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STAKEHOLDER ECOSYSTEMS AND CORPORATE SUSTAINABILITY: A NEXUS FOR VALUE CREATION IN THE AGE OF SUSTAINABILITY

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Abstract:

The present-day interconnected global society has seen a diminished significance of borders and a growing interdependence between companies and their stakeholders. For every organization the influence wielded by these key stakeholders plays a pivotal role. The interdependence between stakeholders and corporate sustainability forms the foundation for generating economic, social, and environmental performance, as well as long-term sustainable value for the stakeholder ecosystem. The aim of the paper is to examine significant aspects related to the stakeholder dimension of corporate sustainability. This research employs a methodology that draws upon both literature review and bibliometric analysis, performed using VOSviewer. The research has identified stakeholder engagement as a critical and emerging theme. Moreover, a modern stakeholder approach is essential for understanding stakeholder dynamics holistically. Amid current challenges, a growing discourse advocates a multi-stakeholder approach, recognizing wider society and the natural environment as important stakeholders. In the context of sustainability, key trends include: promoting a pro-sustainability mindset among all stakeholders, fostering shared interests in sustainability, and empowering stakeholders to advocate for nature and sustainable development. The paper concludes with recommendations derived from the research results, providing insights for academics, researchers, and managers in formulating and implementing corporate strategies aligned with sustainability opportunities and challenges.

Key words: corporate social responsibility; corporate sustainability; performance; stakeholder engagement; sustainable value.

1. Introduction

The current landscape of modern society, characterized by an array of unprecedented challenges, encompassing climate change, depletion of non-renewable resources, socio-economic and sanitary crises, as well as the emergence of new disruptive technologies, demands substantial changes in the perspectives, lifestyles, and professional practices of states, governments, organizations, and individuals. It is imperative to adopt a novel mindset that transcends self-centeredness, profit-driven endeavors, and the exclusive pursuit of personal interests, as underscored in Swilling's

work. This shift in mindset is crucial in order to avert an impending “ecological apocalypse” and secure a more “livable future” for future generations within the intricate framework of the Age of Sustainability. Embarking on the journey, which revolves around the establishment of a more “equitable and sustainable world,” requires profound transformations and comprehensive transitions that involve the active participation of all individuals. (Swilling, 2019, pp. 21, 33, 318).

In 1991, Carroll delineated four types of organizational responsibilities - economic, legal, ethical, and philanthropic - representing them in the form of a pyramid aptly named Carroll's Pyramid of CSR – the most popular, used and known model of CSR. The four components of the conceptual framework, as emphasized by Carol (1991, p.42), symbolize and provide clarification on the multifaceted obligations organizations hold towards a broad range of stakeholders, thereby underscoring the paramount importance of meeting their expectations. In 2016, Carroll presents a fresh outlook regarding the approach to stakeholder responsibilities, emphasizing the need for a comprehensive, interconnected, and simultaneous approach that encompasses the required, expected, and desired responsibilities. According to Carroll, the subject of stakeholders is inherently intertwined and “inseparable from CSR”. This new perspective advocates a shift from a hierarchical approach, as seen in the traditional pyramid framework, to a simultaneous approach. The concept of Total CRS is introduced, which advocates for a holistic and integrated viewpoint that considers different stakeholder categories and balances their short-term and long-term interests. Furthermore, a reevaluation of the conventional pyramid model has been conducted from the perspective of sustainability, underscoring the imperative of fulfilling obligations not only for the present generation but also for future ones (Carroll, 2016, pp.5-6).

The aim of the paper is to analyze and explore key dimensions pertaining to the stakeholder aspect of corporate sustainability, emphasizing its pivotal role as a nexus for value creation. To fulfill this scope, the study delineated specific objectives, including the identification and analysis of: (1) relevant elements derived from the literature review; (2) the evolution of scholarly output over time; (3) the main authors and their respective contributions; (4) critical and emerging themes in stakeholder research; (5) prominent topics that exemplify the research in this field; and (6) the nexus of value creation for stakeholders.

2. Literature review

In the conventional paradigm, organizations that prioritized the maximization of shareholder value were perceived as successful. Milton Friedman, a Nobel laureate in economics (1976), is renowned for his development of the “shareholder theory”. This framework of business ethics posits that the primary obligation of an entity is to ensure the satisfaction of its shareholders. In his seminal work Milton Friedman argued that businesses have a responsibility to utilize their resources and engage in activities that yield profit, as long as they operate within the bounds of fair and transparent competition, devoid of deception and fraud. The author maintains that any social responsibilities primarily rest upon individuals rather than businesses themselves (Friedman, 1970, pp.122-126).

Given the present-day backdrop characterized by geopolitical, economic, social, environmental, and technological challenges, a transition from a shareholder-centric approach to one that emphasizes the creation of value for stakeholders becomes imperative. The stakeholder theory proves significantly more advantageous in ensuring resilience and sustainability in this context. Edward R. Freeman is credited with providing one of the most widely recognized definitions of the stakeholder concept. According to author, stakeholders encompass individuals and groups with the capacity to affect and/ or be affected by other entities (Freeman, 1984; Freeman et al., 2010). Stakeholders approach the organization from the standpoint of their own interests and seek to exert influence over its actions to ensure their expectations are met. However, the expectations of different stakeholders often clash, and the fulfillment of one stakeholder's desires may lead to discontent among others.

Stubbs and Cocklin (2008) draw attention to the evolving approach of sustainable organizations, transitioning from a shareholder-centric orientation to a stakeholder perspective. The authors assert that the achievement of these entities is intrinsically linked to the well-being of stakeholders, including employees, customers, suppliers, and local communities. Consequently, they advocate moving beyond the limited shareholder approach and adopting a more comprehensive stakeholder approach. This expanded perspective involves not only identifying stakeholders but also fostering collaboration and active involvement of stakeholders (Stubbs & Cocklin, 2008, pp. 122-123).

Within a stakeholder ecosystem, the presence of a wide array of internal and external stakeholders, each with their own distinct cultures and subcultures, forms a network of relationships. This complexity mirrors the interactions observed in natural ecosystems, where the various components interact systemically (Gyrd-Jones & Kornum, 2013). In the context of sustainability, the interactions among multiple stakeholders necessitate the development of novel ecosystem methodologies and a holistic approach that integrates challenges and impacts, ultimately contributing to a more sustainable future (Theodoraki et al., 2022).

As is known, the success of an organization is linked to its ability to create and deliver value. The question that arises is: For whom should this value be created? In the classical, traditional approach, the answer would have been obvious: for shareholders. However, as emphasized by Garcia and colleagues, in the current context of multiple challenges and issues, there is an increasing expectation for organizations to create value for other stakeholders as well, in addition to shareholders. In this regard, organizations are expected to integrate environmental and social objectives into the decision-making process, which should subsequently be measured and monitored (Garcia et al., 2016).

