

# Research Trend on Strategic Management Accounting Techniques in Business: A Bibliometric Analysis Approach

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## ABSTRACT

This study examines trends, maps themes, and outlines the research trajectory of Strategic Management Accounting Techniques (SMAT). A bibliometric analysis was conducted to identify research trends related to SMAT. The researchers used data from the Scopus database covering the years 1991 to 2024. A total of 121 published documents were retrieved and then analyzed using VOSviewer software and spreadsheets. A significant surge of interest and attention to SMAT peaked in 2023. Bibliometric mapping shows that early research on SMAT focused primarily on conceptual frameworks and theoretical underpinnings. The analysis identified several key themes and topics that are frequently explored in the SMAT domain, such as the integration of strategic management with accounting practices. Over time, there has been a shift towards empirical studies examining the practical applications and benefits of SMAT in various organizational contexts. The scarcity of research on SMAT underscores the importance and novelty of conducting a bibliometric analysis on this subject. The insights gained from this study help fill the existing knowledge gap and provide a foundation for future research. By identifying key trends and thematic areas, this study provides a roadmap for researchers to explore aspects of SMAT. Further research can explore the role of SMAT in artificial intelligence and big data analytics.

**Keywords:** SMAT, Business, Management Accounting, VOSviewer, Bibliometric Analysis

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## **INTRODUCTION**

Technology has altered the business operation landscape (Nawi et al., 2024; Abdullah et al., 2023a; Zainuddin et al., 2021a; Zainuddin et al., 2021b), regardless of industries, sectors and form of business (Abdullah, 2021). Among the technologies, strategic management accounting techniques have emerged as innovative tools, owing to the increasing integration of technology into business operations management. In recent years, there has been a growing interest among scholars and businesses in the field of strategic management accounting (SMA) practices. The business environment of the 1980s posed a challenge to conventional management accounting techniques, resulting in the emergence of the term Strategic Management Accounting (SMA). This novel approach employs a diverse range of techniques to tackle management accounting concerns. Accounting facilitates managerial decision-making, thereby enhancing organisational profitability. According to Turner et al. (2017), organisations aiming to enhance their competitiveness and performance should establish and execute internal policies and procedures, such as strategic management accounting, that are in line with their business strategies and consider the changing requirements of the competitive environment.

Strategic management accounting principles prioritise the incorporation of external factors that are pertinent to the organization's operations into accounting practices. As the significance of strategic management accounting in managerial decision-making and corporate success becomes more evident, there is a growing interest in this field. SMA, or Strategic Market Analysis, encompasses a wide range of techniques, methodologies, instruments, and software applications used to analyse competitor data and formulate effective strategies. It is not limited to mere theoretical concepts or academic disciplines. Strategic management accounting enhances managerial decision-making and organisational performance. However, its effectiveness relies on the organization's capacity to synchronise its practices with its strategy and the changing environmental conditions.

In recent decades, numerous scholars from various disciplines have conducted thorough research on accountability and government performance, significantly advancing our understanding of these subjects. Bibliometric analysis is a quantitative approach employed to evaluate and

examine scientific literature using statistical methods. Its main emphasis is on quantifying different facets of academic work, including publication counts, citation frequencies, and the connections between various scholarly elements such as authors, journals, and keywords. Bibliometric analysis can significantly aid in identifying emerging research trends by leveraging quantitative methods to evaluate scientific literature (Raman et al., 2022).

This study aimed to offer a comprehensive and current overview of the research landscape on Strategic Management Accounting (SMA), presenting a more detailed analysis than most previous literature reviews, which often focused on specific areas within SMA. The article will address the following research questions:

RQ1: What are the recent trends in publication growth for Strategic Management Accounting Techniques (SMAT)?

RQ2: How do the publication trends in SMAT vary across different years, and what factors might explain the fluctuations in publication volume?

RQ3: Which authors have been most influential in the field of SMAT, and how does their productivity and citation impact compare?

RQ4: What are the top journals and their impact factors contributing to the research on SMAT, and how do their publication volumes and impact factors reflect their role in the field?

RQ5: What are the geographical and institutional patterns of SMAT research, and how do collaborations between countries and institutions shape the development of the field?

