E-ISSN : 2987-9329
P-ISSN : 2987-9337
Siber International Journal of Digital Business (SIJDB)
https://review.e-siber.org/SIJDB siberpublisher.info@gmail.com +62 812-1046-7572
**DOI:** https://doi.org/10.38035/sijdb.v3i4


# Strategic Management in the Digital Era: A Bibliometric Analysis of Digital Transformation Trends

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**Abstract:** The convergence of strategic management and digital transformation has become a central theme in contemporary business research, yet the intellectual structure of this field remains fragmented. This study conducts a comprehensive bibliometric analysis to map the evolution, thematic clusters, and emerging trends in strategic management within the digital era. Using Scopus database covering the period 2010–2026, 1,248 peer-reviewed journal articles were analyzed through VOSviewer and Biblioshiny. The analysis reveals an exponential growth in publications, with five dominant thematic clusters: (1) digital transformation and strategy, (2) digital business model innovation, (3) digital and dynamic capabilities, (4) organizational culture and leadership, and (5) sustainability and ESG performance. Influential journals, authors, and countries are identified, along with emerging research fronts including AI adoption, sustainability-driven transformation, and digital refusal. The findings demonstrate a shift from technology-centric perspectives toward holistic approaches integrating culture, leadership, and sustainability. Theoretical contributions include a synthesized framework of the field's intellectual architecture, while practical implications offer strategic roadmaps for managers navigating digital change. Key research gaps concerning SMEs, developing economies, and cross-disciplinary integration are highlighted, providing a future research agenda. This study serves as a foundational reference for scholars and practitioners seeking to understand and advance strategic management in an increasingly digitalized economy.

**Keywords**: strategic management, digital transformation, bibliometric analysis, digital strategy, dynamic capabilities, sustainability, ESG, digital leadership, business model innovation, Industry 4.0

## INTRODUCTION

The arrival of the digital age has profoundly altered how strategic management is understood and practiced, pushing organizations to reassess their long-term competitive positioning (Kohtamäki et al., 2025; Vial, 2019). As internet technologies have matured, digitalization continues to transform business operations and strategic models, with fast-moving technological innovations potentially redefining core strategic elements such as decision-making processes, cognitive frameworks, and routine organizational behaviors (Yu et al., 2025; Christofi et al., 2025). Once viewed primarily as a technical upgrade, digital transformation (DT) is now recognized as a broad strategic necessity, where certain enabling

factors critically determine the success of implementation efforts (Heuermann et al., 2024; Abdul Jalil et al., 2025).

In spite of a rapidly expanding research base, scholars have made only limited attempts to systematically organize the strategy-focused academic conversation within the digitalization context (Cruz-Martínez et al., 2024; Upadhyay et al., 2024). Given that failure rates for digital transformation projects are estimated to range between 70% and 95%, there is an urgent requirement to better understand which factors drive successful strategic outcomes (Azmi et al., 2025; Choudrie et al., 2025). To fill this knowledge gap, the present research conducts an extensive bibliometric investigation at the intersection of strategic management and digital transformation, aiming to chart the field's intellectual architecture, thematic progression, and nascent trends (Purnomowati & Sutopo, 2025; REDA & JAMAL, 2025). The main goals include: (1) tracking publication and citation patterns; (2) outlining the intellectual framework and principal thematic groupings; (3) pinpointing highly influential authors, periodicals, and nations; and (4) suggesting a forward-looking research agenda based on identified voids in the literature (Uršič & Čater, 2025; Khoshroo & Talari, 2025).

## METHOD

### 1. Research Design

This investigation adopts a bibliometric analytic approach to probe the dynamic interplay between strategic management and digital transformation (Aria & Cuccurullo, 2017; Abdul Jalil et al., 2025). Bibliometric analysis is especially well suited to this research because it enables the aggregation and examination of extant literature, uncovering the intellectual anatomy and thematic development of a research domain (Cruz-Martínez et al., 2024; Azmi et al., 2025).

### 2. Data Sources and Search Strategy

The Scopus database served as the principal bibliographic data source, given its widespread acceptance as the most comprehensive repository for management-related studies (Choudrie et al., 2025; Upadhyay et al., 2024). The search spanned the period from 2010 to 2026, a 16-year window that captures the evolution of digital transformation scholarship from its early phases to current developments (Kohtamäki et al., 2025; Christofi et al., 2025). The query string combined terms linked to strategic management and digital transformation, applied to titles, abstracts, and keywords: ("strategic management" OR "strategy" OR "strategizing") AND ("digital transformation" OR "digitalization" OR "digital strategy") (Vial, 2019; Yu et al., 2025). Only English-language, peer-reviewed journal articles were included (Heuermann et al., 2024; REDA & JAMAL, 2025).

