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A BIBLIOMETRIC REVIEW OF SUSTAINABLE SUPPLY CHAIN MANAGEMENT: AN OR PERSPECTIVE

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ABSTRACT

This bibliometric analysis offers a comprehensive overview of the evolving landscape of Sustainable Supply Chain Management (SSCM) research from an Operations Research (OR) perspective. This review systematically extracted and analysed 232 articles published between 2005 and 2023. The findings reveal significant trends and insights in SSCM literature. The study finds that SSCM research has experienced exponential growth since 2011. The co-authorship analysis highlights both collaboration and individual contributions, indicating room for increased scholarly interaction. The co-word analysis uncovered thematic clusters, such as sustainability reporting, supply chain resilience, and the use of Big Data. The findings suggest emerging areas for research, including the impact of the COVID-19 pandemic on supply chains and the growing interest in carbon taxes and Internet of Things (IoT) applications. These insights offer valuable guidance for both researchers and industry professionals seeking to align with current SSCM trends and collaboration between academia and industry holds promise for enhancing sustainable and efficient supply chain practices.

Keywords: Sustainability; Supply Chains, bibliometric analysis, operations research, supply chain management, Sustainable supply chain management, literature review.

1. INTRODUCTION

Corporations around the world have been undergoing a transformative phase, placing a greater emphasis towards sustainable practices**.** This change has not been driven purely by the desire to meet compliances or appease shareholders but rather taken root in the core of strategic planning of an organisation due to recognising the merits of sustainable actions. A core subject of study in this realm of sustainability is Sustainable Supply Chain Management (SSCM), where supply chains are strategically designed to be sustainable. Kleindorfer, Singhal, & Van Wassenhove (2005) consider this approach of supply chain management to go beyond just meeting ethical or environmental standards and instead turn into a competitive advantage for the firm. Operations Research (OR) and decision sciences have been utilised extensively in SSCM, especially in sectors such as e-commerce, logistics, and digital supply chain, which has led to not only sustainable outcomes but also improved performance. Linton, Klassen, and Jayaraman (2007) elaborated on the potential of utilising OR in order to optimise the Sustainable Supply Chain (SSC) (Rekik & Bergeron, 2017). The researchers chose to explore this topic for several reasons. Studying the changing dynamics of SSCM over the years, being at the center of the ambition and Industry 4.0

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is one such recent factor of interest. Corbett and Klassen (2006) elaborate on the economic benefits gained from the adoption of the eco-centric lens by organisations (Nunes & Bennett, 2010). The introduction of Industry 4.0 furthers this discussion by bringing forth more innovative initiatives that could be applied to SSC. This article utilises bibliometric techniques to study and present key features of the extensive literature on SSCM. Trends, pivotal works and key academic collaborations are highlighted in this study, which would be of help to scholars and simplify the search for businessmen who want to study old topics as well as the latest developments in the discussion surrounding SSCM.

This article aims to serve both of these audiences. For the scholarly audience, the presentation of existing literature in a summarised form presents gaps that could be utilised as subjects for future research. For industry leaders, the latest trends in the field can be identified and studied for utilisation in their organisations. This section is succeeded by a meticulous bibliometric dissection, revealing the nuances of SSCM research. The subsequent sections intertwine the academic and practical implications of the insights, culminating in a summative section that captures the spirit of our investigation and its relevance in the modern corporate ecosystem.

2. RESEARCH METHODOLOGY

The present study utilises the EBSCOhost database in order to obtain a sample of research articles. The keywords ‘Sustainability’, ‘Supply Chain’ and ‘Operations Research’ were used in September 2023 to arrive at a sample of 261 articles that were published between the years of 2005-2023, out of which articles except for those from Academic journals and in the English language were excluded and a sample of 236 articles were obtained, finally duplicates were removed to obtain a sample of 232 articles for the review. The articles’ abstracts and keywords were manually screened in order to eliminate articles irrelevant to the study, but it was determined that all the articles in the sample were relevant to the objective of the study. The review utilised Biblioshiny, Microsoft Excel, VosViewer and Tableau software for further analysis. Figure 1 shows the flowchart of the process.

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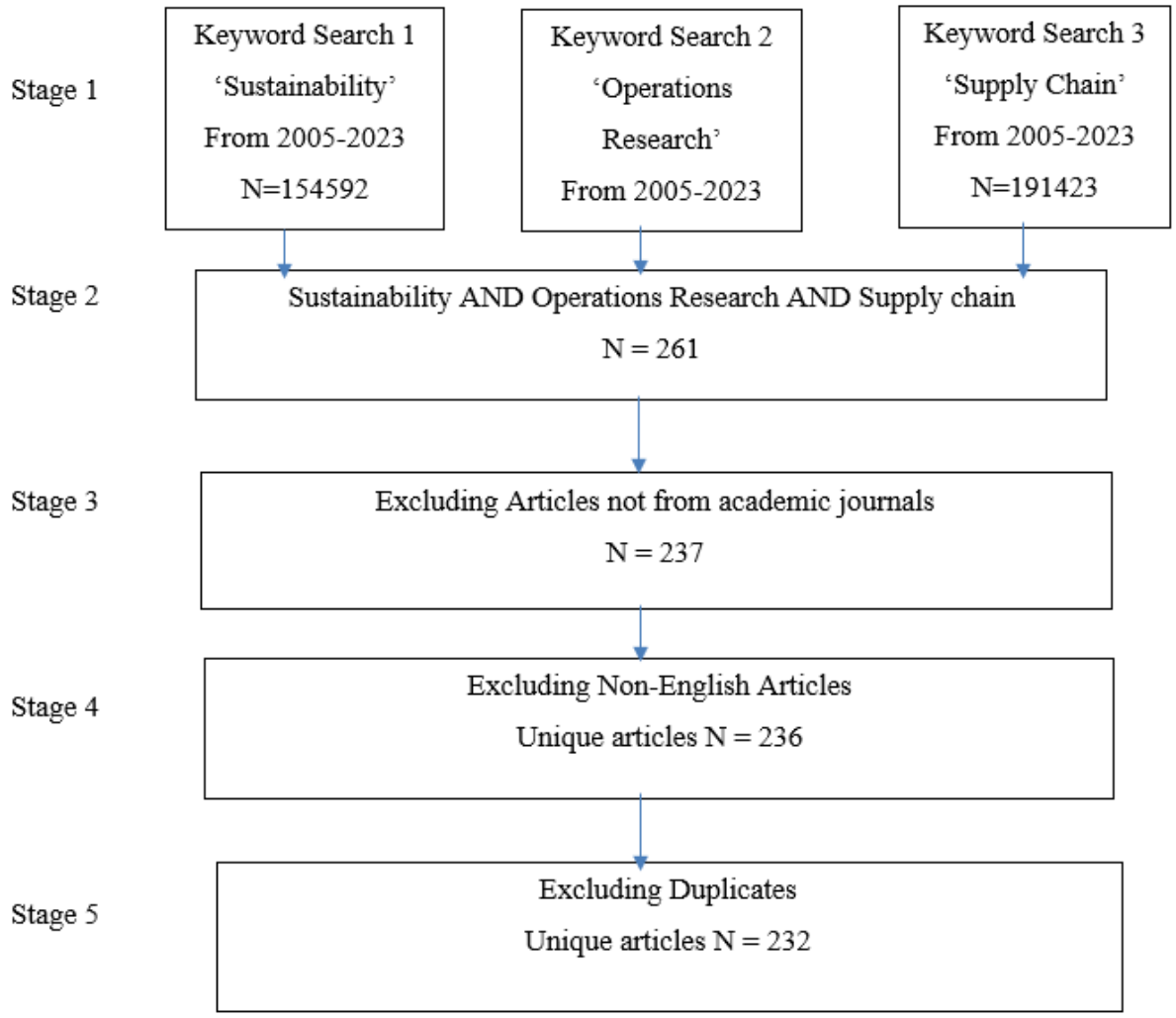

