

Annual Review 2016-2017



MASSACHUSETTS INSTITUTE OF TECHNOLOGY



MIT Center for
Transportation & Logistics

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Welcome...

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Timeline

2016-2017

2016-2017 Timeline



MARCH

- 7th Annual Partners Meeting
- Crossroads 2016
- 5th Annual SCM Directors' Conference

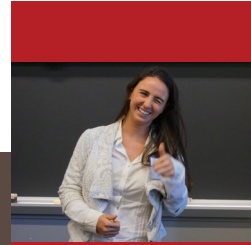


MAY

- Research Fest 2016
- SCALE Alumni ReConnect 2016

JUNE

- MIT SCM Class of 2016 graduates
- Executive Education: Driving Strategic Advantage



JULY

- GCLOG Class of 2017 spends three weeks at MIT
- Humanitarian Response Lab alumna Emily Gooding receives Fullbright

AUGUST

- MIT SCM Class of 2017 arrives at MIT for orientation
- Humanitarian Response Lab Co-Hosts Health and Humanitarian Logistics Conference
- SC3x Course runs with 34K+ students



2016



SEPTEMBER

- Ningbo Supply Chain Innovation Institute China, the 6th member of the MIT Global SCALE Network, held its opening ceremony
- Chris Caplice receives CSCMP's Distinguished Service Award

OCTOBER

- Innovations in Transportation Roundtable: Impact of New Technologies
- Yossi Sheffi's *The Power of Resilience* named "a best business book of 2016" by *Strategy + Business Magazine*



NOVEMBER

- Omni-Channel: Completing the Integrated Experience Puzzle
- MIT Humanitarian Speaker Series: Storage Technologies to Reduce Post-Harvest Loss
- SC0x Course runs with 40K+ students

DECEMBER

- Supply Chain Financial Analysis Workshop



JANUARY

- SCALE Connect brings 100+ students to MIT
- Executive Education: Driving Strategic Advantage
- Research Expo 2017
- GCLOG Class of 2017 graduates
- SC1x & SC4x Courses run with 31K+ & 23K+ students



FEBRUARY

- Webinar: How New IoT-Based Models Could Reduce Service Parts Inventory

2017



Research

Omni-Channel Distribution Strategies

Principal Researcher: Dr. Eva Ponce

Dr. Ponce is leading the Omni-Channel Distribution Strategies research initiative at CTL. The growth of e-commerce and mobile devices is changing customer behavior and she is analyzing how these changes impact retailers' supply chains. These retailers have to respond to order coming from in-store visits, the web and mobile phones for delivery in person, in store, at home, or in collections points. These complications are the reason for the massive success of companies such as Amazon and the failure of many tradition retailers. Dr. Ponce's research helps retailers respond by putting together a combination of in-store and on-line delivery schemes. She has played a leading role in bringing relevant academics and experts from companies to the Center to identify the main challenges in this topic and to identify future research approaches on this topic. Dr. Ponce also leads research initiatives on Reverse Logistics and Closed-Loop Supply Chains, integrating both forward and reverse flows in these complex supply chain networks.



Watch the Video to Learn More
goo.gl/Hnr3rN



MITx MicroMasters in Supply Chain Management

Executive Director: Dr. Eva Ponce

Eva Ponce is the Executive Director of the MITx MicroMasters Program in Supply Chain Management. She oversees the five online MITx courses in Supply Chain Management (CTL.SCX courses) and the Comprehensive Final Exam (CTL.CFx) that make up the MicroMasters Program. This innovative program in online education has reached over 170,000 learners in more than 180 countries across the globe. Learners enrolled in the program come from diverse backgrounds. Most of them are professionals from supply chain and related business fields who are expanding their skills, as well as students in other academic programs who are augmenting their knowledge base. Dr. Ponce has pioneered the course's delivery approach to ensure the quality of the program and also a rigorous assessment. The scale and complexity of this global online program in supply chain management is unprecedented.



