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# Mapping the Nexus of Strategic Management and Sustainable Development Goals 12 with a Focus on Innovation: A Bibliometric Analysis

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**ABSTRACT**

**This study aims** to map the research landscape at the intersection of Strategic Management and Sustainable Development Goal (SDGs) 12: Responsible Consumption and Production, using bibliometric methods. A total of 94 articles published between 2015 and 2025 were analyzed using VOSviewer and Bibliometrix to identify key authors, countries, institutions, and thematic clusters. **The results revealed** four dominant keyword clusters: growth, strategy, innovation, and stakeholder integration. Notably, India emerged as a central player in global collaborations related to SDGs 12. Theoretically, **this study extends** the understanding of how technological and green innovations intersect within strategic management frameworks to foster sustainable consumption and production practices. Managerially, **the findings suggest** that organizations should invest in digital infrastructure, particularly in AI, IoT, and data analytics, and adopt cross-sector governance mechanisms to drive sustainability goals. Furthermore, embedding sustainability metrics into key performance indicators (KPIs) can create a competitive advantage while aligning with global sustainability agendas. This paper provides actionable insights for both researchers and managers seeking to integrate strategic innovation with SDGs 12.



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## 1. INTRODUCTION

In the evolving landscape of business management, Strategic Management has increasingly focused on integrating sustainability into organizational practices [1, 2]. As global concerns about environmental degradation, resource depletion, and social inequalities intensify, organizations have begun to recognize the need to adopt sustainable strategies that not only address these challenges but also create long-term value. One of the most significant frameworks to guide this shift is the United Nations' Sustainable Development Goals (SDGs), which provide a universal agenda for promoting social, environmental, and economic sustainability [3].

Among the 17 SDGs, SDGs 12: Responsible Consumption and Production stands out as particularly relevant for businesses, as it calls for reducing waste through consumption and production patterns that are more efficient and sustainable [4, 5, 6]. As organizations strive to align their strategies with SDGs 12, the

intersection of Strategic Management and sustainability has become a critical area of research [7, 8]. Over the past decade, significant efforts have been made to explore how strategic management frameworks can incorporate sustainability goals, particularly in the context of technological and green innovations that can drive responsible consumption and production.

This paper seeks to map the research landscape that explores the intersection of Strategic Management and SDGs 12, using bibliometric methods to identify key authors, countries, institutions, and thematic trends in this field [9, 10]. By analyzing the academic literature from 2015 to 2025, this study captures a decade of scholarly work focused on sustainable business practices, innovation, and the integration of sustainability within strategic management. The selection of this time frame is significant because 2015 marked the official adoption of the SDGs by the United Nations, making it an ideal starting point to examine how research on SDGs 12 has evolved since its introduction [11, 12, 13]. Additionally, the end date of 2025 aligns with the projected milestone for many global sustainability initiatives, ensuring that this paper captures the most recent trends and findings in the field.

Using VOSviewer and Bibliometrix, this study performs a comprehensive bibliometric analysis of 94 articles published between 2015 and 2025, offering insights into the global research network, thematic clusters, and key research gaps. The analysis reveals patterns in the growth of the literature, identifies influential contributors, and highlights the technological and green innovation themes that dominate the discourse on SDGs 12 within strategic management [14, 15]. The findings from this study not only contribute to the academic understanding of how Strategic Management can foster sustainable practices but also offer practical insights for managers and policymakers seeking to integrate sustainability into their organizational strategies [16, 17, 18]. By focusing on the key themes, influential authors, and global collaborations, this research aims to provide a holistic view of the current state of knowledge on SDGs 12 and its implications for Strategic Management [19, 20].

### 1.1. Research Questions

This study addresses the following research questions:

- RQ1: Who are the most influential contributors (countries, institutions, authors, and sources) in the research intersection of Strategic Management and SDGs 12?
- RQ2: What dimensions of innovation technological or green dominate within this research field, and how have they evolved over time?
- RQ3: What are the major keyword clusters identified through co-occurrence analysis, and how are they thematically connected?
- RQ4: What are the theoretical and managerial implications derived from these bibliometric findings, and how can they guide future research and practice?

## 2. RESEARCH METHOD

### 2.1. Data Collection

The following search terms were used to retrieve bibliographic data from Scopus: “strategic management” AND “sustainable development goal 12” OR “innovation” covering the entire publication period from 2015 to 2025. The extensive use of Scopus ensures high-quality, peer-reviewed data [21, 22]. This collection includes 94 articles from Scopus-indexed journals. Research articles should focus on strategic management (SM), sustainable development goal 12 (SDGs-12), sustainable innovation, or their relationship to SDGs-12. The timeline depicts ten years of significant progress toward sustainability [23, 24].

