*Corresponding Author' Email: dsinoimeri@fim.edu.al
Proceedings of the International Conference on Business, Management and Economics
Vol. 1, Issue. 1, 2024, pp. 16-21
DOI: https://doi.org/10.33422/icbmeconf.v1i1.195

ISSN: 3030-0541 online

Diamond Scientific Publishing

Systematic Literature Review of Supply Chain Management

Dea Sinoimeri*, Jonida Teta
Department of Production and Management, Polytechnic University of Tirana

Abstract

Supply Chain Management has become crucial in company development and competition since the late 20th century. The article provides a transparent definition of Supply Chain Management by examining the body of literature. It also explores the current state of research in Supply Chain Management and identifies potential areas for future research in forthcoming articles. The article analyzes the influential research of Supply Chain Management using various criteria, including disciplines, journals, countries, and authors' keywords. The analysis was based on a dataset of 76,493 articles obtained from the Elsevier and Springer databases between 2012 and 2022. The results reveal predominant involvement in disciplines such as Environmental Science (13,288; 17.37%), Medicine & Public Health (10,396; 13.59%), and Business & Management (8,498; 11.11%). The terms "Sustainability," "Green Supply Chain Management," and "Sustainable Supply Chain Management" underscore the shift towards integrating environmental concerns within Supply Chain Management, reflecting its growing significance in bolstering both operational efficiency and sustainability. The Systematic Literature Review further identifies a rapid integration of information technology into Supply Chain Management, indicating a crucial pivot towards digital solutions in managing supply chains more effectively.

Keywords: Supply Chain Management, Systematic Literature Review, Analysis, Sustainability, Industry 4.0.

1. Introduction

The literature appropriately establishes the concept of "Supply Chain." Currently, companies no longer engage in individual competition inside the market but rather compete as integral parts of a supply chain. An efficient supply chain is essential for a company to promptly fulfill the requirements and fast-paced product cycles of its consumers. Supply chains are moving from 'cost chains' to 'value chains' and 'supply push' to 'demand pull' *(Hines T., 2014; Martin C. and Ryals L. J., 2014).* A supply chain focused on growth through sales generation is more demand-driven and outward-looking *(De Treville S. et al., 2004; Hadaya P. and Cassivi L., 2007).*

A Supply Chain encompasses the synchronized administration of several processes in transmitting information and products, including the stages of planning, implementation, and

evaluation. This includes acquiring raw materials, the subsequent transformation of products, and the ultimate distribution to the final customer. The chain's links start with the raw material producers and conclude when the van delivers the completed product to the customer *(Hayes A. F., 2022)*. The supply chain consists of all parties (manufacturers, suppliers, transporters, warehouses, retailers, and customers) and all the functions involved, directly or indirectly, in fulfilling a customer request *(Chopra S. and Meindl P., 2010)*.

The definition of "Supply Chain Management" was mainly developed by consultants R. Oliver and M. Weber in their article "Supply Chain Management: Logistics catches up with strategy," published in 1982. Supply Chain Management involves coordinating essential operational procedures among company partners, including the whole value chain from the extraction of raw materials to the final delivery of the completed product to the final customers. This encompasses steps like manufacturing, shipping, warehousing, and acquiring. Supply Chain Management involves the fundamental company activities that establish a connection between final consumers and original suppliers.
Supply Chain Management represents a new approach that involves both internal operations and external suppliers to make advancements in cost management, product development, cycle times, and total quality control (*Monczka R. M. et al., 2020)*.

Supply Chain Management is a vital aspect of operations management that enhances the company's performance. Supply chain management encompasses the planning and managing of all activities involved in sourcing and procurement, conversion, and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, suppliers, intermediaries, third-party service providers, and customers. In essence, supply chain management integrates supply and demand management within and across companies *(Ellram L. et al., 2019)*. According to (*Kazemkhanlou H. and Ahadi H., 2014*), effective Supply Chain Management has several advantages, including increasing customer value and profitability, reducing product cycle time, achieving average inventory levels, and designing better products.

The article analyzes the current position and trends in Supply Chain Management. The analysis investigates the contributions of significant countries, influential journals, and authors keywords in the field of Supply Chain Management. Section 2 of this article outlines the Methodology used to obtain the data source. Section 3 finishes by showing the Results obtained from the article. The article concludes with Section 4, which addresses the Conclusions made to identify any areas that may need more investigation in future articles.

2. Methodology

A Systematic Literature Review identifies, selects, and critically appraises research to answer a clearly formulated question *(Dewey A. and Drahota A., 2016)*. The article used an analysis methodology, which can be succinctly summarized into five stages, as shown in Figure 1.

