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Nota di contenuto	-- Human-centred Work Systems for the Operator 4.0/5.0 in Manufacturing, Logistics, and Service Domains. -- Industrial work instructions with DIGA. -- Robotic Process Automation: A Qualitative Journey through RPA's Impacts on Company Employees. -- Human-Centered Augmented Reality in Manufacturing: Enhancing Efficiency, Accuracy, and Operator Adoption. -- How Industry 4.0 Technologies Are Evolving to Industry 5.0 - A Systematic Literature Review. -- Technocontrol and Technoaugmentation Stress: Expanding the Framework of Technostress in Response to Emerging Workplace Technologies. -- Teaching Method for Industrial Robots That Reduces Positioning Errors Caused by Look-Ahead Control. -- Organizational

barriers to the operator 4.0, operator 5.0 and human-centricity paradigms: A mixed methods study. -- From Proactive to Embodied Collaboration: A System-Centric Approach to Advancing HRC Quality. -- Eye-Guided Human-Robot Collaborative Assembly: A Feasibility Study. -- Developing Code Agents for Robot Programming: Technical and Managerial Perspectives. -- The impact of work instruction simplification on operator performance and learning curve efficiency. -- Integration of Human Learning and Complexity Effects in Production Ramp-up Cost. -- Evaluating User-Centered Visualizations of Traffic Anomalies: A User Study. -- Inside-out: an exploratory study of the emotional profile of industrial operators for human-centric factories and empathic AI assistants. -- Architecture for Dynamic Process Safety Management using Digital Twin and Machine Learning. -- AI Cockpit: A Meaningful Human Control Interface for Mitigating AI Risks for Hybrid Intelligence Systems. -- AI-Driven Decision Support and Human-AI Collaboration for Smart and Sustainable Supply Chains. -- Transfer Learning for Transportation Cost Prediction in Modular Construction. -- Distribution-Focused Clustering for Revealing Patterns in Container Logistics. -- Deep Reinforcement Learning for Multi-stage Inventory Optimization with Agent-based Supply Chain Simulator. -- AI-enhanced demand forecasting: a design science approach. -- Perceptions and Trust in AI-Driven Decision Support Systems in Supply Chain Management. -- Machine learning-based cost estimation approach for Innovative products in furniture manufacturing. -- Intelligent Conceptual Architecture as a Proposal for Integration of Artificial Intelligence for Accident Prevention with Heavy Equipment. -- Evaluating Crowdsourcing Logistics Platforms in São Paulo and Rio de Janeiro, Brazil. -- Soybean Logistics Corridor in Brazil: A Route Analysis Using AHP/ANP. -- Integrating System Dynamics and Machine Learning in Environmental Studies: A Literature Review. -- Improving Quality Management through AI-Powered 8D-Reports. -- Digital Twins and AI for Dynamic Scheduling and Human-Centric Applications. -- Multi-objective optimization of worker assignment for manual assembly production lines: A genetic approach. -- Feasibility study on the interactive AI scheduling with LLM technology for human-centric Industry 5.0. -- Reinforcement Learning in Production Control: A Deep Dive into Order Release. -- Graph Attention Network based Deep Reinforcement Learning Approach for Dynamic Human Order Picking. -- Digital Twins as a vector of convergence between Operational Technology (OT) and Information Technology (IT). -- Digital Twin for Intelligent Production Management using AI Computer Vision and Proactive Simulation. -- A Human Digital Twin Approach to Physical Hazard Management in the Manufacturing Environment: An Extensive Literature Review with a Conceptual Framework. -- Extending ISO 23247: A Production Logistics Information Model for Integrated Digital Twins. -- Integrating Large Language Models and Digital Twins in Manufacturing: Opportunities and Challenges for Production Logistics and Assembly Environments. -- Automating Task Monitoring in Industrial Setting using Combined Gesture Recognition and Object Detection. -- Computer Vision-based Environmental Perception for a Collaborative Robot.

Sommario/riassunto

The six-volume set IFIP AICT 764-769 constitutes the refereed proceedings of the 44th IFIP WG 5.7 International Conference on Advances in Production Management Systems, APMS 2025, held in Kamakura, Japan, from August 31st to September 4th, 2025. The 227 full papers presented in these proceedings were carefully reviewed and selected from 247 submissions, which cover a broad array of research and technological developments on the present and future of “Cyber-

Physical-HUMAN Production Systems". They were categorized under the following topical sections: Part I: Human-centred Work Systems for the Operator 4.0/5.0 in Manufacturing, Logistics, and Service Domains; AI-Driven Decision Support and Human-AI Collaboration for Smart and Sustainable Supply Chains; Digital Twins and AI for Dynamic Scheduling and Human-Centric Applications. Part II: Smart Manufacturing Evolution: Integrating AI and the Digital Twin for Human-centric, Circular and Collaborative Production Systems; Human-centered Service Engineering and Digital Transformation for Sustainable Service Industries; Shaping Human Capital for Industry 5.0: Skills, Knowledge and Technologies for Human-centric, Resilient, and Sustainable Manufacturing; Experiential Learning in Engineering Education; Theoretical and Practical Advances in Human-centric, Resilient, and Sustainable Supply Chain Management; Maintenance and Asset Lifecycle Management for Sustainable and Human-centered Production; Methods and Tools for Assessing the Value of Digital, Sustainable and Servitized Offerings of Manufacturing Companies. Part III: Digital Transformation Approaches in Production and Management; Digital Technologies in Manufacturing and Logistics: Exploring Digital Twin, IoT, and Additive Manufacturing; Enhancing the Value Creation Mechanisms of Manufacturing Value Chains through Digital Platforms, Circular strategies, and Servitization Principles. Part IV: Enhancing Value Chain Resilience through Digital Technologies; How Supply Chain Can React to Internal and External Disruptions?; Mechanism Design for Production, Service and Supply Chain Management; Transforming Engineer-to-Order Projects, Supply Chains, and Systems; Designing Next Generation Lean Models Supporting Social, Sustainable, and Smart Production Systems. Part V: Advancing Eco-efficient and Circular Industrial Practices; Upgrade Circular Economy for the Manufacturing Industry; Cyber-Physical System-Based Approaches to Achieve Sustainability; Industrial Data Spaces and Sustainability; Enabling Circularity in Batteries & E-Waste with Digital Technologies: From Production to Recycling; Circular and Green Manufacturing; Sustainable Product Design and Engineering. Part VI: Digital Services and Smart Product-Service Systems; Innovative Approaches and Methods for Developing Industry 4.0 and Industry 5.0 Skills; Scheduling and Production Planning in Smart Manufacturing; Supply Network Planning and Optimization; Artificial Intelligence / Machine Learning in Manufacturing; Cloud and Collaborative Technologies; Simulation of Production and Supply Chains.