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The multidimensional nature of organizational myopia: co-word analysis and topic modeling of managerial and strategic short-termism

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Abstract
This study explores organizational myopia by employing a multi-method quantitative approach, including co-word analysis and topic modeling, to map the intellectual landscape and thematic evolution in the field. A dataset of 158 peer-reviewed articles from the Web of Science and Scopus databases was analyzed using co-word analysis to identify key subjects, patterns, and relationships, along with topic modeling via Latent Dirichlet Allocation (LDA) to uncover latent topics and their correlations. Key themes such as organizational performance, myopia, digital transformation with managerial foresight, knowledge/learning practices, environmental variables, resilience, and innovation were identified. The study emphasizes the importance of aligning short-term goals with long-term strategic objectives and highlights the challenges of managerial myopia and the role of innovative solutions in fostering organizational flexibility. This research provides a comprehensive framework for understanding and addressing organizational myopia, offering valuable insights for future research and practical applications to navigate its complexities effectively.

Keywords Organizational myopia · Managerial myopia · Strategic myopia · Co-word analysis · Topic modeling

Introduction

Organizational myopia, often defined as the tendency of organizations to favor short-term goals at the expense of long-term sustainability (Levinthal & March, 1993; Catino, 2013), has been a topic of considerable study within management and organizational research. These factors include a reduced innovation capacity (Smith et al., 2010), lower levels of adaptability to environmental changes (Day & Schoemaker, 2000), and a weakening competitive edge (Ridge et al., 2014). All these challenges are very evident in the modern, fast-changing, and complex business environment, where technological disruptions (Ma & Tao, 2023), market disruptions, and global issues require organizations to be strategic and resilient (Lioui & Tarelli, 2022). Another important aspect is that the study of organizational myopia cuts across various disciplines, including management (O'reilly Iii & Tushman, 2008), economics (Bendickson et al., 2016), environmental science (Falsarone, 2022), and social sciences (French, 2011). Despite this growth in research, the overall understanding of the major determinants, persistent themes, and relationships explaining organizational myopia remains fragmented (Schmiedel et al., 2019). This study addresses this research problem by using a multi-method quantitative approach (Vayansky & Kumar, 2020), bringing together co-word analysis (He, 1999) and topic modeling that allows taking a closer look into the discussions related to organizational myopia. Natural Language Processing (NLP)-based topic modeling, and especially Latent Dirichlet Allocation (LDA) (Blei et al., 2003), uncovers hidden topic groups and their change over time.

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This gives rise to a significant research problem: *How might the presently fragmented scholarly views on organizational myopia be systematically synthesized to reveal major themes*, *trends*, *and intellectual structures guiding both theoretical and practical advancements*? Answering this question is important for advancing the theoretical underpinnings of organizational myopia and developing actionable insights for practitioners interested in mitigating its harmful effects. This study employs a multi-method quantitative approach, bringing together co-word analysis and topic modeling that allows taking a closer look into the discussions related to organizational myopia. Co-word analysis helps in finding important themes and their connections within the field. Natural Language Processing (NLP)-based topic modeling, and especially Latent Dirichlet Allocation (LDA), uncovers hidden topic groups and their change over time. This article presents a strong collection of peer-reviewed articles from top academic databases, therefore giving a clear view of the research area, dealing with the research problem in detail and from different angles.

This study will also use a multi-faceted approach that weaves together a number of concepts to meet a variety of objectives: (1) the delineation of key themes and ideas found in the literature on organizational myopia, (2) the identification of emerging trends and topics in the existing body of research, and (3) the suggestion of possible future research paths that can tackle the challenges that short-term thinking creates for organizations. This, therefore, leads to the development of theoretical frameworks within the discipline and offers very important lessons for organizations in trying to balance short-term goals with long-term sustainability amidst increasing uncertainty in the business environment.

This study makes several significant contributions to the existing literature on organizational myopia. First, it provides a comprehensive mapping of the intellectual structure of organizational myopia research by employing innovative methodological techniques, namely co-word analysis and topic modeling, which have not been previously combined in studying this phenomenon. Second, by identifying the key themes and their evolution over time, this research offers valuable insights into the changing dynamics and emerging trends in scholarship on organizational, managerial, and strategic myopia. Third, the study bridges multiple disciplinary perspectives, including management, economics, environmental science, and social sciences, thereby enriching our understanding of the multifaceted nature of organizational myopia. From a practical standpoint, our findings contribute to organizational practice by illuminating the mechanisms through which short-term thinking affects performance and by highlighting potential strategies for balancing short-term goals with long-term sustainability. The methodological approach employed also provides a template for future studies seeking to map the intellectual landscape of emerging fields in management and organizational research.

Literature review

In the literature, organizational, managerial, and strategic myopia is usually defined as the tendency of decision-makers in organizations to focus on short-term goals or immediate problems (Larwood & Whittaker, 1977; Cyert & March, 2015). This narrow focus might sacrifice long-term objectives and broad perspectives, leading to inadequate strategies and missed opportunities for sustainable growth (Levinthal & March, 1993; Growth, 2008). Organizational myopia occurs when an organization puts too much emphasis on its internal operations and current products, thus ignoring external changes and innovations (Smith et al., 2010; Ridge et al., 2014). This restricted viewpoint impedes the organization's capacity to respond effectively to market fluctuations or technological innovations, thereby jeopardizing its competitive edge (Day & Schoemaker, 2000; Catino, 2013). Originally conceived as an intersection of behavioral and organizational theory, organizational myopia has developed into a multifaceted notion impacting multiple disciplines (French, 2011; Bolman & Deal, 2017). Early studies defined organizational myopia as a short-term orientation from managerial forces prioritizing immediate outcomes over long-term sustainability and innovation. This concept has been linked to decision-making biases, resource allocation issues, and strategic misalignments. Pioneering works by Cyert (1963) and Levinthal and March (1993) defined organizational myopia as a cognitive and structural constraint that disrupts the balance between exploring innovation and future opportunities (exploration) and optimizing efficiency and short-term gains (exploitation). This contradiction raises the central issue of how organizational myopia can integrate short-term needs with long-term goals. Subsequent research combined perspectives from fields such as economics, strategic management, and environmental studies, highlighting the broader impacts of myopia in organizational contexts. Moreover, organizational myopia can be reflected in decision-making frameworks, such as resource allocation and strategic planning (Ridge et al., 2014). Evidence from research shows that organizations with myopia focus on short-term profitability at the expense of long-term gains deriving from digital transformation and sustainability investment in particular sectors subject to rapid technological changes (Ma & Tao, 2023).