Watch the Video to Learn More
goo.gl/VxLTlk

Supply Chain Emergency Response

Principal Researcher: Dr. Jarrod Goentzel

Supply chain crisis response is a major research initiative of the Humanitarian Response Lab, run by Dr. Jarrod Goentzel. The research aims to improve response operations during humanitarian crises by understanding and improving the supply chain systems behind public services and private markets. The capacity of public services to respond to crises is ascertained by focusing on supply chain management and decision making processes triggered by natural disasters, conflict, outbreaks, etc. Supply chains are the critical link in the delivery of donated supplies to those in need, and MIT researchers have years of experience designing supply chains and developing management approaches. Decision making research combines researcher experience in optimization and information technology to develop new automation tools and decision support systems for a broad range of critical decisions during a crisis.



Watch the Video to Learn More
goo.gl/YkK5Xi



Global Health and Food Security

Principal Researcher: Dr. Jarrod Goentzel

The development of resilient supply chains for global health and food security is a major research initiative of the Humanitarian Response Lab, run by Dr. Jarrod Goentzel. The research focuses on driving efficiency and effectiveness, and managing risks in resource constrained settings. Supply chains are fundamental to making critical products more affordable, available, and accessible for communities around the world. Lab researchers balance theoretical and applied work through active engagement with the private sector, government agencies, and humanitarian, international development, and community organizations on several continents.



Watch the Video to Learn More
goo.gl/MsDKAm

Megacity Logistics Lab

Principal Researcher: Dr. Matthias Winkenbach

The MIT Megacity Logistics Lab works on operational and analytical challenges related to urban last-mile distribution. It supports companies in designing flexible and efficient, multi-tier, multi-modal last-mile distribution networks to serve customers in increasingly large, dense, congested and thus difficult to serve urban markets. Moreover, the lab investigates the impact of technology innovations and advances in data analytics on the choice of last-mile delivery models, the composition of urban delivery vehicle fleets, and the design of urban distribution networks. Working with cities, governments, and NGOs, the lab also supports the optimal design of urban freight policies and infrastructures. The research of the MIT Megacity Logistics Lab is strongly driven by quantitative modeling and the use of large-scale, high-resolution data analytics to enable better logistics for cities, and better cities for logistics.



Watch the Video to Learn More
goo.gl/Wj7uC5



Visual Analytics Lab

Principal Researcher: Dr. Matthias Winkenbach

The MIT CTL Visual Analytics Lab is a newly founded research initiative around the use of interactive visualization and Augmented Reality (AR) technology to improve supply chain and logistics data visibility, data analytics, and data-driven supply chain decision making. Based on a newly created physical lab space at MIT CTL equipped with state-of-the-art visualization technology, the lab will be working on developing interactive visual interfaces to data and analytical tools addressing complex supply chain and logistics problems. Taking advantage of rapid advances in AR technology, the lab will enable immersive virtual experiences of strategic design, tactical planning and operational decision problems in the supply chain and logistics domain and related fields. The lab's technology platform will also be used to enable new ways of high-fidelity remote communication and collaboration on data-driven decision problems.



Watch the Video to Learn More
goo.gl/uZozd5

Sustainable Logistics

Principal Researcher: Dr. Josué C. Velázquez Martínez

We have achieved the highest level of carbon dioxide (CO₂) in the atmosphere in the history of humanity. Due to a variety of drivers such as green consumers, investors' long-term perspectives, regulations, etc., many companies currently estimate their carbon footprint and aim for substantial CO₂ emissions reduction targets. For instance, the top 10 most successful American companies from Fortune 500 report their yearly CO₂ emissions in the Carbon Disclosure Project. While different economic sectors like manufacturing and power generation account for the largest share of CO₂ emissions, studies show that transportation (particularly road), is the fastest growing major source in the US. Dr. Josue Velazquez presents the Sustainable Logistics Initiative that focuses on analyzing the implications of considering CO₂ emissions in logistics decisions. Previous projects with industry partners show that companies can potentially achieve important reductions in carbon emissions by making better logistics decisions (e.g. truck assignment, replenishment strategies, vehicle routing, etc.)