The expansion of the multi-stakeholder approach to include the natural environment as a stakeholder is a crucial aspect. Stubbs and Cocklin contend that this perspective fosters environmental stewardship (Stubbs & Cocklin, 2008, p. 122). Actions such as substituting non-renewable resources, minimizing, or even eliminating waste and pollution, and reducing consumption are significant endeavors that demand a long-term outlook and a collaborative engagement encompassing the practices and activities across the entire supply chain. In contrast to a simple stakeholder network, a multi-stakeholder ecosystem surpasses the narrow focus on customers and entails a systematic and iterative process in

which all stakeholders, acting as resource integrators, contribute to the co-creation of value within the ecosystem (Pera et al., 2016).

The strategic consideration of sustainability opportunities and challenges in the process of value creation and delivery necessitates a thoughtful approach. In addition to conventional stakeholders, organizations face a significant hurdle in capturing sustainable value that contributes positively to society and the environment. It becomes apparent that this integrated approach, which incorporates corporate sustainability principles, calls for a shift in mindset - encompassing values and beliefs - regarding the role of organizations within society. Moreover, it requires practical actions for proactive engagement with sustainability issues and system-level changes to facilitate the implementation of innovative SBMs (Morioka et al., 2017).

Achieving sustainable value creation necessitates the adoption of a strategic multi-stakeholder engagement approach. Harmonizing the needs and interests of organizations with their diverse stakeholders, even in situations of dissonance or conflict, is a complex undertaking that calls for innovative approaches to sustainable business models (SBMs) from a multi-stakeholder perspective (Velter et al., 2020).

Recognizing that stakeholders are interconnected within the value creation process, establishing trust with stakeholders is of paramount importance. Organizational transparency, closely linked to integrity, can enhance the effectiveness of communication, foster trust, and enhance the reputation of the organization. Transparency can be demonstrated through disclosure, providing stakeholders with the necessary information to make informed decisions (Crane, 2020). Baldassarre and collaborators examine the generation of sustainable value within the stakeholder network. Illustrated in Figure 1, their framework encompasses the integration of three key components: (1) the creation of shared value for the stakeholder network; (2) the consideration of sustainability issues through the alignment of economic, social, and environmental objectives; and (3) the development of products or services that address stakeholder needs and tackle identified challenges (Baldassarre et al., 2017, pp. 5, 17).



Figure 1. Framework for sustainable value proposition
Source: Authors computation based on Baldassarre et al, 2017, p.5

Regrettably, many companies possess a narrow perspective, failing to recognize the potential of addressing fundamental societal needs and disregarding the impact of injustices and societal vulnerabilities on their value chain. In light of this, Porter and Kramer emphasize the significance of fostering shared value, which entails adopting operational policies and practices that not only enhance a company's competitiveness but

also contribute to the economic and societal progress of the communities in which they operate. The notion of shared value should not solely focus on benefits, but rather on the ratio between benefits and associated costs – costs that are frequently externalized and borne by the environment, customers, community, and society at large. Consequently, strategic thinking becomes imperative for companies to seize opportunities and gain competitive advantages by reconfiguring their value chains. While the specific opportunities may vary depending on identified societal needs, the implementation of the shared value concept – whereby companies generate economic value through the creation of societal value – offers numerous prospects such as addressing emerging needs, differentiation from competitors, operational efficiency improvements, and market expansion (Porter & Kramer, 2011, pp. 6, 7).

3. Methodology

This research employs a methodology that draws upon literature review and bibliometric analysis, using Web of Science Core Collection (WoS CC), VOSviewer, and Excel tools. To fulfill the established objectives, the research methodology followed 7 main steps:

- **Step 1 - Selection of the bibliographic database.** The data collection process employed the use of the Web of Science Core Collection (WoS CC) database, selected for its significant and representative role in bibliometric research. The research was carried out in April 2023.

- **Step 2 – Establishing the filtering criteria.** The topic (TS) was employed as the basis for constructing the query in WoS, encompassing titles, abstracts, and keywords (including authors keywords and keywords plus). The sole applied filter was language, limiting the search results to English. The search criteria encompassed two distinct directions, combined with AND Boolean operator. The first direction was around the topic stakeholder AND the second direction around corporate sustainability OR sustainable corporate. It is important to emphasize that for the second direction was used several terms under the same umbrella concept, respective: corporate, company, firm, organization, sme etc. For the search string asterisk symbol (*) have been used to identify both singular and plural forms (e.g. “sustainable compan*”). Moreover the search was established for full name but also or acronyms (for example – “small and medium enterprise*” OR “sme*”). For the second direction OR Boolean separator was used to merge in the search string all types of the previous mentioned entities.

- **Step 3 – Collecting the data from WoS CC.** A total of 1,894 documents were gathered, of which the majority (1,863) were in English. The remaining 30 documents were distributed across multiple languages, including: Portuguese (12), Spanish (8), Ukrainian (2), and one document each in Chinese, German, Hungarian, Maltese, Russian, Slovak, Slovenian, and an unspecified language. Based on the collected documents, a Citation Report was generated and analyzed, covering the period from 1994 to 2023.

- **Step 4 – Exporting the results.** Plain Text File (.txt) was chosen to export “Full Records and Cited References”. Following the process (in groups of 500 records for each operation), four .txt files have resulted and subsequently merged into a single document.

- **Step 5 – Import into VOSviewer.** The concatenated (merged) file was imported into VOSviewer (Van Eck & Waltman, 2022) to undergo processing by the automated algorithms. To facilitate subsequent analysis, only keywords that appeared more than 5 times were retained for further processing.

- **Step 6 – Creation of the thesaurus file.** To ensure accurate representation and analysis of keywords, synonymous terms were identified, encompassing singular and plural forms, full keywords, their acronyms or abbreviations, and combined forms such as the complete keyword along with its abbreviation. The resulting thesaurus file was then loaded into VOSviewer to conduct the keyword co-occurrence analysis. Through this procedure, from a total of 6,334 keywords, 503 met the threshold of at least 5 occurrences, thus forming the foundation for automatically generated maps based on bibliographic data.

- **Step 7 – Analyzing the data processed in VOSviewer.** The present study encompasses diverse visualizations and analyses to examine the data processed in VOSviewer: Co-citation with cited authors as unit of analysis; Keywords clusters (number, colors, and the most representative item within each cluster); Network Visualization; Network maps for seven concepts, representing the predominant keyword within each of the seven clusters; The critical and emerging themes identified with the "stakeholder" root; Network map for value creation concept..

4. Results and discussions

Based on collected documents, the results were generated, visualized and analyzed covering the period from 1994 to 2023.

