STRATEGIC MANAGEMENT AND LEADERSHIP: A BIBLIOMETRIC ANALYSIS

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ABSTRACT

Organizations today require excellent strategic management and skilled leadership to achieve their aims and objectives. Strategic management and leadership are two distinct concepts with distinct meanings that appear to act in various ways. The goal of this paper's research is to conduct a bibliometric evaluation and a visualization analysis of the strategic management and leadership relationship. This paper's goal is to scientifically document the intellectual structure, volume, and knowledge-development directions. A Scopus Database and VOS Viewer software was applied as method to collect data and analysis the data. From the database, excel and VOS viewer, the total 342 of articles related with the topic the result of the paper was found and the relevant article can be used is 58 articles. As a result, the volume of articles on strategic management and leadership published in the span of the year 2012 until the year 2021 remains unstable as it decreases and increase as the time passes. The most influential journals, authors, and publications in the researched topic are identified through bibliometric analysis. This study reveals that by combining the most important aspects of strategic management and leadership into a single concept, it can lead to new research directions in business, management and accounting filed.

Keywords: strategic, management, leadership, bibliometric analysis

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INTRODUCTION

The sudden rise of the economy, as well as the introduction of technological advancements, has resulted in improved individual communication and productivity throughout the world. Moreover, the world is changing dramatically, moving from the industrial to the intelligence era which it increases competition between organisations. The changing of environment in which technologies advances gives opportunities to organizations to restructure their management suitable with the new trend. Technological advances can be challenging as it become a new experiences and new knowledge that can be beneficial if it be managed properly. Every organization must develop management strategies that are specifically suited to the organization's ability to react to current business trends while also maintaining flexibility in the face of fast change in the business environment so it can to increase the organization's performance and reputation (Hao and Yazdanifard, 2015). Strategic management is a method of foreseeing the future based on the interpretation of current trends and indicators, with the goal of ensuring the long-term viability of a company. However, the implementation of strategic management must have leadership because leadership has the ability to sustain problem that occurs by rapid growth of the economic environment technologies advances that can impact the organization.

In this current environment, it is important that organization have their own leader in every department to manage the employees as the digitalization can be a challenged. The most important job of leadership is to align the organization's vision with its goals and objectives in order to compete effectively in a dynamic environment, as well as to train and motivate personnel to realize the vision (Mjaku, 2020). High- impact events could use a new type of strategic leadership based on new environmental and organization competencies which include with high uncertainty and unpredictability, from the upper echelons of management, who have traditionally been the custodians of strategy creation (Adobor, Darbi and Damoah, 2021). A strategic management can influence the leadership as it involves the continuous planning, monitoring, analysis, and evaluation of the requirements that a company must meet in order to achieve its goals and objectives. Leadership frequently seizes the opportunity for change, which necessitates a significant strategic shift or adjustment. Leadership has already been highlighted as having an influence on people and persuading them to attain the organization's goals. Both strategic management and leadership are distinct concepts with distinct meanings that act in tandem but in seemingly opposing ways.

A few of the categories' constraints are related to strategic management and leadership. The role of leadership and a strategic strategy for developing countries' best institutional model for balanced regional economic development (RED) (Krasniqi and Statovci, 2019). Self-leadership (SL) is the strategic management of people's views and behaviors in order for them to define goals, identify needs, and work efficiently (Na-Nan and Saribut, 2020). Because business executives are strongly involved in defining a new vision and implementing strategies for the transition, leadership principles should be integrated into this issue (Phillip, 2021). Strategic leaders must engage in complexity leadership by understanding their organisations as complex adaptive systems and redesigning their leadership approaches and organisations to generate strategic adaptive capabilities (Adobor, Darbi and Damoah, 2021).

The focus of this research is to find areas of overlap and possible future interdisciplinary themes in strategic management and leadership. For this purpose, a bibliometric method will be used to scientifically document the discipline's content, intellectual structure, and understanding paths. There are a few research issues that can be addressed using a combination of bibliometric, text-mining, and visualizations analyses:

1. What is the volume of published articles with the strategic management and leadership topic?
2. What are the most influential journals, authors and research papers in the field?
3. What is the intellectual structure in the strategic management and leadership?
4. Which are the most addressed research topics in the research?

