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Blockchain Revolutionizing Supply Chain Management: A bibliometric review of emerging research trends and challenges

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Abstract
Blockchain technology has garnered substantial attention for promoting sustainability in economic, social, and environmental domains. This study employs a knowledge-based visualization approach to present an extensive review of blockchain-based supply chains. Examining 1276 articles from Scopus databases between 2016 and December 2022, the research utilizes bibliometric analysis and statistical techniques for data analysis. Notably, China and the United States lead the field, investigating the integration of blockchain with emerging technologies for applications in supply chain management, finance, intellectual property, digital currency, and transaction costs. This study provides a comprehensive overview, guiding future research in blockchain within management and economics.

Keywords: Blockchain; Supply Chain Management; Bibliometric Analysis; Emerging Research Trend;

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1.0 Introduction

Blockchain technology has gained significant attention in recent years due to its potential to improve supply chain management. Blockchain is a distributed ledger that enables secure and transparent transactions between multiple parties without the need for a central authority. By utilizing blockchain technology, supply chain management can be made more efficient, secure, and cost-effective. Previous studies on the systematic literature review were undertaken to explore the current state of research on blockchain technology in supply chain management. The study found that blockchain technology can enhance transparency, traceability, security, and efficiency in supply chain management (Chang & Chen, 2020). The authors also noted that the implementation of blockchain technology in supply chain management requires collaboration and trust among various stakeholders. Blockchain technology has been identified as a promising solution for supply chain management (SCM) challenges such as transparency, traceability, and collaboration. To gain a better understanding of the research landscape on blockchain and SCM, several bibliometric analyses have been conducted in recent years. Although bibliometric analysis is a useful tool for evaluating and understanding the research landscape related to blockchain and supply chain management, there are some limitations and gaps that should be considered. One gap in the existing bibliometric studies

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is the lack of focus on specific industries or supply chain processes. A recent study by Pandey et al. (2022) addressed this gap by conducting a bibliometric analysis of blockchain technology in the food supply chain. The study analyzed over 150 articles published between 2016 and 2021 and found that research on blockchain technology in the food supply chain (FSC) has been increasing in recent years. According to the survey, most of the research has been done on how blockchain technology can be used in finance, logistics, and product authentication. Furthermore, blockchain is likely to become the dominant technology for improving FSC transparency and traceability, lowering risk, and, most significantly, boosting trust among various stakeholders. Table 1 summarizes findings from different studies on blockchain-based supply chains. Some studies discussed recent blockchain applications in the supply chain, while others provided an analysis of themes, dynamic industries, and methodologies in blockchain-based supply chain studies.

Table 1: Bibliometric analysis of blockchain-based supply chain research

Authors	Area of Study	Key Subject
Tapscott & Tapscott (2017)	Discussed transparent transactions within the blockchain network.	Transparency of transactions within the blockchain
Kshetri (2018)	Depicted the value and objectives of blockchain technology in the supply chain.	Value and objectives of blockchain technology
Saberi et al. (2019)	Illustrated blockchain's sustainable relationship and adopting factors.	Adopting factors of blockchain
Queiroz & Wamba (2019)	Discussed recent blockchain applications in the supply chain.	Blockchain applications
Pournader et al. (2020)	Studied the adoption of blockchain technology in the supply chain and aviation industries.	Blockchain technology in Aviation Industry
MOBI (2020)	Analyzed the adoption of blockchain technology, emphasizing its ability to make the supply chain more transparent, smooth, efficient, and cost-effective.	Adoption and benefits of blockchain technology
Lohmer et al. (2020)	Analyzed resilience strategies in the supply chain.	Resilience strategies in the supply chain
Wamba & Queiroz (2020)	Explored themes used in blockchain-based supply chain studies and future research agendas.	Themes and future research agendas in blockchain-based supply chain studies
Li et al. (2021)	Studied the adoption of blockchain supply chain technology in the aviation industry, highlighting cost-effective solutions.	Blockchain supply chain technology in the aviation industry
Moosavi et al. (2021)	Conducted a short analysis using bibliographic coupling (citation, co-citation, co-occurrence analysis) and network analysis of the blockchain-based supply chain.	Blockchain-based supply chain using bibliographic coupling and network analysis
Kuzior & Sira (2022)	Conducted citation and co-occurrence analysis using VOSviewer software on 1842 documents published from 2007 to 2021.	Citation and co-occurrence analysis of blockchain documents using VOSviewer software
Pandey et al. (2022)	Used Scopus database to perform general citations, bibliometric coupling, and co-word analysis on blockchain technology in the food supply chain.	Blockchain technology in the food supply chain
Jin & Chang (2022)	Conducted bibliometric research on blockchain in environmental management, extracting data from WOS, and using the R-package and VOSviewer for visualization.	Blockchain in environmental management
Yang et at. (2022)	Conducted bibliometric research on blockchain in business and management (B&M) field, extracting data from WOS on 696 articles published between year 2015 and 2021.	Blockchain in business and management field