4.1 Citation report

The data presented in Figure 2 demonstrates a discernible upward trend in the level of interest pertaining to the subject under investigation. A careful examination of the information reveals distinct phases characterized by years in which the growth rates exceeded those observed in preceding periods (indicated by the red border), as well as years with comparatively lower growth rates (indicated by the black border). Consequently, notable periods of significant growth occurred in 2010, 2018, and 2020. However, in 2021, there was a substantial decline in interest, most likely attributable to the impact of the COVID-19 crisis. It is plausible to suggest that during this time, attention shifted towards other areas of focus. Nonetheless, this decline was transient, and interest rebounded in 2022, reaching levels comparable to those observed in 2020.

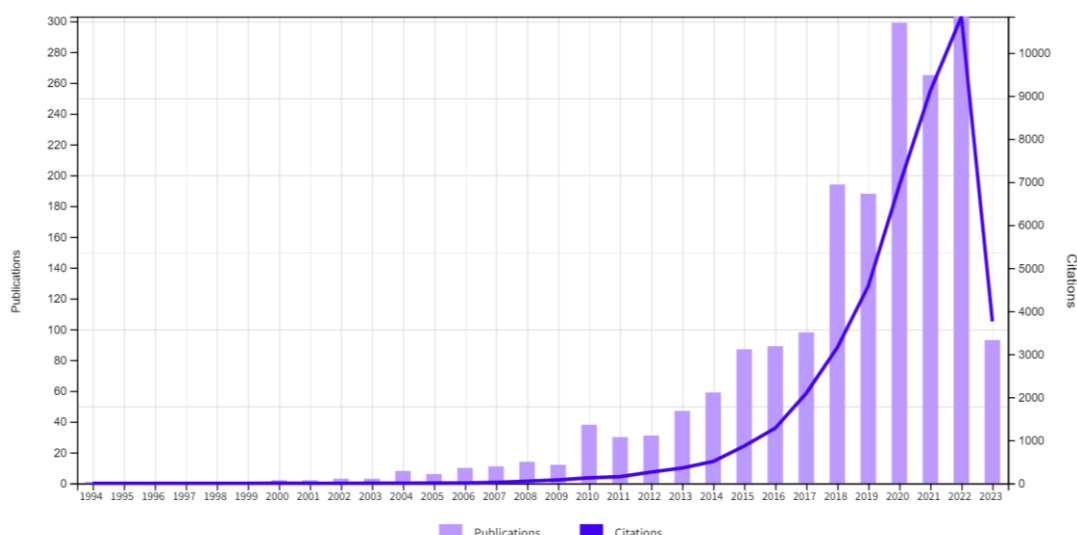


Figure 2. The evolution of the number of documents published and of citations

Source: Adapted by authors from WoS

4.2 Co-citation with cited authors as unit of analysis

The co-citation analysis technique offers the flexibility to examine various attributes, including cited references, cited sources, and cited authors, as units of analysis. For this paper, the co-citation analysis has been conducted using cited authors as the unit of analysis, which involves quantifying the frequency of citations received by authors from other authors.

It is essential to emphasize that, according to the algorithm's, the VosViewer co-citation analysis considers only the first author of a cited document in the case of papers authored by multiple individuals, disregarding the contributions of the remaining authors. The visualization of the co-citation network provides valuable information that can be extracted and analyzed, including:

1. Author groups that are interconnected or associated with specific “schools” or subfields within the realm of information science;
2. Determination of the relative placement and spatial arrangement of these author groups in relation to one another within the co-citation network;
3. Assessment of the positioning of individual authors within a particular group, classifying them as either centrally located or peripheral to the network;
4. Examination of the proximity of authors to one another within their respective groups, revealing potential patterns of collaboration or intellectual influence;
5. Identification of boundary-spanning authors who establish connections between different research areas, facilitating interdisciplinary exchange and integration; etc.

The research area involved the examination of a dataset comprising 51,856 authors who served as the first authors of cited documents. To facilitate manageable and relevant network visualization, a minimum citation threshold of 20 citations per author was established.

As a result, 727 authors surpassed this threshold. To further refine the analysis and achieve an improved representation, a stricter criterion of at least 50 citations per author was applied, resulting in a subset of 177 authors meeting the criterion. This deliberate approach aimed to strike a balance between inclusivity and relevance, allowing for a meaningful exploration of the co-citation network while mitigating the risk of information overload.

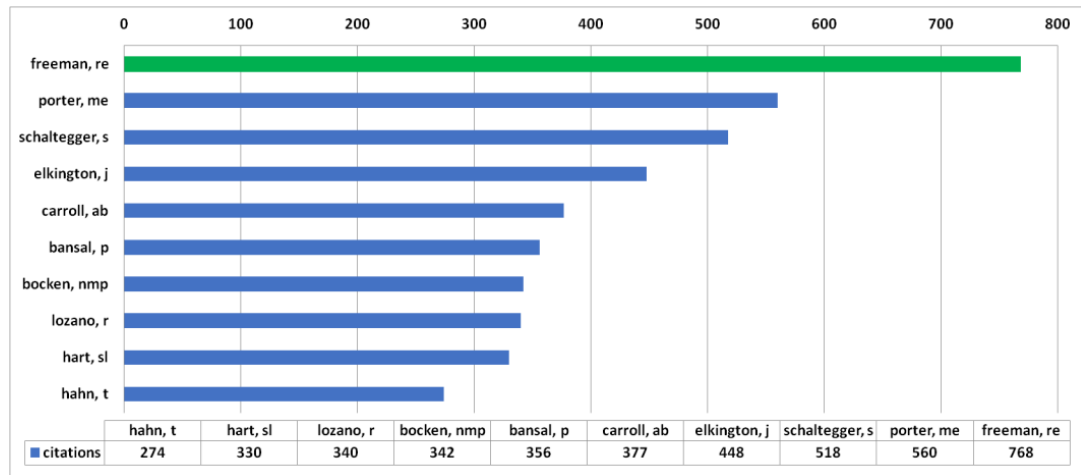


Figure 3. Co-citation analysis of the 10 top most frequently cited authors

Source: Authors' computation with data exported from VOSviewer

Figure 3 presents the outcomes of the co-citation analysis, specifically focusing on the top 10 most frequently cited authors. Notably, Freeman, recognized as the pioneer of the stakeholder concept, holds the first position with the highest number of citations (768), followed by Porter (560); Schaltegger (518); Elkington (448); Carroll (377); Bansal (356); Bocken (342); Lozano (340); Hart (330); and Hahn (274).

The dataset consisting of 177 items has undergone an automated clustering process, resulting in the identification of four clusters with different number of items: Cluster 1 – red (69); Cluster 2 – green (43); Cluster 3 – blue (36); Cluster 4 – yellow (29). The Co-citation map is characterized by 14,073 links and 203,792 TLS (Figure 4).

