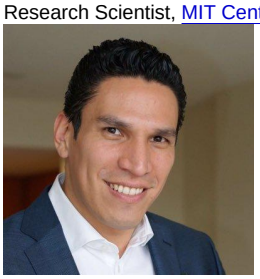
MIT Industrial Liaison Program Faculty Knowledgebase Report

Supply Chain Challenges

December 1, 2020 11:00 am - 12:10 pm

11:00am	Welcome and Introduction
11:05am	Sustainable Logistics: How to deliver "fast" and "green" in the new digital era? Josué C. Velázquez Director, MIT Sustainable Supply Chains Lab Research Scientist, MIT Center for Transportation and Logistics



Josué C. Velázquez
Director, MIT Sustainable Supply Chains Lab
Research Scientist
MIT Center for Transportation and Logistics

Josué C. Velázquez Martínez is a Research Scientist, and Lecturer at the MIT Center for Transportation and Logistics specialized in Logistics and Supply Chain Management in transportation, manufacturing, and retail industries, and has more than 10 years of experience in conducting applied research on logistics sustainability and small firms in emerging markets. He serves as the director of the MIT Sustainable Supply Chains Lab, a research group focused on collaborating with organizations to improve their supply chain and logistics operations by considering environmental, social and business goals. Velázquez Martínez is also de director of MIT GeneSys, a research lab aimed at alleviating poverty in Latin America via developing innovative research and technology for micro and small enterprises to foster growth by improving their supply chain management capabilities.

Velázquez Martínez has published a variety of academic and business-oriented articles and book chapters on logistics sustainability and supply chain management, and has been constantly quoted and interviewed by different international media, including HuffPost, CNN, The Washington Post, Bloomberg, NY Times, and ELLE.com. Velázquez Martínez is the lecturer at MIT of the graduate course SCM.290 Sustainable Logistics, has been invited as guest speaker and lecturer in conferences and academic seminars in Europe, Asia, the United States, and Latin America

Velázquez Martínez holds a BSc in Industrial Engineering, an MSc in Manufacturing Systems and a PhD in Industrial Engineering with focus on Sustainability in Supply Chains from Monterrey Tech, Mexico.

View full bio

Urbanization and e-commerce growth (omni-channel) have increased the need for faster and greener transportation of goods, specifically during last-mile delivery operations. The challenge many companies face is how to deliver products fast and keep high vehicle utilization, which drives low fuel consumption, and CO2 emissions. In this webinar, I will discuss the new trends in logistics sustainability, and present ideas on how to optimize CO2 emissions during last-mile operations by using geo-spatial analysis, Machine learning, and data analytics. From the consumer perspective, I will discuss some of the new findings on the “Green Button” project and how companies can significantly reduce transportation CO2 emissions in e-commerce, via driving consumer behavior with the use of understandable environmental statements at the moment of the purchase.

11:35am

An Essential Evolution: How a pandemic is accelerating the supply chain transformation

Ashfaque Chowdhury
President, Supply Chain, Americas and Asia Pacific
XPO Logistics

The COVID-19 global pandemic has clearly demonstrated the critical importance of our global supply chain. Dr. Ashfaque Chowdhury, President of XPO Logistics Supply Chain Americas and Asia Pacific, will talk about how XPO has protected its employees from COVID-19 exposure, how the pandemic is transforming the logistics industry, and why intelligent automation will shape the future of distribution centers.

12:05pm

Q&A