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## **A SNAPSHOT ASPECT OF THE BIBLIOMETRIC VIEW IN OFFERING THEMES OF STRATEGIC MANAGEMENT DURING COVID-19 PERIOD**

***Анотація.** Стратегічне управління є важливою компетентністю, якою повинні оволодіти стратеги та організації, незалежно від того, чи є вони частинами машинобудівних підприємств, сільськогосподарського сектору, вищих навчальних закладів, приватного чи державного секторів. Ефективне стратегічне управління потребує не лише мікроменеджменту з боку генеральних директорів та вищого керівництва, але й фундаментальних політик або стратегій, які схвалюються як критично важливі для виконання вимог організаційної ефективності та надання можливості організації досягти конкурентних переваг. Бібліометрична аналітика в цьому дослідженні пропонує послідовне розуміння того, що організації повинні зосередитися на своєму стратегічному управлінні шляхом інтеграції набору стратегічних тем. Кожна тема, у загальному сенсі, демонструє потенційні напрямки, сильні та слабкі сторони, обсяг компетенції та виклики, з якими наразі стикаються або з якими доведеться мати справу організації. Базуючись на постійній взаємодії організацій із різними типами середовища, стратегічне управління вимагає гнучкої адаптації до невизначеності. Таким чином, потрібно постійно відслідковувати і розуміти, які стратегічні теми чи напрями з'явилися в літературі. Це дослідження має на меті визначити, на яких темах стратегічного управління були зосереджені організації та науковці в період пандемії COVID-19. В основі методології лежить бібліометричний підхід. Проаналізовано 28 996 статей ScienceDirect, з фокусом на публікаціях, що містять «стратегічне управління» як ключове слово, для усвідомлення основних тенденцій у літературі. Програмне забезпечення VOSviewer дозволило візуально представити спільне використання ключових слів і співцитат у наукових статтях. Використовуючи обширну базу даних Sciencedirect.com, бібліометричний метод дозволив виділити п'ять відмінних тем або кластерів стратегічного управління: (1) стратегічні компетенції; (2) стреси та цілі стійкості; (3) бізнес-системи — управління*



аналітикою даних, циркулярна економіка та SCM; (4) ринкова конкуренція; і (5) управління технологіями та енергією, оптимізація витрат і попиту. У статті розкриваються ці ключові кластери стратегічного управління, серед яких акцентовано на новій концепції «стратегічні компетентності», що охоплюють когнітивні та поведінкові навички, важливі для розробки адаптивних бізнес-систем. Дослідження підкреслює важливість взаємозв'язку стратегічних компетентностей із такими сферами, як стреси та цілі сталого розвитку, ринкова конкуренція та управління технологіями для сталої конкурентної переваги в динамічних умовах. Результати дослідження можуть дати поштовх до розвитку нових теоретичних і практичних уявлень як важливий внесок у сферу стратегічного управління (SM).

**Ключові слова:** Стратегічне управління; COVID 19; стратегічні компетентності; бібліометрична карта; стреси; стійкість; бізнес-системи; ринкова конкуренція; технології.

**JEL Classification:** I31

**Absztrakt.** A stratégiai menedzsment olyan fontos kompetencia, amelyet a stratégáknak és a szervezeteknek el kell sajátítaniuk, függetlenül attól, hogy a feldolgozóiparban, a mezőgazdasági ágazatban, a felsőoktatási intézményekben, a magán- vagy a közszférában tevékenykednek. A hatékony stratégiai menedzsment nemcsak a vezérigazgatók és a felső vezetés mikromenedzsmentjét igényli, hanem olyan alapvető politikákat vagy stratégiákat is, amelyeket a szervezeti teljesítménykövetelmények teljesítése és a szervezet versenyelőnyének elérése szempontjából kritikusnak tartanak. A tanulmányban szereplő bibliometriai elemzések koherens megértést nyújtanak arról, hogy a szervezeteknek stratégiai témák integrálásával kell összpontosítaniuk stratégiai irányításukat. Az egyes témák általános értelemben megmutatják azokat a lehetséges irányokat, erősségeket, gyengeségeket, kompetenciákat és kihívásokat, amelyekkel a szervezetek jelenleg szembesülnek vagy szembesülni fognak. A szervezeteknek a különböző típusú környezetekkel való állandó kölcsönhatása alapján a stratégiai menedzsmentnek rugalmasan kell alkalmazkodnia a bizonytalansághoz. Ezért folyamatosan figyelemmel kell kísérni és meg kell érteni, hogy a szakirodalomban milyen stratégiai témák vagy irányok jelentek meg. E tanulmány célja annak megállapítása, hogy a COVID-19 világjárvány idején a szervezetek és a tudományos szakemberek milyen stratégiai menedzsmenttémákra összpontosítottak. A módszertan bibliometrikus megközelítésen alapul. A szakirodalom főbb tendenciáinak megértése érdekében 28 996 ScienceDirect-cikket elemeztünk, a „stratégiai menedzsment” kulcsszót tartalmazó publikációkra összpontosítva. A VOSviewer szoftver lehetővé tette a kulcsszavak vizuális bemutatását és a társ cikkek együttes használatát a tudományos cikkekben. A Scencedirect.com átfogó adatbázisának felhasználásával a bibliometriai módszer lehetővé tette, hogy a stratégiai menedzsment öt különböző témakörét vagy klaszterét azonosítsuk: (1) stratégiai kompetenciák; (2) stressz és fenntarthatósági célok; (3) üzleti rendszerek - adatelemzési menedzsment, körkörös gazdaság és SCM; (4) piaci verseny; és (5) technológia- és energiagazdálkodás, költség- és keresletoptimalizálás. A cikk feltárja a stratégiai menedzsment e kulcsfontosságú csoportjait, amelyek közül kiemeli a „stratégiai kompetenciák” új fogalmát, amely az adaptív üzleti rendszerek fejlesztéséhez fontos kognitív és viselkedési készségeket foglalja magában. A tanulmány hangsúlyozza a stratégiai kompetenciák olyan területekkel való összekapcsolásának fontosságát, mint a stressz és a fenntarthatósági célok, a piaci verseny és a technológiai menedzsment a fenntartható versenyelőny érdekében a dinamikus környezetben. A tanulmány eredményei lendületet adhatnak új elméleti és gyakorlati meglátások kidolgozásához, fontos hozzájárulásként a stratégiai menedzsment (SM) területéhez.

**Kulcsszavak:** Stratégiai menedzsment; COVID 19; stratégiai kompetenciák; bibliometriai térkép; stressz; tartósság; üzleti rendszerek; piaci verseny; technológia.

