Rethinking Strategic Thinking Through the Lens of Strategic Coherence

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Abstract: In light of the rapidly evolving complexities in strategic management and organizational behaviour, the aim of this research is to explore the conceptualization of strategic thinking in the context of innovative developments that have occurred in the research field over the past decades. This study is a follow-up upon the findings of a bibliometric analysis of publications between 1962 and 2024 obtained from the Scopus database and conducted to investigate shifts and trends in the research landscape of strategic thinking. Key conceptual shifts were identified through a co-occurrence analysis with a minimum threshold of 3. The study was also complemented with a qualitative analysis that offered a richer exploration of strategic thinking as a multidimensional construct. The research indicates that strategic thinking is no longer the sole purview of the C-suite but rather is being pushed down throughout the organization. Within this paper, four key dimensions of strategic thinking were identified: (1) analytical reasoning, (2) systems thinking, (3) strategic intuition, and (4) creativity – each critical to decision-making under uncertainty. Beyond mapping these dimensions, we demonstrate how they interact to produce strategic coherence – defined as the mutually compatible configuration of meanings, choices, and resource deployments that shape long-term advantage. The research also explains how digital transformation and AI-based decision augmentation transformed strategic thinking from a rigid, top-down function to a dynamic, distributed, and ecosystem-centric model. An outcome of this is that strategic decision-making has become more dynamic, with employees at all tiers now expected to engage in strategic thinking. Drawing on these insights, along with an analysis of the strategic choices laying ahead, the paper outlines an alternative understanding of strategic thinking that takes into consideration both real-world and technological dimensions of it. This refinement in conceptualization enhances literature in strategic management and organizational psychology by showing that leaders must strengthen their muscle of strategic agility, digital literacy, and navigating uncertainty in pluralistic business ecosystems. The paper closes by outlining leadership-development, strategic-learning, and policy implications that flow from a strategically coherent mindset.

Keywords: Strategic coherence, Strategic learning, Strategic thinking, Leadership, Digital transformation, Strategic learning

1. Introduction

In today's fast-paced business environment – characterized by extensive digital transformation, the widespread adoption of artificial intelligence, and, as a result, the growing complexity of interactions among ecosystem actors (Verhoef et al., 2021; Nambisan et al., 2019; Hess et al., 2016) – the substantive content of the concept of strategic thinking has undergone significant change. Traditionally, strategic thinking was often equated with strategic analysis and planning, assumed to be the exclusive purview of senior management (Mintzberg, 1994; Hambrick & Mason, 1984). However, the rise of the platform economy has challenged this conventional understanding, redirecting researchers' attention to a new set of factors that substantially reshape the field of study and underscore the need for a revised conceptualization of strategic thinking. Moreover, an expanding body of work investigates how variables previously left outside the boundaries of strategic models – such as personality traits – affect strategic choices (e.g., Grüning & Krueger, 2024; Shirokova et al., 2024; Carré et al., 2020).

At present, a paradox has emerged: on the one hand, there is a clear trend toward "fragmenting" strategic thinking into specialized domains (business, politics, ESG strategies, etc.). On the other hand, both scholars and practitioners continue to demand a universal conceptual foundation (Bonn, 2001; Goldman, Scott, & Follman, 2015) that allows for adapting strategic thinking and the approaches to teaching this core 21st-century meta-skill (Liedtka, 1998a) to the realities of a changing environment (Aksiutin et al., 2022; Bagrationi & Thurner, 2023; Bagrationi et al., 2022). This tension mirrors the classic exploration vs. exploitation dilemma and underlines the need for strategic coherence that dynamically balances vertical and horizontal fit (Mielcarek, 2023).

How has the research landscape of strategic thinking evolved over the past decades? Answering this question will bridge certain gaps in the scholarly debate on the essence and boundaries of strategic thinking by reconstructing it as a multi-dimensional, dynamically developing concept that underpins the long-term competitiveness of organizations (Rumelt, 2012; Child, 1997). In this article, the authors aim to address this question by conducting a comprehensive analysis of the body of research devoted to strategic thinking.

