Monday 31 August 2020			
9:00 - 9:30	Registration & Welcome Coffee (30')		
	OPENING CEREMONY		
9:30 - 10:00	Opening Ceremony (30')		
10:00 - 10:15	Coffee Break (15') - Participants take their coffee and move to the physical (parallel) rooms		
10:15 - 12:15	Parallel Sessions I		
	ENTER SESSION	ENTER SESSION	ENTER SESSION	ENTER SESSION

Session (20')	(A) Digital Transformation - Part I	(B) Data-Driven Services - Part I	(C) Digital Twins & Shadows - Part I	(D) Production Ramp-up Strategies
Chairs	Bahrudin Hrnjica & Egon Lüftenegger	Paolo Gaiardelli & Shaun West	Erik Flores-García & Sabine Waschull	Stefan Wiesner & Jannicke Baalsrud
10:15 - 10:35	204 - A Conceptual Model for Deploying Digitalization in SMEs through Capability Building	257 - Industry 4.0 Data-related Technologies and Servitization: A Systematic Literature Review	210 - The Transformation Towards Smart(er) Factories: Integration Requirements of the Digital Twin	277 - Key Factors on Utilizing the Production System Design Phase for Increasing Operational Performance
10:35 - 10:55	245 - Towards the Definition of an Impact Level factor of SME features over Digital Transformation	181 - Engineering of Data-driven Service Systems for Smart Living: Application and Challenges	173 - Systems Engineering Approach to Identify Requirements for Digital Twins Development	115 - Part Selection for Freeform Injection Molding: Framework for Development of a Unique Methodology
10:55 - 11:15	232 - Industry 4.0 On demand: A Value Driven Methodology to Implement Industry 4.0	254 - Impact of Platform Openness on Ecosystems and Value Streams in Platform-based PSS Exemplified using RAMI 4.0	185 - Analyzing the Characteristics of Digital Twin and Discrete Event Simulation in Cyber Physical Systems	283 - Business Model Development for a Dynamic Production Network Platform
11:15 - 11:35	241 - Technology Adoption in the Industry 4.0 Era: Empirical Evidence from Manufacturing Companies	202 - Towards a Comparative Data Value Assessment Framework for Smart Product Service Systems	230 - A Digital Twin Modular Framework for Reconfigurable Manufacturing Systems	179 - A Model for Cost-Benefit Analysis of Production Ramp-up Strategies
11:35 - 11:55	224 - ERP in Industry 4.0 Context	196 - The Data-Driven Product-Service Systems Design and Delivery (4DPSS) Methodology	269 - Business Process Management for Manufacturing Execution System Deployment: Some Lessons from a Bearings Manufacturer Experience	138 - Machine Learning-Supported Planning of Lead Times in Job Shop Manufacturing
11:55 - 12:15	278 - General Readiness Assessment of Industry 4.0: Evidence from Serbian Manufacturing Industry	274 - Agile Guideline for Development of Smart Services in Manufacturing Enterprises with Support of Artificial Intelligence	235 - Identifying Key Business Processes that Can Benefit from Industry 4.0 in the Gas Sector, The Public Gas Distribution Networks Case in Greece	216 - Backlog Oriented Bottleneck Management - Practical Guide for Production Managers

12:15 - 13:15	Lunch (60')			
13:15 - 15:15	Parallel Sessions II			
	ENTER SESSION	ENTER SESSION	ENTER SESSION	ENTER SESSION