**Abstract.** Strategic management is a crucial competency for both strategists and organizations across various sectors, including manufacturing, agriculture, education, and both public and private sectors. Effective strategic management necessitates not only micromanagement from CEOs and senior



leadership but also fundamental policies or strategies deemed critical for organizational performance and competitive advantage. In this study, bibliometric analysis offers a systematic understanding of organizational focus on strategic management by integrating a set of strategic themes. Each theme, in essence, elucidates potential directions, strengths and weaknesses, competency scope, and current challenges organizations face or will encounter. Given the continual interaction of organizations with diverse environments, strategic management demands flexible adaptation to uncertainty. Thus, it is imperative to consistently track and comprehend emerging strategic themes or directions in the literature. This study aims to identify the strategic management topics that organizations and researchers focused on during the COVID-19 pandemic. The methodology relies on bibliometric analysis, examining 28,996 ScienceDirect articles, with a focus on publications containing "strategic management" as a key term, to understand major trends in the literature. The VOSviewer software visually represents the co-occurrence of key words and co-citations in scholarly articles. Utilizing the extensive Scencedirect.com database, the bibliometric method identified five distinct themes or clusters of strategic management: (1) strategic competencies; (2) stresses and sustainability goals; (3) business systems—data analytics management, circular economy, and SCM; (4) market competition; and (5) technology and energy management, cost optimization, and demand. The article delves into these key clusters of strategic management, with a focus on the novel concept of "strategic competencies," encompassing cognitive and behavioral skills essential for developing adaptive business systems. The study underscores the importance of the interconnection between strategic competencies and areas such as stresses and sustainability goals, market competition, and technology management for sustaining competitive advantage in dynamic conditions. The research findings may serve as a catalyst for the development of new theoretical and practical insights, contributing significantly to the field of strategic management (SM).

**Keywords:** Strategic management; COVID-19; Strategic competency-based view of competition; Bibliometric map; stresses; sustainability; business systems; market-side competition; technology.

**Problem description.** Strategic management (SM) became a prominent field of study 50-60 years ago [1]. SM is a specialized knowledge that equips businesses and strategists with the strategic tools to establish plans that ensure survival and generate competitive returns on investment [2]. SM is, in fact, an essential competency that firms must master, whether for engineering enterprises [3], digital B2B platform assets [4], or agriculture farms [5]. The process of formulating organization's strategies is inherently complex, as highlighted by [6] and [7].

The SM task encompasses the complex procedures of scanning, interpreting, and making decisions, which are further complicated in situations defined by low and high cognitive complexity.

Industrial organization economics (IO), the resource-based view (RBV), and the institution-based view (IOV) have been the main theoretical concepts and frameworks in the field of strategic management (SM).

RBV focuses on enhancing businesses' effectiveness and commercial processes using organizations' resources, capabilities, and competencies, while IOV emphasizes the significant roles of organization's contexts (e.g., institutional environment), which involves rationalizing for social justification and social obligation [8].

The discipline of SM is complex, and it is not easy to understand comprehensively how to combine many theories effectively in a systematic and simplified manner.



The author [9] provide an extensive list of A-Z categories of theories applicable in strategic management, such as absorptive capacity theory, agency theory, attribution theory, belief systems theory, competing values framework, contingency theory, control theory, goal theory, institutional theory, knowledge-based theory, management control theory, market orientation theory, niche development theory, psychological contract theory, resource-based view, risk theory, signal detection theory, signaling theory, stakeholder theory, structure-conduct-performance theory, theory of core competencies, transaction cost economics, upper echelon theory, and value-based planning theory. However, they do not propose a straightforward configuration model for their integration.

COVID-19 exemplifies enterprises' VUCA environment, characterized by volatility, uncertainty, complexity, and ambiguity [10]. It is fitting and suitable to analyze the recent advancements in the study and understanding of the strategic management field and identify its conceptual frameworks and patterns that organizations emphasize during COVID-19.

Bibliometric analytics is a suitable method for research scholars to analyze large amounts of data and assess the current status of a particular field of knowledge [11].

The bibliometric method also allows the researchers to generate hypotheses for empirical studies [12]. The bibliometric method was primarily used in the past to look into certain areas of strategic management, like innovation management [13], strategic ambidexterity [14], strategic leadership [15], risk management or a particular journal, like the Journal of International Management [16].

However, there still exists a gap in the bibliometric analysis concerning the strategic management themes that organizations focused on during COVID-19.

Accordingly, this study utilizes the database of Scimedirect.com and the bibliometric approach to address the following research objective: To present a snapshot of the bibliometric view on strategic management themes during COVID-19.

**Methodology and Data.** This study uses bibliometric analysis to examine the intellectual trends of existing articles in the ScienceDirect database from 2022 to 2023, the period organizations and businesses faced during COVID019.

The bibliometric method presents the theoretical framework that integrates the thematic perspectives [13] on strategic management (SM) subjects. The literature database encompasses the publications of multiple disciplines.

The bibliometric analysis aims to unveil the similarities and disparities arising from the categories of journals, subjects, and the nature and quantity of the articles.

The bibliometric map presents an overall picture of the intellectual patterns of publications represented by nodes highlighting the themes of strategic management, links that explain their interrelationships, and the nodes' sizes and thickness that explain the thematic relationships' frequency and intricacy interplay.

As noted in [11], nodes and their sizes represent the normalized number of citations of the included publications, while the links and their thickness indicate the co-citation relationships between the publications.

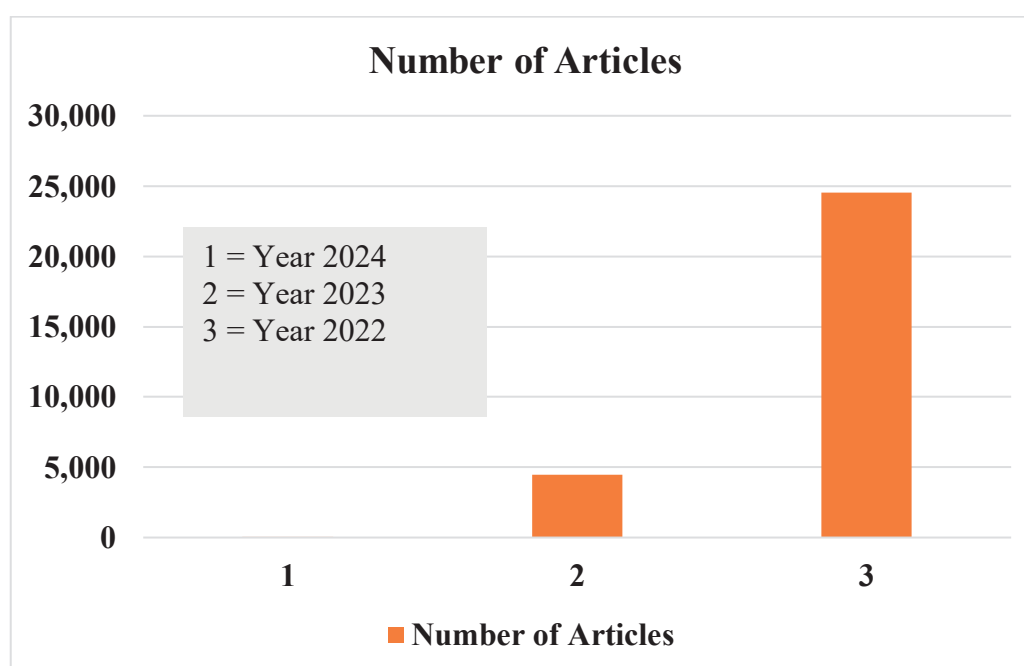
Overall, the bibliometric map offers a visual advantage by providing a comprehensive overview of essential research subjects and their co-citation links,



which allows research scholars to gain a qualitative and objective perspective and can support and guide their efforts in literature evaluation.

The VOSviewer software application is utilized to construct and visualize bibliometric networks of publications.