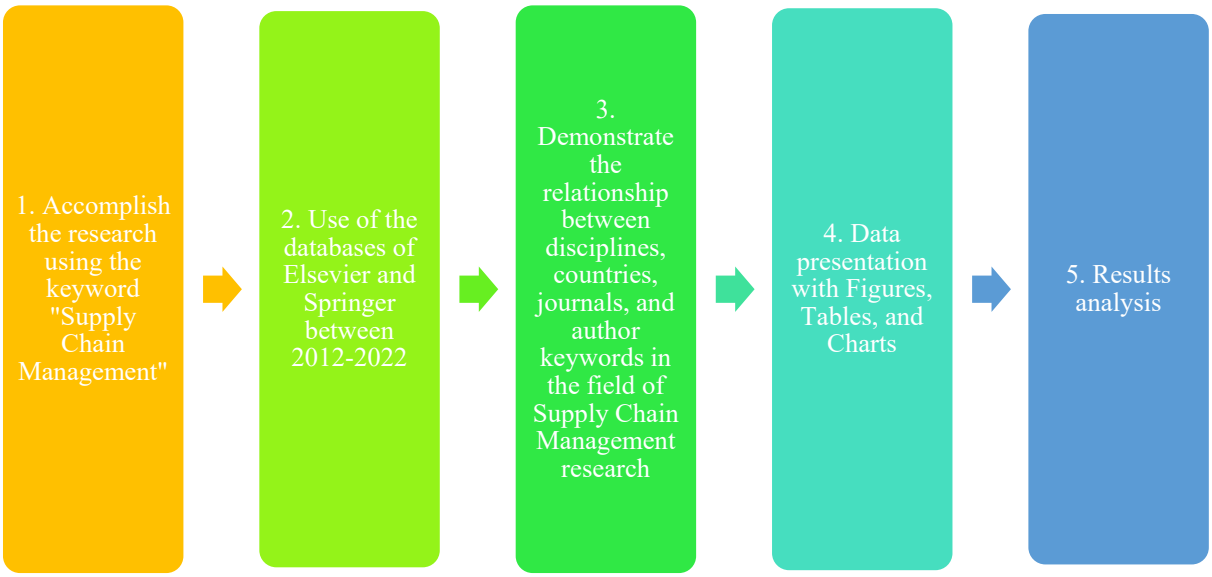

Figure 1. The research methodology

1. The first stage includes identifying the research using the keyword "SCM- Supply Chain Management" and the research parameters using the title, abstract, and keywords.
2. The Systematic Literature Review includes two databases as follows:
   a. Elsevier (www.sciencedirect.com),
   b. Springer (www.springer.com).
   The Systematic Literature Review includes a decade from 2012 to 2022 in English. A total of 76,493 reviewed articles were obtained on 5 November 2023.
3. Data presentation appears with the help of visual forms, including Figures, Tables, and Charts.
4. The results show the analysis of Supply Chain Management to identify the main areas of study and future possibilities for forthcoming articles.

3. Results

The quantity of articles and their tendencies are vital indicators of advancement in any specific field. The Elsevier and Springer databases revealed 76,493 reviewed articles (*Elsevier- 16,876 articles, Springer- 59,617 articles*) in the field of Supply Chain Management from 2012 to 2022. The information was collected on 5 November 2023. The total number of articles by year from 2012-2022 is shown in Figure 2.