Session (20')	(A) Digital Transformation - Part II	(B) Data-Driven Services - Part II	(C) Digital Twins & Shadows - Part II	(D) Reconfig., Flex. & Agile Mfg. - Part I
Chairs	Ioan Turcin & Selver Softic	Xavier Boucher & Giuditta Pezzotta	Dimitris Kiritsis & Frederick Birtel	Alexandre Dolgui & Xavier Delorme
13:15 - 13:35	111 - Challenges in Data Life Cycle Management for Sustainable Cyber-Physical Production Systems	206 - A Novel Value Driven Co-creation Framework	189 -Digital Shadows as an Enabler for the Internet of Production	120 - A Computational Method for Identifying the Optimum Buffer Size in the Era of Zero Defect Manufacturing
13:35 - 13:55	294 - Applying Contextualization for Data-driven Transformation in Manufacturing	268 - A Framework to Support Value Co-creation in PSS Development	261 - Digital and Physical Testbed for Production Logistics Operations	124 - A Bi-objective Scheduling Model for Additive Manufacturing with Multiple Materials and Sequence-dependent Setup Time
13:55 - 14:15	161 - Concept of PLM Application Integration with VR and AR Techniques	172 - Value Chain Integration - A Framework for Assessment	139 - First Steps to the Digital Shadow of Maintenance Services' Value Contribution	222 - A Method of Distributed Production Management for Highly-Distributed Flexible Job Shops
14:15 - 14:35	146 - Organizational Enablers for Digitalization in Manufacturing Industry	177 - Using Service Dominant Logic to Assess the Value Co-creation of Smart Services	236 - Process Mining in Manufacturing: Goals, Techniques and Applications	126 - Dynamic Distributed Job-Shop Scheduling Problem Consisting of Reconfigurable Machine Tools
14:35 - 14:55	113 - Explainable AI in Manufacturing: A Predictive Maintenance Case Study	190 - The Role of Service Business Models in the Manufacturing of Transition Economies	174 - Integrated Platform and Digital Twin Application for Global Automotive Part Suppliers	148 - Towards a Non-Disruptive System for Dynamic Orchestration of the Shop Floor
14:55 - 15:15	196 - The Big Potential of Big Data in Manufacturing: Evidence from Emerging Economies	168 - Reshoring of Service Operations: Evidence from a Delphi Study	176 - The Successful Commercialization of a Digital Twin in an Industrial Product Service System	255 - Balancing and Configuration Planning of RMS to Minimize Energy Cost

15:15 - 15:30	Coffee Break (15') - Participants take their coffee and move to the physical (plenary) room			
	ENTER EVENT			
15:30 - 16:15	Keynote I: Prof. Ivanka Visnjic, Associate Professor of Innovation, ESADE Business School, Spain (45')			
16:15 - 16:30	Coffee Break (15') - Participants take their coffee and move to the physical (parallel) rooms			

16:30 - 18:30	Parallel Sessions III			
	ENTER SESSION	ENTER SESSION	ENTER SESSION	ENTER SESSION
Session (20')	(A) Digital Transformation - Part III	(B) Data-Driven Applications	(C) Collaborative Robotics Applications	(D) Reconfig., Flex. & Agile Mfg. - Part II
Chairs	Vlad Bocanet & Bahrudin Hrnjica	Magnus Wiktorsson & Sang Do Noh	Åsa Fasth-Berglund & Jan Ola	Xavier Delorme & Alexandre Dolgui
16:30 - 16:50	263 - Achieving Business Model Innovation with the Personalized Product Business Model Radar Template	110 - Smart Factory Competitiveness based on Real Time Monitoring and Quality Predictive Model Applied to Multi-Stages Production Lines	223 - A Literature review on the Level of Automation and New Approach Proposal	183 - Towards a Reference Model for Configuration of Reconfigurable Manufacturing System (RMS)
16:50 - 17:10	270 - Integrating Electronic Components into 3D Printed Parts to Develop a Digital Manufacturing Approach	160 - A Framework of Data-driven Dynamic Optimisation for Smart Production Logistics	150 - Framework for Identifying Gripper Requirements for Collaborative Applications in Manufacturing	301 - Towards an Industry-Applicable Design Methodology for Developing Reconfigurable Manufacturing
17:10 - 17:30	247 - The Application of ICT Software Solutions in Manufacturing Sector in Serbia	140 - Workforce Assignment with a Different Skill Level for Automotive Parts Assembly Lines	196 - Gripper Types and Components in Robotic Bin Picking	246 - Reconfigurable Digitalized and Servitized Production Systems: Requirements and Challenges
17:30 - 17:50	143 - Retrofit Concept for Textile Production	121 - A New Application of Coordination Contracts for Supplier Selection in a Cloud Environment	227 - A Simulation Analysis of Part Feeding to Assembly Stations with Vertical Robotic Storage and Retrieval Systems	302 - Reconfigurable Manufacturing: Lesson Learnt from the COVID-19 Outbreak
17:50 - 18:10	182 - Smart Contract-based Blockchain Solution to Reduce Supply Chain Risks	169 - Decentralized Industrial IoT Data Management Based on Blockchain and IPFS	220 - Autonomous Mobile Robots in Hospital Logistics	149 - Assembly Process Design: Performance Evaluation under Ergonomics consideration using several Robot Collaboration Modes
18:10 - 18:30	238 - The Potential of Game Development Platforms for Digital Twins and Virtual Labs: Case Study of an Energy Analytics and Solution Lab	296 - SKOS Tool: A Tool for Creating Knowledge Graphs to Support Semantic Text Classification	225 - Planning Environments of Hospital Laboratories: An Exploratory Study	251 - The Impact of Dynamic Tasks Assignment in Paced Mixed-Model Assembly Line with Moving Workers

