

Table of Content

6th European Conference on Industrial Engineering and Operations Management
Lisbon, Portugal, July 18-20, 2023

Title	Page
Cover Page	
Title	ii
Masthead	iii
Welcome	v
Committee	vi
Table of Content	xxii

ID	<u>Title</u>	<u>Page</u>
	Evaluating the Effectiveness on AR Filters: The Mediating Role of Technology	1
3	Acceptance, Customer Satisfaction, Loyalty, and Behavioral Intention	
	Study of How the Experience and Behavior of Consumers are Affected by User	3
4	Experience (UX) Design in the Online Fashion Retailing Industry	
	A Comparison of 3D-Based Electronic Scanning and Manual Anthropometric	19
7	Measurement for Indonesian’s Women: A Case Study of Fashion Design	
	Electromagnetic Performance Analysis of Electrically Excited and Interior Permanent	21
8	Magnet Motor for Electric Vehicle Application	
	Economic Optimization of the Inspection Period for Sensors with Hidden Failures: A	33
21	Monte Carlo Simulation Approach	
25	Optimal Innovation	35
	A Multi-step Optimization Method for Optimization of Interior Permanent Magnet	36
26	Motor for EV	
27	Acoustic Noise Analysis of a 5G Telecom Base Station Design	45
	Linear Programming Applied to the Vehicle Routing Problem with Simultaneous	53
28	Delivery and Pickup: A Comparative Study	
29	A Case Study of Inventory Classification for a Plastic Pallet Manufacturing Company	64
	Where Is Greenness Made in Product Life Cycle? A Multi perspective Literature	65
35	Review and Framework for Future Research	
	An Optimization Model for a Retail Distribution Supply Chain Network Design – A	67
36	Case Study	
37	Port 4.0: Integrating Advanced Technologies to Transform Port Operations	77

	<u>Improving the Effectiveness of Enterprise Resource Planning (ERP) System</u>	<u>78</u>
38	<u>Implementation using a Hybrid Process Mining and FMEA Framework</u>	
40	<u>E-Commence: Visualizing a Growing Future of Tackling the Food Deserts Problem</u>	<u>98</u>
42	<u>Art Supply Chain and the Economic Sustainability of Contemporary Artists</u>	<u>113</u>
	<u>An Industry 4.0 Maturity and Readiness for Condition-Based Maintenance in O&G</u>	<u>114</u>
53	<u>Companies: a Delphi Study-Based Approach for Development and Validation</u>	
	<u>Distribution Function Similarity of Commercial Drivers and their Willingness to Take</u>	<u>130</u>
55	<u>Examinations and Training Courses (Case Study: Iran)</u>	
58	<u>Robust Supply Chain Design for Highly-Customized Manufacturing</u>	<u>138</u>
	<u>The Role of Supply Management for Sales and Operations Planning During the</u>	<u>140</u>
59	<u>COVID-19 Pandemic</u>	
60	<u>Acoustic Noise Analysis of a 5G Telecom Base Station Design</u>	<u>156</u>
	<u>The Impact of Industry 4.0 on Productivity Growth of the Brick Construction Industry</u>	<u>164</u>
61	<u>in South Africa</u>	
	<u>Review of Literature: Productivity Improvement Systems in the South African</u>	<u>172</u>
62	<u>Mineral Exploration Industry</u>	
63	<u>Remote Fault Diagnosis System Based on the Pattern Recognition and Cloud</u>	<u>183</u>
	<u>Relationship Between Ergonomic Assessment and Physical Discomfort of Workers in</u>	<u>191</u>
64	<u>the Twining Process</u>	
66	<u>Machine Learning (ML) in Logistics and Supply Chain Management (SCM)</u>	<u>193</u>
67	<u>Reducing Inbound Logistics Process Cycle Time Using Lean Six Sigma</u>	<u>195</u>
71	<u>Contribution of Big Data Analytics to Developing Sustainable Products</u>	<u>197</u>
	<u>Application of Multi-Criteria Decision-Making Methods for Human Resource’s Task</u>	<u>206</u>
75	<u>Scheduling in Multi-Sided Platforms</u>	
	<u>Cable Routing Optimization for Floating Offshore Wind Farms Integrated with</u>	<u>218</u>
77	<u>Offshore Oil and Gas Platforms Considering Wind Scenarios</u>	
	<u>Investigation of the Challenges of Data to Promote Long-Term Sustainability in</u>	<u>219</u>
79	<u>Flood-Prone Communities</u>	
	<u>Using Lean Practices to Overcome Challenges with Improving Warehouse Operations</u>	<u>227</u>
81		
82	<u>A Waste to 3D Printing: the Development of Additive Symbiotic Networks</u>	<u>229</u>
	<u>Developing a Tool for PBO Design and Analysis: An Integration Between Enterprise</u>	<u>231</u>
83	<u>Architecture and Project Management domains</u>	
85	<u>Empowering Customer Engagement with Lean Service: a case study</u>	<u>246</u>
87	<u>Sustainability of Digital Transformation</u>	<u>258</u>
	<u>Operational Risks Evaluation in Cement Industry using Bayesian Network with</u>	<u>270</u>
93	<u>Uncertainty</u>	
94	<u>Lean Manufacturing Waste Prediction and Reduction Model</u>	<u>281</u>
95	<u>Quality 4.0 Trends and Application: A Systematic Literature Review</u>	<u>294</u>
	<u>Cost Reduction of Water Supply Systems Through Optimization Methodologies: A</u>	<u>306</u>
97	<u>Comparative Study of Optimization Approaches</u>	
	<u>From Concept to Industry: Implementation of a Capability Roadmap and Strategy</u>	<u>319</u>
98	<u>Development Towards Quality 4.0</u>	
100	<u>Budget Allocation for Humanitarian Logistics: A Data-Driven Approach</u>	<u>328</u>

