

STRATEGIC MANAGEMENT ACCOUNTING AND COMPETITIVE ADVANTAGE: A SCOPUS BIBLIOMETRIC ANALYSIS



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Amira Aulia ✉¹, Syaiful Rahman Soenaria², Nanny Dewi Tanzil³

^{1,2,3} Accounting Study Program, Faculty of Economics and Business,
Universitas Padjadjaran, Indonesia

Corresponding Author: amira23007@mail.unpad.ac.id ✉¹

Jl. Japati No.2, Lebakgede, Cobleng, Bandung, West Java, Indonesia

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Abstract

This study addresses the limited understanding of the intellectual structure and evolution of research on strategic management accounting (SMA) and competitive advantage. The study aims at mapping key themes and emerging directions in this field. Using a bibliometric approach, 159 Scopus-indexed documents were analyzed through co-word and thematic mapping techniques. The findings show increased publication growth after 2018 and reveal a dual structure: a traditional core focused on cost and competition, and an emerging stream linking SMA to decision-making and performance. The study implies that SMA is evolving as an information capability, while AI, supply chain, and sustainability remain promising research areas.

INTRODUCTION

Over the past decade, business environments have increasingly been described through VUCA conditions. Recent studies have continued to characterize VUCA as a multidimensional environment in which volatility, uncertainty, complexity, and ambiguity create distinct strategic challenges for organizations (Taskan et al., 2022). Teece et al. (2016) argued that deep uncertainty heightened the need for organizational agility and dynamic capabilities. Under such conditions, firms are challenged not merely to achieve competitive advantage, but to sustain it while interpreting and acting on changing information faster and more coherently than rivals.

Porter (1985) framed competitive advantage around the search for a profitable and sustainable position. Barney (1991) later explained that sustained advantage depended on resources and capabilities that were valuable, rare, difficult to imitate, and non-substitutable. Read together, these perspectives imply that in turbulent environments, the durability of advantage depends not only on what resources a firm possesses, but also on the organizational capabilities through which it senses change, interprets strategic issues, and mobilizes knowledge into coordinated action.

This capability logic is especially relevant in information-intensive settings. Zárraga-Rodríguez and Álvarez (2015) conceptualized information capability through the practices and competencies that allowed firms to develop and use high-quality information. Cao et al. (2019) showed that information processing capability was positively linked to competitive advantage and that decision-making effectiveness partially explained this relationship. Likewise, Aydiner et al. (2019) demonstrated that information system capabilities affected firm performance through decision-making performance and business-process performance. Together, these studies suggest that information matters strategically not because it merely exists, but because organizations build the capability to transform it into effective action.

This issue is central to management accounting. Ojra et al. (2021) noted that management accounting was widely criticized in the 1980s for being too internally focused and for offering limited support for strategy formulation and sustained competitiveness. Against this background, strategic management accounting (SMA) emerged to extend accounting beyond operational control toward externally oriented and strategically relevant information. Since Simmonds (1981), SMA has generally been understood as the provision and analysis of information about the firm and its competitors for use in developing and monitoring strategy.

Subsequent literature widened that understanding. Roslender and Hart (2002) argued that SMA was best understood as accounting for strategic positioning because it integrated management accounting and marketing insights within a strategic management framework. Cadez and Guiding (2008) later distinguished between two complementary SMA perspectives: strategically oriented techniques and the participation of management accountants in strategic processes. More recent reviews by Abdullah et al. (2022) and Ojra et al. (2021) reinforced this broader view by showing that SMA research spanned techniques, contingency factors, and organizational outcomes rather than a narrow list of tools.

Building on RBV, the present study argues that SMA should be interpreted not only as a collection of techniques but also as an enabling mechanism through which firms develop information capability. The logic is that SMA helps organizations generate, combine, and govern strategically relevant information, thereby making accounting and market information more actionable in decision processes. This reading is supported by Su et al. (2023), who found a positive association between the use of SMA practices and competitive advantage. It is also consistent with Baird et al. (2024), who showed that management accounting practices could strengthen the relationship between competitive pressures and competitive advantage. In this sense, SMA matters strategically because it contributes to the capability conditions under which advantage can be developed and sustained. This framework is illustrated in Figure 1.

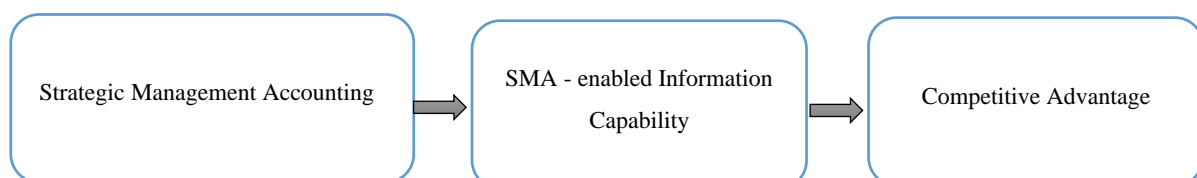


Figure 1. Thematic Framework of SMA, information capability, and competitive advantage

The strategic relevance of SMA has become more visible as digitalization reshapes management accounting. Bhimani (2020) showed that digitalization was profoundly affecting how enterprises function and expanding the depth, breadth, and variety of data available to management accounting

research. Möller et al. (2020) similarly argued that digitalization might disrupt management accounting practices as well as the role of the controller. More recently, Abbas (2025) reported that artificial intelligence and related digital technologies were transforming accounting information, decision processes, and the skill profile of management accountants. Taken together, these developments suggest that SMA is increasingly tied to the organizational problem of how information becomes strategically actionable.

