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 eight papers on important and highly relevant topics in supply chain, service system design, and other emerging research areas. The eight accepted papers are as follows:

- **The Impact of Technology on the Labor Procurement Process**: This paper uses a queuing model to examine the efficiency of digital recruiting process. The model captures several effects of IT on firms’ hiring processes, such as increasing the number of applicants, changing the timing of the application arrivals, reducing screening cost, and increasing dropout rate. It investigates analytically and numerically the expected outcome and shows that the potential benefits of a technology enabled hiring process is negated by the deterioration in quality of the applicants.

- **Optimizing Physician Processing Rates with Priority Queues**: This paper looks at how a typical family physician, or specialist, sees patients on a scheduled basis and also handles 'emergency priority' visits. The authors show that mixing 'emergency priority' cases with regularly scheduled visits causes longer waiting times for the regular patients, and they further investigate how a physician can control this behavior by optimally using his levers of care - price and service rate.

- **Design of Consumer Review Systems and Product Pricing**: Online Consumer review systems have become an important marketing communication tool through which consumers share and learn product information. This paper analyzes firms’ review system design and product pricing strategies. It shows that firms’ optimal strategies critically depend on contextual characteristics such as product quality, product popularity, and consumer misfit cost.

- **Theoretical Exploration for Supply Chain Leagility Capability: From the Dynamic Capabilities View**: Supply chain leanness and agility are critical capabilities for winning global competition. The authors of this paper synthesize relevant literature to develop a conceptual framework that links the antecedents, moderator, and outcome of leagile supply chain.

- **Information Systems and Coordination in Supply Chain**: This paper studies the role of information systems in supply chain coordination. It models three scenarios of information sharing in a two-tier supply chain with one supplier and multiple retailers and analyzes the benefits of information systems linking supplier to retailers. It shows that benefit from implementing information system may be asymmetric and channel members may need to agree on some sharing mechanism to realize full benefit.

- **Manufacturer’s Pricing Strategy for Mixed Retail and E-tail Channels**: this paper investigates the pricing strategies of a manufacturer who supplies to both offline retailers and online e-tailers in a two-echelon supply chain. The two channels compete with each other with price and service level dependent demands. Different pricing options of the manufacturer are compared and suggestions on how to resolve channel conflicts are proposed.

- **Transportation performances measures and metrics: Overall Transportation Effectiveness (OTE) A Framework, Prototype and Case Study**: this study studies the practical issues of low margin and high truck empty miles for Logistic Service Providers (LSPs). This paper emphasizes collaboration and information exchange as the key to improve LSPs’ efficiency. It developed an Overall Transportation Effectiveness (OTE) framework, and implemented it in a BI dashboard piloted in the Dutch branch.

- **Technology Investment Decision-Making under Uncertainty: The Case of Mobile Payment Systems**: In deciding whether and when to adopt mobile payment (m-payment) technology, senior managers are naturally concerned about uncertainties regarding future market conditions, technology standards, and consumer and merchant responses. This study adopts a real-option approach to model the optimal investment decisions. They find that the value of waiting to adopt jumps when the related business environment experiences relevant shocks.