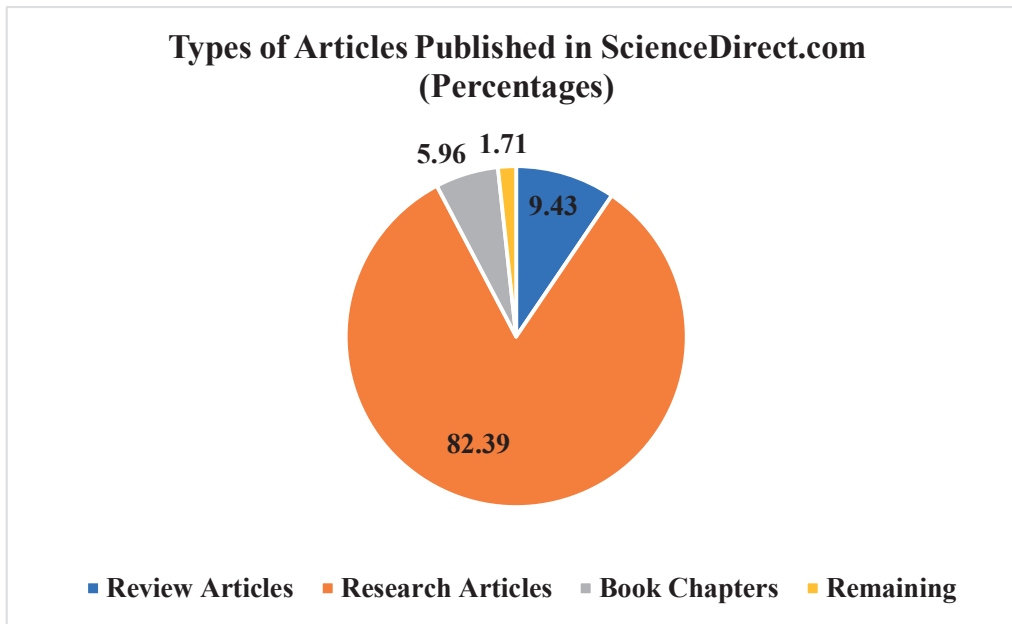
The bibliometric analysis is based on a database of 28,996 articles from ScienceDirect, namely those published in Jan, 2024 (1 article) [the time the dataset was extracted], 2023 (4,465 articles), and 2022 (24,530 articles), being extracted using the keyword “strategic management” [see Fig. 1].



**Fig. 1. The Number of Articles**

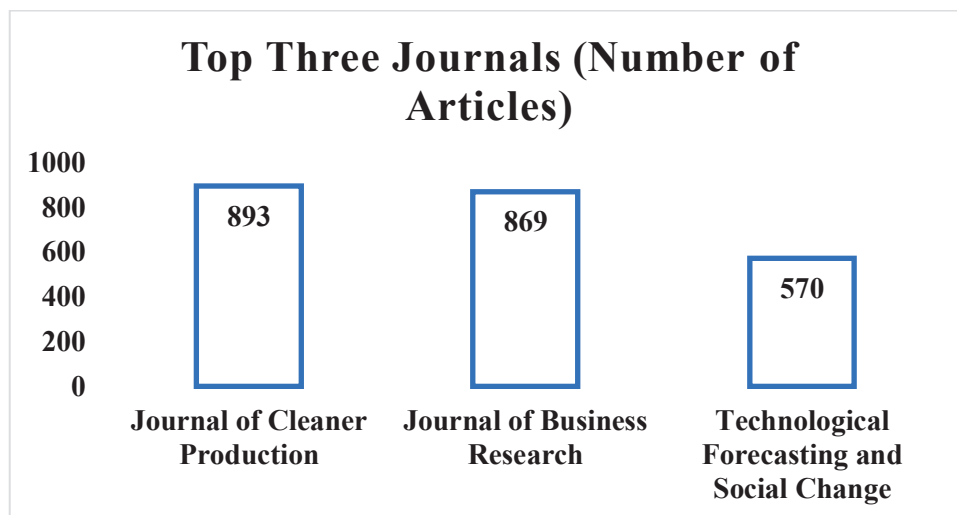
*Source: Authors' Data Collection Effort from ScienceDirect.com, on January 2023*

Out of the total, 9.43 percent of the articles are review articles, 82.89 percent are research papers, 5.96 percent are book chapters, and the remaining 1.71 percent are encyclopedias, as indicated in Fig. 2.



**Fig. 2. Types of Articles Published in ScienceDirect.com**

As it is noted in Fig. 3, the top three journals are the Journal of Cleaner Production with 893 articles (3.08% of the total), followed by the Journal of Business Research with 869 pieces (3% of the total), and Technological Forecasting and Social Change with 570 articles (1.97% of the total).

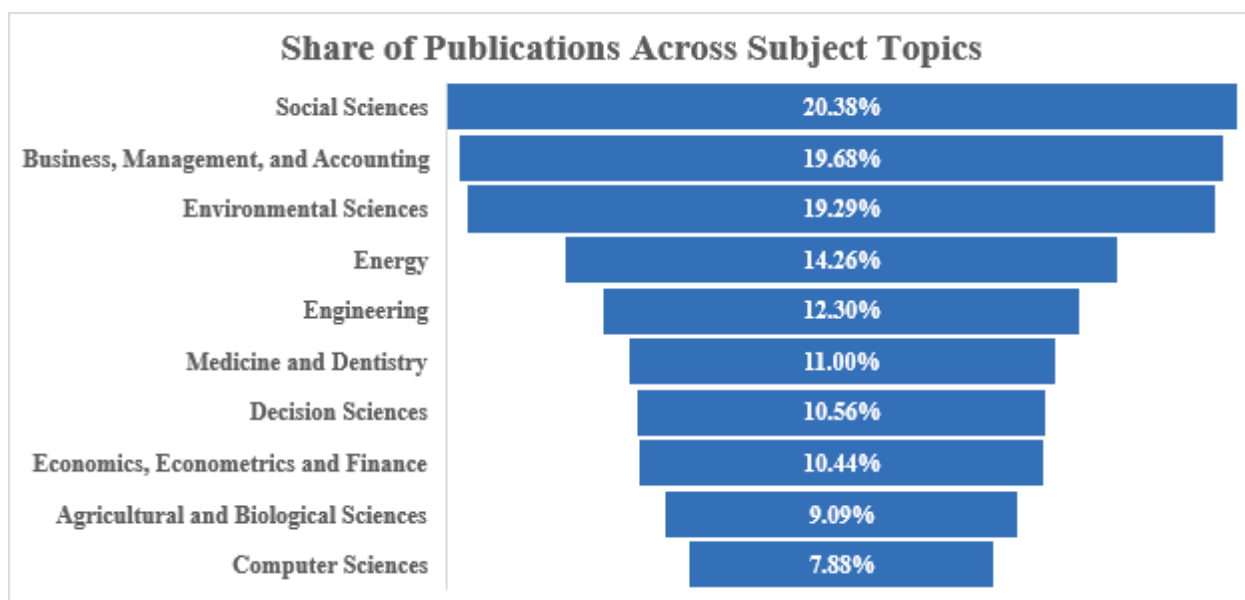


**Fig. 3. Number of Articles in the Top Three Journals**

The articles extracted from the dataset are distributed relatively evenly across various subject areas. These subject areas include social sciences (5,909 articles, 20.38% of the total), business, management, and accounting (5,707 articles, 19.68%), environmental sciences (5,593 articles, 19.29%), energy (4,134 articles, 14.26%), engineering (3,566 articles, 12.30%), medicine and dentistry (3,189 articles, 11%),



decision sciences (3,063 articles, 10.56%), economics, econometrics, and finance (3,028 articles, 10.44%), agricultural and biological sciences (2,635 articles, 9.09%), and computer science (2,285 articles, 7.88%), as illustrated in Fig. 4.