	Tuesday 1 September 2020			
10:15 - 12:15	Parallel Sessions IV			
	ENTER SESSION	ENTER SESSION	ENTER SESSION	ENTER SESSION
Session (20')	(A) Digital Lean Manufacturing	(B) Gastronomic Service System Design	(C) Product & Assets Lifecycle Mgmt.	(D) Blockchain & Logistics 4.0
Chairs	Daryl Powell & David Romero	Tomomi Nonaka & Nobutada Fujii	Irene Roda & Adalberto Polenghi	Ugljesa Marjanovic & Chiara Cimini
10:15 - 10:35	131 - A Learning Roadmap for Digital Lean Manufacturing	132 - Human-Robot Hybrid Service System Introduction for Enhancing Labor and Robot Productivity	186 - Exploring Synergies between Circular Economy and Asset Management	249 - Identifying the Opportunities for Enhancing the Digital Readiness Level of the Supply Chain
10:35 - 10:55	205 - New Forms of Gemba Walks and their Digital Tools in the Digital Lean Manufacturing World	170 - Effectiveness of Vendor Managed Inventory [VMI] in Explosive Inventory Management	218 - A Conceptual Model of the IT Ecosystem for Asset Management in the Global Manufacturing Context	123 - Evaluating a Blockchain-based Supply Chain Purchasing Process through Simulation
10:55 - 11:15	152 - Investigating the Challenges and Opportunities for Production Planning and Control in Digital Lean Manufacturing	141 - Forecasting Customers Visiting using Machine Learning and Characteristics Analysis with Low Forecasting Accuracy Days	191 - Agent-Based Modeling and Analysis of Dynamic Slab Yard Management in a Steel Factory	193 - Blockchain-based Secured Collaborative Model for Supply Chain Resource Sharing and Visibility
11:15 - 11:35	266 - Lean Thinking: From the Shop Floor to an Organizational Culture	197 -A Study on Menu Planning Method for Managed Meal - Consideration of the Cost of Ordering Ingredients	199 - Data-driven Maintenance Delivery Framework: Test in an Italian company	112 - A Robust Multi-Commodity Rebalancing Process in Humanitarian Logistics
11:35 - 11:55	133 - Utilizing Lean Thinking as a Means to Digital Transformation in Service Organizations	293 - Service System Design considering Employee Satisfaction through Introducing Service Robots	187 - Information Flows Supporting Circular Economy Adoption in the Manufacturing Sector	167 - Travel-Times Analysis and Passenger Transport Disutilities in Congested American Cities: Los Angeles, New York, Atlanta, Austin, and Chicago
11:55 - 12:15	162 - Assessing the Value of Process Improvement Suggestions	...	273 - Bayesian Modelling for Product Testing and Release	171 - The Role of Last-Mile Delivery in the Future of E-commerce
12:15 - 13:15	Lunch (60')			
	ENTER EVENT			
13:15 - 14:00	Keynote II: Dr. Marco Ulrich, Head of Software Technologies and Applications, ABB Corporate Research, Germany (45')			
14:00 - 14:45	Special Panel I: Women in Production Management (Chairs: Irene Roda, Panellists: MK, MD, GP, RS) (45')			