To address this gap, this study conducts a longitudinal bibliometric analysis of the literature on SMA and competitive advantage. Bibliometric analysis is a quantitative review approach used to examine the development, structure, and dynamics of a body of literature through bibliographic metadata such as keywords, citations, and publication sources (Donthu et al., 2021). Compared with conventional literature reviews, bibliometric analysis offers a more systematic and replicable way to identify publication trends, influential contributors, thematic patterns, and research gaps. In management and accounting research, bibliometric studies generally combine performance analysis and science mapping. Performance analysis focuses on productivity and impact indicators, such as publication output, citation counts, and influential sources, while science mapping reveals the conceptual, intellectual, and social structures of a field (Aria & Cuccurullo, 2017; Donthu et al., 2021). This methodological perspective is relevant to the present study because it enables a clearer understanding of how the SMA and competitive advantage literature has evolved and how its main themes are organized.

Previous bibliometric studies have examined strategic management accounting and related areas from broader perspectives. For example, Pires et al., (2024) explored the conceptual structure of SMA through co-word analysis, while Suriyanti et al., (2024) mapped research trends in strategic management accounting techniques and identified emerging opportunities related to artificial intelligence and big data analytics. However, these studies mainly addressed SMA or SMAT as broad domains and did not specifically focus on the intersection between SMA and competitive advantage. An important component of bibliometric science mapping is network-based analysis, including collaborative network analysis, which helps reveal the social structure of a field through relationships among authors, institutions, or countries. In addition, co-word analysis is used to identify conceptual structures through keyword relationships, while thematic mapping helps classify research themes according to their relevance and level of development. Together, these approaches provide an appropriate methodological basis for examining the thematic evolution and intellectual structure of the SMA–competitive advantage literature.

Against this background, this study conducts a longitudinal bibliometric analysis of the literature on SMA and competitive advantage. The study aims at clarifying how this research interface has evolved, what thematic clusters and intellectual structures define it, and what gaps may guide future work on how SMA supports competitive advantage. Specifically, the study identifies publication trends, examines thematic evolution and keyword-based structures, maps the intellectual structure of the field, and identifies underdeveloped areas for future research. This study makes three main contributions. First, it provides a focused synthesis of the SMA–competitive advantage literature by identifying its thematic clusters, intellectual structure, and evolutionary patterns. Second, it offers a capability-based interpretation of SMA by linking the literature to the notion of information capability within an RBV framework. Third, it identifies underdeveloped research areas that represent important directions for future research. In line with bibliometric objectives, particular attention is given to the evolution of themes and keyword-based structures in the SMA competitive advantage literature to clarify how the field has developed over time. Accordingly, this study addresses the following research questions:

1. How has the research landscape on Strategic Management Accounting and competitive advantage evolved?
2. What thematic clusters, intellectual structures, and thematic evolution have characterized this body of literature?

What gaps or underdeveloped intersections can be identified to guide future research on how SMA supports competitive advantage?

METHOD

The data collection process in this study was carried out through a structured and sequential procedure to ensure transparency and methodological clarity. This procedure included defining the scope of the study, retrieving relevant publications from the Scopus database, and applying screening criteria to obtain the final dataset for analysis. To provide a clearer overview of this workflow, the stages of data collection and screening are presented in Figure 2.

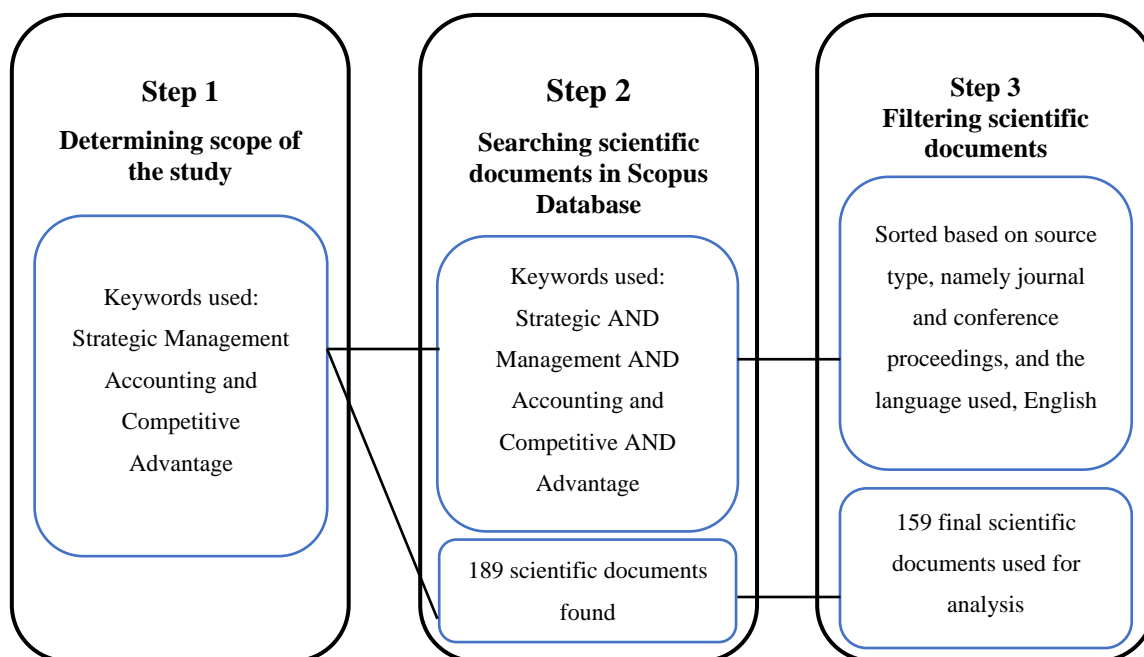


Figure 2. Data collection steps

The research stages are presented visually in Figure 2 to clarify the data sources and the data collection workflow. In the first step, the study defined its scope by focusing on literature that examines the relationship between SMA and competitive advantage. This scope limitation allowed a more focused mapping of the literature, covering publication trends, dominant themes and clusters, and future research opportunities, while avoiding broader discussions of general management accounting or corporate strategy that were not directly related to SMA (Donthu et al., 2021).