In turn, managerial myopia describes the tendency for managers to focus on short-term financial outcomes, typically under pressure from quarterly reporting requirements

or personal incentives (Duruigbo, 2011). This focus on short-term results leads to insufficient funding in critical areas like research and development (R&D) and employee training, ultimately damaging the long-term success potential of the organization. Research (Peng, 2017; Lin et al., 2019; Li et al., 2021) has linked managerial myopia to lower R&D investments as managers with a narrow decision-making time frame cannot see the importance of long-term innovation projects. Originally associated with agency theory in the 1980 s, the concept has been enriched by subsequent studies into how managerial behavior can constrain research and development spending and long-term investments to meet the needs of shareholders (Bendickson et al., 2016). By the 2000 s academic research (Clark, 2011; Erasmus, 2015), supported by behavioral finance and psychology theories, underlined the impact of cognitive biases and pressures on short-term performance. Today, new themes are mentioned, such as digital transformation, Environmental, Social, and Governance (ESG) factors, and the effects of short-term decision-making post-pandemic on long-term sustainability (Esposito De Falco et al., 2022; Kalfaoglou, 2021; Falsarone, 2022). Managerial myopia remains one of the major issues that still deters innovation, strategic advantage, and sustainability efforts in businesses.

The term strategic myopia demonstrates a limited strategic perspective to which organizations fail to adapt effectively to long-term trends and changes in the corporate environment (O'reilly Iii & Tushman, 2008). The narrow strategic focus leads to policies and strategies that are inadequate to deal with the challenges ahead, and thus, the organization experiences stagnation or decline (Levine, 2018). This idea initially emerged in the literature from the work of strategy experts such as Ansoff (1965), who noted the inability to adapt to environmental changes and was later developed further in the context of competitive advantage, innovation, and environmental adaptation by scholars like O'reilly Iii and Tushman (2008), the disparity between exploration and exploitation, along with immediate financial pressures and shortcomings in innovation, was recognized as contributors to the exacerbation of strategic myopia. Contemporary research has examined the influence of ESG factors (Lioui & Tarelli, 2022), digital transformation, and worldwide crises, including the pandemic, on strategic foresight, emphasizing strategic myopia as a critical concern that endangers organizational sustainability, resilience, and enduring competitive advantage. Research on organizational myopia has employed various methods to explore this issue comprehensively. Unlike bibliometric analyses that map the theoretical basis and main themes in the field, literature reviews were conducted. Although NLP-based approaches are limited, they are being done. NLP-based topic modeling and sentiment analysis have extracted themes and strategic focus patterns from texts such as strategic plans and annual reports. Quantitative data analyses have measured the relationship between firm performance, R&D spending, and short-term pressures, while surveys and interviews have captured managers' attitudes toward strategic decision-making. Simulation models and case studies have provided in-depth insights into the long-term challenges organizations face due to strategic myopia (Catino, 2013). These methods have collectively contributed to understanding the causes, effects, and solutions for strategic myopia. Recently, advances in artificial intelligence and large language models have accelerated the use of NLP methods in these studies.

NLP is a powerful tool for understanding themes and trends in the literature on organizational myopia. Keyword extraction, co-word analysis, and topic modeling can reveal the subcomponents of concepts like managerial and strategic myopia, while sentiment analysis can examine managers' attitudes toward short- and long-term strategies. Furthermore, NLP-based bibliometric analyses and text networks map influential studies and connections in the literature on organizational myopia. Methods used in strategic management, corporate governance, and sustainability contexts range from analyzing short-term language in reports to assessing long-term strategic impacts, offering significant contributions to research. In organizational studies, Leydesdorff and Nerghes (2017) compared co-word mapping and topic modeling in small and medium-sized text collections, showing that topic modeling is more effective for large datasets. Schmiedel et al. (2019) highlighted the potential of topic modeling in organizational research, offering an application example on organizational culture. These studies show how text-mining techniques can be applied to topics such as organizational myopia. However, there is a gap in studies integrating common word analysis and topic modeling to study organizational myopia, and this study will fill this gap by contributing both theoretically and practically to the advancement of the field.

Methodology

This study employs a multi-method quantitative approach, integrating co-word analysis (He, 1999) with topic modeling (Vayansky & Kumar, 2020) to examine the landscape of organizational myopia research. While both methods analyze textual data, they represent complementary quantitative techniques that allow for the identification of key themes, trends, and relationships within the field. Rather than combining qualitative and quantitative approaches (which would constitute a mixed-methods design), our research utilizes two distinct but complementary quantitative text

mining techniques to provide a comprehensive analysis of the literature.

Co-word analysis

Co-word analysis is an effective technique for identifying key topics within a research area by calculating the association strength between representative terms and visualizing the field's knowledge structure (Zhang et al., 2012). This method reveals patterns and trends by analyzing word co-occurrences within titles and abstracts of the collected articles. To enhance the analysis, we did co-word analysis to statistically investigate word co-occurrence patterns. This has been successfully applied in various fields, such as health informatics and cybersecurity, to elucidate thematic trends.

The analysis process consists of several steps: data retrieval, preprocessing, refinement, and analysis. We first retrieved relevant articles on organizational myopia from Web of Science and Scopus databases, followed by preprocessing the data to remove duplicates and irrelevant records. The refined dataset was then subjected to co-word analysis using a network graph to visualize the co-occurrence of significant terms, highlighting the central themes and emerging trends in the field.

