

DAY 1: THURSDAY 22nd MAY

DAY 1: Thursday 22nd May	Central European Time, GMT +2	Room 1				Room 2			
	9:30-9:40	Welcome ceremony							
	9:40-10:10	Keynote Speech: "Obsolescence Issues and Proactive Management for long-life cycles products and systems" by Vito Romaniello, Hitachi Rail							
Coffee break	10:10-10:20								
Parallel sessions 10:20-11:35		Paper ID	Authors	Title	Chair	Paper ID	Authors	Title	Chair
	10:20-10:35	47	Letizia Tebaldi and Laura Monferdini	OEE improvement using DMAIC and SMED approaches: An Italian case study within steel production field	Alessandra Cantini, Politecnico di Milano	103	Thomas Hes, Alex van der Helm, Nico Brand and Sergio España	Towards digital sustainability performance management: Designing data-driven Sustainability Performance Management Systems	Italo C. Fantozzi, University of Rome Tor Vergata
	10:35-10:50	11	Ker Hsin Ong, Sinyin Teh, Kenglin Soh and Michael Boonchong Khoo	The Trends of Statistical Process Control Charts with Machine Learning Based on VOSviewer and Scimago Graphica		70	Sirianni Sara	Revolution in Turbine Design and Maintenance: The Role of Digital Twin and Advanced Technologies	
	10:50-11:05	88	Paula Morella, Gabriel Aznar-Lapuente, Maria Pilar Lambán, Ignacio Gutierrez, Alejandro Raúl Razquín and Jokin Rubio	Development of a Standardized Methodology for Dynamic Indicator Calculation in Machine Tools Using Data Modelling		67	Zhang Naiheng, Ng Wei Chien and Teh Sin Yin	A Bibliometric and Visualization Analysis of Green Supply Chain Performance in Logistic Industry	
	11:05-11:20	56	Simone Pagano	Implementation of Industry 4.0 Technologies in Football for Player Performance Monitoring and Prediction		119	Zhi Tan, Wei Chien Ng and Sin Yin Teh	Sustainable and Efficient Agritourism Supply Chains: Insights from a Bibliometric Analysis	
	11:20-11:35	124	Antonio Javier Nakhhal Akel, Sanshodhan Shende, Massimo Tronci, Lorenzo Fedele and Giulio Di Gravio	Industrial risk assessment in the modern era - A new in- terpretation of the Black-Sholes-Merton		15	Laura Cambronero, Kita Sobczyk, Andrés Caballero-Calvo, José Luis Serrano Montes, Esteban Romero Frías and Jesús Rodríguez-Correa	Development of a DSS (Decision Support System) for Sustainable Soil Management in Viticulture	
Coffee break	11:35-11:50								
Parallel sessions 11:50-13:05	11:50-12:05	98	Alessandro Neri, Leonardo Leoni, Maria Angela Butturri and Rita Gamberini	Mapping firm capabilities in implementing Digital Product Passports: a resource-based view perspective	Francesco Mancusi, University of Basilicata	23	Kusum Kanan Mishra and Mridanish Jha	Sustainable Leadership in Indian Manufacturing: Insights from SEM and ANN Analysis	Valentina De Simone, University of Salerno
	12:05-12:20	118	Andrea Gatto, Raffaele Mattera and Demetrio Panarello	Integrating Generative AI into sales forecasting: A novel framework for enhanced performance measurement and strategic decision-making		22	Mehmet Karahan, Turgay Yildirim and Zafer Yildirim	Calculation of International Digital Competitiveness Performance with Entropy Based PROMETHEE Method and Comparative Analysis of Türkiye with Other Countries	
	12:20-12:35	6	Sobia Jamil and Mustafa Hyder	From Socialization to Commitment: How Inclusive Practices Drive Employee Performance in Diverse Workforces		38	Mariantonietta Ferrante, Micaela Vitti and Claudio Sassanelli	Indexes for assessing Circular Economy performance in industry: a systematic literature review	
	12:35-12:50	58	Fausto Cimaschi	Integration of IoT, CPS and AI for efficient, sustainable and competitive management of a cinema		21	Amar Shankar Mishra and Shovona Choudhury	Exploring the Impact of Green Entrepreneurial Orientation on Corporate Green Performance: The Mediating Role of Green Innovation in Indian Manufacturing Firms	
