

Electronic Markets – The International Journal on Networked Business

Call for Papers

Digitalization for Responsive and Circular Supply Chains

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Theme

The economic environment in which companies create value today is characterized by greater vulnerability, uncertainty, complexity and ambiguity than ever before. Natural disasters, geopolitical conflicts and other disruptions are affecting global supply chains and presenting great changes to established supply chain management models, processes and tools. In the meantime, Planet Earth has reached its limits; climate change and shortages of raw materials are forcing companies and supply chains to transition to more sustainable operations. The commoditization of high-tech products, which is evident in many sectors, is driving the servitization of the manufacturing industry. This presents a golden opportunity for companies to cope with the above-mentioned challenges with greater responsiveness and sustainability.

Tomorrow's supply chains must be able to react quickly to disruptions and changes. The concepts of resilience and responsiveness (Richey et al. 2021) are key, as are flexibility, agility, adaptability and improvisation. The renewed battle for natural resources requires economic growth to be decoupled from the extraction of raw materials, ultimately forcing a transformation of established 'take, make, waste' supply chains into circular systems (Papert et al. 2024). R-strategies such as reduce, reuse, remanufacture and recycle play a special role in doing so (Potting et al. 2017). The ultimate aim is to increase resource efficiency in existing value chains, extend the service life of products, and close the loop. Scientific literature agrees that digital technologies are key to realizing the responsive, servitized and circular supply chains of tomorrow (Alcayaga et al. 2019; Bressanelli et al. 2022; Jabbour et al. 2019; Khan et al. 2021; Kristoffersen et al. 2021; Stank et al. 2019; Yu et al. 2022; Berg & Wilts 2018; Zeiss et al. 2021). Important building blocks include the internet of things, artificial intelligence (AI) and machine learning, digital twins for products and supply chains, blockchains and digital platforms. However, insufficient research has been conducted into how these building blocks support responsiveness, servitization and the transition to sustainability and circularity as a triple transformation.

Central issues and topics

This Special Issue on Digitalization for Responsive and Circular Supply Chains continues Electronic Markets' earlier special issue on sustainability (Jabłoński et al. 2020) and seeks contributions that exemplify technology- or data-driven solutions for implementing resilient and circular supply chains, as well as the associated business models. Therefore, we welcome research papers including but not limited to the following aspects:

- Contribution of digital technologies to responsiveness, agility, flexibility, adaptability, improvisation, and resilience, sustainability, circularity, and regeneration
- Increasing supply chain visibility based on digital technologies
- AI methods supporting forecasting, planning, decision making and optimization



- Division of labour and interactions between humans and machines in AI-supported supply chains
- Virtualization and simulation of supply chains based on digital twins
- Blockchain and smart contracts in logistics and supply chain management
- The role of digital platforms in supply chain management
- Effects of smart product-service-systems on supply chains and supply chain management
- Ecosystems and federated data ecosystems enabling new data-driven R strategies
- Models, methods and tools enabling the triple transformation of supply chains
- Barriers and challenges hindering digitalization, servitization and transition to sustainability and circularity
- Data security and cyber security challenges in digital supply chain structures
- Legal aspects within the digital, servitized, circular supply chain
- Potential of digital technologies for ensuring compliance with legal requirements in the context of sustainability and circularity
- Relationship management mechanisms and governance structures in the era of digitalized supply chains.

This special issue aims to emphasize topics related to the context outlined above. We therefore invite contributions that explore digital technologies in supply chain management within today's challenging business environment or specific industry contexts, such as automotive, chemicals, food, life sciences and healthcare, logistics service providers, manufacturing, or mining. We are particularly interested in contributions that address the challenges and opportunities associated with digitalization, servitization and transition to sustainability and circularity across multiple supply chain tiers or at least in dyadic relationships.

Submission

Contributions employing a broad range of methodological approaches are encouraged, including but not limited to conceptual, qualitative, and quantitative research. It is essential that these contributions also derive and discuss managerial implications. We also welcome contributions addressing related topics not listed above (please contact the special issue editors in that case to discuss the fit prior to submission).