2. Methodology

To ensure a thorough exploration of the body of literature on strategic thinking, the study employed both (1) a quantitative assessment of the significance of individual keywords and their interconnections, and (2) an in-depth qualitative analysis of academic publications.

To form the research sample, bibliometric data on the entire corpus of articles indexed in the Scopus database for the period from 1962 to 2024 were retrieved. These articles were published in the categories Business, Management and Accounting, Sociology, and Psychology, and contained the keyword strategic thinking.

As our primary tool, we chose co-occurrence (frequency) analysis, which helps identify relationships among keywords and topics in the scholarly literature. This approach was selected for three main reasons: (1) it offers a promising way to detect both well-established and emerging directions within the field; (2) it ensures objectivity (Mingers & Leydesdorff, 2015); and (3) it can track shifts in the research landscape and highlight new dimensions and trends that may have arisen in recent decades.

The minimum co-occurrence threshold was set at 3, which made it possible to identify even rare but meaningful connections between terms. This decision was driven by the fact that the need to revisit existing paradigms and identify new aspects has been emphasized since the 1990s (e.g., Prahalad & Hamel, 1994). Presumably, the semantic field of strategic thinking has undergone a renaissance in recent decades. This allowed us to reduce the dimensionality significantly, cutting the number of keywords from 6,149 to 633 (see Figure 1.).

