

# International Joint Conference on Industrial Engineering and Operations Management

June 28-30, 2023 – Lusófona University – Lisbon, Portugal

## Wednesday, June 28

13:00 – 14:00 **Registration**

14:00 – 14:30 **Open session**

Place: Auditorium Agostinho da Silva

14:30 – 15:30 **Bidanda Bopaya (Pittsburg University, USA)**

Place: Auditorium Agostinho da Silva

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### **15:30 – 16:00 Coffee break**

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16:00 – 17:00 **Session 1**

Room D.0.1.: 37660, 37791, 37671, 37732 (Session Chair Pedro Carmona)

Room D.1.10.: 37672, 37677, 37679, 37684 (Session Chair Miguel Vieira)

Room D.1.11.: 37689, 37692, 37842, 37801 (Session Chair Diana Jorge)

## Thursday, June 29

09:00 – 10:00 **Session 2**

Room D.0.1.: 37757, 37765, 37767, 37770 (Session Chair Pedro Marques)

Room D.1.10.: 37774, 37775, 37781, 37782 (Session Chair Ricardo Mateus)

Room D.1.11.: 37797, 37811, 37814, 37819 (Session Chair Pedro Carmona)

Room D.1.12.: 37779, 37793, 37688, 37807 (Session Chair Francisco Pinto)

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### **10:00 – 10:30 Coffee break**

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10:30 – 11:30 **Josefa Mula Bru (UPV, Spain)**

Place: Auditorium Agostinho da Silva

11:30 – 12:30 **Session 3**

Room D.0.1.: 37687, 37690, 37691, 37693 (Session Chair Pedro Marques)

Room D.1.10.: 37707, 37728, 37729, 37736 (Session Chair Ricardo Mateus)

Room D.1.11.: 37739, 37743, 37762, 37766 (Session Chair Pedro Carmona)

Room D.1.12.: 37731, 37772, 37755 (Session Chair Francisco Pinto)

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### **12:30 – 14:00 Light lunch**

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**14:00 – 15:00 Fosso Wamba Samuel (TBS Education, France)**

Place: Auditorium Agostinho da Silva

**15:00 – 16:00 Special Session – Open Access Journals: Advantages and Risks**

Round Table: João Reis, Francisco Gaudêncio, TBD

Place: Auditorium Agostinho da Silva

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**16:00 – 16:30 Coffee break**

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**16:30 – 17:30 Session 4**

Room D.0.1.: 37820, 37828, 37829, 37697 (Session Chair Francisco Pinto)

Room D.1.10.: 37708, 37716, 37719, 37840 (Session Chair Miguel Vieira)

Room D.1.11.: 37746, 37748, 37730, 37694 (Session Chair Diana Jorge)

**19:30/22:00 – Social Dinner\*** (Bar closes at midnight)

Mensagem Restaurant. Address: Rua da Oliveira ao Carmo, 8, 1200-309, Lisbon

\*Only the dinner is included in the conference

## **Friday, June 30**

**09:00 – 10:00 Session 5**

Room D.0.1.: 37726, 37740, 37734, 37666 (Session Chair Ricardo Ferraz)

Room D.1.10.: 37701, 37703, 37709, 37676 (Session Chair Adriane Cavaliere/Luis Malheiro)

Room D.1.11.: 37667, 37678, 37686, 37823 (Session Chair Francisco Gaudêncio)

**10:00 – 11:00 Session 6**

Room D.0.1.: 37830, 37837, 37839, 37718 (Session Chair Ricardo Ferraz)

Room D.1.10.: 37798, 37802, 37810, 37816 (Session Chair Adriane Cavaliere/Luis Malheiro)

Room D.1.11.: 37834, 37836, 37827 (Session Chair Francisco Gaudêncio)

Room D.1.12.: 37771, 37776, 37790 (Session Chair Raphael Vidal)

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**11:00 – 11:30 Coffee break**

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**11:30 – 12:30 Keynote Douglas Kent (ASCM, USA)**

