is to construct a more complete theory of corporate sustainability as another “interim struggle” serving as a platform for further scholarly enlightenment. The study starts by outlining knowledge gaps and significant contributions, and introducing our theory building approach that deals with limitations of the previous theoretical development. Then, it continues by introducing components of the theory, managerial implications, and directions for future research.

2. Knowledge Gaps and Significant Contributions

First, while an organization in reality is an open system with open boundaries [33], and a transfer over the boundaries between the organization and its surrounding context exists [34] (Dubin, 1976), no theory of corporate sustainability that takes organizations as an open system exists. In particular, corporations typically run into sustainability problems frequently instigated by external forces [35] such as institutional pressures, an ideal theory of corporate sustainability should consider external forces. The present theory development includes external forces as part of the emerging corporate sustainability theory, reflecting the reality of the organization as an open system [33], allowing constant interaction between the environment and the system, the first contribution.

Second, since scholars point out the pivotal role that organizational culture plays in ascertaining organizational sustainability, no existing theory of corporate sustainability addresses the cultural element of shared basic assumption, generally recognized as a fundamental element of an organizational culture [36,37]. The present theory development addresses the shared sustainability assumptions as a culture component, the second contribution.

Third, in terms of sustainability performance management, numerous studies have adopted the Triple Bottom Line (TBL) concept [38,39] and its associated concepts (e.g., the Sustainable Development Goals, Sustainability Reporting, Environmental, Social, and Corporate Governance or ESG [40] to measure sustainability performance. However, Wu, Zhu, Tseng, Lim and Xue [41] argue that the traditional facets of the TBL are not adequate in addressing the highly complex sustainability issues, characterized by constant uncertainties [42]. With the prevailing misuse of the concepts of performance measurement and performance management as interchangeable concepts [43], numerous scholars have focused their efforts on sustainability performance measurement system [44–50] as opposed to sustainability performance management system [51–53], required to deal with the high complexity and uncertainty [54,55]. Essentially, sustainability requires to be managed within a system. Consequently, its performance requires to be systematically managed and measured [46]. To address this gap, a holistic system sustainability perspective is required to go beyond the “fixation and myopia” [56]. The present theory development proposes a corporate sustainability management subsystem as part of the Corporate Sustainability system, the third contribution.

Within the Corporate Sustainability system, since stakeholder benefits and trust are predictive of brand equity [57], and brand equity is becoming widely regarded as a sustainability outcome [58,59], the present theory development integrates stakeholder benefits and trust into the theory, the forth contribution. A stakeholder is any group or individual that can affect or is affected by the operation of an organization, ranging from suppliers, clients, shareholders, employees, communities, civil groups, governments, media, future generations and so on [9]. They are anyone who have a stake in the organization [9]. The Stakeholder theory [9] argues that a firm should create value for all stakeholders, not just shareholders to improve its competitiveness. Stakeholder trust in particular has been considered as a main driver for sustainable business excellence [60]. Well beyond the widely used TBL concept, stakeholder trust essentially denotes a novel corporate sustainability paradigm that directs the

attention of corporate leaders and managers toward a higher level of stakeholder-corporation relationship quality, as opposed to simply stakeholder satisfaction [60].

Since (a) organizational resilience is frequently viewed as an outcome of the process of corporate sustainability [58], (b) scholars and practitioners have little knowledge about how organizational resilience can systematically be achieved via day-to-day management [61–63], and (c) an organizational theory that describes the resilience phenomenon in an organization via everyday practices is still lacking [32], the present theory development is the first corporate sustainability theory to include organizational resilience as an outcome of the process of corporate sustainability and to explain the day-to-day process to ensure organizational resilience, the fifth contribution.

Even though it is evident that, to ensure corporate sustainability, corporations are required to manage simultaneous, often paradoxical, demands from a wide range of stakeholders [64,65], no existing theory of corporate sustainability incorporates organizational ambidexterity [66], itself an under-developed area [67]. Since empirical evidence has demonstrated that, especially in dynamic environments, organizational ambidexterity gains the utmost performance effects [68–71], the present theory development is the first theory of corporate sustainability to address organizational ambidexterity, the sixth contribution.

Finally, in terms of theory building approach, since the focal theory of corporate sustainability is concerned with cultural beliefs and values, the Mindspunge framework [72] is adopted to help in understanding how and why a person engrosses and refuses certain values. In addition, since the sustainability problems are wicked problems or problems that are difficult to solve as they are characterized by complex interdependencies, and the effort to solve one aspect of a wicked problem may lead to other problems, the systems-approach is required for treating such a wicked problem [1]. With the integrated theory building approach between the General Systems Theory [33] and the Mindspunge approaches [72], the emerging system theory of corporate sustainability has more power to explain the corporate sustainability phenomenon, the seventh contribution to the field, given that the existing theory of corporate sustainability [15] is not system-based.

Therefore, the present theory development contributes to the corporate sustainability field by filling in these fundamental gaps in the corporate sustainability literature.

3. Theory Building Approach

Dealing with the limitation in the theoretical corporate sustainability literature, the General Systems theory is adopted [33], given that it considers organizations as an open system, as the main approach to construct our corporate sustainability theory in response to the highly dynamic nature of organizations [73]. It focuses on organizational systems and the interactions among them. This approach addresses the limitation of the existing theory of corporate sustainability [15] by enhancing its dynamic nature.

The General Systems Theory process emphasizes the construction of postulates, universal concepts and principles. It is particularly suitable for organizational studies such as the present study because the General Systems approach assumes that a system, such as an organization, is a consequence of dynamic interrelationships between system's components and the system's entirety, within which these components are commonly determine. It is assumed that systems govern and adapt themselves continuously via feedback. System interactions are core to this approach.

Since a system is bordered by an environment [33], all environmental elements influence the system fully or partially. Other systems can also be included in the environment, each of which has its own border. The boundary distinguishes each system from other systems and the environment, and defines a system. The environmental effects are to be considered when developing a theory and its theoretical process. In the present study, the Corporate Sustainability system is the focal system, comprising the Sustainability Culture, Resilience and Corporate Sustainability Performance subsystems.

All systems and subsystems in this present theory development are considered as an open system because they permit effects from the high-velocity environment to flow across

their border [33]. In a given system, an input goes into the system to produce an output, the process of which is called throughput, to achieve its goals. Clearly, the system and the environment interact constantly.

The General Systems Theory is uniquely characterized by feedback and equilibrium [33], making it suitable for the present organizational study. Allowing the self-regulating system to function, feedback information about an output is fed back into the system. To finish a feedback loop, an equilibrium is reached in the system when its internal structures and collaborations among its part are of homogeneity. A new equilibrium can also be reached when the system responds timely to an environmental change via the feedback loop. In essence, this new equilibrium prepares the system for the new environment.

Next, the theory's boundary, inputs, throughputs and outputs and their causal relationships are identified [33]. Most importantly, required for a self-regulating system, feedback and equilibrium are identified. Since the focal theory is concerned with individual beliefs and values, I also adopt the Mindsponge framework [72] to help in understanding how and why a person engrosses and refuses certain values. With the integrated approach between the General Systems Theory and the Mindsponge approach, the emerging system theory of corporate sustainability has more power to explain the corporate sustainability phenomenon, a contribution to the theory building field.

Related theoretical, conceptual and empirical literature are drawn to form the emerging theory's body by comparing and contrasting an entire range of conjectures, whether they be possible, rational, experiential, and/or even philosophical [74]. Through such a process, highlighting can be identified [75], which later become the core elements of the system theory. Guided by Whetten [74]'s qualities of a simple theory, the questions below are developed to guide the theoretical development.

- What are the input, throughput and output components relevant to ensuring corporate sustainability?
- Why and how are the components related?

Based on the literature review, each core theory element is identified and defined. Included is also a definition of the corporate sustainability concept. I next define the theory's boundaries, suggesting what the system theory predicts and does not predict. Then, the system state dynamics in sustainable organizations are explored, meaning that the nomological network among the observed components of the theory is explained. Eventually, to recognize the presumed laws of interaction, I conclude the present theory development by expressing the resulting theory graphically and in propositions.

4. Defining Corporate Sustainability

At the macro level, scholars have described the sustainability concepts in a wide variety of ways, including the strong sustainability by Ott [76] and the model of the steady state economy by Daly [77]. With such a variety, sustainability is however commonly described along the lines of environmental, economic and social dimensions [78]. At the micro, organizational level, sustainability is defined in the present study as a holistic approach that considers ecological, social and economic dimensions, recognizing that all must be considered together to find lasting prosperity [79]. In the sustainable enterprise literature, sustainability often refers to sustainable wellbeing for all stakeholders including the society and future generations [58,64,65]. This sustainability definition is reflected in the definition of corporate sustainability in the present study, which is discussed more below.

Like the sustainability concepts, the definitions of corporate sustainability have flourished [80] and yet no commonly agreed definition exists, certainly affecting theorizing and researching in the field. In particular, the literature on society and business is filled to the brim with a large variety of confusing and sometimes overlapping concepts of corporate social responsibilities and corporate sustainability [15], complicating the much-needed knowledge production in this field even further. The two concepts are confusing because they both are about being responsible for the society at large [81]. However, they are not the same. The corporate sustainability concept is more inclusive than the corporate social

responsibility concept because it suggests both a balance between leading and managing for short- and long-term results, and responsibility inside and outside the corporation [81].

In the present study, I adopt the definition by Kantabutra and Ketprapakorn [15] because it is well constructed in the core theories of corporate accountability [82,83], stakeholder [9], and relevant corporate social responsibility and sustainable development concepts. Corporate sustainability is a set of management notions that recognize that businesses must grow profitably, with a higher level of emphasis on the three domains of development and their reporting to the society [84]. Accordingly, corporate sustainability here refers to “the leadership and management approach that a corporation adopts so that it can profitably grow and at the same time deliver social, environmental and economic outputs [15], p. 3”. In other words, corporate sustainability is the leadership and management approach that a corporation adopts to ensure the wellbeing for all stakeholders (e.g., minority groups, less privileged individuals). I use this definition to guide the present theory development.

5. Fundamental Components of Corporate Sustainability System

The fundamental components of the Corporate Sustainability system are introduced one by one in this section. I in this particular order explain the theory’s boundaries, inputs, the Sustainability Culture subsystem, the Resilience subsystem, and the Corporate Sustainability Performance subsystem.

Considered as necessary in achieving corporate sustainability, the three subsystems of Sustainability Culture, Resilience and Corporate Sustainability Performance as well as the relationships among them are drawn from the literature. Sustainability organizational culture is a pre-condition for the development of a sustainable corporation [15,36]. A strong organizational culture also enhances the prospect of organizational resilience [58,85,86], in turn improving the prospect of corporate sustainability [15,87]. Finally, corporate sustainability performance needs to be monitored and managed in order to achieve corporate sustainability [51,53]. All subsystems function as part of the Corporate Sustainability system.

These elements are discussed one by one, followed by an elaboration on their dynamic relationships as justified by supportive logical, empirical, and/or epistemological arguments. Eventually, all components are integrated into a comprehensive theory of corporate sustainability.

5.1. Theory’s Boundaries

As for the boundaries, the theoretical sphere for the present theory encompasses only the organizational components that are conducive to corporate sustainability [33], which is the objective of the present theory’s development [34]. The focal theory is composed of three core subsystems. Within the main Corporate Sustainability system, I postulate that certain organizational culture components in the Sustainability Culture subsystem lead to forming the Resilience subsystem that improves sustainability performance via the mechanism of the Corporate Sustainability Performance subsystem. The open boundaries allow for an information transfer between the Corporate Sustainability system and its environment [34]. This transfer triggers required adjustments in the system. Consequently, the system adapts according to the changes to reach a new equilibrium after each trigger.

In the following sections, I critically review the literature and use the relevant literature to meaningfully construct the theory components and their relationships. I then identify, define and designate each component of the system as input, throughout or output [33]. The Sustainability Culture subsystem is special in that its elements are additionally organized by the cultural levels [37]: assumptions, values and beliefs, and artifacts. The Mindsponge framework [72] is adapted to help in understanding why individuals accept or reject certain values, increasing the power to explain the cultural phenomenon. The Corporate Sustainability system’s feedback loop and how the system reaches an equilibrium are also discussed.

5.2. Inputs

Enhancing the existing interim theory of corporate sustainability [15], the Corporate Sustainability system has four inputs into the system: human resources, social and environmental issues, institutional settings and socio-cultural values.

Human resources are human beings. Each human being is full of cultural values and beliefs, or a mindset, forming his/her own identity [88]. Human resources enter into an organizational workforce with their mindsets, which may be similar or different from those already residing in the organization. According to the present theory, the Sustainability Culture subsystem is an organizational mechanism that aligns the mindsets of individual human beings with the organizational mindset, including goals, values, beliefs and attitudes [89,90]. Though the Mindsponge's mechanism to be discussed in the following section, individuals who find themselves unfit [64] with the existing corporate goals, values, beliefs and attitudes will depart from the subsystem to return to the external environment.

Social and environmental issues (e.g., expanding social gaps, environmental degradation, poverty, and gender) are an input into the Sustainability Culture subsystem as they are prevalent in the workplace today [91]. Certainly, these issues impact corporations and require them to take an action effectively.

