

Lecture Series of the Research Institute for Supply Chain Management

Friday, April 10, 2026, 12:00 pm



Building Teaching Center, Room TC 4.05
Welthandelsplatz 1,
1020 Vienna

MARCUS POTTENDORFER :

AI-BASED PRODUCTION PLANNING CONSIDERING THE ENTIRE SUPPLY CHAIN

The increasing complexity of global supply chains poses significant challenges for production planning. High product variety, limited resources, volatile demand, and tight delivery schedules require advanced and robust planning approaches. This lecture presents the implementation of an AI-based production planning system at Klinger Fluid Control GmbH that explicitly considers the entire supply chain across all production and material levels.

The talk focuses on an autonomous planning approach based on reinforcement learning, which simultaneously evaluates thousands of customer orders, production steps, inventory items, and purchase orders on a daily basis. By modeling indirect order networks, applying a priority-driven objective function with a strong emphasis on delay minimization, and explicitly accounting for capacity-, material-, and labor-related bottlenecks, the system enables a realistic and resilient optimization of production schedules and customer delivery dates.

The lecture provides insights into the system architecture, the underlying optimization logic, and the organizational and operational impact of AI-driven production planning on supply chain management in a globally operating industrial company.

Marcus Pottendorfer is Head of Supply Chain Management at Klinger Fluid Control GmbH. He holds a degree in Industrial Engineering from TU Wien and has led multiple initiatives in production planning, intralogistics, and digital transformation. His professional focus is on supply chain management and the practical integration of AI-driven planning systems in a global industrial context.

For further information, please contact sekretariat.itl@wu.ac.at