The bibliographic study was conducted, as shown in Figure 1, starting with a keyword search in the Scopus database, which provided 94 publications on “Strategic Management” AND innovation OR “sustainable development goal 12.” The second step was to narrow the first search to only problematic terms between 2015 and 2025, in fact the Scopus database found publications starting in 2019, not 2015. A total of 208 articles were made only from journal publications. In the third stage, 121 articles were selected based on the field classification, namely social sciences, business and management, economics, and decision sciences, and 94 articles were the final screening results after all search results from the initial search were manually selected with a focus on topics and limited to articles, reviews, and conference papers in English only.

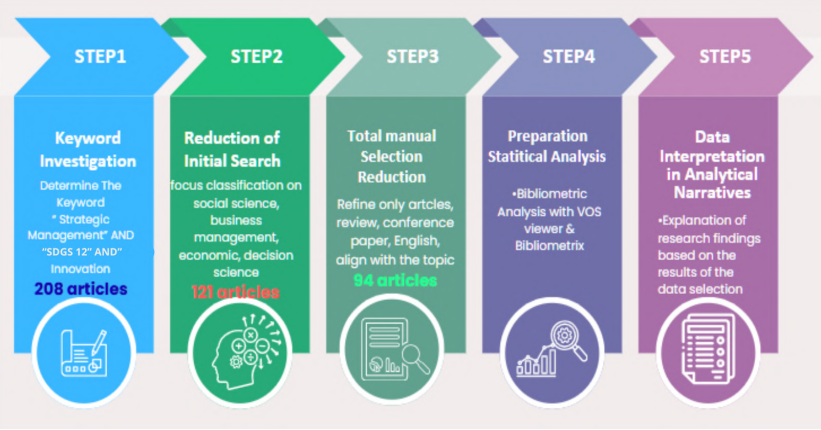


Figure 1. Steps to conduct a bibliographic study of Strategic Management and SDGs 12 and innovation

In the fourth stage, a bibliometric analysis was carried out on the VOSviewer for country-couples, organization-couples, source-couples, author-couples, document-couples, and keyword-occurrences to create the first statistical grouping data as a description of the problem [25, 26]. In addition to strengthening the analysis, this bibliometric analysis also utilizes Bibliometrix software for three field plot analysis of top ten authors, keywords and countries, and country-collaboration world map analysis [27, 28]. The 94 articles must be thoroughly evaluated because the final phase is data interpretation in an analytical narrative explanation of study findings based on the selection outcomes.

## 2.2. Scholarly Publication Trends at the Nexus of Strategic Management, Innovation and SDGs 12: 2015–2025


Figure 2. Publication trend in 2015–2025 of articles of strategic management and innovation or sustainable development goals 12. Source: Scopus database (2025)

The scholarly attention towards strategic management, innovation, and Sustainable Development Goal 12 (SDGs 12) in Figure 2 began modestly, with only one publication noted in both 2019 and 2020. Initial studies mainly laid foundational insights, exploring early theoretical frameworks, such as perceived fairness constructs like procedural and distributive fairness positively link with embeddedness, mediating green innovation in sustainable supply chains, with high business volume and transparency in sustainability reports more likely to communicate SDGs, benefiting managers and decision-makers [29, 30].

A gradual increase in research output emerged from 2021 through 2023, reaching a steady count of 10 publications in both 2022 and 2023. This period represents a developing phase where research was predominantly influenced by the integration of innovative approaches into sustainability practices [31, 32, 33]. Notably, studies on the economic impact of highly perishable products showed that certain conditions could

increase the environmental impact by 120% and the social impact by 51% for highly congested road networks. This period also underscores the significance of project information requirements for SMEs, the challenges they face in building design, and suggests future research areas focusing on innovation realization [34].

A significant and unprecedented spike occurred in 2024, marking a remarkable increase to 27 publications nearly threefold compared to the previous year. This surge reflects an intense scholarly response to global sustainability initiatives and could signify heightened policy interventions and greater corporate accountability towards sustainable production and consumption [35, 36]. Research in this year explored the intersection of green innovation and sustainable growth, emphasizing how corporate strategies could balance profitability with ecological imperatives.

The momentum continued dramatically into 2025, reaching a record high of 37 publications. The rapid growth during this year signifies the maturity and mainstream acceptance of strategic management practices deeply integrated with innovation for achieving SDGs 12 targets [37]. Prominent research themes included comprehensive explorations into circular economy transitions and innovative technological solutions aimed at closing production and consumption loops [38, 39]. Further work examined GSCM implementation challenges within the triple bottom line framework and SDGs, using circular and sustainable criteria to support SDGs 12 achievement.