Additionally, such as institutional factors as institutional policies and labor union, and external factors of the government, the general public, the media, or professional associations, or so called institutional settings [92–94], influence the Sustainability Culture subsystem. Corporations that cannot conform to these institutional factors can possibly be threatened. According to DiMaggio and Powell [95], Oliver [96] and Scott [97], they can eventually affect corporate survival. Clearly, the prospect of corporate sustainability is influenced by these institutions over time. In effect, they put pressure on corporate leaders to enhance the sustainability values and practices of their corporations.

Socio-cultural values refer to the forces from the society and economy [98] influencing the Sustainability Culture subsystem. In general, these forces change gradually over time, dependent on many factors (e.g., economic development, modernization stages) [98]. Individualism, liberty, creativity, risk tendency, and harmony are examples of socio-cultural values.

Since (a) the only way to ensure sustainability that outlives any one individual is by developing and nurturing a strong organizational culture [99], (b) organizational culture is a precondition for sustainable corporation development [36], and (c) organizational culture is the only greatest important determinant of organizational failure or success [100], the Corporate Sustainability system begins with a sustainability organizational culture subsystem, introduced below.

5.3. Fundamental Components of Sustainability Culture Subsystem

The four inputs of human resources, social and environmental issues, institutional settings, and socio-cultural values enter into the Sustainability Culture subsystem defined as a system with required cultural components aiming at improving the prospect of corporate sustainability. As shown in Figure 1, the Sustainability Culture subsystem comprises assumptions and, beliefs and values for sustainability, as expressed in the sustainability vision and values, and sustainability artifacts as expressed through corporate sustainability practices. Each and their relationships are discussed below.

5.3.1. Sustainability Assumptions

While the cultural level of shared basic assumptions is widely regarded as fundamental in driving sustainability success [36,37], the organizational culture literature in the sustainability context has not specifically addressed them, except one by Ketprapakorn and Kantabutra [101]. Building on the prior theory development, I explain how sustainability assumptions lead to improving the corporate sustainability prospect below.

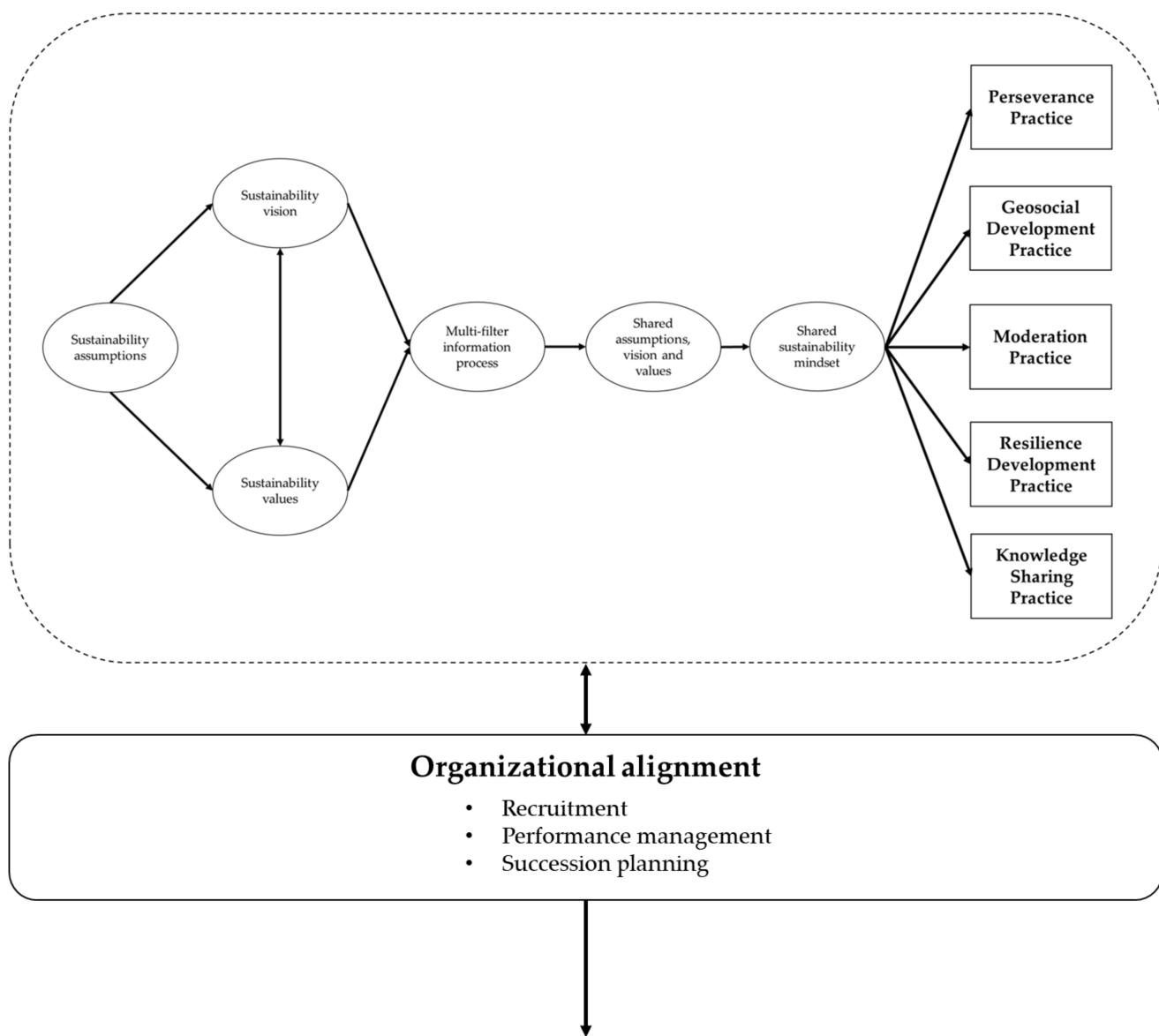


Figure 1. Sustainability Culture subsystem elements and their relationships.

Culture is a set of frequently-unstated assumptions, or a pattern of shared basic assumptions, that members of the culture commonly learn, share and develop [102] after they face the problems of adaptation introduced by the external environment, and organizational integration [103]. Over a period of time, after this pattern has been confirmed as effective in dealing with the problems, it is considered valid and turned into an experience to be shared to new members as the acceptable way to view, think and feel concerning the problems. In essence, an organizational culture, the shared, taken-for-granted assumptions, is continuously developed as the residue of success in dealing with the problems [37]. Therefore, my goal in the present study is to develop the assumptions that are shared and taken-for-granted about sustainability.

The prevailing problems of organizational integration and external adaptation in the sustainability context are certainly associated with sustainability, including market changes, unpredictable crisis and mismanagement [104]. The world has also witnessed numerous bankruptcy cases as an evidence for the problems. Even with the best and brightest organizational members, some global corporations have fallen to the ground. Really, an instantaneous need to fight for generating and conserving sustainable industries is evident [105].

According to the present system theory, when the environment such as institutional pressures changes, the change introduces sustainability problems to the corporations. The change requires organizational efforts to adapt to the dynamic environment. As they continue to solve the sustainability problems through a period of time, their organizational members create a structure of common basic assumptions, which later becomes core to the Sustainability Culture subsystem. These common basic assumptions are developed as the organizational members learn through their experience in dealing with the sustainability problems. At this cultural level, the perceptions and thoughts concerning sustainability among organizational members are required to be positive [36]. The emotional involvement with the sustainability assumptions is also very critical [36].

To be precise, the shared basic assumptions do not first arrive. Initially, they are developed as shared values and beliefs when organizational members are presented with a sustainability problem [37]. As organizational members continue to tackle the sustainability problem successfully, the shared values and beliefs are recurrently instantiated till a value turns into an unconscious assumption as it acts directly upon the sustainability problem [37]. Overtime, the sustainability assumptions become taken-for-granted truths in the organization. They are conveyed by the organizational members from one generation to the next. In the long run, when members of the culture are exhibited as effective in dealing with the sustainability problem, the sustainability assumptions are reinforced [37], signifying a loop of learning.

In the present theory development, I adopt Ketprapakorn and Kantabutra [101]’s three sustainability assumptions as the world is encountering the sustainability problems. They are as follow:

- A corporation is an entity operating within the society. They depend on each other.
- An imbalanced development among the economic, social and environmental domains exists.
- A balanced development among the three domains leads to corporate sustainability.

Russell et al. [106] also agree with these sustainability assumptions. They assert that organizing for sustainability includes a holistic approach to attain a balance of ecological, social, and economic well-being. The sustainability assumptions are well rooted in the Stakeholder theory [9] and the Corporate Accountability theory [81,82]. According to the emerging system theory, these sustainability assumptions drive cultural values and beliefs, and artifacts.

5.3.2. Sustainability Vision

The sustainability visions are composed of two components: Content and attributes [107]. Although the sustainability vision theory [107] has been internationally endorsed by various studies [108–113], it can still be refined as follow.

In terms of content, I theorize that vision content contains reference to increasing stakeholder wellbeing, although the sustainability vision theory [107] asserts that it contains simply stakeholder satisfaction imagery. I argue that simply stakeholder satisfaction is not sufficient to ensure corporate sustainability because it is not the only stakeholder factor contributing to improving the prospect of corporate sustainability. By replacing stakeholder satisfaction imagery with stakeholder wellbeing imagery, I integrate other stakeholder aspects and make the vision more inclusive. These other aspects range from stakeholder trust, stakeholder satisfaction, stakeholder commitment to stakeholder identification, all to be discussed in the following Sustainability Performance Management subsystem. Specifically, developing stakeholder trust denotes a new corporate sustainability paradigm because it is a main driver for sustainable business excellence, and challenges corporate leaders to direct their attention toward a higher level of stakeholder–corporation relationship quality, as opposed to simply stakeholder satisfaction [60]. I postulate that when an organizational vision contains a high level of sustainable wellbeing imagery, a chance that its organization becomes sustainable is increased.

In the system theory, sustainability visions are characterized by brevity, clarity, abstractness, challenge, future orientation, stability and desirability or ability to inspire (see [107]).

All of these attributes must be presented in a sustainability vision as they interactively support the organizational vision sharing process. When a vision is brief and clear, it is easy to communicate massively. With vision desirability, abstractness and challenge, the vision can become shared easily among organizational members. When vision is future-oriented, it keeps organizational members informed about the future direction of the corporation. Finally, when a vision is stable, it will not change easily because it does not shift according to short-term changes as the corporation is going through fluctuations.

My system theory postulates that the vision content and attributes interact to develop and nurture emotional commitment among organizational members to the vision. While the vision is the overarching goal of the organization, the organizational assimilation of sustainability values is compulsory [114,115] to direct the behavioral actions and mindsets of organizational members to attain the vision. The sustainability values are introduced in the next section.

5.3.3. Sustainability Values

Sustainability vision and values are organizationally interrelated, because vision only suggests a sense of direction for organizational members in the long run. It cannot turn into reality without organizational efforts. Values are needed as the means to realize it [116]. Sustainability values are to be shared and proclaimed by organizational members to guide how they turn the sustainability vision into reality. On the other hand, the values cannot become living core values [116] without a vision. Therefore, the vision for sustainability allows the values for sustainability to be brought to life by organizational members.

In the present theory development, I assert that the values for sustainability give meaning to the vision for sustainability, forming the Sustainability Culture subsystem. Core values frequently discovered in sustainable enterprises are virtues (e.g., perseverance, generosity, moderation), the accountability for the environment and the society, and innovation. It is evident that simply espousing the virtuous values is not sufficient to ensure corporate sustainability. Moral values are needed since many corporations voluntarily adopt corporate sustainability practices because of moral reasons [117]. According to Blok et al. [118], Ploum et al. [119], and Turiel [120], morality concerns a set of values, beliefs and norms that distinguishes between what is wrong and right when it comes to sustainability. Complementing the virtuous values, moral values, as shown in the accountability for the society and the environment, guide organizational members to make the right decisions concerning their decisions and actions. At the end, corporate commitment and actions toward the Triple Bottom Line goals depend on how sustainability is morally perceived [121].

To deal with the prevalent problems of sustainability, organizational members guided by the assumptions and values for sustainability, according to my system theory, environmentally and socially innovate their products and services [64,122]. I postulate further that the sustainably innovative products and services effectively deal with the sustainability problems. After all, sustainability innovation is required if corporations aspire to survive and thrive [123].

5.3.4. Sustainability Mindset

In the Sustainability Culture subsystem, I theorize that organizational members verbally and non-verbally communicate the sustainability culture through assumptions, vision and values for sustainability so that the culture is widely organizationally shared. Via a multi-filter information process [72], the Sustainability Culture subsystem over time instills a sustainability mindset among its members.

The process of developing a corporate sustainability mindset starts when human resources enter into the Sustainability Culture subsystem. They come in with own beliefs and values, which are very challenging to change as the beliefs and values are deeply ingrained in their individual mindsets used to guide their behaviors. In an organization, numerous individual and organizational values exist [124]. Only a few values are eventually

turned into living core values after a number of learning loops by organizational members. It is this set of living core values that distinguishes one organization from another.

In my system theory, organizational members with the communicated sustainability vision and values messages go through the multi-filter information process [72]. In this process, they evaluate the vision and values for sustainability, and integrate those that are in line with their own existing beliefs and values. In this filtering process, organizational members consider the difference between the sustainability vision and values and their own beliefs and values in terms of cost and benefits of adopting them, rejecting them or replacing their existing ones with the new ones. Shared assumptions, vision and values for sustainability begin to form in the filtering process, fundamental to the Sustainability Culture subsystem. It is this shared sustainability mindset, as a growth mindset [125], that infuses throughout the entire sustainable corporation. The shared sustainability mindset is encapsulated into corporate sustainability practices, the observable cultural artifacts.