**Fig. 4. Percentage Share of Publications across Subject Topics in ScienceDirect.com**

**Results.** By restricting the search for articles to the time frame of 2022-2023, we obtain a comprehensive bibliometric map as shown in Fig. 5. The articles encompass a range of themes, with the most significant portion being research articles (22,386 articles), followed by review articles (2,547), book chapters (1,610), and encyclopedias (463). The three leading journals are the Journal of Cleaner Production, with 893 articles; the Journal of Business Research, with 869 articles; and Technological Forecasting and Social Change, with 570 articles. The bibliometric map in Fig. 5 provides an overview of the intellectual structure of the published articles in ScienceDirect.com on the subject of strategic management for the years 2022 and 2023. The bibliometric map highlights five prominent clusters. Cluster one, represented by the color red and denotes SM's strategic competency aspect, contains 294 sub-themes. Cluster two, represented by green and denotes SM's challenges, crises, and pressure aspects, contains 245 thematic factors. Cluster three, represented by blue, denotes SM's technology and energy management, cost, and demand optimization aspects and contains 209 sub-themes. Cluster four, represented by yellow, denotes SM's data analytics, circular economy, and SCM aspects and contains 134 sub-themes. Lastly, cluster five, represented by purple and denotes the market-side competition, contains 72 items extracted from the bibliometric analytics.







themselves); decisions are made based on the cognitive abilities of both principals and agents, and information is the critical factor. However, with the introduction of blockchain technology, these assumptions are modified to achieve more aligned outcomes for both principals and agents. Blockchain technology protects aligned goals through encrypted transactions, decentralized AI enables limitless rationality, and a decentralized peer-to-peer proof-of-work system promotes information symmetry. Consequently, all individuals gain advantages.

- The resources and competencies of strategic management encompass various elements such as ambidexterity, creativity, digital innovation and transformation, foresight, heterogeneity, green HRM, human capital, HRM, impression management, open innovation, process and product innovation, reputation, and social capital. According to the dynamic capability theory of strategic management, firms operating in a VUCA (volatile, uncertain, complex, and ambiguous) environment need to adjust and rearrange their resources and abilities, including their constituents, leadership, culture, learning, and networking [18], in order to enhance their effectiveness in acquiring, transferring, and generating knowledge that is crucial for the long-term survival of the firm. The onset of COVID-19 has made creativity and innovation extremely valuable and essential for enterprises to endure [19]. Companies should embrace digital and emerging technologies to facilitate organizational innovation, including utilizing digital technologies and artificial intelligence [19].

- The micro foundation of an organization includes various factors such as emotions (e.g., the emotional stability of the CEO, which affects strategy and company performance, as studied by [20]), intuition, intention, intellect, leadership, and dynamics of the leadership team (as explored by [20]). This concept is closely related to the top management team and the upper echelons theory. The COVID-19 pandemic has highlighted the need to elicit happy emotions in employees and consumers. This is because emotionally significant events have beneficial socio-psychological effects [21]. Belief in the restoration of employees is closely linked to negative feelings. During the COVID-19 pandemic, it is important to proactively address certain factors to achieve benefits such as ensuring safety compliance and increasing customer and company confidence [22].

- Institutions take shape in various ways, such as ethical inclusion as a cognitive institution, social and professional norms as normative institutions, and laws and regulations as regulatory institutions. [23] analyze several institutional ideas by connecting them to the notion of routine, resulting in an institution being defined as “consistent, esteemed, repetitive patterns of behaviors.” An *institution* is a set of “rules and routines that establish how activities are carried out based on the relationships between roles and contexts” [24, p.160]. Therefore, in this study, the institution considers the ability to create stable, predictable, and pattern-based connections that connect to shared values and meaning as a strategic competency [25]. The bibliometric map reveals that the institutional theory encompasses various concepts such as corporate social responsibility (CSR), viewed as a strategic and performative narrative according to [26], competition, corporate governance, crisis management, entrepreneurial orientation and entrepreneurship, institutional pressure,

and theory, as well as legitimacy. Strategists utilize institutional theory to examine the interaction between enterprises and the institutional environment. Institutional theory analyzes how the cognitive, normative, and regulative structures inside an institution's setting or context contribute to maintaining stability and providing significance to social and corporate actions [27]. Within supply chain management, the institution engages with businesses by providing policy assistance, which is crucial for developing and advancing strategic emerging sectors [28].

- **Business and management system:** This encompasses various aspects, such as the business ecosystem, which refers to the network of organizations and stakeholders interacting with a particular business. It also includes the business model, which outlines how a company creates and delivers values to its customers. Additionally, it covers business processes and management, which involve the activities and strategies used to run a business effectively. Other vital concepts include earnings management, which relates to the manipulation of financial results; ecosystem management, which involves the sustainable management of natural resources; and the concepts of exploitation and exploration, which refer to the balance between utilizing existing resources and seeking new opportunities. Furthermore, it includes market orientation, which focuses on understanding and meeting customer needs, and marketing and technology management, which involve the strategies and practices used to promote and leverage technology in business operations. In response to the COVID-19 pandemic, firms are proactively reconfiguring their business models by including new elements of value [29].

- **Strategic consequences,** which are the consequences of the design and investment of strategic competencies, and include strategic outcomes such as competitive advantage, corporate sustainability, firm performance, and competitive priorities [30]. By prioritizing the competitive consequences of strategies, organizations can formulate more competitive and preventive measures (e.g., strategic orientation, innovation, and creativity) and corrective measures [31]. Furthermore, focusing on factors of competitive advantage can help firms identify sustainable approaches [32].

By embracing a resource-based vision (RBV) [33], the extensive range of strategic competencies outlined above can be interpreted as a comprehensive collection of interconnected skills that assist strategists and organizations in formulating their company's plans to gain a competitive edge. The extensive range of strategic skills helps alleviate strategic myopia, which refers to the inclination to overlook strategic matters due to a narrow focus on specific worldviews, cognitive biases, and behavioral frameworks [34] since it provides a broader perspective. As an extension of RBV, this study interprets cluster one as the strategic competency-based view (SCBV) of SM and reckons it as a critical contribution to the disciplines of SM.

Cluster two, labeled as "green," comprises 245 sub-themes and factors relating to SM, such as problems, crises, and pressures due to COVID-19, the pandemic, climate change, hazards, and their respective management issues and challenges faced during design and implementation of SM. Some examples of management strategies that are triggered by stress include climate change adaptation, disaster management, risk



management, ecosystem service management (which is connected to biodiversity, land, forest, and species), flood security and management, forest management, health management, land management, livelihood management, pain management, recovery management, restoration management, resilience management, risk perception and management, sustainable development goals, and water management. Institutional pressures might be considered as instances of stress. Organizations are subjected to three types of institutional pressure to align their actions with the desires of the institutions. These pressures include (1) coercive isomorphism, which arises from political pressure and concerns about legitimacy; (2) normative institutional pressures, which stem from the societal norms of the local community and; (3) mimetic institutional pressures occur when individuals are uncertain about the strategic issues and are forced to imitate. Furthermore, the authors [35] outline the three forces or mechanisms that drive isomorphic institutional change. In addition, the bibliometric map shows that resilience management has emerged as a new standard in strategic management during a pandemic crisis to recover a corporation during intense pressure or disruption. Enhancing resilience should prioritize the organization's ability to manage and respond to unexpected disruptions effectively [36]. A practical approach to achieve this is by employing, for instance, complex systems adaptation theory, which encompasses continuous learning and feedback, to manage resilience [37].