Place: Auditorium Agostinho da Silva

**12:30 – 13:00 Awards & Closing Session**

Code	Title	Area	First Author	Institution	Country
37660	Blockchain application for the supply chain optimization	02.Circular Economy and Sustainable Operations and Supply Chain Management	Pedro Marques	Lusófona University	Portugal
37666	Industrial production and economic growth since the 50s: analysing the Portuguese case using kaldorian and causality approaches	08.Information Systems in Operations	Ricardo Ferraz	Lusófona University	Portugal
37667	Procedural Switching Costs: Scaling using the Item Response Theory	02.Circular Economy and Sustainable Operations and Supply Chain Management	Eduardo Tramontin Castanha	Universidade Federal de Santa Catarina - UFSC	Brazil
37671	Suicide prediction in workers using Neural Networks and stress-related factors	09.Innovation, Product and Service Development	Daniel Alejandro Barajas Aranda	Universidad Autonoma de Aguascalientes	Mexico
37672	Method to improve Supplier Control aiming at Operational Excellence	03.Digital Transformation and Data Science	Jose Cristiano Pereira	UCP	Brazil
37676	Social-environmental effectiveness of IoT: structure and a proposal of an assessment tool	10.Last Mile Delivery Optimization	Adriane Monteiro Cavalieri Barbosa	Instituto Nacional de Tecnologia (MCTI)	Brazil
37677	Optimisation Models for Scheduling Extraordinary University Exams with a Minimum Rest Time between Consecutive Exams	01.General Topics of Production and Industrial Engineering	Ana Esteso Álvarez	Universitat Politecnica de Valencia	Spain
37678	Circular and Sustainable productive processes: An approach to the practices adopted in the Industrial Pole of Manaus-AM	10.Last Mile Delivery Optimization	Thiago Azevedo Conte de Melo	Universidade Federal do Amazonas	
37679	Diagnosis Model Proposal for Improvement Opportunity in Project Management: An approach from the perspective of lean waste	01.General Topics of Production and Industrial Engineering	Marcelo Silva Pereira	Eldorado Research Institute	Brazil

<b>37684</b>	Analysis of Dentists Allocation in Health Care Centers: A Case of Qatar	12.Logistics and Supply Chain Management	Reem Hassan A Alabdulmalik	College of Engineering, Qatar University	Qatar
<b>37686</b>	Using robust approach concept to solve the production planning problem in manufacturing systems	01.General Topics of Production and Industrial Engineering	Marcelo Carneiro GonÁalves	Pontifical Catholic University of Paraná	Brazil
<b>37687</b>	Predicting project sales prices using machine learning techniques: a case study in a project consultancy	04.Healthcare Management	Marcelo Carneiro GonÁalves	Pontifical Catholic University of Paraná	Brazil
<b>37688</b>	Digital technologies and Lean 4.0: Integration, Benefits and Areas of Research	01.General Topics of Production and Industrial Engineering	Giovanna Bueno Marcondes	Universidade Tecnológica Federal do Paraná	Brazil
<b>37689</b>	Continuous improvement related performance: a bibliometric study and content analysis	03.Digital Transformation and Data Science	Giovanni Cláudio Pinto Conde	Federal University of São Carlos, UFSCar	Brazil
<b>37690</b>	A decomposition scheme in production planning based on linear programming that incorporates the concept of a dynamic planning environment	01.General Topics of Production and Industrial Engineering	Izamara Cristina Palheta Dias	Pontifical Catholic University of Paran <sup>o</sup>	Brazil
<b>37691</b>	5g Technology And The Economic Impact On Industry 4.0 (A Microeconomic Analysis)	05.Human development and digital training for operation management in emergencies	Francisco Andrade	Universidade Candido Mendes UCAM RJ BR	Brazil
<b>37692</b>	Financial multiobjective optimization of hybrid PV-wind generation with energy storage systems	08.Information Systems in Operations	Arthur Leandro Guerra Pires	Universidade Federal da Paraíba	
<b>37693</b>	Risk Management in the Context of Industry 5.0	09.Innovation, Product and Service Development	Vitor Hugo dos Santos Filho	Universidade Tecnológica Federal do Paraná - UTFPR/PG	Brazil

