



DO&IT Seminar Series

Speaker: Jérémie Gallien, Associate Professor of Operations Management,
MIT Sloan School of Management

Date: Friday, October 10, 2008

Time: 2-3:30 pm

Location: VMH 1335

Title: Implementing Supply Routing Optimization in a Make-To-Order
Manufacturing Network*

Abstract: Dell's supply chain for desktops involves Asian vendors shipping components by sea to several U.S. plants. While suppliers are responsible for shipping enough inventory, Dell can re-route and expedite their shipments while in transit and also transfer on-hand inventory in order to balance supply across sites. In this talk I will describe the development, implementation and impact of the process and optimization-based control system now used by Dell to address this supply routing challenge for its US-bound monitors. This new methodology is estimated to have reduced Dell's inventory re-positioning costs for monitors by about 60%.

* In collaboration with John Foreman, Julie Alspaugh, Rohit Bhatnagar, Fernando Lopez, Chee Chong Teo and Charles Dubois. Paper can be downloaded at <http://papers.ssrn.com/abstract=1210842>.

Bio: Jérémie Gallien's research involves the development, implementation and evaluation of mathematical optimization models for the real-time control of physical flows and trading interfaces in supply chains. He teaches a variety of classes in Sloan's MBA, LFM and Ph.D programs, including Operations Management, System Optimization, Simulation, and some research seminars. He holds a Ph.D in Operations Research from MIT and an Eng.D in Industrial Engineering and Applied Mathematics from the Ecole des Mines de Paris.