	12:50-13:05	36	Raid Al-Aomar	Simulation-based Value Stream Digital Twin: A Platform for Real-Time Supply Chain Performance Management		43	Ahmet Yasin Erten and Ufuk Cebeci	Developing a Digital Twin System for Predicting Usage of Istanbul Metro Lines Using Smart Card Data	
Lunch break	13:05-14:00								
Parallel sessions 14:00-15:30	14:00-14:15	115	Panagiotis G. Giannopoulos, Giannis T. Tsoufas, Vasileios Zeimpekis and Thomas K. Dasaklis	Enhancing sustainable performance in last-mile distribution: a dynamic framework integrating deep reinforcement learning and multi-criteria decision analysis	Fabio Fruggiero, University of Basilicata	64	Simona Camilla	Artificial Intelligence for the enhancing Environmental, Social and Economic Sustainability	Laura Monferdini, University of Parma
	14:15-14:30	116	Panagiotis G. Giannopoulos, Vangelis Malamas, Nikolaos P. Rachaniotis and Thomas K. Dasaklis	Siamese Neural Networks-infused framework for improving the performance of hybrid production systems		79	Muhammet Enis Bulak and Mohamad Ali Chebli	Hybrid Simulation for Supply Chain Performance Optimization	
	14:30-14:45	82	Michela Lanzini, Enzo Morosini Frazzon, Silvia Cardini and Simone Zanon	Integrating MES data into Data-Driven Discrete Event Simulation models: a case study		81	Gianluca Fratta and Andrea Rossi	Enhancing the introduction of green practices in manufacturing plants through the use of machine learning: observation on a real case study.	
	14:45-15:00	127	Aizi Mouna and Bouyaya Linda	Optimizing the Vehicle Routing Problem with Time Win- dows using Particle Swarm Optimization: A Case Study of Naftal		20	Hazem Aldabbas and Maria Gianni	The Impact of Open Innovation Types on Digital Transformation: A Moderation Model of Digital Strategy	
	15:00-15:15	140	Saeedeh Mosafarchi and Alireza Mortezapour	Aging Human ware in Industry 4.0: A Bibliometric Survey		99	Juan Ignacio Alvarez, Daniel A. Rossit, Marisa Sanchez and Fernando Tohme	Strategic Business alliance of small producers to improve remanufacturing management	
	15:15-15:30	141	Seyed Abolfazl Zakerian, Alireza Mortezapour and Saeedeh Mosafarchi	From Learning to Practice: The Structural Equation Modeling Evidence on Nursing Performance		86	Youssef Joucha, Anass Cherrafi, Nadia Hamani, Said Elfezazi and Khadija Echefaj	Assessing the Effectiveness of Current Performance Measurement Systems in the Context of Industry 5.0	
Coffee break	15:30-15:50								
Parallel sessions 15:50-17:05	15:50-16:05	16	Santiago Echeandia, Ariana Velarde Bartra and Marcos Fernando Ruiz-Ruiz	Supply Chain and Productivity Improvement for the Flexography Process in a Peruvian Cardboard Manufacturing Plant through TPM and 5S Methodologies	Mario Caterino Univerist of Campania Luigi Vanvitelli	133	Silvia Alvarez-Ponce, Fernando Gómez-Suárez and Gianella Hilber-Muro	Proposal for improvement to increase efficiency of opera- tors using 5S and SLP in a garment manufacturing work- sho	Francesco Mancusi, University of Basilicata
	16:05-16:20	30	Alessia Mejia-Torres, Gian Moron-Moron and Marcos Fernando Ruiz-Ruiz	Improvement of Productivity in the Production Process of a Metalworking Company Through Lean Tools and SLP		34	Karen Alejandra Taboada-Sara, Gina Trujillo-Lopez, Marcos Fernando Ruiz-Ruiz and Nicolás Salazar-Medina	Ergonomic Applications to Reduce the Risk of Musculoskeletal Disorders and Improve Occupational Well-Being in the Manufacturing Area of a Textile Workshop	
	16:20-16:35	27	Carlos Alonso Gonzales-Merino, Macarena Miguel-de-Priego-Sánchez and Marcos Fernando Ruiz-Ruiz	Comprehensive Process Improvement in a Textile Testing Laboratory with a Time – Centric Approach. A case study		28	Fiorella García-Orrego, Karen Jara-Carrasco and Marcos Fernando Ruiz-Ruiz	Improving Logistics Performance through Demand Forecasting and Picking Time in Inventory Management: The Case of a Peruvian Electrical Resistance Company	