Generally, the table provides a brief overview of the main topics covered in each study and serves as a useful reference for anyone interested in learning more about blockchain-based supply chains. Bibliometric analysis is a method of evaluating and analyzing academic literature that involves looking for patterns and relationships in research publications. By conducting a bibliometric analysis of literature related to blockchain and supply chain, researchers can identify trends, research gaps, and areas of potential future research. In the context of supply chain management (SCM), reporting on the existing state, potential, and developing uses of blockchain across many industries appears essential. In this study, a set of questions was formulated to aid in establishing a logical connection between pertinent existing research and the potential for new research in this field.

RQ1: How has research on blockchain-based supply chain management evolved over time?
RQ2: Which countries and authors are leading research in blockchain-based supply chain management?
RQ3: What are the most frequently cited papers in the field of blockchain-based supply chain management?
RQ4: How can future research in blockchain-based supply chain management address current gaps and limitations?

This paper contributes to a better understanding of blockchain's applications in SCM by exploring various research topics and future directions. The literature analysis identified potential areas of research that may indicate gaps for future research. The remainder of this paper is structured as follows: Section II introduces the fundamental knowledge of blockchain and smart contracts, Section III outlines

the methodology and procedural steps used in this review, and Section IV presents the findings from the literature analysis including future research gaps, and limitations while the conclusion is presented in Section V.

2.0 Methods

The study utilized bibliometric knowledge mapping visualization and statistical analysis techniques. The software and application programs of Microsoft Excel, Harzing Publish or Perish, Visual of Similarities (VOS) viewer, and Open refine were employed to analyze a sample dataset of blockchain research in management and economics. This enabled the researchers to visually present information on various aspects such as country/region collaboration, author collaboration and co-citation, keyword co-occurrence and clustering, as well as keyword timelines.

Data required for a comprehensive literature review and bibliometric analysis were collected from the Scopus database platform on the 15th of March 2023. TITLE-ABS-KEY ("blockchain" AND "supply chain") AND (LIMIT-TO (SUBJAREA , "BUSI") OR LIMIT-TO (SUBJAREA , "SOCI") OR LIMIT-TO (SUBJAREA , "ECON") OR LIMIT-TO (SUBJAREA , "MULT")) AND (LIMIT-TO (PUBYEAR , 2022) OR LIMIT-TO (PUBYEAR , 2021) OR LIMIT-TO (PUBYEAR , 2020) OR LIMIT-TO (PUBYEAR , 2019) OR LIMIT-TO (PUBYEAR , 2018) OR LIMIT-TO (PUBYEAR , 2017) OR LIMIT-TO (PUBYEAR , 2016)) were the keyword search used to select the articles. All languages were considered during the selection process and articles were categorized based on their respective subject areas. The analysis resulted in the selection of 1276 publications which are described in detail in the subsequent sections. The data collection process is illustrated in Figure 1 using the PRISMA flow diagram.