The second step involved retrieving scientific documents from Scopus, which is widely recognized as a curated and reputable database for multidisciplinary academic literature (Baas et al., 2020). The search used the keyword string “Strategic AND Management AND Accounting and Competitive AND Advantage” and returned 189 documents as the initial pool for analysis.

In the third step, documents were screened using criteria that limited publication types to journal articles and conference proceedings and included only English-language publications. After screening, 159 documents remained and were considered eligible for further analysis. Journal articles and conference proceedings were selected because they typically undergo peer review, which supports recognized scholarly standards (Handoyo, 2024b). The English-language restriction was applied because English is the primary language of global scientific communication, enabling wider dissemination and stronger comparability of research findings (Cinpolat, 2022; Handoyo, 2024b).

Bibliographic data were retrieved from the Scopus database. Scopus was selected because it provides structured bibliographic metadata suitable for bibliometric analysis. The analysis was conducted using the Bibliometrix package through the Biblioshiny interface in RStudio, which was used to generate descriptive indicators, keyword-based analyses, and network visualizations (Aria & Cuccurullo, 2017; Donthu et al., 2021).

Based on these procedures, the bibliometric analysis in this study is structured into three complementary analytical components: descriptive analysis, word analysis, and network analysis. Each component serves a distinct purpose in capturing publication trends, thematic patterns, and structural relationships within the SMA and competitive advantage literature. A summary of these analytical components and their specific applications in this study is presented in Table 1.

Table 1. Description of bibliometric analysis

Analysis	Description	Aspects used in the study
Descriptive Analysis	Descriptive analysis is employed to examine a body of scientific publications by integrating their key characteristics and distribution patterns. This method offers a general overview of how research in a particular field has developed, including trends in publication output, growth over time, and temporal patterns of scholarly production (Handoyo, 2024b).	<ul style="list-style-type: none"> ● Main information ● Annual scientific production ● Sources' Local Impact
Word Analysis	Word analysis examines the textual content of academic literature through the systematic assessment of frequently used words or phrases across a set of documents. This approach facilitates the identification of dominant themes, emerging research trends, and conceptual linkages embedded within scholarly discourse (Handoyo, 2024a).	<ul style="list-style-type: none"> ● Word frequency ● Trending topics
Network Analysis	Network analysis focuses on analyzing the relationships and interactions among core components of the literature, including authors, institutions, journals, and publications. By representing these relationships as networks, this technique enables a clearer understanding of knowledge structures, collaboration patterns, and the overall dynamics of research development within a field (Handoyo, 2024b).	<ul style="list-style-type: none"> ● Co-occurrence networks analysis ● Thematic Map

RESULTS

The analytical dimensions employed in this study are summarised in Table 2. The dataset spans the period from 1989 to 2025 and comprises 159 documents sourced from 115 publication outlets, including journals and conference proceedings. The annual publication growth rate of 9.1 percent reflects a steady increase in scholarly output related to Strategic Management Accounting (SMA) and competitive advantage, indicating growing academic interest in this research domain. In bibliometric studies, increases in publication output over time are commonly used to describe the development and evolution of a research field (Aria & Cuccurullo, 2017).

Table 2. Description of Data

Description	Results
MAIN INFORMATION ABOUT DATA	
Timespan	1989:2025
Sources (Journals, conference proceedings)	115
Documents	159
Annual Growth Rate %	9,1
Document Average Age	10,5
Average citations per doc	28
DOCUMENT CONTENTS	
Keywords Plus (ID)	515
Author's Keywords (DE)	527
AUTHORS	
Authors	401
Authors of single-authored docs	35
AUTHORS COLLABORATION	
Single-authored docs	38
Co-Authors per Doc	2,65
International co-authorships %	17,61
DOCUMENT TYPES	
article	120
conference paper	26
conference review	2
review	11

The documents analyzed have an average age of 10.5 years and receive an average of 28 citations per document, suggesting a moderate level of scholarly impact. From a content perspective, the literature encompasses a broad range of research topics, as reflected in 515 Keywords Plus and 527 author keywords. The dataset involves 401 authors, including 38 single-authored documents, with an average of 2.65 authors per publication. International collaboration accounts for 17.61 percent of the total publications. Regarding document types, journal articles constitute the largest proportion of the dataset (120 documents), followed by conference papers (26), review articles (11), and conference reviews (2). This distribution indicates that research on SMA and competitive advantage is primarily disseminated through established scholarly publication channels.