Figure 1: Flowchart of the Screening Process (Authors' work)

Bibliometric analysis

The review utilised Bibliometric techniques to systematically and methodically quantify, evaluate, and study the data pertaining to the review articles of this paper. In practical application, bibliometric analysis constitutes a quantitative inquiry into the realm of academic publishing, encompassing research articles, periodicals, citation patterns, and associated bibliographic attributes (Donthu, Kumar, & Pattnaik, 2020). The selected review article files (.ris) were downloaded and added to the reference manager, Mendeley. The bibliometric file (.bibtext) containing the metadata of the 232 articles was then exported to the biblioshiny package of RStudio. Biblioshiny converted the data in an Excel format (.xlxs) for Microsoft Excel, VosViewer and Tableau analysis. The first research objective investigates the performance of the existing literature, including publication details, sources, authors, and citations. The second objective

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employs thematic mapping and co-occurrence analysis to identify the relationships between the keywords. Finally, future research areas are identified for further analysis and studies.

3. LITERATURE REVIEW

Conceptual Background

Previous studies have defined a supply chain as a set of three or more entities, including organisations or individuals, that are directly involved in the upstream and downstream flows of products, services, finances, and information from a source to a customer (Sandberg & Abrahamsson, 2011). "Supply chain management (SCM) is the integration of these activities through improved supply chain relationships in order to make the system as efficient and as effective as possible." Sustainable supply chain management is a method of optimising the supply chain, keeping sustainability as a core focus of management. Although there are several frameworks of sustainability, one of the most accepted and widespread frameworks is the triple-bottom-line approach. This sustainability framework measures the performance of a company or organisation based on its environmental, social, and economic impacts. It is also known as the 3Ps – people, planet, and profit approach. It is based on the premise that businesses and organisations have a responsibility to consider their social and environmental impacts, as well as their economic performance (Shamsuddoha et al., 2022). Another framework of sustainability that has been on the rise recently is the circular economy approach. Circular economic design of supply chains is a way of producing and consuming goods and services in a way that reduces waste and pollution and minimises energy leakage by slowing, closing, and narrowing material and energy loops (Lopes de Sousa Jabbour et al., 2019).

The objective of this review is to investigate the academic literature on the utilisation of operations research techniques in order to optimise sustainable supply chains. Operations research involves "research on operations". Thus, operations research is used as a tool to solve problems that are related to the way that operations in an organisation are conducted or coordinated. The approach to solving these problems is similar to how research is conducted in scientific fields, which leads to the research part of operations research. To a considerable extent, the scientific method is used to investigate the problem of concern (Saxena et al., 2024).

Evidence from the Literature

Comprehensive overviews of the literature on sustainable supply chains have addressed several techniques such as sustainable supply chain performance measurement (SSCPM) (Taticchi, Tonelli, and Pasqualino, 2013), sustainable supply chain management (Ansari & Kant, 2017), and utilisation of multi-criteria decision-making (MCDM) techniques in green supply chains (Banasik et al., 2018). Emphasis is also given in the areas of sustainable food supply chain (Zhu et al., 2018), TBL approach to vehicle routing and loading operations (VRL) optimisation (Vega-Mejía et al., 2019), application of blockchain technology in supply chains (Lim et al., 2021), and healthcare operations and supply chain management (Ali & Kannan, 2022).

Further, the authors have also discovered the applications of advanced OR techniques that include artificial intelligence, deep learning, and fuzzy logic. Application of data envelopment analysis (DEA) in supplier selection (Dutta et al., 2022), developments in sustainable operations management (Kassa et al., 2023), applications of deep learning in manufacturing operations (Sahoo et al., 2023), and methodologies used in data science and big data analytics (DS & BDA)

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research in the supply chain and logistics (SC & L) domain (Jahani et al., 2023) are some of such examples.

Furthermore, there are also existing reviews that have covered topics such as the impact of epidemic outbreaks on supply chains (Queiroz et al., 2022) and the impact of China's Belt and Road Initiative on global supply chain (Thürer et al., 2020) covering the impacts of external environment on supply chains. Together, these studies provide important insights into the research conducted on the abundant fields present within the wide topic of sustainable supply chain management and the scope for further optimisation of supply chains with different objectives in mind. Notwithstanding that, Several reviewers have acknowledged the lack of empirical research in their reviews, and the literature review suggests that there is a dearth of papers that include meta-analyses or bibliometric analyses, which remains a gap in the literature.

4. RESEARCH OBJECTIVE

The present review utilises the bibliometric techniques of a systematic review that aims at identifying major trends and themes in the published literature on a given topic. The following research questions are defined as the scope of this review.

RQ1: What are the current trends in publication growth in the sustainable supply chains literature?
RQ2: What are the most prevalent themes discussed in the existing literature on sustainable supply chains?
RQ3: What are the existing gaps and potential avenues for future research in sustainable supply chains?

5. DATA ANALYSIS AND RESULTS

Publication Trends

The research in the field of sustainable supply chains was in its infancy stage from around 2005-2009, and only around 1 or 2 articles were published each year, as can be seen in Figure 2.