Watch the Video to Learn More
goo.gl/dgOgnP



Micro Supply Chain Management for Small Firms

Principal Researcher: Dr. Josué C. Velázquez Martínez

Micro and small firms account for the majority of jobs in most OECD countries, and many of them represent a substantial share of the suppliers and customers of large firms, for instance, all of the traditional channels in emerging markets served by big CPG companies. Despite the clear value of small companies, only a fraction survives in the short term and develops into a high-growth firm. One main cause that is being extensively documented, is low productivity due to lack of Supply Chain expertise, i.e. data is not commonly used for decisions on production planning, inventory management, demand analysis, etc. Traditional Supply Chain Management (SCM) best practices have been designed for large companies (e.g. VMI, CPFR, etc.), however very little research has been done on SCM for small business. Dr. Josue Velazquez presents the Micro SCM concept, which is an emerging, discipline focusing on improving the efficiency and survival of the micro and small firms by leveraging their SCM decisions.



Watch the Video to Learn More
goo.gl/llsgbh

Quantifying Resilience

Principal Researcher: Mr. James B. Rice, Jr.

This research intends to extend our research in resilience to a lingering issue for practitioners - identifying how to make the case for risk management investments, particularly resilience in the organization. Over the past 15+ years, we have come to understand the need for resilience, and have identified many different options for creating resilience. Organizations are challenged to make the financial case for making investments in resilience, competing for growth-oriented investments. The project will study how firms go about making risk management and resilience investment decisions, and solicits companies to participate by sharing their practices in order to identify the frontier of practice in making these kind of investments. Subsequent phases of study intends to develop methods for making the financial investment case for resilience.



Watch the Video to Learn More
goo.gl/vPMZtq



FreightLab

Principal Researcher: Dr. Chris Caplice

The management of freight transportation has become increasingly important and even more complex. Outsourcing of manufacturing overseas, constraints on infrastructure capacity, and a wider range of modal options are just some of the more recent trends leading to this complexity. This research initiative focuses on improving all aspects of freight transportation to include design, procurement, management, systems, and execution. Recent projects have included exploring the linkage between strategic planning and operational execution, quantifying the cost of design complexity, and carrier responses to combinatorial auctions. Underlying all of these points is the problem of identifying and managing the uncertainty that is inherent in freight transportation networks.



Watch the Video to Learn More
goo.gl/luKQ00

AgeLab

Principal Researcher: Dr. Joseph F. Coughlin

The MIT AgeLab was created in 1999 to invent new ideas and creatively translate technologies into practical solutions that improve people's health and enable them to "do things" throughout the lifespan. Equal to the need for ideas and new technologies is the belief that innovations in how products are designed, services are delivered, or policies are implemented are of critical importance to our quality of life tomorrow.

The MIT AgeLab is a multidisciplinary research program that works with business, government, and NGOs to improve the quality of life of older people and those who care for them. The AgeLab applies consumer-centered systems thinking to understand the challenges and opportunities of longevity and emerging generational lifestyles to catalyze innovation across business markets.



Watch the Video to Learn More
goo.gl/jEQCdX



Sustainable Supply Chains

Principal Researcher: Professor Yossi Sheffi

Sustainability is intimately connected with supply chains. Although a number of surveys show that most consumers say they want sustainable products, sales data show that only a small percentage, if any, are actually willing to pay more to buy sustainable products. This gap between “say” and “pay” puts companies in a difficult position. The supply side exacerbates this gap. The developing world emphasizes livelihood and economics rather than sustainability, so companies routinely violate their own country’s laws, sometimes with the implicit “understanding” of the authorities, in the name of providing jobs. Thus, companies face seemingly incompatible requirements when accounting for sustainability, costs, and jobs.

This research presents a rationale for corporate sustainability efforts, whereby companies attempt to bridge the gap between the conflicting constraints imposed by customers, competitors, investors, environmental activists, and regulators. It describes and illustrates many of the choices companies face; their efforts up and down the supply chain; the tools they use to assess the impact of those efforts, both environmental and financial; and the conflict and cooperation between companies, NGOs and government agencies.



