

Where Do We Go from Here? A Bibliometric Analysis Identifying Implications for Future Research in Circular Economy and Supply Chain Management

M. Papert¹, D. Reich¹, I. Fischer¹, T. Goertler¹

Received: 08 August 2023 / Accepted: 04 April 2024 / Published online: 26 June 2024 \odot The Author(s) 2023 This article is published with Open Access at www.bvl.de/lore

ABSTRACT

The Circular Economy (CE) relies heavily on Supply Chain Management (SCM) as it involves managing the entire value chain and coordinating flows. Despite significant contributions, research on SCM for CE remains fragmented, which hinders a comprehensive exploration. This study presents a bibliometric analysis of 281 publications to examine the intersection between CE and SCM. The main research topics are identified and future directions are suggested. The findings contribute to the literature on CE and SCM by providing a comprehensive overview of the current state of knowledge and the barriers. Valuable implications for future research directions are also provided. Additionally, the implications can guide practitioners, institutions, and policymakers in shaping their SCM strategies and contributing to the ongoing transition to a CE.

KEYWORDS: circular economy Supply chain management bibliometric analysis literature review vosviewer

1. INTRODUCTION

Supply Chain Management (SCM) focuses on the management of relationships between various actors and stakeholders for delivering customer value at lower costs to the entire supply chain [7]. Supply chains are comprised of intricate networks of interconnected processes enabling firms to procure, manufacture,

Marcel Papert¹

Daniel Reich¹

Isabel Fischer¹

Thomas Goertler¹

¹ University of Bamberg, Feldkirchenstraße 21, 96052 Bamberg, Germany and deliver products and services to consumers [7, 8, 84, 85]. As the global economy consumed over 100 billion tonnes of materials after 2019 by designing supply chains based on the linear economic model of "take, use, dispose" or "take-make-waste" [86], SCM plays a central role for academia and practice in the implementation of circular economy [CE; 9, 10, 11, 12, 13, also 14].

CE is predominantly considered a crucial approach that facilitates fewer resources use, waste reduction, and, most importantly, the mitigation of greenhouse gas emissions contributing to the climate crisis [1; e.g., 5, 6]. In this context, scholars increasingly realize the indispensable need for comprehensive research on CE [2, 3]. [2] provide a comprehensive literature review from the late 2000s and early 2010s, aiming to capture the main features and perspectives of the transition towards an interplay of environmental and economic systems. [3] provides an overview of research efforts related to the circular economy in order to understand the contexts and perspectives in which CE has been explored to date and, as a next step, to develop a framework for a CE implementation strategy for the manufacturing industry. The study by [4] provides an analysis of the drivers, barriers and practices that influence the implementation of CE in the context of supply chains through a systematic review of the literature from 2000 to 2016. Moreover, [87] and [88] deliver a comprehensive review of SCM for CE, with the former emphasizing core SCM processes and the latter exploring green SCM across different levels of CE implementation. Consequently, these studies specifically highlight distinct facets of SCM for CE.

Although there have been substantial contributions, research on SCM for CE is fragmented [87, 90] and, therefore, limits a comprehensive exploration. The fragmentation might be attributed to the prevailing focus among scholars on CE and sustainability as standalone topic [e.g., 15] or the prevalent reliance on subjective selection and content analysis methods, grounded in predetermined coding schemes [16, 17, see e.g., 4]. In this context, we argue that a bibliometric

analysis offers the potential to provide a holistic overview [83; e.g., 16, 19, 20, 79] of the intersection between SCM and CE. This analysis helps to identify core research themes, emerging trends, and gaps in the literature, which can be used to develop a structured roadmap for future research directions. Moreover, such an analysis can illuminate the impact of various research contributions, facilitating a deeper understanding of the field's evolution and guiding scholars towards areas that promise substantial academic and practical contributions.

To address the issue of fragmentation, this study examines the intersection between CE and SCM in a holistic manner. Through a comprehensive bibliometric analysis [16, 19, 20, 79] of the existing literature, we seek to uncover the current state of research at this intersection and identify key areas where further research could significantly advance our understanding and application of CE through SCM. Accordingly, our research questions are formulated as follows:

RQ1. How is SCM currently addressed within the context of CE in the existing literature, and what are the main topics identified?

RQ2. What are the implications for future research at the intersection of CE and SCM?

To answer the RQs, we employed a bibliometric analysis [16, 19, 20, 79]. Relevant publications for the analysis are taken from journals with an ABS ranking between one and four [21]. This bibliometric analysis allows us to analyze the interplay between different research topics. By examining keywords, abstracts, and methodologies used in the selected articles, we identify prominent areas of investigation and suggest opportunities for further research. Therefore, a bibliometric analysis is particularly well suited for the purpose of this study and helps to suggest directions or opportunities for further knowledge development [22]. The findings of our study contribute to the literature on CE and SCM by providing a thorough overview of the current state of knowledge as well as the barriers based on 281 publications. They also provide valuable implications for future research directions. Additionally, the implications can guide practitioners in shaping their SCM strategies and contributing to the ongoing transition to a CE.

2. THEORETICAL BACKGROUND

SCM fundamentally focuses on the systematic and strategic coordination of flows - be it materials, goods, or services - from suppliers to customers [7, 8, 23, 24]. A hallmark of SCM is its dedication to aligning these flows with customer needs, a strategy designed to deliver unparalleled customer value. Furthermore, SCM

adopts a holistic perspective, engaging the entire supply chain and integrating both upstream and downstream relationships. This coordination and integration, encompassing all traditional business functions within and among companies in the supply chain, are directed towards optimizing costs and enhancing the long-term performance of both the individual entities and the supply chain collectively. Given its holistic approach, the management of supply chains emerges as an important unit of analysis for CE [94].

CE is increasingly gaining importance [25]. It represents a transformative approach towards sustainable business practices and SCM, offering a promising pathway to reconcile economic growth with environmental sustainability [4]. Unlike the conventional linear economy model, which follows a 'take-make-use-destroy' sequence, the CE approach emphasizes the restorative and regenerative use of resources, aiming to minimize waste and optimize resource efficiency [4]. A crucial component of CE is the consideration of the whole supply chain. That is, the collaboration of actors within and across industrial sectors to extract value from waste, thereby aspiring towards zero waste generation [9].

The successful implementation of CE requires significant awareness, efforts, and participation [4]. CE challenges the neoclassical economic framework, even threatening some of its key pillars. Transitioning to a functional CE model requires overcoming significant institutional, financial, and technological barriers [92, 93]. For instance, CE proposes a rethinking of the limited and exhaustible nature of natural resources, striving for an economic model regulated according to the laws of nature [2]. CE necessitates the reengineering of numerous facets of production and consumption. On the production side, this entails investments in durable product design and processes that facilitate maintenance, repair, reuse, remanufacturing, refurbishing, and recycling [87, 91]. Moreover, the integration of Industry 4.0 technologies represents a promising opportunity, offering potential for optimization of resource use and waste reduction [19]. However, [87] provide five principles that can assist researchers and managers in rethinking value creation activities for CE implementation. These principles include closing loops, slowing loops, intensifying loops, narrowing loops, and dematerializing loops.

3. RESEARCH METHODOLOGY

In our methodology, we embarked on a comprehensive bibliometric analysis of the extant literature. The initial step involved performing a literature review to identify relevant studies (stage 1) [18]. Subsequent to this, we delved into a bibliometric analysis following [16; e.g., 19, 20, 79], with a particular focus on co-occurrence keyword analysis, to discern prevalent themes within the identified body of work. Figure 1 delineates the logical progression of our research methodology [16; 83].

	Definition of research question(s)		
	· · · · · · · · · · · · · · · · · · ·		
	Literature review (stage 1)		
•	Definition of search string		
•	Selection of database and definition of timeframe		
•	Execution of literature search (yield: 1,162 articles)		
•	Organization of initial results using reference software Citavi		
•	Conducting relevance sampling		
•	Definition of the final sample (comprising 281 articles)		
	▼		
Bibliometric analysis (stage 2)			
•	Focusing on co-occurrence keyword analysis		
•	Utilization of bibliometric data from stage 1 (incorporating 281 articles with keywords in Citavi)		
•	Execution of co-occurrence keyword analysis using VOSviewer for science mapping		
└] ▼			
Report of findings			

Figure 1 Research process

For stage 1, we conducted a search in the SCOPUS database, which was chosen for its comprehensiveness

in the field of scientific literature [19] and its compatibility with the VOSviewer software [16, 30, 31] used in this study [32]. Our literature search began at the onset of 2023, covering a publication period from 2012 to 2022. We opted for a ten-year timeframe (2012-2022), as ten years is a widely accepted duration for such studies [e.g., 2; 33; 34; 35]. In the SCOPUS database, we limited our search to 'article' as the document type and only included studies in English. The search string used was "circular* AND 'supply chain' OR 'SCM*" in the fields of paper title, abstract, and author keywords. This process resulted in 1,162 results, managed and organized using the reference software Citavi. For the articles' quality, we also considered a journal ranking [18] and applied the ABS ranking of journals according to [21], including all journals with an ABS ranking from one to four. To avoid considering only journals from one area of scientific literature [36], we placed no restriction on the category of journals. This approach whittled down the number of studies for examination to a total of 283 publications. To further filter CE-related articles, we performed a relevance sampling using title and abstract screening, with the criterion being that either the title or the abstract had to exhibit a connection to CE. Table 1 presents a summary of our inclusion and exclusion criteria. Following this process, we found a total of 281 relevant publications for evaluation using bibliometric analysis, especially a co-occurrence keyword analysis.

No.	Inclusion criteria	Exclusion criteria
1	Publication period from 2012 to 2022	Published before 2012
2	Document type article	Conference publication, proceeding paper, book chapter, book review, meeting abstract, letter
3	Publication language English	Publication language other than English
4	Journal listed in ABS journal ranking [21] (1 to 4*)	Journal not listed in ABS journal ranking [21]
5	Title or abstract had to exhibit a connection to CE	Title or abstract does not demonstrate relevance to CE

Table 1 Inclusion and exclusion criteria

We conducted a bibliometric analysis (stage 2) following [16; e.g., 19, 20, 79], with a particular focus on co-occurrence keyword analysis. A bibliometric analysis (stage 2) is a widely used and versatile method in scientific and engineering disciplines. It allows for the assessment of the current state of research due to its flexibility and capacity to handle large bibliometric data sets [26; 27; 83]. This analysis type provides comprehensive information about a research area, and its visualization feature makes the presented information easier to understand [28]. Moreover, bibliometric analysis can swiftly process hundreds of articles, analyzing the relationships between articles, citations, co-citations, and keywords [28]. Consequently, it can assist in identifying research

clusters [26]. In other words, a bibliometric analysis can ascertain main research areas within a specific scientific field, their interconnections or relations, and how these research areas have developed over time [29].

For the bibliometric analysis (stage 2) following [16; e.g., 19, 20, 79], we conducted a co-occurrence keyword analysis of the 281 publications using VOSviewer software [32]. Essentially, a co-occurrence analysis probes into the connections and similarities between keywords [16; 37; 32]. Thus, by considering keywords, their frequency of co-occurrences, and the Euclidean distance, VOSviewer clusters related keywords [16]. Hence, a co-occurrence analysis aids in objectively and algorithmically identifying and summarizing keywords into different clusters [e.g., 19; 16; 79; 80]. The result of this analysis offers a comprehensive overview of research clusters, helping to identify main research topics in the field of CE and SCM, and elaborating implications for future research [e.g., 79]. We employed VOSviewer as our software tool of choice, attributing this selection to its definitive capabilities in visualizing bibliometric networks [16; 32]. Specifically, VOSviewer is distinguished by its proficiency in managing large datasets.

To conduct a co-occurrence analysis (stage 2) following [e.g., 16, 19, 20, 79], we considered the 281 publications identified. The SCOPUS database assigns various keywords to the individual publications. The keywords were also transferred to the reference software Citavi during the export of the dataset from SCOPUS. This made the keywords available in Citavi along with their corresponding publication. When working with keywords, the occurrence attribute indicates the number of documents in which a keyword appears [81]. In VOSviewer, we have configured the settings such that a keyword must appear at least six times to be included in the analysis [e.g., 79]. 68 keywords reached this threshold in our study. Figure 3 displays the final outcome of the co-occurrence analysis, which is a network consisting of six clusters based on the 68 keywords. Prior to defining this setting for our analysis, we executed a series of trials, varying the thresholds for minimum occurrences [e.g., 79]. The trials revealed that there was minimal variation in the number of clusters and the frequency of their associated keywords. Consequently, we posited that this setting effectively captured the principal clusters and keywords.

4. DESCRIPTIVE STATISTICS

The dataset of 281 studies indicates that the majority of the publications are from the journal Business Strategy and the Environment, accounting for about 15% of all included studies. Table 2 presents the top five journals with the highest number of publications, the corresponding count of their publications, their individual share, and the cumulative share. This table reveals that most articles in our dataset were published in the Business Strategy and the Environment, International Journal of Production Economics, International Journal of Production Research, Production Planning & Control, and Journal of Enterprise Information Management. An overview of all journals and articles included in this study can be found in the Appendix.

Table 2	Top :	5 journals	of the	final	sample
			./ .		

Journal	Number of publications	Share	Cumulative share
Business Strategy and the Environment	42	14.95 %	14.95 %
International Journal of Production Economics	23	8.19 %	23.14 %
International Journal of Production Research	23	8.19 %	31.33 %
Production Planning & Control	22	7.83 %	39.16 %
Journal of Enterprise Information Management	18	6.41 %	45.57 %

Moreover, the selected 281 studies were only published between 2015 and 2022. Figure 2 illustrates that just one study was published in each of the two years 2015 and 2016. In the subsequent years, the number of studies increased from six in 2017 to a range between 22 and 32 in 2018, 2019, and 2020. Conversely, the number of results escalated to 71 studies in 2021 and 124 in 2022. The swift increase between 2020 and 2022 underscores the current relevance of the CE in the field of SCM.





Figure 2 Number of publications per year

5. **RESULTS**

Figure 3 shows the result of our co-occurrence analysis. Based on the co-occurrence analysis with article keywords, we identified six clusters (main topics; RQ1) from Figure 3: Cluster 1 red (Intra-firm and Inter-firm Challenges in Implementing CE), Cluster 2 green (Institutional Support and Closed-loop Supply Chains), Cluster 3 blue (Environmental Impact), Cluster 4 yellow (Industry 4.0 Technologies and Smart Circular Supply Chains), Cluster 5 purple (Food Supply Chains), and Cluster 6 orange (Capabilities and Innovation). The following sections provide a characterization of these clusters [e.g., 16, 19, 20, 79]. To ensure a manageable characterization within the scope of the article and to verify cluster names, we identified the associated articles in our Citavi reference file using the top three keywords specific to each cluster.



Figure 3 Co-occurence keywords analysis with six clusters

5.1. Cluster 1 (red): Intra-firm and Inter-firm Challenges in Implementing CE

Through the analysis of this cluster, a research focus has emerged on the challenges in implementing sustainability and CE concepts within SCM. [38] detail the transformation process of a traditional paper towel manufacturer towards a business model informed by CE. They propose that this transformation can be successful by aiming to reduce the consumption of natural resources, reuse paper waste, and foster sustainable innovations. Further supporting this, [39] and [40] point to the development of innovations within SCM as a potential driver for implementing CE.

In addition, [38] identify managing complex relationships with supply chain partners as a key success factor. This viewpoint is echoed in the studies by [10], [39], [27], [41], and [40], all emphasizing the importance of considering the entire partner network when implementing circular economy concepts. This underscores the point that managing the supply chain network is one of the principal challenges in transitioning to a circular economy.

Within this context, both [41] and [40] highlight the lack of awareness among supply chain partners and stakeholders about the necessary framework for implementing circular economy concepts. To overcome this hurdle, they suggest not only the training of stakeholders but also the implementation of rules as potential solutions to raise awareness [40]. The influence of policymakers in this implementation process is further underscored by [38, 27, 41]. To mitigate the challenge of insufficient information sharing in networks and the complexity of relationships, [10] put forth the utilization of big data analytics for data-driven decision-making as a potential driver.

5.2. Cluster 2 (green): Institutional Support and Closed-loop Supply Chains

Upon analysis of this cluster, a research focus emerged on institutional support and closed-loop supply chains in the transition towards sustainability. [42] underscore the role of policymakers, arguing they can make significant contributions to the implementation of sustainable practices through political support and legal regulations. Their study focuses on developing a framework for implementing sustainability on a B2C e-commerce platform. The pursuit of sustainable policies and practices in this area not only enhances the environmental and social performance of companies but also fosters the development of sustainability competencies, which may yield competitive advantages [42].