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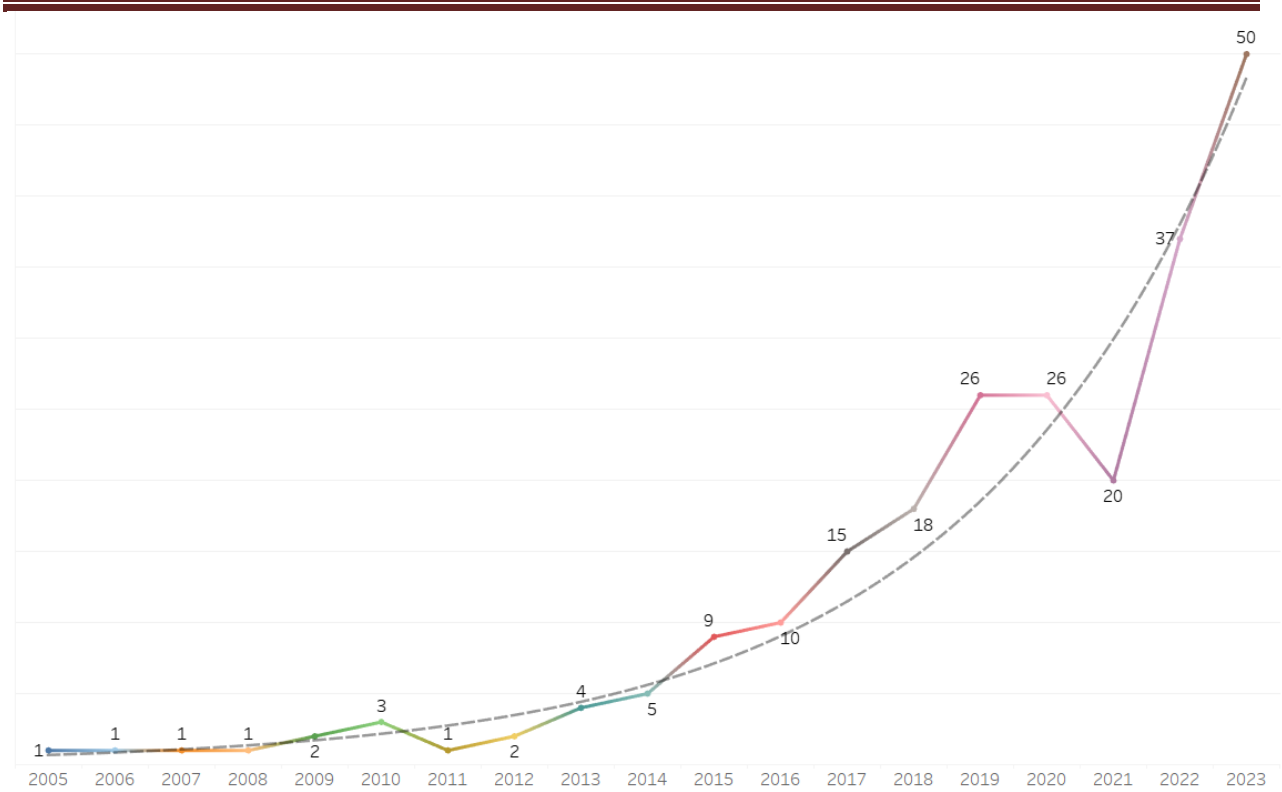

Figure 2: Yearly growth in number of publications (extracted from Tableau – authors' work).

Although the concept of sustainability was not very new, there was a lack of discussion about its application in supply chain management. The rapid increase in publications is noted from the year 2011 to 2023, with 2021 serving as the only exception. This growth is significantly higher at 37.5% of total articles during the years 2022 and 2023 (87 articles). A total of 658 authors have contributed to 232 publications, i.e. 2.84 authors per publication. The overall trend in the growth of the number of publications resembles an exponential trend ($y = 0.5052e^{0.2399x}$, $R^2 = 0.9358$, $p < 0.001$), and the average annual growth rate is 33.94%.

For this study, the popularity (Cronin and Ding, 2011) of an author has been taken as the relevance or prominence of the author in the SSCM literature. In Figure 3, a heat map consisting of the top 10 authors in terms of popularity has been plotted. It is observed that Ivanov D and Tang CS are the two authors that have been cited the most number of times, and it can be said they have the most popularity out of the authors of this review. A limitation of this study is that the prestige (Cronin and Ding, 2011) has not been calculated, which could have been done by using the PageRank Analysis introduced by Brin and Page (1998).

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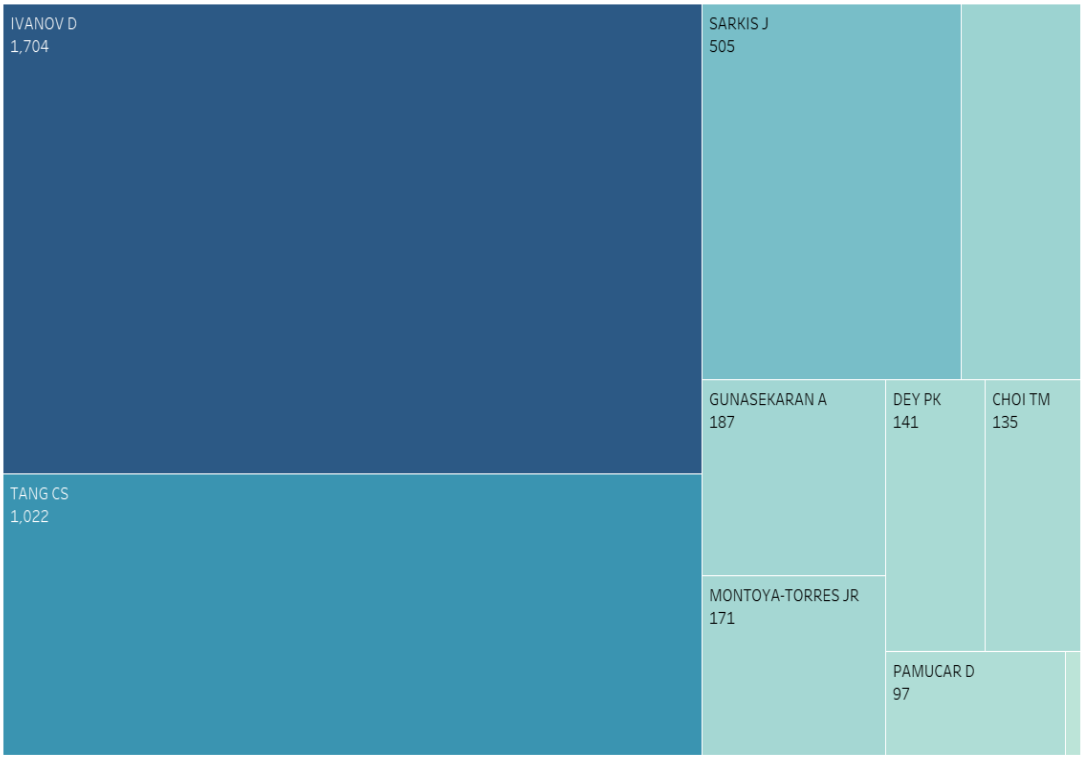

Figure 3: Number of citations (extracted from Tableau – Authors' work)