The early stage in this research was to create a sample database from published papers on the existence of the two primary keyword directions, strategic management and leadership, based on the research's goal. The sample database was compiled with the Scopus database as the primary source. In addition, data for the bibliometric review was gathered using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) technique. As a result, we compiled a list of 58 peer-reviewed journal papers.

METHODOLOGY

This research will be using a systematic literature review and bibliometric analysis in order to extract data and text, and the analysis of the citations of other studies. A systematic review can be thought of as a broad overview of primary studies that used a specific approach and are possible to be replicated moreover there are some of the advantages of the systematic literature review, namely, reduction of study bias, the reliability, and the precision of conclusions (Greenhalgh, 1997). While, bibliometric analysis can be defined as the statistical examination of published materials. Which concentrated on the complex quantitative examination of citations and citation counts. Using both methods can create an extensive and complete analysis of the accumulated knowledge in the recent years. In this case, there are several methods that be used in this research which data collection, data extraction and data analysis.

Data Collection

From the systematic research, identifying the relevant literature was develop as the search strategy. This research strategy was collected by using Scopus database as the main database and use a few search terms. To start the search strategy is by interrogating the Scopus Database using common keywords. All searches were spanned from the database inception until 2022. The search terms are limited into article title, abstract and author keyword to ease the search strategy. The common search term has been used is not just "strategy", "management" and "leaderships" but also "strategic management" AND "leadership". Table 1 show the criteria and the filter we apply when collecting data from the database. The document type of the search

must be in journal articles and review papers. The search mainly focused on mapping existing literature on strategic management and leadership which narrowed to subject area of business, management and accounting. The search span was from year 2012 until year 2021. All articles before year 2021 were excluded from the search. The search focused on all countries that are involved in the field.

After gathering relevant literature from the Scopus Database, a PRISMA technique will be used. To locate and extract data for bibliometric analysis, the PRISMA technique has four steps to follow. The first stage in the PRISMA approach is to search the Scopus Database for relevant articles relating to "strategic management" and "leadership." On June 10, 2022, we did the initial literature search and were able to retrieve a total of 342 journal articles published on specific topic using these parameters. Only journal articles and review papers were accepted, and they had to be written in English.

