# Supply Chain Forum: an International Journal

# Call for Papers / Special Issue

Artificial Intelligence, Generative Artificial Intelligence, and the Transformation of Operations Management and Supply Chains: A Call for Action

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Submission deadline: May 5<sup>th</sup>, 2026

# **Context and Objectives**

Artificial Intelligence (AI) and Generative Artificial Intelligence (Gen-AI) have recently emerged as the next frontier of operations management (OM) and supply chain (SC) or the next productivity frontier, mainly because of their abilities to transform almost all OM and SC activities. The recent emergence of Gen-AI, particularly through technologies such as Large Language Models (LLMs), is disrupting practices, decision-making models, and collaboration modes worldwide. Gen-AI is a subset within the vast AI ecosystem that enables the creation of new content—texts, code, production plans, risk scenarios, or even automated dialogues with suppliers or customers (SHIPPEO 2023, Fosso Wamba, Queiroz et al. 2025). This capability opens new perspectives in planning, resilience, agility, service personalization, human-AI hybrid business models, new job roles, and organizational innovation (Fosso Wamba, Queiroz et al. 2025). In addition, LLM-based technology empowers SC planners to interact directly with SC tools using natural language, eliminating the need for data scientists, thus driving the automation of core processes and creating entirely new workflows while explaining decisions generated by SC systems and providing enriching insights (Menache, Pathuri et al. 2025).

This special issue aims to critically and prospectively explore the role of AI and Gen-AI in transforming operations management and supply chains. It addresses promises and limitations, considering these transformations' technological, organizational, human, ethical, and environmental dimensions.

### Recommended topics (non-exhaustive)

We welcome submissions on (but not limited to) the following topics:

- Case studies, longitudinal case studies, and pilot studies on the implementation and use of Al and Gen-Al for improved operations and supply chain management
- Case studies, longitudinal case studies, intervention research, or empirical investigations on generative AI adoption in industrial, logistics, or service organizations



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- Development and evaluation of hybrid approaches combining traditional AI, generative AI,
  and analytics in decision-making systems within operations and supply chains
- Empirical studies on the applications of AI and Gen-AI in operations planning, demand forecasting, inventory management, or reverse logistics
- Empirical studies on the business value of AI and Gen-AI in operations and supply chains
- Equity, inclusion, and gender issues in the development, deployment, and usage of AI and Gen-AI in logistics and operations settings
- Evaluation of AI and Gen-AI use for interorganizational collaboration, risk management, or real-time communication in extended supply chains
- Evaluation of the impact of AI and Gen-AI on operations management and supply chain management processes and performance
- Evaluation of the impact of AI and Gen-AI on the sustainability of operations and circularity strategies
- Evaluation of the roles of AI and Gen-AI in improving traceability, transparency, and compliance in global supply chains (e.g., CSRD, due diligence laws)
- Evaluation of the use and contribution of AI and Gen-AI in identifying and mitigating forced labor, child labor, and modern slavery risks in extended supply chains
- Intersectional research combining gender, ethics, AI, and supply chain management in specific sectors or geographies.
- Issues of explainability, transparency, trust, and governance in AI and Gen-AI systems in supply chains
- Reinventing work in supply chains: human-AI collaboration, new roles, and skill requirements

# **Types of contributions**

We invite theoretical, empirical (quantitative, qualitative, or mixed-method), methodological, or conceptual contributions. Special attention will be given to scientific rigor, clarity of managerial implications, and originality in research questions and methods.

#### References

- intelligence and the challenges to adding value ethically." *Technovation* 144: 103235.
- Menache, I., J. Pathuri, D. Simchi-Levi and T. Linton (2025). "How Generative AI Improves Supply Chain Management." *Harvard Business Review* 103(1): 86-95.
- SHIPPEO. (2023). "Revolutionizing Supply Chains with Generative AI: A New Frontier." Retrieved 13 April, 2025, from <a href="https://www.shippeo.com/blog/revolutionizing-supply-chains-with-generative-ai-a-new-frontier">https://www.shippeo.com/blog/revolutionizing-supply-chains-with-generative-ai-a-new-frontier</a>.

## **Submission guidelines**

Authors should submit their manuscripts through the *Supply Chain Forum: An International Journal*'s submission platform, indicating that the paper is for the special issue "Al and Gen-Al in Operations Management and Supply Chains.": <a href="https://www.tandfonline.com/journals/tscf20">https://www.tandfonline.com/journals/tscf20</a>.

Author guidelines are available at: <a href="https://www.tandfonline.com/action/authorSubmission?show=instructions&journalCode=tscf20">https://www.tandfonline.com/action/authorSubmission?show=instructions&journalCode=tscf20</a>

All papers submitted will undergo the usual double-blind peer review process.

About *Supply Chain Forum: An International Journal* (<a href="https://www.tandfonline.com/journals/tscf20/a">https://www.tandfonline.com/journals/tscf20/a</a> bout-this-journal#aims-and-scope)

Supply Chain Forum: an International Journal (SCFIJ) is a peer reviewed periodical providing a broad international coverage of subjects relating to the management of the supply chain. It focuses on the integration of supply, production, distribution and sales. It is concerned with the management of the global supply chain from primary supplier to final customer. It provides in-depth research articles and company case studies that enrich both the knowledge of the discipline and the practices of supply chain management.

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#### **Contact**

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#### **Special Issue information:**

Submissions will be subject to a double-blind peer review process. Online submissions to *Supply Chain Forum: an International Journal* are made using ScholarOne Manuscripts, the online submission and peer review system.

Registration and access is available at

https://rp.tandfonline.com/submission/create?journalCode=TSCF

Information concerning formatting is available at:

https://www.tandfonline.com/action/authorSubmission?show=instructions&journalCode=tscf20

#### **Publication schedule**

Deadline for submissions of full papers: May 5<sup>th</sup>, 2026

Notification of final acceptance for publication: March, 1<sup>st</sup>, 2027 The special issue is expected to appear in June 2027 (vol 28-2 2027)