	16:35-16:50	24	José Jesús Álvarez-Huamán, Mateo Joaquín Martos-Yon and Marcos Fernando Ruiz-Ruiz	Optimization of Productivity Through the Redesign of the Material Handling System and Preventive Maintenance: The Case of a PET Recycline Comomn for Polyester Fiber		26	Andrea Lam-Mau, Adrianna Marie Meza-Bustamante and Marcos Fernando Ruiz-Ruiz	Inventory Optimization for Reduction of Costs in Restaurants based on Modelation. A Case Study	
	16:50-17:05	107	Alfakhduddin, Tan Kaitlynn Eleanor Poo, Ovrillia Praditha, Anindita Aulia Jasmine, Muhril Ardiansyah and Fakhri Makarim	Digital Infrastructure and Competence as Drivers of Performance in Manufacturing and Services		25	Fernanda Bautista-Otiniano, Aimi Daniela Kamego-Benel and Marcos Fernando Ruiz-Ruiz	Implementation of Lean 5S and Kanban in a Medical Equipment Maintenance Company: a case study	
First day closure	17:05-17:10								

DAY 2: FRIDAY 23rd MAY

	Central European Time, GMT +2	Room 1				Room 2			
DAY 2: FRIDAY 23rd MAY	8:50-9:00	2nd day introduction							
	9:00-9:30	Keynote Speech by Jan Olhager Professor Emeritus, Supply Chain and Operations Strategy Lund University LTH Dept. of Industrial and Mechanical Sciences							
Coffee break	9:30-9:45								
		Paper ID	Authors	Title	Chair	Paper ID	Authors	Title	Chair
Parallel sessions 9:45-11:00	9:45-10:00	1	Max Di Ciccio and Koorosh Gharehbaghi	The importance of recycling materials within the Australian residential construction sector	Laura Monferdini, University of Parma	5	Bin Xu, Sin Yin Teh and Sajal Saha	Statistical Process Control in Manufacturing Industry: A Bibliometric Analysis and Future Directions	Alessandra Cantini, Politecnico di Milano
	10:00-10:15	3	Abdi-Raqib Mohamed and Koorosh Gharehbaghi	Measuring the characteristics of asbestos present in both Australian residential and commercial building structures		52	Shu Bee Soon, Sin Yin Teh and Keng Lin Soh	biometric and Visualization Analysis of Smart Manufacturing in Semiconductors: Past Trends and Emerging Futures	
	10:15-10:30	104	Laura Vaccari, Francesco Lolli, Antonio Maria Coruzzolo and Rita Gamberini	Resilience in Supply Chains: A Review of Key Metrics, Disruption Models, and Simulation Approaches		60	João Pereira, Ângela Silva and Ana C. Ferreira	Integration of Lean principles and digitalization on the production planning and control: a case study in textile sector	
	10:30-10:45	13	Carla Morrone, Salvatore Ferri and Giacomo Gotti	How does transparency shape the financial impact of environmental externalities?		53	Lorenzo Pristipino	Literature review on Artificial Intelligence based solutions to enhance Agriculture performance	
	10:45-11:00	93	Carlos Henrique Lopes Resende, Carla A. S. Geraldes and Francisco Rodrigues Lima Junior	A Hesitant Fuzzy Linguistic QFD Model for Supplier Selection in the Industry 4.0 Era		54	Marko Mladineo, Marina Crnjac Zizic, Ivica Veza and Vili Milkovic	Modeling of Industry 4.0/5.0 production system: Case study of Croatian manufacturing industry	
Coffee break	11:00-11:20								
Parallel sessions 11:20-12:45	11:20-11:35	142	Carmine Attanasio and Alireza Mortezapour	Quality of explanation of xAI from the perspective of Italian end-users: Italian version of System Causability Scale (SCS)	Italo C. Fantozzi, University of Rome Tor Vergata	51	Federico Briatore, Daniele Binci and Giorgia Masili	Lean manufacturing and Industry 4.0: a bibliometric review about applications, synergies and adoption barriers	Mario Caterino, University of Campania Luigi Vanvitelli
	11:35-11:50	113	Pankaj Kant, Sanjay Gupta, Pavan Kumar Machavarapu and Aditi Mitra Ghosh	An Agent-Based Modelling & Simulation (ABMS) Approach to Assess the Optimum Fleet Size in City Logistics Realm – Case of Jaipur City in India		85	Laura Monferdini, Giorgia Casella and Eleonora Bottani	Distribution Network Reconfiguration: An Italian Logistics Case Study	