Table 1 Search criteria

|	Search criteria	No of articles
Topic	"strategic"	369,174
Document type	journal articles, review papers	263,272
Research years	2012-2021	131,452
Subject area	business, management and accounting,	34,226
Topic	"management"	4,735,858
Document type	journal articles, review papers	3,495,038
Research years	2012-2021	1,649,181
Subject area	business, management and accounting,	134,133
Topic	"strategic management"	14,357
Document type	journal articles, review papers	10,669
Research years	2012-2021	5,455
Subject area	business, management and accounting,	3,346
Topic	"leadership"	229,827
Document type	journal articles, review papers	170,799
Research years	2012-2021	92,248
Subject area	business, management and accounting,	20,790
Topic	"strategic management" AND "leadership"	852
Document type	journal articles, review papers	654
Research years	2012-2021	363
Subject area	business, management and accounting,	248
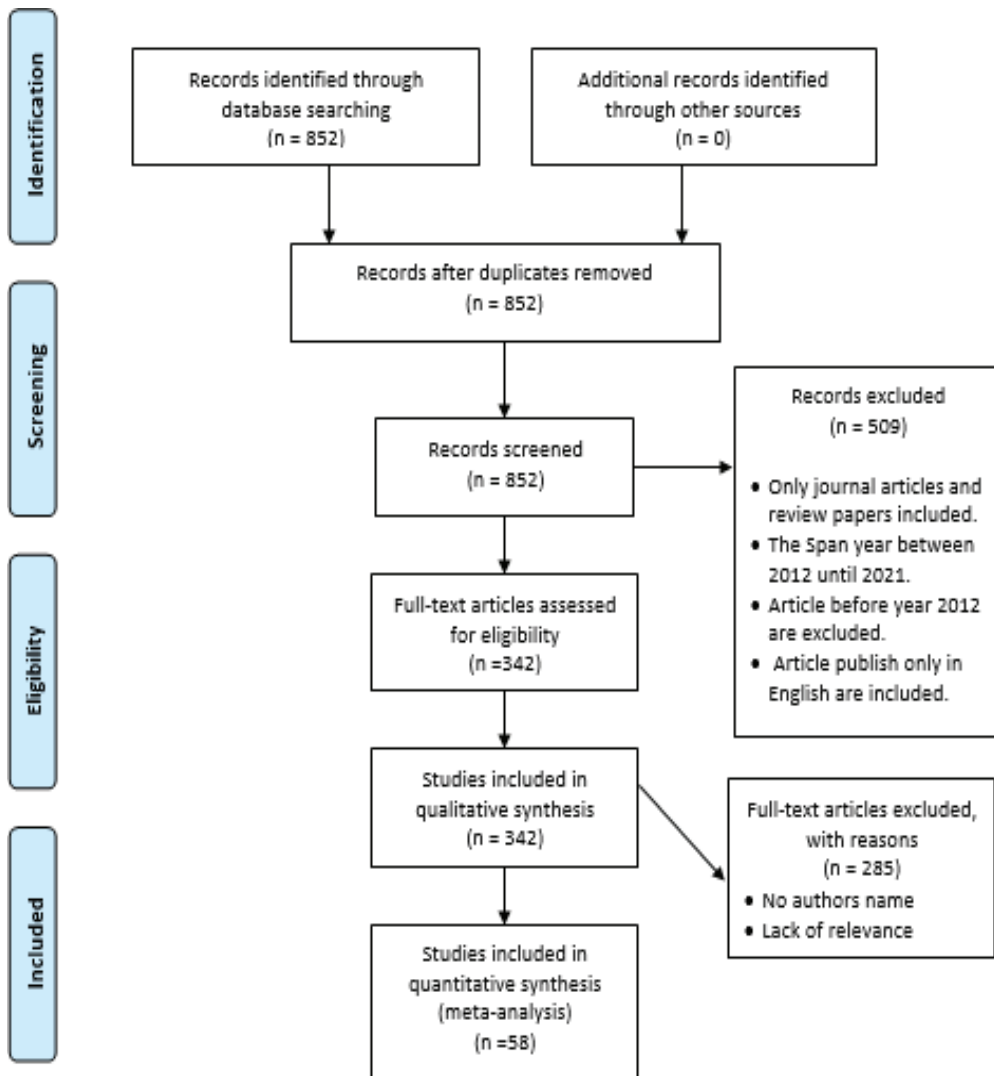
Figure 1 PRISMA Framework

The next step in PRISMA approach is eliminating documents which did not have authors names, documents identified as other than journal articles and review papers. Besides that, the subject area other than business, economics and management in the document will be excluded. Also, documents that publish before year 2012 will be eliminated. Then, documents that are duplicated will be removes. As a result, the number of documents that have been eliminated are 509 articles which leaving a database of 342 articles. After that, the document title and abstract will be evaluated to see if the document is relevance which the topics. After evaluating the documents, a total of 285 articles was removed as the documents involves study of other filed which is entrepreneurship and healthcare. As a result, 58 peer-reviewed journal articles able to obtained from the data collection.

Data Extraction

The completed database, which included 58 journal articles, was exported into a software-compatible file format. To analyses the data in this situation, we used the VOSviewer software. VOSviewer's features are notably beneficial for displaying big bibliometric maps in an easy-to-understand format (Eck and Waltman, 2010). VOSviewer pays close attention to the graphical rendering of bibliometric maps (Eck and Waltman, 2010). VOSviewer is compatible with a wide range of hardware and operating systems, and it may be launched directly from the web. The article title, author names, keywords used, and citation information, including all articles' reference lists, are the most important pieces of information obtained from the final database. The initial downloaded database was carefully analyzed and processed to increase the accuracy of the research results. The VOSviewer software's co-citation analysis was constrained by a degree of homogeneity in the format information, such as journal titles in the same format. As a result, data normalization took up a significant portion of the study.