Topic analysis: topic modeling

To supplement the co-word analysis, we adopted topic modeling to uncover latent topic groups and their evolutionary trends within the corpus. Topic modeling is a machine learning technique used in natural language processing for data mining, latent data detection, and discovering hidden semantic structures in text documents (Albalawi et al., 2020).

In this study, we utilized Latent Dirichlet Allocation (LDA), a widely used topic modeling method, to identify latent topics within the dataset. LDA allows for the classification of words and documents into distinct topics, providing a nuanced understanding of the thematic landscape (Li et al., 2024; Watrianthos & Komalasari, 2024). By employing these methodologies, this study aims to map the intellectual structure and trends of organizational myopia research, providing a comprehensive overview of the field and identifying areas for future exploration.

To determine the optimal number of topics for our LDA model, we conducted a systematic evaluation using both statistical metrics and interpretability criteria. We tested LDA models with topic numbers ranging from 3 to 10, calculating coherence scores (Cv) and perplexity for each model. The coherence score peaked at 5 topics (Cv = 0.54), while perplexity continued to decrease but began to level off after 5 topics. Additionally, we manually inspected the interpretability of topics at each level, finding that 5 topics provided the most semantically meaningful and distinct clusters without significant overlap. Models with fewer topics resulted in overly broad categories, while models with more topics produced redundant themes with minimal semantic differentiation. This combined quantitative and qualitative assessment led us to select 5 as the optimal number of topics for our analysis.

While various text mining approaches exist for analyzing scholarly literature, our selection of co-word analysis and Latent Dirichlet Allocation (LDA) topic modeling was deliberate and methodologically driven. Co-word analysis was chosen for its established capability to visualize semantic relationships and knowledge structures through word co-occurrence patterns (Callon et al., 1983; He, 1999), making it particularly suitable for mapping the intellectual landscape of organizational myopia research. This method excels at revealing the associative structure of ideas within a field, which aligns with our objective of identifying key themes and their relationships. LDA topic modeling complements co-word analysis by providing probabilistic insights into latent thematic structures that might not be immediately apparent through co-occurrence patterns alone (Blei et al., 2003). While supervised machine learning methods such as Support Vector Machines (SVM) offer powerful classification capabilities, they require labeled training data and are more appropriate for predefined categorization tasks rather than exploratory analysis of emerging knowledge structures (Joachims, 1998). Similarly, Structural Topic Modeling (STM), though offering advantages in incorporating document metadata into topic discovery (Roberts et al., 2019), was not selected because our primary focus was on identifying the core thematic content rather than analyzing how document-level covariates influence topic prevalence. The combination of co-word analysis and LDA provides methodological triangulation, offering both network-based semantic mapping and probabilistic topic extraction, which together provide a more robust understanding of the organizational myopia literature landscape than either approach alone or alternative methods might offer.

Data collection and analysis process

Data retrieval

We collected articles relevant to organizational myopia from the Web of Science and Scopus databases, which are renowned for their comprehensive coverage of peer-reviewed scholarly literature across various disciplines. These databases were chosen for their extensive range of

high-quality academic publications, ensuring a robust dataset for our analysis.

To gather the articles, we constructed a keyword search query as follows:

Query: (*"organizational myopia" OR "managerial myopia" OR "strategic myopia"*)

The search was limited to journal articles published in English from 2000 onwards, reflecting the evolving discourse on organizational myopia over recent decades. The data retrieval process was conducted on 2000–2024, resulting in an initial collection of 158 articles (from Web of Science and from Scopus). After eliminating duplicates and entries lacking essential information such as publication year, author, or abstract, the final dataset was prepared, consisting of bibliometric details including title, year, author, journal, abstract, and keywords.

Data preprocessing and refinement

To create a text corpus from the abstracts, we conducted data preprocessing through a structured approach. This involved developing dictionaries for exceptions, definitions, and synonyms.

First, we established an "exception" dictionary to remove common terminologies used in abstracts to describe research methodologies, processes, and structures (e.g., introduction, methods, results, discussion). Next, we created a "definition" dictionary to ensure compound nouns were treated as single entities (e.g., "organizational myopia" as opposed to "organizational" and "myopia" separately). To enrich this dictionary, we incorporated academic compound nouns from the keywords provided by authors.

Additionally, we developed a "synonym" dictionary to identify and unify terms with identical meanings into a single representative word (e.g., "managerial myopia" representing similar terms). This dictionary also standardized singular and plural forms into singular terms. Following this process, a text corpus was established from the abstracts.

Subsequently, data refinement was performed to exclude high-frequency general terms. The dataset was organized as a word-document matrix based on occurrence. To further refine the dataset, we applied the term frequency-inverse document frequency (TF-IDF) method, which highlights significant terms by balancing their frequency with their prevalence across documents.

For data preprocessing and refinement, we utilized Python (version 3.8; Python Software Foundation) for its powerful text-processing capabilities. The processed data was then used for co-word analysis and topic modeling, leveraging social network analysis to visualize relationships and trends within the field of organizational myopia.

Data analysis

First of all, a descriptive analysis was performed in order to understand the publication frequency of different time periods. This helped us to identify important research areas and key journals that focus on the organizational myopia phenomenon. The results showed the general academic landscape and helped to build a basic intellectual structure for understanding organizational myopia. We then split the dataset into time periods to perform a time-series analysis, looking at how the research themes have changed over time. In constructing the periods, we considered major developments within the management and organizational studies field and the emergence of new methodologies and theories pertaining to myopia.

We therefore carried out a co-word analysis to build networks of word co-occurrence. This analysis was based on document frequency, TF-IDF values, as well as the degree centrality of keywords in the networks created. By this method, we identified important keywords and followed their evolution, thus addressing the research question about the intellectual focus of the field. We constructed word co-occurrence networks by converting word-document matrices into word-word networks and assigning weights representing the frequency of word co-occurrences.