Based upon the literature above, the following propositions are formed.

Proposition #1: Sustainability organizational culture enables organizational resilience, leading to improving sustainability performance

Proposition #2: Shared sustainability assumptions, vision and values lead to organizational sustainability mindset, via the Multi-filter information process.

Proposition #3: Organizational members with the sustainability mindset realize the sustainability vision by adopting the five corporate sustainability practices

In Section 5.4, the corporate sustainability practices are discussed. How the practices enable organizational resilience is also explained in the Fundamental components of Resilience subsystem Section below.

5.3.5. Organizational Alignment

Part of the Sustainability Culture subsystem is to align corporate and individual values or organizational alignment at any given time to ensure the corporate sustainability mindset. Sustainable corporations view themselves as a “special” place to work [64] where individual and corporate values are aligned. They espouse an approach to align such values, starting from recruitment, performance management to succession planning [65]. Sustainable enterprises are careful in recruiting new employees [64,126]. They develop a strict recruitment standard to ascertain that the new recruits’ beliefs and values are aligned with the corporate sustainability vision and values. Moreover, they promote employees who behave consistently with their corporate vision and values in their performance evaluation [122,127]. To ensure the existing culture continues in the future, they have a succession plan to identify talented employees who share the corporate vision and values as successors at all levels [128]. With the organizational alignment practice, employees who shared the corporate vision and values are encouraged to stay on with the corporations, while those who do not share are discouraged to stay on and finally leave the corporations as they feel “unfit” with the “special” place [101].

5.4. Fundamental Components of Resilience Subsystem

The resilience subsystem is defined as a system with day-to-day corporate practices leading to improving the prospect of organizational buffering and adaptive capacities required to ensure organizational resilience. A review by Batista and Francisco [129] has indicated that the existing corporate sustainability practices are categorized according to the TBL domains of environment, society and economy. Such a practice as anti-corruption, prevention of child labor use, and zero waste focuses only on one aspect of sustainable development. Although such a practice as Sustainability Reporting [130] or Environmental, Social, and Governance (ESG) [131,132] appears to address more than one aspect, it only focuses on reporting outputs. More importantly, an increasing number of scholars such as Boiral and Gendron [133] and Cho et al. [134] has criticized the effectiveness and transparency of such reporting. Neither Sustainability Reporting nor ESG practice provides a day-to-day practical approach to run a sustainable corporation.

To ensure corporate sustainability, organizational ambidexterity is required to address the simultaneous, often-conflicting demands from a variety of stakeholders [32]. None of the existing practices offers an approach to deal with such a paradox. Therefore, a holistic set of corporate sustainability practices is needed to manage the simultaneous tension. To address this need, I propose a holistic set of corporate sustainability practices as observable cultural artifacts in this section. The literature review reveals a set of five holistic practices of corporate sustainability, which have continuously been refined over time [15,115,125,135,136]. These five corporate sustainability practices are also the input into the Resilience subsystem. It is postulated that they enable day-to-day management practices that nurture organizational resilience and increase our understanding about the organizational resilience phenomenon.

Contributing significantly to the field, I theoretically reinforce the five practices: Perseverance, Resilience Development, Moderation, Geosocial Development and Knowledge Sharing by grounding them upon additional theories of Stakeholder Resource-based View by Sodhi [137] and Freeman et al. [138], Resource-based View by Teece et al. [139], Grit by Duckworth et al. [140], Organizational Paradox by Smith and Lewis [141], Organizational Ambidexterity by Tushman and O'Reilly [66], Sustainability Organizational Culture by Ketprapakorn and Kantabutra [101], and Organizational Resilience by Kantabutra and Ketprapakorn [125].

Since little is known among scholars and practitioners on how to achieve organizational ambidexterity [32], pivotal to managing for sustainable development, I theorize that adopting these five corporate sustainability practices allows organizations to develop organizational ambidexterity to effectively manage paradoxes among the frequently conflicting requirements from a large variety of stakeholders, resulting in organizational resilience (Figure 2). I discuss these five corporate sustainability practices as well as how each leads to organizational resilience as indicated by organizational buffering and adaptive capacities one by one below.

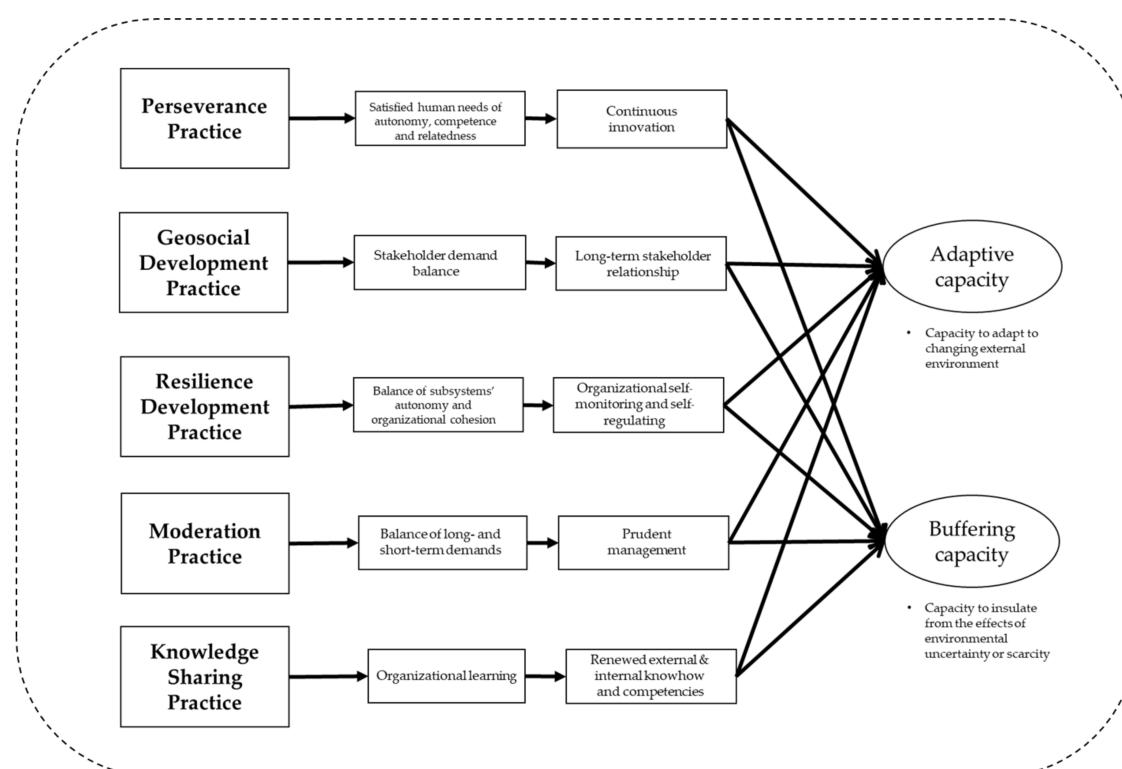


Figure 2. Resilience subsystem elements and their relationships.

5.4.1. Perseverance Practice

The widely shared sustainability organizational culture is manifested into the Perseverance practice. With such a culture, organizational members shared the values of perseverance and accountability for the society and the environment. Consequently, according to my system theory, they consistently put efforts in developing procedures, products and services for their stakeholders. Since the business environment is changing so quickly, the Perseverance practice results in better organizational adaptive capacity. The shared assumptions, vision and values for sustainability, as a growth mindset, enhances individual belief that perseverance leads to success [142]. It is postulated that perseverant behavior leads to both incremental and radical innovations throughout the entire organization. Given that shared assumptions, vision and values for sustainability, the resultant innovations are frequently social and environmental solutions that deal effectively with the prevailing social and environmental problems.

The Perseverance practice is also informed by the Grit theory [140]. According to the Grit theory, trait-level passion and perseverance for long-term aspirations are attributes of individuals with grit [140]. I postulate that it is this long-term aspirations that keep people moving toward turning the sustainability vision into reality, despite great difficulties. Grit is characterized by perseverance of effort and consistency of interest. Perseverance of efforts refers to the individuals' likelihood to persevere and sustain the momentum of their efforts while being confronted with great difficulties or setbacks in life. Consistency of interest refers to the likelihood of individuals to remain focused and passionate in maintaining a set of interests over an extended period of time. They choose to give up so many other things in life and do a particular thing. Grit and determination are pivotal in promoting resilience when encountering adversity [143].

Empirically, individuals with grit are also associated with certain kinds of orientations to happiness, including orientation toward pleasure, meaning, and engagement [144]. Evidence on the well-being benefits, as theoretically driven by our theorized vision content, of grittiness in a large variety of different contexts is also found [144]. In my system theory, perseverant organizational members choose to perform even beyond their roles and responsibilities to achieve their long-term aspirations, leading to continuous organizational innovation. Collectively as an organization, they develop a cushion for any unanticipated shock from the external environment. Toward this end, their happiness increases.

Along with the Grit theory [140], the Perseverance practice is endorsed by the theory of Self-determination by Deci and Ryan [145] as the perseverant members are unwaveringly, intrinsically encouraged to continue, in spite of daunting difficulties. I theorize that they choose to do so because they have grit. With the sustainability mindset, they are intrinsically motivated to carry on, willing to sacrifice their own interests for organizational interests. In such a context, the Perseverance practice enhances the prospect of business continuity, strengthening organizational buffering capacity.

5.4.2. Geosocial Development Practice

The widely shared sustainability organizational culture is also manifested into the Geosocial Development practice. Sharing the sustainability mindset, organizational members invest in developing a high level of corporate-stakeholder relationship quality and assimilating concerns for a variety of stakeholders in their business practices. As informed by the advanced concept of Cleaner Production, the Geosocial Development practice includes the accountabilities for the TBL domains of sustainability performance, including individual rights, business ethics, and community participation [146]. I theorize that corporations, focusing on keeping stakeholders satisfied by allowing them to reach their full potential [147], bring about higher levels of stakeholder-corporation relationship quality of trust, commitment and identification [148]. Satisfying stakeholders improves organizational adaptability as corporations always realize the changing stakeholder requirements and respond to them accordingly.

The genuinely recognizing of dualities of contemporaneous tensions is at the core of Organizational Paradox theory [149,150]. According to the theory, no singular choice or

compromise among them has to be made [149,150], often the case observed in managing conflicting stakeholder demands. The Geosocial Development practice, as managing these tensions effectively, depends on searching for innovative solutions to involve both extremes by exploiting the inherent pluralism within the duality [149]. In the present theory development, successfully managing organizational paradoxes leads to organizational ambidexterity.

According to the Organizational Ambidexterity theory, superior performance is achieved when corporations embrace contradictory, and yet interrelated demands [151,152]. Ambidexterity in organizations allows corporations to be aligned and efficient in organizational management of present requirements. Concurrently, it allows the corporations to be sufficiently adaptive to environmental changes that they will still be around tomorrow [153]. This is the reason organizational ambidexterity is well regarded as particularly relevant in the corporate sustainability context where conditions of high-velocity environment exist. Organizational ambidexterity indeed supports corporations in maintaining its agility in the long run, by constantly aligning themselves with the changing environment and being adaptative to unanticipated disruptions [154].

It is also postulated that stakeholders who have developed a high-quality relationship with the corporations become supporters for the corporations [155], including assisting their organizational members [156] and purchasing their merchandises and/or services [157]. Particularly in a crisis, these stakeholders come to offer support to the corporations in surviving the crisis [115]. In such a process, the Geosocial Development practice enhances their organizational buffering capacity via nurturing a long-term stakeholder relationship.

5.4.3. Resilience Development Practice

To deal with the gap in the literature discussed earlier, I employ the Organizational Theory of Resilience [125]. I postulate that sustainable organizations effectively respond to the high-velocity environment so that they rebounce and strengthen their present entity by vigorously reconstructing themselves for the future, given the high-velocity environment [125]. According to my system theory, the practical approach to do so is called Resilience Development practice.

Driven by the sustainability mindset, the Resilience Development practice suggests that corporations organizationally expect and organize themselves for change, resulting in organizational adaptive and buffering capacities. I theorize that resilience is enabled in an organization when its members, sharing the sustainability culture, are self-governing, and concurrently maintaining an overall organizational coherence. Filling in the gap in the literature discussed earlier, I reinforce the theoretical ground of the Resilience Development practice by including the Organizational Ambidexterity theory [66]. In the high-velocity environment, organizations are required to simultaneously explore and exploit [66] by establishing a supportive organizational structure and culture. Both the structure and culture, acting as hard and soft controls, permit individual organizational members to decide how they should distribute their time between exploitative and exploratory undertakings [152]. In other words, they are enabled and encouraged to decide on their own about how to divide their time between conflicting demands for adaptability and alignment, improving organizational adaptive capacity over time.

Beyond simply organizational change and risk management, the Resilience Development practice is concerned with the identification and prioritization of susceptibilities and various capabilities of the organization while formulating strategies to enhance the level of organizational consciousness of the surrounding environment. In doing so, the Resilience Development practice allows for organizational capacity to cope with challenges and threats, thereby strengthening organizational buffering capacity. Such a practice is also endorsed by the Complexity theory [158] since it assists in upgrading organizational competence in response to organizational demands and those demands instigated by the high-velocity environment [15].