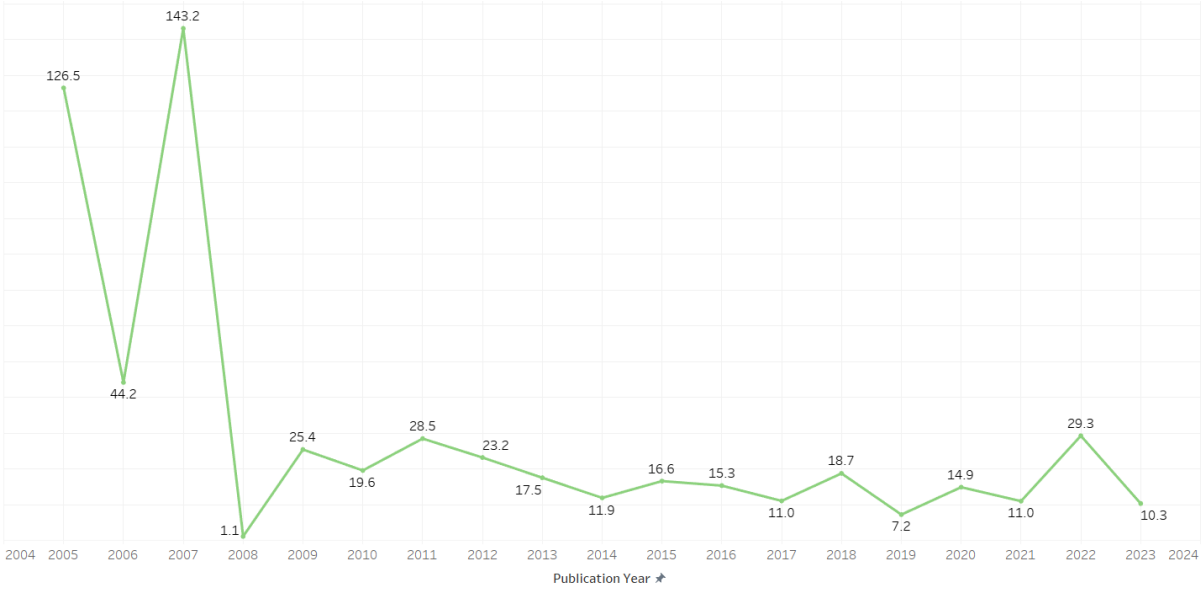

Figure 4: The year-wise trend of Average Citations (extracted from Tableau – Author's work)

As a general rule of thumb, the most highly-cited papers are the ones that have been published earlier and have had more time to be reviewed and analysed. Therefore, The total citations have been divided by the number of years from the publication in order to obtain the average citations or citation per year measure. Figure 4 shows the trend of the average citations over the years, and it is observed that the works published in 2005 and 2007 have been the most

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influential and cited the most number of times in current literature because of the difference in the citations even after adjusting for the number of years.

Co-authorship Analysis

Figure 5 displays the clusters of authors that have published at least two articles and have or have not collaborated. The nodes in the network represent authors, and the edges represent co-authorship relationships. The presence of several clusters indicates a fair amount of collaboration between authors in this field. At the same time, there are a lot of individual nodes as well, representing authors that have published their works solo and not in collaboration with other authors, which leaves a possibility for further growth in interactions between the authors since contributions from different scholars can contribute to greater clarity and richer insights (Tahamtan et al., 2016)**.**

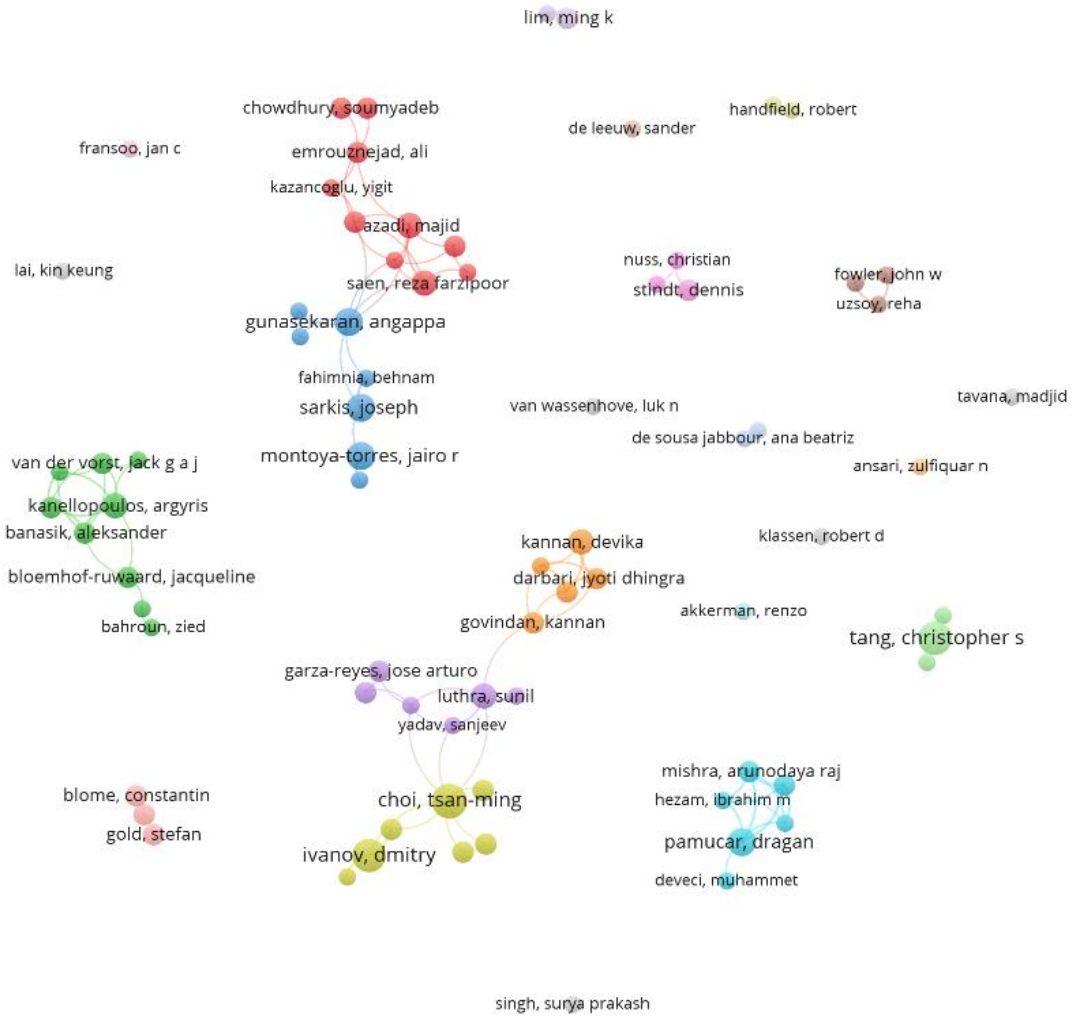

Figure 5: Co-authorship in SSCM literature (extracted from VOSviewer – Author's work)

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Co-word Analysis

Co-word analysis is a way of examining the actual contents of the publication. The words for a co-word analysis are extracted from the "author keywords" in the case of this study; however, article titles and abstracts can also be utilised for the analysis as well.

The nodes in Figure 6 represent the occurrence of the keywords, while the thickness of the link signals shows the occurrence of co-occurrence between keywords. Every colour highlights a thematic cluster in which the links and nodes can be used to explain the themes.

The Green cluster in Figure 6 highlights that keywords such as 'Social responsibility of business', 'sustainable reporting' and environmental management were used together. These keywords were mainly used before 2018. This keyword map provides valuable insights into the latest areas of study within a topic and finds keywords that would complement that particular field. For example – Big data and reverse logistics could be topics that researchers explore further as they are both relatively new topics that lie within the same thematic cluster.