Third, we conducted topic modeling, which allowed us to look at the major topics of organizational myopia research and their evolution over time. In conducting topic modeling, we applied Latent Dirichlet Allocation (LDA) to uncover latent topics and to classify words and documents accordingly. The word-topic networks were built and visualized by allocation probability values.

Results

Descriptive analysis results

Overall academic status

Using the initial set of 158 articles, an overview of research on organizational myopia was compiled. Figure 1 illustrates the publication frequency from the year 2000 to 2024. This graph demonstrates fluctuations in research interest over time, with notable increases in publication frequency in recent years, reflecting growing academic interest in the topic of organizational myopia.

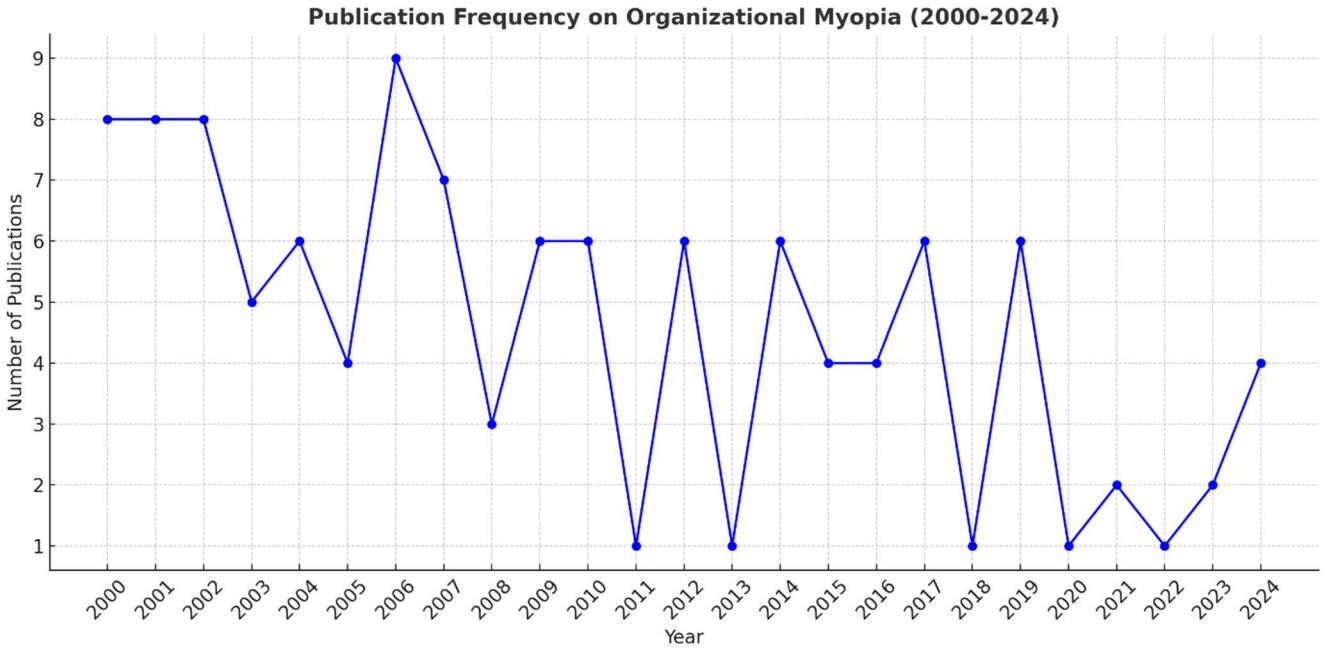

Fig. 1 Publication frequency

Table 1 The top influential categories in organizational myopia research from 2000 to 2024

Category	Article frequency
Management	62
Business	52
Economics	18
Business Finance	17
Environmental Science	9
Political Science	8
Social Science Interdisciplinary	6

Influential categories in organizational myopia research

Table 1 lists the significant categories in organizational myopia research from the year 2000. The publication frequencies for each category were calculated, highlighting the areas where research is most concentrated. The "Management" category holds the highest rank with 62 publications, followed by "Business," "Economics," "Business Finance," "Environmental Science," "Political Science," and "Social Science Interdisciplinary." These categories reflect the diverse disciplinary interest in organizational myopia.

Geographical distribution of research

Figure 2 presents the geographical distribution of publications related to organizational myopia research between the year 2000 and 2024. The leading country is the United States with 52 publications, hence showing that there is considerable research activity related to this field. Then comes England with 21 and China with 20 publications, meaning these countries are active in researching organizational myopia. France and Australia follow with 18 and 13 publications, respectively. Italy has the next largest number of publications: 9. Besides, Denmark and the Netherlands have contributed 7 publications each, while Sweden and Singapore have added 6 and 5 publications respectively. This distribution reflects global interest in organizational myopia with contributions from diverse regions reflecting varied academic perspectives and approaches.

Topic modeling results

The Latent Dirichlet Allocation—LDA—analysis brought out five topics from the organizational myopia research (Table 2). Topic 1 dwells on the concept of myopia in organizations, highlighting aspects such as labor and opportunities. Topic 1 reflects discussions related to challenges and dynamics in the context of short-term thinking in organizational settings. Topic 2 revolves around the managerial dimensions, digital transformation, and foresight, thereby placing into the limelight leadership strategies and, at the same time, the impact of technological progress. Topic 3 turns toward knowledge, learning, and organizational theory in an effort to reflect on the theoretical perspectives and mechanisms that take place during organizational adaptation and learning. Topic 4 is based on accounting, product management, and environmental factors related to how short-sightedness converges with financial and ecological problems. Finally, Topic 5, which covers resilience, innovation, and strategic organizational behavior, underscores the