Cluster three (blue) comprises 209 factors with a theme described by “technology and energy management, cost and demand optimization”, for instance, algorithm, alliance, allocation, artificial neural network, cloud computing, cost, demand, energy (including consumption, efficiency, management, recovery, security, storage, system, and transition), environmental impact and pollution, environmental sustainability, expert system, fuel and fuel cell, generic algorithm, global warming, government policy, greenhouse gas, human health, IoT, lifecycle assessment, machine learning, microgrid, solar energy, strategic analysis, strategic direction, strategic priority, sustainability, and energy management. Amid the COVID outbreak, enterprises face logistical and quarantine difficulties, making energy resources vital for their continued operations. Consequently, strategic management of energy resources is necessary [38], leading to an increased focus on renewable energy innovation [39]. Technologies such as IoTs and AIs, which eliminate the need for human contact and interactions, create new possibilities in many businesses [40].

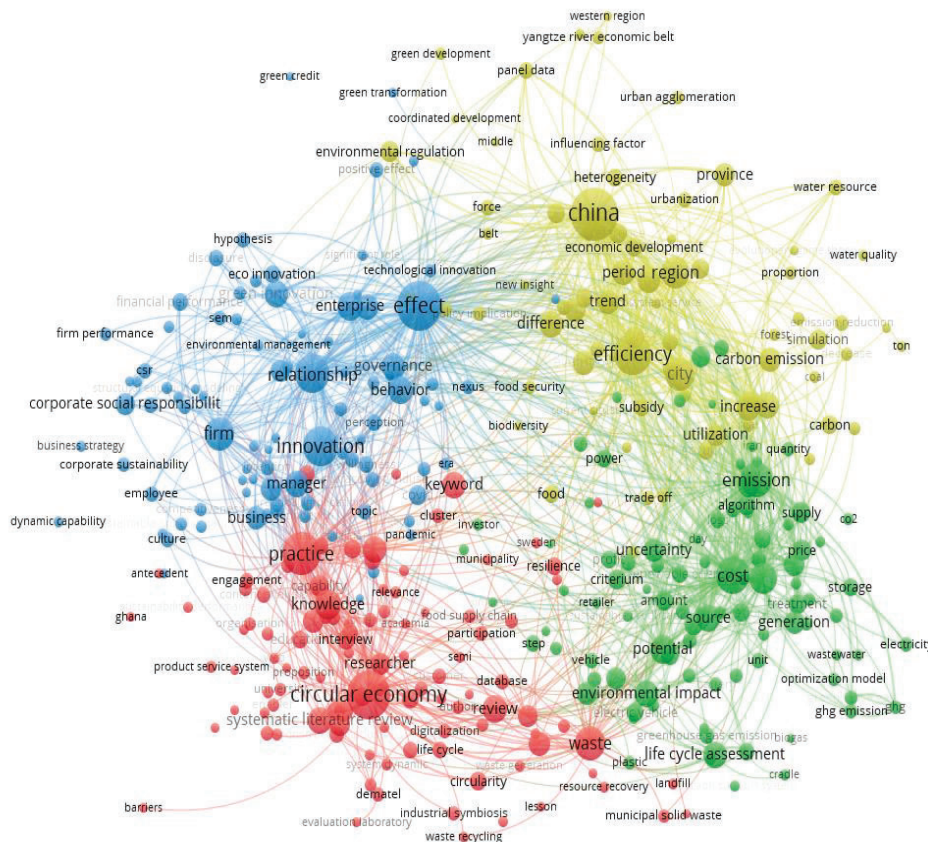
Cluster four (yellow) consists of 134 thematic sub-items and is characterized by the themes of “data analytics, circular economy, and supply chain management (SCM).” The topics within this cluster include balanced scorecard, barriers, big data analytics, blockchain, brand equity, business performance, circular economy, circular SCM, communication technology, competitive strategy, continuous improvement, critical success factors (CSF), customer relationship management (CRM), customer satisfaction, financial performance, green innovation, green SCM, key performance indicators (KPI), management accounting, operations performance and management, organizational culture, paradigm shift, performance measurement, purchasing, quality management and system, service quality, strategic innovation, SCM, sustainability management practice, sustainable practice, total quality management (TQM), and

transport policy. The COVID-19 pandemic has significantly impacted businesses and economies, prompting them to increasingly depend on digital technologies to utilize large-scale, diverse information assets driven by big data. This is done to enhance the speed and quality of decision-making, including in areas such as supply chain management (SCM) and the circular economy in business and factory management [41]. Moreover, COVID-19 has a pattern of systemic danger. According to [42] organizations should use a comprehensive approach to address several types of risks, including anticipated risks (such as hazards, susceptibility, exposure, high uncertainty, interconnectedness, and complexity), mitigated risks, lingering risks, and emergent risks.

Cluster five, represented by the color purple, consists of 72 factors relating to SM. This cluster is associated with market-side competition and includes various topics such as advertising, buyers, channels, competition, consumers, consumer behavior, credit, demand uncertainty, differentiation, diffusion, dynamic pricing, e-commerce, game theory, information asymmetry, information sharing, inventory, investors, logistics, managerial insight, market structure, price, pricing, profit, profitability, retailers, retailing, revenue management, rewards, risk aversion, sales, social welfare, strategic behavior, consumer behavior, customer delegation, timing, and trade. The complexities of market-side competition encompass various factors, including comprehension, causes, and consequences. This diversity is partly due to the broad spectrum of managerial experiences and perspectives on market rivalry. Organizations tend to allocate more resources toward research and development (R&D) to strengthen their competitive advantage through differentiation or cost leadership, particularly when they perceive a higher level of environmental hazards [43]. Strategists may opt for early market entry as a preemptive measure against their rivals instead of engaging in deliberate learning, as [44] suggested.

