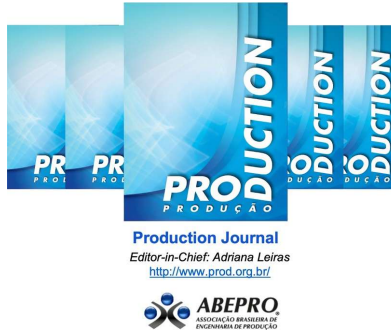




CALL FOR PAPERS

THEMATIC SECTION: Regenerative and Intelligent Pathways toward the Twin Transition in Industrial Engineering and Operations Management:

Driving Responsible Production and Consumption through Systemic Circularity and Interconnected Value Ecosystems

SUBMIT YOUR PAPERS BY NOVEMBER 30, 2026

Operations management and production planning are undergoing a twin transition, in which digitalization and sustainability increasingly reinforce one another. Advances in Industry 4.0/5.0, data-driven planning and artificial intelligence are reshaping how organizations plan, schedule and control production, while growing pressure for regenerative and circular practices is pushing production systems toward more resilient and sustainable configurations.

Despite the growing body of conceptual and exploratory work on these transitions, there remains a shortage of empirical and applied evidence on how operations management and production planning practices are evolving under this twin transition, particularly in complex, resource-constrained and emerging-economy contexts.

This Thematic Section aims to advance knowledge on how operations management and production planning can be reconceived and operationalized considering the twin transition, addressing trade-offs between efficiency, resilience, sustainability and human-centered values in production systems. In line with the title of the call, particular attention is given to systemic circularity, responsible production and consumption, regenerative practices, and the coordination of interconnected value ecosystems enabled by digital intelligence.

This Thematic Section is linked to the XXXIII IJCIEOM 2027 (International Joint Conference on Industrial Engineering and Operations Management), to be held at PUC-Rio in Rio de Janeiro, Brazil, on 14–16 June 2027. The conference theme, 'Regenerative and Intelligent Pathways toward the Twin Transition in Industrial Engineering and Operations Management', frames this call and provides an international forum for presenting accepted papers.

About the Journal

Production (formerly *Produção* or *Producao*) is the flagship journal of ABEPRO – Brazilian Association of Production Engineering. Created in 1990, the journal (ISSN 0103-6513) provides an internationally respected channel for original and relevant research in Operations, Manufacturing, Industrial Engineering, and Production Engineering and Management. Articles undergo double-blind peer review and accepted works are published in English in continuous flow.

Objectives and Rationale

The objectives of this Thematic Section are:

- Advance theoretical and methodological foundations for operations management and production planning under the twin transition;
- Explore how digital technologies and data-driven methods support production planning and operations decision-making;
- Analyze trade-offs, tensions and paradoxes between efficiency, resilience and sustainability in production systems;
- Investigate the integration of sustainability, resilience and human-centered perspectives into operations management practices;
- Examine how systemic circularity and regenerative practices reshape production, supply networks and responsible consumption;
- Explore coordination, orchestration and value creation across interconnected industrial and service ecosystems;
- Examine production planning and operations management in complex, resource-constrained or emerging-economy contexts;
- Discuss the implications of the twin transition for production system design, performance evaluation and managerial decision-making.

We invite submissions that provide empirical evidence, theoretical frameworks, methodological contributions, simulation models, and applied studies addressing these key areas. Strong empirical grounding and explicit implications for Production Engineering and Operations Management are particularly welcome.

Topics of Interest

Topics of interest include, but are not limited to:

Twin Transition in Operations Management and Production Planning

- Conceptual and empirical foundations of the twin transition in operations management;
- Production planning and control under simultaneous digitalization and sustainability pressures;
- Operations strategy and capability development for digital and regenerative transformation;
- Human-centricity, responsible innovation and organizational change in production systems.

Systemic Circularity and Regenerative Production

- Circular production systems, closed-loop supply chains and industrial symbiosis;
- Regenerative operations, remanufacturing, reuse, repair, product-life extension and resource stewardship;
- Responsible production and consumption, product-service systems and circular business models;
- Decarbonization, resource efficiency and operational pathways toward carbon neutrality.