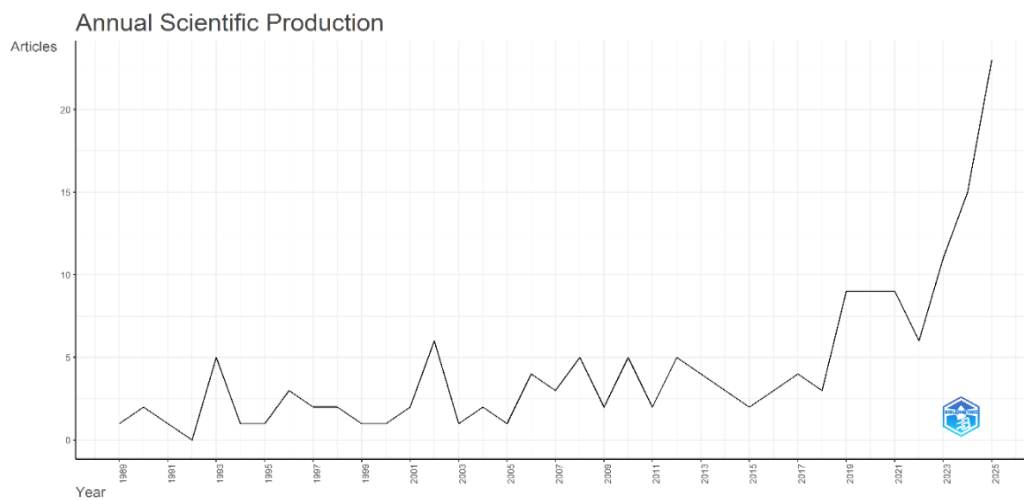


Figure 3. Annual Scientific Production

Figure 3 presents the annual trend of scientific publications on SMA and competitive advantage from 1989 to 2025. During the early period, publication output was relatively low and fluctuated from year to year. A clearer upward trajectory begins in 2018 with 3 articles, increasing to 9 articles in 2019 and remaining at the same level in 2020 and 2021.

In 2022, the number of publications decreased to 6 articles, followed by a renewed increase in 2023 (11 articles) and 2024 (15 articles). The trend reaches its peak in 2025 with 23 articles. Overall, the pattern indicates marked growth in publication volume after 2018, culminating in a substantial rise from 3 articles (2018) to 23 articles (2025).

Table 3. Top 10 Sources' Local Impact

Source	h_index	g_index	m_index	TC	NP	PY_start
Management Accounting Research	4	4	0,108	224	4	1990
Cogent Business And Management	3	4	1	28	9	2024
Critical Perspectives On Accounting	3	3	0,12	108	3	2002
Journal Of Applied Accounting Research	3	3	0,115	52	3	2001
Accounting, Auditing, and Accountability Journal	2	2	0,08	216	2	2002
International Journal Of Business Excellence	2	2	0,25	12	2	2019
Journal Of Accounting And Organizational Change	2	2	0,095	22	2	2006
Measuring Business Excellence	2	2	0,4	57	2	2022
Omega (United Kingdom)	2	2	0,059	106	2	1993
Strategic Management Journal	2	2	0,083	68	2	2003

Based on the Top 10 Sources' Local Impact shown in Table 3, Management Accounting Research ranked highest in this dataset in terms of citation-based impact, as indicated by the highest h-index (h = 4) and the largest total citations (TC = 224), with four publications (NP = 4) starting from 1990. In contrast, *Cogent Business and Management* recorded the highest number of publications (NP = 9, starting in 2024), but with lower citation counts (TC = 28) and a slightly lower h-index (h = 3).

Nevertheless, its relatively high m-index ($m = 1$) indicates a faster accumulation of citations given its recent starting year.

Other established journals, such as Critical Perspectives on Accounting, Journal of Applied Accounting Research, Accounting, Auditing and Accountability Journal, and Omega (The United Kingdom), also appeared among the leading sources. Although their publication counts were relatively modest, ranging from two to three articles, their total citation numbers remained comparatively high, indicating sustained visibility within the literature on strategic management accounting and competitive advantage.

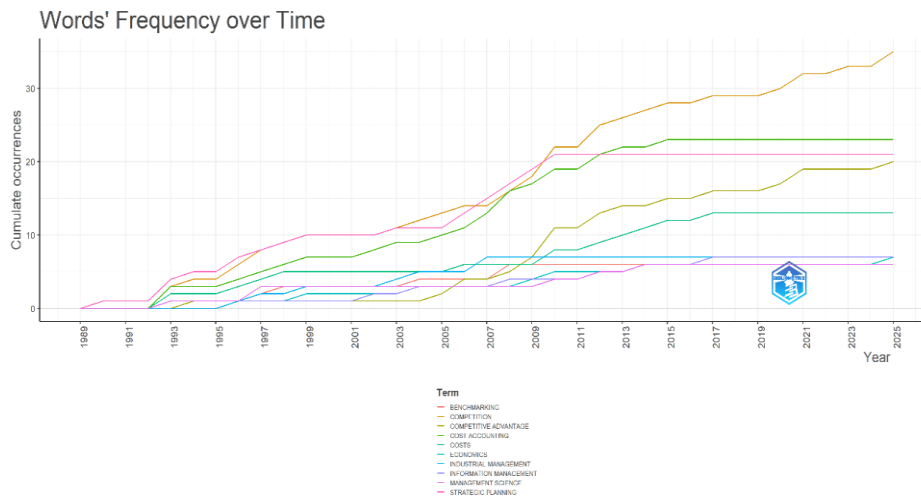


Figure 4. Words' Frequency over Time

Figure 4 presents the cumulative frequency of selected keywords in the strategic management accounting and competitive advantage literature from 1989 to 2025. In the early years, keyword occurrences are limited and increase slowly. From 1993 to 1999, several terms began to accumulate more steadily, including cost accounting, competitive advantage, and strategic planning.

Between 2000 and 2007, the cumulative growth became more consistent across a wider range of terms, with noticeable increases for keywords such as benchmarking and competition. From 2008 to 2013, multiple keywords showed a faster rate of accumulation, and the upward pattern continued through 2014 to 2025. Over the full period, benchmarking, competition, and competitive advantage displayed the largest cumulative growth among the listed terms. In addition, terms related to information and management domains, such as information management, industrial management, and management science, also increased over time, indicating broader topic coverage within the mapped literature.