Also underlined by the Cleaner Production concept is the Resilience Development practice, where reducing energy and material consumption are considered as pivotal in

enabling corporations to become less vulnerable from abrupt changes in the high-velocity environment [159]. In doing so, their organizational buffering capacity is enhanced through minimizing emissions and waste [160] and preserving environmental capital [161].

5.4.4. Moderation Practice

Taking into consideration a whole range of stakeholder demands, the Moderation practice advises corporations to prudently find a middle way between maximizing profits between the short and long run. In doing so, they need to consider their profitability policy and business risk as well as opportunities and potentials [15], core to the Organizational Paradox [141] and Organizational Ambidexterity [66] theories. Consistent to the Moderation practice, ambidextrous corporations concurrently are concerned with both short-term efficiency and long-term growth [66], such as managing between short-term profits and investments in the society. Failure to manage this paradox can bring about a triumph trap at the expense of exploration in a sense of too much exploitation. On the other end, it can also bring about a fiasco trap at the expense of exploitation in a sense of too much exploration [162]. Both ends are detrimental to long-term, sustainable growth. I postulate that managing this simultaneous tension successfully leads to so-called organizational ambidexterity, required for corporate sustainability.

According to Kantabutra and Ketprapakorn [15], sustainable corporations, being moderate, concurrently balance between long- and short-term results. Such a practice is consistent with the Organizational Ambidexterity theory [66]. While corporations recognize that short-termism can damage their sustainability prospect, they also recognize that they can be viewed as a poor performer by investors [163]. In essence, corporations are under pressure to maximize profitability in the short run, demonstrating the need for organizational ambidextrous capacity. Under such a paradox, I postulate that corporations need to develop a cushion of actual or possible resources that gives them some room to timely adapt to organizational and environmental pressures or organizational slack [164]. In doing so, an investment in resources and capabilities now is required although it may not immediately pay off [162]. Underlined by the Organizational Paradox theory by Smith and Lewis [141], “moderate” corporations manage the simultaneous tension between mortgaging the position in the long future and maximizing profits in the short run [165].

With such a prudent management, the organizational buffering capacity is enhanced. In particular, since the Organizational Paradox theory [141] suggests carefully managing tensions among simultaneously conflicting demands, the Moderation practice assists in creating and nurturing organizational buffering capacity to endure crises [15].

5.4.5. Knowledge Sharing Practice

Directed by the sustainability mindset, the Knowledge Sharing practice is supportive to organizational ambidexterity as it allows for the combination of incremental and radical innovation practices to ascertain both short-term success and long-term corporate survival [151]. The Knowledge Sharing practice allows organizations to continuously learn, proactively enable change, and seek innovation, reinvent themselves through the combination of radical and incremental innovations [66]. In such a context, the Knowledge Sharing practice enables organizational ambidexterity since both efficiency and novelty oriented innovations can be achieved.

The Knowledge Sharing practice suggests corporations to share knowledge organizationally and with external stakeholders. Such knowledge exchange, even with competitors, leads to corporate innovation. Supported by the Dynamic Capabilities theory by Barney [166], the Knowledge-based theory by Nonaka [167], the Knowledge Management theory by Tzortzaki and Mihiotis [168], and the Coopetition concept by Luo [169], the Knowledge Sharing practice assists in developing and maintaining organizational capacity to constantly adapt to the high-velocity environment.

According to Ketprapakorn and Kantabutra [101], the Knowledge Sharing practice is underlined by Resource-based View theorists such as Freeman et al. [138], Sodhi [137] and

Teece et al. [139], and Organizational Paradox theorists such as Smith and Lewis [141]. All competitor stakeholders are viewed equally through these theoretical perspectives. Concurrently over time, cooperation and competition are balanced [141], although the opposing yet intertwined demands still persist. I postulate that via coopetition [169], each participating corporation acquires unique capabilities to survive prominently in the industry [170]. All participating corporations can continuously renew their capabilities via knowledge sharing to prepare for the future [170], enhancing organizational buffering capacity.

In this section, I have demonstrated how the five corporate sustainability practices lead to improving organizational resilience through organizational buffering and adaptive capacities. In doing so, they have also developed organizational ambidexterity to deal with tensions from managing the simultaneous demands from a wide variety of stakeholders. It is this ambidextrous capacity in an organization that allows corporations to maintain the delivery of corporate sustainability performance, despite obstacles.

Based upon the literature discussed above, the following propositions are formed.

Proposition #4: By continuously innovating processes, products, and services for stakeholders, the Perseverance practice improves TBL outputs

Proposition #5: By investing in stakeholders and integrating social and environmental accountability with business operation, the Geosocial Development practice improves TBL outputs.

Proposition #6: By expecting and organizing for change, the Resilience Development practice improves TBL outputs.

Proposition #7: By adopting the process of prudent and reasonable decision making that taking into consideration short-term and long-term impacts on stakeholders, the Moderation practice improves TBL outputs.

Proposition #8: By sharing knowledge internally within the organization and externally with stakeholders, the Knowledge Sharing practice improves TBL outputs.

Given the theory building approach, the outcome knowledge or the output from the process of corporate sustainability is required [33,34]. Thus, I introduce the Corporate Sustainability Performance subsystem as the outcome knowledge in the next section.

5.5. Fundamental Components of Corporate Sustainability Performance Subsystem

The Corporate Sustainability Performance subsystem is defined as a system of processes, outputs, and outcomes that helps corporate leaders to track and analyze the sustainability performance of their corporations. According to the emerging system theory, the five corporate sustainability practices day-to-day ensure a continuous delivery of the corporate sustainability outputs or Triple Bottom Line (TBL) outputs into the Corporate Sustainability Performance subsystem, enabled by the organizational adaptive and buffering capacities. As a major contribution of the present theory development, the Corporate Sustainability Performance subsystem comprises corporate sustainability outcomes of sustainable well-being, or stakeholder wellbeing, and brand equity. I explain the theoretical process by which the corporate sustainability outputs lead to improving the sustainability performance outcomes of sustainable wellbeing and brand equity, as shown in Figure 3, in this section.

Informed by the TBL approach, sustainable success is dependent upon successfully fulfilling stakeholder requirements by balancing social and environmental preservation and development, and economic prosperity [171,172]. In practice, economic development occurs on the earth and along with human beings. Indeed, the sustainability of the society, environment and economy is required by a sustainable development, making TBL the central proxy to measure sustainability performance [173,174]. To show social accountability, corporations are advised to report their TBL outputs. The TBL outputs are considered as measures for corporate sustainability performance here as the three outputs are directly brought about by adopting the practices of corporate sustainability.

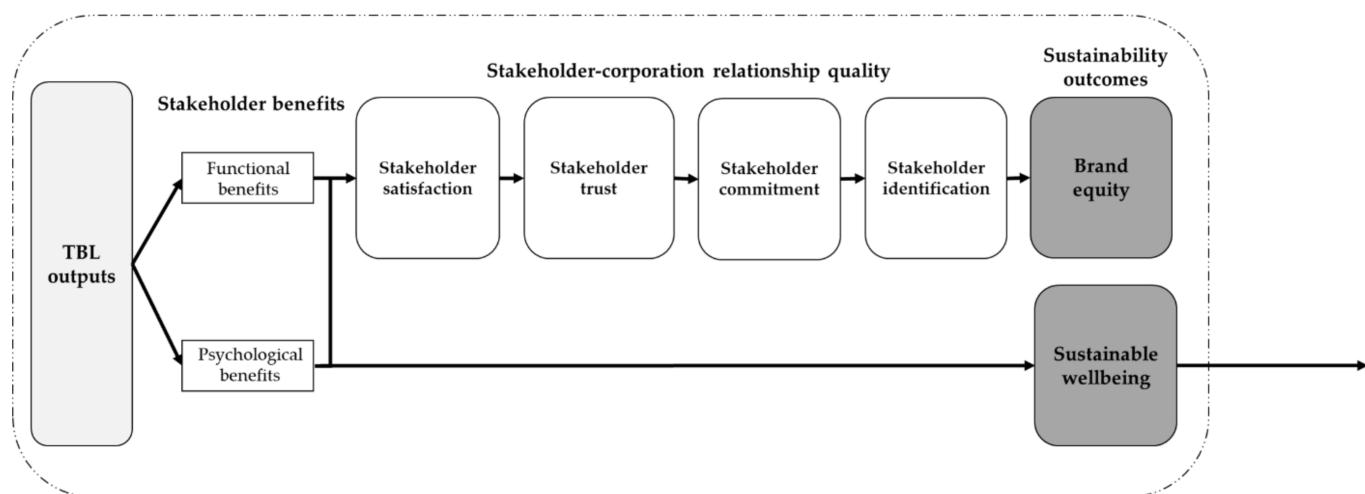


Figure 3. Corporate Sustainability Performance subsystem elements and their relationships.

On one hand, the TBL outputs in the emerging system theory lead to improving the prospect of sustainable wellbeing for stakeholders via delivering both functional and psychological benefits to them. Functional, frequently referred to as utilitarian benefits are tangible benefits associated directly with services and products, ranging from monetary benefits, welfare to facilities. Psychological benefits are intangible, frequently considered as happiness [175]. Such happiness can only be achieved when stakeholders receive psychological benefits relevant to their individual values [148,176]. Sustainable wellbeing is an ability for individuals or organizations to rely on themselves, to withstand shocks from the external environment, and to endure difficult times [58]. With the sustainable wellbeing as the prime goal, the functional and psychological benefits are to fulfil different needs of human beings [177], ranging from physiological needs, safety needs, social needs, self-esteem needs to self-actualization needs. I postulate that corporations are required to create opportunities for stakeholders to fulfill these needs, including creating jobs, training them on skills and knowledge they need, and support them financially so that they can stand on their own.

On another hand, the emerging system theory suggests that TBL outputs lead to improving brand equity via forging a strong stakeholder-corporation relationship and improving the quality of such a relationship. According to Bhattacharya et al. [148], the relationship quality starts from satisfaction, trust, commitment to identification. At the lowest level, stakeholder satisfaction refers to an overall evaluation of the corporation from the stakeholder experience. Stakeholders compare between overall experience with the corporation and resources that they have to offer to develop a relationship with the corporation.

Advancing the existing interim theory of Corporate Sustainability [15], I include stakeholder trust in the present theory development as it suggests a higher level of relationship quality with perceived confidence in reliability and integrity from stakeholders who have interacted directly or indirectly with the corporation. It is a form of stakeholder expectation toward the corporation when it is committed to achieve what it promises. In addition to stakeholder trust, I also include another higher level of relationship quality called stakeholder commitment, a willingness of stakeholders to keep a valued relationship with the corporation. They do so because they are psychologically attached to and trust the corporation. At the top level of relationship quality, stakeholder identification is oneness between an individual self-concept and a group concept [148], a group that an organizational member considers himself as a member. Stakeholders with a high level of identification with the corporation will become supporters of the corporation in purchasing products/services and other various ways they can [155,157]. According to the emerging system theory, it is stakeholder identification that finally leads to improving brand equity.

To be precise, when stakeholders are ensured of their own sustainable wellbeing by the sustainable corporations, their trust in the corporate brands increase [175]. According to the Stakeholder model by Winit and Kantabutra [175], a corporation is required to deliver both functional and emotional benefits in order to improve stakeholder trust as a precursor to improving brand equity. According to the emerging system theory, sustainable corporations choose to offer functional benefits that improve psychological benefits, enhancing stakeholder trust and brand equity respectively. Empirically, such an offer has been discovered as an effective way to build and nurture stakeholder trust and brand equity [175].

Based upon the literature above, the following propositions are formed.

Proposition #9: The TBL outputs improve the outcome of sustainable wellbeing through delivering both functional and psychological benefits to stakeholders.

Proposition #10: The TBL outputs improve the outcome of brand equity through ensuring a high-quality of stakeholder-corporation relationship, ranging from stakeholder satisfaction, trust, commitment and identification.

When the sustainability performance outputs and outcomes are delivered, organizational members reflect on how they feel about their own sustainability assumptions and their associated beliefs and values as they deal with the sustainability problems. The organizational members continue with questioning and testing the assumptions, beliefs and values systematically [73]. When the sustainability performance outputs and outcomes successfully solve the prevailing sustainability problems, they genuinely recognize the assumptions, vision and values for sustainability. Simultaneously, they also unlearn other individual assumptions, beliefs and values they earlier had. This feedback loop of learning allows a reverse process to continuously test, reconfirm and even unlearn an assumption, belief or value, a contribution of the present theory development.

The feedback loop of learning process can be explained in greater details here. As shown in Figure 4, the feedback loop starts with the delivery of the TBL results in the Corporate Sustainability Performance subsystem, as residues of success, which delivers an answer to the prevailing sustainability problems. Such a solution further strengthens the commitment of organizational members to the sustainability assumptions and the rest of the Sustainability Culture subsystem [178,179], in turn reinforcing the Resilience subsystem even further.

