

INTERNATIONAL CONFERENCE ON MANAGEMENT OF INNOVATION AND ENTREPRENEURSHIP

Conference Theme

PARALLEL TRANSFORMATIONS:

Responding to the AI Revolution and Global Crises through innovation and Entrepreneurship

Special Track Proposal

Track Title <i>Please provide a concise and engaging title for the proposed track</i>	AI-Enabled Twin Transition in SMEs: Leveraging Artificial Intelligence for Sustainable Digital Transformation
Track Description <i>Please provide a detailed description of the proposed track (approximately 800–1,000 words), outlining:</i> • Motivation and relevance of the track; • Key research challenges and emerging issues addressed • Track's contribution to the conference theme • Examples of topics and research questions that would fit within the track	In today's market environment, organizations are operating in an increasingly competitive landscape that is continuously reshaped by rapid advances in digital innovation. At the same time, growing pressure is being placed on firms to embed sustainable practices into their operations and contribute to achieving the Sustainable Development Goals (SDGs) of the 2030 Agenda. The European Union refers to this combined process as the "Twin Transition" (TT), which refers to the simultaneous pursuit by firms and organizations of digital transformation and sustainability objectives (Centobelli et al., 2020; Myshko et al., 2024; Mele et al., 2025). Therefore, TT brings digital transformation and the green transition into a shared agenda, raising questions about how their trajectories can be aligned (Abbate et al., 2023). Although these transformations can reinforce one another, their alignment is not automatic and requires an integrated approach that addresses both synergies and tensions, prompting firms to undertake significant strategic and organizational changes (Muench et al., 2022). As a result, in responding to the challenges arising from this "digitally-enabled sustainable transition" (Spaltini et al., 2024), firms are engaged in a profound transformation of their value chains and business models aimed at enhancing both efficiency and flexibility (Myshko et al., 2024; Montresor & Vezzani, 2023). While the digital and green dimensions of this transition are increasingly recognized as interdependent, their implementation remains particularly challenging for Small and Medium-sized Enterprises (SMEs), which often face constraints in financial resources, digital capabilities, specialized skills, data availability, and organizational capacity (Perossa et al., 2023; Pan et al., 2024; Chen et al., 2023; Mele et al., 2026). In this context, Artificial Intelligence (AI) is emerging as a potentially powerful enabler of the TT, with the capacity to support SMEs in overcoming some of these constraints and in transforming data, knowledge, and technological resources into new forms of sustainable value creation (Sjödén et al., 2025; Olgren, 2023). Beyond improvements in efficiency and accuracy, AI can contribute to addressing environmental and societal challenges by supporting more informed decisionmaking, resource optimization, process innovation, and forecasting. In addition, AI-enabled tools support the development of new products and services, sustainable business models, as well as new forms of interaction with customers, suppliers, and other stakeholders. For SMEs, the potential relevance of AI is particularly significant because AI-enabled tools may facilitate access to advanced analytical and decision-making capabilities without necessarily requiring the development of all technological resources internally. However, the contribution of AI to TT depends on SMEs' ability to connect AI applications to explicit environmental objectives and translate insights into organizational action, while accounting for the environmental impacts of the technologies themselves. Within this debate, this track examines whether, how, and under what organizational conditions AI can help SMEs align digital transformation with environmental sustainability



