Seminar: “Exploring Service Sciences – Concepts, Methods and Applications”

Summer Term 2010

Course Description:
This seminar addresses the modern approach of Service Science that has gained tremendous attention in recent years. The prevalence of Internet and Web-based services demands more opportunities for service innovation necessitating the new approach of Service Science. Combining managerial and technical perspectives, Service Science research aims to create service professionals with technological, business, and social-organizational abilities.

Service-oriented approaches are used for developing software applications and software-as-a-service that can be sourced as virtual hardware resources, including on-demand and utility computing. The driving forces come from the software engineering community and the e-business community. Service-oriented architecture promotes the loose coupling of software components so that interoperability across programming languages and platforms, and dynamic choreography of business processes can be achieved.

Specifically this seminar examines multiple issues associated with service-oriented technologies and management by examining several interrelated questions: why is it appropriate now to study the related business problems from the point of view of services research? What new conceptual frameworks and theoretical perspectives are appropriate for studying service-oriented technologies and management? What value will a service science and business process modeling offer to the firms that adopt them? And, how can these approaches be implemented so as to address the major challenges that organizations face with technology, information and strategy? These questions will be addressed in the seminar by focusing on the fields “Service Science Management and Engineering (SSME)”, “Service-Oriented Enterprise”, and “Modeling and Simulating Service Networks”.

Target Group:
This Seminar addresses specifically students in their advanced year of their integrated master program as well as “VWL Diplom” students.
Organization:
Registration: personally at our office, office time: 09.30 – 12 am, room 2522

First meeting: Wednesday, 21 April 2010, 02 pm to 04 pm, room: 2330

Communication:
All announcements, handouts, etc. will be posted on Campusonline.

The topics of the term papers are listed down below. Please familiarize yourself with the subject matter and pick your three favorite topics. The final assignment will take place at the end of our first meeting. The literature beyond each topic is found on CampusOnline in the "Exploring Service Sciences" folder.

Topics:

Service-Oriented Enterprise:
- Firm-Level Productivity Analysis for Software-as-a-Service Companies
- Improving Work Performance of Service delivered Off-Shore: Ex Post Inspection or Ex Ante Monitoring?
- Understanding the Service Component of Application Service Provision: An Empirical Analysis of Satisfaction with ASP Services
- Risk Management of Contract Portfolios in IT Services: The Profit-at-Risk Approach
- Auctioning Vertically Integrated Online Services: Computational Approaches for Real-Time Allocation

Modeling and Simulating Service Networks:
- Evolution of Innovations across Web 2.0 Service Platforms through Mutation, Natural Selection and Reuse
- A Service Request Acceptance Model for Revenue Optimization - Evaluating Policies Using a Web Based Resource Management Game -
- Measuring Information System Service Quality: SERVQUAL from the Other Side
- Demand Heterogeneity in IT Infrastructure Services: Modeling and Evaluation of a Dynamic Approach to Defining Service Levels
Service Science Management and Engineering (SSME):  
- Zones of Tolerance: Alternative Scales for Measuring Information Systems Service Quality
- Taming Energy Costs of Large Enterprise Systems through adaptive Provisioning
- Management of Cloud Infrastructures: Policy-Based Revenue Optimization
- Risk-Based Decision Support in Service Value Networks

Policies and Procedures
Grading: Seminar paper (about 15 pages) and final presentation. The seminar paper can be written in English or German.

Creditpoints: 4

Credit points are accreditable to: Wirtschaftsinformatik, BWL

Chair:  
Prof. Dr. Dirk Neumann  
Albert-Ludwigs-Universität  
Chair of Information Systems

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