

Mini-Track: Service Science, Management and Engineering (SSME): Theories and Artifacts for Service Systems

Track:IT Services (SIGSVC)

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Abstract:

Services have been the major growth-driver of entire economies as well as of single businesses in the last decades. In the US, 90% of the population worked on farms in 1800, whereas today less than 3% of the country's workforce is employed in agriculture. The manufacturing of goods or physical products peaked in the US in the mid-1950s, and has been decreasing ever since due to automation and offshoring. About 20% of the US GDP comes from physical products (agriculture, manufacturing, construction) and about 80% stems from the service sector (government, healthcare, education, retail, financial, professional and business, media and communication, entertainment and hospitality, transportation & warehousing, utilities), leading to economies dominated by the service sector.

A thorough understanding as well as innovative artifacts, such as new methods and models for the variety of service systems is needed in order to succeed. Health care is an example with a strong track record of high quality research aiming in understanding the health care service system and developing innovative models, methods, and tools. NAICS gives a classification for a lot more service systems research has to be conducted on.

This minitrack seeks research papers focusing on new theories for service systems in general. Additionally innovative artifacts i.e. constructs, models, and methods for service systems are addressed in this minitrack. Insights building on implementations for specific service system instances are welcome, giving particular consideration to articles that follow a design science approach according to Hevner 2004. Related theoretical pursuits can include, but are not limited to the following:

- Innovative artifacts for service systems
- Business objects and business rules for service systems
- Business process synthesis within service systems
- Theories for defining and delineating service systems
- Service-oriented computing paradigms as enabler for dynamic service systems
- Optimization of consumption processes within service systems
- Decision models and decision support for service systems

- Service discovery and service composition within service systems
- Multi-agent systems as service systems
- Semantic web services for dynamic service systems
- Inter-organizational service systems and service networks
- Data mining and web 2.0 for service system knowledge bases
- Performance and optimization of service systems
- Emerging technologies, tools and standards for service systems