RQ6: What are the primary themes and keyword clusters in SMAT research, and how do these reflect the current focus and emerging trends in the field?

RQ7: How does the citation analysis of seminal SMAT articles highlight the ongoing relevance and research opportunities within the field?

## **LITERATURE REVIEW**

### **Strategic Management Accounting (SMA)**

Management accounting (MA) encompasses the process of creating, conveying, and utilising both financial and non-financial data to facilitate managerial decision-making and control activities (Groot & Selto, 2013). In a volatile economic condition, business is surrounded by various types of risks (Zainuddin et al., 2023a; Zainuddin et al., 2023b; Zainuddin et al., 2022), strategic management accounting techniques reduce risk by providing comprehensive data analysis and insights, especially on financial data (Nasir et al., 2021), enabling businesses to make informed decisions and anticipate potential challenges. A literature review conducted from 1982 to 2022 revealed that there is no agreement among scholars regarding the definition of SMA (Langfield-Smith & Parker, 2008). Coad (1996) stated that SMA is an expanding field of study, yet its exact features are not well-defined, and there is no agreement on its essence or future development (Nik Abdullah, 2022).

According to Simmonds (1982), SMA refers to the provision and examination of management accounting information about a company and its competitors, with the purpose of monitoring and developing business strategies. He emphasized the potential for management accountants to have a greater impact on external competitor analysis, highlighting the contrast with their current emphasis on internal matters. This viewpoint highlights SMA's progressive emphasis on utilizing both internal and external insights to guide strategic decision-making.

Table 1 shows Strategic Management Accounting Techniques (SMAT) by Strategic Management Accounting (SMA) categories. The table shows that every SMA has its own set of techniques and processes which contributes to effective management. In detail, strategic costing is a strategic cost calculation that focuses more on strategic issues because the information generated is used to achieve competitive advantage through cost management (Shank & Govindarajan, 1988; Grundy, 1996; Quon, 2020). According to Ojra (2023) the literature distributes five key costing techniques: attribute costing (Roslender and Hart 2010), life-cycle costing (Cadez and Guilding, 2008), quality costing (Cinquini and Tennuci, 2010),

target costing (Cinquini and Tennuci, 2010) and value chain costing (Cadez and Guilding, 2008). Planning, control and performance measurement is a SMA technique that helps organizations plan activities, control operations, and measure performance to ensure strategic goals are achieved, monitoring organizational progress to stay on track. There are two core components in this technique, namely benchmarking and integrated performance management (Cadez and Guilding, 2009; Cinquini and Tennuci, 2010). Strategic decision-making is a SMA tool that focuses on strategic cost management, Strategic pricing and brand valuation (Ojra, 2014; Cescon et. al., 2019). Competitor accounting is a strategic management accounting concept that involves the systematic analysis of competitors’ financial and operational data to inform the company’s strategic planning and decision-making process. Key components of competitor accounting include, competitor cost assessment, competitive position monitoring, competitor performance appraisal (Cinquini and Tennuci, 2010). Finally, customer accounting concerns practices aimed at appraising profit, sales or costs related to customers or customer segments (Ojra, 2023). Core customer accounting techniques include customer profitability analysis (Opute et. al., 2020), lifetime customer profitability analysis (Lawrence, 1967) and valuation of customers as assets (Opute et. al., 2020; Ojra, 2023).

**Table 1: SMAT by SMA Categories**

SMA Categories	SMAT
1) Strategic Costing	<ol style="list-style-type: none"> <li>1) Attribute Costing</li> <li>2) Life-cycle costing</li> <li>3) Quality costing</li> <li>4) Target Costing</li> <li>5) Value Chain Costing</li> </ol>
2) Planning, control & performance measurement	<ol style="list-style-type: none"> <li>1) Benchmarking</li> <li>2) Integrated performance measurement</li> </ol>
3) Strategic decision-making	<ol style="list-style-type: none"> <li>1) Strategic Costing (strategic cost management)</li> <li>2) Strategic pricing</li> <li>3) Brand Valuation</li> </ol>
4) Competitor accounting	<ol style="list-style-type: none"> <li>1) Competitor cost assessment</li> <li>2) Competitive position monitoring</li> <li>3) Competitor performance appraisal</li> </ol>
5) Customer accounting	<ol style="list-style-type: none"> <li>1) Customer profitability analysis</li> <li>2) Lifetime customer profitability analysis</li> <li>3) Valuation of customers as assets</li> </ol>

Sources: Cadez and Guilding (2008) and Nik Abdullah (2022)

Trends in the integration of SMAT with digital technologies, real-time data analytics, and sustainability considerations is reshaping the landscape of strategic management accounting. The trends highlight a shift towards more dynamic, data-driven approaches that enhance decision-making and align with contemporary business challenges.