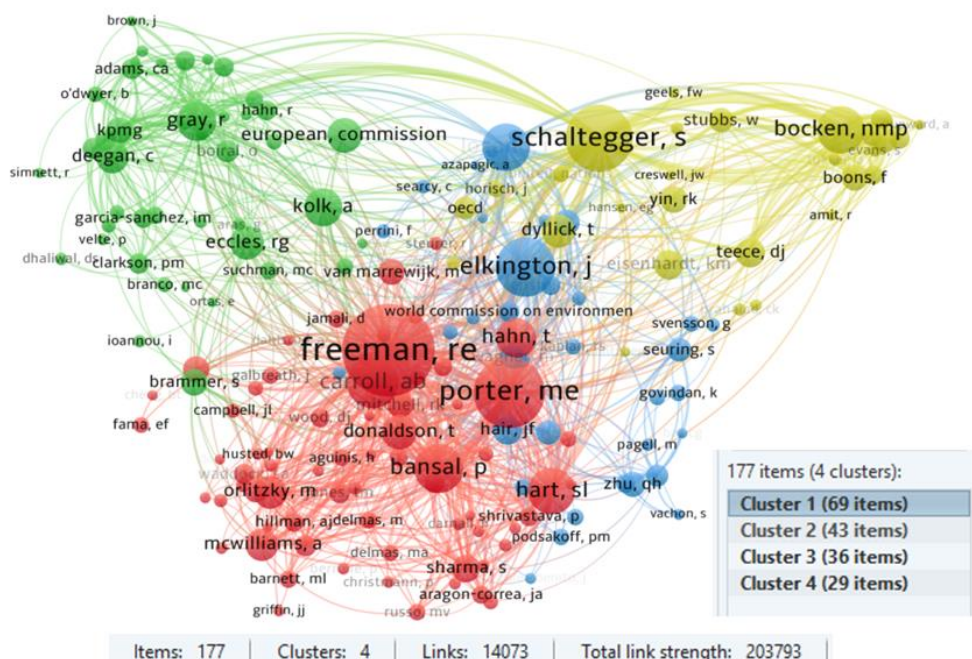


Figure 4. Co-citation map (cited authors as unit of analysis)

Source: Authors' computation with data from VOSviewer

Cluster 1 (red) emerges as the most prominent one within the present research topic. Notably, this cluster encompasses 6 out of the top 10 most cited authors of the entire network, namely Freeman, Porter, Carroll, Basal, Hart, and Hahn. It is important to note that Figure 5 only depicts the top 5 authors from Cluster 1, and thus excludes Hahn. The presence of all these highly cited authors within Cluster 1 underscores its central role and relevance within the broader context of the research domain.

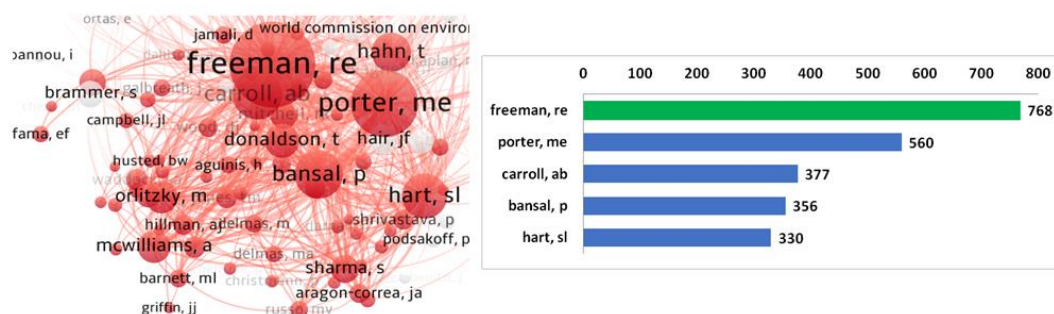


Figure 5. Cluster 1 – Co-citation map and top five authors

Source: Authors' computation with data from VOSviewer

Within Cluster 2 (green), Kolk stands out as the most prominent reference cited author. Subsequently, Gray, European Commission, Eccles, and Deegan follow in terms of citation frequency.

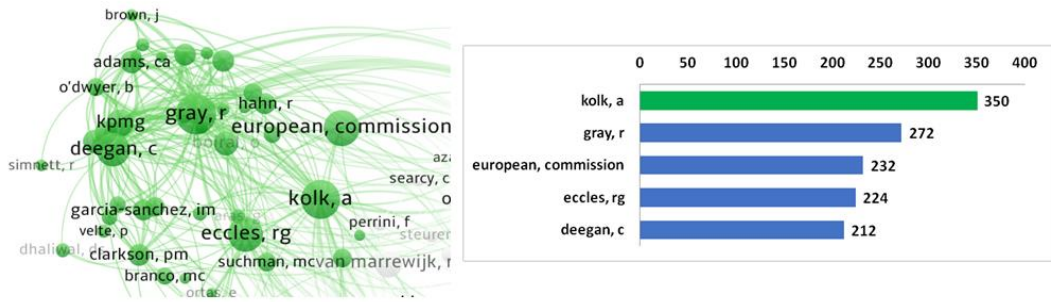


Figure 6. Cluster 2 – Co-citation map and top five authors

Source: Authors' computation with data from VOSviewer

Within Cluster 3 (blue), Elkington emerges as the most representative and central author, exerting a significant influence within the cluster. Interestingly, Elkington also holds the fourth position in the overall top 10 cited authors. Following Elkington, notable authors in Cluster 3 include Lazano, Hair, Zhu, and Baumgartner.

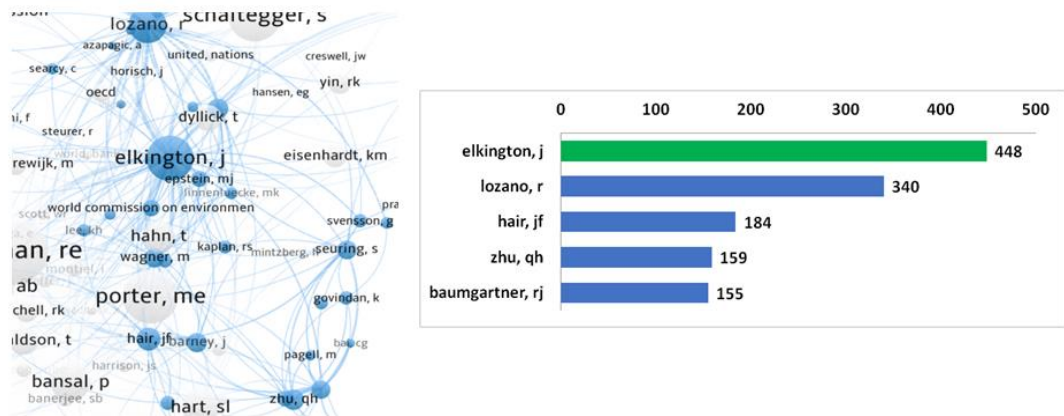


Figure 7. Cluster 3 – Co-citation map and top five authors

Source: Authors' computation with data from VOSviewer

Cluster 4 exhibits a notable presence of authorship with Schaltenger occupying a position of prominence. Simultaneously, Schaltenger is positioned as the third most influential author within the top 10. Following Schaltenger in this cluster are Bocken, Dyllick, Teece, and Eisenhardt.