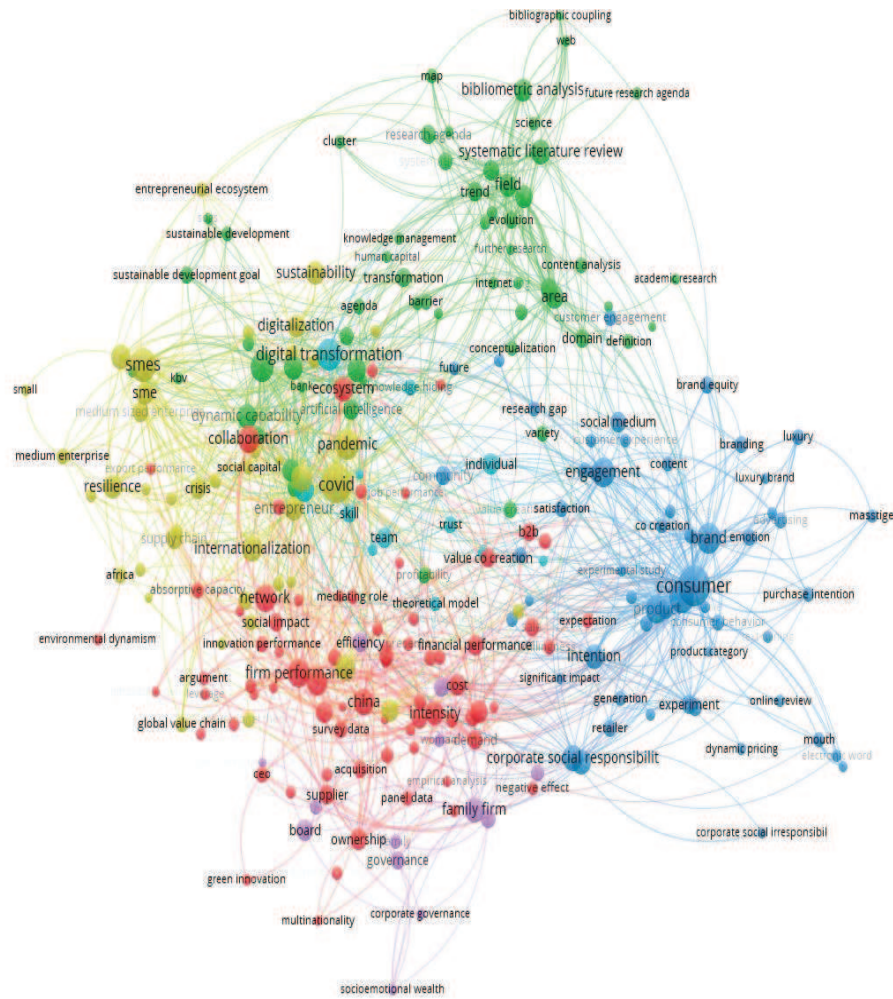
In addition to the overall synthesis of the SM, as it is presented above, the figures presented below depict the bibliometric maps of specific journals (as shown in Fig. 6 and Fig. 7) and the subject areas in business, management, and accounting (Fig. 8), as well as hospitality and tourism (Fig. 9).

The Journal of Cleaner Production and the Journal of Business Research were selected for the data analysis presentation due to their status as the two leading journals in terms of the number of published articles on strategic management. The bibliometric map of the Journal of Cleaner Production database reveals a prominent emphasis on four main areas: (1) cost and environment management, (2) circular economy, knowledge, and practice, (3) innovation, CSR, and governance, and (4) economic and green development, with a particular emphasis on China. This information is illustrated in Fig. 6. The primary emphasis is on environmental sustainability, and the organization employs the circular economy concept, innovation, and governance mechanisms to create green initiatives and accomplish environmental sustainability objectives.



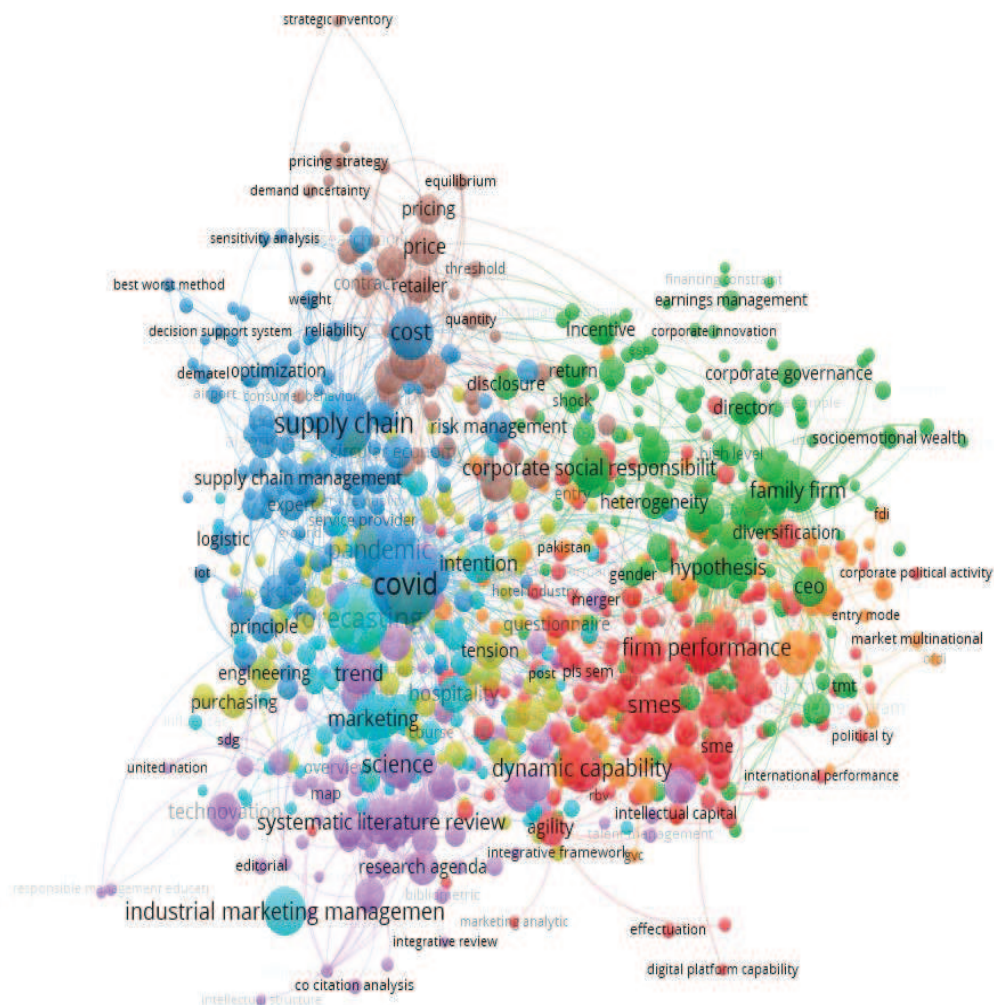
**Fig. 6. Journal of Cleaner Production**

The Journal of Business Research database article mainly focuses on “strategic competencies” and areas related to governance, board, socioemotional wealth, and the family firm. The Journal of Business Research identifies several key strategic competencies. These include consumer and brand targeting, corporate social responsibility (CSR), and digital transformation. Additionally, the journal highlights the importance of effectively managing challenges posed by COVID-19 and building resilience by leveraging institutional theory and the global value chain. Furthermore, the journal emphasizes the significance of dynamic capability and competitive advantage. Lastly, it underscores the interconnection between firm performance, absorptive capacity, and entrepreneurship, as depicted in Fig. 7.