Data Analysis

The data was analyzed using descriptive analyses. Descriptive analysis is a type of data analysis that aids in the explanation, presentation, or summarization of data points in a constructive manner so that patterns can emerge that satisfy all of the data's requirements. We used Excel to create a series of graphs to show the progression of published papers on strategic management and leadership themes across time. Due to the document's little content, we simply include the year, journal, and reference as our primary elements. In addition, we used bibliometric analysis as another approach of data analysis. The complicated quantitative examination of citations and citation counts was the emphasis of the bibliometric analysis methodology. The results can be obtained can be used to determine how many often a document has already been cited by another item from the same index. The purpose of co-citation analysis is to create a quantitative tool for comparing publications, authors, and journals. Co-citation analysis can also be customized to include journal co-citations, author co-citations, keyword co-citations, and so on. The visualization of similarity (VOS) software is used to create bibliometric mapping-based analytical tools based on these co-citation matrices. We used the VOSviewer software to create visual representations or 'network maps' of the connections between the data from the published paper in the database for this study.

RESULTS AND INTERPRETATIONS

Volume of Published Articles on Strategic Management and Leadership

To find out the volume of the published articles on Strategic Management and Leadership filed is by analyzing the evolution in time between year 2012 and 2021 which is a span of 10 years. The figure 2 show a bar graph which consist number of published articles during the year 2012 and year 2021 for the strategic management and leadership.
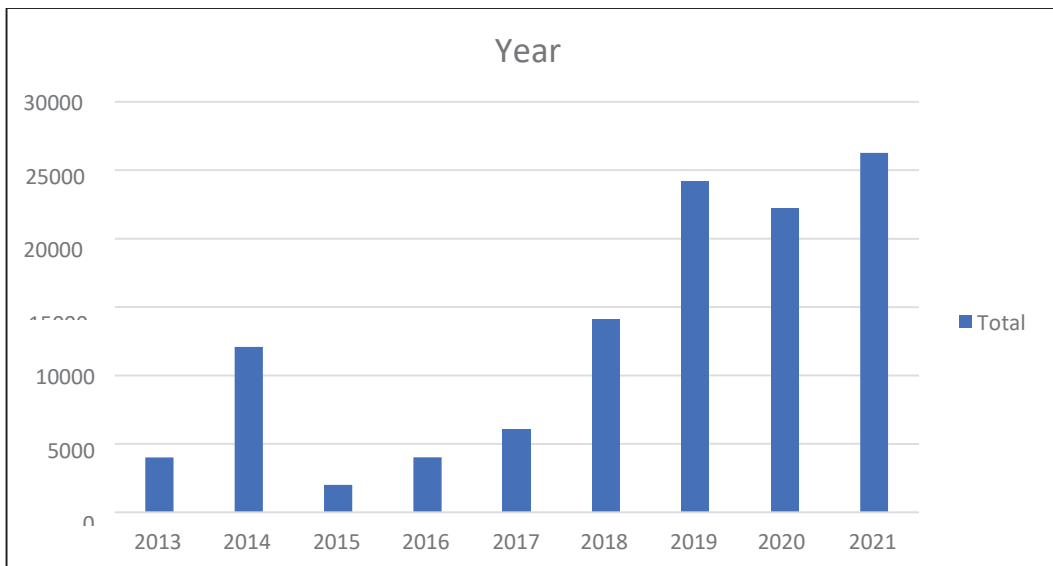

Figure 2 The publish articles in time evolution related with the strategic management and leadership

The result from the graph analysis shows that inconsistent number of publish articles related to strategic management and leadership field. There is no number of publish articles related to the filed in year 2012. Starting from the year 2013, the number of publish articles increases but fluctuated on year 2015. However, the number of publish articles have increases from the year 2015 until year 2019. During the year 2020, the number of publish articles have fallen but increases in year 2021. The number of publishing articles related to the filed in year 2021 have the highest number of publish articles while the lowest number of publish articles is in year 2015.

Journals Analysis of Strategic Management and Leadership Articles

The next step in the research was to look at the composition of the papers in the sample database based on where they were published. Table 2 lists the first 10 journals in order of the number of articles published. From the table 2, we can analyze that the top journals with the most published articles related with the topic are journal with the keyword or search term "strategic", "management" and "leadership".