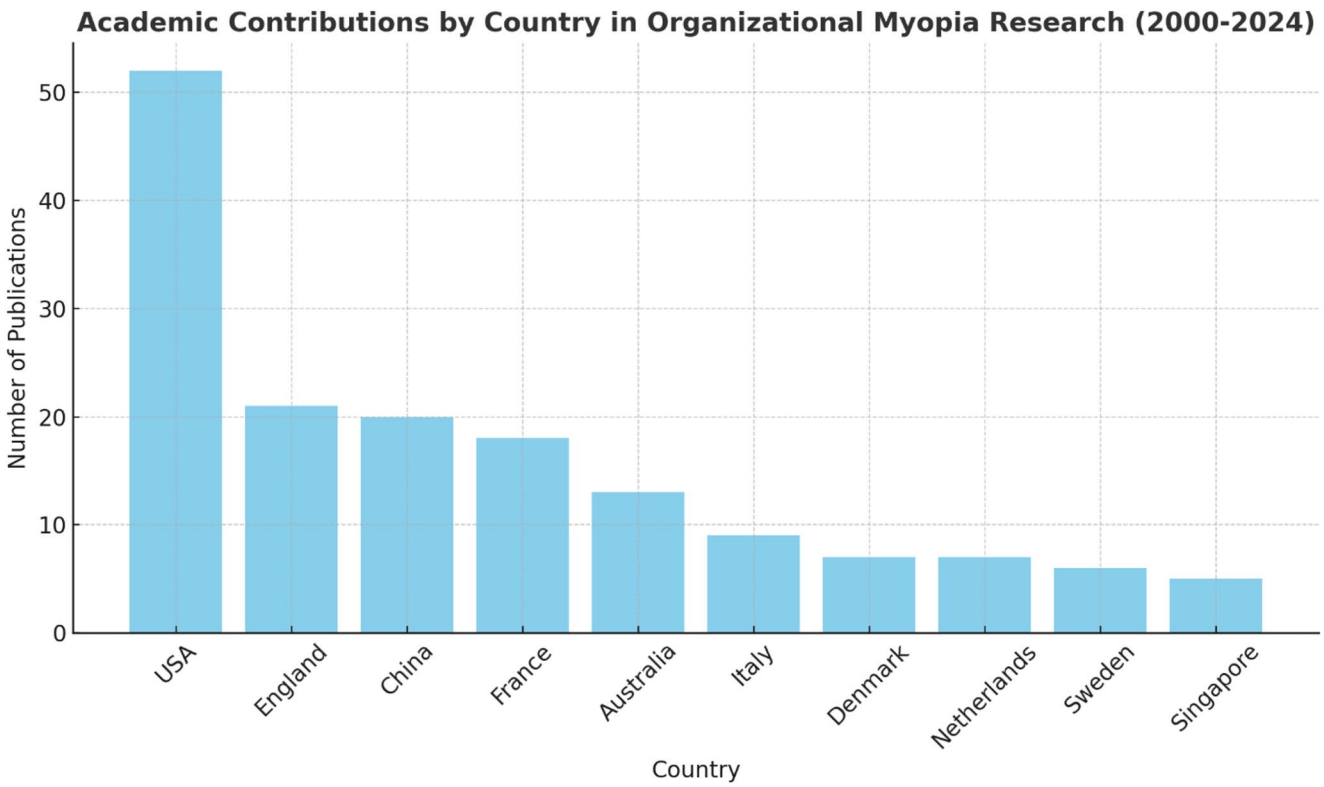

Fig. 2 Academic contributions

Table 2 Topic modelling results

Topic 1	Topic 2	Topic 3	Topic 4	Topic 5
Myopia	Founder	Knowledge	Myopia	Resilience
Organizations	Creation	External	Accounting	Innovation
Labor	Managerial	Myopia	Product	Strategic
Opportunity	Mechanisms	Learning	Management	Organizational
Concept	Digital	Theory	Learning	Ambidextrous
Selection	Transformation	Research	Environmental	Organizations
Performance	Hyperopia	Evolutionary	Innovation	Marketing
Organizational	Learning	Process	Development	Identity
Improvisation	CEOs	Public	Managerial	Theory
Market	Foresight	Scenario	Firm	Dependence

importance of adaptability and creative ways of overcoming parochial tendencies. Taken together, the topics provide a comprehensive view of the themes and debates that are in the study of organizational myopia.

Based on the keywords identified through our LDA analysis, we assigned descriptive labels to each topic that reflect their thematic focus. Topic 1 was labeled "Organizational Performance and Myopia Conceptualization" as it centers on the fundamental concepts of myopia and its relationship to organizational performance and opportunity selection. Topic 2, "Managerial Leadership and Digital Transformation," captures the intersection between leadership mechanisms, digital transformation processes, and strategic foresight. Topic 3, labeled "Organizational Learning and Knowledge Processes," encompasses the theoretical and evolutionary aspects of knowledge acquisition and learning within organizations. Topic 4, "Environmental Factors and Product Management," reflects the interplay between environmental considerations, accounting practices, and product innovation management. Finally, Topic 5 was labeled "Organizational Resilience and Strategic Innovation," highlighting the connection between adaptive capabilities, strategic orientation, and innovation in ambidextrous organizations. These labels provide a conceptual framework for understanding the multifaceted nature of organizational myopia research and its evolution across different thematic domains.

Co-word analysis results

The co-word analysis applied to the dataset has thrown up several important themes and interlinkages. This showed a repeated co-occurrence of words such as "organizational," "myopia," "resilience," "learning," and "change," which

point out an emphasis on organizational behavior, more so in relation to how organizations respond to change and the problems brought about by organizational myopia. The visualization of the network revealed clusters that suggest a substantial impact of organizational fit on organizational myopia, where person-organization fit emerges as a significant contributing factor. Furthermore, another cluster demonstrated that organizational resilience fosters firm growth, mediated by strategic change and managerial myopia, especially in contexts of environmental uncertainty. Moreover, the analysis underscored themes associated with organizational learning and its constraints, highlighting the necessity of balancing exploration with exploitation. The themes presented in the document indicate a thorough investigation into the ways in which organizational frameworks and behaviors impact adaptability, resilience, and strategic development, simultaneously acknowledging possible drawbacks such as managerial myopia and constraints on learning (Fig. 3).