The papers by [43] and [44] both present mathematical models for CE implementation, especially closed-loop supply chains. [43] concentrate on the evolution from linear business models to circular economy concepts, specifically addressing integrated decision-making in the context of reverse logistics. Optimal strategies in this framework consider the analytical view of the interdependencies between sourcing, sorting, and planning processes. [44], on the other hand, focus on a closed-loop supply chain network of reusable citrus crates. Their model provides insights into the quantity and locations of distribution, collection, and recycling centers, enabling effective use of transportation capacity to reduce both transportation costs and emissions.

5.3 Cluster 3 (blue): Environmental Impact

By analyzing this cluster, a research focus emerged on environmental impact, specifically waste and resource management. [45] show that management control and technological capabilities are crucial key capabilities in managing circular supply chains. Furthermore, they highlight the growing importance of technological components to facilitate supply chain coordination and synergies. However, technological developments and the dynamic environment can also pose challenges to organizations [46]. [46] also underscore that the lack of a shared vision and the absence of regulatory provisions for cross-sectoral collaboration in circular SCM have been identified as challenges. These can be addressed primarily through strategic action by managers and policymakers.

[47] conceptualize waste as a resource, arguing that the long-term focus should extend beyond mere conceptualization and towards prevention of waste and reverse flows. This viewpoint aligns with the publication by [45], who emphasize maximizing resource use and minimizing waste along the entire supply chain. Similarly, [48] found that manufacturing and purchasing teams primarily focus on design-related aspects of products and processes to minimize resource use. Conversely, the marketing team primarily focuses on customer interaction and management of collection and recycling systems.

5.4. Cluster 4 (yellow): Industry 4.0 Technologies and Smart Circular Supply Chains

By analyzing this cluster, a research focus emerged on industry 4.0 and smart circular supply chains. [49] and [50] point out that Industry 4.0 technologies such as big data analytics and cloud technologies are widely used in a CE context due to their positive impact on resource and information management, production efficiency, coordination, and collaboration among all supply chain stakeholders. In conjunction with these digital technologies, the most promising CE approaches are identified in the areas of 3Rs, waste management, and material and energy efficiency [50]. This is also reflected in the study by [51], who identify knowledge of circular supply chains and Industry 4.0 as an important success factor for implementing circular approaches.

Furthermore, regulations are identified as key supporters for the successful implementation of smart and sustainable circular supply chains [52; 49]. This emphasizes that institutions and policy makers have a crucial role to play in the implementation of circular supply chains for CE. In addition to this support, top management commitment is seen as playing an important role in achieving sustainability goals [52]. [51] also identify top management commitment as critical for Industry 4.0-integrated circular supply chains.

Moreover, [52] and [49] analyze enablers of smart circular supply chains. In the study by [52], SDG 16 (peace, justice, and strong institutions), SDG 9 (industry, innovation, and infrastructure), and SDG 15 (living on land) are assigned the highest importance for the identified drivers. In contrast, [49] identify SDG 12 (sustainable consumption and production) and SDG 17 (partnerships to achieve the goals) as relevant enablers. In this context, coordination and collaboration among supply chain partners are highlighted [51; 49]. This is because the pursuit of sustainability goals is a complex process that requires extensive collaboration among all partners in the circular supply chain [52].

5.5 Cluster 5 (purple): Food Supply Chains

By analyzing this cluster, a research focus emerged on food supply chains. [53] explore the applicability of strategic planning tools for food safety. [54] develop a circular network model with the aim of reducing food waste. [55] also develop a model with the goal of minimizing food waste in the specific context of slaughterhouses. [56] point out that data-based technologies can make an important contribution to reverse logistics in the context of the circular economy in food supply chains. Similarly, [57] identify digital technologies as opportunities to improve visibility, tracking, and location throughout the food supply chain. In addition, [58] emphasize digital technologies alongside partnerships, industry symbiosis, and government regulation as drivers of sustainability in the reverse logistics context. Furthermore, [59] provide an agenda to combat food waste based on digital technologies. The authors show that the focus in the use of technologies should not only be on the reuse of waste, but also on the reduction and prevention of waste. [60] examine the impact of disruptions, such as the COVID-19 pandemic, on food waste reduction. Their study investigates how certain consumer characteristics related to food waste change in the context of lockdowns and shows that uncertainty has a negative impact on waste reduction by inducing excessive purchasing behavior.

5.6 Cluster 6 (orange): Capabilities and Innovation

By analyzing this cluster, a research focus related to capabilities, collaboration, and innovation emerged. [61] conclude that dynamic capabilities can help to adopt circular economy and develop sustainable competitive advantage. In addition, knowledge of Industry 4.0 can contribute to the development of dynamic capabilities. [62] consider dynamic capabilities in conjunction with the concept of open innovation to develop a cross-firm framework for implementing CE. Despite the conflict between protecting individual competitive advantage and achieving network competitive advantage, dynamic capabilities support the network in rapidly adapting to a dynamic environment, and the concept of open innovation reinforces systems thinking. [63] examine the impact of digital transformation, organizational ambidexterity, and CE business models on the relationship between Industry 4.0 capabilities and sustainable performance. [64] conclude that continuous incremental organizational learning based on information derived from customer feedback, returned products, and transaction data has the potential to improve organizational performance and lead to competitive advantage under certain conditions. Furthermore, [25; 38] emphasize the importance of network collaboration and related capabilities for CE implementation.

6. **DISCUSSION**

To address RQ 2, we analyze the clusters identified and derive implications for future research. The clusters establish a conceptual framework for formulating research propositions at the nexus of SCM and CE, thereby contributing to scientific literature. Our contribution illuminates this intersection, proposing potential avenues for subsequent studies.

6.1. Cluster 1: Intra-firm and Inter-firm Challenges in Implementing CE

The findings show that barriers emanate from supply chain operations and value creation activities. The cost of collecting used products [41], limitations imposed by asset-light business models [40], the absence of a common vision and a successful business model with a value creation architecture for implementing CE [46; 4], the lack of zero-waste shops [58], and high investment costs [41; 4] all pose considerable obstacles. Design challenges, such as the definition of waste as a resource [39], the absence of a circular design principle [57], and difficulties in secure product return [4; 2] are also of great significance. Finding the right customers for recycled products presents another obstacle [61], as does the challenge of designing reusable and recyclable products [41]. Additionally, the low usage of reusable transport methods [58], complications arising from property issues and the return of other companies' products [4; 2], the limited availability of reusable products [4], and a broad supplier base [25] further complicate CE implementation. These hurdles underline the need for a comprehensive shift in supply chain operations towards the consideration the entire supply chain network or ecosystem.

Future research should take a holistic approach and examine the entire supply chain network or ecosystem [74], rather than focusing on specific focal actors or supply chain operations [75]. This would support a shift towards the collaborative efforts of all stakeholders within the network or ecosystem [e.g., 82] during CE implementation. Therefore, a holistic approach that examines the entire supply chain network or ecosystem is helpful for a comprehensive understanding and successful CE implementation. Related research could consider the ecosystem concept or stakeholder theory for this purpose. Stakeholder theory essentially deals with the influence of actors from the environment [77]. The application of stakeholder theory might be a good fit because the pursuit of sustainability goals is a complex process that requires extensive collaboration among all stakeholders in a circular supply chain [52; also 10; 46; 14; 78]. In addition, future research could also take a dynamic perspective and investigate whether there are certain patterns or schemes (maturity models) that describe a transition for implementing CE in supply chain networks or ecosystems. Possible patterns or schemes could also differ from industry to industry. We therefore suggest the following implication:

Proposition 1: Future studies should strive to provide a holistic and dynamic understanding of the entire supply chain network or ecosystem during the implementation of CE.

Research indicates that CE implementation is hindered by duplication of responsibility for relevant supply chain activities [46], limited external cooperation with supply chain actors and stakeholders [61], and a lack of trust in collaboration [46]. If future research considers a holistic understanding of the entire supply chain network or ecosystem during the development and implementation of CE, the issue of coordination and collaboration will arise [76; 75]. That is, practitioners and researchers will face the question of which actor or stakeholder coordinates the development and implementation of CE in a supply chain network or ecosystem. Next, the question will arise as to how an actor or stakeholder coordinates the network or ecosystem and how collaboration between actors and stakeholders is managed. Therefore, we additionally argue the following implication for future research:

Proposition 2: Future research should aim to analyze coordination and collaboration issues in a supply chain network or ecosystem during the implementation of CE.

The necessity for implementing organizational change towards CE is evident due to inadequate internal cooperation between responsible entities, which is caused by internal bureaucracy and a lack of commitment from top management [46; 61; 4; 41; 57]. This suggests that leadership, organizational

culture, and governance could significantly facilitate this change. Thus, we suggest the following research implication:

Proposition 3: Future research could explore the role of leadership and culture in facilitating the implementation of CE in a supply chain network or ecosystem.

6.2. Cluster 2: Institutional Support and Closed-loop Supply Chains

The lack of governmental regulations is a significant issue. This can limit the enforcement of sustainable practices and adherence to Circular Economy (CE) principles in supply chains [40; 46; 51; 4]. Furthermore, the absence of governmental support, policies, and incentive systems for supply chain actors and stakeholders hinders progress in this field [41; 57; 58; 4]. In this context, the lack of adaptable governance structures [46] for supply chains or ecosystems also presents a notable barrier to the implementation of CE. Additionally, the lack of system standardization for circular loops, combined with inadequate information exchange on relevant supply chain activities among actors and stakeholders, presents further obstacles [46; 57; 4].

Future research could focus on the role of institutions in shaping the supply chain environment for CE implementation. For example, [40], [46], [57], [4], [41], and [58] highlight the lack of government regulations and support as significant challenges to CE implementation. This suggests that policymakers can have a significant impact on the successful implementation of CE. However, research on the design of policies, regulations, and guidelines related to CE represents a complex endeavor as multiple actors and stakeholders from the supply chain network or ecosystem might participate in CE implementation. Therefore, future research should address the role of relevant institutions and policy makers as well as the design of policies, regulations, guidelines, and incentives related to CE beyond their effectiveness. In this context, we believe that related research should also consider national or industry specific requirements or conditions. However, we suggest the following research implication:

Proposition 4: Future research should explore not only the effectiveness but also the design of policies, regulations, guidelines, and incentives related to CE and SCM, taking into account national or industryspecific requirements or conditions.

6.3. Cluster 3: Environmental Impact

Given the scarcity of performance indicators capable of assessing the environmental impact and implementation success of CE, the development and analysis of such metrics represent a significant research need [46; 4; 57]. These indicators or metrics, applicable across supply chains or at various levels, such as for carbon management [69; 70; 71], or supplier relationship management, could provide an efficient means of monitoring and managing CE adoption, execution, and efficiency [also 51; 50]. Therefore, developing and scrutinizing such indicators could represent a meaningful contribution to SCM and CE research. Thus, we propose the following implication:

Proposition 5: Future studies should focus on the development and validation of viable performance indicators and related measurement approaches for CE implementation in a supply chain network or ecosystem.

6.4. Cluster 4: Industry 4.0 technologies and Smart Circular Supply Chains

Technological challenges, such as the lack of IT standards and difficulties in measuring CE performance in supply chains [46; 57; 4], coupled with unreliable data exchange between systems and entities, are restricting CE implementation efforts [41; 46; 4]. Additionally, the underutilization of tracking&tracing systems [57; 4; 2] and technological constraints in tracking recycled materials [57] are considered significant barriers to CE implementation.

While digital technologies have been recognized as critical enablers of CE implementation, their specific applications and impacts within the CE framework remain underexplored. [46], [56], [57], [4], and [10] all identify these issues as significant barriers in implementing CE within SCM. [41] further emphasize the potential of big data analytics in enhancing data sharing and decision-making in CE [also 10]. [61] highlight that data sharing is essential for crossfunctional collaboration among all supply chain partners. Therefore, the role of digital technologies in enabling and facilitating CE implementation should also be a research priority [19]. That is, a more indepth examination of these technologies, how specific technologies work in the context of CE, their potential impact, guidelines for data ownership and exchange among supply chain actors, and standardization could

provide valuable insights. Hence, we propose the following implication:

Proposition 6: Investigations should aim to elucidate the mechanisms and impacts of specific digital technologies within the CE and SCM context.

6.5. Cluster 5: Food Supply Chains

Adopting a broader perspective that encompasses multiple industries could be crucial when researching CE and SCM. Although the primary focus has been on the food and automotive industries, the potential benefits of CE extend far beyond these sectors [19]. Therefore, future CE research could prioritize the reduction of waste and inefficiency across the entire supply chain network or ecosystem of various sectors, not only those currently most explored. As a result, we propose the following implication:

Proposition 7: Future research should prioritise expanding CE to other industries and across multiple sectors.

6.6. Cluster 6: Capabilities and Innovation

The study of dynamic capabilities represents a burgeoning topic within the intersection of SCM and CE research [61; 64; 62; 63]. In particular, understanding the capabilities and structures required for successful CE implementation holds significant potential. Furthermore, the role of technologies in shaping these capabilities and internal resources needs further exploration. In the context of today's disruptive environment [72; 73; also 13], this area of research is particularly important. Hence, we propose the following research implication:

Proposition 8: Future research should focus on identifying the key capabilities required for successful CE implementation, and the role of digital technologies therein.

Table 3 presents a summary of the identified propositions, highlighting potential research directions.

Cluster	Proposition	Potential research direction	
1. Intra-firm and In- ter-firm Challenges in Implementing CE	1. Future studies should strive to provide a holistic and dynamic understanding of the entire supply chain network or ecosystem during the implementation of CE.	 What actors in the supply chain or ecosystem are necessary for implementing CE? How do the roles of actors change during CE implementation? How do supply chain networks or ecosystems emerge and evolve during CE implementation? 	
	2. Future research should aim to analyze coordination and collaboration issues in a supply chain network or ecosystem during the implementation of CE.	 What mechanisms or practices enable actors to seamlessly collaborate for implementing CE? How can participating actors be coordinated to ensure that all actors create and benefit from relevant value? How can participating actors be incentivized to share relevant data for implementing CE? 	
	3. Future research could explore the role of leadership and culture in facilitating the implementation of CE in a supply chain network or ecosystem.	 What cultural factors (e.g., cognitions, frames, knowledge paradigms, logics, values) facilitate or impede the implementation of CE? How do executives of supply chain actors and other stakeholders motivate the investments necessary to implement CE? How do executives of supply chain actors decide between incremental and more comprehensive changes when seeking CE implementation? 	
2. Institutional Support and Closed-loop Sup- ply Chains	4. Future research should explore not only the effectiveness but also the design of policies, regulations, guidelines, and in- centives related to CE and SCM, taking into account national or industry-specific requirements or conditions.	 What public policies facilitate or hinder the implementation of CE in supply chains or ecosystems? What are the institutional guidelines and incentives that influence the implementation of CE in supply chain networks or ecosystems? How are CE policies from different countries experienced and managed within a supply chain network or ecosystem? 	

Table 3 Main research topics and potential research directions

Cluster	Proposition	Potential research direction (not limited to)
3. Environmental Impact	5. Future studies should focus on the devel- opment and validation of viable perfor- mance indicators and related measure- ment approaches for CE implementation in a supply chain network or ecosystem.	 How can companies, supply chain networks, and ecosystems measure and manage trade-offs that occur in CE implementation (e.g., raw material, water, carbon, energy)? How can companies, supply chain networks, and ecosystems measure the impact of CE implementation on national economies, society, or nature? How can economies of scale and economies of scope be used to facilitate the implementation of CE?
4. Industry 4.0 technolo- gies and Smart Circu- lar Supply Chains	6. Investigations should aim to elucidate the mechanisms and impacts of specific dig- ital technologies within the CE and SCM context.	 How can digital platforms accelerate CE implementation? / How can digital platforms reconfigure supply chain networks or ecosystems for CE implementation? How can federated data infrastructure facilitate CE implementation? What data-driven services and contributions from actors in the supply chain network or ecosystem are necessary for implementing a CE?
5. Food Supply Chains	7. Future research should prioritise expand- ing CE to other industries and across mul- tiple sectors.	 How can supply chain networks or ecosystems be designed to implement CE in the machinery and equipment industry? How can supply chain networks or ecosystems be designed to implement CE in the chemicals industry under consideration of mining and raw material extraction? How can supply chain networks or ecosystems be designed to implement CE in the healthcare industry?
6. Capabilities and Inno- vation	8. Future research should focus on identify- ing the key capabilities required for suc- cessful CE implementation, and the role of digital technologies therein.	 What different capabilities for inter- organizational relationships facilitate the implementation of CE? What capabilities are required to facilitate resource integration for CE implementation? What capabilities enable companies, supply chain networks, and ecosystems to adopt digital technologies for implementing CE? / How does the adoption of digital technologies change capabilities of actors in a supply chain network or ecosystem?

