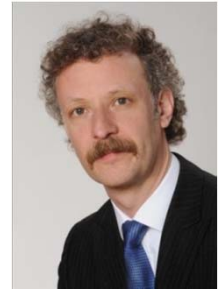




Séminaire conjoint / Joint Seminar
Chaire de recherche du Canada en logistique et en transport et
Chaire de recherche du Canada en distributique

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REVENUE MANAGEMENT APPROACHES TO SUPPLY CHAIN DEMAND FULFILLMENT

Abstract: Demand fulfillment (DF) concerns the planning of how to satisfy a given customer order. The traditional focus of demand fulfillment has been on assessing delivery capabilities, e.g. for promising reliable delivery dates. More recently, driven by increasing customer heterogeneity, service differentiation is becoming another potential lever to manage profitability. This links demand fulfillment to the concept of revenue management (RM), as established in service industries.

This presentation starts by reviewing several recent studies that develop RM oriented DF approaches in different supply chain settings. Applications range from e-groceries to spare parts management. We then zoom in on a specific problem, namely DF in make-to-stock (MTS) production. We discuss two alternative modeling approaches for the resulting planning problem, namely a deterministic linear programming model and a stochastic dynamic programming (SDP) model. We analyze the structure of the SDP and compare it to traditional RM models. We also highlight the strengths and weaknesses of both approaches and use them to develop several heuristics. A numerical study reveals the performance of the different approaches and provides insights into the impact of key problem parameters.

(The presentation is based on joint work with Herbert Meyr, Rainer Quante, and Yao Yang.)

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MERCREDI / WEDNESDAY

14 mai 2014 /
May 14th, 2014
10h30

Salle / Room 5441
Pavillon André-Aisenstadt
Université de Montréal

Ouvert à tous / Open to all

Organisateur / Organizer
Jean-François Cordeau