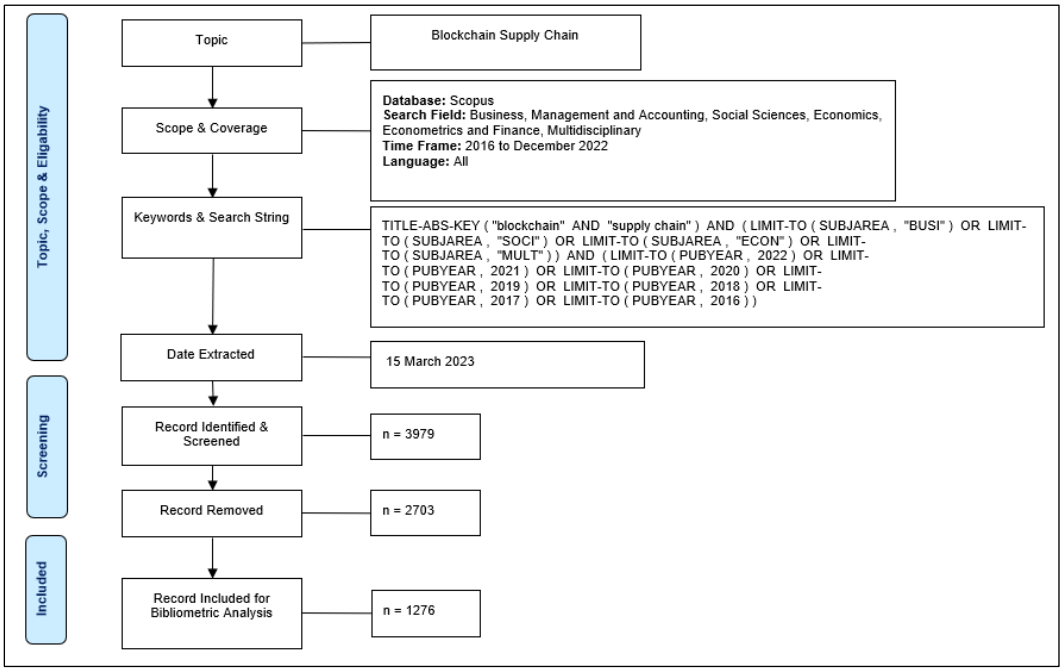

Fig. 1: PRISMA Flow Diagram

(Source:) Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Medicine, 6(7), e1000097. https://doi.org/10.1371/journal.pmed.1000097

3.0 Result

The findings of this analysis shed light on the trends and patterns in scholarly publishing across disciplines. The prevalence of articles as the most common type of scholarly publication is consistent with previous research, highlighting the centrality of original research articles in scholarly communication. However, the relatively high proportion of conference papers and book chapters suggests that these types of publications continue to play an important role in disseminating scholarly knowledge, particularly in certain disciplines (e.g., engineering, computer science).

3.1 Evolution of published studies

The table (Table 2) displays the distribution of publications throughout time, as reported in a scholarly analysis. The data include 2 publications from 2016 (0.16%), 14 from 2017 (1.10%), 63 from 2018 (4.94%), 126 from 2019 (9.87%), 267 from 2020 (20.92%), 347 from 2021 (27.19%), and 457 from 2022 (35.82%). The analysis aimed to investigate the trends and patterns in scholarly publishing over time, with a particular emphasis on the growth and impact of research output in different fields.

The results suggest a clear upward trend in scholarly publishing in recent years, with the number of publications steadily increasing from 2016 to 2022. The sharp increase in publications in 2020 and 2021 could be attributed to the impact of the COVID-19 pandemic

on research priorities and output. The continued growth of scholarly publishing in 2022 suggests that this trend is likely to continue. These findings have important implications for scholars, publishers, and policymakers seeking to understand and support scholarly communication. As the volume of scholarly output continues to increase, it is critical to ensure that research is disseminated effectively and efficiently, and that the quality of research remains high. Additionally, policymakers and funding agencies may need to adjust their strategies and priorities to support the changing landscape of scholarly publication.

Table 2. Year of publications

Year	Total Publications	Percentage (%)
2016	2	0.16
2017	14	1.10
2018	63	4.94
2019	126	9.87
2020	267	20.92
2021	347	27.19
2022	457	35.82
Total	1276	100.00