14:45 - 15:00	Coffee Break (15') - Participants take their coffee and move to the physical (parallel) rooms			
15:00 - 17:00	Parallel Sessions V			
	ENTER SESSION	ENTER SESSION	ENTER SESSION	ENTER SESSION
Session (20')	(A) Smart Manufacturing & Industry 4.0	(B) Scheduling Methods	(C) The Operator 4.0	(D) Production Logistics 4.0
Chairs	Thorsten Wuest & Boonserm (Serm) Kulvatunyou	Toshiya Kaihara	David Romero & Johan Stahre	Jannicke Baalsrud & Gregor von Cieminski
15:00 - 15:20	252 - Smart Products in Smart Manufacturing Systems: An Opportunity to Utilize AR?	203 - Automatic Design of Dispatching Rules with Genetic Programming for Dynamic Job Shop Scheduling	289 - Challenges for the Operator 3.0 Addressed Through the Enabling Technologies of the Operator 4.0	248 - Tools for Evaluating Human Factor Aspects in Production and Logistics System
15:20 - 15:40	200 - Manufacturing Operations Management for Smart Manufacturing - A Case Study	209 - A Basic Study on Scheduling Method for Electric Power Saving of Production Machine	286 - Knowledge Strategies for Organisation 4.0	147 - Supporting the Decision of the Order Processing Strategy by using Logistic Models: A Case Study
15:40 - 16:00	276 - Industry 4.0: Maturity of Automotive Companies in Brazil for the Digitization of Processes	180 - A Dynamic Hybrid Berth Allocation Problem with Routing Constraints in Bulk Ports	240 - Production Management as-a-Service: A Softbot Approach	125 - Towards a Unified Reliability-centered Information Logistics Model for Production Assets
16:00 - 16:20	279 - The Impact of Industry 4.0 Connectivity on the Collaboration along Brazilian Automotive Supply Chain	256 - Towards Interoperable Enterprise Systems - Graph-based Validation of a Context-driven Approach for Message Profiling	237 - Improving the Safety of Using Didactic Setups by Augmented Reality	214 - Streaming Analytics in Edge-Cloud Environment for Logistics Processes
16:20 - 16:40	285 - An Application of a DSML in Industry 4.0 Production Processes	194 - System Architecture Analysis with Network Index in MBSE Approach - Application to Smart Interactive Service with Digital Health Modeling	201 - Facilitating Operator Participation in Continuous Improvement: An Investigation of Organizational Factors	219 - Order Acceptance and Scheduling with a Throughput Diagram
16:40 - 17:00	292 - Digital Transformation and its Potential Effects on Future Management: Insights from an ETO Context	...	291 - Agent- and Skill-based Process Interoperability for Socio-Technical Production Systems-of-Systems	213 - Production-Storage and Transport Integrated Planning for a Multi-site Mining Industry
17:00 - 18:30	Break to prepare for the Gala Dinner (1.30')			
18:30 - 20:30	Gala Dinner			

	Wednesday 2 September 2020			
10:15 - 12:15	Parallel Sessions VI			
	ENTER SESSION	ENTER SESSION	ENTER SESSION	ENTER SESSION
Session (20')	(A) Sustainable Manufacturing	(B) Quality & Risk Management	(C) Human Resources Management	(D) Food Supply Chains - Part I
Chairs	Ralph Riedel & Bojan Lalić	Milan Delic & Ugljesa Marjanovic	David Romero & Johan Stahre	Irenilza de Alencar Nääs & João Mendes
10:15 - 10:35	280 - Towards Sustainability: The Manufacturers' Perspective	231 - Questionnaire Model for Paraconsistent Quality Assessment of Software Developed in Sales Force	234 - Gamification of Operational Tasks in Manufacturing - A Literature Review	116 - Food Bank: A Proposal for Short Agri-Food Chains
10:35 - 10:55	275 - A Methodology to Integrate Sustainability Evaluations into Vendor Rating	290 - An Improvement in Master Surgical Scheduling using Artificial Neural Network and Fuzzy Programming Approach	264 - Evaluation of Augmented Reality in Industry	155 - The New Frontiers in World Soybean Production: An Analysis of Savanna in Piaui, Brazil
10:55 - 11:15	128 - Application of Virtual Reality Technologies for Achieving Energy Efficient Manufacturing: Literature Analysis and Findings	226 - Insights from a Top-Down Lean Subprogram Deployment in a Corporate Group: The Use of Deployment Tactics	109 - Virtual and Augmented Reality as a Digital Support to HR systems in Production Management	212 - Prediction of Cold Chain Transport Conditions using Data Mining
11:15 - 11:35	129 - Characterization of Energy Consumers in Production Systems with Renewable On-site Power Generation	166 - On the Necessity for Identifying Waste in Knowledge Work Dominated Projects: A Case Study from Oil & Gas-Related Product Development Projects	221 - The Interdependencies of Quality Management, Knowledge Management and Innovation Performance: A Literature Review	230 - Economic and Environmental Performance in Coffee Supply Chains: A Brazilian Case Study
11:35 - 11:55	137 - Sustainable Business Model Innovation in Furniture Supply Chain: A Case Study	229 - De-Risking Investments in Industrial Systems using Real Options Analysis: Case of Chemical Industry	117 - The Use of Organizational Innovation Concepts in Manufacturing Companies	259 - Managing Perishable Multi-Product Inventory with Supplier Fill-Rate, Price Reduction and Substitution
11:55 - 12:15	...	134 - On the Need of Functional Priority and Failure Risk Assessment to Optimize Human Resource Allocation in Public Service Organizations	284 - Interorganizational Learning in Manufacturing Industry	165 - Potential Benefits of Reverse Blending in the Fertilizer Industry
12:15 - 13:15	Lunch (60')			
	ENTER EVENT			
13:15 - 14:00	Keynote III: Prof. Jin Chen, Professor of Innovation Management, Tsinghua University, China (45')			
14:00 - 14:45	Special Panel II: Digital Transformation and the Social Factory of Things, Services and People (Chair: Gregor Von Cieminski, Panellist: IR, PG, DR, TW) (45')			

