1. Record Nr. UNINA9910886992903321

Titolo	Advances in Production Management Systems. Production Management Systems for Volatile, Uncertain, Complex, and Ambiguous Environments : 43rd IFIP WG 5.7 International Conference, APMS 2024, Chemnitz, Germany, September 8-12, 2024, Proceedings, Part VI / / edited by Matthias Thürer, Ralph Riedel, Gregor von Cieminski, David Romero
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	3-031-71645-0
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (557 pages)
Collana	IFIP Advances in Information and Communication Technology, , 1868-422X ; ; 733
Disciplina	670.28563
Soggetti	Computer engineering Computer networks Computer Engineering and Networks
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	-- Modelling Supply Chain and Production Systems. -- Management of measuring equipment for quality assurance in manufacturing processes: a decision-making support system. -- Understanding co-opetition dynamics in manufacturing value networks: A system dynamics based causal loop di-agram (CLD) modelling approach. -- De-politicised in court: The interaction of democracy with innovation projects.. -- Dynamic Dispatching of DDMRP Replenishment Orders. -- Assembly Line Design for Industrialized Electrolyser Production. -- Empirical grounded simulation models for Make-to-order (MTO) supply chains: an application in the furniture industry. -- Modeling of logistics objectives at rail-road inland transshipment terminals. -- Resilience Management in Supply Chains. -- Forging Resilience Through Supply Chain Collaboration: Insights from the Chinese Automotive Industry. -- Anticipating VUCA by Utilizing the Potential of Technological and Logistical Degrees of Freedom. -- Material shortages propagation: using network science to evaluate inventory efficacy. .-Digital Twin Concepts in Production and Services. -- A Digital Twin framework for Flexible Manufacturing System. -- A

Dynamic Fit-out Scheduling Framework for Digital Twin-enabled Modular Integrated Construction. -- Comparing Digital Twins and Virtual Engineering in buyer supplier relationships for complex production facilities. -- Optimization. -- A Cost Effective Two-step Exploration for Constrained Two-dimensional Packing Problems. -- Energy Conscious Bi-Objective Job Shop Scheduling: A New Formulation and Augmented -Constraint Method. -- Routing heuristics for in-house transportation in assembly systems. -- A Flexible Job Shop Scheduling Problem Involving Reconfigurable Machine Tools under Industry 5.0. -- Makespan minimisation in Hybrid Flexible Flowshops with buffers and machine-dependent transportation times. -- Multi-Depot Electric Vehicle Routing Problem with Half Open Routes and Rotations: A mathematical formulation. -- The Generalized One-to-One Pickup and Delivery Vehicle Routing Problem. - A Multi-objective Model in a Sustainable Manufacturing System under Reliable Constraints: An AUGMECON2VIKOR Method. .-Additive Manufacturing. -- An Accessibility Assessment Algorithm for Support Structure Removal in Parts Produced by Powder Bed Fusion of Metal Using a Laser Beam. -- Conceptualization of an Operational Capability Development Framework to Facilitate the Integration of Additive Manufacturing based on a Use Case Perspective. -- Operations Management of Additive Manufacturing. -- Advances in Production Management Systems. -- A Worker-Centric Order Release Method based on Workload Control: An Assessment by Simulation. -- Understanding Part Complexity: A Novel Approach for the Identification of Complexity-Influencing Part Characteristics. -- Covariance Structure Analysis on the Collaboration between Local Enterprises and Local Governments for Value Creation and Value Communication of Local Brands. -- Developing 3D Production Simulation Models in Industrial Production Systems. -- From Product-Service-Systems to smart Product-Service-Systems. A survey about German Companies and practical implications. -- The Impact of Blockchain Implementations on Supply Chain Collaboration. -- An Overview of Cloud-Based Services for Smart Production Plants. -- Sustainability Evaluation of Electronic Components: A Case Study of a Swedish Temperature-Sensing Solutions Manufacturer. -- Developing a Robust Multi-objective Optimization Model for Reverse Logistics of Electric Vehicle Batteries. -- Construction logistics conceptualization: a comprehensive framework and existing challenges. -- Integrated Dynamic Flexible Job Shop and AIV Scheduling: Multi-agent Deep Reinforcement Learning Approach Considering AIV Charging and Capacity Constraints. -- Multi-Project Scheduling Problem with Limited Preemption and Ordinary Feeding Precedence Relations.

Sommario/riassunto

The six-volume set IFIP AICT 728-729 constitutes the refereed proceedings of the 43rd IFIP WG 5.7 International Conference on Advances in Production Management Systems, APMS 2024, held in Chemnitz, Germany, during September 8–12, 2024. The 201 full papers presented together were carefully reviewed and selected from 224 submissions. The APMS 2024 conference proceedings are organized into six volumes, covering a large spectrum of research addressing the overall topic of the conference “Production Management Systems for Volatile, Uncertain, Complex, and Ambiguous Environments”. Part I: advancing eco-efficient and circular industrial practices; barriers and challenges for transition towards circular and sustainable production processes and servitized business models; implementing the EU green deal: challenges and solutions for a sustainable supply chain; risk analysis and sustainability in an uncertain system in a digital era. Part II: smart and sustainable supply chain management in the society 5.0

era; human-centred manufacturing and logistics systems design and management for the operator 5.0; inclusive work systems design: applying technology to accommodate individual workers' needs; evolving workforce skills and competencies for industry 5.0; experiential learning in engineering education. Part III: lean thinking models for operational excellence and sustainability in the industry 4.0 era; human in command – operator 4.0/5.0 in the age of AI and robotic systems; hybrid intelligence – decision-making for AI-enabled industry 5.0; mechanism design for smart and sustainable supply chains. Part IV: digital transformation approaches in production and management; new horizons for intelligent manufacturing systems with IoT, AI, and digital twins. Part V: smart manufacturing assets as drivers for the twin transition towards green and digital business; engineering and managing AI for advances in asset lifecycle and maintenance management; transforming engineer-to-Order projects, supply chains, and systems in turbulent times; methods and tools to achieve the digital and sustainable servitization of manufacturing companies; open knowledge networks for smart manufacturing; applications of artificial intelligence in manufacturing; intralogistics. Part VI: modelling supply chain and production systems; resilience management in supply chains; digital twin concepts in production and services; optimization; additive manufacturing; advances in production management systems.