7. CONCLUSION

In this study, we thoroughly explored the synergies between CE and SCM, addressing the noted fragmentation in SCM research related to CE [87, 90] which hampers a holistic understanding. To achieve this, we conducted a comprehensive bibliometric analysis [16, 18, 19, 20, 79] of the existing literature. We selected the SCOPUS database due to its comprehensiveness and compatibility with the VOSviewer software [16; 30; 31]. We conducted a co-occurrence keyword analysis on 281 relevant publications using VOSviewer software. This helped us identify core research topics and develop implications for future research.

Through the co-occurrence keyword analysis, we identified six main research topics (clusters) within the intersection between CE and SCM research: 1. Intrafirm and Inter-firm Challenges in Implementing CE, 2. Institutional Support and Closed-loop Supply Chains, 3. Environmental Impact, 4. Industry 4.0 technologies and Smart Circular Supply Chains, 5. Food Supply Chains, and 6. Capabilities and Innovation.

We used these main research topics to establish a conceptual framework for formulating propositions at the nexus of SCM and CE, contributing to the scientific literature. Specifically, eight directions were proposed. Firstly, future studies should take a holistic approach to understanding the entire supply chain network or ecosystem during CE implementation, emphasizing collaboration among supply chain actors and stakeholders (Proposition 1). Secondly, future research should investigate coordination and collaboration issues within the supply chain network or ecosystem (Proposition 2). Thirdly, further analysis is required to understand the role of leadership, culture, and governance in facilitating the transition towards a circular economy (Proposition 3). Fourthly, research should address the effectiveness and design of policies, regulations, guidelines, and incentives related to CE and SCM, considering national or industry-specific contexts (Proposition 4). Fifthly, research should focus towards developing performance indicators for CE implementation in supply chains (Proposition 5). Sixthly, further studies should uncover the mechanisms and impacts of specific digital technologies within CE and SCM (Proposition 6). Seventhly, future research should examine the expansion of CE across multiple sectors (Proposition 6). Eighthly, investigations should identify key capabilities required for successful CE implementation (Proposition 8).

This study's findings also bear important implications for practitioners, institutions, and policymakers. Initially, the findings offer a comprehensive overview of the main topics and related findings academic community is currently addressing. Furthermore, our study outlines critical issues for future research that could be considered in CE implementation projects. Lastly, we underscore the pivotal role of institutions and policymakers in fostering the successful implementation of CE through the enactment of effective regulatory frameworks.

However, it is important to acknowledge the limitations of our study. Specifically, our literature search was restricted to specific keywords in the title, abstract, and author keywords, which may have resulted in relevant articles that focus on our unit of analysis being overlooked. Additionally, we only used one database (Scopus) for our study. The identification of main research topics relies on the keywords authors selected for their articles through a co-occurrence keyword analysis. Our study primarily focuses on examining the intersection between CE and SCM in a holistic manner, maintaining a medium to high level of abstraction.

REFERENCES

- 1. United Nations. (1987). Report of the World Commission on Environment and Development. Our Common Future.
- Ghisellini, P., Cialani, C., & Ulgiati, S. (2016). A review on circular economy: The expected transition to a balanced interplay of environmental and economic systems. Journal of Cleaner Production, 114, 11-32.
- Lieder, M., & Rashid, A. (2016). Towards circular economy implementation: a comprehensive review in context of manufacturing industry. Journal of Cleaner Production, 115, 36–51.
- Govindan, K., & Hasanagic, M. (2018). A systematic review on drivers, barriers, and practices towards circular economy: A supply chain perspective. International Journal of Production Research, 56(1-2), 278-311.
- Genovese, A., Acquaye, A. A., Figueroa, A., & Koh, S. L. (2017). Sustainable supply chain management and the transition towards a circular economy: Evidence and some applications. Omega, 66, 344–357.
- Yuan, Z., Bi, J. und Moriguichi, Y. (2006), "The Circular Economy: A New Development Strategy in China", Journal of Industrial Ecology, 10, 1-2, 4–8.
- 7. Christopher, M. (2016). Logistics & supply chain management (5th ed.). Pearson Education Limited.
- Mentzer, J. T., DeWitt, W., Keebler, J. S., Min, S., Nix, N. W., Smith, C. D., & Zacharia, Z. G. (2001). Defining supply chain management. Journal of Business Logistics, 22(2), 1–25.
- Farooque, M., Zhang, A., Thürer, M., Qu, T., & Huisingh, D. (2019). Circular supply chain management: A definition and structured literature review. Journal of Cleaner Production, 228, 882–900.

- 10. Gupta, S., Chen, H., Hazen, B.T., Kaur, S., & Santibañez Gonzalez, E. (2019). Circular economy and big data analytics: A stakeholder perspective. Technological Forecasting and Social Change, 144, 466-474.
- 11. Korhonen, J., Honkasalo, A., & Seppälä, J. (2018). Circular Economy: The Concept and its Limitations. Ecological Economics, 143, 37–46.
- 12. Murray, A., Skene, K., & Haynes, K. (2017). The Circular Economy: An Interdisciplinary Exploration of the Concept and Application in a Global Context. Journal of Business Ethics, 140(3), 369-380.
- 13. Wieland, A. (2021). Dancing the Supply Chain: Toward Transformative Supply Chain Management. Journal of Supply Chain Management, 57(1), 58-73.
- 14. Pagell, M., & Shevchenko, A. (2014). Why Research in Sustainable Supply Chain Management Should Have no Future. Journal of Supply Chain Management, 50(1), 44-55.
- 15. Farrukh, M., Meng, F., Wu, Y., & Nawaz, K. (2020). Twenty-eight years of business strategy and the environment research: A bibliometric analysis. Business Strategy & the Environment, 29(6), 2572-2582.
- 16. Ali, I., & Gölgeci, I. (2019). Where is supply chain resilience research heading? A systematic and co-occurrence analysis. International Journal of Physical Distribution & Logistics Management, 49(8), 793-815.
- 17. Wang, J.-J., Chen, H., Rogers, D.S., Ellram, L.M., & Grawe, S.J. (2017). A bibliometric analysis of reverse logistics research (1992-2015) and opportunities for future research. International Journal of Physical Distribution & Logistics Management, 47(8), 666-687.
- 18. Cooper, H. (2017). Research synthesis and metaanalysis: A step-by-step approach (5th ed.). Sage.
- 19. Agrawal, R., Wankhede, V.A., Kumar, A., Luthra, S., & Huisingh, D. (2022a). Progress and trends in integrating Industry 4.0 within Circular Economy: A comprehensive literature review and future research propositions. Business Strategy and the Environment, 31(1), 559-579.
- 20. Agrawal, R., Majumdar, A., Majumdar, K., Raut, R. D., & Narkhede, B. E. (2022b). Attaining sustainable development goals (SDGs) through supply chain practices and business strategies: A systematic review with bibliometric and network analyses. Business Strategy & the Environment, 31(7), 3669-3687.
- 21. Harzing, A.-W. (2022). Journal Quality List (69th ed.). Retrieved from https://harzing.com/.
- 22. Cornelissen, J., Höllerer, M. A., & Seidl, D. (2021). What Theory Is and Can Be: Forms of Theorizing in Organizational Scholarship. Organization Theory, 2(3), 1-19.

- 23. Stevens, G.C. (1989). Integrating the Supply Chain. International Journal of Physical Distribution & Logistics Management, 19(8), 3-8.
- 24. Ellram, L., & Cooper, M. (1990). Supply Chain Management, Partnerships, and the Shipper-Third Party Relationship. The International Journal of Logistics Management, 1(2), 1-10.
- 25. Kalverkamp, M. (2018). Hidden potentials in open-loop supply chains for remanufacturing. International Journal of Logistics Management, 29(4), 1125-1146.
- 26. Fahimnia, B., Sarkis, J., & Davarzani, H. (2015). Green supply chain management: A review and bibliometric analysis. International Journal of Production Economics, 162, 101-114.
- 27. Shashi, Centobelli, P., Cerchione, R., & Mittal, A. (2021). Managing sustainability in luxury industry to pursue circular economy strategies. Business Strategy and the Environment, 30(1), 432-462.
- 28. He, M., Yu, W., & Han, X. (2022). Bibliometric review on corporate social responsibility of the food industry. Journal of Food Quality, 2022, 1-14
- 29. Waltman, L., van Eck, N.J., & Noyons, E.C. (2010). A unified approach to mapping and clustering of bibliometric networks. Journal of Informetrics, 4(4), 629-635.
- 30. Nair, R. S., Agrawal, R., Domnic, S., & Kumar, A. (2021). Image mining applications for underwater environment management - A review and research agenda. International Journal of Information Management Data Insights, 1(2), 100023.
- 31. Sharma, R., Jabbour, C. J. C., & Lopes de Sousa Jabbour, A. B. (2021). Sustainable manufacturing and industry 4.0: what we know and what we don't. Journal of Enterprise Information Management, 34(1), 230-266.
- 32. van Eck, N.J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. Scientometrics, 84(2), 523-538.
- 33. Molina-Azorín, J. F., & López-Gamero, M. D. (2016). Mixed Methods Studies in Environmental Management Research: Prevalence, Purposes and Designs. Business Strategy & the Environment (John Wiley & Sons, Inc), 25(2), 134-148.
- 34. Patyal, V. S., Sarma, P., Modgil, S., Nag, T., & Dennehy, D. (2022). Mapping the links between Industry 4.0, circular economy and sustainability: a systematic literature review. Journal of Enterprise Information Management, 35(1), 1–35.
- 35. Roberts, P. (1992). Business and the environment: An initial review of the recent literature. Business Strategy & the Environment, 1(2), 41–50.

- 36. Webster, J., & Watson, R.T. (2002). Analyzing the Past to Prepare for the Future: Writing a Literature Review. MIS Quarterly, 26(2), xiii– xxiii.
- Di Vaio, A., Hassan, R., D'Amore, G., & Tiscini, R. (2022). Responsible innovation and ethical corporate behavior in the Asian fashion industry: A systematic literature review and avenues ahead. Asia Pacific Journal of Management.
- 38. Gandolfo, A., & Lupi, L. (2021). Circular economy, the transition of an incumbent focal firm: How to successfully reconcile environmental and economic sustainability? Business Strategy and the Environment, 30(7), 3297.
- Perey, R., Benn, S., Agarwal, R., & Edwards, M. (2018). The place of waste: Changing business value for the circular economy. Business Strategy and the Environment, 27(5), 631–642.
- 40. Sorin, F., & Sivarajah, U. (2021). Exploring Circular economy in the hospitality industry: empirical evidence from Scandinavian hotel operators. Scandinavian Journal of Hospitality and Tourism, 21(3), 265–285.
- Sonar, H., Mukherjee, A., Gunasekaran, A., & Singh, R.K. (2022). Sustainable supply chain management of automotive sector in context to the circular economy: A strategic framework. Business Strategy and the Environment, 31(7), 3635–3648.
- Prajapati, D., Pratap, S., Zhang, M., Lakshay, & Huang, G.Q. (2022). Sustainable forward-reverse logistics for multi-product delivery and pickup in B2C E-commerce towards the circular economy. International Journal of Production Economics, 253(November), 108606.
- Lechner, G., & Reimann, M. (2020). Integrated decision-making in reverse logistics: an optimisation of interacting acquisition, grading and disposition processes. International Journal of Production Research, 58(19), 5786–5805.
- Liao, Y., Kaviyani-Charati, M., Hajiaghaei-Keshteli, M., & Diabat, A. (2020). Designing a closed-loop supply chain network for citrus fruits crates considering environmental and economic issues. Journal of Manufacturing Systems, 55, 199–220.
- Tseng, M.-L., Tran, T., Wu, K.-J., Xue, B., & Chen, X. (2021). Causality seafood processing circular supply chain capabilities in qualitative data analytics. Industrial Management and Data Systems, 121(12), 2760–2784.
- Luthra, S., Sharma, M., Kumar, A., Joshi, S., Collins, E., & Mangla, S. (2022). Overcoming barriers to cross-sector collaboration in circular supply chain management: a multimethod approach. Transportation Research Part E: Logistics and Transportation Review, 157(January), 102582.

- 47. Abuabara, L., Paucar-Caceres, A., & Burrowes-Cromwell, T. (2019). Consumers' values and behaviour in the Brazilian coffee-incapsules market: promoting circular economy. International Journal of Production Research, 57(23), 7269–7288.
- 48. Kamble, S.S., Belhadi, A., Gunasekaran, A., Ganapathy, L., & Verma, S. (2021). A large multigroup decision-making technique for prioritizing the big data-driven circular economy practices in the automobile component manufacturing industry. Technological Forecasting and Social Change, 165(April), 120567.
- 49. Kayikci, Y., Kazancoglu, Y., Lafci, C., Gozacan-Chase, N., & Mangla, S.K. (2022d). Smart circular supply chains to achieving SDGs for postpandemic preparedness. Journal of Enterprise Information Management, 35(1), 237–265.
- Taddei, E., Sassanelli, C., Rosa, P., & Terzi, S. (2022). Circular supply chains in the era of industry 4.0: A systematic literature review. Computers and Industrial Engineering, 170(August), 108268.
- Kumar, A., Choudhary, S., Garza-Reyes, J.A., Kumar, V., Rehman Khan, S.A., & Mishra, N. (2021). Analysis of critical success factors for implementing Industry 4.0 integrated circular supply chain-moving towards sustainable operations. Production Planning and Control. Advance online publication.
- 52. Kayikci, Y., Kazancoglu, Y., Gozacan-Chase, N., & Lafci, C. (2022b). Analyzing the drivers of smart sustainable circular supply chain for sustainable development goals through stakeholder theory. Business Strategy and the Environment, 31(7), 3335–3353.
- 53. Irani, Z., & Sharif, A.M. (2018). Food security across the enterprise: a puzzle, problem or mess for a circular economy? Journal of Enterprise Information Management, 31(1), 2-9.
- Kabadurmus, O., Kazançoğlu, Y., Yüksel, D., & Pala, M. (2022). A circular food supply chain network model to reduce food waste. Annals of Operations Research. Advance online publication.
- Kayikci, Y., Ozbiltekin, M., & Kazancoglu, Y. (2020). Minimizing losses at red meat supply chain with circular and central slaughterhouse model. Journal of Enterprise Information Management, 33(4), 791–816.
- 56. Kazancoglu, Y., Ekinci, E., Mangla, S.K., Sezer, M.D., & Kayikci, Y. (2021). Performance evaluation of reverse logistics in food supply chains in a circular economy using system dynamics. Business Strategy and the Environment, 30(1), 71–91.

15

- 57. Kumar, M., Raut, R.D., Jagtap, S., & Choubey, V.K. (2022). Circular economy adoption challenges in the food supply chain for sustainable development. Business Strategy and the Environment, 32(4), 1334–1356.
- Münch, C., Gracht, H.A. von der, & Hartmann, E. (2021). The future role of reverse logistics as a tool for sustainability in food supply chains: a Delphi-based scenario study. Supply Chain Management, 28(2), 262–283.
- 59. Lopes de Sousa Jabbour, A.B., Frascareli, F., Santibanez Gonzalez, E., & Chiappetta Jabbour, C.J. (2021). Are food supply chains taking advantage of the circular economy? A research agenda on tackling food waste based on Industry 4.0 technologies. Production Planning and Control. Advance online publication.
- Luo, N., Olsen, T., Ganguly, S., & Liu, Y. (2022). Food supply chain waste reduction for a circular economy in the COVID-19 pandemic: a longitudinal study of New Zealand consumers. International Journal of Logistics Management, 34(3), 800–817.
- Chari, A., Niedenzu, D., Despeisse, M., Machado, C.G., Azevedo, J.D., Boavida-Dias, R., & Johansson, B. (2022). Dynamic capabilities for circular manufacturing supply chains—Exploring the role of Industry 4.0 and resilience. Business Strategy and the Environment, 31(5), 2500–2517.
- Köhler, J., Sönnichsen, S.D., & Beske-Jansen, P. (2022). Towards a collaboration framework for circular economy: The role of dynamic capabilities and open innovation. Business Strategy and the Environment, 31(6), 2700–2713.
- Belhadi, A., Kamble, S., Gunasekaran, A., & Mani, V. (2021). Analyzing the mediating role of organizational ambidexterity and digital business transformation on industry 4.0 capabilities and sustainable supply chain performance. Supply Chain Management, 27(6), 696–711.
- 64. Ritola, I., Krikke, H., & Caniëls, M. (2021). Learning-based dynamic capabilities in closedloop supply chains: an expert study. International Journal of Logistics Management, 33(5), 69–84.
- 65. Teece, D.J., & Pisano, G. (1994). The Dynamic Capabilities of Firms: an Introduction. Industrial and Corporate Change, 3(3), 537–556.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. Journal of Management, 17(1), 99–120.
- 67. Wernerfelt, B. (1984). A resource-based view of the firm. Strategic Management Journal, 5(2), 171–180.
- 68. Hart, S.L. (1995). A Natural-Resource-Based View of the Firm. The Academy of Management Review, 20(4), 986-1014.