	11:50-12:05	134	Carlo Calazzo, Patrick Dallasega and Luca Gualtieri	Evaluating Inclusion through KPIs: Integrating Assistive Technologies to Support Workers with Disabilities in In- dustry 5.0		10	Constantin Florin Bogdea, Nicoleta Mirea, Ionel Lungu, Anca Draghici and Larisa Victoria Constantin	STEMing the Future Smart Cities: Sustainable Vehicle Lifecycle Innovations for Smart Mobility	
	12:05-12:15	66	Aadra Bharat Kumar, Vaibhav Sharma, Ayush Agrawal	Benchmarking of Best Practices in Solar PV E-Waste Policy for India		14	Nicoleta Manta, Sérgio Sousa and Irina Severin	The impact on quality costs and customer satisfaction due to operational changes in the quality management system	
	12:15-12:30	76	Ibrokhimjon Khamidov, Federica Costa and Alberto Portioli Staudacher	Combining Environmental VSM with LCA: Action Research in oil and gas industry manufacturing		50	Turlapati D S N S Venkatesh, Vaibhav Sharma, Satyajit Mahato and Rajeev Agrawal	Sustainable multi-compartment vehicle routing for medical waste management	
	12:30-12:45	77	Ibrokhimjon Khamidov, Federica Costa and Alberto Portioli Staudacher	Barrier and driver factors for green manufacturing within Lean: Exploratory survey of case studies (Primary results)		61	Mohamed El Aallami, Anass Cherrafi, Said Elfezazi and Khadija Echefaj	A Practical Framework for IoT Sensors Implementation Towards Prescriptive Maintenance	
Lunch break									
Parallel sessions, 14:00-15:45	14:00-14:15	110	Anna Presciuttini, Alessandra Cantini and Alberto Portioli-Staudacher	A Rule-Based Anchors Approach to Transparent and Actionable Machine Learning in Manufacturing	Valentina De Simone, University of Salerno	121	Laura Simões, Ana C. Ferreira and Ângela Silva	Enhancing Communication and Retail Operations through Digital Tools Implementation	Francesco Mancusi, University of Basilicata
	14:15-14:30	94	Serena Coito Ruiz and Daniel Rossit	Development of a Digital Twin for Maintenance Management in the energy industry: a case study		57	Khleef Alkhawaldeh	The impact of innovation on return on investment in Jordanian industrial companies: the mediating role of innovation culture	
	14:30-14:45	71	David Massetti, Tiziano Miroglio and Mehdi Raoofi	Bridging Innovation and Sustainability: The Role of Generative AI, Digital Twin, and Simulation Modeling with Measurable KPIs in Industry 4.0 and 5.0		41	Andreea Madalina Alexandru and Irina Severin	Supply chain optimizing using Optim 3D Algorithm	
	14:45-15:00	48	Hassina Madjour, Hanane Zermane, Ufuk Cebeci and Rahmouni	Basic Experiments on Predictive Maintenance of Naval Propulsion System using small-scale Machine Learning		37	Chiara Forgone, Antonio Maria Coruzzolo, Francesco Lolli and Rita Gamberini	Health Resource Planning: A Systematic Literature Review	
	15:00-15:15	90	Juan Arza, Germán Prieto and Daniel Rossit	Resilience management to improve digital transformation processes in SMEs		8	Zineb Aktef, Anass Cherrafi, Khadija Echefaj and Said Elfezazi	Industry 5.0 enablers of circular economy in the context of maintenance 5.0	
	15:15-15:30	45	Pantelis Baxevanidis Taros, Maria Gianni, Katerina Gotzamani and Argyro Fragkaki	Embedding Lean Principles and Digital Transformation into Organizational Culture: Effects on Industry 4.0 Adoption and Corporate Sustainability Performance – A Case Study in Metal Processing		136	Adnan Hussain and Patrizia Garengo	Impact of Artificial Intelligence on HRM Practices: A Systematic Literature Review	
	15:30-15:45	63	Salem Alateyyat, Ayham A. M. Jaaron and Eghosa Igudia	Does Team Culture Alone Ensure High Performance in Non-Profit Organizations?		68	M. Mujiya Ulkhaq	Global logistics efficiency: A benchmarking study using data envelopment analysis and the 2023 logistics performance index	
Closing ceremony	15:45-16:00								