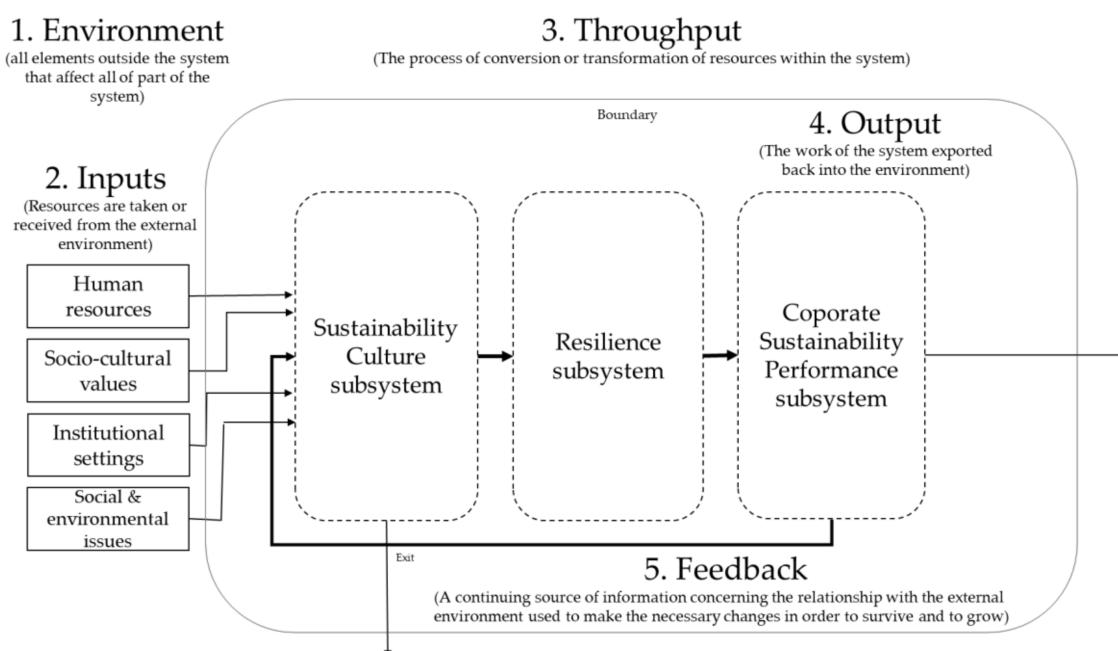


Figure 4. Feedback loop.

More specifically, the sustainability assumptions are strengthened as shared basic assumptions, the beliefs that organizational members naturally use to make day-to-day decisions within their organization [37], encapsulated into the five practices of corporate sustainability. These five practices of corporate sustainability continue to strengthen organizational buffering and adaptive capacities to deliver TBL outputs. In one way, the TBL outputs then turn into functional and psychological benefits for stakeholders who continue to strengthen the relationship quality with the corporations, from satisfaction, trust, commitment to identification. This high-quality relationship leads to improving brand equity. In another way, the functional and psychological benefits lead to improving stakeholder wellbeing as envisioned earlier in the sustainability vision. This entire process represents a feedback loop of learning. Eventually, after some loops of learning over a period of time, the Sustainability Culture subsystem, as a precondition to corporate sustainability, becomes core to the Corporate Sustainability system, as I theorize.

The necessity of the feedback loop is demonstrated when the surrounding environment changes [59]. When the external change affects the delivery of sustainability performance outputs and outcomes (i.e., as shown through a lack of organizational capacity to innovate), the sustainability culture subsystem is triggered. According to the emerging system theory, sustainable corporations consequently adapt the existing vision and values to accommodate the change, in turn adapting the corporate sustainability practices, the Resilience subsystem and the Corporate Sustainability Performance subsystem respectively. This spiral adaptation allows the entire Corporate Sustainability system to arrive at a new equilibrium. In essence, via the feedback loop, the sustainable corporations improve both organizational buffering and adaptive capacities in response to the high-velocity environment to rebound and strengthen their present entity by vigorously constructing themselves for the future as the dynamic environment changes rapidly.

Based upon the literature above, the following propositions are formed.

Proposition #11: The delivery of sustainability performance outputs and outcomes in turn strengthens the Corporate Sustainability system initially by allowing organizational members to validate the Cultural, Resilience and Corporate Sustainability Performance subsystems respectively as the right way to encounter the sustainability problems.

Proposition #12: After several feedback loops of learning by organizational members, the validated Sustainability Culture subsystem becomes deeply embedded, taken-for-granted, unconscious behaviors core to the sustainability organizational culture that continuously drives the Corporate Sustainability system.

6. Integrated Corporate Sustainability Model

Consequently, the system theory of Corporate Sustainability is composed of the Sustainability Culture, Resilience and Corporate Sustainability Performance subsystems. The Sustainability Culture and Resilience subsystems continuously interact to bring about sustainability performance via the subsystem of Corporate Sustainability Performance. The system theory's elements and their relationships are identified and integrated into a coherent theory [33] as shown in Figure 5.

Overall, I postulate that these organizational elements interact dynamically to daily ascertain resilience in the organization via enhanced organizational buffering and adaptive capacities. With organizational resilience, corporations can continue their sustainability performance delivery.

The system theory of corporate sustainability, as illustrated by the integrated Corporate Sustainability model above, reflects the reality of the organization as an open system, because it allows constant interaction between the environment and the Corporate Sustainability system, filling in the gap in the literature. Also filling in the gap in the corporate sustainability literature, the model includes the cultural element of shared basic sustainability assumptions.

1. Environment

(all elements outside the system
that affect all or part of the
system)

2. Inputs

(Resources are taken or
received from the external
environment)

- Human resources
- Socio-cultural values
- Institutional settings
- Social & environmental issues

3. Throughput

(The process of conversion or transformation of resources within the system)

Boundary

Resilience subsystem

Corporate Sustainability Performance subsystem

Sustainability Culture subsystem

Assumptions

Values & beliefs

Artifacts

5. Feedback

(A continuing source of information concerning the relationship with the
external environment used to make the necessary changes in order to
survive and to grow)

4. Output

(The work of the system
exported back into the
environment)

Figure 5. Integrated Corporate Sustainability Model.

In terms of sustainability performance, the model includes a sustainability performance management system since sustainability performance is required to be systematically managed and measured within a system [46]. The system addresses the critique that the TBL concept alone is not adequate in addressing the highly complex sustainability issues, characterized by constant uncertainties [42]. Well beyond the widely used TBL concept, stakeholder trust is included in the model as it denotes a novel corporate sustainability paradigm that directs the attention of corporate leaders and managers toward a higher level of stakeholder-corporation relationship quality, as opposed to simply stakeholder satisfaction [60].

Since scholars and practitioners have little knowledge about how organizational resilience can systematically be achieved via day-to-day management [61–63], and (c) an organizational theory that describes the resilience phenomenon in an organization via everyday practices is still lacking [32], the model explains the day-to-day practices and process to ensure organizational resilience. Finally, the model also offers the corporate sustainability practices that allow corporations to manage simultaneous, often paradoxical, demands from a wide range of stakeholders to ensure corporate sustainability [64,65].

7. Implications for Practitioners

As Lewin [180] stated that “there’s nothing so practical as good theory”, the “good” system theory of corporate sustainability renders some pragmatic implications for corporate practitioners (see Figure 6). Representing the system theory, the model provides a mechanism for corporate practitioners to adapt their organizational systems to improve the prospect of corporate sustainability. The guidelines for the adaptation are discussed below.

First, corporate leaders should craft a sustainability assumptions statement containing the three sustainability assumptions as the basis for communicating and explaining the vision and values for sustainability. Next, as they craft a vision statement or revise an existing vision statement, they should make sure that the vision statement is characterized by the seven characteristics of effective vision. Moreover, the content of the vision should contain stakeholder wellbeing imagery.

They then should ensure that their corporate values incorporate virtues, the social and environmental accountability and innovation. Corporate leaders at all levels should verbally and non-verbally communicate both vision and values as frequently and massively as possible throughout their entire corporation so that they become organizationally shared. The cultural communication process also signals to those who do not share the culture that they do not fit this ‘special’ place.

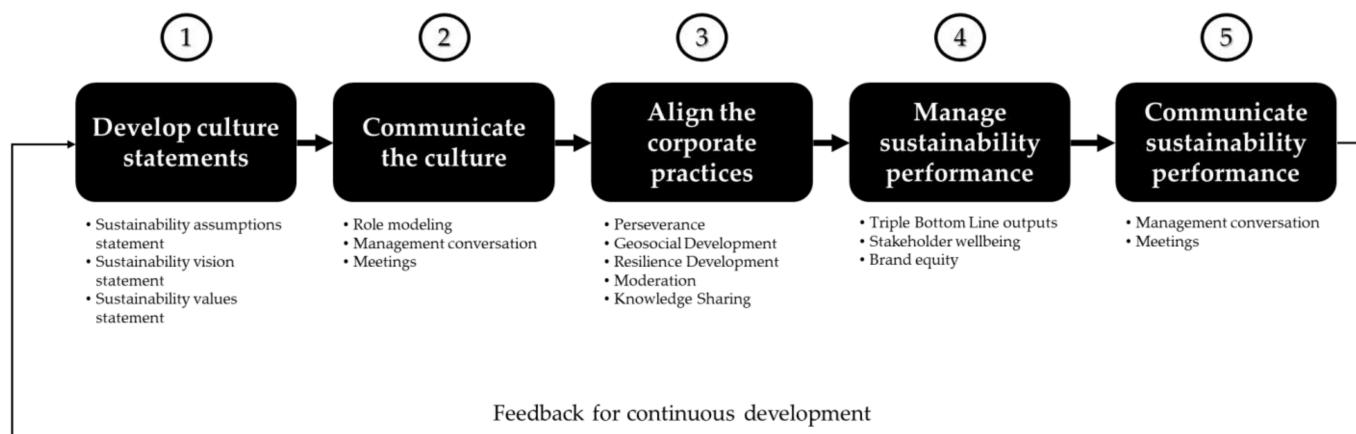


Figure 6. Guidelines to manage and monitor for corporate sustainability.

Corporate practitioners should compare and contrast their current practices with the five practices of Perseverance, Geosocial Development, Moderation, Resilience Development and Knowledge Sharing, and adjust them accordingly. Here, corporate leaders may consult the comparison of the existing sustainability practices and the five practices of corporate sustainability in Table 1 below. Relevant business functions are also shown in the Table, specifically emphasizing the contributing role of sustainable enterprises in a society.

Table 1. A comparison between the five corporate sustainability practices, and relevant existing sustainability practices and business functions.

Corporate Sustainability Practices	Relevant Existing Practices	Relevant Business Functions
Perseverance	New product development, eco-innovation, and cleaner production.	R&D, human resources, production
Geosocial Development	Sustainable supply chain management, sustainability reporting, and cleaner production.	Logistics and procurement, sustainable development, human resources, production
Resilience Development	Risk management, change management, and cleaner production.	Risk management, production
Moderation	Risk management and cleaner production.	Finance, investment, strategic planning, marketing
Knowledge Sharing	Knowledge management and cleaner production.	Knowledge management, human resources, production, sustainable development.

In terms of sustainability performance management, corporate leaders should evaluate their current performance management system if it includes the sustainability performance outputs. To be precise, relevant TBL outputs should be identified and monitored. In addition, stakeholder satisfaction, trust, commitment and identification should be measured and monitored as they lead to improving brand equity. In order to reach the level of stakeholder identification, the top level of stakeholder-corporation relationship quality, corporate leaders should deliver functional benefits that bring about improving psychological benefits to stakeholders. Through this way, they can ensure stakeholder wellbeing, the overarching goal of sustainable development. Stakeholder identification and brand equity surveys should be regularly performed so that corporate leaders have some sustainability indicators to monitor and manage.

Given the feedback loop of our refined theory of corporate sustainability, corporate leaders should continue to communicate the TBL outputs and sustainability outcomes of stakeholder wellbeing and brand equity survey results to organizational members so that they can validate their basic sustainability assumptions which will in turn reinforce the entire Corporate Sustainability system overtime. The sustainability performance outputs and outcomes will offer directions for organizational members to continuously adapt the entire organization to prepare for environmental changes in the future.

8. Directions for Future Theoretical Refinement

Since the proposed theory of Corporate Sustainability is simply another interim struggle, serving as a platform for future scholarly enlightenment, scholars should continue to test and develop it further. To enhance its theoretical robustness, researchers can explore or examine the theory in an actual setting in an organization to spot probable anomalies and warrant the theory's practicality. In doing so, they can adopt/adapt the Integrated Theory Building Methodology [15].

To be precise, future studies may consider developing hypotheses from the Corporate Sustainability model and test them in different organizational settings and different industries so that the external validity of the theory can possibly be enhanced. One primary hypothesis here is that the more similar the culture of the samples to the Sustainability Culture, the better the Triple Bottom Line outputs, stakeholder wellbeing and brand equity. Of the three cultural elements, future research should focus on the sustainability assumptions because they are not sufficiently studied.

In addition, a cross-case analysis can be adopted by future research to explore the propositions in sustainable corporations since sustainability organizational culture is a precondition for the development of a sustainable business according to Baumgartner [36] and Kantabutra and Ketprapakorn [15]. In doing so, I advise that they adopt a sustainable corporation definition as one with organizational capacities to deliver strong performance, endure difficult economic and social crises and maintain a leadership position in a relevant industry [65].

Additionally, since a sustainability organizational culture is often regarded as being associated with organizational resilience [58,125], future studies may qualitatively explore or quantitatively examine the Corporate Sustainability model in corporations that have survived and thrived through a difficult period (e.g., COVID-19 pandemic) to determine if their practices are consistent to the five corporate sustainability practices and whether these practices actually lead to improving organizational buffering and adaptive capacities.