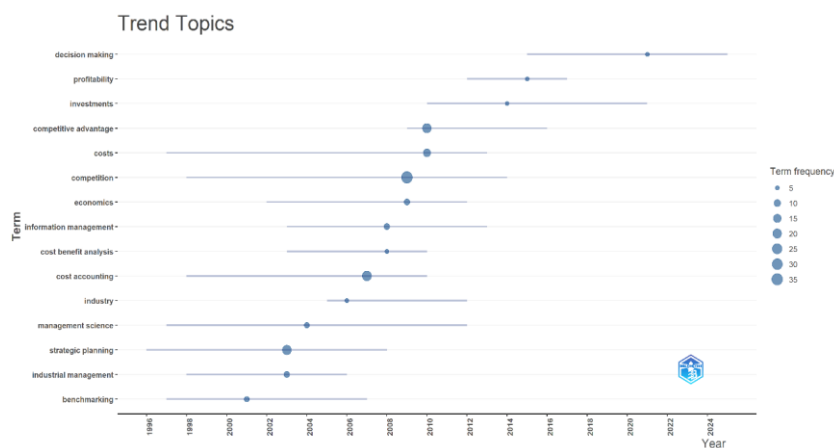


Figure 5. Trend Topics

Figure 5 shows trend topics in the strategic management accounting and competitive advantage literature based on the temporal distribution of keywords. Each horizontal line indicates the time span during which a topic appeared, while the dot size represents the frequency of the term.

In the earlier years, benchmarking appeared as the earliest topic, followed by industrial management and strategic planning, with these topics extending across several years. During the mid-2000s, additional topics became visible, including management science, industry, cost accounting, and cost–benefit analysis, although their frequencies varied as indicated by different dot sizes.

From 2008 to 2014, topics related to competition, competitive advantage, economics, and costs appeared more prominently, as shown by larger dots and continued presence over multiple years. In the later period from 2015 to 2025, newer topics emerged, particularly profitability, investments, and decision making. Profitability became visible around the middle of this period, investments spanned a relatively long time range, and decision-making appeared among the most recent topics displayed in the figure.

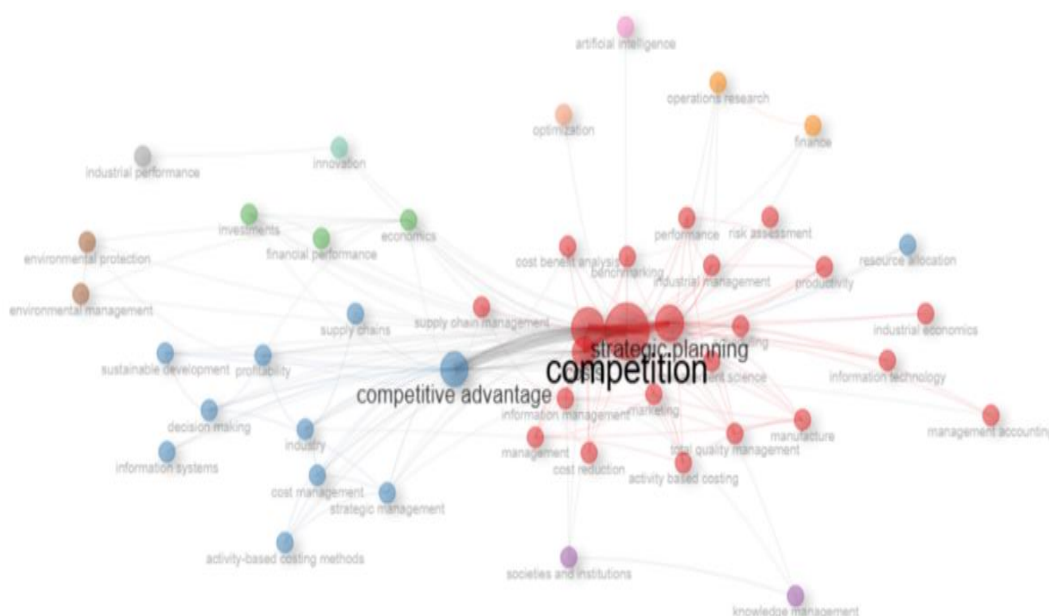


Figure 6. Co-occurrence Network

Figure 6 and Table 4 present the keyword network structure in the SMA and competitive advantage literature based on a co-word network analysis. In the network visualization, competition appeared as the most central node. This is consistent with the network metrics reported in Table 4, where competition showed the highest betweenness centrality (607,218) and the highest PageRank (0.162). In network analysis, a high betweenness value indicates that a node acts as a major structural bridge connecting different themes within the network (Borgatti et al., 2018). Accordingly, the position of competition reflects its connections to multiple topics, ranging from management accounting practices and strategic planning to issues of competitive advantage, within the analyzed body of literature.

Beyond competition, cost accounting and strategic planning also displayed relatively strong centrality, as indicated by their PageRank values of 0.099 and 0.074, respectively. PageRank reflects the importance of a node based on whether it is linked by other important nodes in the network (Liu et al., 2021). In the visualization, both keywords appeared close to the network center, indicating that cost accounting practices and strategic planning frequently occurred and were closely connected to competition-related themes.

