BROADEN HORIZONS | EXTEND MINDS



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Date: Friday, Nov 19, 2021

Time: 1 - 1:50 pm

Zoom Meeting ID: 970 7656 5407

Password: 477211

Drop & Swap Network Design*

Abstract: A firm's strategic network design seeks to maximize profits, which requires balancing revenues, costs and service. We examine distribution network design with consideration of trailer 'drop and swap' as a method for extending branch facility coverage while complying with FMCSE regulations on truck driver hours of service. Using actual marketing and operating data from a building products distributor, we develop and solve an MIP network model encompassing trailer drop and swap alternatives, and compare its solution to traditional network design approaches. Our findings indicate profit improvements over traditional approaches that do not consider drop and swap alternatives. We provide industry examples where trailer drop and swap strategies are applicable. This is joint work with *E.P. Robinson (UH) and L. Gao (Hofstra University)*.

Biography: Dr. Funda Sahin is an Associate Professor of Supply Chain Management at the University of Houston. Prior to joining the University of Houston, she worked at the University of Tennessee. She earned her Ph.D. in operations and supply chain management from the Mays Business School, Texas A&M University. She also holds an MBA degree from Texas A&M University and BA in accounting and finance from Marmara University-Turkey.

Her teaching and research interests are in logistics, operations and supply chain management, inventory planning and control, and information technology applications in supply chain management. Her research publications appeared in leading operations and supply chain management journals. She also co-authored book chapters. She is a Past President of Decision Sciences Institute (DSI) and a Vice-President of the Production and Operations Management Society (POMS). She teaches at the undergraduate, graduate (masters and doctoral) and executive levels. She served as the Supply Chain Management Doctoral Program Coordinator at Bauer College of Business of University of Houston. She recently was a participant of the 2020 University of Houston- Provost's Academic Women in Leadership Program.