Strategic and Competitive Information Systems

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The HICSS-33 mini-track on Strategic and Competitive Information Systems this year will have three sessions, each with two papers. The first session deals with how to rethink products and the roles of intermediaries in the presence of markets that emphasize the role of information exchange. Reflecting the strategic and commercial importance of business to business commerce, the mini-track opens with a business case “The Business to Business Case in the Globalization of Electronic Commerce,” by Nancy Shaw.

The next paper, “Toward a Research Agenda for the Study of Business Practices in Information Industries,” is by George Nezlek and Gezinus Hidding. The authors discuss how different today’s “Information Age” products are relative to how they have been defined traditionally in “Industrial Age” terms. Their argument and suggested agenda for research emphasize that many leading edge firms now recognize products as “bundles” of physical goods, high-end service, and information, and that our theories and frameworks for organizational strategy must reflect this.

In “Analyzing Information Intermediaries in Electronic Brokerage,” by Robert J. Kauffman, Mani Subramani and Charles A. Wood, the authors use contestable markets theory, transaction costs and social networks to develop a predictive model of strategic vulnerability in e-commerce marketplaces. They explore propositions dealing with stalling technology adoption by market leaders, and conditions for long-run value creation. They apply them to electronic brokerage and financial advisory services.

The second session provides strategic perspectives on enterprise information architecture and information bundling. The first paper, “An Enterprise Information Architecture: A Case Study for Decentralized Organizations,” is by Richard W Watson, chief scientist at the Lawrence Livermore National Laboratory (LLNL), an applied science laboratory focusing on national security, energy and environment, and bioscience and healthcare. LLNL has an information systems budget of $250 million each year, within which significant amounts of money are being spent on information integration, supply chain management and vendor support. The paper provides an opportunity for participants to explore the visioning and implementation issues with a senior manager, and a basis for rich discussion around the issues of information architecture stewardship and standard setting.

The next paper shifts gears from information architecture to the exploitation of information, and the public policy issues that revolve around data mining and genetic privacy. In “The Impact of Genetic Testing on Informational Privacy: Bundling As a Strategy in the Individual Health Insurance Market,” Matt E. Thatcher and Eric K. Clemons analyze the inefficiencies of current legislative prescriptions for how to deal with the possibility of genetic screening-based health insurance discrimination. They also use Industrial Dynamics methods to develop simulation results that describe the efficacy of “large bundle” health insurance packages that are intended to maximize the number of insureds, while safeguarding the viability of the insurance market, and that maintain equitable costs for those who are insured.

The final two papers in this mini-track examine strategies for IS project success and distribution system design. In “Understanding Internal IS Customer Models of Firm Performance to Identify Potential High-Impact Projects,” Ken Peffers and Charles E. Gengler present a new approach to evaluating high potential IS project that they hope can break the logjam of politically-motivated, but low payoff projects. Their method, the “Critical Success Chain,” views the IS user as a customer, and utilizes personal construct theory and methods from Marketing Research to develop a basis for understanding IS user preferences for different system project features. The authors illustrate their perspective in a case study of IS project planning at a large grocery wholesaler.

Finally, in “Branch Bank Network Structure with Electronic Transaction Considerations,” Reynold Byers and Phillip Lederer develop models that enable senior managers in retail banking to select among alternate distribution systems in a competitive. Their analysis features two alternatives: a branch banking distribution structure that emphasize ATM and teller support, versus a wholly electronic support system that includes PC, telephone and Internet-based banking. The model yields solutions that help senior managers to think through how to optimize physical and digital service infrastructure in a competitive marketplace.