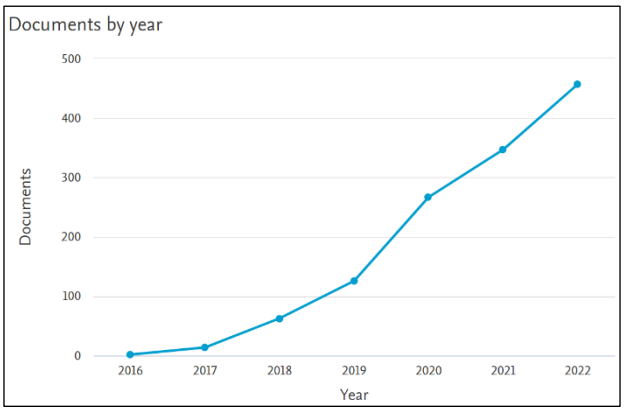

Fig. 2: Document by year

3.2 Citation analysis

Table 3 presents citation metrics for works published between 2016 and 2022. The dataset consists of 1276 papers and 33815 citations, covering a seven-year period. On average, each paper received 26.5 citations. The average annual citation rate was 4830.71. The average number of citations per author was 14427.58, and the average number of papers per author was 492.37. The h-index, a measure of the impact of a particular author's publications, was 89, while the g-index was 157.

Table 3. Citation analysis

Metrics	Data
Publication years	2016 – 2022
Citation years	7 (2016-2022)
Papers	1276
Citations	33815
Citations/year	4830.71
Citations/paper	26.5
Citations/author	14427.58
Papers/author	492.37
h-index	89
g-index	157

Table 4 presents a list of highly cited articles related to the use of blockchain technology in supply chain management. The table includes information on the authors, title, year of publication, total number of citations, and average number of citations per year for each of the 20 articles. The articles in the table are ranked according to the total number of citations they have received, with the most highly cited article at the top. Saberi et al. (2019), the first article on the list, has received 1199 citations since its publication, with an average of 299.75 citations per year. The articles on the list cover a range of topics relating to blockchain technology and its application in supply chain management. These include traceability systems, adoption challenges, cybersecurity, and sustainability. These articles have been cited extensively by other scholars and practitioners, suggesting that they are highly regarded and widely recognized as important works

in the field. Furthermore, the articles reflect a growing interest in the use of blockchain technology in supply chain management, an increasingly popular area of research in recent years.

It is also important to note that the articles were published over a relatively short period of time, with the earliest appearing in 2016 and the most recently published was in 2021. This suggests that research in this area is rapidly evolving, with new findings and insights constantly emerging. Overall, this table provides a valuable resource for anyone interested in understanding the current state of research on blockchain technology and its application in supply chain management. It highlights some of the most influential and highly cited works in the field, as well as insights into the key trends and themes driving research in this area.

Table 4. Highly cited articles

No.	Authors	Title	Year	Cites	Cites per Year
1	S. Saberi, M. Kouhizadeh, J. Sarkis, L. Shen	Blockchain technology and its relationships to sustainable supply chain management	2019	1199	299.75
2	N. Kshetri	1 Blockchain's roles in meeting key supply chain management objectives	2018	832	166.4
3	F. Tian	An agri-food supply chain traceability system for China based on RFID & blockchain technology	2016	820	117.14
4	D. Ivanov, A. Dolgui, B. Sokolov	The impact of digital technology and Industry 4.0 on the ripple effect and supply chain risk analytics	2019	678	169.5
5	F. Tian	A supply chain traceability system for food safety based on HACCP, blockchain, & Internet of things	2017	475	79.17
6	M.M. Queiroz, S. Fosso Wamba	Blockchain adoption challenges in supply chain: An empirical investigation of the main drivers in India and the USA	2019	452	113
7	K. Wust, A. Gervais	Do you need a blockchain?	2018	449	89.8
8	Y. Wang, J.H. Han, P. Beynon-Davies	Understanding blockchain technology for future supply chains: a systematic literature review and research agenda	2019	447	111.75
9	H.M. Kim, M. Laskowski	Toward an ontology-driven blockchain design for supply-chain provenance	2018	372	74.4
10	S. Kamble, A. Gunasekaran, H. Arha	Understanding the Blockchain technology adoption in supply chains-Indian context	2019	354	88.5
11	H. Min	Blockchain technology for enhancing supply chain resilience	2019	350	87.5
12	S.S. Kamble, A. Gunasekaran, R. Sharma	Modeling the blockchain enabled traceability in agriculture supply chain	2020	350	116.67
13	Y. Wang, M. Singgih, J. Wang, M. Rit	Making sense of blockchain technology: How will it transform supply chains?	2019	339	84.75
14	N. Kshetri	Blockchain's roles in strengthening cybersecurity and protecting privacy	2017	333	55.5
15	H. Treiblmaier	The impact of the blockchain on the supply chain: a theory-based research framework and a call for action	2018	329	65.8
16	M. Kouhizadeh, S. Saberi, J. Sarkis	Blockchain technology and the sustainable supply chain: Theoretically exploring adoption barriers	2021	328	164
17	M. Pournader, Y. Shi, S. Seuring, S.C.L. Koh	Blockchain applications in supply chains, transport and logistics: a systematic review of the literature	2020	324	108
18	S.S. Kamble, A. Gunasekaran, S.A. Gawankar	Achieving sustainable performance in a data-driven agriculture supply chain: A review for research and applications	2020	322	107.33
19	R. Cole, M. Stevenson, J. Aitken	Blockchain technology: implications for operations and supply chain management	2019	318	79.5
20	K. Behnke, M.F.W.H.A. Janssen	Boundary conditions for traceability in food supply chains using blockchain technology	2020	288	96