## **METHODOLOGY**

The dataset was extracted from the Scopus database on January 8, 2024, and subsequently analysed. The Scopus Database was selected because of its extensive repository of esteemed and internationally acknowledged articles, comprehensive coverage of various subjects, and user-friendly interface (Ahyaruddin et. al., 2023). A total of 121 publication documents, ranging from 1991 to 2024, were discovered using the given keywords, “Strategic Management Accounting Techniques (SMAT)”. These documents covered a diverse range of types and subject areas. This study used a complete dataset extracted from Scopus WoS (Web of Science) and converted to CSV. This dataset included citations, bibliographical information, abstracts, keywords, funding information, and other pertinent data. This massive dataset was examined and visualised using Scopus analysis tool, spreadsheet and VOSviewer. The dataset was explored using Scopus Analyse Search Results, which revealed basic statistics and trends. VOSviewer, as a bibliometric analysis software tool, was essential for network building and visualisation. Previous research has used VOSviewer for similar purposes (Islam et al., 2020; Van Eck and Waltman, 2010). The software specifically creates and visualize networks of journals, researchers, and publications. In addition, the study used a variety of analyses to investigate bibliometric network relationships in VOSviewer such as co-authorship, co-occurrence, bibliographic coupling, and co-citation in accessing author and institution collaboration, and keywords. Bibliometric analysis provides a comprehensive and wider view on the trend of research for the particular area (Abdullah et al., 2023b). Prior to analysis, the data underwent a meticulous cleaning, filtering, and screening process to ensure its readiness and relevance for the study.

## RESULTS AND DISCUSSION

### Growth Trend

The number of publications is an important indicator for assessing the evolving research landscape in a specific field (Van Nunen et al., 2018). Table 2 shows that the number of publications in SMAT research was steadily increasing. In 1991, only one article on SMAT was published. From 1991 to 2023, the progression of SMAT-related documents fluctuated. Notably, 2023 saw the highest number of SMAT-related publications, with a total of 7.

Meanwhile, the years 1998, 2012, and 2017 ranked second, each with five SMAT-related publications. The growth trend over the three years, from 2021 to 2023, indicated a positive development. Specifically, the number of publications was steadily increasing, with three journals in 2021, four in 2022, and a significant increase to seven in 2023.

**Table 2: Number of Document Publication and Growth Trend**

Year of Publication	Total Publication Article
1991	1
1992	3
1994	1
1995	2
1996	4
1997	3
1998	5
2002	2
2003	1
2005	1
2006	5
2007	3
2008	4
2009	1
2010	3
2011	1
2012	5
2013	3
2014	1
2015	1
2016	4

2017	5
2018	4
2019	3
2020	4
2021	3
2022	4
2023	6
2024	1

Sources: data processed, 2024

This trend indicated a renewed interest in and focus on SMAT research, with a notable increase in publications, particularly in recent years. The positive growth trajectory reflected the academic community’s increased emphasis on understanding and researching SMAT.

### Number of Authors and Number of Publications

The study identified the four most productive authors in the field of SMAT. Table 3 ranks articles according to their total number of publications. Oyewo from England, emerged as the most prolific author, with three articles. Cadez, Guidling, Roslender, Hart, and Sedevich-Fons each had two publications.

Oyewo continued to lead in average citations per publication, with an average of 3.67. Sedevich-Fons was next, with an average of 2.00 citations per publication, followed by Cadez, Guidling, Roslender, and Hart, all of whom had an average of 1.00 citation.