### 2.3. Bibliometric Analysis

VOSviewer and Bibliometrix are used to conduct a multidimensional bibliometric analysis that comprised country-couple, organization-couple, author-couple, source-couple, document-couple, and co-occurrence analysis of keywords and titles [40, 41]. Clusters were formulated to correspond with Strategic Management and Sustainable Development Goal 12, which emphasizes responsible consumption and sustainable production practices. These clusters specifically focus on driving innovation and strategic alignment to minimize waste and enhance resource efficiency across industries.

The robust visualization capabilities of VOSviewer facilitated an insightful mapping of intellectual structures, revealing clusters of related topics and collaborative networks across the literature, while the analysis period from 2015 to 2025 highlighted both contemporary and evolving research directions. Complementing this, Bibliometrix analysis, renowned as an advanced big data analytical tool developed by expert scholars, expanded the methodological scope, enabling detailed exploration of international research collaborations and keyword interconnections, thereby ensuring a rigorous and comprehensive synthesis aligned with premier academic research standards.

## 3. ANALYSIS RESULT AND DISCUSSION

### 3.1. Country-Couple Bibliometric Analysis

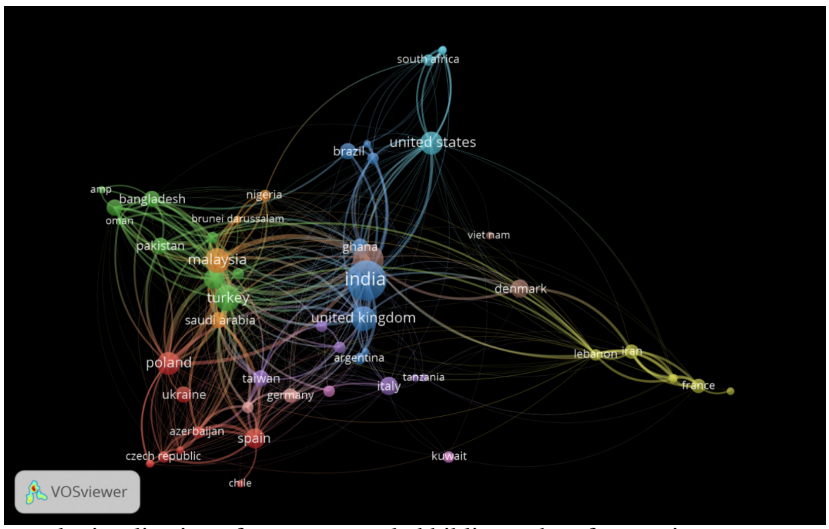


Figure 3. The network visualization of country-coupled bibliography of strategic management and innovation or sustainable development goals 12. Source: Data processing by VOSviewer (2025)

The visualization in Figure 3 elucidates a multilayered topology of country-couples collaborations within the domain of strategic management and Sustainable Development Goal 12, manifesting distinct clusters whose prominence is underpinned by differential citation impact and scholarly productivity. The blue cluster, wherein India occupies a dominant and central position, displays prolific cross-continental linkages most notably with the United States, the United Kingdom, and Brazil underscoring India's emergent leadership in advancing discourses around responsible production and innovation ecosystems. India's high citation count and aggregate link strength jointly signify its catalytic role in mediating knowledge transfer across regions.

The adjacent red cluster is anchored by Poland and Spain, where dense intra-European collaborations extend to Ukraine and the Czech Republic; this structure reflects a geographically cohesive research axis with a pronounced focus on circular economy frameworks and technological modernization pathways. Simultaneously, the green cluster dominated by Malaysia and encompassing Pakistan, Bangladesh, and Oman illustrates a South South cooperation arc, characterized by rising publication intensity yet a relatively nascent citation profile, indicative of a consolidating epistemic community oriented toward integrating green innovation with resource governance.

The yellow cluster, incorporating France, Iran, and Denmark, functions as a semi-peripheral knowledge broker, bridging Euro-Mediterranean and Asian perspectives through robust inter-cluster conduits with India's core hub, thereby enriching the transregional dialogue on sustainability transitions. The observed co-authorship synergies reveal a polycentric architecture in which established scholarly nuclei coalesce with emerging contributors, fostering a pluralistic knowledge regime necessary to catalyze SDGs 12 implementation in heterogeneous institutional contexts. Collectively, these structural patterns accentuate the imperative of sustaining transboundary partnerships and advancing co-creation modalities to operationalize strategic management innovations aligned with sustainable development imperatives.

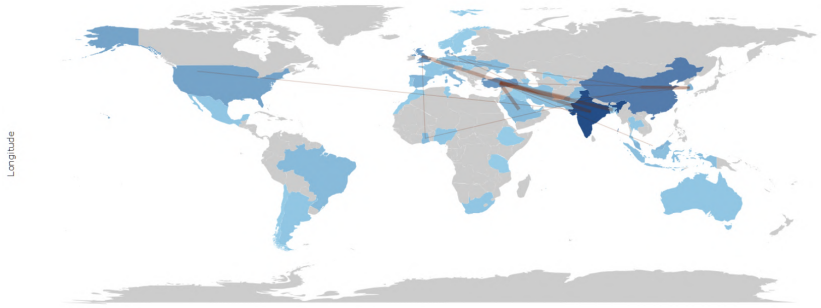


Figure 4. The country collaboration map bibliography of strategic management and innovation or sustainable development goals 12. Source: Data processing by Bibliometrix (2025).