Contact Professor Sheffi to Learn More
sheffi@mit.edu

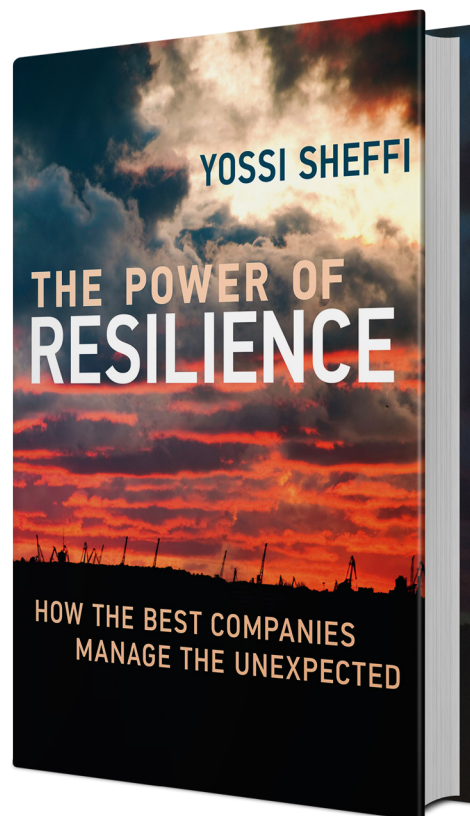
Books

The Power of Resilience

Author: Professor Yossi Sheffi

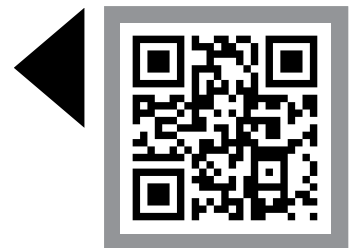
A catastrophic earthquake is followed by a tsunami that inundates the coastline, and around the globe manufacturing comes to a standstill. State-of-the-art passenger jets are grounded because of a malfunctioning part. A strike halts shipments through a major port. A new digital device decimates the sales of other brands and sends established firms to the brink of bankruptcy. The interconnectedness of the global economy today means that unexpected events in one corner of the globe can ripple through the world's supply chain and affect customers everywhere.

In this book, Yossi Sheffi shows why modern vulnerabilities call for innovative processes and tools for creating and embedding corporate resilience and risk management. Sheffi offers fascinating case studies that illustrate how companies have prepared for, coped with, and come out stronger following disruption—from the actions of Intel after the 2011 Japanese tsunami to the disruption in the “money supply chain” caused by the 2008 financial crisis. Supply chain risk management, Sheffi shows, is a balancing act between taking on the risks involved in new products, new markets, and new processes—all crucial for growth—and the resilience created by advanced risk management.



Watch the Trailer to Learn More

goo.gl/gSJYE1



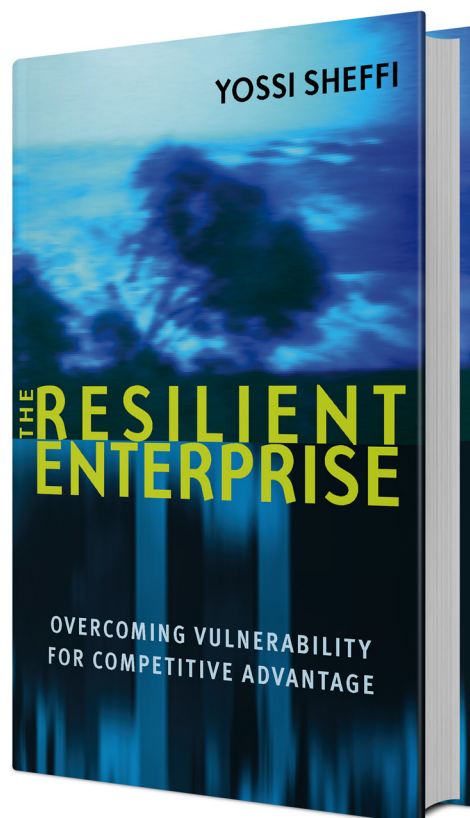
The Resilient Enterprise

Author: Professor Yossi Sheffi

What happens to a company when the unimaginable occurs? When an earthquake hits its primary contract manufacturer? When labor strikes shut down an entire port? When terrorists cripple a transportation system?

