January 29, 2020
5:00-8:00pm

supply chain
research
expo 2020

180 supply chain master's students from the MIT Global SCALE Network showcase their research projects sponsored by global companies including::

Procter & Gamble, Uber Freight, CH Robinson, Ahold-Delhaize, Coyote Logistics (UPS), Niagara Bottling, ATL Partners, Coppel, Johnson & Johnson, and many more.

Samberg
Conference Center
50 Memorial Drive
Cambridge, MA

Schedule

Registration opens at 4:30 pm. Each display stand features two posters. Posters are divided into A and B groups, and will revolve every 25 minutes. Voting for the Best Research Project Poster will close at 7:30pm.

5:00 - 5:25 pm	Group A posters are displayed (Voting opens at 5pm)
5:30 - 5:55 pm	Group B posters are displayed
6:00 - 6:30 pm	Welcome Remarks & AWE Scholarship Award Announcement
6:35 - 7:00 pm	Group A posters are displayed
7:05 - 7:30 pm	Group B posters are displayed (voting closes at 7:30pm)
7:45 - 8:00 pm	Best Research Project Poster Awards announced

MIT GLOBAL SCALE NETWORK

SCM
Master of Engineering or Master of Applied Science in Supply Chain Management
MIT Center for Transportation & Logistics - Cambridge, MA, USA

ZLOG
MIT Zaragoza Master of Engineering in Logistics and Supply Chain Management
Zaragoza Logistics Center - Zaragoza, Spain

MSCM
MIT Malaysia Master of Science in Supply Chain Management
Malaysia Institute for Supply Chain Innovation - Shah Alam, Malaysia

LSCM
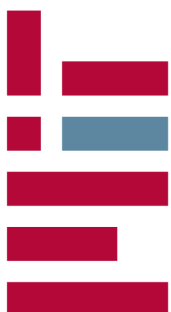MIT Luxembourg Master in Logistics and Supply Chain Management
Luxembourg Centre for Logistics and Supply Chain Management - Luxembourg
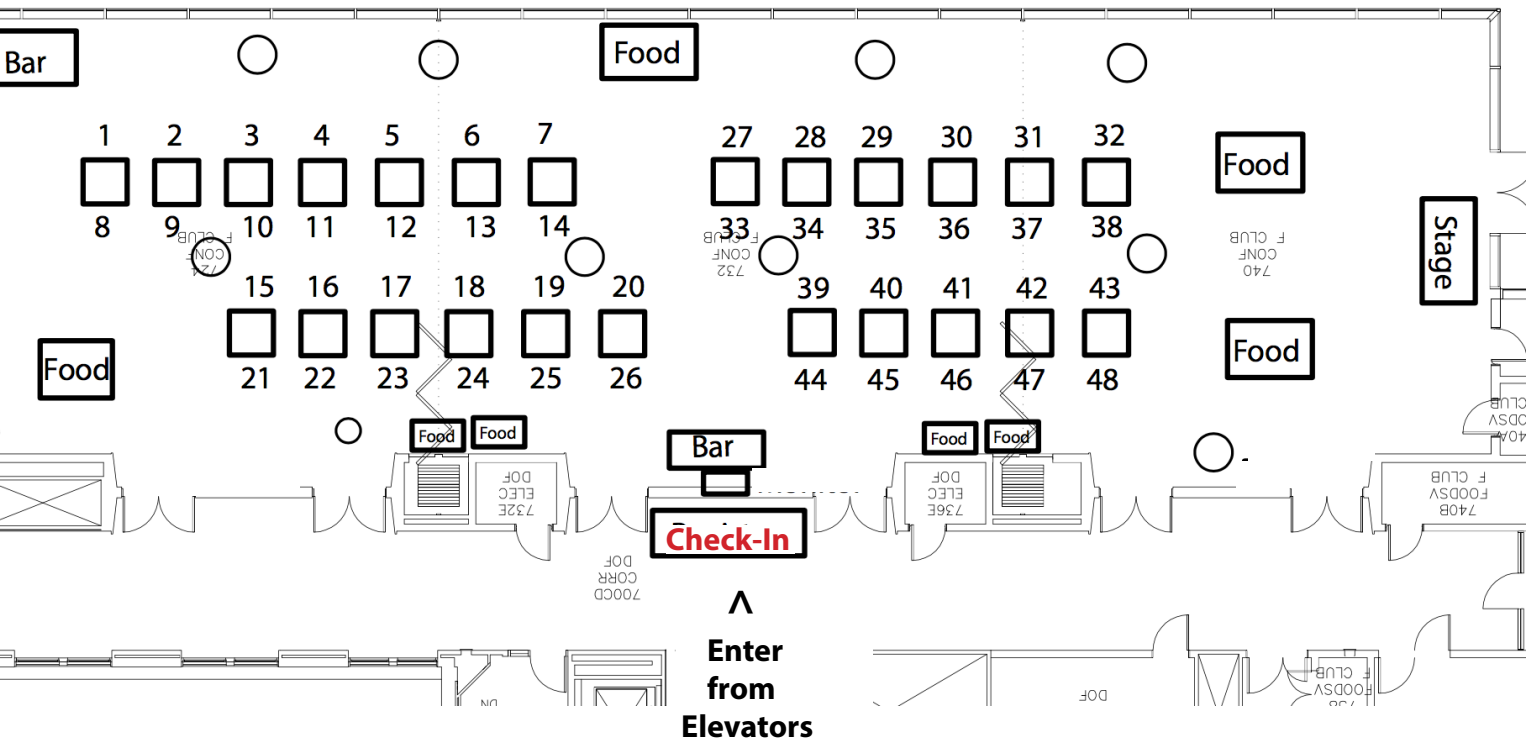
MNSCM
MIT Ningbo Supply Chain Management Program (MBA with SCM Focus)
Ningbo **China** Institute for Supply Chain Innovation - Ningbo, China