	objectives. Rather than considering AI adoption as an end in itself, the track aims to explore how AI-enabled capabilities can support SMEs in combining digital transformation with sustainability-oriented objectives, and to examine when their potential remains unrealized or gives rise to new tensions. While the role of AI in aligning digital transformation with environmental sustainability constitutes the core of the track, contributions are also invited to examine the economic and social implications of AI-enabled transformation in SMEs, including effects on competitiveness, implementation costs, job quality, workforce skills, and employee participation in organizational change. Particular attention is paid to the capabilities SMEs need to manage complementarities and trade-offs among these outcomes. Therefore, the aim of the track is to move beyond a purely technological perspective and emphasizes the importance of managerial capabilities, knowledge, organizational processes, and strategic alignment in transforming AI-enabled insights into concrete, sustainable innovation and organizational action. Framed in these premises, this track calls for contributions at the intersection of Artificial Intelligence, SMEs, digital transformation, and sustainability. Contributions are invited to address, amongst others, the following questions: • <i>How does AI enable SMEs to pursue the Twin Transition by simultaneously advancing digital transformation and sustainability objectives?</i> • <i>How can AI contribute to the creation of economic, environmental, and social value in SMEs pursuing the Twin Transition?</i> • <i>Under what conditions does AI adoption translate into effective Twin Transition outcomes in SMEs?</i> • <i>How does the integration of AI into SMEs' business processes contribute to sustainable digital transformation?</i> • <i>What role does AI play in helping SMEs overcome the technological and organizational challenges associated with the Twin Transition?</i> • <i>When and why does AI adoption fail to deliver environmental improvements in SMEs, and what trade-offs or unintended consequences emerge?</i> • <i>What organizational capabilities enable SMEs to effectively integrate AI into their Twin Transition strategies?</i> • <i>How do SMEs acquire and develop the knowledge and skills needed to use AI in pursuit of environmental sustainability objectives?</i> • <i>What are the main barriers and drivers influencing AI adoption for the Twin Transition in SMEs?</i> • <i>Which organizational, technological, and managerial factors facilitate the successful integration of AI into SMEs' Twin Transition strategies?</i> • <i>How do SMEs leverage AI to identify and exploit new entrepreneurial opportunities arising from the Twin Transition?</i> Contributions comparing SMEs with larger firms, across sectors, countries, or institutional contexts are also welcome.
Keywords Please provide 4–6 keywords that best characterize the proposed track. Separate keywords using a semicolon (;)	Twin Transition, Artificial Intelligence, SMEs, Sustainable Growth, Green Transformation
References Please include the key references supporting the relevance and positioning of the proposed track	• Abbate, S., Centobelli, P., and Cerchione, R., 2023. "The Digital and Sustainable Transition of the Agri-Food Sector." <i>Technological Forecasting and Social Change</i> 187: 122222. https://doi.org/10.1016/j.techfore.2022.122222. • 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. <i>Business Strategy and the Environment</i>, 29(4), 1734-1749. • Chen, X., Kurdve, M., Johansson, B., & Despeisse, M. (2023). Enabling the twin transitions: Digital technologies support environmental sustainability through lean principles. <i>Sustainable Production and Consumption</i>, 38, 13-27.

	• Mele, G., Del Vecchio, P., & Passiante, G. (2025). Platform-based ecosystems and knowledge management for the circular economy: an in-depth analysis of Italian cases. <i>Journal of Knowledge Management</i>, 29(9), 3011-3030. • Mele, G., Miglietta, G., Passiante, G., Del Vecchio, P. (2026), Navigating the Twin Transition: Insights and Future Horizons, Springer Proceeding in Complexity (in press) • Montresor, S., & Vezzani, A. (2023). Digital technologies and eco-innovation. Evidence of the twin transition from Italian firms. <i>Industry and Innovation</i>, 30(7), 766-800. • Muench, S., Stoermer, E., Jensen, K., Asikainen, T., Salvi, M. and Scapolo, F., Towards a green and digital future, EUR 31075 EN, Publications Office of the European Union, Luxembourg, 2022, ISBN 978-92-76-52451-9, doi:10.2760/977331, JRC129319. • Myshko, A., Checchinato, F., Colapinto, C., Finotto, V., & Mauracher, C. (2024). Towards the twin transition in the agri-food sector? Framing the current debate on sustainability and digitalisation. <i>Journal of Cleaner Production</i>, 452. • Ogrean, C. (2023). Interplays between Artificial Intelligence and sustainability in business/management. A bibliometric analysis. <i>Studies in Business and Economics</i>, 18(2), 336-357. • Pan, X., Mangla, S. K., Song, M., & Vrontis, D. (2024). Climate policy uncertainty and entrepreneur eco-investment behavior for green growth—Moderate effect analysis of twin transition. <i>IEEE Transactions on Engineering Management</i>, 71, 8459-8468. • Perossa, D., Acerbi, F., Rocca, R., Fumagalli, L., & Taisch, M. (2023). Twin Transition cosmetic roadmapping tool for supporting cosmetics manufacturing. <i>Cleaner Environmental Systems</i>, 11, 100145. • Sjödin, D., Parida, V., & Kohtamäki, M. (2023). Artificial intelligence enabling circular business model innovation in digital servitization: Conceptualizing dynamic capabilities, AI capacities, business models and effects. <i>Technological Forecasting and Social Change</i>, 197, 122903. • Spaltini, M., Acerbi, F., De Carolis, A., Terzi, S., & Taisch, M. (2024). Toward a technology roadmapping methodology to enhance sustainable and digital transition in manufacturing. <i>Production & Manufacturing Research</i>, 12(1), 2298572
Track Chairs Please identify between 2 and 5 Track Chairs. For each Track Chair, provide: • Full Name • Affiliation • Country • Email address • Research interests (optional)	(1) Pasquale Del Vecchio, Associate Professor in Management Engineering, Department of Engineering, University LUM, Casamassima – Bari, Italy. Contacts: delvecchio@lum.it. Research fields: digital innovation, circular economy, data-driven business models. (2) Gioconda Mele, Assistant Professor in Management Engineering at the Department of Engineering for Innovation of the University of Salento (Lecce, Italy) – gioconda.mele@unisalento.it Research fields: digital transformation, circular economy, technological entrepreneurship. (3) Piera Centobelli, Associate Professor in Circular Resource Management at the Department of Industrial Engineering, University of Naples Federico II, piera.centobelli@unina.it. Research fields: circular economy, environmental, economic, and social sustainability, knowledge and technology management, logistics and supply chain management. (4) Stefano Abbate, Assistant Professor in Management Engineering, Department of Engineering, Pegaso University, Naples, Italy. Contacts: stefano.abbate@unipegaso.it. Research fields: digitalization, sustainability, circular economy. (5) Giovanna Attanasio, Tenure-track Researcher in Management Engineering at the Department of Engineering and Science, Mercatorum University, Rome, Italy. Contacts: giovanna.attanasio@unimercatorum.it Research fields: business model, sustainable and digital innovation, foresight.
Short biography of each organizer	1) Pasquale Del Vecchio, PhD, is an Associate Professor in Management Engineering at the Department of Engineering of University LUM. He held the PhD in ebusiness at the Scuola Superiori ISUFI – University of Salento, by spending in 2007 a period ad visiting PhD student