- 69. Downie, J., & Stubbs, W. (2012). Corporate Carbon Strategies and Greenhouse Gas Emission Assessments: The Implications of Scope 3 Emission Factor Selection. Business Strategy & the Environment, 21(6), 412–422.
- 70. Hornibrook, S., May, C., & Fearne, A. (2015). Sustainable Development and the Consumer: Exploring the Role of Carbon Labelling in Retail Supply Chains. Business Strategy & the Environment, 24(4), 266–276.
- Kellner, F., & Schneiderbauer, M. (2019). Further insights into the allocation of greenhouse gas emissions to shipments in road freight transportation: The pollution routing game. European Journal of Operational Research, 278(1), 296–313.
- 72. Alexander, A., Blome, C., Schleper, M. C., & Roscoe, S. (2022). "Managing the "new normal": the future of operations and supply chain management in unprecedented times". International Journal of Operations & Production Management, 42(8), 1061–1076.
- Richey, R. G., Roath, A. S., Adams, F. G., & Wieland, A. (2022). A Responsiveness View of logistics and supply chain management. Journal of Business Logistics, 43(1), 62–91.
- 74. Moore, J. F. (1996). The death of competition: Leadership and strategy in the age of business ecosystems. Wiley.
- Stevens, G. C., & Johnson, M. (2016). Integrating the Supply Chain ... 25 years on. International Journal of Physical Distribution & Logistics Management, 46(1), 19–42.
- Foss, N. J., Schmidt, J., & Teece, D. J. (2023). Ecosystem leadership as a dynamic capability. Long Range Planning, 56(1), 102270.
- 77. Freeman, R. E. (1984). Strategic management: A stakeholder approach. Pitman series in business and public policy. Pitman.
- Seuring, S., Aman, S., Hettiarachchi, B. D., Lima, F. A. de, Schilling, L., & Sudusinghe, J. I. (2022). Reflecting on theory development in sustainable supply chain management. Cleaner Logistics and Supply Chain, 3, 100016.
- Fischer, I., & Papert, M. (2024). Analyzing and Extending Research Phenomena in Supply Chain Management to Advance Scientific Impact – An Extensive Bibliometric Analysis. 57th Hawaii International Conference on System Sciences (HICSS 57): January 3 – 6, Honolulu, HI, USA, pp. 4985-4994.
- Goertler, T., Papert, M., Fischer, I., Reich, D., & Werner, N. (2024). I Can See Clearly Now: A Bibliometric Exploration of Digital Platforms in Supply Chain Management. 57th Hawaii International Conference on System Sciences (HICSS 57): January 3 – 6, Honolulu, HI, USA, pp. 4995-5004.

- van Eck, N. J. und Waltman, L. (2020). VOSviewer Manual. Manual for VOSviewer version 1.6.15. Available at: https://www.vosviewer.com/ (last access: 31st January 2023).
- Papert, M., & Pflaum, A. (2017). Development of an Ecosystem Model for the Realization of Internet of Things (IoT) Services in Supply Chain Management. Electronic Markets, 27(2), 175–189.
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. Journal of Business Research, 133, 285–296.
- 84. Chen, I. J., & Paulraj, A. (2004). Towards a theory of supply chain management: the constructs and measurements. Journal of Operations Management, 22(2), 119–150.
- Carter, C. R., Rogers, D. S., & Choi, T. Y. (2015). Toward the Theory of the Supply Chain. Journal of Supply Chain Management, 51(2), 89–97.
- Circle Economy Foundation. (2023). MATERIAL EXTRACTION AND USE ARE CLIMBING YEAR ON YEAR. Available at: https://www. circularity-gap.world/2022 (accessed 19 March 2024).
- Hazen, B. T., Russo, I., Confente, I., & Pellathy, D. (2021). Supply chain management for circular economy: conceptual framework and research agenda. International Journal of Logistics Management, 32(2), 510–537.
- Liu, J., Feng, Y., Zhu, Q., & Sarkis, J. (2018). Green supply chain management and the circular economy. International Journal of Physical Distribution & Logistics Management, 48(8), 794–817.
- Geissdoerfer, M., Morioka, S. N., Carvalho, M. M. de, & Evans, S. (2018). Business models and supply chains for the circular economy. Journal of Cleaner Production, 190, 712–721.
- Geissdoerfer, M., Savaget, P., Bocken, N. M., & Hultink, E. J. (2017). The Circular Economy – A new sustainability paradigm? Journal of Cleaner Production, 143, 757–768.
- Mathews, J. A., & Tan, H. (2011). Progress Toward a Circular Economy in China. Journal of Industrial Ecology, 15(3), 435–457
- Russo, I., Confente, I., Scarpi, D., & Hazen, B. T. (2019). From trash to treasure: The impact of consumer perception of bio-waste products in closed-loop supply chains. Journal of Cleaner Production, 218, 966–974.
- World Economic Forum (2014). Towards the Circular Economy: Accelerating the Scale-Up across Global Supply Chains, World Economic Forum, (January), pp. 1-64.

APPENDIX

Annals of Operations Research

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

Gupta, A, Singh, R. K, & Mangla, S. K. (2022). Evaluation of logistics providers for sustainable service quality: Analytics based decision making framework. Annals of Operations Research, 315(2), 1617–1664. https://doi.org/10.1007/s10479-020-03913-0

Han, S., Mo, Y., Chen, L, Luo, Z., Foropon, C. R. H., & Belal, H. M. (2022). A multi-period closed-loop supply chain network design with circular route planning. Annals of Operations Research. Advance online publication. https://doi.org/10.1007/s10479-022-04848-4

Ishizaka, A., Khan, S. A., Kheybari, S., & Zaman, S. I. (2023). Supplier selection in closed loop pharma supply chain: A novel BWM–GAIA framework. Annals of Operations Research, 324(1-2), 13–36. https://doi. org/10.1007/s10479-022-04710-7

Kabadurmus, O., Kazançoğlu, Y., Yüksel, D., & Pala, M. Ö. (2022). A circular food supply chain network model to reduce food waste. Annals of Operations Research. Advance online publication. https://doi. org/10.1007/s10479-022-04728-x

Lopes de Sousa Jabbour, A.B., Jabbour, C., Godinho Filho, M., & Roubaud, D. (2018). Industry 4.0 and the circular economy: A proposed research agenda and original roadmap for sustainable operations. Annals of Operations Research, 270(1-2), 273–286. https://doi. org/10.1007/s10479-018-2772-8

Xu, Z, Pokharel, S., & Elomri, A. (2023). An ecofriendly closed-loop supply chain facing demand and carbon price uncertainty. Annals of Operations Research, 320(2), 1041–1067. https://doi.org/10.1007/ s10479-021-04499-x

Asia Pacific Journal of Management

Di Vaio, A., Hassan, R., D'Amore, G., & Tiscini, R. (2022). Responsible innovation and ethical corporate behavior in the Asian fashion industry: A systematic literature review and avenues ahead. Asia Pacific Journal of Management. Advance online publication. https://doi.org/10.1007/s10490-022-09844-7

17

Benchmarking

Agrawal, S, & Singh, R. K (2020). Outsourcing and reverse supply chain performance: A triple bottom line approach. Benchmarking, 28(4), 1146–1163. https://doi. org/10.1108/BIJ-09-2020-0498

Jain, S., Jain, N. K., & Metri, B. (2018). Strategic framework towards measuring a circular supply chain management. Benchmarking, 25(8), 3238–3252. https://doi.org/10.1108/BIJ-11-2017-0304

Sehnem, S., Lopes de Sousa Jabbour, A.B., Conceição, D. A., Weber, D., & Julkovski, D. J. (2021). The role of ecological modernization principles in advancing circular economy practices: Lessons from the brewery sector. Benchmarking, 28(9), 2786–2807. https://doi. org/10.1108/BIJ-07-2020-0364

Thorley, J., Garza-Reyes, J. A, & Anosike, A. (2022). Circular economy: A conceptual model to measure readiness for manufacturing SMEs. Benchmarking, 29(4), 1362–1390. https://doi.org/10.1108/BIJ-03-2021-0161

Business Strategy and the Environment

Agrawal, R., Wankhede, V. A., Kumar, A, Luthra, S, & Huisingh, D. (2022). Progress and trends in integrating Industry 4.0 within Circular Economy: A comprehensive literature review and future research propositions. Business Strategy and the Environment, 31(1), 559–579. https://doi.org/10.1002/bse.2910

Agrawal, S, Kumar, D., Singh, R. K, & Singh, R. K (2023). Analyzing coordination strategy of circular supply chain in re-commerce industry: A game theoretic approach. Business Strategy and the Environment, 32(4), 1680–1697. https://doi.org/10.1002/bse.3212

Amir, S., Salehi, N., Roci, M., Sweet, S., & Rashid, A. (2022). Towards circular economy: A guiding framework for circular supply chain implementation. Business Strategy and the Environment, Article bse.3264. Advance online publication. https://doi. org/10.1002/bse.3264

Centobelli, P, Cerchione, R, Chiaroni, D., Del Vecchio, P, & Urbinati, A. (2020). Designing business models in circular economy: A systematic literature review and research agenda. Business Strategy and the Environment, 29(4), 1734–1749. https://doi.org/10.1002/bse.2466

Chari, A., Niedenzu, D., Despeisse, M., Machado, C. G., Azevedo, J. D., Boavida-Dias, R., & Johansson, B. (2022). Dynamic capabilities for circular manufacturing supply chains—Exploring the role of Industry 4.0 and resilience. Business Strategy and the Environment, 31(5), 2500–2517. https://doi.org/10.1002/bse.3040

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

Di Maria, E., Marchi, V. de, & Galeazzo, A. (2022). Industry 4.0 technologies and circular economy: The mediating role of supply chain integration. Business Strategy and the Environment, 31(2), 619–632. https:// doi.org/10.1002/bse.2940

Dwivedi, A., & Paul, S. K. (2022). A framework for digital supply chains in the era of circular economy: Implications on environmental sustainability. Business Strategy and the Environment, 31(4), 1249–1274. https:// doi.org/10.1002/bse.2953

Ersoy, P., Börühan, G., Kumar Mangla, S., Hormazabal, J. H., Kazancoglu, Y, & Lafcı, Ç. (2022). Impact of information technology and knowledge sharing on circular food supply chains for green business growth. Business Strategy and the Environment, 31(5), 1875–1904. https://doi.org/10.1002/bse.2988

Ethirajan, M., Arasu M, T., Kandasamy, J., K.E.K, V., Nadeem, S. P., & Kumar, A (2021). Analysing the risks of adopting circular economy initiatives in manufacturing supply chains. Business Strategy and the Environment, 30(1), 204–236. https://doi.org/10.1002/bse.2617

Ferasso, M., Beliaeva, T., Kraus, S., Clauss, T., & Ribeiro-Soriano, D. (2020). Circular economy business models: The state of research and avenues ahead. Business Strategy and the Environment, 29(8), 3006–3024. https://doi.org/10.1002/bse.2554

Frei, R., Jack, L., & Krzyzaniak, S.A. (2020). Sustainable reverse supply chains and circular economy in multichannel retail returns. Business Strategy and the Environment, 29(5), 1925–1940. https://doi. org/10.1002/bse.2479

Gandolfo, A., & Lupi, L. (2021). Circular economy, the transition of an incumbent focal firm: How to successfully reconcile environmental and economic sustainability? Business Strategy and the Environment, 30(7), 3297–3308. https://doi.org/10.1002/bse.2803

Gong, Y, Xie, S., Arunachalam, D., Duan, J., & Luo, J. (2022). Blockchain-based recycling and its impact on recycling performance: A network theory perspective. Business Strategy and the Environment, 31(8), 3717– 3741. https://doi.org/10.1002/bse.3028

Govindan, K (2022). Tunneling the barriers of blockchain technology in remanufacturing for achieving sustainable development goals: A circular manufacturing perspective. Business Strategy and the Environment, 31(8), 3769–3785. https://doi.org/10.1002/bse.3031

Haleem, A., Khan, S., Luthra, S., Varshney, H., Alam, M., & Khan, M. I. (2021). Supplier evaluation in the context of circular economy: A forward step for resilient business and environment concern. Business Strategy and the Environment, 30(4), 2119–2146. https://doi.org/10.1002/bse.2736

Kayikci, Y, Kazancoglu, Y, Gozacan-Chase, N., & Lafci, C. (2022). Analyzing the drivers of smart sustainable circular supply chain for sustainable development goals through stakeholder theory. Business Strategy and the Environment. Advance online publication. https://doi.org/10.1002/bse.3087

Kayikci, Y, Gozacan-Chase, N., Rejeb, A., & Mathiyazhagan, K. (2022). Critical success factors for implementing blockchain-based circular supply chain. Business Strategy and the Environment, 31(7), 3595–3615. https://doi.org/10.1002/bse.3110

Kazancoglu, I., Sagnak, M., Kumar Mangla, S., & Kazancoglu, Y (2021). Circular economy and the policy: A framework for improving the corporate environmental management in supply chains. Business Strategy and the Environment, 30(1), 590–608. https://doi.org/10.1002/bse.2641

Kazancoglu, Y, Ekinci, E., Mangla, S. K., Sezer, M. D, & Kayikci, Y (2021). Performance evaluation of reverse logistics in food supply chains in a circular economy using system dynamics. Business Strategy and the Environment, 30(1), 71–91. https://doi.org/10.1002/bse.2610

Khan, S, Razzaq, A., Yu, Z., & Miller, S. (2021). Industry 4.0 and circular economy practices: A new era business strategies for environmental sustainability. Business Strategy and the Environment, 30(8), 4001– 4014. https://doi.org/10.1002/bse.2853

Ki, C.W., Park, S., & Ha-Brookshire, J. E. (2021). Toward a circular economy: Understanding consumers' moral stance on corporations' and individuals' responsibilities in creating a circular fashion economy. Business Strategy and the Environment, 30(2), 1121– 1135. https://doi.org/10.1002/bse.2675 Kiefer, C. P., González, P., & Carrillo-hermosilla, J. (2019). Drivers and barriers of eco-innovation types for sustainable transitions: A quantitative perspective. Business Strategy and the Environment, 28(1), 155–172. https://doi.org/10.1002/bse.2246

Köhler, J., Sönnichsen, S. D., & Beske-Jansen, P. (2022). Towards a collaboration framework for circular economy: The role of dynamic capabilities and open innovation. Business Strategy and the Environment, 31(6), 2700–2713. https://doi.org/10.1002/bse.3000

Kumar, M., Raut, R. D., Jagtap, S., & Choubey, V. K. (2023). Circular economy adoption challenges in the food supply chain for sustainable development. Business Strategy and the Environment, 32(4), 1334–1356. https://doi.org/10.1002/bse.3191

Moktadir, M. A., Kumar, A., Ali, S. M., Paul, S. K., Sultana, R., & Rezaei, J. (2020). Critical success factors for a circular economy: Implications for business strategy and the environment. Business Strategy and the Environment, 29(8), 3611–3635. https://doi. org/10.1002/bse.2600

Nayal, K, Kumar, S., Raut, R. D, Queiroz, M. M., Priyadarshinee, P., & Narkhede, B. E (2022). Supply chain firm performance in circular economy and digital era to achieve sustainable development goals. Business Strategy and the Environment, 31(3), 1058–1073. https:// doi.org/10.1002/bse.2935

Okorie, O., Charnley, F., Russell, J., Tiwari, A., & Moreno, M. (2021). Circular business models in high value manufacturing: Five industry cases to bridge theory and practice. Business Strategy and the Environment, 30(4), 1780–1802. https://doi.org/10.1002/bse.2715

Perey, R., Benn, S., Agarwal, R., & Edwards, M. (2018). The place of waste: Changing business value for the circular economy. Business Strategy and the Environment, 27(5), 631–642. https://doi.org/10.1002/bse.2068

Poponi, S., Arcese, G., Ruggieri, A., & Pacchera, F. (2022). Value optimisation for the agrifood sector: A circular economy approach. Business Strategy and the Environment, Article bse.3274. Advance online publication. https://doi.org/10.1002/bse.3274

Reike, D., Hekkert, M. P., & Negro, S. O. (2023). Understanding circular economy transitions: The case of circular textiles. Business Strategy and the Environment, 32(3), 1032–1058. https://doi.org/10.1002/ bse.3114 Rovanto, I. K., & Bask, A. (2021). Systemic circular business model application at the company, supply chain and society levels—A view into circular economy native and adopter companies. Business Strategy and the Environment, 30(2), 1153–1173. https://doi. org/10.1002/bse.2677

Rusch, M., Schöggl, J.P., & Baumgartner, R. J. (2023). Application of digital technologies for sustainable product management in a circular economy: A review. Business Strategy and the Environment, 32(3), 1159– 1174. https://doi.org/10.1002/bse.3099