Recent research, as illustrated in Figure 4, exemplifies the confluence of strategic management practices and innovation imperatives in advancing responsible consumption and production (SDGs 12), as evidenced by dense transnational collaborations prominently linking India with the United States, China, and multiple European nations. Some studies demonstrate how leveraging entrepreneurship through machine learning approaches can enhance environmental sustainability outcomes, underscoring the pivotal role of cross-country networks in operationalizing data-driven innovation frameworks.

Other work highlights the contribution of climate-resilient agricultural technologies developed in India to achieving SDGs 12 objectives, reflecting how strategic alliances between research institutions across continents can disseminate scalable solutions for sustainable production systems. Complementing these perspectives, further research documents how the valorisation of agricultural waste through composite materials innovation has gained traction through partnerships spanning Asia and Europe, illustrating the capacity of interregional scholarly exchange to accelerate technological adaptation and embed circular economy principles into managerial practice. Collectively, these integrative collaborations mapped across the global landscape not only diffuse critical sustainability knowledge but also catalyze innovation ecosystems that are indispensable for meeting the ambitious targets of SDGs 12.

### 3.2. Organizational-Couple Bibliometric Analysis

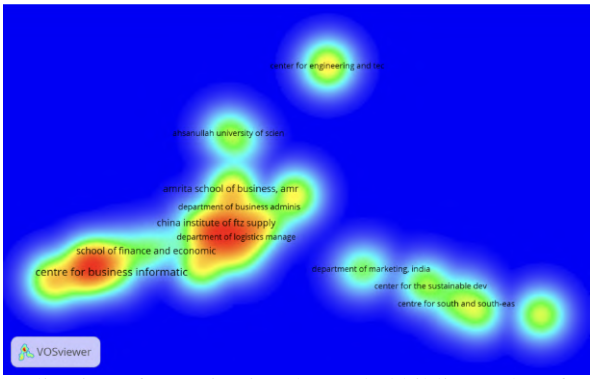


Figure 5. The density visualization of organizational-coupled bibliography of strategic management and innovation or sustainable development goals 12. Source: Data processing by VOSviewer (2025).

The density visualization of organizational-couples contributions to the research landscape surrounding Sustainable Development Goal 12 and strategic management reveals distinct clusters of scholarly productivity and citation impact, as depicted in Figure 5. The "centre for business informatics and industrial management," distinguished by its intense red coloration, signifies a highly cited and prolific institution with four published articles and a citation count of 25, indicative of its influential role in advancing interdisciplinary sustainability research. Adjacent to this core, clusters encompassing the "school of finance and economic" and "department of business administration" also exhibit notable densities, reflecting concentrated scholarly activity and collaborative networks that fuel innovation in sustainable business strategies and circular economy frameworks. In contrast, organizations such as the "department of marketing, India" and the "centre for south and south-east Asian studies," represented in yellow to green hues, denote emergent research entities with comparatively lower citation volumes, signalling nascent yet promising contributions to sustainability discourse. The spatial distribution underscores the centrality of integrative research hubs that orchestrate knowledge flows between established centers and emerging institutions, fostering a vibrant ecosystem for the diffusion of strategic management innovations aligned with SDGs 12 targets.

This organizational density pattern mirrors broader trends in the global scholarly ecosystem, where the interplay of mature research clusters and emerging entities catalyzes dynamic knowledge co-creation essential for achieving responsible consumption and production goals. The red intensity around the "centre for business informatics and industrial management" signals not only its pivotal citation status but also its potential to anchor cross-disciplinary initiatives that leverage big data analytics and business intelligence for sustainability outcomes. Meanwhile, the more diffuse, cooler zones suggest the increasing participation of regionally focused centers, especially in South and Southeast Asia, whose strategic inclusion is critical to contextualizing innovation within local socio-economic realities. This evolving bibliometric topology affirms the importance of fostering multi-scalar institutional partnerships to accelerate the development and implementation of innovative strategic management practices aimed at meeting SDGs 12 imperatives.

