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# **Special Session on Digital Sustainable and Viable Supply Chains**

#### **Organizers**

	Name	Affiliation	Email
1	Prof Alexandre Dolgui	Professor Alexandre Dolgui, IISE Fellow, Dr Habil, PhD, Eng Head of departement Automation, Production and Computer Sciences, IMT atlantique	alexandre.dolgui@imt- atlantique.fr
2	Dr Malek Masmoudi	College of Engineering, University of Sharjah, Sharjah, UAE; University of Saint Etienne, France	mmasmoudi@sharjah.ac.ae, malek.masmoudi@univ-st- etienne.fr,
3	Dr Arij LAHMAR	Dubai Business School, University of Dubai, UAE	alahmar@ud.ac.ae
4	Dr Kamar Zekhnini	L2M3S Laboratory, ENSAM, Moulay Ismail University, Meknes, Morocco	kamarzekhnini@gmail.com

#### **Session Information**

As the marketplace becomes increasingly digital, there is a growing need to ensure that supply chains are sustainable and viable in the face of disruptions and uncertainties. To address this need, we invite submissions for a special issue on "Digital Sustainable and Viable Supply Chains." We seek original research papers that explore topics such as the development of sustainable and resilient supply chain models, the integration of digital technologies and processes to improve sustainability and viability, and the role of stakeholder engagement in creating sustainable and viable supply chains. Additionally, we welcome papers that investigate the use of data analytics and other innovative approaches to manage risks and disruptions in digital supply chains.

Potential research questions for the special issue include:

- 1) How can digital technologies and processes be used to improve the sustainability and viability of supply chains?
- 2) What are the key dimensions of sustainability and viability in digital supply chain models?
- 3) What are the challenges and trade-offs in achieving sustainability and viability in digital supply chains?
- 4) How can stakeholders ensure that sustainability and viability are integrated in the design of their digital supply chains?
- 5) What are the implications of sustainable and viable digital supply chains for firm performance, competitive advantage, and societal well-being?
- 6) How can supply chain resilience be improved in the face of disruptions such as natural disasters or pandemics?
- 7) How can data analytics and other innovative approaches be used to manage risks and disruptions in digital supply chains?

### Submission Deadline: May 30, 2023 Notification of Acceptance: July 5, 2023 Early Bird Registration Deadline: July 30, 2023 Final Paper Submission Deadline: August 15, 2023

The special session would welcome original research papers, case studies, and conceptual papers that address the above research questions, and showcase the latest thinking and innovative practices related to achieving viability and sustainability in the era of Industry 4.0 and digital technologies in supply chain operations. The session would be an opportunity for researchers, practitioners, and policymakers to exchange knowledge, insights, and best practices and contribute to advancing the state of the art in sustainable supply chain management.Novelty and motivation (one to two paragraphs), including why this topic is of interest to the CIE50 attendees and why it is different from a regular conference session.

The special session on achieving viability and sustainability in the era of Industry 4.0 and supply chain operations addresses a critical issue facing companies today: how to manage risks, leverage opportunities, and drive sustainability performance in an increasingly digital and interconnected global economy. The novelty of this special session lies in its focus on the intersection of viability, Industry 4.0, and sustainable supply chain operations, which are all critical areas of research and practice, but are often studied in isolation.

By bringing together researchers, practitioners, and policymakers to exchange knowledge and insights, the special session aims to facilitate a deeper understanding of the challenges and opportunities associated with achieving viability and sustainability in the supply chain, and to showcase innovative practices and strategies for addressing these challenges. The session will encourage interdisciplinary collaboration and will draw on diverse perspectives and experiences to promote dialogue and learning.

The motivation for this special session is to contribute to the ongoing dialogue around sustainable supply chain management and to promote the adoption of best practices and innovative solutions in this area. By highlighting the latest research and practices related to sustainability, Industry 4.0, and supply chain operations, the special session aims to support companies in their efforts to achieve sustainability and viability in the face of a rapidly changing and complex global business environment.

Organizer 1 –

Prof. Alexandre Dolgui is an IISE Fellow, Distinguished Professor, and the Head of Automation, Production and Computer Sciences Department at the IMT Atlantique, France. His research focuses on manufacturing line design, production planning and supply chain optimisation. His main results are based on the exact mathematical programming methods and their intelligent coupling with heuristics and metaheuristics algorithms. He is the co-author of 5 books, the co-editor of 25 books or conference proceedings, the author of more than 280 refereed journal papers, 4 prefaces of books, 31 editorials and 37 book chapters as well as over 400 papers in conference proceedings. He is the Editor-in-Chief of the International Journal of Production Research (IJPR).

### Organizer 2 –

Dr. Malek Masmoudi, Associate Professor of industrial engineering and management, University of Sharjah, College of Engineering, Industrial Engineering and Engineering Management Department, Sharjah, UAE Associate Professor of industrial engineering and management, Head of the Master 2 Industrial Engineering, University Jean-Monnet (UJM), Saint-Etienne, France. His main research focus on Applied optimization, simulation, supply chain, and data sciences, Decision making in healthcare systems

#### Organizer 3 –

Dr Arii Lahmar, assistant professor at Dubai University, holds a PhD in 'Managing risk and vulnerability in supply chain networks' from the University of Sfax (Tunisia), in collaboration with Engineering School of Mines Albi, France. The research interests include sustianbility, risk management, Supply Chain Planning, modelling, Optimization and vulnerability analysis.

## Organizer 4 –

Dr Kamar Zekhnini is a research scholar at L2M3S Laboratory, ENSAM, Moulay Ismail University, Meknes, Morocco and an E-logistic engineer from ENSIAS, Mohamed V University, Rabat, Morocco. Holding a PhD in the area of supply chain management 4.0. The research interests include supply chain management 4.0, industry 4.0, risk management in the 4.0 era, supplier selection, fuzzy-neuro approach, and Artificial Intelligence