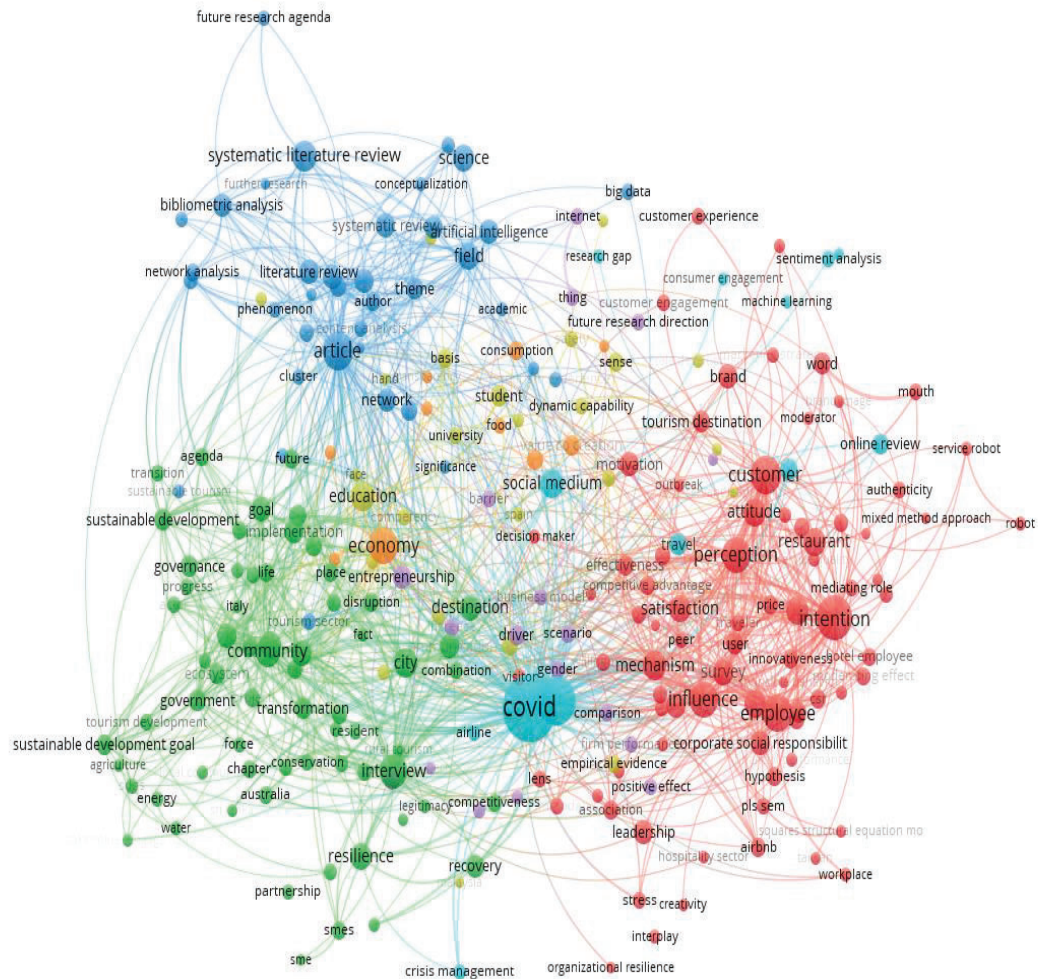
**Fig. 7. Journal of Business Research**

The bibliometric map, represented by Fig. 8, highlights vital themes within the subject field of “business, management, and accounting.” These themes include pricing and demand uncertainty, marketing and forecasting, and their impact on society. The focus areas include firm performance, dynamic capability, agility, big data analytics, and capability, CSR and governance and positive connections, and supply chain, blockchain, and optimization. These areas are depicted in Fig. 8, with COVID-19 as a crucial context in the background of strategic management.



**Fig. 8. Subject Areas: Business, Management, and Accounting**

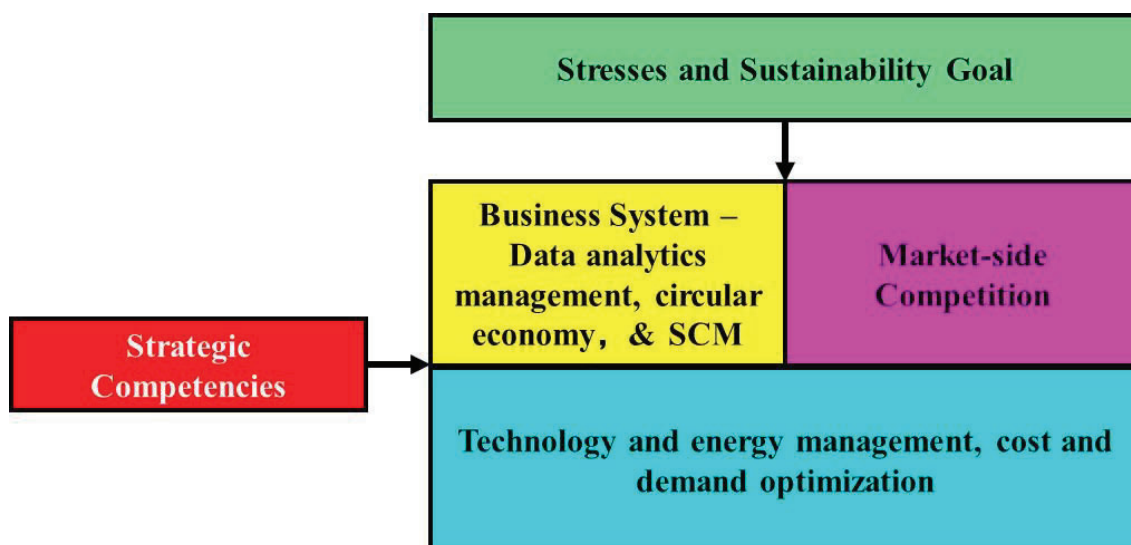
The bibliometric map in Fig. 9 focuses on the disciplinary areas of hospitality and tourism, which is a result using the keywords “strategic management and tourism, hospitality.” The map is based on publications from the Scindedirect.com database for 2022-2023. It highlights the COVID-19 context and the role of social media. The market-oriented aims encompass the community, city, tourism attractions, and their transformational strategies and consequences. The primary strategic characteristics include dynamic capability, client orientation, innovativeness, corporate social responsibility (CSR), and the ability to influence customer purchase intentions and achieve organizational performance. These areas of interest align with the bibliometric clusters that [11] identified, which mostly revolve around service-dominant logic, co-creation, service innovation, customer loyalty, and service recovery.



**Fig. 9. Subject Areas: Hospitality and Tourism**

**Discussions.** We use the “sciencedirect.com” database and co-citation analysis of the bibliometric map, which comprises the nodes and links of the existing literature, to examine the intellectual structure of strategic management (SM). Fig. 10 summarizes the intellectual structure or patterns of the bibliometric analytics results, which presents the interrelationships of the five strategic themes in the published fields of strategic management. Among the five themes, strategic competencies can be reckoned as the cognitive enabler of all the strategic realizations, constantly undergoing environmental stresses, and the guidance for sustainability as the organization’s superlative goals.





**Fig. 10. The Five Strategic Themes in the SM Field during 2022 and 2023**

Diverse strategic competencies enable organizations to create and execute business systems of sustainable competitive advantage. The bibliometric map-derived themes of SM present five clusters of SM themes that organizations have been mastering during COVID-19. Strategic competencies are the engine of the enterprising locomotive, which provides the necessary thrust and momentum to develop other aspects demanded by SM, namely, business systems, market-side competition, and integrative technology investment, in handling stresses and with sustainability as the goal of organizations. As noted in [4], COVID-19, which is a prominent business stress, forces organizations to invest in data analytics management and circular economy, reassess their supply chain management (SCM), and leverage their market competitive advantage through digital technologies [4]. During COVID-19, there is a significant emphasis on cost-oriented participation in social media. In order to address environmental pressures, organizations are driven to transition towards a circular economy by integrating several principles of environmental sustainability into a comprehensive and sustainable framework while ensuring the continuous utilization of resources [45]. Cost-oriented organizations and businesses also utilize technologies based on demand, optimization, and energy management analytics capabilities.