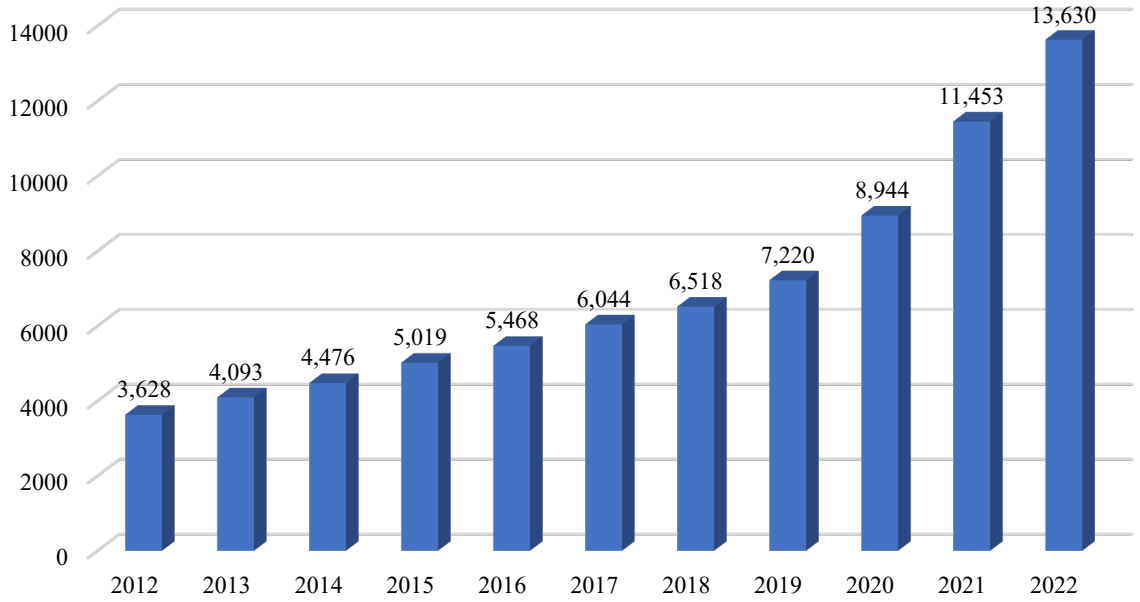

Figure 2. The number of articles published through the period 2012-2022

A total of 76,493 articles were published from 2012 to 2022. Between 2012 and 2015, articles remained remarkably stable, with a slight rise each year from 3,628 to 5,019. Between 2016 and 2020, the number of articles remained remarkably stable, with a slight rise each year from 5,468 to 7,220. The number of articles exceeded 11,453 in 2021, reaching 13,630 in 2022.

The research field is a piece of information in every article and is categorized as a discipline. Supply Chain Management has been the topic of 76,493 articles, which cover a wide variety of disciplines. The top 10 disciplines in Supply Chain Management ranked according to the number of articles are shown in Table 1.

Table 1. Contribution of the Top 10 disciplines in Supply Chain Management

Rank	***Discipline***	***Number of articles***	***% of articles***
1	Environmental Science	13,288	17.37%
2	Medicine & Public Health	10,396	13.59%
3	Business & Management	8,498	11.11%
4	Engineering	8,428	11.02%
5	Social Science	8,031	10.5%
6	Energy	4,917	6.43%
7	Computer Science	2,685	3.51%
8	Economics	2,402	3.14%
9	Agricultural & Biological Science	2,300	3.01%
10	Biochemistry, Genetics & Molecular Biology	2,214	2.89%

It is advantageous to identify the specific journals that publish articles in the field of Supply Chain Management to obtain information and submit their submissions quickly. The top 10 journals published articles in Supply Chain Management are shown in Table 2.

Table 2. Contribution of the Top 10 journals in Supply Chain Management

Rank	***Journal***	***Number of articles***	***Impact Factor (2022)***
1	Environmental Science and Pollution Research	3,648	5.8
2	Renewable and Sustainable Energy Reviews	1,665	17.4
3	Arabian Journal of Geosciences	1,246	1.8
4	The International Journal of Advanced Manufacturing Technology	1,087	3.5
5	Journal of Cleaner Production	830	11.9
6	Journal of Business Ethics	760	6.3
7	Environment, Development and Sustainability	554	5.6
8	Journal of Intelligent Manufacturing	409	7.1
9	Science of The Total Environment	397	9.8
10	Information Systems and e-Business Management	358	4.3

The United States of America resulted as the most prominent country in terms of articles, indicating its superior research impact and attentiveness in the field of Supply Chain Management. China and the United Kingdom were rated second and third, respectively, based on the total number of articles published in the field of Supply Chain Management. The top 10 countries published articles in Supply Chain Management are shown in Chart 1.