<i>Please provide a short biography for each Track Chair (maximum 200 words per biography)</i>	in the Center for Business Intelligence at MIT's Sloan School of Management. His research field concerns the issues of circular economy, data-driven business model innovation and digital transformation. He has been involved in research and innovation projects focused on the technological entrepreneurship for circular economy and smart destination management. These research activities have been documented in approximately 80 publications spanning international journals, conference proceedings and book chapters. (2) Gioconda Mele, Ph.D., is Assistant Professor in Management engineering at the Department of Engineering for Innovation of University of Salento. After a degree in Economics, she took her Master degree in "Business Innovation and Leadership" and her PhD in "e-business" at eBMS-ISUFI. Her main research areas concern Entrepreneurship Education & Entrepreneurial University, Business Models Innovation & Circular Economy, Social Media Big Data Analytics for value creation, with particular focus on Smart Tourism Destinations. Recently, she is also actively involved in research projects related to the topics of technology-based entrepreneurship by focusing on understanding the role of entrepreneurial universities and centers for developing skills and competencies as well as for economic growth of the territory. She is author of several publications in international journals and proceedings of international conferences, and volumes and monographs focused on Innovation Management & Entrepreneurship. (3) Piera Centobelli, Ph.D., is Associate Professor in Circular Resource Management at the Department of Industrial Engineering, University of Naples Federico II, Italy. From 2013 to 2016, she was affiliated with the Fraunhofer Joint Laboratory of Excellence on Advanced Production Technology (J-LEAPT) in collaboration with Fh-IWU Chemnitz. She has been a visiting faculty member in European business schools and polytechnics. She currently serves as Associate Editor for the international journals Business Strategy and the Environment and Corporate Social Responsibility and Environmental Management. She is also a member of the editorial board of the journal Sustainable Production and Consumption. Her research interests include circular economy, environmental, economic, and social sustainability, knowledge and technology management, operations management, logistics and supply chain management, decision support systems, Industry 4.0, digital transformation. She has authored more than one hundred articles published in international journals and conference proceedings and is recognized among the top 2% of scientists in the world by Stanford University. (4) Stefano Abbate is Assistant Professor in Management Engineering at the Department of Engineering of Pegaso University (Naples, Italy). He received the PhD in Technology, Innovation and Management and the M.Sc. degree in Engineering Management. He teaches "Supply Chain and Operations Management", "Project Management", and "Business Management Systems." His research focuses on sustainability and circularity in supply chain management, with particular attention to environmental aspects and the role of Industry 4.0 enabling technologies in enhancing green performance. (5) Giovanna Attanasio, PhD is a Tenure-track Researcher (RTT) at Universitas Mercatorum. Her scientific work lies at the intersection of Strategic and Innovation Management. The main topics covered include: strategic stakeholder management, innovation in digital and sustainable business models, and strategic foresight. Her work has been published in several international journals, including Business Strategy and the Environment, Corporate Social Responsibility and Environmental Management, Industry and Innovation and Journal of Engineering and Technology Management. She has been involved in several national and international research projects, addressing a range of topics, including the digitalization of SMEs. She is a member of the board of the AiIG SIG "Twin transition".
Corresponding Track Chair Please indicate the Track Chair who will serve as the primary contact person for all communications with the Conference Organizing Committee	Gioconda Mele, gioconda.mele@unisalento.it