**Table 3: Top Authors Publishing on Strategic Management Accounting**

Author Name	Country of Author	Number of Publication	Average Citations Per Publication
Oyewo	England	3	3.67
Cadez, Guidling	Australia	2	1.00
Roslender, Hart	England	2	1.00
Sedevich-Fons	Argentina	2	2.00

Sources: data processed, 2024

It is noteworthy to acknowledge that these figures may appear relatively small, given the limited number of studies on SMAT.



## **Journal publishing on Strategic Management Accounting Techniques**

Table 4 summarises the top nine most active journals publishing research on SMAT. “Management Accounting Research” emerged as the top journal, with the most publications. This journal has made significant contributions to the field, publishing nine papers in three categories: Business, Management, and Accounting; Economics, Econometrics, and Finance; and Decision Sciences. The “Journal of Accounting & Organisational Change” was second with three publications. It was divided into three categories: Business, Management, and Accounting; Organisational Behaviour and Human Resource Management; and Subcategories of Business, Management, and Accounting. Furthermore, seven other journals played an important role in publishing SMAT-related research. They include “Economic Research-Ekonomska Istrazivanja,” “European Journal of Operational Research,” “International Journal of Production Economics,” “International Journal of Project Management,” “Journal of Applied Accounting Research,” “Journal of Enterprise Information Management,” along with “Management Science,” all of which had published two papers. It was interesting to note the rankings and impact factors of these journals. The “International Journal of Production Economics” ranked first, followed by the “Journal of Enterprise Information Management” at seventh and the “European Journal of Operational Research” at eighth. Other journals ranked higher than 20. When it came to impact factors, “Journal of Management Science” led with an impact factor of 3.284, with subject categories including Decision Sciences, Management Science, and Operations Research; Business, Management, and Accounting; and Strategy and Management. This rank was followed by the “International Journal of Project Management” (3.005) and “International Journal of Production Economics” (2.918), among others.

**Table 4: Top 9 Journal publishing on Strategic Management Accounting Techniques (SMAT)**

Journal title	Number of publication	Rank and percentile	Impact factor	Subject category of the journal
Management Accounting Research	9	28 & 83rd	1.718	Business, Management and Accounting; Economics, Econometrics and Finance; Decision Sciences Information Systems and Management
Journal of Accounting & Organizational Change	3	79 & 53rd	0.839	Business, Management and Accounting; Business, Management and Accounting; Organizational Behavior and Human Resource Management; Business, Management and Accounting;
Economic Research-Ekonomiska Istrazivanja	2	103 & 85th	1.408	Economics, Econometrics and Finance
European Journal of Operational Research	2	8 & 97th	2.706	Mathematics Modeling and Simulation; Decision Sciences Management Science and Operations; Research Computer Science General Computer Science; Decision Sciences Information Systems and Management
International Journal of Production Economics	2	1 & 99th	2.918	Business, Management and Accounting General Business, Management and Accounting; Decision Sciences Management Science and Operations Research; Economics, Econometrics and Finance Economics and Econometrics; Engineering Industrial and Manufacturing Engineering
International Journal of Project Management	2	22 & 95th	3.005	Business, Management and Accounting; Management of Technology and Innovation; Business and International Management

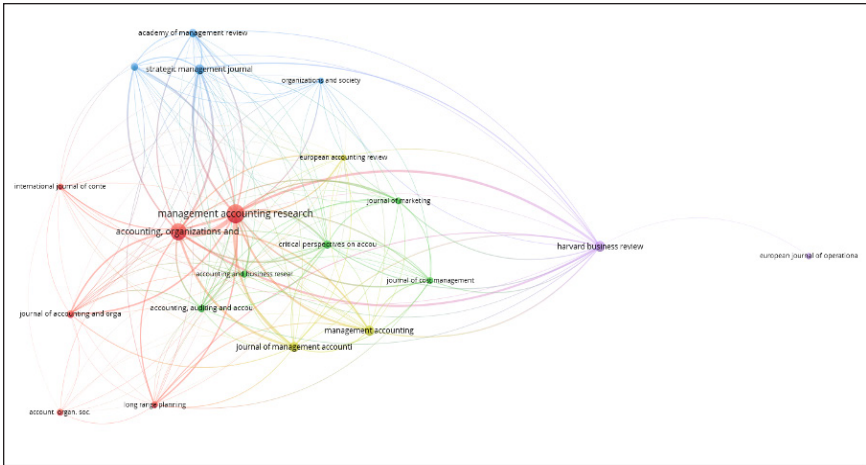
Journal of Applied Accounting Research	2	39 & 81st	1.180	Economics, Econometrics and Finance Economics, Econometrics and Finance (miscellaneous); Business, Management, and Accounting; Accounting; Decision Sciences Information Systems and Management
Journal of Enterprise Information Management	2	7 & 97th	1.590	Social Sciences; Library and Information Sciences; Computer Science Information Systems
Management Science	2	26 & 87th	3.284	Decision Sciences Management Science and Operations Research; Business, Management and Accounting Strategy and Management