101	<u>Cobot-Human Assembly Line Balancing Problem</u>	330
102	<u>Categorization of Website Usability Factors</u>	331
103	<u>Leagility in the Healthcare Research - A Systematic Literature Review</u>	343
104	<u>Consumer Behavior Towards Consumption, Disposal, and Awareness of Household E-waste: A Study in Portugal</u>	345
105	<u>Optimizing the Implementation of Sustainable Green Construction Strategies Post the Covid-19 Pandemic in Jakarta</u>	346
106	<u>The Role of Digital Technologies in the Development of Resilient and Sustainable Supply Chains</u>	355
108	<u>Simulation of the Environmental and Socio-economic Impact from the Lithium Industry within Producing Countries</u>	357
110	<u>Agile Course Planning in Educational Programs</u>	377
113	<u>Towards Data-Driven, Sustainable Supply Chain Quality Management 5.0 Indicators</u>	379
114	<u>Data-Driven Process Improvement of a LOCA Dispensing Station in an Optical Bonding Process</u>	392
115	<u>Turbine Generator Power Plant Reliability for Solar System Improvements</u>	405
118	<u>The Main Causes of Delays in the Projects within The Coal Line Program: A Substations Case Study</u>	417
121	<u>Competencies for Quality Management: A Systematic Literature Review and Perspectives for the Future</u>	429
122	<u>Aumann-Shapley Pricing for Airline Baggage Service</u>	442
123	<u>Traveling Salesman Problem: The Efficiency of Simulated Annealing Applied to a Real Case Study</u>	444
124	<u>Two-Dimensional Cutting Problem: Application of Heuristics to Troubleshooting in the Textile Sector</u>	454
125	<u>An Improved Autoencoder with Dynamic Hidden Layer for Anomaly Detection Monitoring</u>	466
139	<u>Modelling, Simulation and Experimental Study of a Hybrid Photovoltaic-Thermal Collector (PVT)</u>	477
140	<u>Exergy Analysis of Aerothermal and Geothermal Heat Pumps in a Critical Environment Application</u>	490
143	<u>Outpatient Chemotherapy Process with Home-Based and Mobile Services: A Decision Framework and Operation Optimization</u>	502
144	<u>Identification of Fields of Action for the Integration and Validation of Future-Oriented Customer-Relevant Product Characteristics During the Product Engineering Process</u>	515
145	<u>Industry 4.0 Between What It Is and How It Is Perceived by the SMEs</u>	528
146	<u>CSR performance measurement for manufacturing SMEs</u>	530
148	<u>A Data-driven Approach for PID Tuning in Energy-intensive Industry: Application to Evaporator in Kraft Pulp Mill</u>	531
151	<u>Analyzing the Competences of Change Managers for Successful Change Management</u>	541
156	<u>Assessing the Maintenance Strategies and Techniques Used in South African Power Plants: A Review</u>	550