#### *Theoretical Implications*

“Strategic competencies,” as the bibliometric map revealed, are a conceptual addition to strategic management. They are described as the knowledge, abilities, and attitudes organizations master and exhibit during COVID-19. The micro-foundation aspect of strategic competencies indicates that SM should pay attention to the intellectual, emotional, attitudinal, and behavioral factors that assist strategists and companies in creating competitive business systems. Organizations that invest in strategic competencies also strongly emphasize market competition, and SM aims to leverage technological advantages, optimize energy management, minimize costs, and optimize demand for cost efficiency and strategic advantage [46]. The micro-

foundation aspect of the strategic competencies requires the organizations to pay attention to strategists' and practitioners' thoughts, feelings, and actions. It is crucial to acquire the skill of identifying and utilizing various emotions experienced by individuals and groups as a strategic capability. This can be considered a meta-emotional competence, encompassing emotional balancing, emotional recognition, emotional aperture, and the overall emotional capacity to identify, recognize, monitor, and address the emotions of organizational members [47].

In sum, the strategic competencies of SM provide a more comprehensive understanding of how organizations engage in strategic actions [48]. Accordingly, this study contributes to the development of a "strategic competency-based view" (SCBV) of competition, which expands upon [49]'s resource-based view (RBV) of SM. The revealed SCBV surpasses and combines existing theories such as industrial organization economics (IO), the resource-based view (RBV), and the institution-based view (IBV) [8]. It achieves this by integrating many pertinent SM theories, such as those outlined in [9]'s work, in order to enhance and develop the other clusters of themes of SM that this study identified, namely, (1) the management of data analytics, circular economy, and supply chain management, (2) competition on the market side, (3) the management of technology and energy, cost and demand, and optimization, and (4) resilience management on stresses faced by the organizations.

#### *Practical Implications*

The five strategic themes model provides research academics a framework to guide and enhance their research direction and endeavors. The model also implies a systematic approach to strategic decisions, and strategists and practitioners can utilize it to direct their strategic suggestions for firms. The concept emphasizes that environmental stressors are unavoidable and that stresses often exhibit high degrees of volatility, uncertainty, complexity, and ambiguity (referred to as VUCA, [50]). The approach proposes that companies and strategists should develop "strategic competencies" that encompass a harmonious combination of balanced, suitable, and incompatible modes of thinking. Factors contributing to competitive advantage include organizational ambidexterity and the ability to explore and exploit resources. For instance, using networks, as demonstrated by [51], can be advantageous. Additionally, the strategic choices of cost leadership or differentiation, as discussed by [52], can impact competitiveness. Furthermore, competing effectively in the current environment (static) or adapting to changing conditions (dynamic) is also crucial. The "strategic competencies" encompass the capacity to transition and adapt from one competency to another [53], as well as the factors that drive these competencies, such as exploration and exploitation drivers related to customer involvement, knowledge sharing, and data support [54]. [55] assert that aligning various strategic skills is crucial as it indicates how each competency component harmonizes with the internal and external environments and the strategic objective, which aligns with the principles outlined in situational fit theory. The extensive information and many perspectives within the strategic competencies provide various solutions businesses can utilize and modify to address the business environment's volatile, uncertain, complex, and ambiguous (VUCA) characteristics. Based on the bibliometric map discovered in this



study, it is recommended that organizations invest in strategic competencies and establish connections with other areas of strategic management. These areas include stresses and sustainability goals, business systems (such as data analytics management, circular economy, and supply chain management), market-side competition, and technology and energy management. Organizations can achieve sustainable competitive advantage by focusing on cost and demand optimization.

#### *Limitations and Further Research*

This study restricts the bibliometric studies to the ScienceDirect database. Thus, the further study should expand the article base from other publishing databases. For example, the Emerald database focuses on management and social fields, while Springer publications delve into the theoretical foundations of socio-psychological disciplines. Furthermore, the citations inside the co-citation mapping may encompass both supportive and self-citations, perhaps indicating certain intellectual biases [11]. Since the bibliometric study's objective is to provide an overview of the leading intellectual themes and their connections, it may not cover the specific details of each theme. Despite these limitations, research scholars can depend on the provided maps and concepts to direct their future research.

**Conclusion.** Challenges, such as economic shocks (like significant disruptions in supply and demand and market instability, global energy crisis [38]), changes in social behavior (such as shifts in spending habits and restrictions on large gatherings), and organizational challenges (such as ensuring staff safety, implementing remote work, and dealing with reduced employee motivation), offer opportunities for firms to learn and adapt their business strategies [56,57], including COVID-19 as a rare and unpredictable event with significant implications for corporate communities and society [58]. This study seeks to identify the strategic management trends that have emerged during the COVID-19 pandemic. The bibliometric analysis identifies five distinct but interrelated clusters of themes that strategists and organizations can utilize as a comprehensive intellectual model to assist enterprises and industries in adapting to continuing business pressures and stresses, enduring them, and initiating a profoundly transformative revolution. The bibliometric map offers numerous benefits, such as comprehensiveness [59] and diverse perspectives [13]. The five clusters of SM themes are (1) strategic competencies; (2) stresses and sustainability goals; (3) technology and energy management, cost and demand optimization; (4) business system data analytics management, circular economy, and supply chain management; and (5) market-side competitiveness. Cluster one categorizes the theoretical schools of the SM area as strategic competencies, which include roles of cognition and worldviews, resources and capabilities, micro-foundation, institution theory, business and management systems, and strategic consequences. Strategic competency themes offer significant information that allows strategists and companies to develop high-quality strategies and gain a competitive advantage. Strategic competencies and behavioral strategies are interconnected due to their robust micro-foundation. The authors [60] state that behavioral strategy incorporates cognitive and social psychology principles into strategic management theory and practice. The objective is to enhance strategy theory's empirical validity and practical applicability by basing strategic management



on realistic assumptions regarding human cognition, emotion, and social interaction. Cluster two emphasizes the importance of managing systemic risks in firms. These risks can arise from various directions and may seem routine, but they have systemic causes and effects. Examples of such risks include shortages of employees, financial losses, liquidity problems, closures, and challenges related to reopening [61]. Cluster three focuses on analyzing the benefits and difficulties associated with utilizing various resources to mitigate the effects of COVID-19. These resources include energy and environmentally-friendly supply chain management methods [62, 63]. Cluster four highlights the importance of data analytics skills in enhancing organizations' ability to make better decisions. This includes the use of social media analytics [64] and big data analytics (AI) [65]. Given the systemic danger posed by COVID-19, it is necessary to consider systemic factors when considering market competitiveness. For example, a sustainable e-commerce business must consistently allocate resources toward environmentally friendly and sustainable processes [66]. A clear and evident approach is to transition business operations to the web platform [67]. Distinctive themes of SM emerged during COVID-19, including shocks and resilience management, the systemic nature of risks and decision-making, continuous feedback and learning, data analytics, resource advantages, the firms' dynamic capability, and emerging AI and IoTs trends.

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