Interconnected Value Ecosystems and Supply Networks

- Inter-organizational collaboration and ecosystem orchestration;
- Digital platforms, data sharing, traceability and interoperability across value networks;
- Supplier–customer integration, industrial ecosystems and multi-tier supply networks;
- Resilient, sustainable and regenerative value network design.

Digital Intelligence and Decision-Making

- Industry 4.0/5.0 and data-driven production planning;
- Artificial intelligence, generative AI, analytics, digital twins and intelligent decision-support systems;
- Multi-criteria and multi-objective decision-making for twin-transition trade-offs;
- Performance measurement and evaluation in production systems undergoing the twin transition.

Resilience, Sustainability and Human-Centric Operations

- Resilient production and operations systems;
- Sustainability and social impact in operations management;
- Human–technology collaboration, workforce implications and Quality 5.0;
- Risk, uncertainty and adaptive operations in turbulent environments.

Methods and Applied Decision Support

- Optimization, simulation and operations research for circular and sustainable production;
- Empirical modelling, field studies, surveys, case research and mixed methods;
- Decision-support systems and analytics validated in real production or supply-network contexts;

- Performance measurement frameworks and intervention studies supporting managerial decision-making.

Guest Editorial Team

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Outreach Strategy

The Guest Editorial Team will use a coordinated international outreach strategy to attract high-quality submissions aligned with Production and the IJCIEOM 2027 community:

- Launch and disseminate the Call for Papers through the Production and ABEPRO websites, newsletters and social-media channels;
- Promote the Thematic Section through the IJCIEOM 2027 website, mailing lists, conference announcements and the Meet the Editors / Journal Track activities;
- Circulate the call through the international associations and institutional networks represented in IJCIEOM, including IISE, ADINGOR, AIM and partner universities;
- Conduct targeted outreach to authors and research groups working on digital transformation, circular economy, sustainable operations, Industry 4.0/5.0, resilience and supply-network ecosystems;
- Use the professional and academic networks of the Guest Editors to reach established researchers, early-career scholars and doctoral researchers across Brazil, Europe and other regions;
- Encourage high-quality conference submissions that fit the Thematic Section to enter the journal review process, while maintaining Production's independent editorial and peer-review standards.

Timeline

Milestone	Proposed date
Call opens	Upon approval and publication by Production (September 2026)
Submission deadline	30 November 2026
First editorial decision (Reject or Revise – R1)	17 January 2027
Revised version submission (R1)	14 February 2027
Further review rounds and revised versions (R2/R3), if required	14 February–21 April 2027
Final decision for conference-linked Thematic Section papers	21 April 2027
IJCIEOM 2027 – presentation of accepted papers	14–16 June 2027
Publication	Continuous flow after final acceptance and production processing, during 2027

Submissions

The Guest Editors and the Editor-in-Chief of Production invite researchers to submit papers with strong scientific rigor and practical relevance. Manuscripts should present clear motivation, research objectives, methodological soundness, and original theoretical, empirical and/or methodological contributions aligned with the scope of Production Engineering.

Author guidelines: <https://prod.org.br/instructions>

Submission system: <https://mc04.manuscriptcentral.com/prod-scielo>

When submitting, authors should select: *Thematic Section – Regenerative and Intelligent Pathways toward the Twin Transition in Industrial Engineering and Operations Management: Driving Responsible Production and Consumption through Systemic Circularity and Interconnected Value Ecosystems*

Important conference requirement: accepted papers for this Thematic Section must be presented at IJCIEOM 2027 by at least one author. You may list up to 6 authors.

IJCIEOM 2027: <https://ijcieom.org/2027/>

Submitted papers will enter the editorial and peer-review process on a rolling basis as they are received, without waiting for the submission deadline. All manuscripts remain subject to Production's normal editorial criteria, double-blind peer review, and final editorial decision.