Table 2 Top 10 journals with the most published articles on strategic management and leadership

	Journal Name	No. of article
1.	Journal of Leadership and Organizational Studies	2
2.	Journal Leadership and Organization Development	1
3.	Journal of Strategy and Management	3
4.	Leadership Quarterly	4
5.	Academy of Strategic Management Journal	2
6.	Total Quality Management and Business Excellence	1
7.	Journal of Management and Organization	2
8.	International Journal of Organizational Analysis	3
9.	Journal of Business and Accounting	1
10.	Journal of Accounting, Auditing and Accountability	1

The next step was to create a journal co-citation analysis map, which is shown in Figure 4. The map is made up of a set of bubbles or nodes that represent the relative number of co-citations for a given journal. The journals are clustered together based on their co-citation frequency which shows that there are series of similarities in the content of articles. Other than that, the set of lines on the map provide additional information by representing co-citation linkages between works published in different journals. Colors are used to help visualize the data, so each node represent a color that correlates to papers published in associated journals based on their frequency of co- citations. This signifies that all of the journals with the same color have content that is similar.
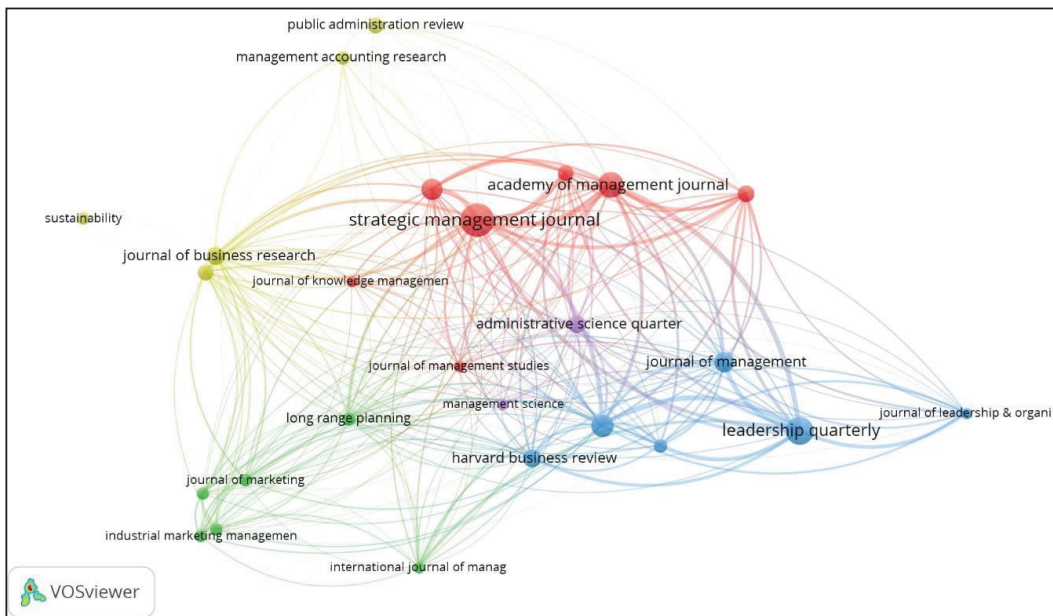

Figure 3 The co-citation network analysis of journals

In our sample of 58 articles, we found a total of 1900 sources, with a minimum of 10 citations per source, yielding a total of 27 articles that matched the criterion, 26 of which are shown in Figure 3. The volume of the node represents the number of citations obtained by the journal; consequently, the larger the cluster, the more references received by the journal. The concept of resemblance is applied to the node distribution, and related nodes are grouped together. On the network map, the journal co-citation analysis showed five unique and cohesive

groups of journals.The red cluster, which contains 24 items, is the largest, as well as several journals stand out. We could see a collection of journals that are firmly classified as important in this cluster. Strategic Management Journal, with 96 direct citations and a total link strength of 2679, is the journal with the most direct citations. The Academy of Management Journal is another standout, with 58 direct citations and a total link strength of 2275. With 11 direct citations and a total link strength of 174, the Journal of Knowledge Management is another notable journal from the cluster. In addition to Journal of Management Studies, which has 11 direct citations and a total link strength of 452, which has 11 direct citations and a total link strength of 452.

Green, with 20 items, is the second cluster in terms of number of things. With 17 direct citations and a total link strength of 526, Long-Range Planning is the most visible in this cluster. With 11 direct citations and a total link strength of 383, another journal from this cluster is International Journal of Management Reviews. Aside from that, another green cluster journal, Journal of Marketing, has 14 direct citations and a total link strength of 423.

