

DO&IT Seminar Series

Speaker: Gal Raz
Associate Professor of Business Administration
Darden Graduate School of Business
University of Virginia

Date: Friday, April 3, 2009

Time: 2-3:30 pm

Location: VMH 1335

Title: Supply Chain Sourcing Under Asymmetric Information

Abstract:

We study a supply chain with two suppliers competing over a contract to supply components to a manufacturer. One of the suppliers is a *big* company for whom the manufacturer's business constitutes a small part of his business. The other supplier is a *small* company for whom the manufacturer's business constitutes a large portion, if not all, of his business. We analyze the problem from the perspective of the *big* supplier and address the following questions: What is the optimal contracting strategy that the big supplier should follow to win the manufacturer's business? How does the information about the small supplier's production cost affect the parties' profits and the big supplier's contracting decision? We study various information scenarios regarding the small supplier's production cost and the manufacturer's processing cost. We show, for example, that the big supplier might benefit when the small supplier keeps its production cost private. We also show that under certain conditions, the total supply chain profits are independent of the information regarding the small supplier's costs, but the division of the supply chain profits depends on the information about the small supplier's cost. By comparing various information scenarios, we quantify the value of information for the manufacturer and the big supplier. We conclude with some extensions and numerical examples to shed light on how the system parameters affect the parties' profits and contracting strategies.

Bio:

Professor Gal Raz is an associate professor of business administration at the Darden Graduate School of Business at the University of Virginia. He received his PhD in Business and a Masters degree

focusing on public policy from Stanford University. He also holds a bachelors degree in industrial engineering from Israel Institute of Technology (The Technion). Professor Raz's research focuses on supply chain pricing and contracts and the interface between operations and marketing. He serves as a referee for Management Science, Operations Research and Manufacturing and Service Operations Management. He is currently the president of the Junior Faculty Interest Group (JFIG) at the Institute of Operations Research and Management Science (INFORMS). Prior to joining the Darden School, Professor Raz was on the faculty of the Australian Graduate School of Management in Sydney. He was involved in numerous consulting projects with many companies on topics relating to Supply Chain Management and Quantitative Modeling in Australia, the US and Israel.