<b>37694</b>	Selective Openness in the Additive Manufacturing Industry: An Exploratory Modeling Analysis	06.Humanitarian Operations Management	Pedro Nascimento de Lima	RAND Corporation	
<b>37697</b>	Environmental and financial optimization: Hybrid generation (wind-PV) with battery energy storage	10.Last Mile Delivery Optimization	Arthur Leandro Guerra Pires	Universidade Federal da Paraiba	
<b>37701</b>	Project management in hospital environments: a 5-year systematic literature review	12.Logistics and Supply Chain Management	Erik Teixeira Lopes	University of Minho	Brazil
<b>37703</b>	Preparing Human Factors for Digital Transformation: A Framework for Innovations in Industrial Engineering Education	11. Production Engineering Education	Carolina Maia dos Santos	CEFET/RJ	Brazil
<b>37707</b>	Strategic Thinking and Mental Models: Comparison Between Brazilian and Spanish Students - Implications for the Teaching-Learning Process	11.Lean and Agile Operations	Flávio Bressan	BREMAT Institute for Strategic Thinking & Leadership	Brazil
<b>37708</b>	Data Driven to Improve Root Cause Analysis: A Bibliometric Analysis	03.Digital Transformation and Data Science	Juan Pablo Carrión Salazar	Universidad Católica del Norte	
<b>37709</b>	BIM critical factors-based framework towards digitalization of construction in the public sector	13.Operations in the Public Sector	Carlos Alejandro Diaz Schery	Pontifical Catholic University of Rio de Janeiro	Brazil
<b>37716</b>	Pathways to achieve resilience in rare earth magnets supply chain	02.Circular Economy and Sustainable Operations and Supply Chain Management	Jéssica Prats Raspini	Federal University of Santa Catarina	Brazil
<b>37718</b>	Analysis of the ANEEL Consumer Satisfaction Index through the application of Item Response Theory	01.General Topics of Production and Industrial Engineering	Anny Key de Souza Mendonça	Federal University of Santa Catarina - UFSC	Brazil
<b>37719</b>	Economic analysis of the wind energy generation: overview and current perspectives	02.Circular Economy and Sustainable Operations and Supply Chain Management	Luiz Célio Souza Rocha	Federal Institute of Education, Science and Technology of the	Brazil

				Northern Minas Gerais (IFNMG)	
<b>37726</b>	An environmental analytical model to assess the decarbonization potential of Municipal Solid Waste-based hydrogen production routes	02.Circular Economy and Sustainable Operations and Supply Chain Management	Francesco Facchini	Polytechnic University of Bari	Brazil
<b>37728</b>	Strategic guidelines for sustainable procurement of infrastructure capital projects in the oil and gas industry	02.Circular Economy and Sustainable Operations and Supply Chain Management	Luciana Salvatore	Pontifical Catholic University of Rio de Janeiro	
<b>37729</b>	The application of an improvement opportunity model in the reduction of the response time of users from the User Trial program	11.Lean and Agile Operations	Matheus Venturini de Toledo	Eldorado Research Institute	
<b>37731</b>	Application of the Sugeno-Takagi-Kang fuzzy logic for demand forecasting in the supply chain, a Fuzzy temporary series forecast model (FTS) proposal	12.Logistics and Supply Chain Management	Francisco Trejo	Universidad Anahuac Mexico	Mexico
<b>37732</b>	Bullwhip effect in the supply chain: an exploratory study in a Brazilian company Mapping the interlinkages between	12.Logistics and Supply Chain Management	Isabela Maganha	Universidade Federal de Itajubá	Brazil
<b>37734</b>	Humanitarian Operations and Sustainable Development Goals through literature review	06.Humanitarian Operations Management	Maria Angélica Gomes da Silva	Pontifical Catholic University of Rio de Janeiro	Brazil
<b>37736</b>	Circular Economy Investments: A Portfolio Selection Framework	02.Circular Economy and Sustainable Operations and Supply Chain Management	Guilherme Candia Donat	Universidade Federal do Rio Grande do Sul	Brazil
<b>37739</b>	Simulation Model of Natural Gas Demand for Contracting Decision in High Thermal Dispatch Scenarios	12.Logistics and Supply Chain Management	Rebeca da Silva Oliveira Farias	Pontifical Catholic University of Rio de Janeiro	Brazil