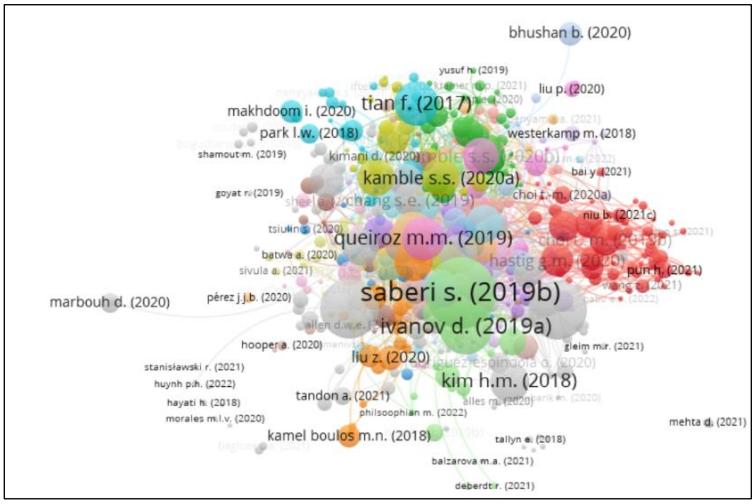

Fig. 3: Network visualization map of the citation by documents
Minimum number of citations of a document = 5

Visualizing citation by document publications is a technique used to clarify collaborative patterns and show the intellectual structure of published works. To create a map of a publication network using VOSviewer, this paper analyzed co-citations at the document level and narrowed down the top twenty publications by decreasing the minimum number of citations required. Figure 3 displays the top 639 articles that met this threshold, which VOSviewer grouped and clustered into several items. The most frequently cited article is in the center of Figure 3.

3.3 Keyword analysis

Table 5 presents the top keywords in the literature related to blockchain technology and its application in supply chain management. The table includes a list of 20 keywords, ranked by the number of publications in which they appear and the percentage of total publications.

The most prevalent keyword is "Blockchain," which appeared in 86.68% of the total publications, indicating a widespread interest in the technology within the academic community. With a frequency of 47.34%, the second most common keyword was "Supply Chain," followed closely by "Supply Chain Management" with a frequency of 30.80%. These keywords suggest that blockchain technology is primarily studied within the context of supply chain management. Other frequently used keywords include "Blockchain Technology" (16.54%), "Sustainability" (9.72%), and "Traceability" (7.52%), which indicate a growing interest in the potential of blockchain to enable more sustainable and transparent supply chains. The keywords "Internet of Things" (6.58%) and "Smart Contract" (5.33%) suggest that blockchain technology is also being studied within the context of the broader trend towards digitalization and automation in supply chain management. Furthermore, the presence of keywords such as "Sustainable Development" (5.96%) and "Industry 4.0" (4.70%) indicates that researchers are interested in the potential of blockchain technology to support more sustainable and efficient industrial practices. The keyword "Distributed Ledger" (4.55%) highlights the importance of blockchain technology's decentralized nature, while "Technology Adoption" (3.92%) and "Decision Making" (3.76%) suggest that researchers are studying the factors that affect the adoption and implementation of blockchain technology in supply chain management.