	<u>Design Validation of Quadcopter Drones Using CAD Simulation - a Project-Based Approach</u>	<u>561</u>
160		
177	<u>Analyzing the Benefits of Incorporating Human Factors in Socio-Technical Systems</u>	<u>569</u>
	<u>Ergonomic Risk Assessment of LPG Hose Handling Process at a Gantry Operation: A Basis for Administrative and Engineering Improvement</u>	<u>578</u>
179		
	<u>Reducing Mobile Phone Repair Cycle Time at A Telecommunications Company Using Lean Six Sigma</u>	<u>590</u>
180		
181	<u>Improved Dynamic Latent Variable Modeling for Process Monitoring and Diagnosis</u>	<u>592</u>
	<u>Lean for Sustainability: A Focus on The Preventive Maintenance Process for Construction Equipment</u>	<u>622</u>
199		
	<u>Machine Learning-Based Forecasting of Ambulance Arrivals: Insights for Shift-Based ED Resource Allocation</u>	<u>634</u>
205		
	<u>Application of Quantum Machine Learning Algorithms for Metal Extraction Process Optimisation</u>	<u>642</u>
207		
	<u>Improve Process to Reduce Wastes in Production: Case Study of Agricultural Machinery Parts Manufacturing Company</u>	<u>664</u>
208		
209	<u>IoT (Internet of Things) in Service Sector</u>	<u>670</u>
	<u>Most Occurred Faults in Chilled Water System: An Empirical Predictive Maintenance 4.0 Study</u>	<u>672</u>
213		
	<u>Examining the effect of ESG controversies score on mutual fund performance during the COVID-19 pandemic</u>	<u>679</u>
214		
	<u>Analysis of the Organ Donation and Transplant Process with Process Mining: Comparing 2021 and 2022 Supply Chain Data in Rio de Janeiro</u>	<u>681</u>
215		
216	<u>Optimization of Economic Viability for Meat Alternatives</u>	<u>698</u>
	<u>Reducing Waste in The Production of Agricultural Machinery Parts: Case Study Manufacturing Process of Collar A Tractor Parts</u>	<u>710</u>
219		
	<u>Cost-Effective PV System Design Empowered by Mobile-Based Forecasting Application</u>	<u>717</u>
220		
	<u>Gap Analysis of Equity, Diversity, and Inclusion in an Organization’s Workforce: “Bridging the gap between diverse and non-diverse work environments.”</u>	<u>728</u>
221		
	<u>Modelling the Degradations and Dependencies of CNC Machines using Dynamic Bayesian Networks</u>	<u>729</u>
222		
	<u>The adoption of Industry 4.0 in Moroccan industrial companies to overcome the crisis Covid-19</u>	<u>731</u>
223		
	<u>Development of an Excellence Framework to Improve Quality in Safety Health and Environment Management for Non-Governmental Organisations in Gauteng Province, South Africa</u>	<u>741</u>
224		
	<u>The last-mile distribution of fresh e-commerce logistics: Case Study in Guiyang, China</u>	<u>750</u>
226		
	<u>Evaluation of Plastic Waste Management Options Using Life Cycle Assessment Approach for a Sustainable Future</u>	<u>764</u>
229		
	<u>Recent Developments from the Use of Social Network Analysis in Supply Chain Management</u>	<u>765</u>
230		

231	Proposed improvement plan with Lean Manufacturing to increase Productivity in a SME in the textile sector in Peru	767
235	A Review of Employees Training and Development in Navigating through Pandemic Covid-19: Malaysian Perspective	776
236	System Improvement on Late Delivery Service of Online Delivery Business	790
237	Application of Lean Six Sigma Methodology in Defect Reduction: A Case Study Of Botswana Shade Net Manufacturing Plant	804
238	How do Albanian Companies utilize Total Quality Management?	816
239	Bibliometric and Narrative Review Analysis of Additive Manufacturing's Impact on Supply Chain Resilience	821
240	Transforming for Sustainability: Total Quality Management and Industry 4.0 Integration with a Dynamic Capability View	833
241	Optimizing Nurse and Dialysis Unit Scheduling for Hemodialysis Patients	835
257	A Threshold Based Proactive Maintenance Policy for Multi-Component Systems using DBNs	846
258	Interlaminar Stresses in Hemp Reinforced Composite Laminates	848
259	Impact of Handle Position and Riveting Tools on Vibration and Muscle Fatigue in Riveters and Buckers	857
260	Supply Chain Responsiveness: Dimensions, Relationships and Impact on Performance	859
261	A literature review of the effect of productivity improvement systems on productivity growth of the masonry brick construction small and medium scale enterprises in South Africa	861
263	Gender Equity and diversity in Academia: intersectional analysis of academic staff in Israel via process mining	869
264	Role of digital leadership in achieving digital readiness through organizational optimization	871
265	Drivers and Barriers for Sustainable and Efficient Biomass Valorization Processes	880
267	Industry 4.0 and Its Importance in Statistical Process Control	889
269	Dynamic Task Allocation for Human-automation Symbiosis with an Application to Medical Product Assembly	891
271	The Impact of Supply Chain Management on South African Local Government Municipalities' Financial Performance	903
272	Improve the Efficiency of Sample Collection and Analysis in Service Orders Request Using Markov Chains	912
275	Utilizing the DMAIC Methodology to Drive a Built-In-Quality Changeover Process in a Thermoforming Line for an Automotive Component Manufacturer	922
278	Supply Chain Risks Management in Manufacturing Industry. Case Study from a Developing Country	933
279	Improvement Proposal Using Postural Ergonomics And Engineering Design In An Educational Environment: Case Study	943
280	Demand-Based Street Lights Electrical Consumption Reduction in Industrial Cities Utilizing Internet of Things	955