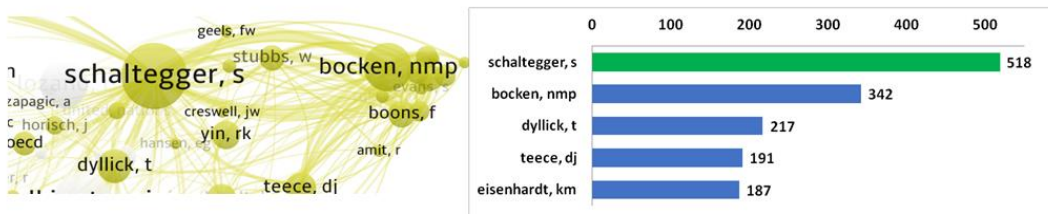


Figure 8. Cluster 4 – Co-citation map and top five authors

Source: Authors' computation with data from VOSviewer

4.3 The most prominent concepts for each cluster

With the aid of the co-occurrence analysis with “All Keywords” as the unit of analysis, a network visualization depicted in Figure 9 showcases the emergence of seven distinct clusters with different number of items: Cluster 1 (129 items); Cluster 2 (118 items); Cluster 3 (98 items); Cluster 4 (68 items); Cluster 5 (40 items); Cluster 6 (32 items); and Cluster 7 (17 items). These clusters were automatically generated through VOSviewer algorithms. It is worth noting that Cluster 8, which consists of a sole item, is not considered in the analysis.

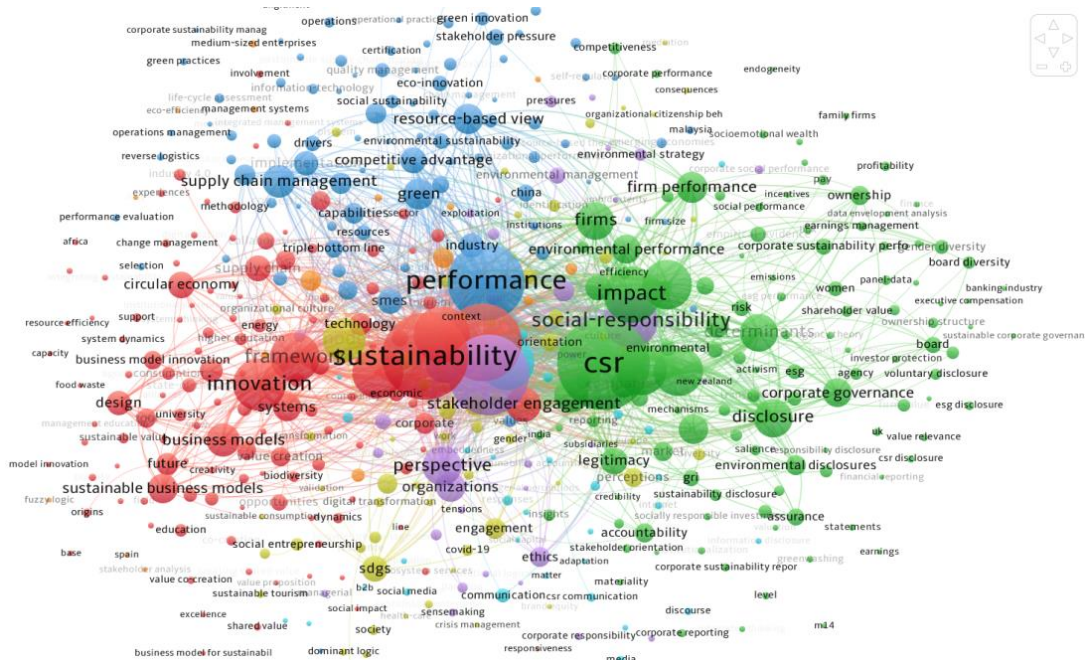


Figure 9. Network visualization

Source: Authors' computation with data from VOSviewer

In Figure 10, a synthesis of each cluster is presented, including the number of items contained within, the assigned color, and the concept with the highest frequency, which serves as the cluster's name.

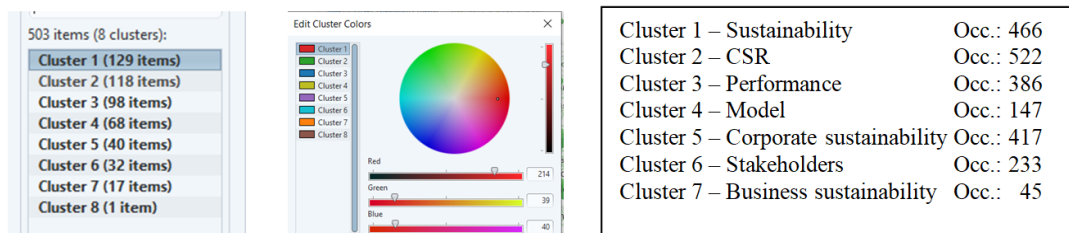


Figure 10. Cluster Overview

Source: Authors' computation with data from VOSviewer

The representation of each cluster was determined by identifying the concept that displayed the highest frequency (occurrences) within the given cluster, thereby serving as

the basis for assigning its name. Each graphical representation, positioned on the left side of the synthesis, featured the network visualization corresponding to the relevant keyword. On the right side, the representation included the link strengths (LS) of three crucial concepts for the research: stakeholder, stakeholder theory, and stakeholder engagement. To ensure consistency, it was determined that the primary concepts giving names to the clusters would be addressed in descending order of occurrence, rather than their numerical cluster designation. Consequently, the main concepts are presented as follows: (a) csr (522); (b) sustainability (466); (c) corporate sustainability (417); (d) performance (386); (e) stakeholders (233); (f) model (147); and (g) business sustainability (45).

a) Corporate social responsibility (CSR)

CSR, which belongs to Cluster 2 but holds significance beyond its cluster affiliation, emerges as the most prominent theme within the entire network (Occ. 522; Links: 464; TLS: 4,099). Additionally, CSR exhibits substantial link strengths (LS) in conjunction with other essential concepts (Figure 11), including stakeholder (LS: 92), stakeholder theory (LS: 90), and stakeholder engagement (LS: 49).

