NYU Stern School of Business Department of Information, Operations & Management Sciences INFORMATION SYSTEMS RESEARCH SEMINAR

TOPIC: Digital Erosion of Firm Boundaries: Production Chain Organization and IT Use

in US Manufacturing

SPEAKER: Chris Forman (Georgia Tech)

DATE: Thursday, May 9th, 2013

TIME: 4:00-5:30pm PLACE: KMC 3-50

ABSTRACT

We investigate complementarities between different margins of information technology (IT) use and firm boundary decisions following the diffusion of the commercial Internet. Using detailed plant-level data covering roughly 2,500 establishments from the U.S. Census of Manufactures, we focus on the decision to allocate production output to either downstream plants within the same firm or to external customers. Using a differences-in-differences design, we find that IT-enabled coordination with external supply chain partners is associated with a significant decline in downstream vertical integration. Our results are robust to extensive time-varying controls for both internal and external downstream demand, as well as instrumental variables estimation. In addition, we find that the upstream and downstream margins of digital coordination are complementary to each other; the magnitude of the effect is greatest when both suppliers and customers are granted greater visibility into the focal plant's operations.

BIO

Chris Forman is the Brady Family Term Professor at the Scheller College of Business at the Georgia Institute of Technology. He received his Ph.D. from Northwestern University in 2002, and was previously on the faculty of the Tepper School of Business at Carnegie Mellon University until 2007. His research focuses on innovation in enterprise IT, including both the business process innovation that accompanies enterprise IT investment within firms as well as the strategies of enterprise IT suppliers. This research has included the study of how geography shapes the benefits of IT investment within firms, the platform strategies of independent software vendors, and the implications of IT investment for firm organization and firm boundaries, among other topics. He has published over 30 articles and book chapters. He has served as a visiting scholar at the Federal Reserve Bank of San Francisco. He currently serves as Associate Editor at Management Science and has previously served as an Associate Editor at Information Systems Research and Information Economics and Policy.