GCLOG
MIT Graduate Certificate in Logistics and Supply Chain Management
Center for Latin-American Logistics Innovation - Bogotá, Colombia

Floorplan

Bar

Food

Food

Stage

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |

| 27 | 28 | 29 | 30 | 31 | 32 |
| 33 | 34 | 35 | 36 | 37 | 38 |

| 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 |

| 39 | 40 | 41 | 42 | 43 |
| 44 | 45 | 46 | 47 | 48 |

Food

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Bar

Check-In

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Enter from Elevators

Best Research Project Poster Awards sponsored by:

ISM®
institute for supply management

ISM - Greater Boston, Inc.
www.ismgb.org

Group A

5:00 - 5:25 & 6:35 - 7:00

Title	Author(s)	SCALE Center	Monitor #
Category: Omnichannel			
E-commerce Drives LatAm Warehouses' Transformation	Maria Paz Chiavarino, Samuel Calvano, Monica Mendoza	GCLOG	1
Category: Data Analytics			
Its About Time: Predicting Dwell Time To Improve Trucking ETA	Sireethorn Benjatanont, Paco Tantuico	SCM	2
Category: Demand Planning			
Optimizing Facility Location via Machine Learning	Mohamed Yehdhin	MNSCM	3
Spare Parts Forecasting Face-off: Machine Learning vs. Conventional Methods	James Vasa & Mahmood Serry	SCM	4
TOPIC: DIGITAL TRANSFORMATION			
IoT-Based Inventory Tracking in the Pharmaceutical Industry	Andrew Kerr, Tony Orr	SCM	5
Human-Machine Teaming in AI Driven Supply Chains – The FrAImework	Libin Huang, Christoph Friedrich Herrmann	SCM	6
Manufacturing Digital Transformation Strategy for FMCG	Sara Gallo, Anais Ortega	ZLOG	7
TOPIC: HUMANITARIAN			
Emergency Water Supply Strategy Definition	Luz Sakihara, Pedro Dias De Faria, Alexandre Faria	GCLOG	8
Immunization Supply Chain Design Study with UNICEF	Henrique Ribeiro Carretti & Yuto Hashimoto	SCM	9
TOPIC: INVENTORY MANAGEMENT			
Inventory Optimization in Clinical Trial Supply Chain	Alvaro Lerma, Paul Lichtenstein	ZLOG	10
Demand-driven Inventory Optimization in the Healthcare Industry	Luiza Goldani, Jorge Ros	ZLOG	11
Inventory strategies: Managing Tobacco giant's Working Capital	Isabel Ramírez, Rodolfo Lisita	ZLOG	12
Inventory Management by Classification	WANG Liwen	MNSCM	13
Improving Inventory Performance for Slow Moving SKUs	Chithra Govindan	MSCM	14
Evaluating Inventory Pooling Strategy for Multi-Echelon Distribution Network	Angelica Aispuro, Hari Sharma	SCM	15
What is the optimal safety stock strategy?	Ni Pan & Jamie Sweeney	SCM	16
TOPIC: MACHINE LEARNING			
E-commerce Sales Forecasting Leveraging Sentiment Analysis	Sneha James, Isabella Roque	ZLOG	17
Machine Learning and Optimization-based Model for Asset Management	Carlos Rafavy & Justin Casey	SCM	18
Identifying Inefficiencies of Last-Mile Delivery in the Trucking Industry	Katharina Mangan & Kristian From	SCM	19
Improving Your Forecasts with Sentiment Analysis	William Teo	SCM	20