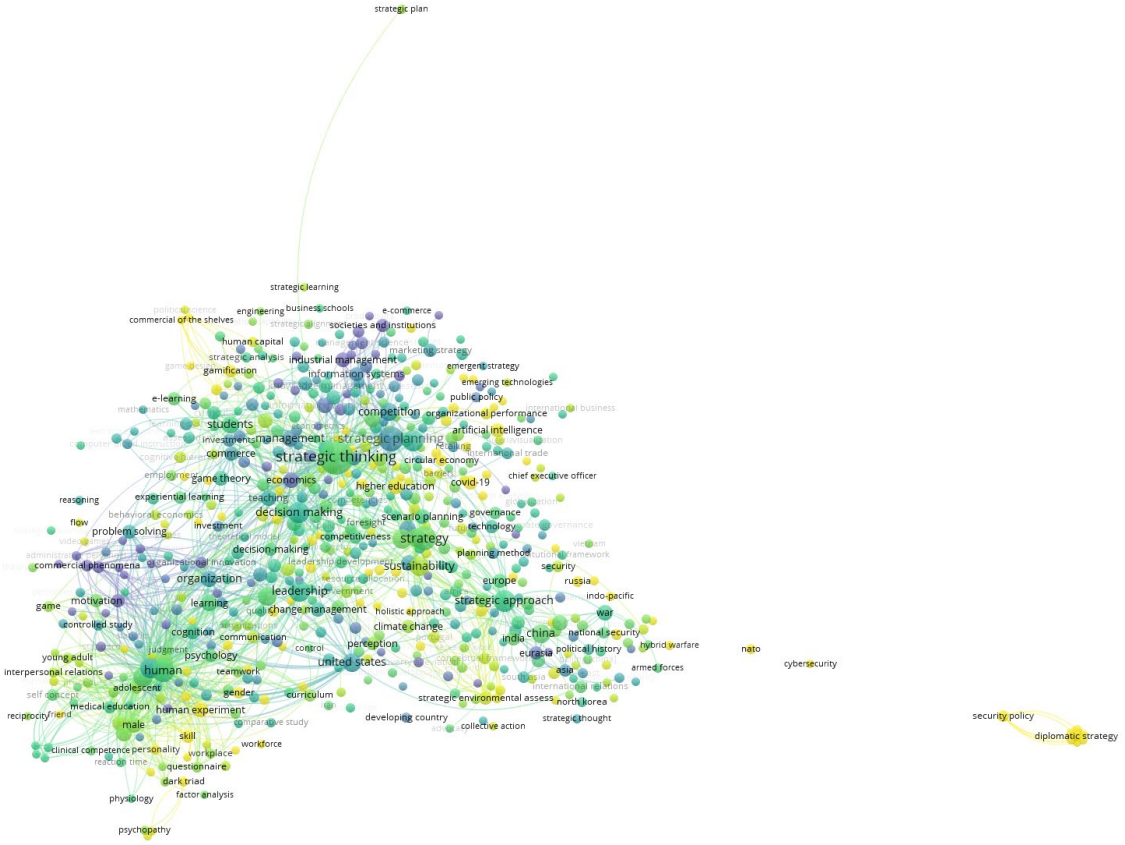

Figure 1: Results of the co-citation analysis, visualized with VosViewer

However, many of the extracted keywords related to strategic thinking still contained a substantial amount of "informational noise." To focus on truly significant aspects of the topic and eliminate noise, we excluded the following categories of keywords:

- non-informative general terms (e.g., human, article) and those too broad or overly generic relative to the studied concept (e.g., business, business strategy);

- geographic references, including city names (Beijing [China]), country names (Finland, Ireland), regions (Indo-Pacific, Europe), as well as political and military alliances (European Union, NATO);
- political and military terminology (democracy, diplomatic tactics, etc.);
- keywords related to the COVID-19 pandemic (covid-19, pandemic, etc.);
- keywords describing the development of specific strategies in various domains (sustainable development goal, supply chain management, etc.).

As a result, the number of keywords was reduced to 367 (see Figure 2.)

Figure 2: The tag cloud was generated using the 367 resulting keywords, sized according to their importance. Terms with higher scores are rendered larger.

The authors acknowledges that certain insights found in publications on military and political topics or sustainability strategies will not be included in this study and considers this to be a limitation of the research. However, this approach was chosen deliberately: the study focuses on universal aspects of strategic thinking in business, the transformation of strategic thinking approaches due to the emergence of new technologies (hence the retention of terms such as artificial intelligence), and the challenges of teaching strategic thinking and other meta-skills (see (Zinchenko et al., 2024) and (Gordienko & Bagrationi, 2024)), rather than industry-specific or military-political strategies. At the same time, studies where keywords directly pertain to the subject of inquiry are still represented in the research field. However, works that do not meet the developed inclusion criteria (e.g., those focusing on military strategy) were excluded from further analysis.

Before calculating the importance of each keyword, all indicators were normalized to account for their values relative to one another. To determine keyword significance, an integral metric was used, taking into account citation frequency, link strength, and citation impact (Ding et al., 2014; van Eck & Waltman, 2010; Newman, 2004). This resulted in a final pool of 367 keywords. To minimise construct-validity threats, we triangulated keyword statistics with qualitative coding of seminal studies on strategic coherence, ambidexterity, and dynamic capabilities (Nath & Sudharshan, 1994; Teece, 2007).

3. Findings and Discussion

In the 21st century, strategic thinking is no longer a linear, hierarchical process but rather a dynamic, integrative capability that combines logical analysis, systemic perspective, intuitive judgment, and creative problem-solving. Organizations that cultivate cognitive diversity and empower employees at all levels to engage in strategic thinking will be better equipped to navigate complexity and achieve sustainable competitive advantage (Rumelt, 2011). We further show that cultivating individual-level strategic thinking is insufficient unless complemented by organisation-level mechanisms (e.g., routines for sensing, seizing, and re-configuring) that generate a specific form of dynamic capabilities – strategic coherence.

3.1 The Changing Role of Strategic Thinking due to Technological and Organizational Shifts

Historically, strategic thinking was considered an exclusive function of senior executives, who formulated long-term plans and cascaded them down the hierarchy (Mintzberg, 1994). However, the increasing complexity of digital ecosystems and market volatility have eroded the effectiveness of centralized strategy-making, giving rise to more decentralized and adaptive approaches (Teece et al., 2016): strategic thinking is no longer confined to top executives. Digital transformation, shifting organizational structures, and the rise of platform economies have fundamentally altered the nature of strategic decision-making (Nambisan et al., 2019; Verhoef et al., 2021). Two key trends stand out: (1) the decentralization of strategic thinking – where employees at all levels are expected to engage in strategic decision-making–and (2) the evolving competencies required of leaders in the face of digital disruption and rapid market shifts. A third, often overlooked, trend is the rise of enabling leadership practices that weave together bottom-up initiatives and top-down intent to sustain coherence (Lusiani & Langley, 2018)