Table 4. Co-occurrence Network

Node	Cluster	Betweenness	Closeness	PageRank
competition	1	607,218	0,021	0,162
cost accounting	1	128,934	0,016	0,099
strategic planning	1	72,238	0,014	0,074
costs	1	40,072	0,015	0,063
industrial management	1	0,686	0,011	0,019
information management	1	3,915	0,012	0,024
benchmarking	1	0,431	0,011	0,013
management science	1	0,666	0,012	0,019
cost-benefit analysis	1	0	0,011	0,012
industrial economics	1	0	0,01	0,008
information technology	1	0	0,011	0,008
management	1	0,346	0,012	0,018
manufacture	1	0,286	0,012	0,018
marketing	1	0,332	0,012	0,018
scheduling	1	0	0,011	0,011
supply chain management	1	0	0,011	0,01
total quality management	1	0,275	0,012	0,016
activity-based costing	1	0	0,012	0,015
cost reduction	1	0	0,011	0,012
management accounting	1	0	0,011	0,009
performance	1	0,219	0,011	0,013
productivity	1	0,067	0,011	0,012
risk assessment	1	0	0,011	0,006
competitive advantage	2	42,864	0,014	0,071
decision making	2	0,292	0,012	0,016
industry	2	1,011	0,012	0,02
profitability	2	3,047	0,012	0,023
cost management	2	0,195	0,012	0,017
strategic management	2	0,55	0,012	0,018
supply chains	2	0	0,011	0,009
information systems	2	0	0,011	0,008
resource allocation	2	0	0,011	0,007
sustainable development	2	0	0,011	0,012
activity-based costing methods	2	0	0,011	0,012
economics	3	4,15	0,012	0,024
investments	3	0,25	0,011	0,014
financial performance	3	0	0,011	0,009
societies and institutions	4	0,195	0,011	0,011
knowledge management	4	0	0,011	0,008
finance	5	0,211	0,011	0,009
operations research	5	0,33	0,011	0,01
environmental management	6	0	0,011	0,008
environmental protection	6	0,222	0,011	0,01
artificial intelligence	7	0	0,011	0,005
industrial performance	8	0	0,007	0,006
innovation	9	45	0,011	0,012
optimization	10	0	0,011	0,005

Based on the clustering results, Cluster 1 was the largest and most dominant cluster. This cluster included core keywords such as competition, cost accounting, strategic planning, and costs, as well as managerial practice themes such as benchmarking, management science, total quality management, and activity-based costing. The density of nodes and the intensity of links among keywords in this cluster are clearly visible in the network visualization, showing a strong concentration of discussion on the use of cost information and strategic management techniques in competitive contexts.

Cluster 2 was centered on competitive advantage and included themes that were more outcome-oriented and decision-oriented, such as decision making, profitability, cost management, and strategic management. The betweenness value for competitive advantage was 42,864, indicating that this concept also functioned as a bridging node, although its centrality was lower than that of competition. In

keyword network analysis, this position reflects a linking function between practice-related themes and performance-related consequences in the research structure (Donthu et al., 2021).

Other clusters were smaller and more specialized. Cluster 3 grouped economic and investment themes through economics and investments, while Cluster 4 contained knowledge-based and institutional topics such as knowledge management and societies and institutions. Cluster 6 represented environmental and sustainability issues through environmental management and environmental protection. Meanwhile, keywords such as artificial intelligence, optimization, and industrial performance appeared in separate clusters with low centrality and peripheral positions in the network. In network analysis, a peripheral position indicates limited connections to the core themes of a research field (Donthu et al., 2021).

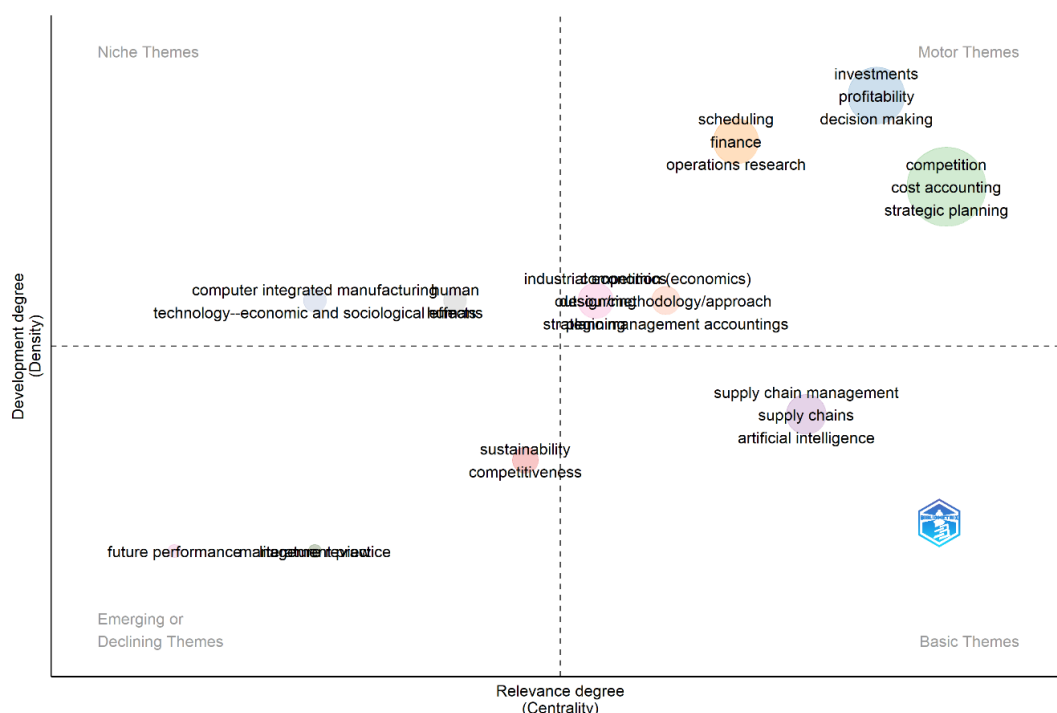


Figure 7. Thematic Map

Figure 7 presents a thematic map of the SMA and competitive advantage literature using two dimensions, namely centrality and density. Centrality refers to the degree to which a theme is connected to other themes in the overall research field and, therefore, indicates its relevance or importance within the broader intellectual structure. Density refers to the internal strength of development of a theme, indicating how strongly the keywords within a cluster are connected and, therefore, how conceptually developed or mature the theme is. Based on these two dimensions, the map groups research themes into four quadrants: motor themes, basic themes, niche themes, and emerging or declining themes.