### 3.3. Author-Couple Bibliometric Analysis

The co-authorship network visualization of SDGs 12 and strategic management research reveals several distinct collaborative clusters, each representing a group of researchers interconnected by frequent co-publications and thematic synergy in Figure 6. The largest and most densely connected cluster, centred around authors such as Sharif and Allam (red cluster), demonstrates a strong focus on sustainability integration, digital technologies, and sustainable development policies, reflecting leadership in advancing theoretical frameworks linking innovation and responsible consumption. Adjacent to this cluster is a blue cluster with central nodes like Rahman, which concentrates on green supply chains, resource efficiency, and interdisciplinary collaboration in higher education, highlighting the role of practical applications and knowledge sharing in sustainability transitions.

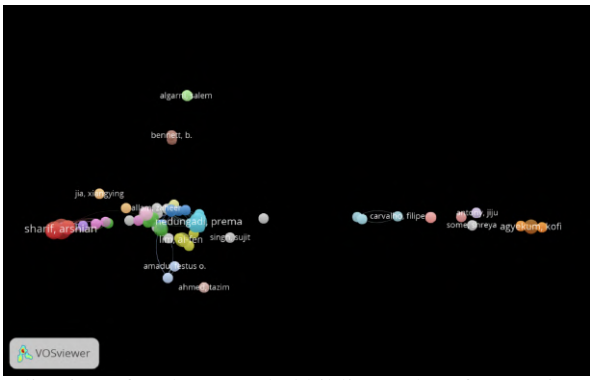


Figure 6. The network visualization of author-coupled bibliography of strategic management and innovation or sustainable development goals 12. Source: Data processing by VOSviewer (2025).

A distinct green cluster positioned slightly apart, with nodes like Algarni, emphasizes renewable energy, green finance, and carbon emission reduction, showcasing research oriented toward technological innovations and financial mechanisms enabling SDGs 12 achievement. The orange cluster, comprising authors such as Agyemang and Kofi, revolves around corporate governance and technological innovation, focusing on responsible production and consumption driven by strategic management practices within organizations. Meanwhile, a smaller isolated pink cluster including Fonseca represents niche explorations of sustainable supply chains and business innovations.

The relative distances and sparse linkages between these clusters indicate thematic specialization and limited cross-cluster collaboration, suggesting opportunities for further interdisciplinary and international cooperation to enhance the impact and integration of research efforts in strategic management for sustainable consumption and production. This structural insight emphasizes the importance of fostering connectivity across diverse thematic domains to holistically address the complexity of SDGs 12.

### 3.4. Source (Journal)-Couple Bibliometric Analysis

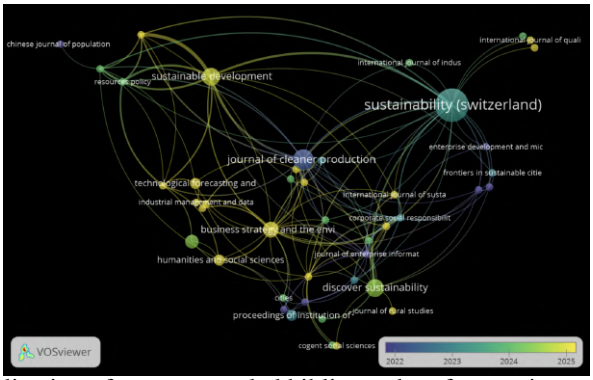


Figure 7. The overlay visualization of source-coupled bibliography of strategic management and innovation or sustainable development goals 12. Source: Data processing by VOSviewer (2025).

The overlay map of source-couples for strategic management and SDGs 12 reveals a dynamic scholarly landscape where several key journals function as intellectual hubs bridging sustainability and innovation shows in Figure 7. Notably, "Sustainability (Switzerland)" stands out as a dominant and contemporary node, indicated by its bright yellow colour in the 2024–2025 overlay, reflecting a surge in recent research addressing circular economy, sustainable business strategies, and the integration of cleaner production practices. Alongside, the "Journal of Cleaner Production" maintains a substantial presence, but with a slightly older average publication year (mostly 2022–2023), underpinning foundational studies in responsible consumption, environmental policy, and resource efficiency.

Emerging journals like "Discover Sustainability" and "Corporate Social Responsibility and Environmental Management" also exhibit increasing influence in the most recent period, as their network connections

intensify with new research outputs in 2024–2025. For example, research published in these venues explores the implementation of digital technologies and policy innovation for waste minimization and sustainable logistics. In contrast, older sources such as "Resources Policy" and "Technological Forecasting and Social Change" anchor the map's green and blue spectrum, contributing significant groundwork in sustainability economics and long-range planning, but with less current publication momentum. This overlay visualization thus demonstrates not only the clustering of mature and emerging research foci but also the robust, evolving interplay between established and novel knowledge domains in advancing SDGs 12.