Organizations operating in platform-based business models (e.g., Amazon, Google, Uber) require decentralized strategic decision-making, where employees, partners, and even customers contribute to shaping strategy in real time (Gawer, 2014). Studies on self-organizing teams highlight how distributed strategic thinking fosters agility and responsiveness in uncertain environments (Felin & Powell, 2016). For instance, employees are increasingly empowered to act as internal entrepreneurs, making strategic decisions about product development, market expansion, and operational efficiencies (Kuratko et al., 2021). The use of real-time analytics, AI-driven insights, and decision-support systems allows mid- and lower-level employees to make strategic choices traditionally reserved for senior management (Shrestha et al., 2019). Companies leverage open innovation ecosystems, where external stakeholders – customers, developers, and research institutions – actively contribute to strategic innovation (Chesbrough, 2010). These developments align with complexity theory, which suggests that organizations function as adaptive systems, where decision-making authority needs to be distributed for the system to remain resilient in turbulent environments (Dooley, 1997).

Advancements in AI, big data analytics, and automation have further enabled decentralized strategic thinking (Brynjolfsson & McAfee, 2017). AI-powered decision augmentation tools assist employees by providing predictive insights, scenario simulations, and risk assessments, allowing them to engage in real-time strategy formulation (Davenport & Ronanki, 2018). For example, AI-driven decision-making is transforming marketing strategy, supply chain optimization and strategic HR planning: AI-driven customer segmentation allows frontline marketing teams to adjust branding strategies dynamically, rather than waiting for centralized directives (Wedel & Kannan, 2016), while predictive analytics empower mid-level managers to reconfigure supply chains in response to external shocks such as geopolitical instability or raw material shortages (Ivanov et al., 2019), whereas AI-based workforce analytics help HR teams anticipate skill gaps and workforce trends, aligning recruitment and training initiatives with long-term strategic goals (Chattopadhyay et al., 2023). The implications of these technological advances are profound: decision-making is no longer confined to C-suite executives but is increasingly democratized across all levels of the organization (Nambisan et al., 2019).

3.2 Strategic Coherence as a Future Research Avenue

The bibliometric map (Table 1) reveals that dynamic capabilities and strategic management cluster closely with one another: Over the past three decades, research in strategic management has evolved from static "structure-strategy-performance" models to process-oriented approaches that place dynamic capabilities at the center (Teece, 2007). Building on Teece's (2007) sensing-seizing-reconfiguring framework, scholars should explore how individual-level strategic-thinking skills (e.g., analytical reasoning, systems thinking, intuition, creativity) aggregate into routines that enact vertical and horizontal coherence. Multi-level designs – linking cognitive micro-processes to firm-level outcomes – are particularly fertile. Strategic coherence is not a static end-state but a "dynamic balance" (Mielcarek, 2023) that oscillates as firms pivot between exploration and exploitation. Lusiani and Langley (2018) show that enabling leadership – the practice bundle of fueling, shaping, and entwining – binds top-down intent with bottom-up initiatives. Future work could test how such mechanisms moderate the coherence-performance link in settings characterized by pluralistic logics (e.g., healthcare, platform ecosystems). As AI-driven decision augmentation diffuses, algorithms increasingly participate in strategy formulation. Researchers should examine how human-AI complementarity affects the construction and maintenance of strategic coherence. Coherence may enable, constrain, or coexist with organizational ambidexterity. Future research could uncover boundary conditions under which high coherence supports simultaneous exploration and exploitation.

