Semantic Business Process Management in ERP-centric Environments

Martin Hepp
Digital Enterprise Research Institute (DERI)
Department of Computer Science
University of Innsbruck
mhepp@computer.org

Abstract: A core challenge in Business Process Management is the continuous, bi-directional translation between (1) a business requirements view on the process space of an enterprise and (2) the actual process space of this enterprise, constituted by the multiplicity of IT systems, resources, and human labor. Semantic Business Process Management (SBPM) is a novel approach of increasing the level of automation in the translation between these two spheres, and is currently driven by major players from the ERP, BPM, and Semantic Web Services domain, namely SAP. One core paradigm of SPBM is to represent the two spheres and their parts using ontology languages and to employ machine reasoning for the automated or semi-automated translation. This talk introduces the core concepts of SBPM, outlines the representational requirements, and discusses the fit of SBPM and ontologies in general to ERP-centric IT landscapes in enterprises and value chains.