### 3.5. Document-Couple Bibliometric Analysis

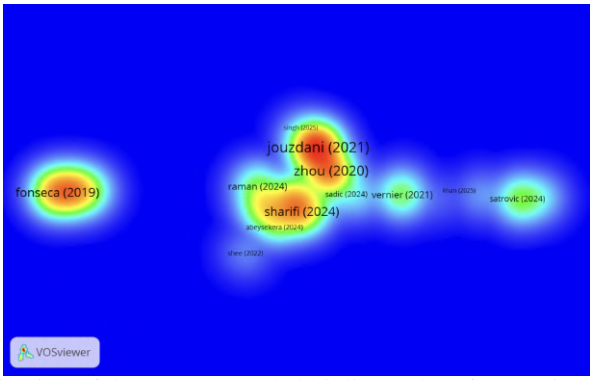


Figure 8. he density visualization of document-coupled bibliography of strategic management and innovation or sustainable development goal 12. Source: Data processing by VOSviewer (2025).

The VOSviewer density visualization map, constructed from a dataset comprising 93 documents with a total of over 1,900 citations, reveals two central zones of citation intensity: the most vibrant red and yellow density clusters are anchored by Jouzdani with 228 citations and Zhou with 205 citations, indicating their status as foundational works in the field shows in Figure 8. These documents act as intellectual hubs, frequently cited in the literature addressing sustainable perishable supply chains and green innovation within sustainable supply networks, thus serving as key reference points for the community's evolving discourse. Adjacent to these is a substantial yellow-green region represented by Fonseca with 140 citations and Fei with 125 citations, which highlights robust but slightly less concentrated research activity around environmental certification and the construction industry's pivotal role in SDGs achievement.

Surrounding these core nodes, the density spectrum shifts towards green and blue for more recent, emergent scholarship. Among the newest, highly cited contributions are works emphasizing research on smart cities and ecological sustainability in the European Union. In contrast, several newer works appear in blue or blurry zones, reflecting their status as recent additions yet to accumulate significant citation impact. This spatial differentiation underscores a dynamic research landscape, where established works provide the intellectual backbone, while new studies continue to broaden the frontiers of knowledge on innovation, responsible consumption, and production within the context of SDGs 12. The mapping confirms a vibrant interplay between legacy and emerging scholarship, revealing a sophisticated ecosystem that continually integrates new empirical insights and methodological advances.

### 3.6. Co-Occurrence Keyword Bibliometric Analysis

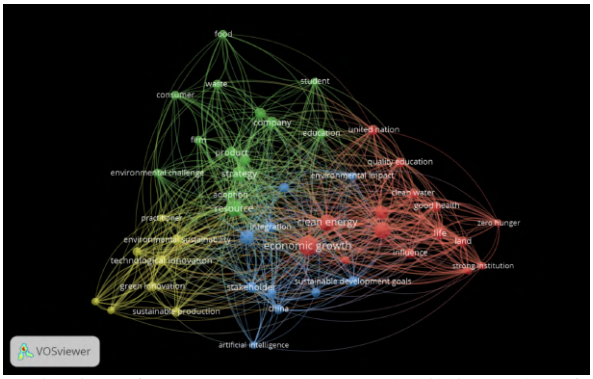


Figure 9. The network visualization of co-occurrence keywords bibliography of strategic management and innovation or sustainable development goals 12. Source: Data processing by VOSviewer (2025).

Figure 9 presents the VOSviewer co-occurrence keyword network, visualizing the intellectual structure of research at the confluence of Strategic Management, innovation, and Sustainable Development Goal 12. The red cluster anchors the map, with "economic growth" and "clean energy" emerging as central, high-impact nodes indicating that the scholarly discourse on SDGs 12 is fundamentally intertwined with economic and energy transformation. The prominence of other red nodes such as "life," "land," "good health," and "zero hunger" illustrates a holistic framing, where environmental stewardship is inseparable from human well-being and institutional resilience. These red nodes exhibit strong connectivity to each other, forming a dense web that reflects the convergence of resource management, sustainable livelihoods, and global health priorities. The robust connections between "economic growth," "clean energy," and human-centric goals indicate that transformative strategies in these domains serve as pivotal levers for advancing SDGs 12.

Surrounding the core red cluster, the green cluster brings together "strategy," "resource," "company," "product," "food," "consumer," "waste," and "student," reflecting an organizational and behavioural perspective on sustainability. This network signifies the integration of corporate practices, supply chain innovation, and consumption patterns areas that have been recognized as critical drivers of SDGs 12 outcomes. Notably, the green cluster is interconnected with the yellow cluster, which is populated by themes like "technological innovation," "green innovation," "environmental sustainability," "practitioner," and "sustainable production." These linkages highlight the vital role of innovation, technological adoption, and practitioner engagement in scaling up sustainable production and organizational change. At the bottom, the blue cluster featuring "stakeholder," "integration," "artificial intelligence," and "China" acts as a bridge, facilitating cross-cluster dialogues between technology, global supply chains, and policy integration. The blue cluster's connection to both red (human-centric) and green/yellow (organizational/innovation) nodes underlines the emerging scholarly recognition that digital transformation, stakeholder governance, and cross-sector integration are foundational for the next wave of progress on SDGs 12.