TOPIC: NETWORK DESIGN			
Designing a 2-hour Delivery Network for Ecommerce	Tai Ho, Ekaterina Lishchenko, Kareem Abdelmonem	ZLOG	21
Multi-Echelon Physical Distribution Approach	Cody Fritz, Hemanth Holla, Mahmoud Elaraby	ZLOG	22
Preparing for the Future: Integrating E-Business to Existing Distribution Network	Tram Ngo, Philippe Bellion	LSCM	23
From Upstream Suppliers to End Customers	Zheng Dan	MNSCM	24
Rise of the Colombian Coffee Farmers! Empowering Through Supply Chain Network Design	Salman Chaudhry, Santiago Botero	SCM	25

Group A

5:00 - 5:25 & 6:35 - 7:00

Title	Author(s)	SCALE Center	Monitor #
TOPIC: PROCUREMENT			
Total Landed Should Cost for Specialty Chemicals in Oil & Gas Industry	Monica Medina, Sang Truong	MSCM	26
TOPIC: PRODUCTION PLANNING			
Estimate Rwa Material Inventory without BOM	Thu Hoang, Hebatalla Elgamal	MSCM	27
Leverage Business Integrated Production Planning & Scheduling	Alessandro Silvestro	SCM	28
TOPIC: RETAIL OPERATIONS			
Closing the Food Access Gap in American Underserved Communities	Jamal Taylor, Luiz Barreto	SCM	29
TOPIC: SUPPLY CHAIN STRATEGY			
Scenario Planning Model for Aftermarket Supply Chain	Deepakshi Jain, Fidel Rodriguez, Carlos Stelling	ZLOG	30
Exploring Supply Chain Strategy in Nascent Markets	Muhammad Ayoub Danka	MSCM	31
M&A Transactions: "Prepare Your Supply Chain!"	Bilal Ahmed, Peter Jung	SCM	32
Candy Coopetition in Brazil: The Case of Two Major Companies	Henrique Pedreira, Tarso Melo	SCM	33
Mirroring Payment Terms and Lead Times	Matthew Dale	SCM	34
TOPIC: BLOCKCHAIN			
Blockchain Application In Aviation MRO	Chang Kock Shong, Shaun Wong Kin Choy	MSCM	35
TOPIC: TRANSPORTATION			
Land Transport Distribution & Visibility	Omar Sheabar, Brigida Raimondi	ZLOG	36
City Distribution Logistics and Warehousing Design in Echternach	Ranjit Pillai, Javad Mahmoodkhani	LSCM	37
Tradeoffs for Ocean Freight and Lead Time Setup	Yi Chen	MNSCM	38
Optimizing Fleet Utilization by Adjusting Appointment Times	Colleen Copley, Charles Lu	SCM	39
Leading Freight Forward: The CO2 Revolution	Elizabeth Raman, Sadia Rahman Shathi	SCM	40
Where Do Routing Guides Fail?	Tala Alnajdawi, Israel Jimenez	SCM	41
TOPIC: URBAN LOGISTICS			
Policy Evaluation for Last-Mile Deliveries	Sofia Rivas, Bernardo Puente, Rafael Leon	GCLOG	42
TOPIC: WAREHOUSE			
Warehousing vs Changing Business Needs	Muhammad Saad, Gewei Wang	ZLOG	43
TOPIC: SUSTAINABILITY			
Externalities of Innovative Last-Mile Delivery Solutions	Fedor Egorov	SCM	44
Fast Shipping and Inbound Logistics Sustainability	Perla Haro, Ana Ferrer, Roogers Mariño	GCLOG	45
The Economics of Batteries in Electricity Grids With High Penetration of Renewable Energy, Electric Vehicles and Heat Pumps	Joachim Refsdal	LSCM	46
Decarbonizing Road Freight Transportation with Carbon Offsets	Abdelrahman Hefny, Cat Dame	SCM	47