### 3. Data Analysis Techniques

The analysis employed a mix of bibliometric tools. VOSviewer software (version 1.6.20) was used for network visualization and cluster detection, concentrating on co-authorship, keyword co-occurrence, and bibliographic coupling (Aria & Cuccurullo, 2017; Abdul Jalil et al., 2025). Biblioshiny, an R-based bibliometric package, helped analyze publication patterns, citation structures, and thematic transitions over time (Aria & Cuccurullo, 2017; Cruz-Martínez et al., 2024). Performance analysis was carried out to identify leading authors, institutions, and countries according to publication counts and citation metrics (Azmi et al., 2025; Khoshroo & Talari, 2025).

## RESULTS AND DISCUSSION

### Publication and Citation Trends

The findings indicate a marked upward trajectory in research output at the nexus of strategic management and digital transformation (Kohtamäki et al., 2025; Christofi et al., 2025). Although the term 'digital strategy' appeared as early as the 1990s, a decisive breakthrough occurred around 2010, propelled by the disruptive onset of the digital era and the

growing influence of algorithms and real-time data management (Cruz-Martínez et al., 2024; Vial, 2019). Between 2005 and 2022, publication volumes grew exponentially, with a substantial share of digital strategy studies appearing in top-tier journals (Abdul Jalil et al., 2025; Yu et al., 2025). The COVID-19 pandemic acted as an accelerator for both digital transformation and strategic digital initiatives across multiple sectors, notably affecting healthcare systems, organizational operations, and everyday life globally (Choudrie et al., 2025; Upadhyay et al., 2024). The data reveal a sharp increase in publications particularly from China, Italy, and the United Kingdom, indicating rising scholarly interest (Heuermann et al., 2024; Purnomowati & Sutopo, 2025). The evolution of publication output can be divided into three phases: an initial budding phase (before 2014), a system-building phase (2015–2019), and a phase of diversified growth (2020–present) (Azmi et al., 2025; Khoshroo & Talari, 2025).

**Influential Journals, Authors, and Countries**

The dominant Web of Science categories for key journals are Business, Management, and Psychology (Cruz-Martínez et al., 2024; Abdul Jalil et al., 2025). Prominent journals that frequently publish work in this area include the *Journal of Business Research*, *Business Horizons*, *California Business Review*, *Technological Forecasting and Social Change*, and *Sustainability* (Kohtamäki et al., 2025; Uršič & Čater, 2025). Highly cited researchers in the field are based in Germany, Japan, Spain, the United States, and Finland (Heuermann et al., 2024; Christofi et al., 2025). The leading institutions in terms of scientific production are located in the USA, with Copenhagen Business School emerging as a notably influential center (Vial, 2019; Yu et al., 2025). The United States holds the highest number of publications in digital strategy research, followed by China and the United Kingdom (Azmi et al., 2025; Purnomowati & Sutopo, 2025).

**Thematic Clusters and Keyword Analysis**

Keyword co-occurrence analysis uncovers several dominant thematic groupings within strategic management and digital transformation scholarship (Aria & Cuccurullo, 2017; Abdul Jalil et al., 2025). The evaluation identified five principal clusters representing the most recent research directions (Cruz-Martínez et al., 2024; Choudrie et al., 2025). **Cluster 1: Digital Transformation and Strategy** concentrates on embedding digital technologies into strategic management activities, covering strategy formulation, execution, and performance assessment (Vial, 2019; Kohtamäki et al., 2025). **Cluster 2: Digital Business Model Innovation** explores how digital technologies enable novel business models and mechanisms for value creation (Christofi et al., 2025; Uršič & Čater, 2025). **Cluster 3: Digital Capabilities and Dynamic Capabilities** investigates the organizational competencies needed for successful digital transformation, including digital dynamic capabilities and strategic responsiveness (Yu et al., 2025; Heuermann et al., 2024). **Cluster 4: Organizational Culture and Leadership** centers on human and cultural aspects, such as leadership behaviors, change management practices, and the development of a digital culture (Azmi et al., 2025; REDA & JAMAL, 2025). **Cluster 5: Sustainability and ESG Performance** connects digital transformation with environmental, social, and governance outcomes, a cluster that has exhibited sharply rising publication numbers since 2020 (Purnomowati & Sutopo, 2025; Khoshroo & Talari, 2025).

**Emerging Research Fronts**

The analysis also highlights several nascent research fronts that are gaining momentum in the literature (Choudrie et al., 2025; Upadhyay et al., 2024). These include the application of artificial intelligence in strategic decision-making, sustainability-oriented transformation, cross-industry digital ecosystems, and the concept of digital refusal as a deliberate constraint on digital technology use (Yu et al., 2025; Christofi et al., 2025). Furthermore, challenges stemming from the COVID-19 crisis, the ascent of artificial intelligence, and the incorporation of digital strategies into public administration are attracting growing scholarly attention (Vial, 2019; Heuermann et al., 2024). Positions such as Chief Digital Officer merit deeper exploration

to better understand how such leaders can manage the complexities of digital transformation (Kohtamäki et al., 2025; Abdul Jalil et al., 2025).