## 4. RESULTS AND DISCUSSION

### 4.1. Interpretation of Results

The Sankey diagram illustrated in Figure 10 highlights the complex interplay between leading research topics, the evolution of sustainability discourse, and the global distribution of scholarly activity in SDGs 12. The prominent placement of themes such as "sustainable development goals," "sustainability," and "circular economy" reflects the core intellectual currents shaping this research domain, underscoring how responsible consumption and production are increasingly approached through systems thinking and innovation-driven perspectives. The diagram also shows India as the country with the highest number of publications on SDGs-related topics, particularly those tied to natural resources. This trend appears to stem from the severe impacts of climate change on developing nations, where agriculture plays a significant economic and social role. Enhancing agricultural productivity is thus critical for poverty alleviation and food security, making sustainable practices highly relevant.

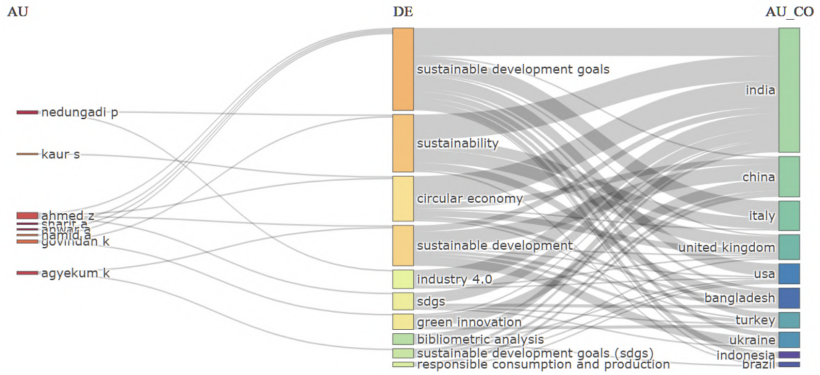


Figure 10. The Sankey diagram visualization of top 10 author–keyword–sources of strategic management and innovation or sustainable development goals 12. Source: Data processing by Bibliometrix (2025).

Cross-country linkages in the visualization further indicate the international and interdisciplinary nature of the field, suggesting that research on SDGs 12 benefits from global knowledge exchange and collaboration. Overall, the Sankey diagram reinforces that progress on SDGs 12 is supported by the dynamic integration of innovation pathways and environmental strategies, which collectively inform both theoretical development and practical implementation.

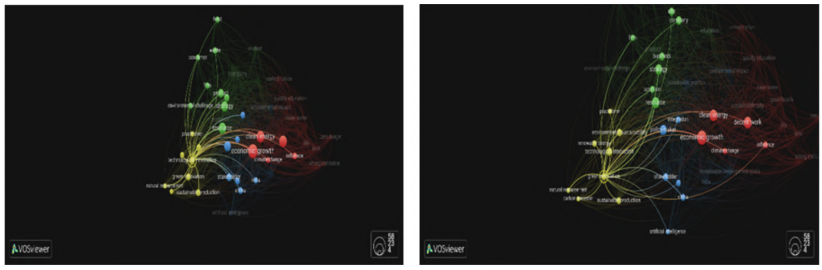

Figure 11. The comparison linkage of "technological innovation" and "green innovation" with other keywords. Source: Data processing by VOSviewer (2025).

Figure 11 presents a comparative analysis of "technological innovation" and "green innovation" within the strategic management and SDGs 12 landscape, revealing both synergistic and distinct pathways for sustainable transformation. Technological innovation demonstrates strong connections to resource optimization, digital transformation, and the implementation of Industry 4.0 tools that enhance organizational agility and operational efficiency across supply chains. In contrast, green innovation is more deeply rooted in circular economy principles, ecological impact mitigation, and stakeholder collaboration, supporting firms in harmonizing economic performance with environmental responsibility.

Both innovation types act as essential enablers of responsible production and consumption. Technological innovation provides the infrastructure and digital capabilities needed to scale sustainability initiatives, while green innovation ensures that such advancements align with ecological considerations and regulatory standards. Their convergence is reflected in the development of green supply chain management, eco-efficient business models, and integrated sustainability strategies that rely on effective knowledge sharing and strategic leadership.

Ultimately, the linkage between technological and green innovation within strategic management is fundamental for advancing SDGs 12. This integration ensures that innovation initiatives are not only technologically robust but also environmentally responsible and socially inclusive, aligning operational transformation with broader sustainability objectives.

### 4.2. Novelty and Contribution

This research offers three primary contributions to the intersection of innovation, strategic management, and SDGs 12.