A detected anomaly, a previously overlooked relationship or categorization [181], will support corporate sustainability theorists to advance the relevant body of knowledge. With a future detected anomaly, the theory of Corporate Sustainability can be refined to enhance its theoretical robustness.

9. Conclusions

To deal with limitations of the existing theoretical literature, I have constructed a novel approach to build a theory by integrating the General Systems Theory and the Mindsponge approaches to demonstrate the dynamic nature of business organizations. I then review the conceptual, theoretical and empirical literature, and integrate the relevant bodies of knowledge into a theory of Corporate Sustainability. The present theory development contributes to the theoretical corporate sustainability literature by integrating additional theories of Grit by Duckworth et al. [140], Organizational Paradox by Smith and Lewis [141], Organizational Resilience by Kantabutra and Ketprapakorn [125], Organizational Ambidexterity by Tushman and O'Reilly [66], Sustainability Organizational Culture by Ketprapakorn and Kantabutra [101], Stakeholder Resource-based View by Sodhi [137] and Freeman et al. [138] and Resource-based View by Teece et al. [139], and to strengthen the theoretical foundation and enhance the power to explain a sustainability phenomenon and the external validity of the resulting theory.

The resultant Corporate Sustainability theory postulates that the Corporate Sustainability system comprises the Sustainability Culture, Resilience and Corporate Sustainability Performance subsystems. Within the Sustainability Culture subsystem, the sustainability cultural components of assumptions, vision and values, and corporate sustainability practices co-exist to bring about organizational resilience via the Resilience subsystem within which organizational buffering and adaptive capacities are enabled. I theorize that organizations can continue to deliver TBL outputs, despite disruptions, via the Resilience subsystem.

Within the Sustainability Performance system, these TBL outputs in turn deliver both functional and psychological benefits to stakeholders to improve their sustainable wellbeing as a sustainability outcome. The TBL outputs also improve the stakeholder-corporation relationship quality via the delivery of functional and psychological benefits. The stakeholder satisfaction, trust, commitment and identification increase, leading to improving brand equity, another sustainability outcome, overtime. I postulate further that the fact that organizational members learn about the sustainability performance outputs and outcomes in turn strengthens the entire Corporate Sustainability system initially via validating the sustainability assumptions that become core to the sustainability-productive culture overtime after a series of feedback loops of learning.

To assist scholars and practitioners, a model representing the theory is also provided. In particular, it offers a mechanism for practitioners on how to adapt their existing organizational system to ensure corporate sustainability. Future directions for theorists to refine the theory have also been introduced.

Funding: The development of the system theory of corporate sustainability receives no funding.

Conflicts of Interest: The author declares no conflict of interest.

References

1. Rittel, H.W.J.; Webber, M.M. Dilemmas in a general theory of planning. *Policy Sci.* **1973**, *4*, 155–169. [[CrossRef](#)]
2. Haffar, M.; Searcy, C. Classification of trade-offs encountered in the practice of corporate sustainability. *J. Bus. Ethics* **2017**, *140*, 495–522. [[CrossRef](#)]
3. Hahn, T.; Figge, F.; Pinkse, J.; Preuss, L.A. Paradox perspective on corporate sustainability: Descriptive, instrumental, and normative aspects. *J. Bus. Ethics* **2018**, *148*, 235–248. [[CrossRef](#)]
4. Pecl, G.T.; Araujo, M.B.; Bell, J.; Blanchard, J.; Bonebrake, T.C.; Chen, I.; Clark, T.D.; Colwell, R.K.; Danielsen, F.; Evengard, B.; et al. Biodiversity redistribution under climate change: Impacts on ecosystems and human well-being. *Science* **2017**, *355*, eaai9214. [[CrossRef](#)]
5. Ergene, S.; Banerjee, S.B.; Hoffman, A.J. (Un)Sustainability and Organization Studies: Towards a Radical Engagement. *Organ. Stud.* **2021**, *42*, 1319–1335. [[CrossRef](#)]
6. Schad, J.; Bansal, P. Seeing the forest and the trees: How a systems perspective informs paradox research. *J. Manag. Stud.* **2018**, *55*, 1490–1506. [[CrossRef](#)]
7. Whiteman, G.; Walker, B.; Perego, P. Planetary boundaries: Ecological foundations for corporate sustainability. *J. Manag. Stud.* **2013**, *50*, 307–336. [[CrossRef](#)]
8. Bansal, P. Sustainable development in an age of disruption. *Acad. Manag. Discov.* **2019**, *5*, 8–12. [[CrossRef](#)]
9. Freeman, R. *Stakeholder Management: Framework and Philosophy*; Pitman: Boston, MA, USA, 1984.
10. Grinblatt, M.; Hwang, C. Signaling and the pricing of new issues. *J. Financ.* **1989**, *44*, 393–420. [[CrossRef](#)]
11. Guthrie, J.; Parker, L.D. Corporate social reporting: A rebuttal of legitimacy theory. *Account. Bus. Res.* **1989**, *19*, 343–352. [[CrossRef](#)]
12. Jensen, M.C.; Meckling, W.H. Theory of the firm: Managerial behavior, agency costs and ownership structure. *J. Financ. Econ.* **1976**, *3*, 305–360. [[CrossRef](#)]
13. Hernandez, M. Promoting stewardship behavior in organizations: A leadership model. *J. Bus. Ethics* **2008**, *80*, 121–128. [[CrossRef](#)]
14. Melé, D. Corporate social responsibility theories. In *The Oxford Handbook of Corporate Social Responsibility*; Crane, A., Ed.; Oxford Academic Press: Oxford, UK, 2009; pp. 47–82. [[CrossRef](#)]
15. Kantabutra, S.; Ketrapakorn, N. Toward a theory of corporate sustainability: A theoretical integration and exploration. *J. Clean. Prod.* **2020**, *270*, 122292. [[CrossRef](#)]
16. Rezaee, Z. Business sustainability research: A theoretical and integrated perspective. *J. Account. Lit.* **2016**, *36*, 48–64. [[CrossRef](#)]
17. Valente, M. Theorizing firm adoption of sustaincentrism. *Organ. Stud.* **2012**, *33*, 563–591. [[CrossRef](#)]
18. Adamska, A.; Dąbrowski, T.J. Investor reactions to sustainability index reconstitutions: Analysis in different institutional contexts. *J. Clean. Prod.* **2021**, *297*, 126715. [[CrossRef](#)]
19. Franco, S. The influence of the external and internal environments of multinational enterprises on the sustainability commitment of their subsidiaries: A cluster analysis. *J. Clean. Prod.* **2021**, *297*, 126654. [[CrossRef](#)]
20. Frempong, M.F.; Mu, Y.; Adu-Yeboah, S.S.; Hossin, M.A.; Amoako, R. Corporate sustainability and customer loyalty: The role of firm's green image. *J. Psychol. Afr.* **2022**, *32*, 54–60. [[CrossRef](#)]
21. Greenland, S.; Saleem, M.; Misra, R.; Mason, J. Sustainable management education and an empirical five-pillar model of sustainability. *Int. J. Manag. Educ.* **2022**, *20*, 100658. [[CrossRef](#)]
22. Kücükgül, E.; Cerin, P.; Liu, Y. Enhancing the value of corporate sustainability: An approach for aligning multiple SDGs guides on reporting. *J. Clean. Prod.* **2022**, *333*, 130005. [[CrossRef](#)]

23. Mishra, P.; Yadav, M. Environmental capabilities, proactive environmental strategy and competitive advantage: A natural-resource-based view of firms operating in India. *J. Clean. Prod.* **2021**, *291*, 125249. [\[CrossRef\]](#)
24. Nader, J.; El-Khalil, R.; Nassar, E.; Hong, P. Pandemic planning, sustainability practices, and organizational performance: An empirical investigation of global manufacturing firms. *Int. J. Prod. Econ.* **2022**, *246*, 108419. [\[CrossRef\]](#)
25. Pazienza, M.; Jong, M.D.; Schoenmaker, D. Clarifying the concept of corporate sustainability and providing convergence for its definition. *Sustainability* **2022**, *14*, 7838. [\[CrossRef\]](#)
26. Roblek, V.; Thorpe, O.; Bach, M.P.; Jerman, A.; Meško, M. The fourth industrial revolution and the sustainability practices: A comparative automated content analysis approach of theory and practice. *Sustainability* **2020**, *12*, 8497. [\[CrossRef\]](#)
27. Rubel, M.R.B.; Kee, D.M.H.; Rimi, N.N. Green human resource management and supervisor pro-environmental behavior: The role of green work climate perceptions. *J. Clean. Prod.* **2021**, *313*, 127669. [\[CrossRef\]](#)
28. Sebaka, L.; Zhao, S. Internal organizational networks and green innovation performance in Chinese new ventures: The roles of corporate proactive environmental strategy and the regulatory quality. *Eur. J. Innov. Manag.* **2022**, ahead-of-print. [\[CrossRef\]](#)
29. Strielkowski, W.; Firsova, I.; Azarova, S.; Shatskaya, I. Novel Insights in the leadership in business and economics: A post-coronavirus update. *Economics* **2022**, *10*, 48. [\[CrossRef\]](#)
30. Silva, C.S.; Magano, J.; Matos, A.; Nogueira, T. Sustainable quality management systems in the current paradigm: The role of leadership. *Sustainability* **2021**, *13*, 2056. [\[CrossRef\]](#)
31. Shah, S.Q.A.; Lai, F.W.; Shad, M.K.; Jan, A.A. Developing a green governance framework for the performance enhancement of the oil and gas industry. *Sustainability* **2022**, *14*, 3735. [\[CrossRef\]](#)
32. Yu, J.; Zhu, L. Corporate ambidexterity: Uncovering the antecedents of enduring sustainable performance. *J. Clean. Prod.* **2022**, *365*, 132740. [\[CrossRef\]](#)
33. Von Bertalanffy, L. The meaning of general system theory. In *General System Theory: Foundations, Development, Applications*; Von Bertalanffy, L., Ed.; Braziller: New York, NY, USA, 1973; pp. 30–53.
34. Dubin, R. Theory building in applied areas. In *Handbook of Industrial and Organizational Psychology*; Dunnette, M.D., Ed.; Rand McNally: Chicago, IL, USA, 1976; pp. 17–39.
35. Barasa, E.; Mbau, R.; Gilson, L. What is resilience and how can it be nurtured? A systematic review of empirical literature on organizational resilience. *Int. J. Health Policy Manag.* **2018**, *7*, 491–503. [\[CrossRef\]](#) [\[PubMed\]](#)
36. Baumgartner, R.J. Organizational culture and leadership: Preconditions for the development of a sustainable corporation. *Sustain. Dev.* **2009**, *17*, 102–113. [\[CrossRef\]](#)
37. Schein, E.H. The concept of “client” from a process consultation perspective: A guide for change agents. *J. Organ. Change Manag.* **1997**, *10*, 202–216. [\[CrossRef\]](#)
38. Elkington, J. Towards the sustainable corporation: Win-win-win business strategies for sustainable development. *Calif. Manag. Rev.* **1994**, *36*, 90–100. [\[CrossRef\]](#)
39. Goh, C.S.; Chong, H.Y.; Jack, L.; Faris, A.F.M. Revisiting triple bottom line within the context of sustainable construction: A systematic review. *J. Clean. Prod.* **2020**, *252*, 119884. [\[CrossRef\]](#)
40. Tseng, M.L.; Chang, C.-H.; Lin, C.-W.R.; Wu, K.-J.; Chen, Q.; Xia, L.; Xue, B. Future trends and guidance for the triple bottom line and sustainability: A data driven bibliometric analysis. *Environ. Sci. Pollut. Res.* **2020**, *27*, 33543–33567. [\[CrossRef\]](#)
41. Wu, K.J.; Zhu, Y.; Tseng, M.L.; Lim, M.K.; Xue, B. Developing a hierarchical structure of the co-benefits of the triple bottom line under uncertainty. *J. Clean. Prod.* **2018**, *195*, 908–918. [\[CrossRef\]](#)
42. Tseng, M.L. Using social media and qualitative and quantitative information scales to benchmark corporate sustainability. *J. Clean. Prod.* **2017**, *142*, 727–738. [\[CrossRef\]](#)
43. Garengo, P.; Biazzo, S. From ISO quality standards to an integrated management system: An implementation process in SME. *Total Qual. Manag. Bus. Excell.* **2013**, *24*, 310–335. [\[CrossRef\]](#)
44. Cagno, E.; Neri, A.; Howard, M.; Brenna, G.; Trianni, A. Industrial sustainability performance measurement systems: A novel framework. *J. Clean. Prod.* **2019**, *230*, 1354–1375. [\[CrossRef\]](#)
45. Delai, I.; Takahashi, S. Sustainability measurement system: A reference model proposal. *Soc. Responsib. J.* **2011**, *7*, 438–471. [\[CrossRef\]](#)
46. Gianni, M.; Gotzamani, K.; Tsiotras, G. Multiple perspectives on integrated management systems and corporate sustainability performance. *J. Clean. Prod.* **2017**, *168*, 1297–1311. [\[CrossRef\]](#)
47. Korphaibool, V.; Chatjuthamard, P.; Treepongkaruna, S. Scoring Sufficiency Economy Philosophy through GRI standards and firm risk: A case study of Thai listed companies. *Sustainability* **2021**, *13*, 2321. [\[CrossRef\]](#)
48. Schaltegger, S.; Wagner, M. Managing sustainability performance measurement and reporting in an integrated manner. Sustainability accounting as the link between the sustainability balanced scorecard and sustainability reporting. In *Sustainability Accounting and Reporting*; Springer: Dordrecht, The Netherlands, 2006; pp. 681–697.
49. Searcy, C. Corporate sustainability performance measurement systems: A review and research agenda. *J. Bus. Ethics* **2012**, *107*, 239–253. [\[CrossRef\]](#)
50. Pryshlakivsky, J.; Searcy, C. A Heuristic Model for Establishing Trade-Offs in Corporate Sustainability Performance Measurement Systems. *J. Bus. Ethics* **2017**, *144*, 323–342. [\[CrossRef\]](#)
51. Giannoukou, I.; Beneki, C.C. Towards sustainability performance management system of tourism enterprises: A tourism sustainable balanced scorecard framework. *Int. J. Glob. Environ. Issues* **2018**, *17*, 175–196. [\[CrossRef\]](#)