4. Conclusion

The paper contributes to the growing body of research on strategic thinking by challenging traditional assumptions and proposing a more holistic and adaptive model that reflects the realities of modern, technology-driven organizations. Specifically, we argue that strategic coherence is the missing integrator that links dispersed strategic-thinking capabilities to firm-level performance outcomes. It is built upon the following ideas: (1) strategic thinking is no longer a linear, rational process but an integrative cognitive capability – requiring a balance between analytical rigor, systems thinking, intuitive decision-making, and creativity (Dane & Pratt, 2007; Kahneman, 2011); (2) strategic decision-making is increasingly decentralized – enabled by AI, big data, and open innovation networks, allowing employees at all levels to contribute to strategic processes (Nambisan et al., 2019); (3) leadership competencies are shifting – future-ready leaders must develop strategic agility, digital literacy, and the ability to manage uncertainty in complex ecosystems (Westerman et al., 2014).

Traditionally, upper echelons theory (Hambrick & Mason, 1984) emphasized how top executives' personality traits, motivations, identities, and values set the stage for strategic intent (Zhang & Sternberg, 2005; Armstrong & Hird, 2009). With the emergence of platform economies and digital ecosystems (Verhoef et al., 2021; Nambisan, Wright, & Feldman, 2019), however, strategic thinking is no longer an exclusive leadership skill. Today, every employee can act as an independent agent – a sort of entrepreneur – seeking to maximize personal earnings and professional growth. Hence, each employee is both "gifted" and "limited" by their individual traits in how they develop strategic-thinking capabilities. Yet employees can learn to think strategically, albeit with varying degrees of success.

With the shift to digital ecosystems, strategic thinking becomes integral to the day-to-day responsibilities of everyone in the organization – even temporary contractors such as freelancers – because they, too, must focus on strategic thinking to stay competitive in a world of high uncertainty. Moreover, the integration of AI and analytics platforms has paved the way for human – AI partnerships, wherein AI handles routine tasks and the human counterpart is responsible for strategic interpretation and goal setting (Hess et al., 2016; Nambisan et al., 2019). A key driver of long-term organizational competitiveness in this context – achieved through strategic learning principles – is the company's attention to developing employees' meta-skills, especially strategic thinking (Liedtka, 1998a; Goldman, Scott, & Follman, 2015; Edmondson, 2018; Harvey et al., 2022).

The strategic process is best described as a synthetic form of thinking that integrates its analytical (Mintzberg, 1987), creative (Shalley et al., 2004), systemic (Senge, 1990), and intuitive (Dane & Pratt, 2007) dimensions. As the pace and intensity of change continue to accelerate (Bagrationi, 2023; Bagrationi et al., 2021), intuition and creativity play an increasingly prominent role in strategic decision-making (Khatri & Ng, 2000; Shalley et al., 2004). In practical terms, an analytical approach must be augmented by creative and intuitive elements that make it possible to arrive at nontrivial solutions (Sadler-Smith & Shefy, 2004). Drawing on the key trends that define today's research landscape, we propose the following updated conceptualization: Strategic thinking is a hypothesis-driven, creative, intuitive–analytical process for generating long-term goals and strategic tasks (along with solutions for achieving them). It aims to build a systemic vision of the future and to continually reinterpret (based on new inputs) the goals and tasks that arise from the interplay of internal (psychological) and external (situational) factors that shape an organization or an individual's behaviour.

Providing a conceptual framework that integrates cognitive and technological dimensions of strategic thinking, the analysis shows that the concept of strategic thinking is currently undergoing a paradigm shift. As AI and digital platforms continue to evolve, the question is no longer whether strategic thinking must change – but how organizations can best adapt to this transformation: presumably, organizations that embrace decentralized decision-making will be better positioned to navigate uncertainty, drive innovation, and sustain long-term competitiveness.

The research has several limitations. First, the bibliometric corpus is restricted to Scopus indexing and English-language publications; seminal non-English works may be under-represented. Second, our keyword-filtering rules excluded military, political, and COVID-19-related strategy studies, narrowing external validity. Finally, while we adopt a dynamic-capabilities lens, other theoretical frames were not systematically examined.

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AI declaration: AI (ChatGPT o1) was used to enhance language quality

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