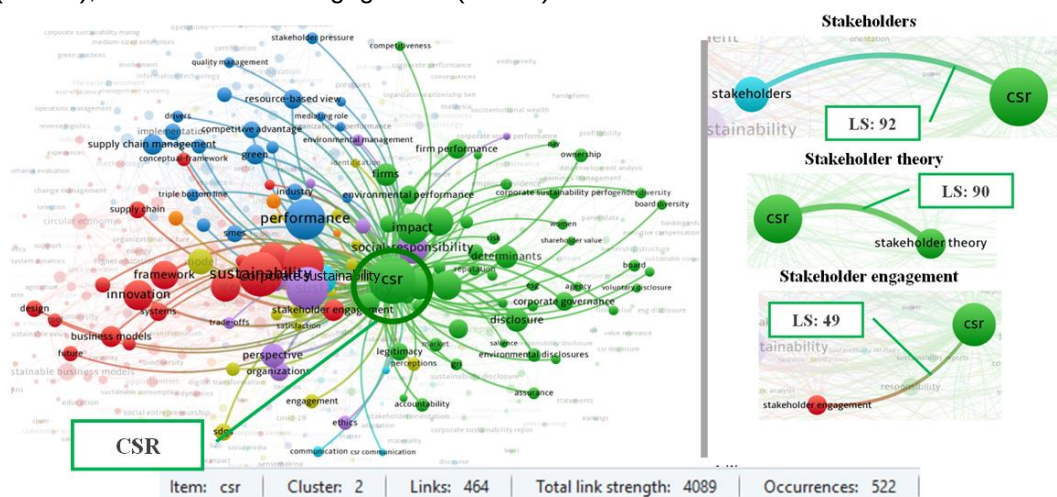


Figure 11. Corporate social responsibility (CSR) network map

Source: Authors' computation with data from VOSviewer

b) Sustainability

Sustainability (Occ: 466, Links: 456 ;TLS: 3,328) holds the second position in the entire network map, following CSR, and stands as the most prominent keyword characterizing Cluster 1. Furthermore, it exhibits substantial links, represented by curved arches, with other emphasized concepts, namely stakeholders (LS: 46), stakeholder theory (LS: 37), and stakeholder engagement (LS: 24), as illustrated in Figure 12.

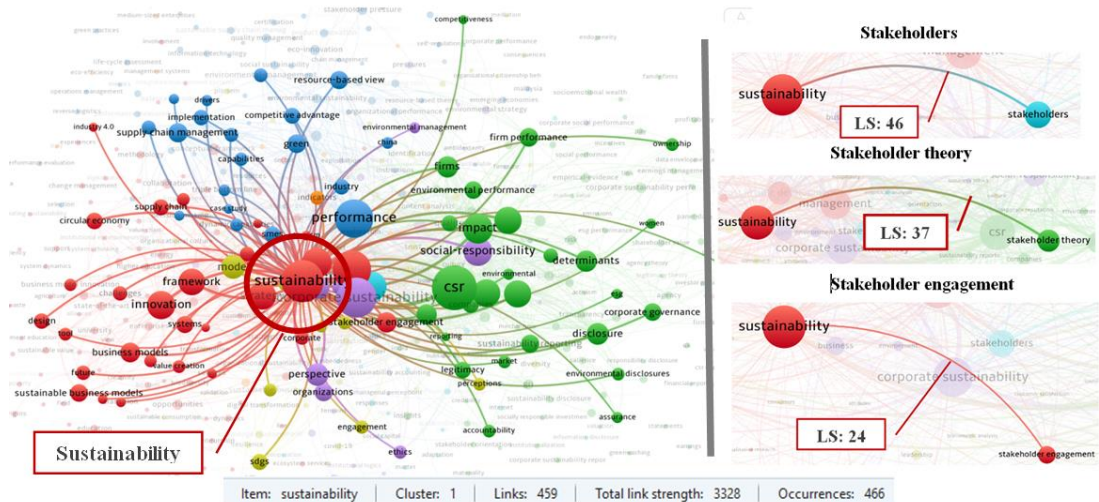


Figure 12. Sustainability network map

Source: Authors' computation with data from VOSviewer

c) Corporate sustainability

Corporate sustainability, with 417 occurrences, emerges as the most representative keyword in Cluster 5. As can be seen, the concept exhibits significant links with stakeholders (LS: 51), stakeholder theory (LS: 65), and stakeholder engagement (LS: 32), as depicted by curved arches in Figure 13, contributing to its notable presence within the network map (Links: 458; TLS: 3,162).

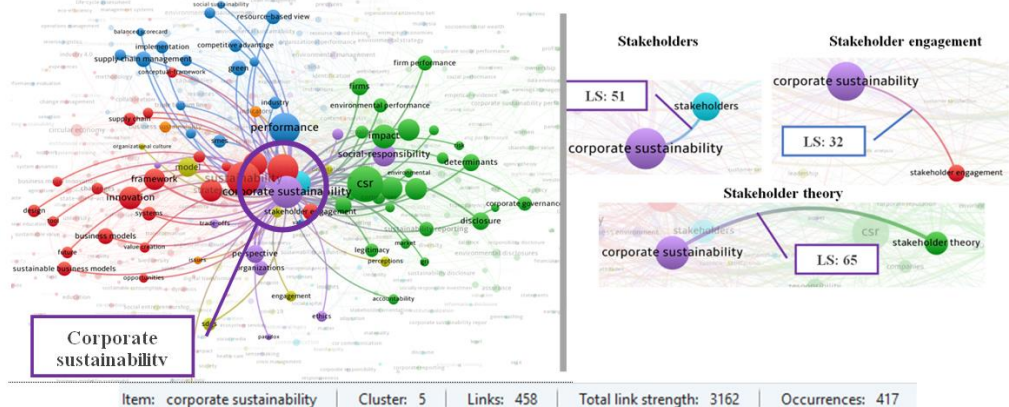


Figure 13. Corporate sustainability network map

Source: Authors' computation with data from VOSviewer

d) Performance

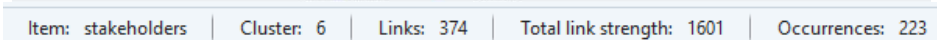
Cluster 3 is characterized by the keyword performance (Occ: 386, Links: 447; TLS: 3,160), representing its primary theme. Notably, performance exhibits connections, symbolized by curved arches, with other key concepts such as stakeholders (LS: 38), stakeholder theory (LS: 58), and stakeholder engagement (LS: 22), as depicted in Figure 14.



Source: Authors' computation with data from VOSviewer

e) Stakeholders

The term stakeholders emerges as the most salient keyword within cluster 6 (Occ: 223; Links: 374; TLS: 1,601). These links, depicted as curved arches, establish connections with other significant concepts relevant to our research, namely corporate social responsibility (LS: 92), corporate sustainability (LS: 65), performance (LS: 55), management (LS: 47), sustainability (LS: 37), social responsibility (LS: 35), sustainable development (LS: 24), and others (Figure 15).