The third cluster is the blue cluster, which has a total of 24 elements. With 69 direct citations and a total link strength of 2571, the Leadership Quarterly is the most visible in this cluster. The Academy of Management Review, with 44 direct citations and a total link strength of 1899, and the Journal of Management, with 35 direct citations and a total link strength of 1281, are two other prominent publications from this cluster.

The journals with the least cited papers are grouped together in the fourth and fifth clusters, which are colored yellow and purple. The fourth cluster, which has 24 pieces, is yellow. The Journal of Business Research is the most noticeable of the yellow cluster, with 28 direct citations and a total link strength of 577. The purple cluster has 24 articles, one of which is the Administrative Science Quarterly publication, which has 30 direct citations and a total link strength of 2071.

Influential Authors and Articles in the Strategic Management and Leadership Field

A citation analysis was used to find the most prominent papers in our sample database. The approach is based on the idea that the more citations a publication receives, the greater its influence in the research field. The Table 3 shows the top 10 papers according to their number of citations. The number of citations is received from the interrogation of the Scopus database.

Table 3 Top 10 most cited papers.

R	Article Title	Authors	Year	TC
1.	Strategic leadership: Values, styles, and organizational performance	Carter S.M., Greer C.R.	2013	53
2.	Leadership and innovation capability development in strategic alliances	Schweitzer J.	2014	41
3.	Strategic analysis of knowledge firms: The links between knowledge management and leadership	Merat A., bo D.	2013	22
4.	Formation of strategic change management system at an enterprise	Dzwigol H.,Shcherbak S.,	2019	16
5.	Distributed Leadership for ICT Reform in Singapore	Ng D., Ho J.	2012	15
6.	When do leaders matter? Ownership, governance and the influence of CEOs on firm performance	Clark J.R., Murphy C., Singer S.J.	2014	14
7.	The Influence of Critical Factors on Business Model at a Smart Factory: A Case Study	Jerman A., Erenda I., Bertoncelj A.	2019	9
8.	Rethinking strategic leadership: stars, clans, teams and networks	Kriger M., Zhovtobryukh Y.	2013	8
9.	The role of creative self-efficacy, transformational leadership, and digital literacy in supporting performance through innovative work behavior: Evidence from telecommunications industry	Santoso H., Elidjen, Abdinagoro S.B., Arief M.	2019	8
10.	Maturity of strategic management in organizations	Witek-Crabb A.	2016	8

Abbreviations: R—rank; TC—total citations

The Table 3 indicate that the paper "Strategic leadership: Values, styles, and organizational performance" written by Carter S.M., Greer C.R. is the most cited article in the field of strategic management and leadership. The paper was published in 2013, in Journal of Leadership and Organizational Studies, and it has 53 citations in the Scopus database. The authors of this paper address Stakeholder demand for firms to satisfy triple bottom line performance benchmarks are posing a challenge to strategic leadership. However, there is a scarcity of empirical study on the relationship between strategic leaders' values and leadership styles and such measurements. The study discusses values as well as existing and growing leadership styles, as well as the findings of empirical studies on their impact on organizational success. The second most cited paper is "Leadership and innovation capability development in strategic alliances", published in Journal of Leadership and Organization Development, written by Schweitzer J with 41 citations on the Scopus Database. In this paper, the author examines whether the deployment of certain intra-firm leadership practices can explain heterogeneity in alliance capabilities development. According to the author, transformational leadership behaviors have a greater impact on the development of a strategic alliance's innovation (dynamic) capabilities than operational (substantive) capabilities, while transactional leadership behaviors primarily sustain operational capabilities.