52. Souza, J.P.E.; Alves, J.M. Lean-integrated management system: A model for sustainability improvement. *J. Clean. Prod.* **2018**, *172*, 2667–2682. [CrossRef]
53. Warhurst, A. *Sustainability Indicators and Sustainability Performance Management; Mining, Minerals and Sustainable Development [MMSD] Project Report No. 43*; International Institute for Environment and Development (IIED): London, UK, 2002; 129p.
54. Forrester, J.W. System dynamics, systems thinking, and soft OR. *Syst. Dyn. Rev.* **1994**, *10*, 245–256. [CrossRef]
55. Senge, P. Collaborating for systemic change. *MIT Sloan Manag. Rev.* **2007**, *48*, 44–53.
56. Lozano, R. Are companies planning their organisational changes for corporate sustainability? An analysis of three case studies on resistance to change and their strategies to overcome it. *Corp. Soc. Responsib. Environ. Manag.* **2013**, *20*, 275–295. [CrossRef]
57. Winit, W.; Kantabutra, S. Sustaining Thai SMEs through perceived benefits and happiness. *Manag. Res. Rev.* **2017**, *40*, 556–577. [CrossRef]
58. Avery, G.C.; Bergsteiner, H. *Sufficiency Thinking: Thailand's Gift to an Unsustainable World*; Routledge: New York, NY, USA, 2020.
59. Kantabutra, S. Exploring relationships among sustainability organizational culture components at a leading Asian industrial conglomerate. *Sustainability* **2021**, *13*, 1733. [CrossRef]
60. Dervitsiotis, K. The pursuit of sustainable business excellence: Guiding transformation for effective organizational change. *Total Qual. Manag. Bus. Excell.* **2003**, *14*, 251–267. [CrossRef]
61. Duchek, S. Organizational resilience: A capability-based conceptualization. *Bus. Res.* **2020**, *13*, 215–246. [CrossRef]
62. Duit, A. Resilience thinking: Lessons for public administration. *Public Adm.* **2016**, *94*, 364–380. [CrossRef]
63. Reeves, M.; Whitaker, K.A. Guide to Building a More Resilient Business. *Harv. Bus. Rev.* **2020**, *2*–8.
64. Avery, G. *Leadership for Sustainable Futures: Achieving Success in a Competitive World*; Edward Elgar: Cheltenham, UK, 2005.
65. Avery, G.; Bergsteiner, H. Sustainable leadership practices for enhancing business resilience and performance. *Strategy Leadersh.* **2011**, *39*, 5–15. [CrossRef]
66. Tushman, M.L.; O'Reilly III, C.A. Ambidextrous organizations: Managing evolutionary and revolutionary change. *Calif. Manag. Rev.* **1996**, *38*, 8–29. [CrossRef]
67. Kassotaki, O. Review of organizational ambidexterity research. *SAGE Open* **2022**, *12*, 1–22. [CrossRef]
68. Jansen, J.; Van Den Bosch, F.; Volberda, H. Exploratory innovation, exploitative innovation, and performance: Effects of organizational antecedents and environmental moderators. *Manag. Sci.* **2006**, *52*, 1661–1674. [CrossRef]
69. Junni, P.; Sarala, R.; Taras, V.; Tarba, S. Organizational ambidexterity and performance: A meta-analysis. *Acad. Manag. Perspect.* **2013**, *27*, 299–312. [CrossRef]
70. Kortmann, S. The mediating role of strategic orientations on the relationship between ambidexterity-oriented decisions and innovative ambidexterity. *J. Prod. Innov. Manag.* **2014**, *32*, 666–684. [CrossRef]
71. Lin, L.-H.; Ho, Y.-L. Institutional pressures and environmental performance in the global automotive industry: The mediating role of organizational ambidexterity. *Long Range Plan.* **2016**, *49*, 764–775. [CrossRef]
72. Vuong, Q.H. Global mindset as the integration of emerging socio-cultural values through mindsponge processes: A transition economy perspective. In *Global Mindsets: Exploration and Perspectives*; Kuada, J., Ed.; Routledge: London, UK, 2016.
73. Daft, R.L. *Organization Theory and Design*; Cengage Learning: Boston, MA, USA, 2015.
74. Whetten, D.A. What constitutes a theoretical contribution? *Acad. Manag. Rev.* **1989**, *14*, 490–495. [CrossRef]
75. Weick, K. Cognitive processes in organizations. In *Research in Organizational Behavior*; Staw, B., Ed.; JAI: Greenwich, CT, USA, 1989; pp. 41–74.
76. Ott, K. *On Substantiating the Conception of Strong Sustainability In Sustainable Development: Relationships to Culture, Knowledge and Ethics [Online]*; KIT Scientific Publishing: Karlsruhe, Germany, 2011; ISBN 9791036538230. Available online: <http://books.openedition.org/ksp/4356> (accessed on 24 November 2022).
77. Daly, H.E. *Steady-State Economics*, 2nd ed.; Island Press: Washington, DC, USA, 1991.
78. Purvis, B.; Mao, Y.; Robinson, D. Three pillars of sustainability: In search of conceptual origins. *Sustain. Sci.* **2019**, *14*, 681–695. [CrossRef]
79. University of Alberta. What Is Sustainability? Available online: www.mcgill.ca/sustainability/files/sustainability/what-is-sustainability.pdf (accessed on 13 August 2022).
80. Swarnapali, R. Corporate sustainability: A literature review. *J. Account. Res. Educ.* **2017**, *1*, 1–15.
81. Ashrafia, M.; Adams, M.; Walkera, T.R.; Magnan, G. How corporate social responsibility can be integrated into corporate sustainability: A theoretical review of their relationships. *Int. J. Sustain. Dev. World Ecol.* **2018**, *25*, 672–682. [CrossRef]
82. Benston, G.J. Accounting and corporate accountability. *Account. Organ. Soc.* **1982**, *7*, 87–105. [CrossRef]
83. Watts, R.; Zimmerman, J. *Positive Accounting Theory*; Prentice-Hall: Englewood, NJ, USA, 1986.
84. Wilson, M. Corporate Sustainability: What is it and where does it come from? *Ivey Bus. J.* **2003**, *67*, 1–5.
85. Mafabi, S.; Munene, J.C.; Ahiauzu, A. Creative climate and organisational resilience: The mediating role of innovation. *Int. J. Organ. Anal.* **2015**, *23*, 564–587. [CrossRef]
86. Morales, S.N.; Martínez, L.R.; Gomez, J.A.H.; Lopez, R.R.; Torres-Arguelles, V. Predictors of organizational resilience by factorial analysis. *Int. J. Eng. Bus. Manag.* **2019**, *11*, 1–13. [CrossRef]
87. de Oliveira Teixeira, E.; Werther Jr, W.B. (2013). Resilience: Continuous renewal of competitive advantages. *Bus. Horiz.* **2013**, *56*, 333–342. [CrossRef]

88. Correll, J.; Spencer, S.J.; Zanna, M.P. An affirmed self and an open mind: Self-affirmation and sensitivity to argument strength. *J. Exp. Soc. Psychol.* **2004**, *40*, 350–356. [CrossRef]
89. Bertels, S.; Papania, L.; Papania, D. *Embedding Sustainability in Organizational Culture. A Systematic Review of the Body of Knowledge; Network for Business Sustainability*; Western Ontario: London, ON, Canada, 2010.
90. Galpin, T.; Whittington, J.L.; Bell, G. Is your sustainability strategy sustainable? Creating a culture of sustainability. *Corp. Gov.* **2015**, *15*, 1–17. [CrossRef]
91. Rasche, A. The United Nations Global Compact and the sustainable development goals. In *Research Handbook of Responsible Management*; Laasch, O., Suddaby, R., Freeman, R.E., Jamali, D., Eds.; Edward Elgar Publishing: Cheltenham, UK, 2020.
92. Ballester, L.; González-Urteaga, A.; Martínez, B. The role of internal corporate governance mechanisms on default risk: A systematic review for different institutional settings. *Res. Int. Bus. Financ.* **2020**, *54*, 101293. [CrossRef]
93. Meyer, J.; Rowan, B. Institutionalized organizations: Formal structure as myth and ceremony. *Am. J. Sociol.* **1977**, *83*, 340–363. [CrossRef]
94. Zucker, L.G. Institutional theories of organization. *Annu. Rev. Sociol.* **1987**, *13*, 443–464. [CrossRef]
95. DiMaggio, P.J.; Powell, W.W. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *Am. Sociol. Rev.* **1983**, *48*, 147–160. [CrossRef]
96. Oliver, C. Strategic responses to institutional processes. *Acad. Manag. Rev.* **1991**, *16*, 145–179. [CrossRef]
97. Scott, W.R. The adolescence of institutional theory. *Adm. Sci. Q.* **1987**, *32*, 493–511. [CrossRef]
98. UNESCO. *The Decentralization of Educational Administration*; UNESCO, Regional Office for Education in Asia and the Pacific: Bangkok, Thailand, 1982.
99. Ulrich, D.; Brockbank, W. Creating a winning culture: Next step for leading HR professionals. *Strateg. HR Rev.* **2016**, *15*, 51–56. [CrossRef]
100. Deal, T.; Kennedy, A. *Corporate Cultures: The Rites and Rituals of Organizational Life*; Addison-Wesley: Boston, MA, USA, 1982.
101. Ketprapakorn, N.; Kantabutra, S. Toward an organizational theory of sustainability culture. *Sustain. Prod. Consum.* **2022**, *32*, 638–654. [CrossRef]
102. Sathe, V. *Culture and Related Corporate Realities*; Irwin: Homewood, IL, USA, 1985.
103. Schein, E. How can organizations learn faster?: The problem of entering the green room. *Sloan Manag. Rev.* **1992**, *34*, 85–92.
104. Kantur, D.; İşeri-Say, A. Organizational resilience: A conceptual integrative framework. *J. Manag. Organ.* **2012**, *18*, 762–773. [CrossRef]
105. Basu, M.; Mukherjee, K. Impact of sustainable leadership on organizational transformation. In *Sustainable Human Resource Management*; Springer: Singapore, 2020; pp. 151–167.
106. Russell, S.; Haigh, N.; Griffiths, A. Understanding corporate sustainability: Recognizing the impact of different governance systems. In *Corporate Governance and Sustainability, Challenges for Theory and Practice*; Benn, S., Dunphy, D., Eds.; Routledge: London, UK, 2007.
107. Kantabutra, S. Toward an organizational theory of sustainability vision. *Sustainability* **2020**, *12*, 1125. [CrossRef]
108. Aung, P.N.; Hallinger, P. Research on sustainability leadership in higher education: A scoping review. *Int. J. Sustain. High. Educ.* **2022**. ahead-of-print. [CrossRef]
109. Boeske, J.; Murray, P.A. The intellectual domains of sustainability leadership in SMEs. *Sustainability* **2022**, *14*, 1978. [CrossRef]
110. Roosa, T.; Mischen, P. Measuring the impact of organizational characteristics on the sustainability performance of US institutions of higher education. *Int. J. Sustain. High. Educ.* **2022**. ahead-of-print. [CrossRef]
111. Schmitt, U. Reframing a novel decentralized knowledge management concept as a desirable vision: As we may realize the memex. *Sustainability* **2021**, *13*, 4038. [CrossRef]
112. Suriyankietkaew, S.; Krittayaruangroj, K.; Iamsawan, N. Sustainable Leadership practices and competencies of SMEs for sustainability and resilience: A community-based social enterprise study. *Sustainability* **2022**, *14*, 5762. [CrossRef]
113. Le, T.T.; Ngo, H.Q.; Aureliano-Silva, L. Contribution of corporate social responsibility on SMEs' performance in an emerging market—The mediating roles of brand trust and brand loyalty. *Int. J. Emerg. Mark.* **2021**. ahead-of-print. [CrossRef]
114. Coleman, J. Six Components of a Great Corporate Culture. Harvard Business Review Blog Network, 6 May 2013. Available online: http://blogs.hbr.org/cs/2013/05/six_components_of_culture.html (accessed on 2 September 2019).
115. Kantabutra, S. Achieving corporate Sustainability: Toward a practical theory. *Sustainability* **2019**, *11*, 4155. [CrossRef]
116. Carton, A.M.; Murphy, C.; Clark, J.R. A (blurry) vision of the future: How leader rhetoric about ultimate goals influences performance. *Acad. Manag. J.* **2014**, *57*, 1544–1570. [CrossRef]
117. Kitsis, K.M.; Chen, I.J. Do motives matter? Examining the relationships between motives, SSCM practices and TBL performance Supply. *Chain Manag.* **2020**, *25*, 325–341. [CrossRef]
118. Blok, V.; Gremmen, B.; Wesselink, R. Dealing with the wicked problem of sustainability. *Bus. Prof. Ethics J.* **2016**, *34*, 297–327. [CrossRef]
119. Ploum, L.; Blok, V.; Lans, T.; Ompta, O. Exploring the relation between individual moral antecedents and entrepreneurial opportunity recognition for sustainable development. *J. Clean. Prod.* **2018**, *172*, 1582–1591. [CrossRef]
120. Turiel, E. The development of children's orientations toward moral, social, and personal orders: More than a sequence in development. *Hum. Dev.* **2008**, *51*, 21–39. [CrossRef]