Yossi Sheffi argues that a company's survival and prosperity depend more on what it does before such a disruption occurs than on the actions it takes as the event unfolds. In *The Resilient Enterprise: Overcoming Vulnerability for Competitive Advantage*, Sheffi explores high-impact/ low-probability disruptions, focusing not only on security but on corporate resilience—the ability to bounce back from such disruptions—and how resilience investments can be turned into competitive advantage.

Sheffi provides tools for companies to reduce the vulnerability of the supply chain they live in. And along the way he tells the stories of dozens of enterprises, large and small, including Toyota, General Motors, UPS, Intel, Amazon.com, the US Navy, and others from across the globe. Their successes, failures, preparations, and methods provide a rich set of lessons in preparing for and managing disruptions.



Watch the Trailer to Learn More

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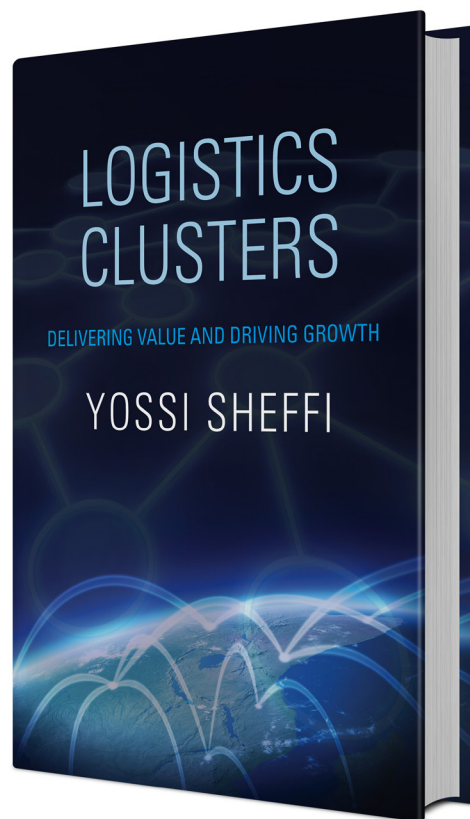
Logistics Clusters

Author: Professor Yossi Sheffi

Why is Memphis home to hundreds of motor carrier terminals and distribution centers? Why does the tiny island-nation of Singapore handle a fifth of the world's maritime containers and half the world's annual supply of crude oil? Which jobs can replace lost manufacturing jobs in advanced economies? Some of the answers to these questions are rooted in the phenomenon of logistics clusters--geographically concentrated sets of logistics-related business activities. In this book, supply chain management expert Yossi Sheffi explains why Memphis, Singapore, Chicago, Rotterdam, Los Angeles, and scores of other locations have been successful in developing such clusters while others have not.

Sheffi outlines the characteristic "positive feedback loop" of logistics clusters development and what differentiates them from other industrial clusters; how logistics clusters "add value" by generating other industrial activities; why firms should locate their distribution and value-added activities in logistics clusters; and the proper role of government support, in the form of investment, regulation, and trade policy.

Sheffi also argues for the most important advantage offered by logistics clusters in today's recession-plagued economy: jobs, many of them open to low-skilled workers, that are concentrated locally and not "offshorable." These logistics clusters offer what is rare in today's economy: authentic success stories. For this reason, numerous regional and central governments as well as scores of real estate developers are investing in the development of such clusters.



Watch the Trailer to Learn More

goo.gl/2pVgRD



Publications

March 2017

- "A New Score for Supply Chains," Supply Chain Management Review, March/April 2017
- "Innovation is a team activity," Supply Chain Management Review, March/April 2017

February 2017

- "Fulfilling Election Promises Needs to be More Than Ticking Boxes," LinkedIn Influencer blog post, February 2017.