First, it provides a comparative bibliometric synthesis of how technological innovation (including digitalization, ICT, and Industry 4.0) and green innovation (focusing on ecological design and circularity) independently and jointly contribute to responsible production and consumption outcomes. This comparative approach highlights nuanced differences while showing where the two innovation streams converge.

Second, the study identifies and visualizes the intellectual structure and keyword co-occurrence patterns in the field. These patterns help clarify how technological and green innovation operate as catalysts for organizational transformation, policy development, and sustainability-oriented decision-making. The mapping also enables scholars to better understand evolving research priorities and emerging strategic trends.

Third, by incorporating recent global and sector-specific studies, the analysis demonstrates that linking both innovation paradigms strengthened by strategic management supports not only operational efficiency but also the diffusion of eco-innovative business models and green supply chains. These combined contributions are essential for accelerating progress toward SDGs 12 and ensuring that sustainable production and consumption practices are effectively integrated across industries.

## 5. MANAGERIAL IMPLICATIONS

For managers, the results of this study provide several actionable insights for integrating sustainability into business strategies. One of the primary takeaways is the need to prioritize **digital transformation** as a catalyst for achieving SDGs 12. By investing in technologies such as **Artificial Intelligence (AI)**, **Internet of Things (IoT)**, and **big data analytics**, organizations can enhance their ability to monitor, manage, and reduce their environmental footprint. These technologies not only drive operational efficiency but also enable firms to collect and analyze data that can inform sustainability decision-making.

Moreover, the study highlights the importance of **cross-sector collaboration** in achieving sustainability goals. As firms move toward more sustainable production and consumption practices, it is crucial to engage with external stakeholders, including policymakers, non-governmental organizations (NGOs), and industry peers, to align efforts and share best practices. Collaborative partnerships can help accelerate the adoption of sustainable strategies and create shared value for all involved parties.

The findings also suggest that organizations should **embed sustainability metrics** into their Key Performance Indicators (KPIs). By measuring sustainability outcomes such as waste reduction, carbon footprint, and resource efficiency, firms can track their progress toward SDGs 12 and ensure that sustainability is a central component of their corporate strategy. This approach will also help organizations communicate their sustainability achievements to stakeholders and differentiate themselves in the marketplace.

Additionally, the study underscores the need for **policy integration** within organizational strategies. Managers should advocate for policies that support sustainability initiatives, both within their organizations and across industries. By aligning organizational goals with national and international sustainability frameworks, firms can enhance their long-term resilience and contribute to the global effort to achieve SDGs 12.

Overall, managers should view the integration of SDGs 12 principles as an opportunity to drive innovation, improve operational efficiency, and build a competitive advantage. The successful adoption of sustainable practices will not only help achieve environmental and social goals but will also enhance organizational performance in the long term.

## 6. CONCLUSION

This study offers a comprehensive bibliometric analysis of the research landscape at the intersection of Strategic Management and SDGs 12: Responsible Consumption and Production. By analyzing 94 articles published between 2015 and 2025, the study provides valuable insights into the key contributors, emerging themes, and collaborative networks that shape this field.

The findings highlight the growing importance of digital innovation and green practices in strategic management as firms seek to integrate sustainability into their business models. The study also emphasizes the need for cross-sector collaboration and stakeholder engagement in driving sustainable production and consumption patterns. These insights have significant implications for both researchers and practitioners seeking to align business strategies with global sustainability goals.

Despite its limitations, this study contributes to the academic literature by providing a systematic overview of the state of research on SDGs 12 within the context of strategic management. The study also offers practical recommendations for managers looking to integrate sustainability into their corporate strategies,

emphasizing the role of digital transformation, policy integration, and sustainability metrics in achieving long-term success.

In conclusion, as sustainability continues to be a central concern for businesses worldwide, the integration of SDGs 12 into strategic management practices will play a critical role in shaping the future of responsible production and consumption. Future research should continue to explore the evolving relationship between strategy and sustainability, particularly through interdisciplinary approaches that combine management, technology, and environmental studies.

## 7. DECLARATIONS

### 7.1. About Authors

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### 7.2. Author Contributions

Conceptualization: ER; Methodology: BS, SM and SR; Software: ER and BS; Validation: SM and SR; Formal Analysis: SM and SR; Investigation: ER, BS, and SR; Resources: SR; Data Curation: SM; Writing Original Draft Preparation: ER, BS, SM, and SR; Writing Review and Editing: ER, BS, SM, and SR; Visualization: SR; All authors, ER, BS, SM, and SR, have read and agreed to the published version of the manuscript.

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The data presented in this study are available on request from the corresponding author.

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### 7.5. Declaration of Conflicting Interest

The authors declare that they have no conflicts of interest, known competing financial interests, or personal relationships that could have influenced the work reported in this paper.

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