Model-driven Design and Automation of Process Orchestrations in Manufacturing

Stefanie Rinderle-Ma[1]

Abstract

Manufacturing is a domain that spans a broad range of process orchestration scenarios with different requirements regarding the degree of automation and human involvement. Moreover, context is provided in manufacturing orchestrations by a rich set of sensor streams that (externally) influence the process execution and outcome. In this keynote, the model-driven design and automation of different real-world manufacturing scenarios is presented. We explain the arising challenges and how they can be met by existing process technologies. Future research directions and opportunities, in particular, the interplay of process automation and process mining conclude the keynote.

Short Biography

Stefanie Rinderle-Ma is a full professor at the Technical University of Munich, Germany, and holds the Chair of Information Systems and Business Process Management. Her research interests focus on process-oriented information systems, flexible and distributed process technologies, compliance management, as well as production and process intelligence. The overarching goal of her research is to enable and accelerate digitalization and automation through processes, and at the same time keep the human in the loop. Application areas comprise manufacturing, transportation and logistics, as well as medicine.

[1] Technical University of Munich, TUM School of Computation, Information and Technology, Munich, Germany
stefanie.rinderle-ma@tum.de

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