Group B
5:30 - 5:55 & 7:05 - 7:30

Title	Author(s)	SCALE Center	Monitor #
TOPIC: OMNICHANNEL			
Omnichannel Retail For A Seamless Grocery Shopping Experience	Wassim Aouad, Nikhil Ganapathi	SCM	1
TOPIC: DIGITAL TRANSFORMATION			
Build Virtual Then Physical : The Digital Way Forward?	Tan Siok Looi, Andrew Pung Heng Xian	MSCM	2
TOPIC: DEMAND PLANNING			
Building Sustainable Supply Chains in the Era of E-Commerce	Christian Gatmaitan, Lisha Yangali	SCM	3
Irregular Demand Forecasting: To Expect the Unexpected	Ngan Chau	SCM	4
TOPIC: DIGITAL TRANSFORMATION			
Dealing With Complexities in Digital Supply Chains	Jamica Brillante, Yoon Joo Lee	SCM	5
Cracking the Digital Transformation Code	Michael Smith	SCM	6
Human-Machine Teaming for Intelligent Demand Planning	Ye Ma	SCM	7
TOPIC: HUMANITARIAN			
Cash and Vouchers in Humanitarian Operations: A System Dynamics Approach	An Qi Hao, Sindhu Srinath	SCM	8
TOPIC: INVENTORY MANAGEMENT			
Application for Dynamic Clustering, Forecasting and MRP	Juan Pablo Salazar, Rohit Kamath	ZLOG	9
Logistics Hubs Improving Spare Parts Management	Karim Massihi, Fermín Zúñiga	ZLOG	10
Optimization of Perishable Supply Chain	Diego Dias, Mohsin Rivzi, Claudia Navarro	ZLOG	11
Measuring costs and likelihood of stock-outs	Veronica Velazquez, Cesar Acevedo, Henrique Medeiros	GCLOG	12
Agribusiness Seed Inventory Management	Rui Fernandes, Sofia Salleh	MSCM	13
Inventory Optimization after retail network revamp	Lau Tzen Yik	MSCM	14
Healthcare Supply Chain: The Digital Age	Gabriela Lamas Oporto & Sherif Alhalafawy	SCM	15
Hey Small Firms, Do You Need Cash? Forget About Sales!	Trevor Thompson & Analiz Cabrera	SCM	16
TOPIC: MACHINE LEARNING			
Application of Artificial Intelligence in SCM	Marcelo Murta, Wendy Carvajal, Lucia Leal	GCLOG	17
Reducing Oil Well Downtime Using Machine Learning	Jesus Madrid & Andrew Min	SCM	18
Machine Learning Application on Long Range Demand Forecasting	Sohyun Jung, Katie Nowadly	SCM	19
Inbound Logistics Optimization	Xuefang Hu, Ezra Weisel	SCM	20
TOPIC: NETWORK DESIGN			
Supply Chain Network Optimization in Chemical Industry	Khem Singh Negi , Cesar Camargo	ZLOG	21
SCND ROUTE 98	Magali Aquino, Paulo Fernandes	GCLOG	22
Logistics Network and Safety Inventory Redesign for FPC	XI Hao	MNSCM	23
Facility & Routing Decisions in Truck-Drone Distribution	Kelly Doan, Amr Taiyeb	SCM	24