January 2017

- "Developing a Clearer Picture of Supply Chain Transparency," Supply Chain Management Review, January 2017. With Holly Cundieff and Mark Ohlund.
- Bateman, A., Blanco, E. and Y. Sheffi, Disclosing and Reporting Environmental Sustainability of Supply Chains, in Yan Bouchery, Tarkan Tan, Jan Fransoo and Charles Corbett (eds.) Sustainable Supply Chains, Springer-Verlag, 2017
- "The Potential Promise and Pitfalls of 3D Printing," LinkedIn Influencer blog post, January 2017.
- Velázquez-Martínez, J.C., Fransoo, J.C. (2017). Green facility location. In Sustainable Supply Chains. Edited by Y. Bouchery, T. Tan., J. Fransoo, & C. Corbett. Springer.
- Edgar Blanco and Yossi Sheffi, "Green Logistics," in Yan Bouchery, Tarkan Tan, Jan Fransoo and Charles Corbett (eds.) Sustainable Supply Chains, Springer-Verlag, 2017
- Available at <http://supplychainmit.com/2016/10/27/small-firm-supply-chains-in-latin-america-the-focus-of-new-scale-study/>

December 2016

- "Retail's Phantom Inventory Menace, or the Ghosts of Christmas Present," Wall Street Journal, with Fredrik Eng Larsson and Daniel W Seeneck), December 2016
- Perez-Franco, R., Phadnis, S., Caplice, C., and Sheffi, Y. Rethinking supply chain strategy as a conceptual system, International Journal of Production Economics, Volume 182 December 2016
- "Does Your Supply Chain Risk Management Strategy Hold Water?" Sloan Management Review Frontiers blog, December 2016.

November 2016

- "IoT Can Drive Big Savings in the Post-Sales Supply Chain," Sloan Management Review Frontiers blog, November 2016. (with Daniel Gettens, OnProcess Technology, Daniel Steeneck)
- "Is Sacking a Customer Worth the Risk?" LinkedIn Influencer blog post, November 2016.

October 2016

- Velázquez-Martínez, J.C. (2016). Small Firm Supply Chains in Latin America the Focus of New SCALE Study. Supply Chain @MIT.

September 2016

- "How MOOCS Can Raise a Company's IQ and Increase Competitiveness," Supply Chain Management Review, September/October 2016 (with Jim Rice).
- "A Fresh Take on Supply Chain Innovation," Sloan Management Review Frontiers blog, (with Tim Rowell, PepsiCo), September 2016
- "The Bankruptcy Risk: Heeding the Distress Signals," LinkedIn Influencer blog, September, 2016

August 2016

- Sheffi, Y., Mitigating the High Risk of Low-Cost Items, Inside Supply Management Magazine, 27 (6) 28-31, August 2016
- "How to Prepare for a Brexit-Size Disruption," Sloan Management Review and LinkedIn Influencer blog post, August 2016.
- "How Store Fulfillment Goes Against the Grain," LinkedIn Influencer blog post, August 2016.
- "Mitigating the Risk of Low-Cost Items," Inside Supply Management, August 2016

July 2016

- Acimovic, J. and Goentzel, J. "Models and Metrics to Assess Humanitarian Response Capacity." *Journal of Operations Management*, Volume 45, pages 11-29, July 2016. doi: 10.1016/j.jom.2016.05.003
- Sheffi, Y., Second Thoughts on Second Sourcing, MIT Sloan Management Review: Blog, July 8, 2016
- "In-Store Fulfillment is no Defense Against Amazon," *Wall Street Journal*, July 2016.
- "Second Thoughts on Second Sourcing," *Sloan Management Review Frontiers blog*, July 2016

June 2016

- "Creating Value from Supply Chain Visibility," *Wall Street Journal*, June 2016 (with Fredrik Eng Larsson)
- Guerrero, J. Ponce, E. (2016). A model that integrates direct and reverse flows in omnichannel logistics networks. *Engineering Systems and Networks*. Editors: Amorim, M., Ferreira, C., Vieira, M., Prado, C. Springer. ISBN: 978-3-319-45746-8.
- Han, H. and Ponce, E. (2016). Formalization of Reverse Logistics Programs: A Theoretical Framework". *Brazilian Journal of Operations & Production Management*. Vol. 13, N. 2, 2016. ISSN: 2237-8960
- Phadnis, S., Caplice, C. Sheffi, Y., How Scenario Planning Influences Strategic Decisions, *MIT Sloan Management Review*, 57 (4) 24-27, Summer 2016