Temporal analysis

To track the evolution of research themes over time, we segmented our dataset into four time periods: 2000–2010, 2011–2015, 2016–2020, and 2021–2024. These periods were selected to reflect major shifts in the business environment, including the global financial crisis, digital transformation acceleration, and the COVID-19 pandemic. Figure 4 illustrates the changing prevalence of each topic across these periods. Notably, Topic 5 ("Organizational Resilience and Strategic Innovation") showed a marked increase in prevalence in the 2021–2024 period, growing from 18% of the literature in 2016–2020 to 31% in 2021–2024, likely reflecting heightened scholarly interest in organizational adaptation following global disruptions. Similarly, Topic 2 ("Managerial Leadership and Digital Transformation") demonstrated steady growth across all periods, with particular acceleration in the 2016–2020 period, coinciding with increased digital transformation initiatives across industries.

Discussion

First of all, the concept of organizational myopia is closely associated with the problems related to short-term decision-making and its consequences on long-term strategic goals. Co-word analysis showed stable links of myopia with such words as "performance" and "opportunity," indicating that there is a prevalent concern about the way in which short-term perspectives impede organizational progress and innovation. This finding underlines the ongoing challenges organizations face in balancing short-term results with sustainable development. The amalgamation of digital transformation and managerial foresight has come to the fore as important themes, which indicates growing awareness in the importance of technology and leadership in overcoming myopia. In an increasingly complex digital world, the

Fig. 3 Coword analysis result

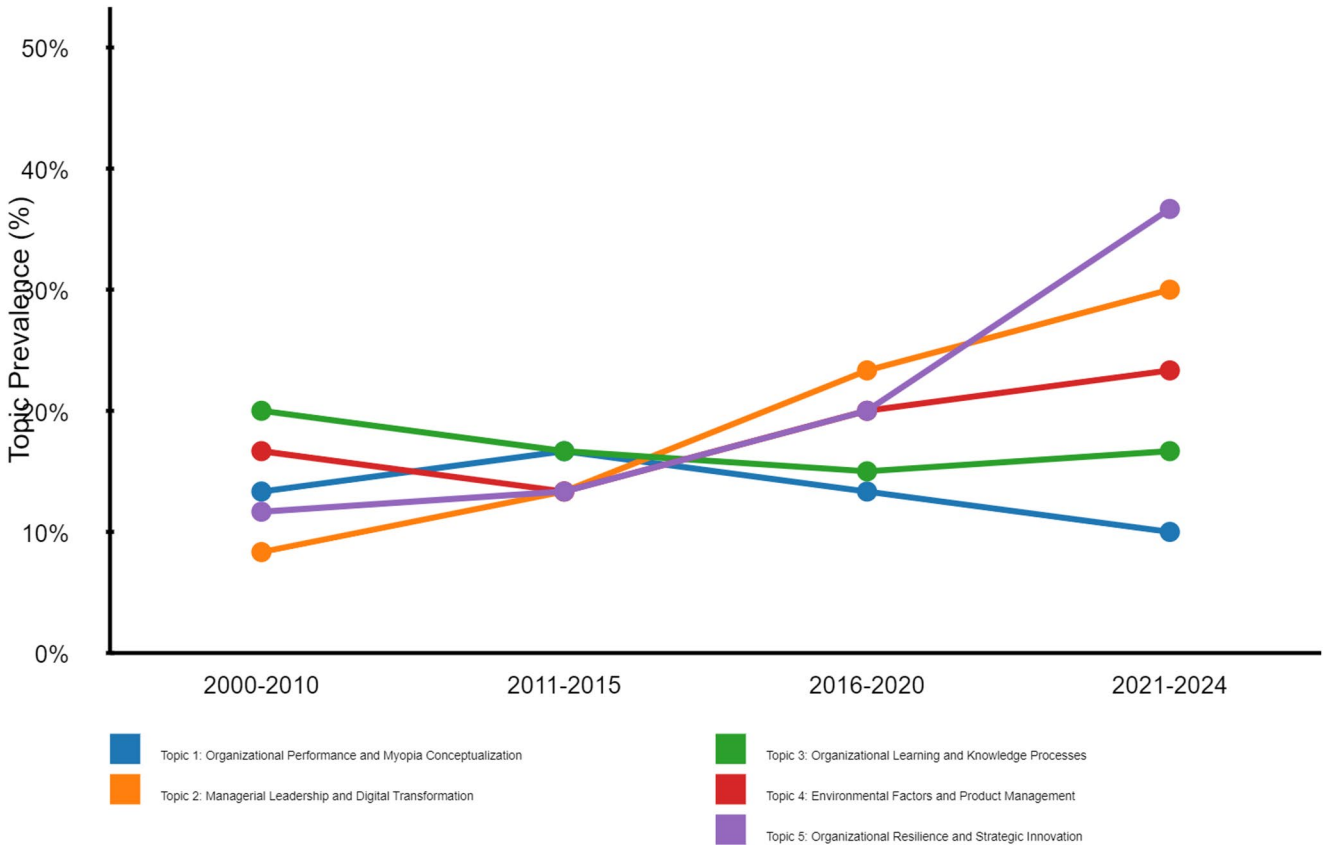

Fig. 4 Evolution of topic prevalence over time (2000–2024)

ability to develop strategic foresight and adapt to new technologies is very important to overcome the limitations of short-termism. For example, as illustrated by the presence of topics related to "digital transformation" and "managerial mechanisms" in the topic modeling output, it is evident that knowledge and learning within organizations are quintessential elements for the alleviation of myopia. The frequent occurrence of such terms as "learning," "knowledge," and "theory" would suggest strong academic interest in exploring just how organizational learning processes may offset myopic decision-making. This focus aligns with considerable dialogues in organizational theory on the importance of developing a learning culture to enhance adaptability and drive innovation.