<b>37740</b>	Human Performance of Manual Sorting: a Stochastic Analytical Model	01.General Topics of Production and Industrial Engineering	Andrea Lucchese	Polytechnic University of Bari	Italy
<b>37743</b>	Measurement of performance in SMEs: Bibliometric analysis (2015 - 2021)	01.General Topics of Production and Industrial Engineering	Juan José Analuisa	Escuela Politécnica Nacional	
<b>37746</b>	Quality evaluation of the public policy São Paulo State Network of Technological Incubators (RPITec)	13.Operations in the Public Sector	Gabriela Dias Viana	Blue3 Investimentos	Brazil
<b>37748</b>	Quality measurement of the public policy São Paulo State Technological Parks System (SPTEc)	13.Operations in the Public Sector	Paulo Renato Pakes	Universidade Federal de São Carlos	Brazil
<b>37755</b>	Can the value chain of mining tires be circular?: The case of Chilean Mines	02.Circular Economy and Sustainable Operations and Supply Chain Management	Isabel Margarita Ordenes Sarabia	Universidad Católica del Norte	Chile
<b>37757</b>	Machine Learning Applied to Industrial Assembly Lines: a Bibliometric Study	07.Industry 4.0 and Cyber physical systems	Diego Cesar Florencio de Queiroz	University of Brasilia	Brazil
<b>37762</b>	Artificial Intelligence Applications for Defect Detections in Industrial Processes: a Bibliometric Analysis	07.Industry 4.0 and Cyber physical systems	Diogo Gomes de Sousa Bezerra	University of Brasilia	Brazil
<b>37765</b>	Project Management Office and Teaching and Learning Center: A Comparative Literature Review	21.Teaching and Learning in Industrial Engineering and Operations Management	Eric Alberto Quinaglia	Universidade de São Paulo - USP	Brazil
<b>37766</b>	Improving the management and allocation of maintenance and cleaning of a university campus infrastructure using a discrete event simulation model	14.Operations Research	César A. Corrales	Pontificia Universidad Católica del Perú	Peru

<b>37767</b>	Main musculoskeletal disorders in virtual modality students	01.General Topics of Production and Industrial Engineering	César A. Corrales	Pontificia Universidad Católica del Perú	Peru
<b>37770</b>	PMS-SMEs network: a framework to measure the performance of SMEs in a collaborative context	01.General Topics of Production and Industrial Engineering	Ximena Rojas-Lema	Escuela Politécnica Nacional	Ecuador
<b>37771</b>	Use of Transportation Problem in a water company	14.Operations Research	Pamela Adelino Ramos	UFPB	Brazil
<b>37772</b>	Investigation of operational parameters that affect the use of drones in goods? stock count process: Evidence from experimental results	12.Logistics and Supply Chain Management	Nikolaos Christoforos Thomaidis	University of the Aegean	Greece
<b>37774</b>	Asset prioritization for predictive maintenance in the context of Industry 4.0: A group multicriteria approach	15.Operations Strategy Planning, Scheduling and Control	Jaqueline Alves do Nascimento	Pontifical Catholic University of Rio de Janeiro	
<b>37775</b>	Barriers, enablers and base Industry 4.0 technologies of digital transformation in supply chains: an inter-country comparison	07.Industry 4.0 and Cyber physical systems	Lia Denize Piovesan	Pontifical Catholic University of Rio de Janeiro	Brazil
<b>37776</b>	Lean Green Tendency: A Systematic Literature Review	11.Lean and Agile Operations	Cláudia Margarida Ramos de Sousa e Silva	Águeda School of Technology and Management (ESTGA-UA)	Portugal
<b>37779</b>	Analysis of Gender and Programming Experience as Mediators between Attitudes toward Programming and Computational Thinking among Engineering Students	21.Teaching and Learning in Industrial Engineering and Operations Management	Isotilia Costa Melo	Universidad Católica del Norte (UCN)	Chile
<b>37781</b>	Implications of COVID-19 on the use of public transport in São Paulo, Brazil	23.Transport System Engineering	Cecília Aparecida Pereira	Federal University of Itajubá	Brazil



<b>37782</b>	Big Data Analytics to identify failures in production machines and propose a preventive maintenance plan	01.General Topics of Production and Industrial Engineering	Valdir H. Cardoso	FEI University	
<b>37790</b>	The implementation of Lean Healthcare six sigma in a Public Hospital	04.Healthcare Management	Cynara Mendonca Moreira Tinoco	Goiás Federal University	Brazil
<b>37791</b>	Systematic literature review on reverse logistics of waste electrical and electronic equipment: recommendations and opportunities for future research	02.Circular Economy and Sustainable Operations and Supply Chain Management	Flávia Gontijo Cunha	Federal University of Itajubá	Brazil
<b>37793</b>	Investigating and measuring small and medium enterprises (SMEs) performance in the context of digital transformation (DT): An approach encompassing the triple bottom line (TBL) of sustainability	03.Digital Transformation and Data Science	Isotilia Costa Melo	Universidad Católica del Norte (UCN)	Chile
<b>37797</b>	Efficiency Analysis of Classes from an Engineering Course in South America	21.Teaching and Learning in Industrial Engineering and Operations Management	Paulo Nocera Alves Júnior	Universidad Católica del Norte (UCN)	Brazil
<b>37798</b>	Operations strategies in the recruitment process pre-exposure prophylaxis to HIV	04.Healthcare Management	Carlos Jefferson de Melo Santos	PrEPara Salvador - UFBA	Brazil
<b>37801</b>	Testing the "Wheel of Slavery" theoretical framework in Brazilian supply chains	20.Supply Chain Risk Models and Resilience	Rodrigo Martins Baptista	Universidade Presbiteriana Mackenzie	Brazil
<b>37802</b>	Critical factors for the implementation of integrated management systems: an analysis using AHP	22.Total Quality Management	Isabela Maganha	Universidade Federal de Itajubá	Brazil
<b>37807</b>	Edtechs in the context of the industry in digital transformation: main research directions	05.Human development and digital training for operation management in emergencies	Jocasta Oliveira Maciel	Universidade Tecnológica Federal do Paraná	Brazil