May 2016

- Riveria, L., Sheffi, Y., Knoppen, D., Logistics clusters: The impact of further agglomeration, training and firm size on collaboration and value added services, *International Journal of Production Economics*, Volume 179, May 2016
- "Why Underdog Leicester City are League Winners and Supply Chain Losers," *Linkedin Influencer*, May 2016
- "Progress on the Road to Disaster Recovery," *Linkedin Influencer post*, May 2016

April 2016

- "Remapping the Last Mile of the Urban Supply Chain," *Sloan Management Review Frontiers blog*, April 2016
- González, J.A.; Ponce-Cueto, E. Reverse Logistics and battery collection best practices. *Economía Industrial*, 400, 2016.
- Ponce-Cueto, E.; González, J.A. How to create value through collaboration in last-mile deliveries. *Economía Industrial*, 400, 2016.
- Ponce-Cueto, E.; González-Manteca, J.A. (In press). *Calidad Pascual: Creating value through collaboration. Reaching 50 Million Nanostores*. Editors: Blanco, E. and Fransoo, J. Accepted for publication in April 2016.
- "When Vilifying Big Business Be Careful What You Ask For," *Linkedin Influencer*, April 2016

March 2016

- "New Supplier Strategies Revive Important Corporate Questions," *Wall Street Journal*, March 2016
- Bateman, A. and Sheffi, Y., How a Lack of Systemic Thinking Threatens a Sustainable U.S. Energy Policy, *MIT Sloan Management Review: Big Idea Sustainability Blog*, March 22, 2016
- "Building Walls is Not the Answer to Economic Anxiety," *Linkedin Influencer*, March 2016

Working/Submitted Papers

- Velázquez-Martínez, J.C., Blanco, E.E., Fransoo, J. C., Mora-Vargas, J. (2015). Transportation cost and CO2 emissions in location decision models. *Beta Research School for Operations Management and Logistics/ TU/e. Working Paper series 451*.
- Velázquez-Martínez, J.C., Blanco, E.E., Fransoo, J.C.(2016). The impact of varying truck capacities in the p-Median problem in megacities. *Working paper*.
- Velázquez-Martínez, J.C., Fransoo, J.C. (2016). Managerial Implications of Considering CO2 Emissions on Vehicle Routing Problems. *Working paper*.
- Leenders, B.P.J., Velázquez-Martínez, J.C., Fransoo, J.C. (2016). Emissions allocation in routing transportation problems. Submitted to *Transportation Research Part D: Transport and Environment*.



Outreach

Events



7th Annual Partners Meeting

March 22, 2016

CTL hosted the 7th Annual Partners Meeting which convened key contacts from CTL's partner companies for a review of research and customer feedback and input sessions.

12th Annual Crossroads Conference

March 23, 2016

This year's conference focused on innovations that are driving another decade of revolutionary change in the supply chain world, and featured experts from MIT speaking about the technologies that will likely impact SCM in the future.

5th Annual SCM Directors' Conference

March 23-25, 2016

A premier colloquium specific to program directors, assistant/associate deans and center managers who were involved in developing and managing different aspects of supply chain management programs and curriculum.

Supply Chain Masters Program Research Fest

May 19, 2016

Graduating master's students presented their theses to CTL's corporate Supply Chain Exchange Partners, providing the chance for Partners to hear the results of new student research, much of which had been done with Exchange Partners.

SCALE Alumni ReConnect 2016

May 19-20, 2016

The annual MIT SCALE Alumni ReConnect welcomed SCALE alumni back to campus to network with each other and continue their professional education.

Executive Education: Supply Chain Management: Driving Strategic Advantage

June 7-10, 2016

A fast-paced mix of simulations, case studies, MIT CTL research, and thought-provoking, interactive class sessions designed to hone and develop SCM skills. Also attended by 65 Executive MBA students from the Antwerp Business School.