14:45 - 15:00	Coffee Break (15') - Participants take their coffee and move to the physical (parallel) rooms			
15:00 - 17:00	Parallel Sessions VII			
	ENTER SESSION	ENTER SESSION	ENTER SESSION	ENTER SESSION
Session (20')	(A) Circular Manufacturing	(B) Assembly Systems 4.0	(C) ETO Manufacturing	(D) Food Supply Chains - Part II
Chairs	Mélanie Despeisse & Federica Acerbi	Vidosav Majstorovic & Åsa Fasth-Berglund	Erlend Alfnes & Martin Rudberg	João Mendes & Irenilza de Alencar Nääs
15:00 - 15:20	287 - Economy and its Symbiosis with Circularity	136 - Assembly Issue Resolution System using Machine Learning in Aero Engine Manufacturing	118 - Factors Affecting Shipyard Operations and Logistics: A Framework and Comparison of Shipbuilding Approaches	295 - Principles and Research Agenda for Sustainable, Data-Driven Food Production Planning and Control
15:20 - 15:40	243 - Knowledge and Practices towards Sustainability and Circular Economy Transitions: A Norwegian Manufacturing Perspective	175 - A Simulation Model Supporting the Production Optimization for High-Precision Machines Assembly	122 -Exploring the Path Towards Construction 4.0: Collaborative Networks & Enterprise Architecture Views	299 - Digital Technology Enablers for Resilient and Customer Driven Food Value Chains
15:40 - 16:00	298 - Finding and Capturing Value in e-Waste for Refrigerators Manufacturers & Recyclers	244 - Cycle Time Estimation Model for Hybrid Assembly Stations based on Digital Twin Concept	119 - Using the Smartphone as an Augmented Reality Device in ETO Industry	154 - Software-based Assistance System for Decision Support on Supply Chain Level
16:00 - 16:20	303 - Changeable Closed-Loop Manufacturing Systems: A Case Study of Challenges in Product Take-Back	260 - A Stochastic Model for a Two-level Disassembly Lot-sizing Problem under Random Lead Time	188 - Planning Procurement Activities in ETO Projects	226 - Environmental Impact Classification of Perishable On-road Transport using Data Mining
16:20 - 16:40	157 - The Potential for Purchasing function to Enhance Circular Economy Business Models for ETO Production	265 - Introduction to Material Feeding 4.0: Strategic, Tactical, and Operational Impact	208 - Maturity Model for Successful Cost Transformation in ETO Companies	...
16:40 - 17:00	211 - Sustainability in Fabric Chains and Garments for a Circular Economy	250 - Data-driven Replenishment Method Choice in a Picking System	242 - Cross-Functional Coordination before and after the CODP: An Empirical Study in the Machinery Industry	...
17:00 - 17:15	Coffee Break (15') - Participants take their coffee and move to the physical (plenary) room			
	CLOSING CEREMONY			
17:15 - 17:45	Closing Ceremony (30')			