

# MIT Industrial Liaison Program Faculty Knowledgebase Report

---

## Evolve or Perish: A Journey in Supply Chain Agility and Applied Analytics

---

---

February 24, 2022 12:00 pm - 2:00  
pm

---

12:00 PM

Welcome and Introduction  
Yuri Ramos

Program Director, [MIT Industrial Liaison Program](#)



Yuri Ramos

Program Director, [MIT Industrial Liaison Program](#)

Yuri Ramos brings 20 years of international experience, having worked with Information Technology for multinational companies in his native Brazil, throughout South America and in the United States. Before MIT, Yuri was with Santander Bank N.A., where he first worked as a Sr. Manager for online and mobile initiatives, and then as Chief of Staff for the CIO of Digital Channels.

Prior to Santander, Yuri was the co-founder and CEO of 2 startups in the EdTech space. In both endeavors he was responsible for strategy, business development and operations. Before this entrepreneurial period, Yuri held positions at Universo Online – Brazil's largest Internet portal - as Director of Operations and Senior Manager; at ACISION as Engineering Manager (Latin America Operations) and Senior Project Manager; and at Nortel Networks as Project Manager.

Yuri earned his Bachelor's degree in Mathematics at the University of Brasilia, and his MBA at MIT where he was a Sloan Fellow.

Enhancing Agility and Flexibility for Retail Supply Chains  
Chris Mejía-Argueta  
Director, MIT SCALE Network - Latin America  
Director, MIT Graduate Certificate in Logistics and SCM (GCLOG)  
Founder & Director, MIT Food and Retail Operations Lab  
Research Scientist, [MIT Center for Transportation and Logistics](#)



Chris Mejía-Argueta  
Director, MIT SCALE Network - Latin America  
Director, MIT Graduate Certificate in Logistics and SCM (GCLOG)  
Founder & Director, MIT Food and Retail Operations Lab  
Research Scientist  
[MIT Center for Transportation and Logistics](#)

Christopher Mejía Argueta is a Research Scientist at the MIT Center for Transportation and Logistics. He develops applied research on retailing operations and food supply chains for multiple stakeholders including consumer packaged goods manufacturers, carriers and retailers in the [Food and Retail Operations Lab](#) (FaROL). His research focuses on improving the efficiency, flexibility of operations in multiple stakeholders, designing route-to-market and logistics strategies to address changing purchasing patterns, coupling these dynamic consumer profiles with the retail landscape, and reducing undesired socioeconomic and health problems related to income disparity, social backwardness, food malnutrition, food waste by proposing sustainable policies, business models to help vulnerable population segments.

Dr. Chris Mejía is also the Director of the [MIT Supply Chain and Global Logistics Excellence \(SCALE\) Network](#) for Latin America. This initiative, conducted by the MIT Center for Transportation & Logistics in the region, aims to lead impactful research and education projects for all companies, public sector and society together with Latin American top universities and the support of the [Center for Latin-American Logistics Innovation \(CLI\)](#). In addition, Dr. Chris Mejía serves as the Director of the [MIT Graduate Certificate in Logistics & Supply Chain Management \(GCLOG\)](#), an elite program from the MIT SCALE Network, geared towards outstanding graduate students from Latin America.

He holds a M.Sc. in Industrial Engineering with focus on supply chain management and multicriteria optimization, and a PhD in Industrial Engineering with focus on Humanitarian Operations. Dr. Mejía got both degrees with *summa cum laude* honors (best grade, top 1% students) in both classes at Monterrey Tech, Mexico. In 2013, Dr. Mejía was the academic leader at [CLI](#), where he developed dozens of projects with industry and other academic partners related to disaster response, green logistics, packaging and last-mile distribution in emerging markets. Prior to joining MIT CTL, Dr. Mejía Argueta was a Postdoctoral Fellow at Eindhoven University of Technology (TUE), the Netherlands, where he investigated retailing operations for emerging markets and formulated estimation models to analyze the prevalence of nanostores in emerging markets. He is author and editor of the books: 1) [Reaching 50 Million Nanostores: Retail Distribution in Emerging Megacities](#), 2) [Supply Chain Management and Logistics in Latin America: A multi-country perspective](#) and 3) [Supply Chain Management and Logistics in Emerging Markets](#).

He has over 12 years of experience and his work in over 10 countries in three different continents has been focused on improving the efficiency of operations across the supply chains. He is co-editor of a variety of special issues in recognized journals, author of scientific papers published in top journals. He has developed dozens of industry projects focus on the reality of emerging markets regarding transportation, logistics, retailing and supply chain management.

Improving supply chain agility has been a top priority of executives to increase performance. Actually, 75% of supply chain and logistics professionals have done adjustments in their supply chain processes during the pandemic. All the high uncertainty required CPG manufacturers, distributors and retailers to make deep structural shifts in retail supply chains given the sudden demand changes and supply shocks. But *why were these supply chains so unprepared to cope with these disruptions?* We collected and analyzed information from around 300 firms and found interesting managerial insights about their supply chain agility, adaptability and alignment (i.e., AAA) before the COVID-19 crisis first wave and right after. Attendees will understand what factors might be significant for them to control and we will discuss innovative strategies to build AAA-supply chains and keep resilience and high-performance under any type of crises.