Table 5. Top keywords

Author Keywords	Total Publications	Percentage (%)
Blockchain	1106	86.68%
Supply Chain	604	47.34%
Supply Chain Management	393	30.80%
Blockchain Technology	211	16.54%
Sustainability	124	9.72%
Traceability	96	7.52%
Internet Of Things	84	6.58%
Sustainable Development	76	5.96%
Transparency	71	5.56%
Smart Contract	68	5.33%
Industry 4.0	60	4.70%
Distributed Ledger	58	4.55%
Smart Contracts	58	4.55%
Food Supply	56	4.39%
Technology Adoption	50	3.92%
Logistics	49	3.84%
Decision Making	48	3.76%
Information Management	45	3.53%
Technology	44	3.45%
Food Supply Chain	43	3.37%

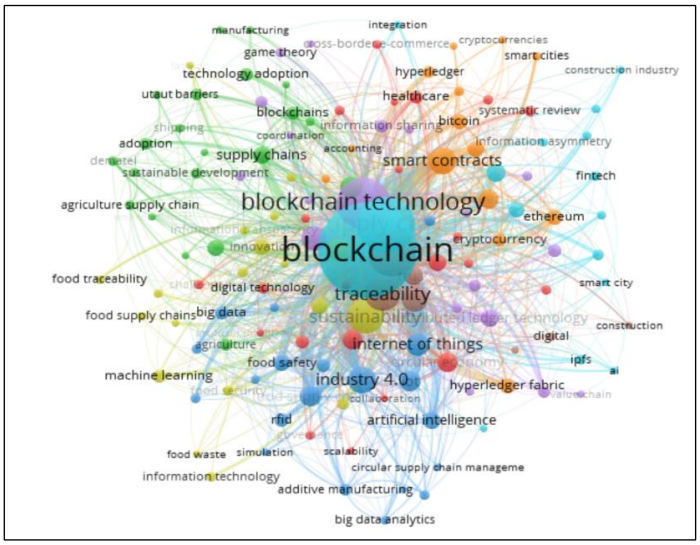

Fig. 4: Network visualization map of the author keywords

The VOSviewer software recommends setting the occurrence minimum number to five after selecting "all keywords," yielding seventy-eight keywords. Figure 4 depicts the network analysis of these keywords. The two largest and closely related nodes were blockchain and supply chain, as indicated by the search terms used on Scopus. Additionally, traceability, transparency, and smart contract were clustered together with supply chain and blockchain. The close proximity of supply chain management and blockchain technology implies a strong correlation between the two (Kshetri 2018). In cluster 3, smart contract and information management were closely linked, suggesting that smart contracts play a significant role in information management (Liu et al. 2019). Finally, traceability was linked to both blockchain and information management, indicating blockchain's ability to enhance traceability in supply chain information management (Feng 2016).

3.4 Geographical distribution of publications - Most influential countries

Citation network analysis is a useful tool for understanding scientific collaborations (Liu et al. 2005). As such, we conducted a network analysis of co-author countries using VOSviewer. Unlike previous analysis, Figure 5 shows the selected "country" as the unit of analysis to assess the network of co-authors' countries. The size of the circles in the analysis represents each country's relative contribution, while the thickness of the connecting lines indicates the level of connectivity. VOSviewer provides a distance-based display, with closer proximity between countries indicating greater relatedness. Our article pool includes co-authors from 74 different countries, and Figure 5 visualizes the network analysis of all these countries. The most prominent contributors to the analysis are the China, USA, UK, Australia, Hong Kong, France, and Germany, which not only appear among the top co-author countries, but are also highly connected to one another.