**Sources:** data processed, 2024

This data shed light on the distribution of publications across leading journals in the field, emphasizing these journals' active participation and contribution to the discourse on SMAT.

### Co-Citation Analysis

The co-citation analysis in VOSviewer investigated the relationships and interactions between publications cited in other SMAT-related publications (Donthu et. al., 2021; Ahyaruddin et. al., 2023). Figure 1 depicts the results of this co-citation analysis, which showed five distinct clusters based on the sources cited.



**Figure 1 : Co-Citation Analysis Based on Cited Sources**

The purple cluster on the right side of the figure represented “Harvard Business Review” as the most frequently cited source in research on SMAT. This cluster indicated that “Harvard Business Review” publications had a significant influence on the broader SMAT literature and were frequently cited there. The green cluster, located in the center, was made up of journals with a high number of accounting citations on the SMAT topic. This cluster represented a cohesive network of publications in the SMAT research landscape. The red cluster had the highest citation count, with “Management Accounting Research” being the most cited source, followed by “Accounting and Organization.” This cluster indicated that these journals had a high level of influence and were frequently cited in the co-citation network. The blue cluster in the upper left focused on “Strategic Management Journal” as a highly cited publication in the field of SMAT research. This cluster emphasized the importance of this journal in the co-citation network. Finally, the yellow clusters at the bottom mirrored the green cluster, indicating a similar situation in which journals in this cluster had received many citations on the same topic. The size of each circle in the figure represented the number of citations, with larger circles indicating more citations. This co-citation analysis not only visualized the relationships between cited sources, but it also aided in identifying key sources that played an important role in the interconnected web of SMAT-related publications.

## Geographical and Institutional Distribution and Cooperation

According to the analysis of 121 publications on SMAT, as shown in Table 5, 23 countries or territories had made significant contributions to this research area (also see Figure 2). Among these countries, the top three in terms of publication output were England, the United States, and Australia.

**Table 5: Publication on SMAT Based on Countries**

Countries	Number of Publication
England	15
United States	14
Australia	10
Germany	4
Spain	4
Canada	3
Italy	3
Malaysia	3
Czech Republic	2
Denmark	2
Greece	2
Indonesia	2
Japan	2
Netherlands	2
Nigeria	2
Sweden	2
Vietnam	2
Argentina	1
Bangladesh	1
Bulgaria	1
China	1
New Zealand	1
Norway	1
Russia	1
Serbia	1
South Africa	1
Turke	1
Ukraine	1

**Sources:** data processed, 2024

As shown in the Table, of the twenty-three countries that contributed to publications on accountability and government performance, a select group of 23 countries accounted for 70% (85 out of 121) of the total publications

on SMAT. This indicated that these nations had made a concentrated and significant contribution to the literature on this subject. England was the group’s leading contributor, with 15 published documents. This accounted for 12% of all publications on SMAT. The United States followed closely behind with 14 publications, accounting for 11.5% of the total, while Australia added 10 publications, accounting for 8% of the entire body of literature on SMAT. The remaining 20 countries, which were not explicitly mentioned, contributed fewer than five documents each. This distribution highlighted the significant influence of a small number of countries in shaping the discourse and scholarly output on SMAT.