	<u>Smart Cities as a Vehicle to Addressing Sustainable Development Goals in South Africa</u>	<u>966</u>
285	<u>Unreliable Queueing System with Working Vacation Interruption and Imperfect Coverage Under Preemptive Priority Service</u>	<u>980</u>
286	<u>Exploring Deep Learning Approaches to Improve Traffic Flow Management and Prediction</u>	<u>982</u>
288	<u>The Effectiveness of Smart Transportation Systems in emerging economies: A Case of South Africa</u>	<u>992</u>
289	<u>Application of Lean and Six Sigma for Intestinal Obstruction Patients-A Case Study</u>	<u>1004</u>
293	<u>Optimizing Short-Term Forecasting of Rice Stock-commercial during the COVID-19 Pandemic using GA-Based Holt-Winters Method</u>	<u>1013</u>
295	<u>Assessing Spatial Planning Readiness to Accommodate Innovative Transport Systems and Technologies.</u>	<u>1023</u>
296	<u>Exploitation of the “Persea Americana” Seed for the Elaboration of Bioplastics, a Bibliographical review</u>	<u>1034</u>
297	<u>Consumer Preferences: Sensory Attributes of Sea Urchin Chips</u>	<u>1035</u>
298	<u>Fire & Explosion Hazards at Gas Turbines in Power Generation Plants</u>	<u>1047</u>
299	<u>BNPP Spent Fuel Pool Fire Protection</u>	<u>1057</u>
300	<u>Systematic Framework for Industrial Warehouse Fire Management</u>	<u>1082</u>
301	<u>The Role of Big Data Analytics in Supply Chain Management for Small Scale Poultry Producers Using Power BI</u>	<u>1091</u>
302	<u>Big Data Analytics for Financial Decision Making by Small and Medium Scale Enterprises in South Africa</u>	<u>1104</u>
303	<u>Supply Chain Risk Assessment: Literature Review and Network Analysis</u>	<u>1106</u>
304	<u>Synergistic Applications of Machine Learning and Bioenergy for Environmental Sustainability: A Comprehensive Assessment</u>	<u>1122</u>
305	<u>Case Study of Potential Hazards of Pb (lead) Lining in Radiation Laboratory on The Employees & Public</u>	<u>1131</u>
306	<u>Biological Waste Management for COVID-19 and Future Pandemics: A Holistic Framework</u>	<u>1142</u>
307	<u>The Physical and Mental Effects of Working in a Hybrid Work Environment on an Employee’s ID 308 The Physical and Mental Effects of Working in a Hybrid Work Environment on an Employee’s Well-being and Performance</u>	<u>1157</u>
308	<u>Human Failure Due to Stress</u>	<u>1167</u>
309	<u>Quality, the Configuration of the Inspection System and Resource Requirements</u>	<u>1185</u>
312	<u>A novel integer programming model for the fixture schedule of Turkish professional soccer league</u>	<u>1186</u>
313	<u>A methodology to analyze production process based on the implementation of a Circular Value Stream Mapping</u>	<u>1195</u>
315	<u>Data Analytics in an Operational System with FMEA in a Healthcare Organization</u>	<u>1208</u>
316	<u>3D-Printing Impacts on Türkiye’s Defense Industry: A SWOT-based Approach</u>	<u>1222</u>
317	<u>BOCR-ANP Approach to Research Program Evaluation in Views of Social Effects: A Case Study</u>	<u>1232</u>
318		