In terms of author co-citation, we present the author co-citation map in Figure 5, which is based on 5164 writers, of whom 5164 met the threshold of having at least one citation. In contrast, Figure 6 shows a network map of the 312 most often co-cited writers. The author co-citation analysis divides writers into clusters on a network map based on the similarity of their co-citations. The co–citation map of the authors is analyzed using the same concepts as the co–citation map of the journals.
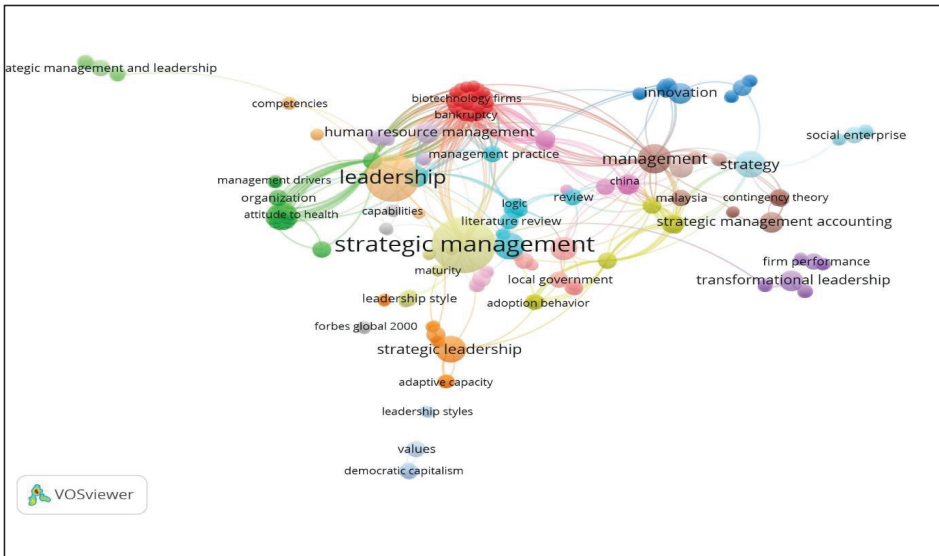

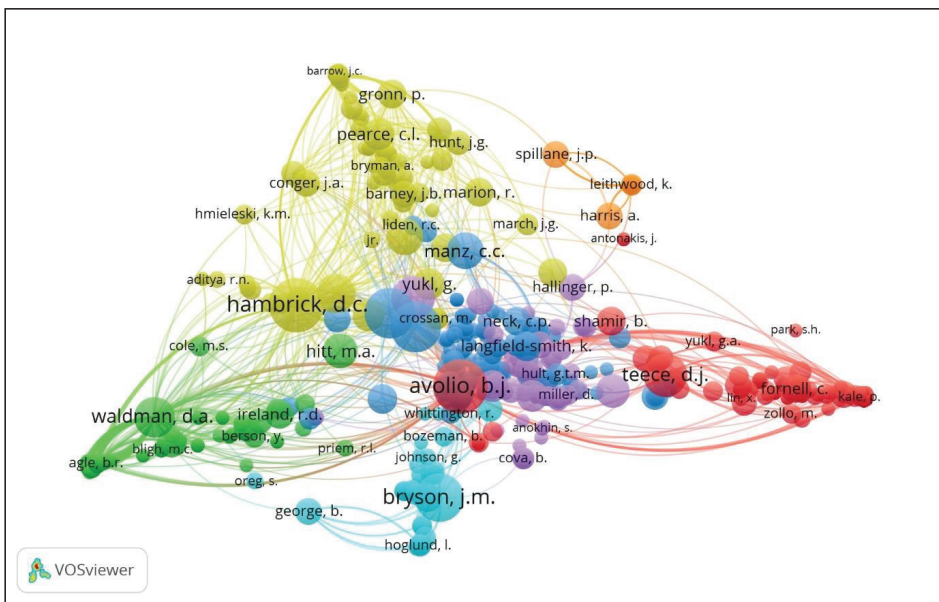**Figure 4** The author co-citation map.

Figure 5 The keyword co-occurrence network map.

There are seven clusters in the authors' co-citation map, however only three primary clusters have been found. The red cluster is the largest, with 748 authors. One author in particular stands out: researcher Avolio, B.J, who has a total link strength of 5049 and 29 direct citations. The blue cluster, on the other hand, is the second largest. Bass B.M. is one of the researchers that is a coauthor on two of the top 15 papers. There are 25 direct citations for the researcher, with a total link strength of 2956. The yellow cluster has the most researchers, with 29 direct citations and a total link strength of 4333. Hamdrick D.C. is the most researcher with 29 direct citations and a total link strength of 4333.