All papers will be peer reviewed and should conform to Electronic Markets publication standards. Electronic Markets is a SSCI-listed journal with a 2024 Impact Factor (IF) of 6.8 and a 5-year IF of 10.0. Electronic Markets welcomes research from a technological, organizational, societal, and/or political perspective. Since Electronic Markets is a methodologically pluralistic journal, quantitative and qualitative research methods are both welcome as long as the studies are methodologically sound. Conceptual and theory-development papers, empirical hypothesis testing, and case-based studies are all welcome. If you would like to discuss any aspect of the special issue, please contact the guest editors.

All papers must be original, not published or under review elsewhere. Papers must be submitted via the electronic submission system at <https://www.editorialmanager.com/elma/default.aspx>. Instructions, templates and general information are available at <https://link.springer.com/journal/12525/submission-guidelines>.

Please note the preferred article length must be in a range of 10,000 words for research papers, around 8,000 words for position papers, and around 5,000 words for fundamentals (all excluding reference list).

Important deadline

Submission Deadline: February 01, 2026



References

- Alcayaga, A., Wiener, M., & Hansen, E. G. (2019). Towards a framework of smart-circular systems: An integrative literature review. *Journal of Cleaner Production*, 221, 622–634. <https://doi.org/10.1016/j.jclepro.2019.02.085>
- Berg, H., & Wilts, H. (2019). Digital platforms as market places for the circular economy - Requirements and challenges. *NachhaltigkeitsManagementForum | Sustainability Management Forum*, 27(1), 1–9. <https://doi.org/10.1007/s00550-018-0468-9>
- Bressanelli, G., Adrodegari, F., Pigosso, D. C. A., & Parida, V. (2022). Towards the smart circular economy paradigm: A definition, conceptualization, and research agenda. *Sustainability*, 14(9), 4960. <https://doi.org/10.3390/su14094960>
- Jabbour, C. J. C., Jabbour, A. B. L. d. S., Sarkis, J., & Filho, M. G. (2019). Unlocking the circular economy through new business models based on large-scale data: An integrative framework and research agenda. *Technological Forecasting and Social Change*, 144, 546–552. <https://doi.org/10.1016/j.techfore.2017.09.010>
- Jabłoński, M., Timmers, P., & Sarkis, J. (2020). Sustainability in business models in the network economy. *Electronic Markets*, 30, 675–678. <https://doi.org/10.1007/s12525-020-00444-1>
- Kristoffersen, E., Mikalef, P., Blomsma, F., & Li, J. (2021). The effects of business analytics capability on circular economy implementation, resource orchestration capability, and firm performance. *International Journal of Production Economics*, 239, 108205. <https://doi.org/10.1016/j.ijpe.2021.108205>
- Papert, M., Hamper, A., Hoßbach-Zimmermann, N., Schuster, T., Buehler, L., & Pflaum, A. (2024). Towards the data-driven circular and embedded supply chain: Considerations from an ICT perspective. *Hawaii International Conference on System Sciences 2024 (HICSS-57)*, 4975-4984. https://aisel.aisnet.org/hicss-57/in/digital_supply_chain/2
- Potting, J., Hekkert, M. P., Worrell, E., & Hanemaaijer, A. (2017). Circular economy: measuring innovation in the product chain. *PBL Netherlands Environmental Assessment Agency*, (2544).
- 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. <https://doi.org/10.1111/jbl.12290>
- Stank, T., Esper, T., Goldsby, T. J., Zinn, W., & Autry, C. (2019). Toward a digitally dominant paradigm for twenty-first century supply chain scholarship. *International Journal of Physical Distribution & Logistics Management*, 49(10), 956–971. <https://doi.org/10.1108/IJPDLM-03-2019-0076>
- Yu, Z., Khan, S. A. R., & Umar, M. (2022). Circular economy practices and industry 4.0 technologies: A strategic move of automobile industry. *Business Strategy & the Environment*, 31(3), 796–809. <https://doi.org/10.1002/bse.2918>
- Zeiss, R., Ixmeier, A., Recker, J., & Kranz, J. (2021). Mobilising information systems scholarship for a circular economy: Review, synthesis, and directions for future research. *Information Systems Journal*, 31(1), 148–183. <https://doi.org/10.1111/isj.12305>