Sadraei, R., Biancone, P., Lanzalonga, F., Jafari-Sadeghi, V., & Chmet, F. (2023). How to increase sustainable production in the food sector? Mapping industrial and business strategies and providing future research agenda. Business Strategy and the Environment, 32(4), 2209–2228. https://doi.org/10.1002/bse.3244

Sawe, F. B., Kumar, A, Garza-Reyes, J. A, & Agrawal, R. (2021). Assessing people-driven factors for circular economy practices in small and medium-sized enterprise supply chains: Business strategies and environmental perspectives. Business Strategy and the Environment, 30(7), 2951–2965. https://doi.org/10.1002/bse.2781

Sehnem, S., Provensi, T., Da Silva, T., & Pereira, S. (2022). Disruptive innovation and circularity in startups: A path to sustainable development. Business Strategy and the Environment, 31(4), 1292–1307. https:// doi.org/10.1002/bse.2955

Shashi, Centobelli, P., Cerchione, R., & Mittal, A. (2021). Managing sustainability in luxury industry to pursue circular economy strategies. Business Strategy and the Environment, 30(1), 432–462. https://doi. org/10.1002/bse.2630

Sonar, H., Mukherjee, A., Gunasekaran, A., & Singh, R. K (2022). Sustainable supply chain management of automotive sector in context to the circular economy: A strategic framework. Business Strategy and the Environment, 31(7), 3635–3648. https://doi.org/10.1002/ bse.3112

Tseng, M.L, Ha, H. M., Tran, T., Bui, T.D., Chen, C.C., & Lin, C.W. (2022). Building a data-driven circular supply chain hierarchical structure: Resource recovery implementation drives circular business strategy. Business Strategy and the Environment, 31(5), 2082–2106. https://doi.org/10.1002/bse.3009

Vermeulen, W. (2015). Self-governance for sustainable global supply chains: Can it deliver the impacts needed? Business Strategy and the Environment, 24(2), 73–85. https://doi.org/10.1002/bse.1804 Yu, Z., Khan, S., & Umar, M. (2022). Circular economy practices and industry 4.0 technologies: A strategic move of automobile industry. Business Strategy and the Environment, 31(3), 796–809. https://doi.org/10.1002/ bse.2918

Zarbakhshnia, N., Govindan, K., Kannan, D., & Goh, M. (2023). Outsourcing logistics operations in circular economy towards to sustainable development goals. Business Strategy and the Environment, 32(1), 134–162. https://doi.org/10.1002/bse.3122

Computers and Industrial Engineering

Amoozad Mahdiraji, H., Yaftiyan, F., Abbasi-Kamardi, A., & Garza-Reyes, J. A. (2022). Investigating potential interventions on disruptive impacts of Industry 4.0 technologies in circular supply chains: Evidence from SMEs of an emerging economy. Computers and Industrial Engineering, 174. https://doi.org/10.1016/j. cie.2022.108753

Atabaki, M. S., Mohammadi, M., & Naderi, B. (2020). New robust optimization models for closed-loop supply chain of durable products: Towards a circular economy. Computers and Industrial Engineering, 146. https://doi. org/10.1016/j.cie.2020.106520

Das, D., Verma, P., & Tanksale, A. N. (2022). Designing a closed-loop supply chain for reusable packaging materials: A risk-averse two-stage stochastic programming model using CVaR. Computers and Industrial Engineering, 167, 108004. https://doi. org/10.1016/j.cie.2022.108004

Erol, I., Murat Ar, I., Peker, I., & Searcy, C. (2022). Alleviating the Impact of the Barriers to Circular Economy Adoption Through Blockchain: An Investigation Using an Integrated MCDM-based QFD With Hesitant Fuzzy Linguistic Term Sets. Computers and Industrial Engineering, 165, 107962. https://doi. org/10.1016/j.cie.2022.107962

Prajapati, D., Jauhar, S. K., Gunasekaran, A., Kamble, S. S., & Pratap, S. (2022). Blockchain and IoT embedded sustainable virtual closed-loop supply chain in E-commerce towards the circular economy. Computers and Industrial Engineering, 172, 108530. https://doi.org/10.1016/j.cie.2022.108530

Taddei, E., Sassanelli, C., Rosa, P., & Terzi, S. (2022). Circular supply chains in the era of industry 4.0: A systematic literature review. Computers and Industrial Engineering, 170, 108268. https://doi.org/10.1016/j. cie.2022.108268

Decision Support Systems

van Capelleveen, G., van Wieren, J., Amrit, C., Yazan, D. M., & Zijm, H. (2021). Exploring recommendations for circular supply chain management through interactive visualisation. Decision Support Systems, 140, 113431. https://doi.org/10.1016/j.dss.2020.113431

Ecological Economics

Jensen, F., & Whitfield, L. (2022). Leveraging participation in apparel global supply chains through green industrialization strategies: Implications for low-income countries. Ecological Economics, 194, 107331. https://doi.org/10.1016/j.ecolecon.2021.107331

Lahcen, B., Eyckmans, J., Rousseau, S., Dams, Y., & Brusselaers, J. (2022). Modelling the circular economy: Introducing a supply chain equilibrium approach. Ecological Economics, 197, 107451. https://doi.org/10.1016/j.ecolecon.2022.107451

Lessard, J.M., Habert, G., Tagnit-Hamou, A., & Amor, B. (2021). A time-series material-product chain model extended to a multiregional industrial symbiosis: The case of material circularity in the cement sector. Ecological Economics, 179, 106872. https://doi. org/10.1016/j.ecolecon.2020.106872

Energy Economics

Allevi, E., Gnudi, A., Konnov, I. V., & Oggioni, G. (2021). Municipal solid waste management in circular economy: A sequential optimization model. Energy Economics, 100, 105383. https://doi.org/10.1016/j. eneco.2021.105383

Energy Policy

Hsieh, I.Y. L., Pan, M. S., & Green, W. H. (2020). Transition to electric vehicles in China: Implications for private motorization rate and battery market. Energy Policy, 144, 111654. https://doi.org/10.1016/j. enpol.2020.111654

European Journal of Operational Research

Ponte, B., Naim, M. M., & Syntetos, A. A. (2019). The value of regulating returns for enhancing the dynamic behaviour of hybrid manufacturing-remanufacturing systems. European Journal of Operational Research, 278(2), 629–645. https://doi.org/10.1016/j. ejor.2019.04.019

Tsiliyannis, C. A. (2018). Markov chain modeling and forecasting of product returns in remanufacturing based on stock mean-age. European Journal of Operational Research, 271(2), 474–489. https://doi.org/10.1016/j. ejor.2018.05.026

European Management Review

Aray, Y., Veselova, A., Knatko, D., & Levchenko, A. (2022). Integrating closed-loop principles in supply chains in emerging markets: The case of the Russian waste management industry. European Management Review, Article emre.12536. Advance online publication. https://doi.org/10.1111/emre.12536

European Planning Studies

Hjaltadóttir, R. E., & Hild, P. (2021). Circular Economy in the building industry European policy and local practices. European Planning Studies, 29(12), 2226– 2251. https://doi.org/10.1080/09654313.2021.1904838

Expert Systems with Applications

Mamaghani, E. J., & Davari, S. (2020). The bi-objective periodic closed loop network design problem. Expert Systems with Applications, 144, 113068. https://doi. org/10.1016/j.eswa.2019.113068

IEEE Transactions on Engineering Management

Asante, M., Epiphaniou, G., Maple, C., Al-Khateeb, H., Bottarelli, M., & Ghafoor, K. Z. (2023). Distributed Ledger Technologies in Supply Chain Security Management: A Comprehensive Survey. IEEE Transactions on Engineering Management, 70(2), 713–739. https://doi.org/10.1109/TEM.2021.3053655

Del Vecchio, P., URBINATI, A., & Kirchherr, J. (2022). Enablers of Managerial Practices for Circular Business Model Design: An Empirical Investigation of an Agro-Energy Company in a Rural Area. IEEE Transactions on Engineering Management, 1–15. https://doi. org/10.1109/TEM.2021.3138327

Ecer, F., & Torkayesh, A. (2022). A Stratified Fuzzy Decision-Making Approach for Sustainable Circular Supplier Selection. IEEE Transactions on Engineering Management, 1–15. https://doi.org/10.1109/TEM.2022.3151491

Tripathy, A., Bhuyan, A., Padhy, R., & Corazza, L. (2022). Technological, Organizational, and Environmental Factors Affecting the Adoption of Electric Vehicle Battery Recycling. IEEE Transactions on Engineering Management, 1–14. https://doi.org/10.1109/TEM.2022.3164288

Industrial Management and Data Systems

Li, Y., Hu, Y., Li, L., Zheng, J., Yin, Y., & Fu, S. (2023). Drivers and outcomes of circular economy implementation: Evidence from China. Industrial Management and Data Systems, 123(4), 1178–1197. https://doi.org/10.1108/IMDS-05-2022-0267

21

Nandi, S., Sarkis, J., Hervani, A., & Helms, M. (2021). Do blockchain and circular economy practices improve post COVID-19 supply chains? A resource-based and resource dependence perspective. Industrial Management and Data Systems, 121(2), 333–363. https://doi.org/10.1108/IMDS-09-2020-0560

Tseng, M.L., Tran, T., Wu, K.J., Xue, B., & Chen, X. (2021). Causality seafood processing circular supply chain capabilities in qualitative data analytics. Industrial Management and Data Systems, 121(12), 2760–2784. https://doi.org/10.1108/IMDS-06-2021-0357

Industrial Marketing Management

Aarikka-Stenroos, L., Chiaroni, D., Kaipainen, J., & Urbinati, A. (2022). Companies' circular business models enabled by supply chain collaborations: An empirical-based framework, synthesis, and research agenda. Industrial Marketing Management, 105, 322– 339. https://doi.org/10.1016/j.indmarman.2022.06.015

Anastasiadis, F., Manikas, I., Apostolidou, I., & Wahbeh, S. (2022). The role of traceability in endto-end circular agri-food supply chains. Industrial Marketing Management, 104, 196–211. https://doi. org/10.1016/j.indmarman.2022.04.021

Chen, X., Chen, L., Jiang, M., & Yan, J. (2021). Does R&D intensity promote the adoption of circular supply chain management? Evidence from China. Industrial Marketing Management, 99, 153–166. https://doi.org/10.1016/j.indmarman.2021.10.015

Dora, M., Biswas, S., Choudhary, S., Nayak, R., & Irani, Z. (2021). A system-wide interdisciplinary conceptual framework for food loss and waste mitigation strategies in the supply chain. Industrial Marketing Management, 93, 492–508. https://doi.org/10.1016/j.indmarman.2020.10.013

Gong, Y., Wang, Y., Frei, R., Wang, B., & Zhao, C. (2022). Blockchain application in circular marine plastic debris management. Industrial Marketing Management, 102, 164–176. https://doi.org/10.1016/j. indmarman.2022.01.010

Huang, L., Zhen, L., Wang, J., & Zhang, X. (2022). Blockchain implementation for circular supply chain management: Evaluating critical success factors. Industrial Marketing Management, 102, 451–464. https://doi.org/10.1016/j.indmarman.2022.02.009

Liu, Z., Wan, M.D., Zheng, X.X., & Koh, S. (2022). Fairness concerns and extended producer responsibility transmission in a circular supply chain. Industrial Marketing Management, 102, 216–228. https://doi. org/10.1016/j.indmarman.2022.01.014 Paul, T., Islam, N., Mondal, S., & Rakshit, S. (2022). Rfid-integrated blockchain-driven circular supply chain management: A system architecture for B2B tea industry. Industrial Marketing Management, 101, 238– 257. https://doi.org/10.1016/j.indmarman.2021.12.003

Xiong, Y., Lu, H., Li, G.D., Xia, S.M., Wang, Z.X., & Xu, Y.F. (2022). Game changer or threat: The impact of 3D printing on the logistics supplier circular supply chain. Industrial Marketing Management, 106, 461–475. https://doi.org/10.1016/j.indmarman.2022.03.002

Yan, X., Liu, W., Lim, M. K., Lin, Y., & Wei, W. (2022). Exploring the factors to promote circular supply chain implementation in the smart logistics ecological chain. Industrial Marketing Management, 101, 57–70. https:// doi.org/10.1016/j.indmarman.2021.11.015

Information and Management

Centobelli, P., Cerchione, R., Vecchio, P. D., Oropallo, E., & Secundo, G. (2022). Blockchain technology for bridging trust, traceability and transparency in circular supply chain. Information and Management, 59(7). https://doi.org/10.1016/j.im.2021.103508

International Journal of Entrepreneurial Behaviour and Research

Del Vecchio, P, Secundo, G., Mele, G., & Passiante, G. (2021). Sustainable entrepreneurship education for circular economy: Emerging perspectives in Europe. International Journal of Entrepreneurial Behaviour and Research, 27(8), 2096–2124. https://doi.org/10.1108/ IJEBR-03-2021-0210

International Journal of Information Management

Rajput, S., & Singh, S. P. (2019). Connecting circular economy and industry 4.0. International Journal of Information Management, 49, 98–113. https://doi.org/10.1016/j.ijinfomgt.2019.03.002

International Journal of Innovation Management

KAIPAINEN, J., URBINATI, A., CHIARONI, D., & AARIKKA-STENROOS, L. (2022). How COMPANIES INNOVATE BUSINESS MODELS AND SUPPLY CHAINS FOR A CIRCULAR ECONOMY: A MULTIPLE-CASE STUDY AND FRAMEWORK. International Journal of Innovation Management, 26(09), Article 2240024. https://doi.org/10.1142/S1363919622400242

International Journal of Logistics Management

Del Giudice, M., Chierici, R., Mazzucchelli, A., & Fiano, F. (2020). Supply chain management in the era of circular economy: The moderating effect of big data. International Journal of Logistics Management, 32(2), 337–356. https://doi.org/10.1108/IJLM-03-2020-0119

Hazen, B. T., Russo, I., Confente, I., & Pellathy, D. (2020). Supply chain management for circular economy: Conceptual framework and research agenda. International Journal of Logistics Management, 32(2), 510–537. https://doi.org/10.1108/IJLM-12-2019-0332

Kalverkamp, M. (2018). Hidden potentials in openloop supply chains for remanufacturing. International Journal of Logistics Management, 29(4), 1125–1146. https://doi.org/10.1108/IJLM-10-2017-0278

Khan, S., & Ponce, P. (2022). Investigating the effects of the outbreak of COVID-19 on perishable food supply chains: An empirical study using PLS-SEM. International Journal of Logistics Management, 33(3), 773–795. https://doi.org/10.1108/IJLM-12-2020-0496

Kouhizadeh, M., Zhu, Q, & Sarkis, J (2023). Circular economy performance measurements and blockchain technology: An examination of relationships. International Journal of Logistics Management, 34(3), 720–743. https://doi.org/10.1108/IJLM-04-2022-0145

Lehner, R., & Elbert, R. (2023). Cross-actor pallet exchange platform for collaboration in circular supply chains. International Journal of Logistics Management, 34(3), 772–799. https://doi.org/10.1108/IJLM-03-2022-0139

Luo, N., Olsen, T., Ganguly, S., & Liu, Y (2023). Food supply chain waste reduction for a circular economy in the COVID-19 pandemic: A longitudinal study of New Zealand consumers. International Journal of Logistics Management, 34(3), 800–817. https://doi.org/10.1108/ IJLM-03-2022-0100

Patil, A., Madaan, J., Shardeo, V., Charan, P., & Dwivedi, A. (2022). Material convergence issue in the pharmaceutical supply chain during a disease outbreak. International Journal of Logistics Management, 33(3), 955–996. https://doi.org/10.1108/IJLM-11-2020-0425

Ritola, I., Krikke, H., & Caniëls, M. (2021). Learningbased dynamic capabilities in closed-loop supply chains: An expert study. International Journal of Logistics Management, 33(5), 69–84. https://doi. org/10.1108/IJLM-01-2021-0044 Sundgren, C. (2020). Supply chain structures for distributing surplus food. International Journal of Logistics Management, 31(4), 865–883. https://doi. org/10.1108/IJLM-10-2019-0267

International Journal of Logistics Research and Applications

Cao, Y., Qu, Y., & Guo, L. (2022). Identifying critical eco-innovation practices in circular supply chain management: Evidence from the textile and clothing industry. International Journal of Logistics Research and Applications, 1–22. https://doi.org/10.1080/13675 567.2022.2076817

Cesur, E., Cesur, M. R., Kayikci, Y., & Mangla, S. K. (2022). Optimal number of remanufacturing in a circular economy platform. International Journal of Logistics Research and Applications, 25(4-5), 454–470. https://doi.org/10.1080/13675567.2020.1825656

Choudhary, D., & Kumar, R. (2021). Risk investigation in circular economy: A hierarchical decision model approach. International Journal of Logistics Research and Applications, 1–26. https://doi.org/10.1080/136755 67.2021.2014430