Myopia correlates with environmental considerations—a feature that was well seen from the results of topic modeling, where "environmental" and "accounting" were frequently associated. This might suggest that interest in the intersection between myopia and corporate social responsibility with sustainability practices is just beginning to emerge. Hence, the role played by myopia in organizational responses to ecological challenges becomes a critical area for further research as the salience of environmental issues grows. Resilience and innovation are some of the very vital elements noted in overcoming organizational myopia. The inclusion of "resilience" and "innovation" in the analysis presents an awareness that organizations must not only be able to adapt to changeable conditions but also to seek in an active way new openings through which to succeed, especially amidst uncertainty. This discovery is consistent with the extensive discussion surrounding strategic resilience, which is viewed as an essential competency for organizations aiming to effectively manage the intricacies of the contemporary business environment.

The intellectual mapping of organizational myopia research through our complementary quantitative analysis reveals several profound implications for theory development and practice. Our findings suggest a significant shift in how myopia is conceptualized in organizations—moving from a purely negative phenomenon to a more nuanced understanding of its contextual dependencies. This aligns with recent work by Esposito De Falco et al. (2022) on focused engagement strategies and Falsarone's (2022) impact framework. The emergence of digital transformation as a key theme (Topic 2) intersects with Ma and Tao's (2023) recent findings on how digital transformation impacts managerial myopia and carbon emission intensity, suggesting that technological advancement may serve as both a catalyst and

remedy for organizational short-sightedness. Furthermore, our identification of resilience and innovation as counterbalances to myopic tendencies supports Lioui and Tarelli's (2022) work on ESG factors and strategic adaptation. The clustering of environmental variables with accounting practices in Topic 4 particularly underscores the growing recognition that myopia has significant implications beyond organizational boundaries, affecting sustainability initiatives and long-term ecological considerations. This finding extends beyond traditional management perspectives to emphasize the societal impact of organizational decision-making timeframes, contributing to emerging conversations on responsible business practices in the post-pandemic context (Kalfaoglou, 2021). Our research further contributes methodologically by demonstrating how complementary text analysis approaches can uncover latent connections between previously siloed concepts, offering a template for future inquiry across management subdisciplines.

This study's primary aim was to map the intellectual landscape of organizational myopia research and identify key thematic patterns, for which a descriptive analytical approach using co-word analysis and topic modeling was most appropriate. While hypothesis testing and comparative case studies offer complementary insights, they typically require predefined constructs and relationships, which were not yet comprehensively mapped in this emergent field. Our study provides this foundational mapping that can inform future hypothesis-driven research.

The COVID-19 pandemic has catalyzed significant strategic adjustments in how organizations approach myopic tendencies. While our analysis identified the growing importance of resilience and digital transformation, recent developments suggest further evolution in this domain. Organizations have increasingly adopted hybrid work models that require balancing short-term operational efficiency with long-term cultural cohesion (Falsarone, 2022). The post-pandemic landscape has also accelerated the integration of ESG (Environmental, Social, and Governance) considerations into strategic planning, as evidenced by the growing connection between environmental factors and organizational myopia in our topic analysis. This integration represents a significant counterbalance to traditional short-termism, as ESG initiatives typically require extended time horizons and broader stakeholder consideration (Lioui & Tarelli, 2022). Furthermore, emerging research suggests that organizations that maintained sustainability commitments during the pandemic demonstrated greater resilience and recovered more quickly (Esposito De Falco et al., 2022), indicating that combating myopia may provide competitive advantages in times of crisis.

Our findings reveal a strong association between digital transformation and managerial myopia, yet the causal mechanisms underlying this relationship warrant further exploration. Digital tools may reshape decision-making horizons through several pathways: First, advanced analytics and AI-driven strategic foresight tools can expand managers' cognitive capacity to process complex information about future scenarios, potentially mitigating cognitive limitations that contribute to myopic decision-making (Ma & Tao, 2023). Second, digital platforms can facilitate more frequent and transparent communication across organizational hierarchies, potentially aligning short-term operational decisions with long-term strategic objectives. Third, digital transformation often necessitates substantial upfront investments with delayed returns, potentially training organizational leaders to adopt longer decision-making timeframes. However, digital tools may also exacerbate myopia through increased pressure for real-time performance metrics and accelerated competitive responses. The balance of these countervailing forces likely depends on how organizations integrate digital capabilities into their strategic processes rather than the mere adoption of digital technologies.

Practical implications

The framework developed in this study offers several practical implications for industries experiencing rapid technological shifts. First, our identification of the relationship between digital transformation and managerial foresight suggests that organizations should view digital initiatives not merely as technological upgrades but as opportunities to reshape strategic time horizons. For instance, telecommunications firms implementing 5G infrastructure could leverage this transition to realign incentive structures toward longer-term metrics of success. Second, the prominence of organizational learning (Topic 3) as a counterbalance to myopia suggests that companies in fast-evolving sectors such as biotechnology or artificial intelligence should prioritize knowledge management systems that preserve insights across project cycles, preventing the "learning myopia" identified by Levinthal and March (1993). Third, for industries particularly vulnerable to disruption, such as retail or financial services, our findings highlight the importance of developing ambidextrous capabilities that balance exploitation of existing competencies with exploration of new possibilities, as evidenced by the connections between these concepts in our co-word analysis. Finally, the growing importance of resilience in our temporal analysis suggests that organizations should incorporate systematic scenario planning into their strategic processes, particularly in sectors where technological change intersects with other forms of uncertainty such as regulatory shifts or environmental challenges.

Limitations and further research

While this study provides important insight into the intellectual architecture around organizational myopia research, a few limitations are worth noting that inhere in the methodological approach taken.