The analysis showed that several core themes fell within the motor themes quadrant, which is characterized by high centrality and high density. These included competition, cost accounting, and strategic planning, as well as themes related to decision making, profitability, and investments. The placement of these themes indicates strong connections to the main thematic structure and a relatively mature level of development in the analyzed literature.

In the basic themes quadrant, themes such as supply chain management, supply chains, and artificial intelligence appeared. These themes exhibited relatively high centrality but lower density than motor themes. This pattern indicates that they were connected to the core themes, yet their development in the literature remained less established.

The niche themes quadrant contained themes with high density but low centrality, mainly topics linked to specific technological and manufacturing contexts. This position shows that these themes were

well developed within a narrower scope, while their connections to the broader thematic structure remained limited.

Finally, the emerging or declining themes quadrant included themes with low centrality and low density, such as sustainability and competitiveness. Their placement suggests that, within the observed period, these themes showed relatively weak connections and limited development in the analyzed literature.

DISCUSSION

This discussion moves beyond describing bibliometric patterns and focuses on what those patterns reveal about the intellectual structure of Strategic Management Accounting (SMA) research in the competitive advantage domain. Consistent with bibliometric best practice, the purpose is not to infer causality, but to integrate evidence on how themes cluster, evolve, and relate over time and to draw implications for theory development and future research (Donthu et al., 2021).

The results addressing RQ1 show that research on SMA and competitive advantage remained relatively limited for many years before increasing sharply after 2018. This pattern suggests more than simple publication growth. It indicates that SMA is being increasingly revisited in response to digitally intensified strategic environments in which firms face faster information flows, deeper uncertainty, and greater pressure to convert information into action. Bhimani (2020) explained that digital data had transformed the informational basis of management accounting, while Möller et al. (2020) showed that digitalization was reshaping management accounting practices, control systems, and controller roles.

This growth pattern matters theoretically because it suggests a repositioning of SMA rather than only an expansion of the literature. The rise in publications after 2018 implies that SMA is increasingly being interpreted not just as a technical accounting specialty, but as part of the broader strategic problem of managing complex and fast-moving information. Bhimani (2020) linked digitalization to the need to rethink management accounting research methods, while Teece et al. (2016) argued that uncertain environments require stronger capabilities for sensing, seizing, and reconfiguring. Read together, these insights support the interpretation that SMA is gaining renewed relevance because firms need information systems and routines that are better aligned with strategic agility.

The descriptive results also show that the literature is dispersed across 115 sources. This dispersion implies that the SMA competitive advantage conversation is no longer confined to a narrow accounting niche but is increasingly visible across adjacent conversations on strategy, organizational performance, and decision making Ojra et al. (2021) portrayed SMA as a domain that links accounting information to strategic decision processes and performance implications, while Pires et al. (2024) showed that SMA had developed through multiple conceptual streams over time. In this context, the present findings suggest that the SMA competitive advantage nexus is showing clear signs of developing into a more recognizable analytical interface within the wider SMA field.

Having established the field's growth and increasing visibility, the findings addressing RQ2 made it possible to discuss its intellectual structure more directly. The co-word analysis showed that competition, cost accounting, strategic planning, benchmarking, and activity-based costing continued to form the dominant conceptual core of the literature. This result suggested that SMA research in this domain still rested on an enduring technical and competitor-oriented backbone. Roslender and Hart (2002) interpreted SMA as part of strategic positioning, while Cadez and Guilding (2008) explained that SMA included a strong dimension rooted in strategically oriented accounting techniques.

This first cluster could therefore be interpreted as the traditional SMA stream. Its prominence indicates that the field continues to rely on established routines for competitor analysis, cost management, and planning, all of which have historically defined SMA's contribution to strategic management. Pires et al. (2024) identified these themes as part of the enduring conceptual backbone of SMA research, while Ojra et al. (2021) emphasized that SMA remained strongly associated with strategic information and performance-oriented decision support. The present findings thus show that the field's intellectual structure is still anchored in a stable traditional core.

At the same time, the co-word network revealed that the literature was not organized only around traditional techniques. The second major cluster linked competitive advantage, decision making, profitability, investments, and strategic management, which suggested that the field was increasingly concerned with what SMA enabled firms to achieve. This result was important because it showed that the intellectual structure of the field was becoming more outcome-oriented. Barney (1991) argued that sustained competitive advantage depended on valuable and difficult-to-imitate resources and capabilities, while Teece et al. (2016) showed that such capabilities became especially important under uncertainty. Interpreted through that lens, the present findings suggested that SMA was increasingly being positioned not merely as a toolkit, but as part of the capability base that supports strategic action.

The second cluster became more meaningful when read through the lens of information capability. The co-word structure suggested that SMA was increasingly associated with decision-making and performance themes, which implied that the strategic value of SMA lay less in information production alone and more in how information was integrated and used. Cao et al. (2019) showed that information processing capability contributed to competitive advantage through decision-making effectiveness, while Aydiner et al. (2019) demonstrated that information system capabilities improved firm performance through decision and process performance. These studies supported the interpretation that information capability is the mechanism through which SMA can be more coherently linked to competitive advantage.

The thematic map strengthened this reading by showing that the field was shaped by two coexisting tendencies. On the one hand, the motor themes remained anchored in competition, cost accounting, strategic planning, decision making, profitability, and investments, which confirmed the strength of the traditional SMA core. On the other hand, artificial intelligence and supply chain management appeared as basic themes, indicating that newer domains were entering the field without yet becoming conceptually consolidated. Baird et al. (2024) showed that management accounting practices played an important role in shaping competitive outcomes under different competitive conditions, while Abbas (2025) argued that AI was transforming the management accounting domain and the role of accountants.

