Information Technology and Market Structure

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The HICSS-33 mini-track on Information Technology and Market Structure departs from the tradition established in the prior three years when the focus was primarily on financial markets-related market structure issues -- what Robert Schwartz of the City University of New York has called "market technostructure." Beginning this year, we plan to broaden the coverage to include Internet-based electronic markets in the mix, as well as traditional markets that are in the process of being transformed by the new technologies associated with electronic commerce and the Internet. The Internet is creating the basis for a whole range of influences and changes in our marketplaces worldwide, including the financial markets, the markets for retail products and corporate procurement, as well as the market for collectibles and other non-commodity goods.

The research papers in this mini-track emphasize developments in the travel industry brought about by the Internet. This industry was among the first to take advantage of the Internet for web-based reservations and the dissemination of scheduling and ticketing information for various travel market segments. The first paper, "Becoming Your Own Travel Agent: A Web of Potential and Pitfalls," is co-authored by Bill Anckar and Pirkko Walden. The authors employ a research design involving students who were asked to act as travel agents, and use information available via the Internet to find the best prices and most advantageous schedule for a complicated set of travel arrangements.

The results of this research show that the move to a newly electronic and intermediated travel reservation-making market on the Internet may not always make the traveler better off. In fact, the authors conclude that thinking about travel agents as an "endangered species" is probably an inappropriate mischaracterization. Complex bookings require knowledge about provider discounting policies, institutional relationships, and an integrated view of the overall market (for air travel, hotels and rental cars).

The second paper, “Limits to Value in Electronic Commerce-Related IT Investments,” is by Alina M. Chircu and Robert J. Kauffman. The authors present an evaluative framework for business process-level investments in e-commerce-related that was developed in a multi-year field study of Internet-based corporate travel reservation systems. The proposed framework characterizes ways in which the potential value of the technology for an adopter is eroded, resulting in less than desirable levels of realized value for firm.

The authors examine several in-depth industry cases involving large-scale corporate travel systems investments, and find that value flows from the systems are hindered by a range of limits to value. Such inhibitors of IT value appropriation for the firm, the authors find, can be overcome by collateral investments in co-specialized assets to the systems (e.g., sponsorship, adoption subsidies, training, etc.) that will unlock potential value. The outcomes of this research enable corporate investors in Internet-based travel reservation systems to build more realistic expectations about the potential value of these innovations, and what pieces need to fall into place for implementation to be successful.

The mini-track will conclude with a discussion forum called "Charting the Course for the New Specialty MBA Offerings on ECommerce." The session, the first of a number that we plan to hold at various conferences during the next year, will include representatives from leading universities around the world. The invited speakers this time include Eric K. Clemons (University of Pennsylvania), Robert J. Kauffman (University of Minnesota), Abraham Seidmann (University of Rochester), Yao-Hua Tan (Erasmus University) and Andrew Whinston (University of Texas, Austin).