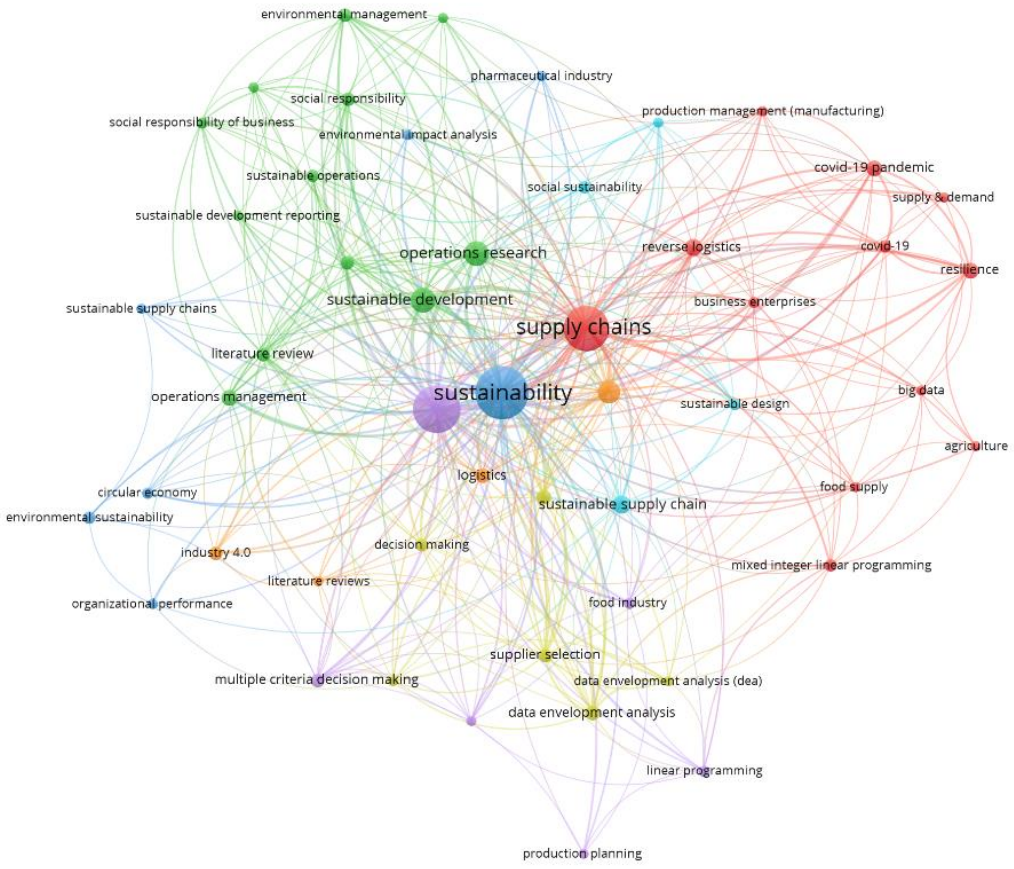

Figure 6: Co-occurrence network of Keywords (extracted from VOSviewer – Author's work)

Further, Figure 7 presents the thematic map of 250 keywords, which was created on the Walktrap clustering algorithm, where keywords are clustered by using the node-to-node distances. Thematic maps were first proposed by (Callon, Courtial, and Laville, 1991) and are a coordinate

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system consisting of centrality (x-axis) and density (y-axis) based on which keywords are divided into four quadrants. The intensity of a cluster's links with other clusters is measured by centrality which means that the number and strength of these links designate how crucial the scientific or technological community considers a set of research problems. The density of a cluster, on the other hand characterises the strength of the links which tie together the words making up that cluster. The stronger these links are, the more the research problems corresponding to the cluster constitute a coherent and integrated whole (Saxena, 2023).

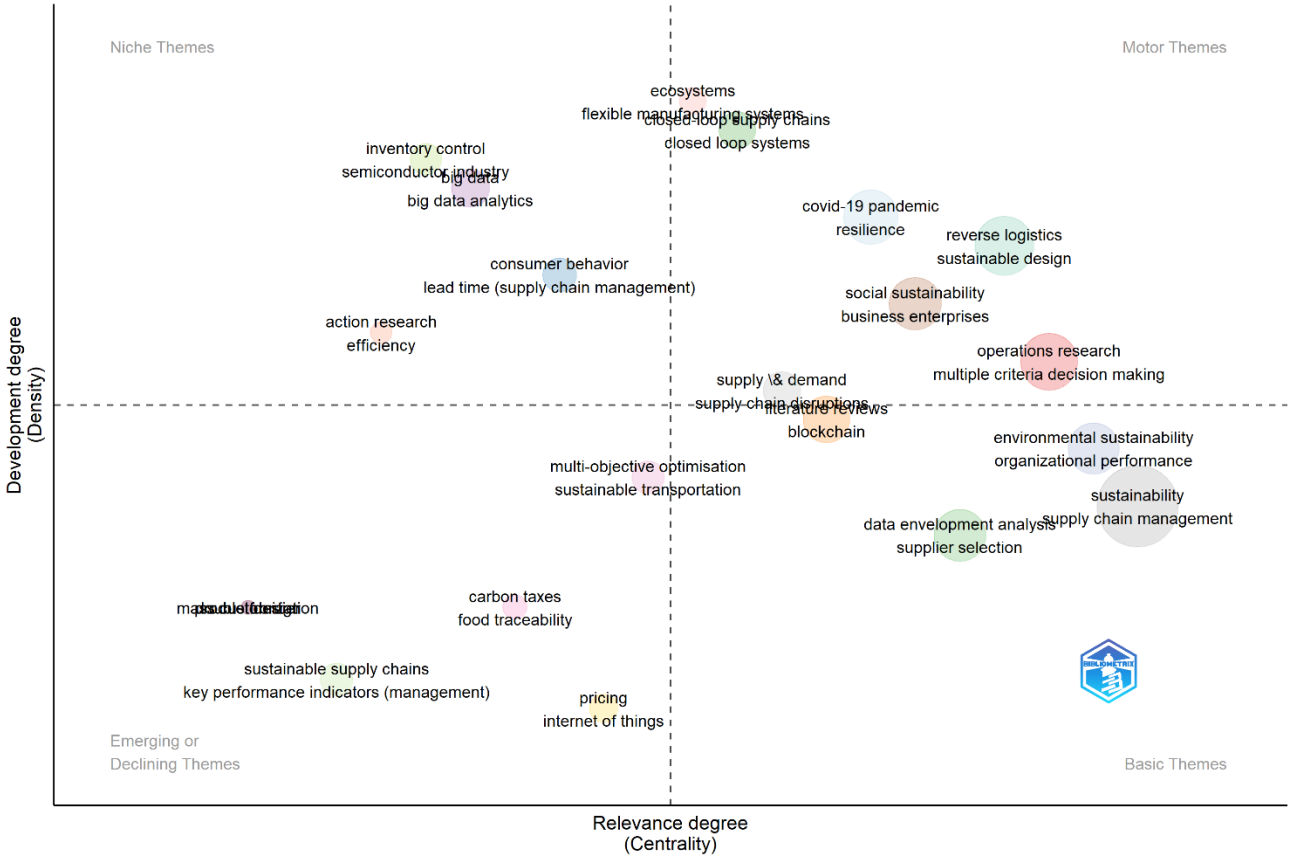

Figure 7: Thematic Map of Keywords (extracted from Biblioshiny – author's work)

The upper right quadrant (central and developed) gives motor themes having stronger internal strength and is well connected with other themes. The first cluster signifies the COVID-19 pandemic and resilience. These terms have been used together in order to study the impact of COVID-19 on supply chains (Queiroz et al., 2022) and how SSCM can be made resilient in order to overcome challenges like these (Azadi et al., 2023). The next cluster highlights the research conducted on designing reverse logistics supply chains with a focus on sustainability, like design with environmental and social considerations in mind (Condeixa et al., 2022) and waste management (Mahajan & Vakharia, 2016).