### Themes or Keywords Analysis

VOSviewer identified ten clusters of keywords related to research on SMAT, which are shown in Table 6. This analysis involved examining co-occurrence patterns among keywords in SMAT-related scholarly publications. In the context of SMAT research, the identified keyword clusters were most likely representing thematic groupings based on keyword co-occurrence in publications. Each cluster represented a specific aspect, theme, or subfield of SMAT research. This resource provided more detailed information about the keywords found in each cluster, their relationships, and the importance of these clusters in SMAT research. Using the resource in conjunction with the keyword clusters enabled a more in-depth understanding of the key themes and trends in the SMAT literature landscape and indicator for future research agenda.

**Table 6: Keywords Cluster of SMAT**

Cluster	Keywords
Pink Cluster	Accounting, Strategic Management, Market Orientation, Activity based costs, quality management, iso 9000, bundled payment.
Purple Cluster	Decision support system, risk assessment, systems analysis
Red Cluster	Technology, Capital Expenditure, Present Value, Government Policy, Cultural Factor.
Green Cluster	Financial management, hospital, Efficiency, Organizational, Humans, Business Intelligence, Environment, Competition.
Grey Cluster	Benchmarks, Planning, Bayesian estimation, Business planning, Management, Analytical techniques, Mediation effect, marketing, accounting methodology, data analysis, application

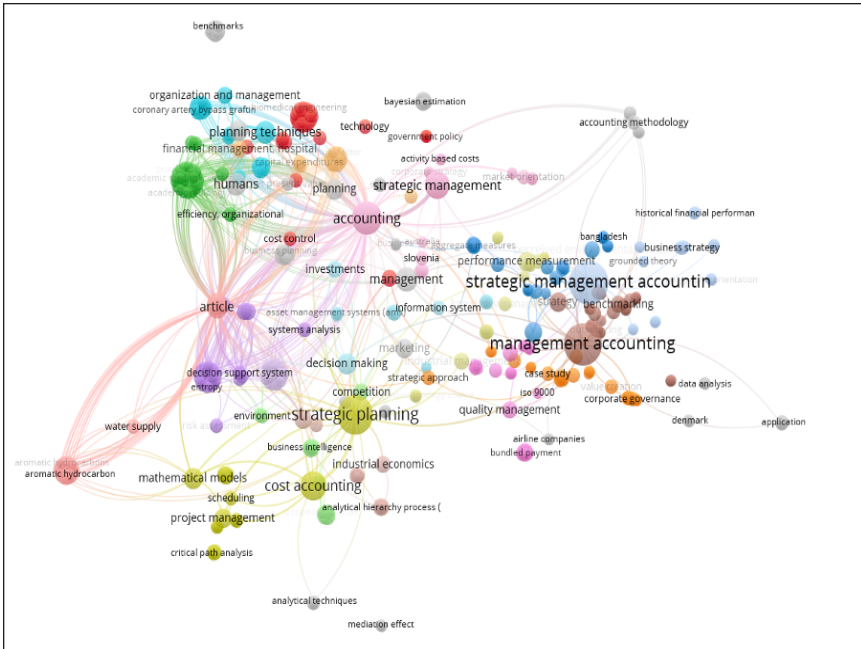
Yellow Cluster	Strategic Planning, Cost Accounting, Mathematical, models, Project management, scheduling, critical path analysis.
Blue Cluster	Strategic management accounting, aggregate measures, performance measurement, business strategy, geographic orientation, historical financial performance.
Light Blue Cluster	Organization and management, Planning techniques, investments, assets management systems, information systems, decision making, industrial management.
Brown Cluster	Management accounting, strategy, benchmarking, outsourcing.
Orange Cluster	Corporate governance, value creation, strategic approach, corporate strategy

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**Sources:** data processed, 2024

Figure 3 shows that specific keywords played an important role in representing each cluster's thematic focus. Cluster Brown, Blue, and Yellow had the greatest number of keywords. Each cluster was labelled with specific keywords that capture the essence of the content.

The most significant keywords in the Pink Cluster were "accounting" and "strategic management." Similarly, in the Purple, Cluster "decision support systems" were prioritized. The Red Cluster was distinguished by the prevalence of the keyword "planning techniques." Moving on, Cluster Green revolved around the keyword "financial management." Cluster Grey was also dominated by the keyword "benchmark," whereas Cluster Yellow was primarily influenced by the keyword "strategic planning." Cluster Blue was distinguished by the term "strategic management accounting," whereas Cluster Light Blue was primarily associated with "organization and management." Cluster Brown was dominated by the term "management accounting." Finally, Cluster Orange was distinguished by the prevalence of keywords relating to "corporate governance."