Source: Authors' computation with data from VOSviewer

The present-day interconnected global society has seen a diminished significance of borders and a growing interdependence between companies and their stakeholders. For every organization, regardless of its size, sector or geographic location, the leverage and influence wielded by these key stakeholders plays a pivotal role.

f) Model

The term model exhibits a relatively lower level of visibility in comparison to the previously analyzed keywords, however, it holds significant representativeness within Cluster 4 (Occ: 147, Links: 311; TLS: 1,197. Its links, symbolized by curved arches in Figure 16, show its connections with other concepts, namely stakeholders (LS: 19), stakeholder theory (LS: 18), and stakeholder engagement (LS: 17).

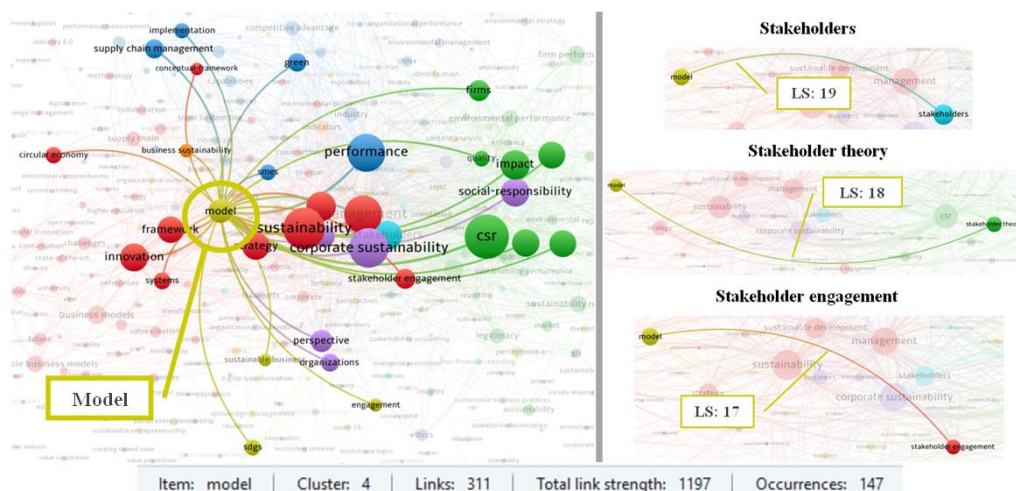


Figure 16. Model network map

Source: Authors' computation with data from VOSviewer

g) Business sustainability

Business sustainability, which falls under the broader category of corporate sustainability, possesses a comparatively lower level of representativeness among the seven concepts that give the clusters names.

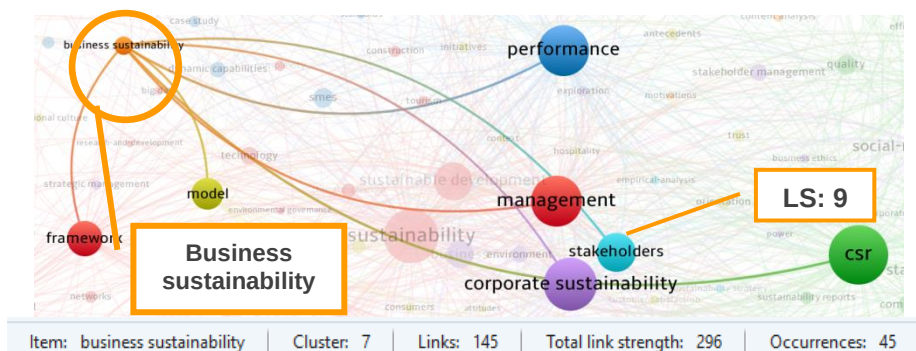


Figure 17. Business sustainability network map

Source: Authors' computation with data from VOSviewer

Nonetheless, it emerges as the most frequently occurring keyword within Cluster 7 (Occ: 45, Links: 145; TLS: 296). The Figure 17 depicts the word map and showcases the link strengths, particularly with regard to the stakeholder concept (LS: 9).

4.4 The stakeholder dimension of corporate sustainability

Upon analyzing the stakeholder dimension within the domain of corporate sustainability (CS), an analysis was conducted using VOSviewer to filter and extract ten keywords with the root term “stakeholder.” Each of these concepts was examined for their respective characteristics, which are presented in Table 1.

Table 1. Keywords with “stakeholder” root
Source: Authors’ computation with data from VOSviewer

No.	Keywords	Cl.	Occ.	L.	TLS	APY	LS with CSR	LS with Sust.	LS with CS	LS with Perf.	LS with BS.
1.	Stakeholders	6	223	374	1,601	2017.66	92	46	51	38	9
2.	Stakeholder theory	2	194	346	1,578	2018.65	90	37	65	55	-
3.	Stakeholder engagement	1	102	287	897	2019.65	49	24	32	22	-
4.	Stakeholder management	2	43	179	355	2017.05	23	-	12	11	-
6.	Stakeholder pressure	3	29	136	273	2020.56	8	-	-	11	-
5.	Stakeholder orientation	2	11	62	92	2020.00	-	-	-	-	-
7.	Stakeholder silence	5	7	47	60	2017.44	-	-	-	-	-
8.	Multi-stakeholder initiative	1	5	26	32	2022.25	-	-	-	-	-
9.	Stakeholder status	1	5	36	47	2017.60	-	-	-	-	-
10.	Stakeholder analysis	7	5	26	33	2013.00	-	-	-	-	-

These characteristics encompass the originating cluster, occurrences, links (L), total link strengths (TLS), average publication year (APY), as well as the link strengths (LS) with five other key concepts representing each cluster: corporate social responsibility (CSR), sustainability, corporate sustainability (CS), performance, and business sustainability (BS).

Among the extracted keywords, “stakeholders” appears as the most frequently mentioned, possessing the highest number of links and TLS. Notably, the concept of stakeholder engagement stands out as a novel theme (APY: 2019.65) with significant occurrence, links, TLS, and notable LS with the aforementioned emphasized keywords. Moreover, the analysis reveals several prominent topics within the scope of the research. Noteworthy subjects include multi-stakeholder initiatives (APY: 2022.25),

Filter:
stakeholder
10 items (6 clusters):
Cluster 1 (3 items)
multi-stakeholder initiative
stakeholder engagement
stakeholder status
Cluster 2 (2 items)
stakeholder orientation
stakeholder theory
Cluster 3 (1 item)
stakeholder pressure
Cluster 5 (2 items)
stakeholder management
stakeholder salience
Cluster 6 (1 item)
stakeholders
Cluster 7 (1 item)
stakeholder analysis

5. Conclusions

The current interconnected global society has diminished the significance of borders, fostering an increased interdependence between businesses and stakeholders. Nowadays, stakeholder leverage and influence play a pivotal role in creating economic, social, and environmental performance as well as in fostering long-term sustainable value through the symbiotic relationship with corporate sustainability (CS).

