

Quantitative Analysis for Internet-Enabled Supply Chains

PINAR KESKINCAK
pinar@isye.gatech.edu

*School of Industrial and Systems Engineering
Georgia Institute of Technology
Atlanta, Georgia 30332*

SRIDHAR TAYUR
stayur@grobner.gsia.cmu.edu

*Graduate School of Industrial Administration
Carnegie Mellon University
Pittsburgh, Pennsylvania 15213*

A supply chain, from an operations perspective, has three components: sourcing or procurement, manufacturing and distribution, and inventory disposal. In each component, the Internet is significantly affecting how supply chains are being managed, leading to new challenges while ultimately promising to provide value. The likely future is collaborative supply-chain management that promises to make, for the first time, the dream of virtual integration a reality. Quantitative modeling provides companies decision support as well as insights for better management of supply chains. But there are still a number of challenges that require further OR/MS analysis.