**Figure 3: Keywords on Strategic Management Accounting Techniques (SMAT)**

This data provided insights into each cluster’s thematic focus, highlighting the various keywords that researchers frequently associated with specific aspects of SMAT. Analysing these keyword clusters helped to understand the various dimensions and themes covered in the field of SMAT research.

**Citation Analysis**

Citation analysis is the examination of citations in scholarly publications, which is facilitated by a citation index. This bibliographic index is a comprehensive database of published articles that was first introduced in 1960 to assist librarians with journal selection (Nigam and Nigam, 2012; Hamid, 2022). Table 7 summarizes the results of the citation analysis, focusing on the top 5 cited articles in SMAT research. The analysis focused on articles published in the highest-ranked journal, “Management Science,” which was a top-tier journal (Q1) in the fields of Management Science, Operations Research, and Strategy and Management.



The article was written by Shaver. According to the Scopus database, the most cited paper was “Accounting for endogeneity when assessing strategy performance: Does entry mode choice affect FDI survival?” from 1998, which received 731 citations (equivalent to an average of 27.07 citations per year). This demonstrated the article’s substantial impact and long-term influence in the academic community.

**Table 7: Top 5 Most Citation on Strategic Management Accounting Techniques (SMAT)**

Authors	Titles	Year	Source	Cites by	Cites Per Year	Cites Per Author
Shaver	Accounting for endogeneity when assessing strategy performance: Does entry mode choice affect FDI survival?	1998	Management Science	731	27.07	731
Chenhall.; Langfield-Smith.	Adoption and benefits of management accounting practices: An Australian study	1998	Management Accounting Research	257	9.51	129
Iltner.; Larcker.	The performance effects of process management techniques	1997	Management Science	174	6.21	87
Langfield-Smith.	Strategic management accounting: How far have we come in 25 years?	2008	Accounting, Auditing and Accountability Journal	141	8.29	141
Roslender.; Hart.	In search of strategic management accounting: Theoretical and field study perspectives	2003	Management Accounting Research	141	6.13	71

Sources: data processed, 2024.

This citation analysis indicated that SMAT remained a compelling and actively researched topic. The top article’s high citation counts suggested that it remained relevant and interesting in the field. Furthermore, the recommendation for future research in SMAT implied that there was still significant opportunities for scholars to contribute to this field, and articles in this domain had a high chance of being published in prestigious, high-ranking journals.

## **CONCLUSION**

The research trend on SMAT in business was on a positive trajectory, with increased interest and focus on recent years. The increase in publications, particularly between 2022 and 2023, indicated greater emphasis on understanding and investigating SMAT within the academic community. The identification of prolific authors and the distribution of publications across prominent journals demonstrated scholars' active participation and contribution to the discourse on SMAT. Furthermore, the interdisciplinary nature of SMAT research, as evidenced by its numerous subcategories, emphasized its relevance in a variety of fields, including economics, finance, operational research, project management, and organizational change.

Furthermore, co-citation analysis provided valuable insights into the relationships between cited sources, allowing for the identification of key works shaping the SMAT literature landscape. The concentration of contributions from specific countries emphasized the global importance of SMAT research, with some countries playing critical roles in advancing the discourse on the subject.

However, it is important to recognize the limitations of this research trend analysis. First and foremost, the study was based primarily on data retrieved from the Scopus database, which did not include all relevant SMAT publications. Furthermore, the analysis focused primarily on quantitative metrics such as publication counts and citation frequencies, leaving out qualitative aspects such as the breadth and impact of individual research contributions. Furthermore, the research trend analysis may have failed to capture emerging or niche areas within the larger field of SMAT, potentially missing significant developments.

To summarize, while the research trend on SMAT in business showed positive growth and engagement within the academic community, such analyses must be approached with a critical lens and an awareness of their inherent limitations. Future research in this area should aim to address these limitations by using more comprehensive data sources, incorporating qualitative assessments, and exploring new research directions in order to provide a more nuanced understanding of SMAT and its implications for business management.

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