The research paper aimed to comprehensively analyze and explore the stakeholder aspect of corporate sustainability, highlighting its key part as a nexus for value creation. The study achieved its objectives by identifying and analyzing relevant elements derived from the literature review and bibliometric analysis completed using Web of Science (WoS), VOSviewer, and Excel. Results and discussions are formulated by tracing the evolution of scholarly output over time, examining the contributions of main authors in the field, identifying critical and emerging themes in stakeholder research, investigating prominent topics that exemplify research in this domain, and exploring value creation for stakeholders.

The co-citation analysis with cited authors as unit of analysis revealed that Freeman, recognized as a pioneer of the stakeholder concept, holds the first position with the highest number of citations, followed in the top 10 by Porter, Schaltegger, Elkington, Carroll, Bansal, Bocken, Lozano, Hart, and Hahn. For a more comprehensive understanding, the results regarding authors have been presented for each of the four automatically resulted clusters, respectively author groups that are interconnected or associated with specific “schools” or subfields of thought in a field.

Using a co-occurrence analysis with "All Keywords" as the unit of analysis, the generated network visualization revealed seven distinct clusters. Each cluster was represented graphically and analyzed by the keyword with the highest occurrence. These seven keywords shaping the clusters, addressed in descending order of occurrence, are: csr (522), sustainability (466), corporate sustainability (417), performance (386), stakeholders (233), model (147), and business sustainability (42). In the research study, each of the previously mentioned concepts were identified and analysed through a dual graphic representation – the network of the concept and its link strengths with other three concepts vital for the researched theme: stakeholders, stakeholder theory, and stakeholder engagement.

This study also aimed to investigate the stakeholder dimension within the context of corporate sustainability by conducting an analysis of ten filtered keywords containing the root term “stakeholder”. Notably, the concept of stakeholder engagement stands out as a novel theme (APY: 2019.65) with significant occurrence, links, TLS, and notable LS with the most prominent keyword for each cluster, respectively: csr, sustainability, corporate sustainability, performance and business sustainability. Furthermore, the analysis also reveals several new topics within the scope of the research, including multi-stakeholder initiatives (APY: 2022.25), stakeholder pressure (APY: 2020.56), and stakeholder orientation (APY: 2020.00). These syntheses reflect the current trends and hot topics in the field.

The paper highlights the significance of sustainability, CSR, SBM, and innovation as fundamental drivers and enablers for value creation and positive outcomes in promoting the interests and well-being of the stakeholder ecosystem.

In the context of sustainability, the examination of organizational relationships with stakeholders has revealed additional trends: the need to foster a pro-sustainability mindset among all stakeholders, the cultivation of a shared interest in sustainability and the empowerment of stakeholders to act as intermediaries for nature and sustainable development.

The findings of this study provide valuable insights not only for academics and researchers, but also for managers who are formulating and implementing their corporate strategies so as to better align with sustainability challenges.

5. References

- Baldassarre, B., Calabretta, G., Bocken, N. M. P., & Jaskiewicz, T. (2017). Bridging sustainable business model innovation and user-driven innovation: A process for sustainable value proposition design. *Journal of Cleaner Production*, 147, 175–186. <https://doi.org/10.1016/j.jclepro.2017.01.081>
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48. [https://doi.org/10.1016/0007-6813\(91\)90005-G](https://doi.org/10.1016/0007-6813(91)90005-G)
- Carroll, A. B. (2016). Carroll's pyramid of CSR: Taking another look. *International Journal of Corporate Social Responsibility*, 1(1), 3. <https://doi.org/10.1186/s40991-016-0004-6>
- Crane, B. (2020). Revisiting Who, When, and Why Stakeholders Matter: Trust and Stakeholder Connectedness. *Business & Society*, 59(2), 263–286. <https://doi.org/10.1177/0007650318756983>
- Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Pitman.
- Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & De Colle, S. (2010). *Stakeholder Theory: The State of the Art* (1st ed.). Cambridge University Press. <https://doi.org/10.1017/CBO9780511815768>
- Friedman, M. (1970, September 13). The Social Responsibility of Business Is to Increase Its Profits. *New York Times Magazine*, 122–126.
- Garcia, S., Cintra, Y., Torres, R. D. C. S. R., & Lima, F. G. (2016). Corporate sustainability management: A proposed multi-criteria model to support balanced decision-making. *Journal of Cleaner Production*, 136, 181–196. <https://doi.org/10.1016/j.jclepro.2016.01.110>
- Gyrd-Jones, R. I., & Kornum, N. (2013). Managing the co-created brand: Value and cultural complementarity in online and offline multi-stakeholder ecosystems. *Journal of Business Research*, 66(9), 1484–1493. <https://doi.org/10.1016/j.jbusres.2012.02.045>
- Morioka, S. N., Bolis, I., Evans, S., & Carvalho, M. M. (2017). Transforming sustainability challenges into competitive advantage: Multiple case studies kaleidoscope converging into sustainable business models. *Journal of Cleaner Production*, 167, 723–738. <https://doi.org/10.1016/j.jclepro.2017.08.118>
- Morioka, S. N., Holgado, M., Evans, S., Carvalho, M. M., Rotella Junior, P., & Bolis, I. (2022). Two-Lenses Model to Unfold Sustainability Innovations: A Tool Proposal from Sustainable Business Model and Performance Constructs. *Sustainability*, 14(1), 556. <https://doi.org/10.3390/su14010556>

- Pera, R., Occhiocupo, N., & Clarke, J. (2016). Motives and resources for value co-creation in a multi-stakeholder ecosystem: A managerial perspective. *Journal of Business Research*, 69(10), 4033–4041. <https://doi.org/10.1016/j.jbusres.2016.03.047>
- Porter, M. E., & Kramer, M. R. (2011). Creating Shared Value. *Harvard Business Review*. <https://www.communitylivingbc.ca/wpcontent/uploads/2018/05/Creating-Shared-Value.pdf>
- Stubbs, W., & Cocklin, C. (2008). Conceptualizing a “Sustainability Business Model.” *Organization & Environment*, 21(2), 103–127. <https://doi.org/10.1177/1086026608318042>
- Swilling, M. (2019). *The Age of Sustainability: Just Transitions in a Complex World* (1st ed.). Routledge. <https://doi.org/10.4324/9780429057823>
- Theodoraki, C., Dana, L.-P., & Caputo, A. (2022). Building sustainable entrepreneurial ecosystems: A holistic approach. *Journal of Business Research*, 140, 346–360. <https://doi.org/10.1016/j.jbusres.2021.11.005>
- Van Eck, N. J., & Waltman, L. (2022). *VOSviewer Manual, version 1 .6.18*. Retrieved from: https://www.vosviewer.com/documentation/Manual_VOSviewer_1.6.18.pdf
- Velter, M. G. E., Bitzer, V., Bocken, N. M. P., & Kemp, R. (2020). Sustainable business model innovation: The role of boundary work for multi-stakeholder alignment. *Journal of Cleaner Production*, 247, 119497. <https://doi.org/10.1016/j.jclepro.2019.119497>