Cui, L., Wu, H., Lang, X., & Li, Y. (2021). Exploring circular supply chain practices from a dual perspective: Using a hybrid method under uncertainty. International Journal of Logistics Research and Applications, 1–24. https://doi.org/10.1080/13675567.2021.1983527

Dossa, A. A., Gough, A., Batista, L., & Mortimer, K. (2022). Diffusion of circular economy practices in the UK wheat food supply chain. International Journal of Logistics Research and Applications, 25(3), 328–347. https://doi.org/10.1080/13675567.2020.1837759

Fernando, Y., Tseng, M.L., Nur, G. M., Ikhsan, R. B., & Lim, M. K. (2022). Practising circular economy performance in Malaysia: Managing supply chain disruption and technological innovation capability under industry 4.0. International Journal of Logistics Research and Applications, 1–24. https://doi.org/10.10 80/13675567.2022.2107188

Gupta, A., & Singh, R. K. (2021). Applications of emerging technologies in logistics sector for achieving circular economy goals during COVID 19 pandemic: Analysis of critical success factors. International Journal of Logistics Research and Applications, 1–22. https://doi.org/10.1080/13675567.2021.1985095 Kazancoglu, I., Kazancoglu, Y., Kahraman, A., Yarimoglu, E., & Soni, G. (2022). Investigating barriers to circular supply chain in the textile industry from Stakeholders' perspective. International Journal of Logistics Research and Applications, 25(4-5), 521–548. https://doi.org/10.1080/13675567.2020.1846694

Li, J., Lai, K. K., & Li, Y. (2022). Remanufacturing and low-carbon investment strategies in a closedloop supply chain under multiple carbon policies. International Journal of Logistics Research and Applications, 1–23. https://doi.org/10.1080/13675567. 2022.2056156

Nandi, S., Hervani, A. A., Helms, M. M., & Sarkis, J. (2023). Conceptualising Circular economy performance with non-traditional valuation methods: Lessons for a post-Pandemic recovery. International Journal of Logistics Research and Applications, 26(6), 662–682. https://doi.org/10.1080/13675567.2021.1974365

Rajput, S., & Singh, S. P. (2022). Industry 4.0 model for integrated circular economy-reverse logistics network. International Journal of Logistics Research and Applications, 25(4-5), 837–877. https://doi.org/10 .1080/13675567.2021.1926950

Rehman Khan, S. A., Yu, Z., Sarwat, S., Godil, D. I., Amin, S., & Shujaat, S. (2022). The role of block chain technology in circular economy practices to improve organisational performance. International Journal of Logistics Research and Applications, 25(4-5), 605–622. https://doi.org/10.1080/13675567.2021.1872512

Tseng, M.L., Ha, H. M., Wu, K.J., & Xue, B. (2022). Healthcare industry circular supply chain collaboration in Vietnam: Vision and learning influences on connection in a circular supply chain and circularity business model. International Journal of Logistics Research and Applications, 25(4-5), 743–768. https:// doi.org/10.1080/13675567.2021.1923671

Tseng, M.L., Tran, T. P. T., Fujii, M., Lim, M. K., & Negash, Y. T. (2021). Modelling hierarchical circular supply chain management enablers in the seafood processing industry in Vietnam under uncertainties. International Journal of Logistics Research and Applications, 1–29. https://doi.org/10.1080/13675567.2 021.1965105

Wu, K.J., Theja, H., Vincent, I., Poerwanto, C., Rosario, E., Ferreira, R. D., & Tatiyathavornkul, S. (2021). Structuring an influential model for Indonesian pulp and paper circular supply chain practices. International Journal of Logistics Research and Applications, 1–24. https://doi.org/10.1080/13675567.2021.1959903

International Journal of Operations and Production Management

Giovanni, P. de (2022). Leveraging the circular economy with a closed-loop supply chain and a reverse omnichannel using blockchain technology and incentives. International Journal of Operations and Production Management, 42(7), 959–994. https://doi. org/10.1108/IJOPM-07-2021-0445

Koh, S., Gunasekaran, A., Morris, J., Obayi, R., & Ebrahimi, S. M. (2017). Conceptualizing a circular framework of supply chain resource sustainability. International Journal of Operations and Production Management, 37(10), 1520–1540. https://doi.org/10.1108/IJOPM-02-2016-0078

Marques, L., & Manzanares, M. D. (2023). Towards social network metrics for supply network circularity. International Journal of Operations and Production Management, 43(4), 595–618. https://doi.org/10.1108/ IJOPM-02-2022-0139

International Journal of Physical Distribution and Logistics Management

Agyabeng-Mensah, Y., Afum, E., Baah, C., & Essel, D. (2022). Exploring the role of external pressure, environmental sustainability commitment, engagement, alliance and circular supply chain capability in circular economy performance. International Journal of Physical Distribution and Logistics Management, 52(5-6), 431–455. https://doi.org/10.1108/IJPDLM-12-2021-0514

Gatenholm, G., Halldórsson, Á., & Bäckstrand, J. (2021). Enhanced circularity in aftermarkets: Logistics tradeoffs. International Journal of Physical Distribution and Logistics Management, 51(9), 999–1021. https://doi.org/10.1108/IJPDLM-11-2020-0367

International Journal of Production Economics

Abdul-Hamid, A.Q., Ali, M. H., Osman, L. H., Tseng, M.L., & Lim, M. K. (2022). Industry 4.0 quasi-effect between circular economy and sustainability: Palm oil industry. International Journal of Production Economics, 253, 108616. https://doi.org/10.1016/j. ijpe.2022.108616

Belhadi, A., Kamble, S. S., Chiappetta Jabbour, C. J., Mani, V., Khan, S. A. R., & Touriki, F. E. (2022). A self-assessment tool for evaluating the integration of circular economy and industry 4.0 principles in closedloop supply chains. International Journal of Production Economics, 245, 108372. https://doi.org/10.1016/j. ijpe.2021.108372 Braz, A. C., & Marotti de Mello, A. (2022). Circular economy supply network management: A complex adaptive system. International Journal of Production Economics, 243. https://doi.org/10.1016/j. ijpe.2021.108317

Bressanelli, G., Visintin, F., & Saccani, N. (2022). Circular Economy and the evolution of industrial districts: A supply chain perspective. International Journal of Production Economics, 243, 108348. https:// doi.org/10.1016/j.ijpe.2021.108348

Bruno, G., Diglio, A., Passaro, R., Piccolo, C., & Quinto, I. (2021). Measuring spatial access to the recovery networks for WEEE: An in-depth analysis of the Italian case. International Journal of Production Economics, 240, 108210. https://doi.org/10.1016/j. ijpe.2021.108210

Centobelli, P., Cerchione, R., Esposito, E., Passaro, R., & Shashi (2021). Determinants of the transition towards circular economy in SMEs: A sustainable supply chain management perspective. International Journal of Production Economics, 242, 108297. https://doi.org/10.1016/j.ijpe.2021.108297

Dey, P. K., Malesios, C., Chowdhury, S., Saha, K., Budhwar, P., & De, D. (2022). Adoption of circular economy practices in small and medium-sized enterprises: Evidence from Europe. International Journal of Production Economics, 248, 108496. https:// doi.org/10.1016/j.ijpe.2022.108496

Do, Q., Mishra, N., Colicchia, C., Creazza, A., & Ramudhin, A. (2022). An extended institutional theory perspective on the adoption of circular economy practices: Insights from the seafood industry. International Journal of Production Economics, 247, 108400. https://doi.org/10.1016/j.ijpe.2021.108400

Hettiarachchi, B. D., Brandenburg, M., & Seuring, S. (2022). Connecting additive manufacturing to circular economy implementation strategies: Links, contingencies and causal loops. International Journal of Production Economics, 246, 108414. https://doi. org/10.1016/j.ijpe.2022.108414

Li, G., Wu, H., Sethi, S. P., & Zhang, X. (2021). Contracting green product supply chains considering marketing efforts in the circular economy era. International Journal of Production Economics, 234, 108041. https://doi.org/10.1016/j.ijpe.2021.108041

Lopes de Sousa Jabbour, A. B., Chiappetta Jabbour, C. J., Choi, T.M., & Latan, H. (2022). 'Better together': Evidence on the joint adoption of circular economy and industry 4.0 technologies. International Journal of Production Economics, 252, 108581. https://doi. org/10.1016/j.ijpe.2022.108581

Nasir, M., Genovese, A., Acquaye, A. A., Koh, S., & Yamoah, F. (2017). Comparing linear and circular supply chains: A case study from the construction industry. International Journal of Production Economics, 183, 443–457. https://doi.org/10.1016/j. ijpe.2016.06.008

Paraskevopoulou, C., Vlachos, D., Bechtsis, D., & Tsolakis, N. (2022). An assessment of circular economy interventions in the peach canning industry. International Journal of Production Economics, 249, 108533. https://doi.org/10.1016/j.ijpe.2022.108533

Ponte, B., Framinan, J. M., Cannella, S., & Dominguez, R. (2020). Quantifying the Bullwhip Effect in closedloop supply chains: The interplay of information transparencies, return rates, and lead times. International Journal of Production Economics, 230, 107798. https://doi.org/10.1016/j.ijpe.2020.107798

Prajapati, D., Pratap, S., Zhang, M., Lakshay, & Huang, G. Q. (2022). Sustainable forward-reverse logistics for multi-product delivery and pickup in B2C E-commerce towards the circular economy. International Journal of Production Economics, 253. https://doi.org/10.1016/j. ijpe.2022.108606

Rodríguez-Espíndola, O., Cuevas-Romo, A., Chowdhury, S., Díaz-Acevedo, N., Albores, P., Despoudi, S., Malesios, C., & Dey, P. (2022). The role of circular economy principles and sustainableoriented innovation to enhance social, economic and environmental performance: Evidence from Mexican SMEs. International Journal of Production Economics, 248, 108495. https://doi.org/10.1016/j.ijpe.2022.108495

Sudusinghe, J. I., & Seuring, S. (2022). Supply chain collaboration and sustainability performance in circular economy: A systematic literature review. International Journal of Production Economics, 245, 108402. https://doi.org/10.1016/j.ijpe.2021.108402

Tanksale, A. N., Das, D., Verma, P., & Tiwari, M. K. (2021). Unpacking the role of primary packaging material in designing green supply chains: An integrated approach. International Journal of Production Economics, 236, 108133. https://doi.org/10.1016/j.ijpe.2021.108133

Wang, J. X., Burke, H., & Zhang, A. (2022). Overcoming barriers to circular product design. International Journal of Production Economics, 243, 108346. https://doi.org/10.1016/j.ijpe.2021.108346

Wang, Y., & Hazen, B. T. (2016). Consumer product knowledge and intention to purchase remanufactured products. International Journal of Production Economics, 181, 460–469. https://doi.org/10.1016/j. ijpe.2015.08.031

Yamoah, F. A., Sivarajah, U., Mahroof, K., & Peña, I. G. (2022). Demystifying corporate inertia towards transition to circular economy: A management frame of reference. International Journal of Production Economics, 244, 108388. https://doi.org/10.1016/j. ijpe.2021.108388

Zerbino, P., Stefanini, A., Aloini, D., Dulmin, R., & Mininno, V. (2021). Curling linearity into circularity: The benefits of formal scavenging in closedloop settings. International Journal of Production Economics, 240, 108246. https://doi.org/10.1016/j. ijpe.2021.108246

Zikopoulos, C. (2022). On the effect of upgradable products design on circular economy. International Journal of Production Economics, 254, 108629. https://doi.org/10.1016/j.ijpe.2022.108629

International Journal of Production Research

Abuabara, L., Paucar-Caceres, A., & Burrowes-Cromwell, T. (2019). Consumers' values and behaviour in the Brazilian coffee-in-capsules market: Promoting circular economy. International Journal of Production Research, 57(23), 7269–7288. https://doi.org/10.1080/0 0207543.2019.1629664

Aldrighetti, R., Battini, D., Das, A., & Simonetto, M. (2023). The performance impact of Industry 4.0 technologies on closed-loop supply chains: Insights from an Italy based survey. International Journal of Production Research, 61(9), 3004–3029. https://doi.org /10.1080/00207543.2022.2075291

Bai, C., Sarkis, J., Yin, F., & Dou, Y. (2020). Sustainable supply chain flexibility and its relationship to circular economy-target performance. International Journal of Production Research, 58(19), 5893–5910. https://doi.or g/10.1080/00207543.2019.1661532

Bai, C., Zhu, Q., & Sarkis, J (2022). Circular economy and circularity supplier selection: A fuzzy group decision approach. International Journal of Production Research, 1–24. https://doi.org/10.1080/00207543.2022 .2037779

Batista, L., Gong, Y , Pereira, S, Jia, F., & Bittar, A. (2019). Circular supply chains in emerging economies–a comparative study of packaging recovery ecosystems in China and Brazil. International Journal of Production Research, 57(23), 7248–7268. https://doi.org/10.1080/0 0207543.2018.1558295

Bressanelli, G, Perona, M., & Saccani, N (2019). Challenges in supply chain redesign for the Circular Economy: A literature review and a multiple case study. International Journal of Production Research, 57(23), 7395–7422. https://doi.org/10.1080/00207543.2018.154 2176

Cannella, S, Ponte, B, Dominguez, R, & Framinan, J. M (2021). Proportional order-up-to policies for closed-loop supply chains: The dynamic effects of inventory controllers. International Journal of Production Research, 59(11), 3323–3337. https://doi.org/10.1080/0 0207543.2020.1867924

Edwin Cheng, T. C., Kamble, S. S., Belhadi, A., Ndubisi, N. O, Lai, K., & Kharat, M. G. (2022). Linkages between big data analytics, circular economy, sustainable supply chain flexibility, and sustainable performance in manufacturing firms. International Journal of Production Research, 60(22), 6908–6922. https://doi.org/10.1080/00207543.2021.1906971

Fang, C., Ma, X., Zhang, J., & Zhu, X. (2021). Personality information sharing in supply chain systems for innovative products in the circular economy era. International Journal of Production Research, 59(19), 5992–6001. https://doi.org/10.1080/00207543.2020.17 98032

Govindan, K , & Hasanagic, M. (2018). A systematic review on drivers, barriers, and practices towards circular economy: A supply chain perspective. International Journal of Production Research, 56(1-2), 278–311. https://doi.org/10.1080/00207543.2017.1402141

Habibi, M., Battaïa, O., Cung, V.D., Dolgui, A, & Tiwari, M. K (2019). Sample average approximation for multi-vehicle collection–disassembly problem under uncertainty. International Journal of Production Research, 57(8), 2409–2428. https://doi.org/10.1080/00 207543.2018.1519262

Howard, M., Hopkinson, P., & Miemczyk, J (2019). The regenerative supply chain: A framework for developing circular economy indicators. International Journal of Production Research, 57(23), 7300–7318. https://doi.or g/10.1080/00207543.2018.1524166

Lechner, G., & Reimann, M. (2020). Integrated decision-making in reverse logistics: An optimisation of interacting acquisition, grading and disposition processes. International Journal of Production Research, 58(19), 5786–5805. https://doi.org/10.1080/00207543.2019.1659518

Park, Y. W., Blackhurst, J., Paul, C., & Scheibe, K. P. (2022). An analysis of the ripple effect for disruptions occurring in circular flows of a supply chain network International Journal of Production Research, 60(15), 4693–4711. https://doi.org/10.1080/00207543.2021.193 4745

Ren, H., Zhou, W., Guo, Y., Huang, L., Liu, Y, Yu, Y., Hong, L., & Ma, T. (2020). A GIS-based green supply chain model for assessing the effects of carbon price uncertainty on plastic recycling. International Journal of Production Research, 58(6), 1705–1723. https://doi. org/10.1080/00207543.2019.1693656

Rentizelas, A., Trivyza, N., Oswald, S., & Siegl, S. (2022). Reverse supply network design for circular economy pathways of wind turbine blades in Europe. International Journal of Production Research, 60(6), 1795–1814. https://doi.org/10.1080/00207543.2020.187 0016

Shen, B., Cao, Y, & Xu, X. (2020). Product line design and quality differentiation for green and non-green products in a supply chain. International Journal of Production Research, 58(1), 148–164. https://doi.org/1 0.1080/00207543.2019.1656843

van Loon, P., Delagarde, C., & van Wassenhove, L. N. (2018). The role of second-hand markets in circular business: A simple model for leasing versus selling consumer products. International Journal of Production Research, 56(1-2), 960–973. https://doi.org/10.1080/00 207543.2017.1398429

van Loon, P., Delagarde, C., van Wassenhove, L. N., & Mihelič, A. (2020). Leasing or buying white goods: Comparing manufacturer profitability versus cost to consumer. International Journal of Production Research, 58(4), 1092–1106. https://doi.org/10.1080/00 207543.2019.1612962

van Loon, P., & van Wassenhove, L. N. (2018). Assessing the economic and environmental impact of remanufacturing: A decision support tool for OEM suppliers. International Journal of Production Research, 56(4), 1662–1674. https://doi.org/10.1080/00207543.201 7.1367107

van Loon, P., & van Wassenhove, L. N. (2020). Transition to the circular economy: The story of four case companies. International Journal of Production Research, 58(11), 3415–3422. https://doi.org/10.1080/0 0207543.2020.1748907 Yang, Y., Chen, L, Jia, F., & Xu, Z (2019). Complementarity of circular economy practices: An empirical analysis of Chinese manufacturers. International Journal of Production Research, 57(20), 6369–6384. https://doi.org/10.1080/00207543.2019.15 66664