While co-word analysis and topic modeling present a quantitative view of the research landscape, it lacks the depth and complexity that can be obtained through qualitative research. Future studies could benefit from the use of qualitative research or systematic literature reviews to explore specific themes in more depth and understand the underlying dynamics within the identified topic groups. This study used a semantic network analysis approach focusing on keywords and abstracts to identify important terms and topics related to organizational myopia. While this approach has been successful in highlighting central themes, future studies could adopt more traditional bibliometric methods, such as co-authorship and citation analysis, to explore knowledge diffusion, collaboration networks, and the influence of specific research organizations in the field.

The dataset used for this analysis was drawn mainly from noun information, following common methodologies used in semantic network analysis. To go deeper, future research may include adjectives and nouns in the dataset to make possible a deeper investigation into contextual nuances and usage patterns in discussions about organizational myopia. A limitation in scope may, however, stem from this study's focus on scholarly articles and its ability to derive insights regarding practical applications and innovative developments within business and organizational contexts. It would also help to broaden the understanding of how, in reality, organizational myopia is tackled and, from that basis, come up with methods for short-termism in business environments.

Our results suggest several promising directions for hypothesis-driven research. For example, the strong connection between organizational myopia and resilience identified in our analysis suggests the hypothesis that organizations with stronger learning capabilities may demonstrate greater resilience to environmental uncertainty by overcoming myopic tendencies. Similarly, the temporal increase in research on digital transformation and managerial myopia (Topic 2) suggests that technological change may be both exacerbating myopic tendencies and providing potential solutions—a relationship that warrants empirical testing. While our search strategy focused on the specific terms "organizational myopia," "managerial myopia," and "strategic myopia," we acknowledge that scholars may discuss similar phenomena using alternative terminology such as "organizational short-sightedness," "short-termism," "organizational improvidence," or "lack of foresight." Our decision to use these three specific terms was deliberate, as they represent the canonical terminology in this research domain and ensure conceptual clarity and precision in our analysis. Using these terms allowed us to focus on literature that explicitly addresses myopia as a theoretical construct rather than including tangentially related concepts that might dilute the analysis. However, we recognize this as a limitation of our study, as relevant research using alternative terminology may not be captured in our dataset. Future research could expand this analysis by incorporating a broader range of search terms to capture the full spectrum of literature addressing short-term organizational decision-making.

Conclusions

This research makes several distinctive contributions to the field of organizational myopia. First, by identifying the five core thematic domains—organizational performance, managerial leadership and digital transformation, learning processes, environmental factors, and resilience—we provide a comprehensive intellectual framework that helps scholars and practitioners navigate the complexities of myopic tendencies in organizations. Second, our methodological approach demonstrates the value of combining co-word analysis with topic modeling to uncover hidden relationships within a research field, offering a replicable template for similar analyses in other areas of management and organizational studies. Third, by highlighting the emerging importance of digital transformation and environmental considerations in organizational myopia research, we point to critical areas for future investigation that have significant implications for organizational sustainability in increasingly volatile business environments. Fourth, our findings suggest practical pathways for organizations to counterbalance myopic tendencies through deliberate cultivation of learning capabilities, resilience strategies, and innovative practices. These insights are particularly valuable as organizations navigate post-pandemic recovery while facing accelerating technological change and environmental pressures.

This study aimed to outline the main research keywords and topics in the field of organizational myopia using co-word analysis and topic modeling to explain its intellectual structure. In examining the academic landscape, we have brought to light a number of notable trends and key areas that have emerged over time in this field. An assessment of organizational myopia was carried out, showing an increased interest in the subject across several research disciplines. The analysis found "management," "business," and "economics" to be the most common categories, indicating a strong focus on the implications of myopia within

both strategic and operational contexts. Co-word analysis allowed the identification of key themes, showing strong connections between "myopia," "performance," "opportunity," and "innovation." This underlines a critical discourse on the challenges brought about by short-termism and its impact on organizational growth and competitiveness.

The findings from the topic modeling analysis provided insights into the prevailing intellectual currents within the discipline, with the identification of five principal themes: (1) the relationship between myopia and organizational effectiveness, (2) the impact of digital transformation in conjunction with managerial foresight, (3) the role of knowledge and learning in the obviation of myopic behavior, (4) the inclusion of environmental factors, and (5) the emphasis on resilience and innovation as mechanisms to counteract myopic tendencies. The findings of the research have underlined the need to align short-term benefits with long-term sustainability while focusing on strategic foresight in navigating complex business ecosystems. The research showed that integration of digital technologies with innovative approaches is a must for organizations to move beyond the limits imposed by narrow thinking.

The importance and contributions of these findings can be encapsulated within three primary dimensions. First, they bring an overall greater understanding of the intellectual landscape of organizational myopia by highlighting necessary areas of scholarly engagement for this area of study and emerging trends that are relevant to this topic. More precisely, insights obtained from this research could help scholars and practitioners in the identification of prospects for collaborative efforts and interdisciplinary research that unite the development of strategies aimed at tackling issues related to myopia. The themes identified through this process give a strong direction to future research, allowing academicians to foresee upcoming trends and explore new areas of investigation. Through this research, the study will theoretically and practically contribute to a better understanding of organizational myopia for academics and practitioners working toward the alignment of short-term goals and long-term development. The recognition of such complexities and variability in myopia is how organizations can strengthen their ability to adapt quickly in changing business environments and thereby ensure sustainability.

Authors' contributions Provide detailed contributions for each author here.: Author ST conceptualized the study, drafted the manuscript, and contributed to interpreting the findings. Author YSB conducted the analysis, data collection, design of the methodology, and data analysis.

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Data availability The data supporting the findings of this study are available from the corresponding author upon reasonable request.

Declarations

Ethical approval This study was approved by the Alanya University (Approval Number: 179294), in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki and its later amendments.

Informed consent Informed consent was obtained from all individual participants included in the study.

Competing interests The authors declare that they have no competing interests.

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