Semantic interoperability in supply chain networks

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Enterprise interoperability is at the source of most of the issues of traditional supply chains, today. In this presentation, we argue that main prerequisite for achievement of interoperability of the loosely coupled systems is to maximize the amount of semantics on different levels of abstraction. First, we analyse the main issues of supply chains and elaborate on the notions of communication, coordination and collaboration. Second, we identify the prerequisites for enterprises interoperability on basis of analogy with human cognition. We use the results from above to set a definition of enterprise semantic interoperability. Finally, we present the ontological framework which formalizes supply chain operations, process of its implementation and describe its intended use and potential effects on interoperability.

Short biography

Milan Zdravkovic is a senior researcher at University of Niš, Faculty of Mechanical Engineering, where he teaches e-business in logistics, enterprise systems integration and conducts research in implementation of innovative concepts and solutions for collaboration networks in general, including clusters, virtual enterprises, virtual teams and supply chain networks. He has 10 years of service industry experience, working in strategy development, analysis, implementation and evaluation of e-business applications; implementation of ISO 12207 standard for Software Lifecycle Management; implementation of CMMI standard for quality management in software development processes; analysis of local market of demand and supply in ICT sector; and consulting of foreign investors in ICT business development in Serbia. Since 2003, he actively participated in preparation and implementation of four FP6 Specific Support Action projects and two FP7 projects (PEOPLE and CAPACITIES programme). He is author of more than 20 papers in fields of Collaborative Content Management, Service Oriented Architecture (SOA) and Supply Chain Management. He worked as affiliate author for the most prestigious local IT printed journal and published 25 technical articles in areas of CMS, CRM, project and quality management in SW development; and reports on local ICT market. He is author of Content Management System – SiteGenius. He works as an expert in two EURAXESS (EC, DG Research, Unit C4) Working Groups: WG Quality and WG Portal.