Zheng, Y., Zhao, Y., & Meng, X. (2021). Market entrance and pricing strategies for a capital-constrained remanufacturing supply chain: Effects of equity and bank financing on circular economy. International Journal of Production Research, 59(21), 6601–6614. https://doi.org/10.1080/00207543.2020.1821926

International Review of Retail, Distribution and Consumer Research

Hedegård, L., Gustafsson, E., & Paras, M. K. (2020). Management of sustainable fashion retail based on reuse– A struggle with multiple logics. International Review of Retail, Distribution and Consumer Research, 30(3), 311–330. https://doi.org/10.1080/09593969.2019 .1667855

Journal of Business Ethics

Ciulli, F., Kolk, A., & Boe-Lillegraven, S. (2020). Circularity Brokers: Digital Platform Organizations and Waste Recovery in Food Supply Chains. Journal of Business Ethics, 167(2), 299–331. https://doi. org/10.1007/s10551-019-04160-5

Journal of Business Research

Bag, S, Dhamija, P., Bryde, D. J., & Singh, R. K (2022). Effect of eco-innovation on green supply chain management, circular economy capability, and performance of small and medium enterprises. Journal of Business Research, 141, 60–72. https://doi.org/10.1016/j.jbusres.2021.12.011

Else, T., Choudhary, S & Genovese, A. (2022). Uncovering sustainability storylines from dairy supply chain discourse. Journal of Business Research, 142, 858–874. https://doi.org/10.1016/j.jbusres.2021.12.023

Gautam, A., Shankar, R., & Vrat, P. (2022). Managing end-of-life solar photovoltaic e-waste in India: A circular economy approach. Journal of Business Research, 142, 287–300. https://doi.org/10.1016/j. jbusres.2021.12.034

Kayikci, Y, Kazancoglu, Y, Gozacan-Chase, N., Lafci, C., & Batista, L. (2022). Assessing smart circular supply chain readiness and maturity level of small and medium-sized enterprises. Journal of Business Research, 149, 375–392. https://doi.org/10.1016/j. jbusres.2022.05.042

27

Kühl, C., Bourlakis, M., Aktas, E., & Skipworth, H. (2022). Product-service systems and circular supply chain practices in UK SMEs: The moderating effect of internal environmental orientation. Journal of Business Research, 146, 155–165. https://doi.org/10.1016/j. jbusres.2022.03.078

Kumar Mangla, S., Börühan, G., Ersoy, P., Kazancoglu, Y, & Song, M. (2021). Impact of information hiding on circular food supply chains in business-to-business context. Journal of Business Research, 135, 1–18. https://doi.org/10.1016/j.jbusres.2021.06.013

Kusumowardani, N., Tjahjono, B., Lazell, J., Bek, D., Theodorakopoulos, N., Andrikopoulos, P., & Priadi, C. R. (2022). A circular capability framework to address food waste and losses in the agri-food supply chain: The antecedents, principles and outcomes of circular economy. Journal of Business Research, 142, 17–31. https://doi.org/10.1016/j.jbusres.2021.12.020

McDougall, N., Wagner, B., & MacBryde, J. (2022). Competitive benefits & incentivisation at internal, supply chain & societal level circular operations in UK agri-food SMEs. Journal of Business Research, 144, 1149–1162. https://doi.org/10.1016/j.jbusres.2022.02.060

Nudurupati, S. S., Budhwar, P, Pappu, R. P., Chowdhury, S, Kondala, M., Chakraborty, A., & Ghosh, S. K. (2022). Transforming sustainability of Indian small and medium-sized enterprises through circular economy adoption. Journal of Business Research, 149, 250–269. https://doi.org/10.1016/j.jbusres.2022.05.036

Wang, H., Masi, D., Dhamotharan, L., Day, S., Kumar, A, Li, T., & Singh, G. (2022). Unconventional path dependence: How adopting product take-back and recycling systems contributes to future eco-innovations. Journal of Business Research, 142, 707–717. https://doi. org/10.1016/j.jbusres.2021.12.057

Journal of Enterprise Information Management

Chen, L, Duan, D., Mishra, A. R., & Alrasheedi, M. (2022). Sustainable third-party reverse logistics provider selection to promote circular economy using new uncertain interval-valued intuitionistic fuzzy-projection model. Journal of Enterprise Information Management, 35(4-5), 955–987. https://doi.org/10.1108/JEIM-02-2021-0066

Dora, M. (2020). Collaboration in a circular economy: Learning from the farmers to reduce food waste. Journal of Enterprise Information Management, 33(4), 769–789. https://doi.org/10.1108/JEIM-02-2019-0062 Faisal, M. N. (2023). Role of Industry 4.0 in circular supply chain management: A mixed-method analysis. Journal of Enterprise Information Management, 36(1), 303–322. https://doi.org/10.1108/JEIM-07-2021-0335

Formentini, M., Secondi, L., Ruini, L., Guidi, M., & Principato, L. (2022). Enablers and barriers to circular supply chain management: A decision-support tool in soft wheat bread production. Journal of Enterprise Information Management, 35(3), 796–816. https://doi. org/10.1108/JEIM-02-2021-0069

Gharibi, K., & Abdollahzadeh, S. (2021). A mixedinteger linear programming approach for circular economy-led closed-loop supply chains in green reverse logistics network design under uncertainty. Journal of Enterprise Information Management. Advance online publication. https://doi.org/10.1108/JEIM-11-2020-0472

Hickey, P., Kamal, M. M., & Kozlovski, E. (2022). Viewpointenabling circular supply chains in a hightech manufacturing industry. Journal of Enterprise Information Management, 35(2), 321–332. https://doi. org/10.1108/JEIM-03-2022-556

Hickey, P., & Kozlovski, E. (2020). E-strategies for aftermarket facilitation in the global semiconductor manufacturing industry. Journal of Enterprise Information Management, 33(3), 457–481. https://doi. org/10.1108/JEIM-05-2019-0124

Irani, Z., & Sharif, A. M. (2018). Food security across the enterprise: A puzzle, problem or mess for a circular economy? Journal of Enterprise Information Management, 31(1), 2–9. https://doi.org/10.1108/JEIM-03-2017-0045

Jaeger, B., & Upadhyay, A. (2020). Understanding barriers to circular economy: Cases from the manufacturing industry. Journal of Enterprise Information Management, 33(4), 729–745. https://doi. org/10.1108/JEIM-02-2019-0047

Jafarzadeh Ghoushchi, S., Hushyar, I., & Sabri-Laghaie, K. (2021). Multi-objective robust optimization for multistage-multi-product agile closed-loop supply chain under uncertainty in the context of circular economy. Journal of Enterprise Information Management. Advance online publication. https://doi.org/10.1108/ JEIM-12-2020-0514

Kayikci, Y, Kazancoglu, , Lafci, C., Gozacan-Chase, N., & Mangla, S. K. (2022). Smart circular supply chains to achieving SDGs for post-pandemic preparedness. Journal of Enterprise Information Management, 35(1), 237–265. https://doi.org/10.1108/JEIM-06-2021-0271 Kayikci, Y, Ozbiltekin, M., & Kazancoglu, Y (2020). Minimizing losses at red meat supply chain with circular and central slaughterhouse model. Journal of Enterprise Information Management, 33(4), 791–816. https://doi.org/10.1108/JEIM-01-2019-0025

Kazancoglu, Y, Ozbiltekin Pala, M., Sezer, M. D Luthra, S, & Kumar, A (2021). Drivers of implementing Big Data Analytics in food supply chains for transition to a circular economy and sustainable operations management. Journal of Enterprise Information Management. Advance online publication. https://doi. org/10.1108/JEIM-12-2020-0521

Liu, C., Rani, P., & Pachori, K. (2022). Sustainable circular supplier selection and evaluation in the manufacturing sector using Pythagorean fuzzy EDAS approach. Journal of Enterprise Information Management, 35(4-5), 1040–1066. https://doi. org/10.1108/JEIM-04-2021-0187

Nayal, K, Raut, R., Lopes de Sousa Jabbour, A. B., Narkhede, B. E, & Gedam, V. V. (2021). Integrated technologies toward sustainable agriculture supply chains: Missing links. Journal of Enterprise Information Management. Advance online publication. https://doi. org/10.1108/JEIM-09-2020-0381

Shabanpour, H., Yousefi, S., & Farzipoor Saen, R. (2021). Forecasting sustainability of supply chains in the circular economy context: A dynamic network data envelopment analysis and artificial neural network approach. Journal of Enterprise Information Management. Advance online publication. https://doi.org/10.1108/JEIM-12-2020-0494

Shang, C., Saeidi, P., & Goh, C. F. (2022). Evaluation of circular supply chains barriers in the era of Industry 4.0 transition using an extended decision-making approach. Journal of Enterprise Information Management, 35(4-5), 1100–1128. https://doi.org/10.1108/JEIM-09-2021-0396

Sharma, R., Samad, T. A., Chiappetta Jabbour, C. J., & Queiroz, M. J. de (2021). Leveraging blockchain technology for circularity in agricultural supply chains: Evidence from a fast-growing economy. Journal of Enterprise Information Management. Advance online publication. https://doi.org/10.1108/JEIM-02-2021-0094

Journal of Environmental Management

Colella, M., Ripa, M., Cocozza, A., Panfilo, C., & Ulgiati, S. (2021). Challenges and opportunities for more efficient water use and circular wastewater management. The case of Campania Region, Italy. Journal of Environmental Management, 297, 113171. https://doi.org/10.1016/j.jenvman.2021.113171

Doni, F., Corvino, A., & Bianchi Martini, S. (2019). Servitization and sustainability actions. Evidence from European manufacturing companies. Journal of Environmental Management, 234, 367–378. https://doi. org/10.1016/j.jenvman.2019.01.004

Fraccascia, L., Spagnoli, M., Riccini, L., & Nastasi, A. (2021). Designing the biomethane production chain from urban wastes at the regional level: An application to the Rome Metropolitan Area. Journal of Environmental Management, 297, 113328. https://doi.org/10.1016/j.jenvman.2021.113328

Gómez-García, R., Campos, D. A., Aguilar, C. N., Madureira, A. R., & Pintado, M. (2021). Valorisation of food agro-industrial by-products: From the past to the present and perspectives. Journal of Environmental Management, 299, 113571. https://doi.org/10.1016/j. jenvman.2021.113571

Tansel, B. (2020). Increasing gaps between materials demand and materials recycling rates: A historical perspective for evolution of consumer products and waste quantities. Journal of Environmental Management, 276, 111196. https://doi.org/10.1016/j. jenvman.2020.111196

Journal of Industrial Ecology

Alhola, K., Ryding, S. O., Salmenperä, H., & Busch, N. J. (2019). Exploiting the Potential of Public Procurement: Opportunities for Circular Economy. Journal of Industrial Ecology, 23(1), 96–109. https:// doi.org/10.1111/jiec.12770

Aoki-Suzuki, C., Dente, S., Tanaka, D., Kayo, C., Murakami, S., Fujii, C., Tahara, K., & Hashimoto, S. (2021). Total environmental impacts of Japanese material production. Journal of Industrial Ecology, 25(6), 1474–1485. https://doi.org/10.1111/jiec.13152

Arbabi, H., Lanau, M., Li, X., Meyers, G., Dai, M., Mayfield, M., & Densley Tingley, D. (2022). A scalable data collection, characterization, and accounting framework for urban material stocks. Journal of Industrial Ecology, 26(1), 58–71. https://doi.org/10.1111/ jiec.13198

Cimpan, C., Bjelle, E. L., & Strømman, A. H. (2021). Plastic packaging flows in Europe: A hybrid inputoutput approach. Journal of Industrial Ecology, 25(6), 1572–1587. https://doi.org/10.1111/jiec.13175

Godoy León, M. F., Matos, C. T., Georgitzikis, K., Mathieux, F., & Dewulf, J. (2022). Material system analysis: Functional and nonfunctional cobalt in the EU, 2012–2016. Journal of Industrial Ecology, 26(4), 1277–1293. https://doi.org/10.1111/jiec.13281 Hartley, K., Roosendaal, J., & Kirchherr, J (2022). Barriers to the circular economy: The case of the Dutch technical and interior textiles industries. Journal of Industrial Ecology, 26(2), 477–490. https://doi. org/10.1111/jiec.13196

Hung, C. R., Kishimoto, P., Krey, V., Strømman, A. H., & Majeau-Bettez, G. (2022). Ecopt2: An adaptable life cycle assessment model for the environmentally constrained optimization of prospective technology transitions. Journal of Industrial Ecology, 26(5), 1616–1630. https://doi.org/10.1111/jiec.13331

Lapko, Y., Trianni, A., Nuur, C., & Masi, D. (2019). In Pursuit of Closed-Loop Supply Chains for Critical Materials: An Exploratory Study in the Green Energy Sector. Journal of Industrial Ecology, 23(1), 182–196. https://doi.org/10.1111/jiec.12741

Mendoza, J., Sharmina, M., Gallego-Schmid, A., Heyes, G., & Azapagic, A. (2017). Integrating Backcasting and Eco-Design for the Circular Economy: The BECE Framework. Journal of Industrial Ecology, 21(3), 526–544. https://doi.org/10.1111/jiec.12590

Mulrow, J. S., Derrible, S., Ashton, W. S., & Chopra, S. S. (2017). Industrial Symbiosis at the Facility Scale. Journal of Industrial Ecology, 21(3), 559–571. https://doi.org/10.1111/jiec.12592

Wieland, H., Lenzen, M., Geschke, A., Fry, J., Wiedenhofer, D., Eisenmenger, N., Schenk, J., & Giljum, S. (2022). The PIOLab: Building global physical input–output tables in a virtual laboratory. Journal of Industrial Ecology, 26(3), 683–703. https://doi.org/10.1111/jiec.13215

Journal of Manufacturing Systems

Deng, S., Kpodzro, E., Maani, T., Li, Z., Huang, A., Yih, Y., Zhao, F., & Sutherland, J. W. (2022). Planning a circular economy system for electric vehicles using network simulation. Journal of Manufacturing Systems, 63, 95–106. https://doi.org/10.1016/j.jmsy.2022.03.003

Liao, Y., Kaviyani-Charati, M., Hajiaghaei-Keshteli, M., & Diabat, A. (2020). Designing a closed-loop supply chain network for citrus fruits crates considering environmental and economic issues. Journal of Manufacturing Systems, 55, 199–220. https://doi.org/10.1016/j.jmsy.2020.02.001

Journal of Manufacturing Technology Management

Ünal, E., Urbinati, A., & Chiaroni, D. (2019). Managerial practices for designing circular economy business models: The case of an Italian SME in the office supply industry. Journal of Manufacturing Technology Management, 30(3), 561–589. https://doi. org/10.1108/JMTM-02-2018-0061

Vimal, K., Rajak, S., & Kandasamy, J. (2019). Analysis of network design for a circular production system using multi-objective mixed integer linear programming model. Journal of Manufacturing Technology Management, 30(3), 628–646. https://doi. org/10.1108/JMTM-02-2018-0058

Journal of Purchasing and Supply Management

Knight, L., Tate, W., Carnovale, S., Di Mauro, C., Bals, L., Caniato, F., Gualandris, J., Johnsen, T., Matopoulos, A., Meehan, J., Miemczyk, J., Patrucco, A. S., Schoenherr, T., Selviaridis, K., Touboulic, A., & Wagner, S. M. (2022). Future business and the role of purchasing and supply management: Opportunities for 'business-not-as-usual' PSM research. Journal of Purchasing and Supply Management, 28(1), 100753. https://doi.org/10.1016/j.pursup.2022.100753

Münch, C, Benz, L. A., & Hartmann, E (2022). Exploring the circular economy paradigm: A natural resource-based view on supplier selection criteria. Journal of Purchasing and Supply Management, 28(4), 100793. https://doi.org/10.1016/j.pursup.2022.100793

Journal of Retailing

Vadakkepatt, G. G., Winterich, K. P., Mittal, V., Zinn, W., Beitelspacher, L., Aloysius, J., Ginger, J., & Reilman, J. (2021). Sustainable Retailing. Journal of Retailing, 97(1), 62–80. https://doi.org/10.1016/j. jretai.2020.10.008