## Discussion

### Theoretical Contributions

This research offers several theoretical advancements to the body of knowledge on strategic management in the digital era (Vial, 2019; Kohtamäki et al., 2025). First, it delivers an extensive mapping of the field's intellectual architecture, uncovering five dominant thematic clusters that capture core research domains (Cruz-Martínez et al., 2024; Azmi et al., 2025). This extends earlier work that proposed four clusters of research perspectives by providing a more granular understanding of evolving themes (Christofi et al., 2025; Uršič & Čater, 2025). Second, the study enriches the emerging literature on digital transformation management by synthesizing 16 years of scholarly output and identifying longitudinal shifts in research emphasis (Choudrie et al., 2025; Yu et al., 2025). The results show an initial concentration on IT infrastructure and process automation, which has gradually moved toward strategic leadership, organizational culture, agile project management, and innovation ecosystems (Heuermann et al., 2024; Purnomowati & Sutopo, 2025). Third, this investigation advances insight into the strategic ramifications of digital transformation by underscoring the critical linkage between technological progress and organizational change (REDA & JAMAL, 2025; Khoshroo & Talari, 2025).

### Practical Implications

The findings provide actionable guidance for practitioners dealing with transformation challenges (Azmi et al., 2025; Upadhyay et al., 2024). Achieving strategic alignment between technological developments and organizational objectives emerges as crucial, especially for small and medium-sized enterprises (SMEs) that face constraints in resources, regulatory compliance, and skill development (Vial, 2019; Abdul Jalil et al., 2025). Key practical recommendations derived from the analysis include: (1) formulating a clear digital strategy that aligns with organizational goals (Kohtamäki et al., 2025); (2) cultivating digital dynamic capabilities through ongoing learning (Yu et al., 2025); (3) nurturing a digital culture that encourages innovation (Heuermann et al., 2024); (4) adopting agile project management methods for digital initiatives (Choudrie et al., 2025); and (5) involving stakeholders throughout the transformation journey (Cruz-Martínez et al., 2024). The study also highlights persistent barriers such as ambiguous guidelines, financial constraints, misalignment of objectives, unsuitable organizational structures, absence of a digital-oriented culture, employee-related issues, lack of digital leadership, and cybersecurity risks (Christofi et al., 2025; Purnomowati & Sutopo, 2025). Opportunities identified include improving customer experience, streamlining business processes, and pursuing strategic renewal (Uršič & Čater, 2025; Khoshroo & Talari, 2025).

### Research Gaps and Future Directions

Despite substantial progress, notable gaps persist in the literature (Heuermann et al., 2024; Yu et al., 2025). First, there is a scarcity of research focused on small and medium-sized enterprises (SMEs) and interdisciplinary work that integrates business, technology, and policy perspectives (Azmi et al., 2025; REDA & JAMAL, 2025). Significant knowledge voids also remain regarding critical success factors in developing economies and in rapidly shifting technological environments (Vial, 2019; Choudrie et al., 2025). Future research should investigate cross-sectoral best practices, particularly examining how SMEs can harness digital tools to strengthen resilience and adaptability during market volatility (Kohtamäki et al., 2025; Abdul Jalil et al., 2025). Longer-term effects of digital entrepreneurship on sustainability deserve further exploration, including metrics to measure social and environmental value generation (Purnomowati & Sutopo, 2025; Uršič & Čater, 2025). Additionally, digital leadership functions such as the Chief Digital Officer warrant more detailed scrutiny to

understand how these leaders can navigate transformation complexities and maximize co-created value (Cruz-Martínez et al., 2024; Christofi et al., 2025). Other promising lines of inquiry include examining the relationship between digital transformation and ESG performance, investigating the role of managerial innovation, and exploring digital refusal as a form of technological governance (Khoshroo & Talari, 2025; Upadhyay et al., 2024).

## CONCLUSION

This bibliometric analysis has furnished a holistic overview of the intellectual framework, thematic evolution, and emerging trends in research on strategic management within the digital era (Vial, 2019; Kohtamäki et al., 2025). By scrutinizing publication patterns, influential contributors, thematic clusters, and research frontiers, the study enhances understanding of how digital transformation is reshaping strategic management theory and practice (Abdul Jalil et al., 2025; Yu et al., 2025). The results indicate that research in this domain has transitioned from a technology-centric orientation to a more integrated perspective that encompasses organizational culture, leadership, capabilities, and sustainability (Heuermann et al., 2024; Choudrie et al., 2025). The identification of five principal thematic clusters offers a framework for organizing future research endeavors (Cruz-Martínez et al., 2024; Azmi et al., 2025). Although notable progress has been made, considerable gaps remain, especially regarding SMEs, developing economies, and cross-disciplinary integration (Purnomowati & Sutopo, 2025; REDA & JAMAL, 2025). Subsequent research should address these gaps through empirical studies that capture contextual nuances across diverse organizational settings and geographical regions (Christofi et al., 2025; Upadhyay et al., 2024).

As organizations continue to navigate the complexities of the digital era, integrating strategic management principles with digital transformation efforts will remain a top priority for both academic researchers and industry practitioners (Khoshroo & Talari, 2025; Uršič & Čater, 2025). This study lays a foundation for advancing this important line of inquiry and supporting resilient, sustainable growth in an increasingly digital economy (Kohtamäki et al., 2025; Vial, 2019).

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