The third cluster is related to the discussion around Corporate Social Responsibility (CSR) (Yadav et al., 2023) and sustainability of business enterprises (Dey et al., 2020) and has the

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keywords social sustainability and business enterprises. Also, what stands out in the motors themes is the significant research in the optimisation of supply chains using quantitative studies (Aditi et al., 2022) and operations research (Kumar & Barua, 2022). Research on Closed-loop systems (Stindt et al., 2016) and supply chains (Kleindorfer et al., 2005), although less connected, is also to be noted.

Niche Themes (peripheral and developed) are highly developed but isolated themes. The use of Big Data and Big Data analytics techniques in SSC has been explored (Chan et al., 2017; Khuntia et al., 2018) are slightly related to the studies conducted on inventory control in the semiconductor industry (Everingham et al., 2008; Konur & Schaefer, 2016).

Basic Themes (central and undeveloped) indicate the topic's high connection but less internal strength. There are generally transversal topics that are connected to many other keywords in this segment. The first cluster shows the research on blockchain and connects it to the literature reviews done (Lim et al., 2021). The thematic map shows that the most connected keywords are Sustainability and Supply chain management followed by Environmental sustainability and organisational performance (Fahimnia et al., 2015; Tworek et al., 2019). Another basic cluster represents the use of Data Envelopment analysis in order to measure the performance (Fukuyama & Weber, 2017) and aid in supplier selection (Moheb-Alizadeh & Handfield, 2019).

The quadrant for the emerging and declining terms (peripheral and undeveloped) has low strength and is less connected in the existing literature. The utilisation of Multi-Criteria Decision Making (MCDM) techniques for transportation (Fathi et al., 2024; Korucuk et al., 2023; Pamucar et al., 2022) is represented with the keywords multi-objective optimisation and sustainable transportation in the cluster. Literature on Carbon Taxes (Choi et al., 2022; Tsai et al., 2023; Xu et al., 2023) has also seen a spike in recent years due to the increasing interest of Corporates in achieving Net-Zero commissions or Carbon neutrality, leading to a rise in popularity of the Carbon markets. Most of the clusters in this segment are topics which have more scope to develop and are emerging in nature. Pricing (Kabadurmus & Erdogan, 2020; Rajapakshe et al., 2020) and the Internet of Things (Akinlolu et al., 2020; Hassini et al., 2023; Wu et al., 2022) are the most recent topics to emerge out of the clusters.

6. DISCUSSION AND IMPLICATIONS

Findings and Research Gaps

In the early years, from 2005 to 2009, research on sustainable supply chains was in its infancy, with only 1 or 2 articles published each year (as shown in Figure 2). Despite the concept of sustainability not being entirely new, there was a lack of discussion about its application in supply chain management during this period. A significant uptrend in research output started in 2011 and continued until 2023, with the exception of 2021. In total, 658 authors have contributed to 232 publications, averaging about 2.84 authors per publication. Figure 3 shows a heatmap of the top 10 authors in terms of popularity, with Ivanov D and Tang CS being the most frequently cited authors. The evidence from the literature suggests that there is a deficiency of papers employing rigorous research methodologies, such as meta-analyses and bibliometric analyses, within the field of supply chain and sustainability management. This gap is significant because such analyses can offer a systematic and data-driven overview of the state of research in SSCM. Meta-analyses can consolidate findings from various studies, increasing the reliability of conclusions. Bibliometric analyses can identify emerging research themes, influential authors, and the evolution of research

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topics over time. In the context of the evidence from the literature, it is important to note that much of the research seems to be descriptive or based on qualitative methods. Empirical studies are valuable because they provide concrete evidence and insights into real-world phenomena.

Implications

For researchers in the field of sustainable supply chain management (SSCM), the co-word analysis findings provide valuable insights into which subjects are being studied together and what are the main keywords that authors are using to refer to that subject. The thematic clusters and co-occurrence patterns help researchers understand the interplay and connection between various prominent topics. This information assists scholars in choosing research areas aligned with current trends and knowledge gaps within SSCM. The temporal trends highlighted in Figure 7 allow academics to identify new emerging fields of study within SSCM. Keywords like 'Social responsibility of business' and 'sustainable reporting', for example, were primarily used before 2018, which shows that newer topics and challenges have emerged in recent years. Novel contributions to the literature can be made by studying these areas. Looking at it specifically from a corporate view, the co-word analysis and thematic map together serve as tools to identify new areas of study and check for the feasibility of implementing those ideas in their organisations. The identification of the COVID-19 pandemic and resilience as a prominent theme, for example, showcases the relevance of designing supply chains in a way that would survive unforeseen disruptions, and it would be crucial to study how related concepts such as reverse logistics can be handled in such scenarios as well.

To summarise, the findings are of significance to researchers who are looking to produce articles that study novel topics in the realm of a subject that has been studied as extensively as SSCM has and also serves as evidence that not all have been studied and there are still gaps present which could be further explored. The corporates could study the charts and graphs which summarise the vast literature on this topic in order to identify strategies and best practices in SSCM and can also benchmark the plans of their organisation against the latest topics that are being studied by academics and researchers.

7. CONCLUSION AND LIMITATIONS

To conclude, this article utilises bibliometric techniques in order to conduct a comprehensive exploration of the dynamic landscape of Sustainable Supply Chain Management (SSCM). The findings included key trends, prominent themes, and research gaps in the existing literature, offering insights into the evolution of SSCM research from its origin to the present while also looking into avenues of future research. Since 2011, there has been an increasing recognition of sustainability as a core element of supply chain management, which was revealed by analysing the publication trends. Identifying influential authors and the impact that they have had on the field provides valuable guidance for both scholars and practitioners, directing them towards authors that have sparked the most discussion. The co-authorship analysis revealed clusters of authors who have published articles together and highlighted the opportunities as well as the importance of interdisciplinary cooperation between researchers in order to address complex sustainability challenges.

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The co-word analysis further revealed thematic clusters and the changes over time, showcasing an evolutionary perspective on research topics in SSCM. Emerging topics such as the Internet of Things and COVID-19 19, as well as declining topics, were identified. These findings are relevant for both researchers and industry. The researcher could use this paper as a tool to more efficiently guide their focus toward relevant topics that need further exploration.

Industry professionals and decision-makers could obtain actionable knowledge to enhance sustainability practices within their supply chain practices from insights in**to** themes and trends. This article further emphasi**s**es the relevance of being prepared for disruptions like the COVID-19 pandemic and the prominence of digitisation as well as utilisation of emerging technologies, such as Big Data and IoT, to optimise supply chain operations.