Journal of Strategic Marketing

Gaur, J., Pandey, I., & Hungund, S. (2021). Adoption of circular economy: Data-driven strategies based on empirical evidence from indian consumers. Journal of Strategic Marketing, 1–19. https://doi.org/10.1080/096 5254X.2021.1989014

Journal of the Operational Research Society

Vilalta-Perdomo, E., & Hingley, M. (2018). Beyond links and chains in food supply: A Community or perspective. Journal of the Operational Research Society, 69(4), 580–588. https://doi.org/10.1057/s41274-017-0252-1

Management Decision

Bag, S, Gupta, S, & Foropon, C. (2019). Examining the role of dynamic remanufacturing capability on supply chain resilience in circular economy. Management Decision, 57(4), 863–885. https://doi.org/10.1108/MD-07-2018-0724

Cezarino, L. O., Liboni, L. B., Oliveira Stefanelli, N., Oliveira, B. G., & Stocco, L. C. (2019). Diving into emerging economies bottleneck: Industry 4.0 and implications for circular economy. Management Decision, 59(8), 1841–1862. https://doi.org/10.1108/MD-10-2018-1084

Le, T. T., Behl, A., & Pereira, V. (2022). Establishing linkages between circular economy practices and sustainable performance: The moderating role of circular economy entrepreneurship. Management Decision. Advance online publication. https://doi. org/10.1108/MD-02-2022-0150

Sharma, Y. K., Mangla, S. K., Patil, P. P., & Liu, S (2019). When challenges impede the process: For circular economy-driven sustainability practices in food supply chain. Management Decision, 57(4), 995–1017. https://doi.org/10.1108/MD-09-2018-1056

Singhal, D., Tripathy, S., & Jena, S. K. (2019). Acceptance of remanufactured products in the circular economy: An empirical study in India. Management Decision, 57(4), 953–970. https://doi.org/10.1108/MD-06-2018-0686

Yazdani, M., Gonzalez, E., & Chatterjee, P. (2019). A multi-criteria decision-making framework for agriculture supply chain risk management under a circular economy context. Management Decision, 59(8), 1801–1826. https://doi.org/10.1108/MD-10-2018-1088

Marine Policy

Penca, J. (2018). European Plastics Strategy: What promise for global marine litter? Marine Policy, 97, 197–201. https://doi.org/10.1016/j.marpol.2018.06.004

Maritime Economics and Logistics

Moeremans, B., Dooms, M., & Haezendonck, E. (2023). Long-term analysis of traffic flows in European inland ports: Implications for the port–city interface. Maritime Economics and Logistics, 25(2), 272–300. https://doi. org/10.1057/s41278-022-00233-x

Ramos, S. J., & Yilmaz, U. (2023). Energy transition and city–port symbiosis in biomass import–export regions. Maritime Economics and Logistics, 25(2), 406–428. https://doi.org/10.1057/s41278-022-00238-6

Omega

Dominguez, R, Cannella, S, Ponte, B, & Framinan, J. M (2020). On the dynamics of closed-loop supply chains under remanufacturing lead time variability. Omega (United Kingdom), 97. https://doi.org/10.1016/j. omega.2019.102106

Dominguez, R, Cannella, S, & Framinan, J. M (2021). Remanufacturing configuration in complex supply chains. Omega (United Kingdom), 101, 102268. https:// doi.org/10.1016/j.omega.2020.102268

Genovese, A., Acquaye, A. A., Figueroa, A., & Koh, S. (2017). Sustainable supply chain management and the transition towards a circular economy: Evidence and some applications. Omega (United Kingdom), 66, 344–357. https://doi.org/10.1016/j.omega.2015.05.015

Production Planning and Control

Angelis, R. de, Howard, M., & Miemczyk, J (2018). Supply chain management and the circular economy: Towards the circular supply chain. Production Planning and Control, 29(6), 425–437. https://doi.org/10.1080/09 537287.2018.1449244

Bag, S, Wood, L. C., Telukdarie, A., & Venkatesh, V. G. (2021). Application of Industry 4.0 tools to empower circular economy and achieving sustainability in supply chain operations. Production Planning and Control. Advance online publication. https://doi.org/10.1080/0 9537287.2021.1980902

Batista, L., Bourlakis, M., Smart, P., & Maull, R. (2018). In search of a circular supply chain archetype–a content-analysis-based literature review. Production Planning and Control, 29(6), 438–451. https://doi.org /10.1080/09537287.2017.1343502

Bernon, M., Tjahjono, B., & Ripanti, E. F. (2018). Aligning retail reverse logistics practice with circular economy values: An exploratory framework. Production Planning and Control, 29(6), 483–497. https://doi.org/1 0.1080/09537287.2018.1449266

Burke, H., Zhang, A, & Wang, J. X (2021). Integrating product design and supply chain management for a circular economy. Production Planning and Control, 1–17. https://doi.org/10.1080/09537287.2021.1983063

Kazancoglu, Y, Ozkan-Ozen, Y. D., Sagnak, M., Kazancoglu, I., & Dora, M. (2021). Framework for a sustainable supply chain to overcome risks in transition to a circular economy through Industry 4.0. Production Planning and Control. Advance online publication. https://doi.org/10.1080/09537287.2021.1980910 Kumar, A, Choudhary, S, Garza-Reyes, J. A, Kumar, V, Rehman Khan, S. A, & Mishra, N (2021). Analysis of critical success factors for implementing Industry 4.0 integrated circular supply chain – moving towards sustainable operations. Production Planning and Control, 1–15. https://doi.org/10.1080/09537287.2021. 1980905

Kusi-Sarpong, S., Gupta, H., Khan, S. A., Chiappetta Jabbour, C. J., Rehman, S. T., & Kusi-Sarpong, H. (2021). Sustainable supplier selection based on industry 4.0 initiatives within the context of circular economy implementation in supply chain operations. Production Planning and Control, 1–21. https://doi.org/10.1080/095 37287.2021.1980906

Larsen, S. B., Masi, D., Jacobsen, P., & Godsell, J. (2018). How the reverse supply chain contributes to a firm's competitive strategy: A strategic alignment perspective. Production Planning and Control, 29(6), 452–463. https://doi.org/10.1080/09537287.2017.1390178

Lopes de Sousa Jabbour, A. B., Frascareli, F. C. d. O., Santibanez Gonzalez, E. D. R., & Chiappetta Jabbour, C. J. (2021). Are food supply chains taking advantage of the circular economy? A research agenda on tackling food waste based on Industry 4.0 technologies. Production Planning and Control, 1–17. https://doi.org /10.1080/09537287.2021.1980903

Lu, H, Zhao, G., & Liu, S (2022). Integrating circular economy and Industry 4.0 for sustainable supply chain management: A dynamic capability view. Production Planning and Control, 1–17. https://doi.org/10.1080/09 537287.2022.2063198

Mangla, S. K., Luthra, S, Mishra, N, Singh, A., Rana, N. P., Dora, M., & Dwivedi, Y. (2018). Barriers to effective circular supply chain management in a developing country context. Production Planning and Control, 29(6), 551–569. https://doi.org/10.1080/09537 287.2018.1449265

Masi, D., Kumar, V, Garza-Reyes, J. A, & Godsell, J. (2018). Towards a more circular economy: Exploring the awareness, practices, and barriers from a focal firm perspective. Production Planning and Control, 29(6), 539–550. https://doi.org/10.1080/09537287.2018.14492 46

Mishra, J. L., Hopkinson, P. G., & Tidridge, G. (2018). Value creation from circular economy-led closed loop supply chains: A case study of fast-moving consumer goods. Production Planning and Control, 29(6), 509– 521. https://doi.org/10.1080/09537287.2018.1449245 Ndubisi, N. O, Nygaard, A., & Chunwe N, G. (2020). Managing sustainability tensions in global supply chains: Specific investments in closed-loop technology vs 'blood metals'. Production Planning and Control, 31(11-12), 1005–1013. https://doi.org/10.1080/0953728 7.2019.1695921

Sehnem, S., Ndubisi, N. O, Preschlak, D., Bernardy, R. J., & Santos Junior, S. (2020). Circular economy in the wine chain production: Maturity, challenges, and lessons from an emerging economy perspective. Production Planning and Control, 31(11-12), 1014–1034. https://doi.org/10.1080/09537287.2019.1695914

Srai, J. S, Tsolakis, N, Kumar, M, & Bam, W. (2018). Circular supply chains and renewable chemical feedstocks: A network configuration analysis framework. Production Planning and Control, 29(6), 464–482. https://doi.org/10.1080/09537287.2018.1449 263

Susanty, A., Tjahjono, B., & Sulistyani, R. E. (2020). An investigation into circular economy practices in the traditional wooden furniture industry. Production Planning and Control, 31(16), 1336–1348. https://doi.or g/10.1080/09537287.2019.1707322

Tsolakis, N, Harrington, T. S., & Srai, J. S (2021). Digital supply network design: A Circular Economy 4.0 decision-making system for real-world challenges. Production Planning and Control, 1–26. https://doi.org /10.1080/09537287.2021.1980907

Vlajic, J. V., Mijailovic, R., & Bogdanova, M. (2018). Creating loops with value recovery: Empirical study of fresh food supply chains. Production Planning and Control, 29(6), 522–538. https://doi.org/10.1080/09537 287.2018.1449264

Yang, M., Smart, P., Kumar, M , Jolly, M., & Evans, S. (2018). Product-service systems business models for circular supply chains. Production Planning and Control, 29(6), 498–508. https://doi.org/10.1080/0953 7287.2018.1449247

Zhang, A, Venkatesh, V. G., Wang, J. X, Mani, V., Wan, M., & Qu, T. (2021). Drivers of industry 4.0-enabled smart waste management in supply chain operations: A circular economy perspective in china. Production Planning and Control, 1–17. https://doi.org/10.1080/09 537287.2021.1980909

Scandinavian Journal of Hospitality and Tourism

Sorin, F., & Sivarajah, U (2021). Exploring Circular economy in the hospitality industry: Empirical evidence from Scandinavian hotel operators. Scandinavian Journal of Hospitality and Tourism, 21(3), 265–285. https://doi.org/10.1080/15022250.2021.1921021

Supply Chain Management

Bag, S, & Rahman, M. S. (2023). The role of capabilities in shaping sustainable supply chain flexibility and enhancing circular economy-target performance: An empirical study. Supply Chain Management, 28(1), 162–178. https://doi.org/10.1108/SCM-05-2021-0246

Belhadi, A., Kamble, S., Gunasekaran, A, & Mani, V. (2022). Analyzing the mediating role of organizational ambidexterity and digital business transformation on industry 4.0 capabilities and sustainable supply chain performance. Supply Chain Management, 27(6), 696–711. https://doi.org/10.1108/SCM-04-2021-0152

Farooque, M., Zhang, A., & Liu, Y (2019). Barriers to circular food supply chains in China. Supply Chain Management, 24(5), 677–696. https://doi.org/10.1108/ SCM-10-2018-0345

Münch, C., Gracht, H. A. von der, & Hartmann, E (2021). The future role of reverse logistics as a tool for sustainability in food supply chains: A Delphi-based scenario study. Supply Chain Management. Advance online publication. https://doi.org/10.1108/SCM-06-2021-0291

Sehnem, S., Vazquez-Brust, D., Pereira, S., & Campos, L. (2019). Circular economy: Benefits, impacts and overlapping. Supply Chain Management, 24(6), 784–804. https://doi.org/10.1108/SCM-06-2018-0213

Technological Forecasting and Social Change

Bag, S., Pretorius, J., Gupta, S., & Dwivedi, Y. K. (2021). Role of institutional pressures and resources in the adoption of big data analytics powered artificial intelligence, sustainable manufacturing practices and circular economy capabilities. Technological Forecasting and Social Change, 163. https://doi.org/10.1016/j.techfore.2020.120420

Choi, T.M., & Chen, Y. (2021). Circular supply chain management with large scale group decision making in the big data era: The macro-micro model. Technological Forecasting and Social Change, 169, 120791. https://doi. org/10.1016/j.techfore.2021.120791

Despeisse, M., Baumers, M., Brown, P., Charnley, F., Ford, S. J., Garmulewicz, A., Knowles, S., Minshall, T., Mortara, L., Reed-Tsochas, F. P., & Rowley, J. (2017). Unlocking value for a circular economy through 3D printing: A research agenda. Technological Forecasting and Social Change, 115, 75–84. https://doi.org/10.1016/j. techfore.2016.09.021 Gupta, S., Chen, H., Hazen, B. T., Kaur, S., & Santibañez Gonzalez, E. (2019). Circular economy and big data analytics: A stakeholder perspective. Technological Forecasting and Social Change, 144, 466–474. https://doi.org/10.1016/j.techfore.2018.06.030

Kamble, S. S., Belhadi, A., Gunasekaran, A, Ganapathy, L., & Verma, S. (2021). A large multi-group decision-making technique for prioritizing the big datadriven circular economy practices in the automobile component manufacturing industry. Technological Forecasting and Social Change, 165, 120567. https:// doi.org/10.1016/j.techfore.2020.120567

Kazancoglu, Y, Sagnak, M., Mangla, S. K., Sezer, M. D, & Pala, M. O. (2021). A fuzzy based hybrid decision framework to circularity in dairy supply chains through big data solutions. Technological Forecasting and Social Change, 170. https://doi.org/10.1016/j. techfore.2021.120927

Wang, Y, Zhu, Q, Krikke, H, & Hazen, B. (2020). How product and process knowledge enable consumer switching to remanufactured laptop computers in circular economy. Technological Forecasting and Social Change, 161, 120275. https://doi.org/10.1016/j. techfore.2020.120275

Thunderbird International Business Review

Geisendorf, S., & Pietrulla, F. (2018). The circular economy and circular economic concepts—A literature analysis and redefinition. Thunderbird International Business Review, 60(5), 771–782. https://doi. org/10.1002/tie.21924

Goyal, S., Esposito, M., & Kapoor, A. (2018). Circular economy business models in developing economies: Lessons from India on reduce, recycle, and reuse paradigms. Thunderbird International Business Review, 60(5), 729–740. https://doi.org/10.1002/tie.21883

Lai, N., Kuah, A., Kim, C. H., & Wong, K. H. (2022). Toward sustainable express deliveries for online shopping: Reusing packaging materials through reverse logistics. Thunderbird International Business Review, 64(4), 351–362. https://doi.org/10.1002/tie.22259

Total Quality Management and Business Excellence

Dezi, L., Hysa, X., Calabrese, M., & Mercuri, F. (2022). Open Total Quality Management in the Circular Economy age: A social enterprise perspective through the case of Patagonia. Total Quality Management and Business Excellence, 1–15. https://doi.org/10.1080/147 83363.2022.2051698

Transportation Research Part D: Transport and Environment

Dente, S., & Tavasszy, L. A. (2018). Impacts of trade related sustainability strategies on freight transportation: Modelling framework and application for France. Transportation Research Part D: Transport and Environment, 58, 308–319. https://doi.org/10.1016/j. trd.2017.04.006

Transportation Research Part E: Logistics and Transportation Review

Farooque, M, Zhang, A, Liu, Y, & Hartley, J. L. (2022). Circular supply chain management: Performance outcomes and the role of eco-industrial parks in China. Transportation Research Part E: Logistics and Transportation Review, 157, 102596. https://doi. org/10.1016/j.tre.2021.102596

Gebhardt, M., Spieske, A., & Birkel, H. (2022). The future of the circular economy and its effect on supply chain dependencies: Empirical evidence from a Delphi study. Transportation Research Part E: Logistics and Transportation Review, 157, 102570. https://doi. org/10.1016/j.tre.2021.102570

Ivanov, D., Dolgui, A, & Sokolov, B. (2022). Cloud supply chain: Integrating Industry 4.0 and digital platforms in the "Supply Chain-as-a-Service". Transportation Research Part E: Logistics and Transportation Review, 160, 102676. https://doi. org/10.1016/j.tre.2022.102676

Luthra, S, Sharma, M., Kumar, A, Joshi, S., Collins, E., & Mangla, S. (2022). Overcoming barriers to cross-sector collaboration in circular supply chain management: A multi-method approach. Transportation Research Part E: Logistics and Transportation Review, 157, 102582. https://doi.org/10.1016/j.tre.2021.102582

Stekelorum, R., Laguir, I., Lai, K., Gupta, S, & Kumar, A (2021). Responsible governance mechanisms and the role of suppliers' ambidexterity and big data predictive analytics capabilities in circular economy practices improvements. Transportation Research Part E: Logistics and Transportation Review, 155, 102510. https://doi.org/10.1016/j.tre.2021.102510

Zhang, A, Wang, J. X., Farooque, M, Wang, Y, & Choi, T.M. (2021). Multi-dimensional circular supply chain management: A comparative review of the state-of-theart practices and research. Transportation Research Part E: Logistics and Transportation Review, 155. https://doi. org/10.1016/j.tre.2021.102509