<b>37810</b>	Proposal for productivity indicators through the Manufacturing Execution Systems	08.Information Systems in Operations	Carlos Jefferson de Melo Santos	PrEPara Salvador - UFBA	Brazil
<b>37811</b>	Evaluation of the implementation of recycling, reuse, remanufacturing, and reduction in the reverse chain of Brazilian WEEE: a survey study in electronics companies	02.Circular Economy and Sustainable Operations and Supply Chain Management	Geraldo Cardoso de Oliveira Neto	FEI University, São Paulo, Brazil	
<b>37814</b>	Design of a controller by pole placement applied to a production and inventory system	01.General Topics of Production and Industrial Engineering	Veronica Olvera Rodriguez	Universidad Nacional Autonoma de Mexico	Mexico
<b>37816</b>	Industry 4.0: impact on productivity, ergonomic aspects and workers' mental health, a literature review	01.General Topics of Production and Industrial Engineering	Juliana Bezerra Gomes de Pinho Pessoa	University of Minho	Brazil
<b>37819</b>	Analysis of performance indicators in orders pickup: physical volume vs human factor	17.Retail Operations	Cynara Mendonca Moreira Tinoco	Gois Federal University	Brazil
<b>37820</b>	Skills for transmitting concepts related to entrepreneurship: measurement using the item response theory	21.Teaching and Learning in Industrial Engineering and Operations Management	Thayanne alves ferreira	Universidade Estadual do Maranhão	Brazil
<b>37823</b>	An analysis of the guidelines for training managers to improve their Industry 4.0 knowledge considering four theories of administration	07.Industry 4.0 and Cyber physical systems	Gustavo Tietz Cazeri	UNICAMP - State University of Campinas	Brazil
<b>37827</b>	On Resilience and Mental Models: a Proposed Theoretical Analysis	05.Human development and digital training for operation management in emergencies	Flávio Bressan	BREMAT Institute for Strategic Thinking & Leadership	Brazil
<b>37828</b>	Business Process Management and Digital Information and Communication Technologies in Public Sector	13.Operations in the Public Sector	Vitor da Silva Palacios	UNESP	Brazil

<b>37829</b>	Economic risk prevention model for Micro and Small Enterprises	09.Innovation, Product and Service Development	Jesus Raymundo Rivera Aguilera	Pontifícia Universidade Católica do Rio de Janeiro	Brazil
<b>37830</b>	Analysis of a logistics process between a food service distributor and a fast-food chain	12.Logistics and Supply Chain Management	Silmara Alexandra da Silva Vicente	Universidade Presbiteriana Mackenzie	Brazil
<b>37834</b>	Multicriteria decision for electrified vehicles selection using analytical hierarchy process method	14. Operations Research	Angelo Marcio Oliveira Sant'Anna	UFBA	Brazil
<b>37836</b>	Process monitoring applied to performance indicators of manufacturing process	22. Total Quality Management	Angelo Marcio Oliveira Sant'Anna	UFBA	Brazil
<b>37837</b>	Design of a corporate training academy - The case study of a pharmaceutical company	05.Human development and digital training for operation management in emergencies	Albuquerque	Lusófona University	Portugal
<b>37839</b>	Research on Potential Usage of Residual Biomass in Marine Ports	02.Circular Economy and Sustainable Operations and Supply Chain Management	Margarita Matias Robaina	University of Aveiro	Portugal
<b>37840</b>	An approach to the design of resilient biomass supply chain using discrete event simulation	02.Circular Economy and Sustainable Operations and Supply Chain Management	Miguel Vieira	Lusófona University	Portugal
<b>37842</b>	Investigation of a Competitive Transport Market Considering Demand Uncertainty and Risk Attitude of Shipping Companies	12.Logistics and Supply Chain Management	Hossein Zolfagharinia	Toronto Metropolitan university	Canada