This article furthers the ongoing discourse on SSCM by offering insights about the body of literature that exists on this topic, highlighting the need for collaboration between academics to further study sustainable and efficient supply chain practices in a more holistic and multi-faceted way. As the discussion around SSCM continues to evolve, it is imperative to keep up with the latest innovations and trends while implementing whatever is beneficial.

The researchers would like to acknowledge the following limitations of the study. EBSCOhost database was utilised for this article; therefore articles not available in it could not be considered for this study. ESG, CSR or other related keywords could be included in the search to obtain a more complete image of how the literature in this field has evolved. Non-English articles were excluded from the study, and the countries that the paper originated from were also not considered, which could have provided other valuable insights for researchers and corporates. Additional future research expansion in this direction could utilise more innovative bibliometric and network analysis tools.

REFERENCE

Aditi, Kannan, D., Darbari, J. D., & Jha, P. C. (2022). Sustainable supplier selection model with a trade-off between supplier development and supplier switching. *Annals of Operations Research*, 1–42. https://doi.org/10.1007/s10479-022-04812-2

Akinlolu, M., Haupt, T. C., Edwards, D. J., & Simpeh, F. (2020). A bibliometric review of the status and emerging research trends in construction safety management technologies. *International Journal of Construction Management*, *0*(0), 1–13. https://doi.org/10.1080/15623599.2020.1819584

Ali, I., & Kannan, D. (2022). Mapping research on healthcare operations and supply chain management: a topic modelling-based literature review. *Annals of Operations Research*, *315*(1), 29–55. https://doi.org/10.1007/s10479-022-04596-5

Ansari, Z. N., & Kant, R. (2017). A state-of-art literature review reflecting 15 years of focus on sustainable supply chain management. *Journal of Cleaner Production*, *142*, 2524–2543. https://doi.org/10.1016/j.jclepro.2016.11.023

Azadi, M., Cheng, T. C. E., Matin, R. K., & Saen, R. F. (2023). The COVID-19 pandemic and the performance of healthcare supply chains. *Annals of Operations Research*, 1–28. https://doi.org/10.1007/s10479-023-05502-3

Banasik, A., Bloemhof-Ruwaard, J. M., Kanellopoulos, A., Claassen, G. D. H., & van der Vorst, J. G. A. J. (2018). Multi-criteria decision making approaches for green supply chains: a

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ISSN: 2581-4664

review. *Flexible Services & Manufacturing Journal*, *30*(3), 366–396. https://doi.org/10.1007/s10696-016-9263-5

Chan, C.-Y., Chou, D.-W., & Lo, H.-C. (2017). Do financial constraints matter when firms engage in CSR? *North American Journal of Economics & Finance*, *39*, 241–259. https://doi.org/10.1016/j.najef.2016.10.009

Choi, T. M., Dolgui, A., Ivanov, D., & Pesch, E. (2022). OR and analytics for digital, resilient, and sustainable manufacturing 4.0. *Annals of Operations Research*, *310*(1), 1–6. https://doi.org/10.1007/s10479-022-04536-3

Condeixa, L. D., Silva, P., Moah, D., Farias, B., & Leiras, A. (2022). Evaluating cost impacts on reverse logistics using an Economic Order Quantity (EOQ) model with environmental and social considerations. *Central European Journal of Operations Research*, *30*(3), 921–940. https://doi.org/10.1007/s10100-020-00707-4

Dey, P. K., Malesios, C., De, D., Budhwar, P., Chowdhury, S., & Cheffi, W. (2020). Circular economy to enhance sustainability of small and medium-sized enterprises. *Business Strategy and the Environment*, *29*(6), 2145–2169. https://doi.org/10.1002/bse.2492

Dutta, P., Jaikumar, B., & Arora, M. S. (2022). Applications of data envelopment analysis in supplier selection between 2000 and 2020: a literature review. *Annals of Operations Research*, *315*(2), 1399–1454. https://doi.org/10.1007/s10479-021-03931-6

Everingham, K., Polaski, G., Riedlin, F., Shirk, M., Deshpande, V., & Iyer, A. V. (2008). Operations research enhances supply chain management at the US Coast Guard Aircraft Repair and Supply Center. *Interfaces*, *38*(1), 61–75. https://doi.org/10.1287/inte.1070.0334

Fahimnia, B., Sarkis, J., & Davarzani, H. (2015). Green supply chain management: A review and bibliometric analysis. *International Journal of Production Economics*, *162*, 101–114. https://doi.org/10.1016/j.ijpe.2015.01.003

Fathi, M. R., Zamanian, A., & Khosravi, A. (2024). Mathematical modeling for sustainable agri-food supply chain. *Environment, Development and Sustainability*, *26*(3), 6879–6912. https://doi.org/10.1007/s10668-023-02992-w

Fukuyama, H., & Weber, W. L. (2017). Measuring bank performance with a dynamic network Luenberger indicator. *Annals of Operations Research*, *250*(1), 85–104. https://doi.org/10.1007/s10479-015-1922-5

Hassini, E., Ben-Daya, M., & Bahroun, Z. (2023). Modeling the impact of IoT technology on food supply chain operations. *Annals of Operations Research*, 1–30. https://doi.org/10.1007/s10479-023-05464-6

Jahani, H., Jain, R., & Ivanov, D. (2023). Data science and big data analytics: a systematic review of methodologies used in the supply chain and logistics research. *Annals of Operations Research*, 1–58. https://doi.org/10.1007/s10479-023-05390-7

Kabadurmus, O., & Erdogan, M. S. (2020). Sustainable, multimodal and reliable supply chain design. *Annals of Operations Research*, *292*(1), 47–70. https://doi.org/10.1007/s10479-020-03654-0

Kassa, K. B., Ensermu, M., & Temesgen, B. (2023). Sustainable Operations Management: A Systematic Review and Future Research Agenda. *Journal of Supply Chain Management Systems*, *12*(1), 38–58. https://search.ebscohost.com/login.aspx?direct=true%7B%5C&%7Ddb=buh%7B%5C&%7DAN=164031617%7B%5C&%7Dsite=ehost-live

Vol. 7, No. 05; 2024

ISSN: 2581-4664

Khuntia, J., Saldanha, T. J. V., Mithas, S., & Sambamurthy, V. (2018). Information Technology and Sustainability: Evidence from an Emerging Economy. *Production and Operations Management*, *27*(4), 756–773. https://doi.org/10.1111/poms.12822

Kleindorfer, P. R., Singhal, K., Luk, •, Van Wassenhove, N., & Van Wassenhove, L. N. (2005). Sustainable Operations Management. *Production and Operations Management*, *14*(4), 482–492. https://doi.org/10.1111/j.1937-5956.2005.tb00235.x

Konur, D., & Schaefer, B. (2016). Economic and environmental comparison of grouping strategies in coordinated multi-item inventory systems. *Journal of the Operational Research Society*, *67*(3), 421–436. https://doi.org/10.1057/jors.2015.67

Korucuk, S., Aytekin, A., Ecer, F., Pamucar, D. S. S., & Karamaşa, Ç. (2023). Assessment of ideal smart network strategies for logistics companies using an integrated picture fuzzy LBWA–CoCoSo framework. *Management Decision*, *61*(5), 1434–1462. https://doi.org/10.1108/MD-12-2021-1621

