Introduction to the Cloud Service Science & Systems Minitrack

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Agility and innovation are essential for survival in today's business world. Mergers and acquisitions, new regulations, rapidly changing technology, increasing competition and heightened customer expectations mean companies must become more responsive to changing demands, i.e., become more agile. This move to agility through innovation has been referred to as the "innovation-services-based economy." If properly applied, 'service oriented' concepts and "service systems" can support the agility organizations are seeking.

Cloud computing is a type of service system in today's IT world. National Institute of Standards defines cloud computing as "...a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources that can be rapidly provisioned and released with minimal management effort or service provider interaction."

The sourcing of IT services needs to be aligned in a manner that takes cost advantage of the commoditization of hardware (e.g., on-demand, utility computing, cloud computing, software oriented infrastructure with virtualized resources, infrastructure service providers), software (e.g. the software-as-service model, software oriented architecture, application service providers), and even business processes (e.g. out-tasking, ITIL, SCOR). The foundations for Cloud Service Science & Systems are rooted in current applications of service oriented architecture (SOA), Infrastructure as a service (IaaS), Platform as a service (PaaS), Software as a service (SaaS), business process and workflow, computing resource virtualization, business semantics, service level agreements, increasing standardization, end-to-end enterprise integration and other areas of applied and theoretical research.

The purpose of this mini-track is to investigate this paradigm, review the impact of services on federations of enterprises, organizational structures and individuals; investigate its tenets and evaluate relevant management and technical approaches to architecture, infrastructure, business processes, workflows and strategy. The three papers accepted for the minitrack investigate these issues in different ways.