Group B

5:30 - 5:55 & 7:05 - 7:30

Title	Author(s)	SCALE Center	Monitor #
TOPIC: PROCUREMENT			
Risk and Opportunities of Long Tail Spend Management	Ravi Shekhar Pathak	LSCM	25
The Building Blocks of Supplier Relationships	Gina Gerhart	SCM	26
TOPIC: PRODUCTION PLANNING			
Oil Palm Plantation Yield Forecasting	Khoo Ter Yang	MSCM	27
TOPIC: RETAIL OPERATIONS			
Shaping Nutritious Food Intake in Emerging Markets	Patricio Crespo, Patricia Naranjo, Ivo Ferreira	GCLOG	28
TOPIC: RISK MANAGEMENT			
Optimization on Crop Portfolio	Bian Xundi	MNSCM	29
TOPIC: SUPPLY CHAIN STRATEGY			
Strategic Capacity Planning for the Future	Aditya Ghosh, Juan Pablo Medrano	ZLOG	30
Idle Hands vs. Inventory Overkill	Amelia Dang, Brett Elgersma	SCM	31
Scenario Planning for Offshore Wind Supply Chains 2030	Haiyin Chen	SCM	32
Dynamic Trade Policy and Supply Chain Design	Liam Sharkey	SCM	33
Continuous Multi-Echelon Inventory Optimization Program (cMEIO)	Sundeep Mathur	SCM	34
TOPIC: BLOCKCHAIN			
Blockchain Adoption: Aligning Incentives of SC Actors	Vijay Krishnan, Zhehao Yu	SCM	35
TOPIC: TRANSPORTATION			
Where Have All the Cowboys Gone?	Omar Ramirez, Gabriel Carrasco	GCLOG	36
On-Time Performance for a Cargo Airline in Luxembourg	Rishabh Mahajan, Catalina Pérez Leiva	LSCM	37
Efficiency Learnings from Operational Data	Adam Buttgenbach, Mei Qing Zhang	SCM	38
Predicting and Planning for the Future: North American Truckload Transportation	David Sokoloff & Gaohui Zhang	SCM	39
Going Awry: Understanding Transportation Budget Failures	Emilio Dolci, Venkat Bandaru	SCM	40
Pricing Model for Asia-U.S. Ocean Freight	Yvonne Cao, Christine Huang	SCM	41
TOPIC: URBAN LOGISTICS			
Innovative Last Mile Network Design to Enable Delivery using Alternative Vehicles from Satellite Locations	Abhinav Goyal	SCM	42
TOPIC: SUSTAINABILITY			
Implementing Sustainability Initiatives in Logistics	María Fernanda Barragán, Gala Andrade	ZLOG	43
E-Commerce Based Closed-Loop for Plastic Recycling	Saikat Banerjee	SCM	44
Implementing CLSC for Plastic Bottles Reuse	Adele Magalhaes, Rafael Del Rio, Raissa Sosa	GCLOG	45
Evaluation of Closed-loop Supply Chain in context of Circular Economy	Vijay Kumar, Merima Palo-Scairovic	LSCM	46
FIRST EVER State of Supply Chain Sustainability Report	Ashley Barrington, Laura Allegue	SCM	47

MIT GLOBAL SCALE NETWORK

MIT Center for Transportation & Logistics
Cambridge, MA, USA

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Malaysia Institute for Supply Chain Innovation
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ZLC

Zaragoza Logistics Center
Zaragoza, SPAIN

CENTER OF LATIN-AMERICAN LOGISTICS INNOVATION

Center for Latin-American Logistics Innovation
Bogotá, Colombia

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