320	Overcoming ‘Jevons paradox’ in the circular economy: Is block chain a threat or solution to climate change?	1234
322	Forecasting of ISO 9001 and ISO 14001 Certifications in Bangladesh Through ARIMA Model	1255
323	Pandemic Impact on Residential Electricity Customer Load Profile Clustering	1263
325	Risks Management & Mitigation in Supply Chain Management: Literature Review and Research Opportunity	1274
327	Assessing the Long-Term Performance of MACD Strategy in the Philippine Stock Market: A 12-Year Review	1280
328	Assessing the Factors Influencing Internet of Things Adoption in the Freight Transport and Logistics Industry	1287
329	Innovative Students-Based Course Project Methodology for Modeling and Simulation of Industrial Systems	1299
330	E-commerce Optimal Packaging Project	1301
331	Integration of ESG and Financial Descriptors for Investment Portfolio Selection	1328
333	Route Optimization in Home Social Care: the Case Study of Cáritas Diocesana de Setúbal	1332
351	Scientific Production in Sustainable Supply Chains	1345
352	Stochastic Cost Modeling for Operator Allocation and Workstation Planning in Manufacturing: Optimizing Resources and Minimizing Costs	1355
353	Assessing Supplier Suitability for Leagile Supply Chains: A Multi-Criteria Decision-Making Approach to Enhance Leanness and Agility	1367
354	Optimizing Preventive Maintenance Frequency and Duration Using Mathematical Model and Fuzzy Logic in Flour Mills	1379
356	Role of IOT in Improving Quality in Manufacturing	1389
357	World Cup organization as an effective tool to drive Qatar’s vision 2030: Sustainability	1397
358	Managing Large-Scale Software Product Development Projects: A Review	1410
359	The Role and Benefits of Business Process Simulation In Digital Transformation Process Within Banking Sector- Case of Absa Bank Limited	1422
361	Exploring the human centricity in Industry 5.0: A Systematic Review	1431
362	Experimental Finalization of Levels of Predictor Variables for Accelerated Degradation Testing of Cutting Tools	1452
364	Quality Control System Applied in Libyan Cement Industry	1459
366	Re-engineering Arnis Sticks Bag for CTU-MC Martial Artists Using Design Thinking Principle	1467
367	First-Come, First-Serve? Gig Worker Performance and Task Allocation in an On-demand Platform	1478
381	Evaluating the Efficiency of a Procurement Process at An Institution of Higher Learning	1491
382	A Review of Integration Models for Industry 4.0 and Lean Management	1505
389	A Systematic Review on Applications of Artificial Neural Networks in the Extraction Metallurgy Industry	1519

390	<u>Assessment Center for quality-related position</u>	<u>1532</u>
	<u>Incorporating Micro Supply Chain in the Simulation of the Food-Energy-Water Nexus</u>	<u>1543</u>
391		
395	<u>An Input-Output-Based Assessment of the Global Food Security Index</u>	<u>1555</u>
397	<u>Implementation of The Value Stream Mapping 4.0 Method in A Warehouse</u>	<u>1567</u>
401	<u>Intelligent Quality Control in Cold Supply Chains</u>	<u>1579</u>
410	<u>Increased Capacity in Industrial Equipment</u>	<u>1587</u>
	Lean Six Sigma Black Belt Project - Reduction in Clients/Customers Lost, Improve	1598
420	Quality of Service and Clients Care	
422	<u>Centrifugal Pump Fault Diagnosis using a Predictive Maintenance Model</u>	<u>1600</u>
	<u>Exploring Innovative Solutions for Enhancing Warehouse Management Efficiency in</u>	<u>1612</u>
423	<u>Medical Supply Unit</u>	
	<u>After the Covid-19 Pandemic, The structure, Behavior, and Performance of</u>	<u>1623</u>
435	<u>Indonesia's Halal Food Industry</u>	
	<u>Towards a Neuro-Symbolic Approach to Bridge the Gap Between Brain and Mind-</u>	<u>1635</u>
441	<u>Inspired Models</u>	
442	<u>Applying Six Sigma to Reduce Electricity Bill in Single Family Residential Home</u>	<u>1645</u>
	<u>A Conceptual Framework for Successful Implementation of an Organizational Digital</u>	<u>1660</u>
466	<u>Transformation</u>	
	An Assessment of the Effect of Corporate Social Responsibility on the	1670
467	Competitiveness of SMEs in the Retail Sector in Ndola District	
468	Overview, Trends and Future Applications of Artificial Intelligence in Manufacturing	1672
	The Effect of Sustainable Human Resources Practices on Employee Retention,	1680
469	Engagement, and Loyalty in the Banking Sector in Zambia	
	Exploring the Ecological Impact of BRT Rea Vaya on Klipspruit Valley Road in Soweto,	1696
470	Johannesburg	
471	<u>Benefits and Effects of Tesla's Direct-to-Customer Sales Model</u>	<u>1710</u>