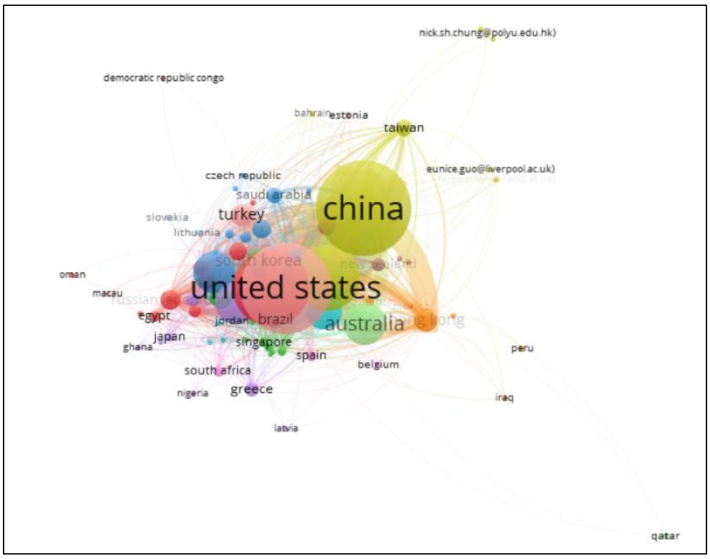

Fig. 5: Network visualization map of the citation by countries
Minimum number of documents of an author = 1
Minimum number of citations of an author = 5

The high number of publications from China and the United States indicates their strong research capabilities and investments in blockchain technology. The participation of India in blockchain research is notable, given its potential to adopt and apply blockchain to support its economic and social development. The top countries' contributions show that blockchain research in management and economics is a global phenomenon, with countries from different regions of the world participating actively. The data provided insights into the international collaboration and competition in blockchain research in management and economics. By identifying the leading countries, this study can help researchers, policymakers, and practitioners understand the current state of research and development in this field and identify opportunities for future collaboration and investment.

4.0 Conclusion

In summary, this bibliometric analysis provided a comprehensive overview of the evolution of blockchain-based supply chain management research, identified influential research groups and authors, showcased leading countries and institutions, examined highly cited papers, explored potential implications, and suggested future research directions. By addressing the research questions posed in this study, a clearer understanding of the current state, emerging trends, and prospects of this field has been attained, fostering further advancements and innovations in blockchain-based supply chain management. However, the study acknowledged some limitations, including the use of only Scopus databases for data collection and the potential for missing articles with titles other than blockchain and supply chain. The software used (Harzing Publish and Perish, Open Refine software and tools, VOS viewer) for data analysis might also prioritize newer publications, potentially leading to the omission of critical information. Furthermore, the result of the VOSviewer analysis depended on selecting several nodes, which might exclude some publications that had not gained much attention. Future research can

overcome these limitations by employing different bibliometric software. The implications of these findings are wide-ranging. For scholars, the results suggest that publishing articles, conference papers, and book chapters remains essential for establishing and advancing one's career. For publishers, the data underscore the continued importance of traditional forms of scholarly publishing, while also pointing to the need for innovation and experimentation in response to changing scholarly communication practices. Finally, the findings provide policymakers with insights into the dynamics of scholarly communication and the role that different types of publications play in shaping knowledge production and dissemination.

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References

Behnke, K., & Janssen, M. F. W. H. A. (2020). Boundary conditions for traceability in food supply chains using blockchain technology. International Journal of Information Management, 52 doi:10.1016/j.ijinfomgt.2019.05.025

Chang, S. E., & Chen, Y. (2020). When blockchain meets supply chain: A systematic literature review on current development and potential applications. In IEEE Access (Vol. 8, pp. 62478–62494). Institute of Electrical and Electronics Engineers Inc. https://doi.org/10.1109/ACCESS.2020.2983601

Cole, R., Stevenson, M., & Aitken, J. (2019). Blockchain technology: Implications for operations and supply chain management. Supply Chain Management, 24(4), 469-483. doi:10.1108/SCM-09-2018-0309

Kamble, S. S., Gunasekaran, A., & Sharma, R. (2020). Modeling the blockchain enabled traceability in agriculture supply chain. International Journal of Information Management, 52 doi:10.1016/j.ijinfomgt.2019.05.023

Kim, H. M., & Laskowski, M. (2018). Toward an ontology-driven blockchain design for supply-chain provenance. Intelligent Systems in Accounting, Finance and Management, 25(1), 18-27. doi:10.1002/isaf.1424

Kouhizadeh, M., Saberi, S., & Sarkis, J. (2021). Blockchain technology and the sustainable supply chain: Theoretically exploring adoption barriers. International Journal of Production Economics, 231 doi:10.1016/j.ijpe.2020.107831