The Topical Focus in the Strategic Management and Leadership Field

The next step in the investigation was to conduct a keyword co-occurrence analysis, it can be shows in the Figure 6. The goal of this study is to discover commonly explored themes in the field of strategic management and leadership, as well as their connections. When words commonly co-occur in papers, it shows that the concepts behind those words are intimately related is the reasoning behind a keyword co- occurrence study. The co-word analysis produces a network of themes and their relationships, which represents a field's conceptual space. By performing keyword co- occurrence analysis, we can determine which terms are commonly used by authors, as well as identify trends and patterns in the themes under investigation. The 312 keywords detected in the 58 publications in the sample database were used to create the keywords co-occurrence map. A minimum of one occurrence of the keyword was required to be included in the results, and 312 papers met this requirement. For the keyword occurrence analysis, the VOS viewer software created 21 clusters. There are three main clusters that are visible which is brown one, peach one and cream. The biggest cluster is the peach as it linked with 123 keywords which among them are "leadership", "distributed leadership" "competencies", "management capabilities" and many more. This clusters have 16 total of an occurrence and a total link strength of 135. Cream is the next cluster, with 144 items that include terms like "strategic management," "management," "leadership style," and so on. This cluster has 22 occurrences in total, with a total link strength of 127. Brown is the final main cluster, with an occurrence of 6 and a total link strength of 100. This cluster was mostly concerned with keywords such as "management," "strategy," and others.

DISCUSSION

The research's main task is to find common ground for future interdisciplinary research between strategic management and leadership, which could be done by experimentally recording the intellectual structure, volume, and knowledge development directions. To achieve these objectives, we used bibliometric analysis to examine 58 publications published in Scopus Database and Excel journals. We summaries the findings and explain the significant limitations, as well as prospective study areas, in this section of the publication.

The Research Findings: Interpretation and Implications

The determination of the evolution of published article volume is the first research topic addressed in this work. The initial conclusions in the cases of strategic management and leadership reveal similarities in the progression of the number of publications. While doing this research, there are some implications occur that affect the research result. This research only uses a few of criteria which only focuses on 10 years of time frame which is from year 2012 until year 2021. All the publish article for the 10 years did not have a proper and relevant content that can be used, only 58 article is relevance and related with the topic of strategic management and leadership. Other than that, the filter uses in findings the articles are limited to years, journals, authors, and citation as some of the publish article in the Scopus Database did not have all the mention criteria. Moreover, this research limited to business, management and accounting which have 248 publish article founded related with the field of strategic management and leadership. This only can be founds using the Scopus Database.

By examining every published article that can be useful with the Vosviewer, you can get an outstanding discovery and result related to strategic management and leadership. In general, the fields of strategic management and leaderships have many resemblances in their progression, and merging the key areas of both theories into a single theme like "strategic management and leaderships," as seen in the search terms co-occurrence analysis, can be an emerging research topic, providing directions for future research in a very large field of strategic management and a new and existing field of leaderships.

Future Research

A variety of factors limit how the findings of the study can be interpreted. One limitation is that science mapping provides a systematic, quantitative method for examining the organization of a knowledge base. Given this restriction, we must emphasize that the current analysis only serves as a foundation for future research syntheses that evaluate findings from strategic management and leadership studies. Other than that, another implication is the creation of the sample database. We used different sets of keywords such as strategic, management, and leaderships to find materials for inclusion throughout the search process. This method was based on the notion that if the writers of the documents used terms such as 'strategic leadership,' 'human-resource management,' and 'leadership styles' in their research, this would be recorded in the title, author-assigned keywords, or the abstract. Even if we read every article in more than 852 periodicals and whittled the sample down to only 58, there's a chance we'll miss out on a useful perspective. Thus, we should emphasize that, despite the quantitative precision of bibliometric study, interpreting co-citation maps is not always simple. It can be difficult to determine the appropriate threshold for co- citation analysis. Last implication occurs is the data collection from one database. In this research we only use Scopus Database to collect our data which is limits the research. Future searcher can use other website such as Web of Science and Google Scholar to finds publish articles related with their topic. In conclusion, we can discover certain dedicated researchers and this research give opportunity to search a new filed of strategic management and leaderships.

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