



Joint Webinar CIRRELT, MobilOpt and Canada research chair in integrated logistics

Martin Philip Kidd
Technical University of Denmark



ON THE TRADEOFF BETWEEN VALUE GENERATED AND COMPLEXITY IN INTEGRATED SUPPLY CHAIN OPTIMIZATION

Abstract: Considerable value can be generated through integrated supply chain planning, where optimization problems concerning production, distribution and inventory across multi-echelon supply chains are solved as a single, integrated optimization problem - as opposed to solving a sequence of separate optimization problems for each planning stage. In this work we are interested in mapping the value of integration as we move from no integration to full integration. For this purpose we implement a general mixed integer programming model for integrated production, distribution and inventory optimization in multi-echelon supply chains. In particular, we address the following question: how much do we need to integrate to get close to the value of full integration? This question is relevant for practice as integration can increase the complexity and cost of the planning processes as more entities need to communicate with each other across the supply chain. We show in the cases we study that limited integration, when done in the right way, can already go a long way in generating value.

Bio: Martin Philip Kidd is assistant professor in supply chain and logistics at the Technical University of Denmark. He obtained his PhD in Operations Research from Stellenbosch University, South Africa, in 2012. His main areas of research and interest are integrated optimization in supply chains, supply chain collaboration and railway planning and optimization.

Lien zoom: <https://ulaval.zoom.us/j/83727423637?pwd=WFOyUkh4d3czV28zUWtLQzhhQkdtOT09>
Meeting ID: 837 2742 3637 Passcode:556914

MARDI / TUESDAY

10 novembre 2020, 10h00
November 10th, 2020, 10:00

Ouvert à tous
Open to all

Responsables / Organizers

Maryam Darvish
Leandro Coelho