Kshetri, N. (2018). 1 Blockchain's roles in meeting key supply chain management objectives. International Journal of Information Management, 39, 80–89. https://doi.org/10.1016/j.ijinfomgt.2017.12.005

Li, X., Lai, P. L., Yang, C. C., & Yuen, K. F. (2021). Determinants of blockchain adoption in the aviation industry: Empirical evidence from Korea. Journal of Air Transport Management, 97. https://doi.org/10.1016/j.jairtraman.2021.102139

Lohmer, J., Bugert, N., & Lasch, R. (2020). Analysis of resilience strategies and ripple effect in blockchain-coordinated supply chains: An agent-based simulation study. International Journal of Production Economics, 228. https://doi.org/10.1016/j.ijpe.2020.107882

Manifavas, H., & Karamitsos, I. (2021). Blockchain in Supply Chain Management. In Heterogeneous Cyber Physical Systems of Systems (pp. 61–94). River Publishers. https://doi.org/10.24018/ejeng.2022.7.5.2888

MOBI (2020) About MOBI, mobility open blockchain initiative.https://dlt.mobi/about/.Accessed 15 March 2023

Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Medicine, 6(7), e1000097. https://doi.org/10.1371/journal.pmed.1000097

Moosavi, J., Naeni, L. M., Fathollahi-Fard, A. M., & Fiore, U. (2021). Blockchain in supply chain management: a review, bibliometric, and network analysis. In Environmental Science and Pollution Research. Springer Science and Business Media Deutschland GmbH. https://doi.org/10.1007/s11356-021-13094-3

Pandey, V., Pant, M., & Snasel, V. (2022). Blockchain technology in food supply chains: Review and bibliometric analysis. Technology in Society, 69. https://doi.org/10.1016/j.techsoc.2022.101954

Pournader, M., Shi, Y., Seuring, S., & Koh, S. C. L. (2020). Blockchain applications in supply chains, transport and logistics: A systematic review of the literature. International Journal of Production Research, 58(7), 2063-2081. doi:10.1080/00207543.2019.1650976

Queiroz, M., & Wamba, F. S. (2019). Blockchain adoption challenges in supply chain: An empirical investigation of the main drivers in India and the USA. International Journal of Information Management, 46, 70–82. https://doi.org/10.1016/j.ijinfomgt.2018.11.021

Saberi, S., Kouhizadeh, M., Sarkis, J., & Shen, L. (2019). Blockchain technology and its relationships to sustainable supply chain management. International Journal of Production Research, 57(7), 2117-2135. doi:10.1080/00207543.2018.1533261

Shoaib, M., Zhang, S., & Ali, H. (2023). A bibliometric study on blockchain-based supply chain: a theme analysis, adopted methodologies, and future research agenda. In Environmental Science and Pollution Research (Vol. 30, Issue 6, pp. 14029–14049). Springer Science and Business Media Deutschland GmbH. https://doi.org/10.1007/s11356-022-24844-2

Tapscott, D., and Tapscott, A. 2017. "How Blockchain Will Change Organizations." MIT Sloan Management Review 58 (2):10–13

Tian, F. (2016). An agri-food supply chain traceability system for China based on RFID & blockchain technology. Paper presented at the 2016 13th International Conference on Service Systems and Service Management, ICSSSM 2016, doi:10.1109/ICSSSM.2016.7538424 Retrieved from www.scopus.com

Treiblmaier, H. (2018). The impact of the blockchain on the supply chain: A theory-based research framework and a call for action. Supply Chain Management, 23(6), 545-559. doi:10.1108/SCM-01-2018-0029

Wang, Y., Han, J. H., & Beynon-Davies, P. (2019). Understanding blockchain technology for future supply chains: A systematic literature review and research agenda. Supply Chain Management, 24(1), 62-84. doi:10.1108/SCM-03-2018-0148

Yang, J., Ma, C., Li, D., & Liu, J. (2022). Mapping the Knowledge on Blockchain Technology in the Field of Business and Management: A Bibliometric Analysis. IEEE Access, 10, 60585–60596. https://doi.org/10.1109/ACCESS.2022.3179714

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