This pattern suggests that the field was evolving through extension rather than replacement. Traditional SMA continued to provide the structured, comparable, and strategically relevant information associated with planning, control, and competitor-oriented analysis, whereas emerging SMA extended that contribution by improving timeliness, integration, and predictive richness. Barney (1991) reminded us that competitive advantage is capability-based rather than tool-based, while Su et al. (2023) showed that the use of SMA practices was positively associated with competitive advantage. The present findings, therefore, suggest that traditional and emerging SMA should be understood as complementary modes of building and renewing information capability.

This synthesis is theoretically important because it helped connect the field's thematic evolution to the RBV logic already established in the introduction. From an RBV perspective, information created strategic value only when it was embedded in capabilities that were difficult to imitate and effectively mobilized. Cao et al. (2019) explicitly framed information processing capability as a pathway to competitive advantage, while Aydiner et al. (2019) showed that information-system capabilities affected performance through decision-related mechanisms. Read in light of the present bibliometric evidence, SMA matters strategically because it contributes to the capability conditions through which information becomes actionable and competitively useful.

The results addressing RQ3 showed that AI and supply chain management were underdeveloped but strategically important intersections. Their location in the basic-theme quadrant indicated that the literature already recognized their relevance but had not yet developed them into dense and cumulative knowledge clusters. Abbas (2025) showed that AI extended forecasting, pattern recognition, and decision support in management accounting, while Dubey et al. (2019) showed that analytics capability could improve supply chain agility and contribute to competitive advantage. In this sense, the bibliometric findings indicated that AI-enabled and supply-chain-oriented SMA practices were not marginal topics but emerging extensions of SMA's information role that remained conceptually fragmented.

A similar issue arises with sustainability, which remained weakly connected to the conceptual center of the field. The thematic map suggested that sustainability had entered the SMA conversation but had not yet been strongly integrated into the SMA–competitive advantage nexus. Beusch et al. (2022) showed that firms often struggled to connect sustainability management control to broader strategic routines, while Rahi et al. (2022) concluded that the relationship between sustainability reporting and management control remained fragmented. The present findings, therefore, imply that sustainability is not only a topical extension of SMA but also a theoretically significant one because it challenges the field to rethink competitive advantage beyond short-term efficiency and market positioning.

Taken together, these underdeveloped intersections matter because they reveal where the field's evolving intellectual structure remains incomplete. If SMA is increasingly being repositioned around information capability, then AI, supply chain, and sustainability should not remain peripheral, since all three concern how strategically relevant information is generated, integrated, governed, and used. Abbas (2025) showed that AI changed the way management accounting information was processed and interpreted, while Dubey et al. (2019) linked analytics capability to agility and competitive advantage in interorganizational contexts. Read together, these studies support the view that the current gaps are important not merely because they are new topics, but because they test how far SMA can extend as a capability-oriented field.

These findings also generated a more focused future research agenda than a purely descriptive bibliometric reading would allow. First, future studies should operationalize information capability more explicitly in SMA contexts so that the mechanism linking SMA information, managerial action, and competitive advantage can be examined more directly. Su et al. (2023) showed that the SMA competitive advantage relationship was contingent on organizational culture, while Baird et al. (2024) showed that organizational learning capability facilitated the organizational use of SMA practices through employee empowerment and creativity. These studies implied that future work should examine the organizational conditions under which traditional and emerging SMA jointly strengthen information capability.

Second, future research should pay greater attention to how AI, supply chain, and sustainability can be incorporated into a more cumulative SMA framework. The thematic map indicated that these themes were relevant to the field but remained insufficiently consolidated, suggesting the need for more theory-driven and cross-functional inquiry. Abbas (2025) highlighted the disruptive implications of AI for management accounting, while Beusch et al. (2022) showed that sustainability remained difficult to align with integrated management control systems. In practical terms, the present study therefore suggests that SMA should be understood not only as a toolkit for cost control or competitor analysis, but also as part of the information capability infrastructure through which firms pursue competitive advantage under changing strategic conditions characterized by digitalization, uncertainty, and increasing informational complexity.

CONCLUSION

This study provided a bibliometric overview of research on SMA and competitive advantage and showed that the field has developed significantly, particularly after 2018. The findings indicated that this literature was no longer confined to a narrow accounting domain but increasingly intersected with broader discussions of strategy, decision making, and organizational performance. The analysis revealed two main patterns: a stable traditional core centered on cost, competition, and planning, and an emerging outcome-oriented stream linking SMA to decision making and firm performance. Taken together, these findings suggest that SMA is increasingly being repositioned as an information capability that supports strategic action in dynamic and uncertain environments. In addition, artificial intelligence, supply chain management, and sustainability appear as important but still underdeveloped areas that provide promising directions for future research. Practically, these findings suggest that firms should not manage SMA only as a cost-control or planning toolkit, but as part of a broader capability to generate, integrate, and use strategic information for decision making and competitive advantage.

During the data collection and processing stages, several practical challenges were encountered. Bibliographic metadata required cleaning and harmonization, particularly where author keywords appeared in different forms, spellings, or levels of specificity. Variations in document classification and metadata formatting across records also required careful screening and standardization before analysis. In addition, because co-word and thematic analyses depend heavily on keyword consistency, the resulting clusters and thematic structure may still be influenced by residual variation in how concepts were labeled across publications. Future research is therefore encouraged to expand database coverage, refine search strategies, and complement bibliometric evidence with systematic reviews or empirical studies.

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