Introduction to the Information Issues in Supply Chain and in Service System Design Minitrack

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This year the Information Issues in Supply chain and in Service System Design minitrack at HICSS has accepted a total of nine papers on important and highly relevant topics in supply chain, service system design, and other emerging research areas.

The nine accepted papers in this year’s Information Issues in Supply chain and in Service System Design minitrack are as follows:

• An Exploratory Study of Supply Chain Management IT Solutions: This study investigates the evolution of supply chain management IT solutions. It looks at a number of different technologies and explores how those technologies relate to each other and the overall performance of supply chain operations.

• Durable Goods Pricing in the Presence of Volatile Demand: The paper analyzes the problem of a durable good monopolist who sells to forward-looking consumers in multiple time periods. The authors utilize a dynamic programming methodology to address this problem and characterize a Markov perfect equilibrium for the infinite-horizon case.

• e-Book Platform Competition in the Presence of Two-Sided Network Externalities: This paper studies the impact of the new e-book technology on the publishing supply chain. By examining the e-book platform competition, it shows that publishers can influence consumers’ e-book platform adoption decisions and the total e-book sales by strategically deciding the size of contents available on each platform.

• Efficiency Implications of E-Procurement System Capabilities and Usage Behavior: Status Quo and Directions for Future Research: This paper reviews the efficiency implications of both e-procurement system capabilities and the corresponding usage behavior of purchasers from a welfare economics perspective.

• Peaker Outsourcing for Service Systems with Time-Varying Arrival Rates: This paper proposes the use of ‘peaker’ capacity services for handling peak-load demands. It studies how peaker ownership choice and cost and profit optimizing behavior influence optimal peaker architecture (outsourcing and capacity decisions).

• Product Performance Based Business Models: A Service Based Perspective: This paper examines the emergence of a business model based on value creation through product utilization, where products are sold as a service, (often referred to as “Servicization” or product-service systems). It reviews current research on Servicization and highlights an economic model of performance based incentives and contracting and an empirical analysis of the impact of performance based contracting on product reliability. It also considers the implications of the Servicization paradigm for areas in information management such as cloud computing and decision support systems.

• Reminder Systems for Reducing No-shows in General Practices: This paper studies the issue of no-shows for service providers which rely on appointments. It shows that reminder systems could actually reduce the probability that patients show up to their appointments because patients start to depend on these systems and put less of their own effort of keeping the appointments.

• Supplier Selection Problem: A Differential Games Approach: The paper studies the contracting issues in IT consulting and other collaborative services where the service output is contingent on the continuous efforts of both the vendor and the client. The authors analyze the performance of three contract types and discuss useful managerial insights.

• Using Business Processes from the Cloud: The Effect of On Demand Integration Capability on Capacity Planning for Cost Driven Support Processes: This paper examines the effects of an on demand integration of IT services on capacity planning. It suggests that businesses can use external providers to handle peak loads to help address the capacity planning issue.