121. Ha-Brookshire, J. Toward moral responsibility theories of corporate sustainability and sustainable supply chain. *J. Bus. Ethics* **2017**, *145*, 227–237. [CrossRef]
122. Suriyankietkaew, S. Taking the long view on resilience and sustainability with 5Cs at B. *Grimm. Glob. Bus. Organ. Excell.* **2019**, *38*, 11–17. [CrossRef]
123. Le, T.T.; Ikram, M. Do sustainability innovation and firm competitiveness help improve firm performance? Evidence from the SME sector in Vietnam. *Sustain. Prod. Consum.* **2022**, *29*, 588–599. [CrossRef]
124. Vuong, Q.H.; Napier, N.K. Acculturation and global mindspunge: An emerging market perspective. *Int. J. Intercult. Relat.* **2015**, *49*, 354–367. [CrossRef]
125. Kantabutra, S.; Ketprapakorn, N. Toward an organizational theory of resilience: An interim struggle. *Sustainability* **2021**, *13*, 13137. [CrossRef]
126. Morsing, M.; Oswald, D. Sustainable leadership: Management control systems and organizational culture in Novo Nordisk A/S. *Corp. Gov. Int. J. Bus. Soc.* **2009**, *9*, 83–99.
127. Suriyankietkaew, S. Sustainable leadership and entrepreneurship for corporate sustainability in small enterprises: An empirical analysis. *World Rev. Entrep. Manag. Sustain.* **2019**, *15*, 256–275. [CrossRef]
128. Ketprapakorn, N. Toward an Asian corporate sustainability model: An integrative review. *J. Clean. Prod.* **2019**, *239*, 117995. [CrossRef]
129. Batista, A.A.d.S.; Francisco, A.C.d. Organizational sustainability practices: A study of the firms listed by the Corporate Sustainability Index. *Sustainability* **2018**, *10*, 226. [CrossRef]
130. Boiral, O.; Heras-Saizarbitoria, I. Sustainability reporting assurance: Creating stakeholder accountability through hyperreality? *J. Clean. Prod.* **2020**, *243*, 118596. [CrossRef]
131. Bose, S. Evolution of ESG Reporting Frameworks. In *Values at Work*; Esty, D.C., Cort, T., Eds.; Palgrave Macmillan: Cham, Switzerland, 2020. [CrossRef]
132. Mervelskemper, L.; Streit, D. Enhancing market valuation of ESG performance: Is integrated reporting keeping its promise? *Bus. Strategy Environ.* **2017**, *26*, 536–549. [CrossRef]
133. Boiral, O.; Gendron, Y. Sustainable development and certification practices: Lessons learned and prospects. *Bus. Strategy Environ.* **2011**, *20*, 331–347. [CrossRef]
134. Cho, C.H.; Michelon, G.; Patten, D.M.; Roberts, R.W. CSR disclosure: The more things change . . . ? *Account. Audit. Account. J.* **2015**, *28*, 14–35. [CrossRef]
135. Karnama, A.; Vinuesa, R. Organic Growth Theory for Corporate Sustainability. *Sustainability* **2020**, *12*, 8523. [CrossRef]
136. Wijlens, T.M. Step-By-Step Approach to Implement Corporate Sustainability. Master’s Thesis, University of Twente, Enschede, The Netherlands, 2022.
137. Sodhi, M.S. Conceptualizing social responsibility in operations via stakeholder resource-based view. *Prod. Oper. Manag.* **2015**, *24*, 1375–1389. [CrossRef]
138. Freeman, R.E.; Dmytriiev, S.D.; Phillips, R.A. Stakeholder theory and the resource-based view of the firm. *J. Manag.* **2021**, *47*, 1757–1770. [CrossRef]
139. Teece, D.J.; Pisano, G.; Shuen, A. Dynamic capabilities and strategic management. *Strateg. Manag. J.* **1997**, *18*, 509–533. [CrossRef]
140. Duckworth, A.L.; Peterson, C.; Matthews, M.D.; Kelly, D.R. Grit: Perseverance and passion for long-term goals. *J. Personal. Soc. Psychol.* **2007**, *92*, 1087–1101. [CrossRef]
141. Smith, W.K.; Lewis, M.W. Toward a theory of paradox: A dynamic equilibrium model of organizing. *Acad. Manag. Rev.* **2011**, *36*, 381–403.
142. Merriman, K.K. Leadership and Perseverance. In *Leadership Today*; Marques, J., Dhiman, S., Eds.; Springer Texts in Business and Economics; Springer: Cham, Switzerland, 2017. [CrossRef]
143. Duckworth, A. *Grit: The Power of Passion and Perseverance*; Scribner/Simon & Schuster: New York, NY, USA, 2016.
144. Datu, J.A.D. Beyond passion and perseverance: Review and future research initiatives on the science of grit. *Front. Psychol.* **2021**, *11*, 545526. [CrossRef]
145. Deci, E.; Ryan, R.M. The “What” and “Why” of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychol. Inq.* **2000**, *11*, 227–268. [CrossRef]
146. Hens, L.; Block, C.; Cabello-Eras, J.J.; Sagastume-Gutierrez, A.; Garcia-Lorenzo, D.; Chamorro, C.; Mendoza, K.H.; Haeseldonckx, D.; Vandecasteele, C. On the evolution of “Cleaner Production” as a concept and a practice. *J. Clean. Prod.* **2018**, *172*, 3323–3333. [CrossRef]
147. Maslow, A.H. A theory of human motivation. *Psychol. Rev.* **1943**, *50*, 370–396. [CrossRef]
148. Bhattacharya, C.B.; Korschun, D.; Sen, S. Strengthening stakeholder–company relationships through mutually beneficial corporate social responsibility initiatives. *J. Bus. Ethics* **2009**, *85*, 257–272. [CrossRef]
149. Eisenhardt, K.M. Paradox, spirals, ambivalence: The new language of change and pluralism. *Acad. Manag. Rev.* **2000**, *25*, 703–705. [CrossRef]
150. Westenholz, A. Paradoxical thinking and change in the frames of reference. *Organ. Stud.* **1993**, *14*, 37–58. [CrossRef]
151. Clauss, T.; Kraus, S.; Kallinger, F.L.; Bican, P.M.; Brem, A.; Kailer, N. Organizational ambidexterity and competitive advantage: The role of strategic agility in the exploration-exploitation paradox. *J. Innov. Knowl.* **2021**, *6*, 203–213. [CrossRef]

152. O'Reilly, C.A.; Tushman, M.L. Organizational ambidexterity: Past, present and future. *Acad. Manag. Perspect.* **2013**, *27*, 324–338. [[CrossRef](#)]
153. Gibson, C.B.; Birkinshaw, J. The antecedents, consequences, and mediating role of organizational ambidexterity. *Acad. Manag. J.* **2004**, *47*, 209–226. [[CrossRef](#)]
154. Heracleous, L.; Papachroni, A.; Andriopoulos, C.; Gotsi, M. Structural ambidexterity and competency traps: Insights from Xerox PARC. *Technol. Forecast. Soc. Chang.* **2017**, *117*, 327–338. [[CrossRef](#)]
155. Bhattacharya, C.B.; Sen, S. Consumer-company identification: A framework for understanding consumers' relationships with companies. *J. Mark.* **2003**, *67*, 76–88. [[CrossRef](#)]
156. Bell, S.J.; Menguc, B. The employee-organization relationship, organizational citizenship behaviors, and superior service quality. *J. Retail.* **2002**, *78*, 131–146. [[CrossRef](#)]
157. Lichtenstein, D.R.; Drumwright, M.E.; Braig, B.M. The effect of corporate social responsibility on customer donations to corporate-supported nonprofits. *J. Mark.* **2004**, *68*, 16–32. [[CrossRef](#)]
158. Lewin, M. The impact of Kurt Lewin's life on the place of social issues in his work. *J. Soc. Issues* **1992**, *48*, 15–29. [[CrossRef](#)]
159. Cheung, W.M.; Marsh, R.; Griffin, P.W.; Newnes, L.B.; Mileham, A.R.; Lanham, J.D. Towards cleaner production: A roadmap for predicting product end-of-life costs at early design concept. *J. Clean. Prod.* **2015**, *87*, 431–441. [[CrossRef](#)]
160. Sweetapple, C.; Fu, G.; Farmani, R.; Butler, D. Exploring wastewater system performance under future threats: Does enhancing resilience increase sustainability? *Water Res.* **2019**, *149*, 448–459. [[CrossRef](#)] [[PubMed](#)]
161. Mou, Y.; Luo, Y.; Su, Z.; Wang, J.; Liu, T. Evaluating the dynamic sustainability and resilience of a hybrid urban system: Case of Chengdu, China. *J. Clean. Prod.* **2021**, *291*, 125719. [[CrossRef](#)]
162. Levinthal, D.; March, J.G. A model of adaptive organizational search. *J. Econ. Behav. Organ.* **1981**, *2*, 307–333. [[CrossRef](#)]
163. Kantabutra, S.; Thepha-Aphiraks, T. Sustainable leadership and consequences at Thailand's Kasikornbank. *Int. J. Bus. Innov. Res.* **2016**, *11*, 253–273. [[CrossRef](#)]
164. Bourgeois, L.J., III. On the measurement of organizational slack. *Acad. Manag. Rev.* **1981**, *6*, 29–39. [[CrossRef](#)]
165. Kennedy, A. *The End of Shareholder Value: The Real Effects of the Shareholder Value Phenomenon and the Crisis It Is Bringing to Business*; Orion Business Books: London, UK, 2000.
166. Barney, J.F. Resources and sustained competitive advantage. *J. Manag.* **1991**, *17*, 99–120. [[CrossRef](#)]
167. Nonaka, I.A. Dynamic theory of organizational knowledge creation. *Organ. Sci.* **1994**, *5*, 14–37. [[CrossRef](#)]
168. Tzortzaki, A.M.; Mihiotis, A.A. Review of knowledge management theory and future directions. *Knowl. Process Manag.* **2014**, *21*, 29–41. [[CrossRef](#)]
169. Luo, Y. A coopetition perspective of global competition. *J. World Bus.* **2007**, *42*, 129–144. [[CrossRef](#)]
170. Dierickx, I.; Cool, K. Asset stock accumulation and sustainability of competitive advantage. *Manag. Sci.* **1989**, *35*, 1504–1511. [[CrossRef](#)]
171. Glavas, A.; Mish, J. Resources and capabilities of triple bottom line firms: Going over old or breaking new ground? *J. Bus. Ethics* **2015**, *127*, 623–642. [[CrossRef](#)]
172. Norman, W.; MacDonald, C. Getting to the bottom of the "Triple Bottom Line". *Bus. Ethics Q.* **2004**, *14*, 243–262. [[CrossRef](#)]
173. Berns, M.; Townend, A.; Khayat, Z.; Balagopal, B.; Reeves, M.; Hopkins, M.; Kruschwitz, N. Sustainability and competitive advantage. *MIT Sloan Manag. Rev.* **2009**, *51*, 19–26.
174. Fauzi, H.; Svensson, G.; Rahman, A.A. Triple bottom line as sustainable corporate performance: A proposition for the future. *Sustainability* **2010**, *2*, 1345–1360. [[CrossRef](#)]
175. Winit, W.; Kantabutra, S. Enhancing the prospect of corporate sustainability via brand equity: A stakeholder model. *Sustainability* **2022**, *14*, 4998. [[CrossRef](#)]
176. Son, J.; Wilson, J. Volunteer work and hedonic, eudemonic, and social wellbeing. *Sociol. Forum* **2012**, *27*, 658–681. [[CrossRef](#)]
177. Maslow, A.H. *Motivation and Personality*; Harper & Row: New York, NY, USA, 1954.
178. Lopez-Cabrales, A.; Valle-Cabrera, R. Sustainable HRM strategies and employment relationships as drivers of the triple bottom line. *Hum. Resour. Manag. Rev.* **2020**, *30*, 100689. [[CrossRef](#)]
179. Svensson, G.; Ferro, C.; Høgevold, N.; Padin, C.; Varela, J.C.S.; Sarstedt, M. Framing the triple bottom line approach: Direct and mediation effects between economic, social and environmental elements. *J. Clean. Prod.* **2018**, *197*, 972–991. [[CrossRef](#)]
180. Lewin, K. Psychology and the process of group living. *J. Soc. Psychol.* **1943**, *17*, 113–131. [[CrossRef](#)]
181. Carlile, P.R.; Christensen, C.M. *The Cycles of Theory Building in Management Research*; Division of Research, Harvard Business School: Boston, MA, USA, 2005.