12:45 PM

Business Analytics in Supply Chain Management  
Edgar Gutiérrez-Franco  
Postdoctoral Associate, [MIT Center for Transportation and Logistics](#)



Edgar Gutiérrez-Franco  
Postdoctoral Associate  
[MIT Center for Transportation and Logistics](#)

Edgar Gutierrez-Franco is a Postdoctoral Associate at the MIT Center for Transportation and Logistics. He is collaborating in projects related with Sustainable Supply Chains, Food and Retail Operations and Omnichannel Distribution Strategies. His research interests are related to applying quantitative models and artificial intelligence for Distribution Network Design, Manufacturing and the design of Decision Support Systems. His corporate experience includes positions in the consulting, beverage and retail industry. Dr. Edgar has publications in scientific journals and has served as editor and author of two books related with engineering and business analytics. He holds a MSc. in Industrial Engineering from the University of Los Andes (Colombia), and a Ph.D. in Industrial Engineering and Management Systems with focus on Data Science from the University of Central Florida (2019).

Analytics technologies and data science have not just created new business models, they have revolutionized the nature of how businesses operate and compete. Research suggests that 71% of global enterprise investments in analytics have accelerated in the last years. This webinar presents how leading-edge technologies like advanced optimization, artificial intelligence and simulation along with supply chain strategies can help organizations to deal with current and future challenges in supply chains. A successful case study on urban delivery operations in a megacity is discussed. This case solves operational challenges for product supply from consumer package goods (CPGs) or retail industries to stores and end consumers in urban areas. Attendees will have the opportunity to learn how data analytics have supported decision making in SCM to reduce costs, enhance SC agility, and improve customer satisfaction.

Angela Acocella  
 PostDoctoral Research Affiliate  
[MIT Center for Transportation and Logistics](#)

Chris Mejía-Argueta  
 Director, MIT SCALE Network - Latin America  
 Director, MIT Graduate Certificate in Logistics and SCM (GCLOG)  
 Founder & Director, MIT Food and Retail Operations Lab  
 Research Scientist, [MIT Center for Transportation and Logistics](#)



Chris Mejía-Argueta  
 Director, MIT SCALE Network - Latin America  
 Director, MIT Graduate Certificate in Logistics and SCM (GCLOG)  
 Founder & Director, MIT Food and Retail Operations Lab  
 Research Scientist  
[MIT Center for Transportation and Logistics](#)

Christopher Mejía Argueta is a Research Scientist at the MIT Center for Transportation and Logistics. He develops applied research on retailing operations and food supply chains for multiple stakeholders including consumer packaged goods manufacturers, carriers and retailers in the [Food and Retail Operations Lab](#) (FaROL). His research focuses on improving the efficiency, flexibility of operations in multiple stakeholders, designing route-to-market and logistics strategies to address changing purchasing patterns, coupling these dynamic consumer profiles with the retail landscape, and reducing undesired socioeconomic and health problems related to income disparity, social backwardness, food malnutrition, food waste by proposing sustainable policies, business models to help vulnerable population segments.

Dr. Chris Mejía is also the Director of the [MIT Supply Chain and Global Logistics Excellence \(SCALE\) Network](#) for Latin America. This initiative, conducted by the MIT Center for Transportation & Logistics in the region, aims to lead impactful research and education projects for all companies, public sector and society together with Latin American top universities and the support of the [Center for Latin-American Logistics Innovation \(CLI\)](#). In addition, Dr. Chris Mejía serves as the Director of the [MIT Graduate Certificate in Logistics & Supply Chain Management \(GCLOG\)](#), an elite program from the MIT SCALE Network, geared towards outstanding graduate students from Latin America.

He holds a M.Sc. in Industrial Engineering with focus on supply chain management and multicriteria optimization, and a PhD in Industrial Engineering with focus on Humanitarian Operations. Dr. Mejía got both degrees with *summa cum laude* honors (best grade, top 1% students) in both classes at Monterrey Tech, Mexico. In 2013, Dr. Mejía was the academic leader at [CLI](#), where he developed dozens of projects with industry and other academic partners related to disaster response, green logistics, packaging and last-mile distribution in emerging markets. Prior to joining MIT CTL, Dr. Mejía Argueta was a Postdoctoral Fellow at Eindhoven University of Technology (TUE), the Netherlands, where he investigated retailing operations for emerging markets and formulated estimation models to analyze the prevalence of nanostores in emerging markets. He is author and editor of the books: 1) [Reaching 50 Million Nanostores: Retail Distribution in Emerging Megacities](#), 2) [Supply Chain Management and Logistics in Latin America: A multi-country perspective](#) and 3) [Supply Chain Management and Logistics in Emerging Markets](#).

He has over 12 years of experience and his work in over 10 countries in three different continents has been focused on improving the efficiency of operations across the supply chains. He is co-editor of a variety of special issues in recognized journals, author of scientific papers published in top journals. He has developed dozens of industry projects focus on the reality of emerging markets regarding transportation, logistics, retailing and supply chain management.

Edgar Gutiérrez-Franco  
 Postdoctoral Associate, [MIT Center for Transportation and Logistics](#)



2:00 PM

Closing Remarks