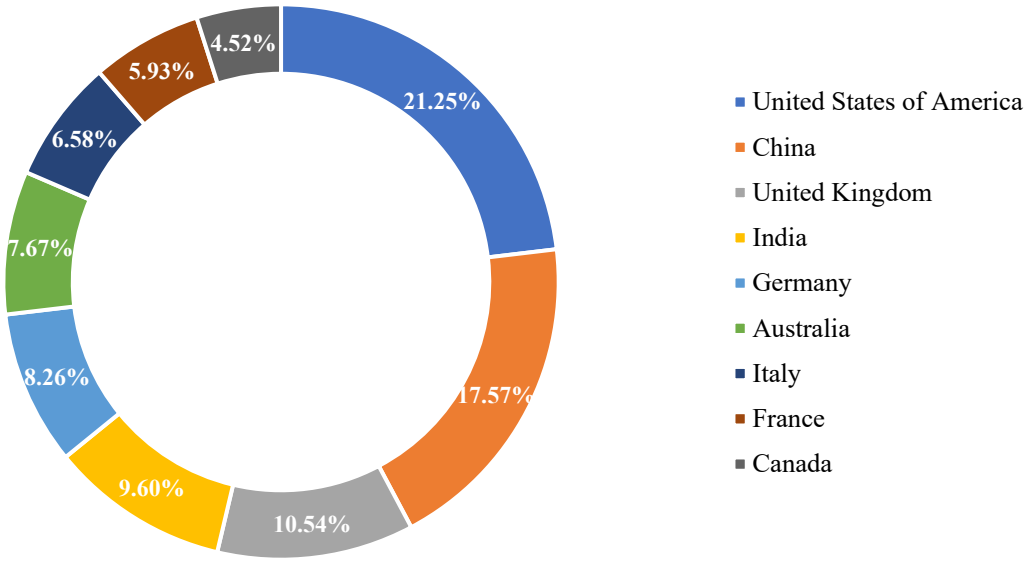

Chart 1. Contribution of the Top 10 countries in Supply Chain Management

The authors' keywords were created to analyze the research trend by quantifying the use of specific terms. From 2012 to 2022, author keywords were utilized to analyze the research trend of the article. Approximately 68.2% of all articles had keywords that were used just once. The top 10 Authors' Keywords in Supply Chain Management are shown in Figure 3.

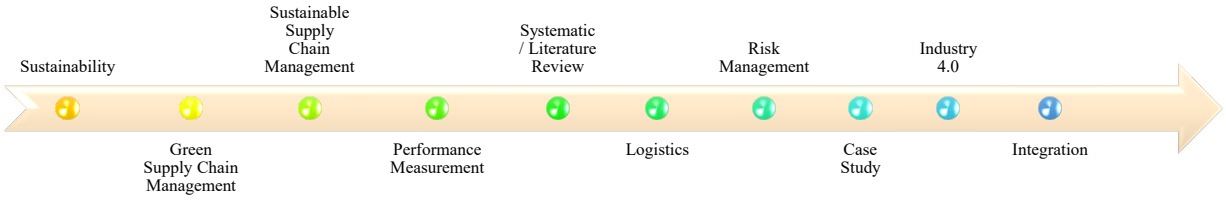

Figure 3. Contribution of the Top 10 authors' keywords in Supply Chain Management

4. Conclusions

The Systematic Literature Review conducted for this article underscores the evolving landscape of Supply Chain Management, which has expanded significantly over the past decade. The research has shown a considerable increase in the volume of publications, particularly in fields such as Environmental Science, Medicine & Public Health, and Business & Management, indicating a broadening scope of Supply Chain Management applications across different sectors. The most cited journals and articles within these disciplines strongly emphasize sustainability and technology integration. Moreover, the United States, China, and the United Kingdom have been identified as leading contributors to Supply Chain Management research, reflecting their strategic importance in global supply chain networks. The prevalence of sustainability-related keywords confirms a shift towards more sustainable and environmentally friendly supply chain practices. Moving forward, it is imperative for future research to explore further the integration of advanced technologies such as AI and IoT in Supply Chain Management, assess the impact of global economic changes on supply chains, and develop more robust strategies to manage the complexities of modern supply chains. This will enhance the theoretical framework of Supply Chain Management and provide practical insights for its application in improving economic efficiency and sustainability in global markets.

References

Chopra, S., & Meindl, P. (2010). *Supply Chain Management: Strategy, Planning, and Operation*. Upper Saddle River, New Jersey: Pearson Education, Inc.

De Treville, S., Shapiro, R., & Hameri, A. (2004). From supply chain to demand chain: The role of lead time reduction in improving demand chain performance. *Journal of Operations Management, 21*, 613–627.

Dewey, A., & Drahota, A. (2016). *Introduction to systematic reviews: Online learning module*. Cochrane Training.

Hadaya, P., & Cassivi, L. (2007). The role of collaboration planning actions in a demand-driven supply chain. *Industrial Management & Data Systems, 107*(7), 954–978.

Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (Vol. 3). The Guilford Press.

Hines, T. (2014). *Supply Chain Strategies: Customer Demand Driven, and CustomeFocused*. Routledge.

Kazemkhanlou, H., & Ahadi, H. (2014). Study of performance measurement practices in supply chain management. *Proceedings of the 2014 International Conference on Industrial Engineering and Operations Management, 1*, 297–310.

Lisa, M. E., Christine, M. H., Van Weele, A., Essig, M., Johnsen, Th., Nassimbeni, G., Pagell, M., Van Raaij, E., Rozemeijer, F., Tate, W. L., & Wynstra, F. (2020). Purchasing and supply management's identity: Crisis? What crisis? *Journal of Purchasing and Supply Management, 26*(1), 100583.

Martin, C., & Ryals, L. J. (2014). The supply chain becomes the demand chain. *Journal of Business Logistics, 35*(1), 29–35.

Monczka, R. M., Handfield, R. B., Giunipero, L. C., & Patterson, J. L. (2020). *Purchasing & Supply Chain Management*. Cengage.