Kumar, S., & Barua, M. K. (2022). Sustainability of operations through disruptive technologies in the petroleum supply chain. *Benchmarking*, *29*(5), 1640–1676. https://doi.org/10.1108/BIJ-02-2021-0086

Lim, M. K., Li, Y., Wang, C., & Tseng, M. L. (2021). A literature review of blockchain technology applications in supply chains: A comprehensive analysis of themes, methodologies and industries. *Computers and Industrial Engineering*, *154*, N.PAG-N.PAG. https://doi.org/10.1016/j.cie.2021.107133

Lopes de Sousa Jabbour, A. B., Rojas Luiz, J. V., Rojas Luiz, O., Jabbour, C. J. C., Ndubisi, N. O., Caldeira de Oliveira, J. H., & Junior, F. H. (2019). Circular economy business models and operations management. *Journal of Cleaner Production*, *235*, 1525–1539. https://doi.org/10.1016/j.jclepro.2019.06.349

Mahajan, J., & Vakharia, A. J. (2016). Waste Management: A Reverse Supply Chain Perspective. *Vikalpa*, *41*(3), 197–208. https://doi.org/10.1177/0256090916659029

Moheb-Alizadeh, H., & Handfield, R. (2019). Sustainable supplier selection and order allocation: A novel multi-objective programming model with a hybrid solution approach. *Computers and Industrial Engineering*, *129*, 192–209. https://doi.org/10.1016/j.cie.2019.01.011

Nunes, B., & Bennett, D. (2010). Green operations initiatives in the automotive industry: An environmental reports analysis and benchmarking study. *Benchmarking*, *17*(3), 396–420. https://doi.org/10.1108/14635771011049362

Pamucar, D., Deveci, M., Gokasar, I., & Popovic, M. (2022). Fuzzy Hamacher WASPAS decision-making model for advantage prioritization of sustainable supply chain of electric ferry implementation in public transportation. *Environment, Development and Sustainability*, *24*(5), 7138–7177. https://doi.org/10.1007/s10668-021-01742-0

Queiroz, M. M., Ivanov, D., Dolgui, A., & Fosso Wamba, S. (2022). Impacts of epidemic outbreaks on supply chains: mapping a research agenda amid the COVID-19 pandemic through a structured literature review. *Annals of Operations Research*, *319*(1), 1159–1196. https://doi.org/10.1007/s10479-020-03685-7

Rajapakshe, T., Kumar, S., Sen, A., & Sriskandarajah, C. (2020). Sustainability planning for healthcare information exchanges with supplier rebate program. *Operations Research*, *68*(3), 793–817. https://doi.org/10.1287/opre.2019.1912

Rekik, L., & Bergeron, F. (2017). Green practice motivators and performance in SMES: A

Vol. 7, No. 05; 2024

ISSN: 2581-4664

qualitative comparative analysis. *Journal of Small Business Strategy*, *27*(1), 1–17. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85014174649&partnerID=40&md5=512d6e562fb493482aafa6c282330c74

Sahoo, S., Kumar, S., Abedin, M. Z., Lim, W. M., & Jakhar, S. K. (2023). Deep learning applications in manufacturing operations: a review of trends and ways forward. *Journal of Enterprise Information Management*, *36*(1), 221–251. https://doi.org/10.1108/JEIM-01-2022-0025

Sandberg, E., & Abrahamsson, M. (2011). Logistics capabilities for sustainable competitive advantage. *International Journal of Logistics Research and Applications*, *14*(1), 61–75. https://doi.org/10.1080/13675567.2010.551110

Saxena, R. K. (2023). On-demand online video streaming services: a bibliometric analysis and future research agenda. *Communication Research and Practice*, *9*(4), 394–407. https://doi.org/10.1080/22041451.2023.2247700

Saxena, R. K., Garg, A., Jain, A., Mittal, A., Y, B., & Kachhara, D. (2024). The Applications of Operations Research in Insurance and Management. *International Journal of Management and Social Science Research*, *1422*(2), 45–66.

Shamsuddoha, M., Quaddus, M. A., & Woodside, A. G. (2022). Environmental sustainability through designing reverse logistical loops: case research of poultry supply chains using system dynamics. *Journal of Business and Industrial Marketing*, *37*(4), 823–840. https://doi.org/10.1108/JBIM-02-2021-0119

Stindt, D., Sahamie, R., Nuss, C., & Tuma, A. (2016). How Transdisciplinarity Can Help to Improve Operations Research on Sustainable Supply Chains—A Transdisciplinary Modeling Framework. *Journal of Business Logistics*, *37*(2), 113–131. https://doi.org/10.1111/jbl.12127

Thürer, M., Tomašević, I., Stevenson, M., Blome, C., Melnyk, S., Chan, H. K., & Huang, G. Q. (2020). A systematic review of China's belt and road initiative: implications for global supply chain management. *International Journal of Production Research*, *58*(8), 2436–2453. https://doi.org/10.1080/00207543.2019.1605225

Tsai, W. H., Lai, S. Y., & Hsieh, C. L. (2023). Exploring the impact of different carbon emission cost models on corporate profitability. *Annals of Operations Research*, *322*(1), 41–74. https://doi.org/10.1007/s10479-022-04519-4

Tworek, K., Walecka-Jankowska, K., & Zgrzywa-Ziemak, A. (2019). the Role of Information Systems in Shaping Integrative Logic for Business Sustainability. *Operations Research and Decisions*, *29*(4), 125–146. https://doi.org/10.37190/ord190406

Vega-Mejía, C. A., Montoya-Torres, J. R., & Islam, S. M. N. (2019). Consideration of triple bottom line objectives for sustainability in the optimization of vehicle routing and loading operations: a systematic literature review. *Annals of Operations Research*, *273*(1–2), 311–375. https://doi.org/10.1007/s10479-017-2723-9

Wu, W., Chen, W., Fu, Y., Jiang, Y., & Huang, G. Q. (2022). Unsupervised neural network-enabled spatial-temporal analytics for data authenticity under environmental smart reporting system. *Computers in Industry*, *141*, N.PAG-N.PAG. https://doi.org/10.1016/j.compind.2022.103700

Xu, A., Zhu, Y., & Wang, W. (2023). Micro green technology innovation effects of green finance pilot policy—From the perspectives of action points and green value. *Journal of Business Research*, *159*, N.PAG-N.PAG. https://doi.org/10.1016/j.jbusres.2023.113724

Vol. 7, No. 05; 2024

ISSN: 2581-4664

Yadav, S., Choi, T. M., Kumar, A., Luthra, S., & Naz, F. (2023). A meta-analysis of sustainable supply chain practices and performance: the moderating roles of type of economy and innovation. *International Journal of Operations and Production Management*, *43*(5), 802–845. https://doi.org/10.1108/IJOPM-05-2022-0328

Zhu, Z., Chu, F., Dolgui, A., Chu, C., Zhou, W., & Piramuthu, S. (2018). Recent advances and opportunities in sustainable food supply chain: a model-oriented review. *International Journal of Production Research*, *56*(17), 5700–5722. https://doi.org/10.1080/00207543.2018.1425014