Humanitarian Response Lab Co-Hosts Health and Humanitarian Logistics Conference

August 29-31, 2016

The Conference provided an open forum to discuss the challenges and new solutions in disaster preparedness and response, long-term development and humanitarian aid, and global health delivery.

Innovations in Transportation: Impact of New Technologies Roundtable

October 6, 2016

The Roundtable identified how current and pending innovations could potentially disrupt the freight transportation industry based on participants from the shipper, carrier, broker, and technology perspectives.

Omni-Channel: Completing the Integrated Experience Puzzle

November 3, 2016

This Roundtable addressed the challenges of adding new capabilities, and connecting or modifying existing systems to develop seamlessly integrated omni-channel supply chains.

Supply Chain Financial Analysis Executive Education Workshop

November 30-December 1, 2016

This workshop demonstrated how supply chain actions affect the income statement and balance sheet – two key financial statements – and how supply chain managers can explain their decisions in the language of finance.

Executive Education: Supply Chain Management: Driving Strategic Advantage

January 17-20, 2017

A fast-paced mix of simulations, case studies, MIT CTL research, and thought-provoking, interactive class sessions designed to hone and develop SCM skills

9th Annual MIT Global SCALE Network Supply Chain Student Research Expo and Networking Night

January 25, 2017

MIT CTL hosted a Research Expo for over 125 supply chain master's students from the MIT Global Supply Chain and Logistics Excellence (SCALE) Network to showcase their company-sponsored thesis projects.



Our Corporate Partners

Our corporate outreach program, the Supply Chain Exchange, brings together more than 50 global companies to solve critical supply chain challenges. Our Supply Chain Exchange Partners gain access to world-leading research, unrivaled expertise, and a unique environment for exchanging knowledge.



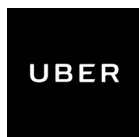
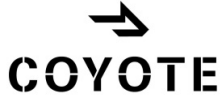
Key Figures

54 Supply Chain Exchange Partners

15 Thesis Partners

11 Research Partners

5 Strategic Partners
(BASF, Intel, Procter & Gamble, Starbucks, UPS)



Hosted Speakers

CTL Distinguished Speaker Series:

Steve Sensing

President of Global Supply Chain Solutions, Ryder

March 4, 2016

Jim Barch

Director of Research and Development, Seventh Generation

March 9, 2016

Gustavo Velez Jr., Executive Vice President, LF Products, Li & Fung

Pamela Mar, Director of Sustainability, Li & Fung

September 19, 2016

Susan Handy

Professor, Environmental Science & Policy

Director, National Center for Sustainable Transportation, University of California, Davis

December 5, 2016

MIT Humanitarian Speaker Series:

Paola Corrado

Head of Logistics for Ethiopia, UN World Food Programme

March 3, 2016

Panel Discussion:

Johnson Kagoye, Programme Officer, World Food Programme Zero Food Loss Initiative;

Dieudonné Baributsa, Research Associate Professor, Purdue University and Team Manager, Purdue Improved Cowpea Storage (PICS);

Jim Bagwell, President, ProvisionGard

November 10, 2016



SCALE Connect Speaker Series:

Ralf Busche

Senior Vice President of Global Supply Chain Strategy & Performance, BASF

January 10, 2017

Peter Kraemer, Chief Supply Officer, AB InBev

Elito Siqueira, Global Vice President Operations and Logistics, AB InBev

January 17, 2017

Phillippe Cochet

SVP & Chief Productivity Officer, GE

January 19, 2017

Tom Linton

Chief Procurement Officer, Flex

January 23, 2017

Nate Faust

Co-founder, Jet; and Head of Supply Chain US eCommerce, Walmart

January 24, 2017





Education

Supply Chain Management Program

Class of 2016



Class Profile

Students: 35

Countries: 13

Female: 43%

Male: 57%

Average age: 29

Median GMAT: 710

Prior work experience: 6 Years

Thesis research partners: 21

Companies recruiting: 60+

Job offer upon graduation: 91%

Job offer 6 months after graduation: 97%

Class of 2015-2016 placement:

Google

pwc

Genentech

amazon.com

McKinsey&Company

Gap Inc.

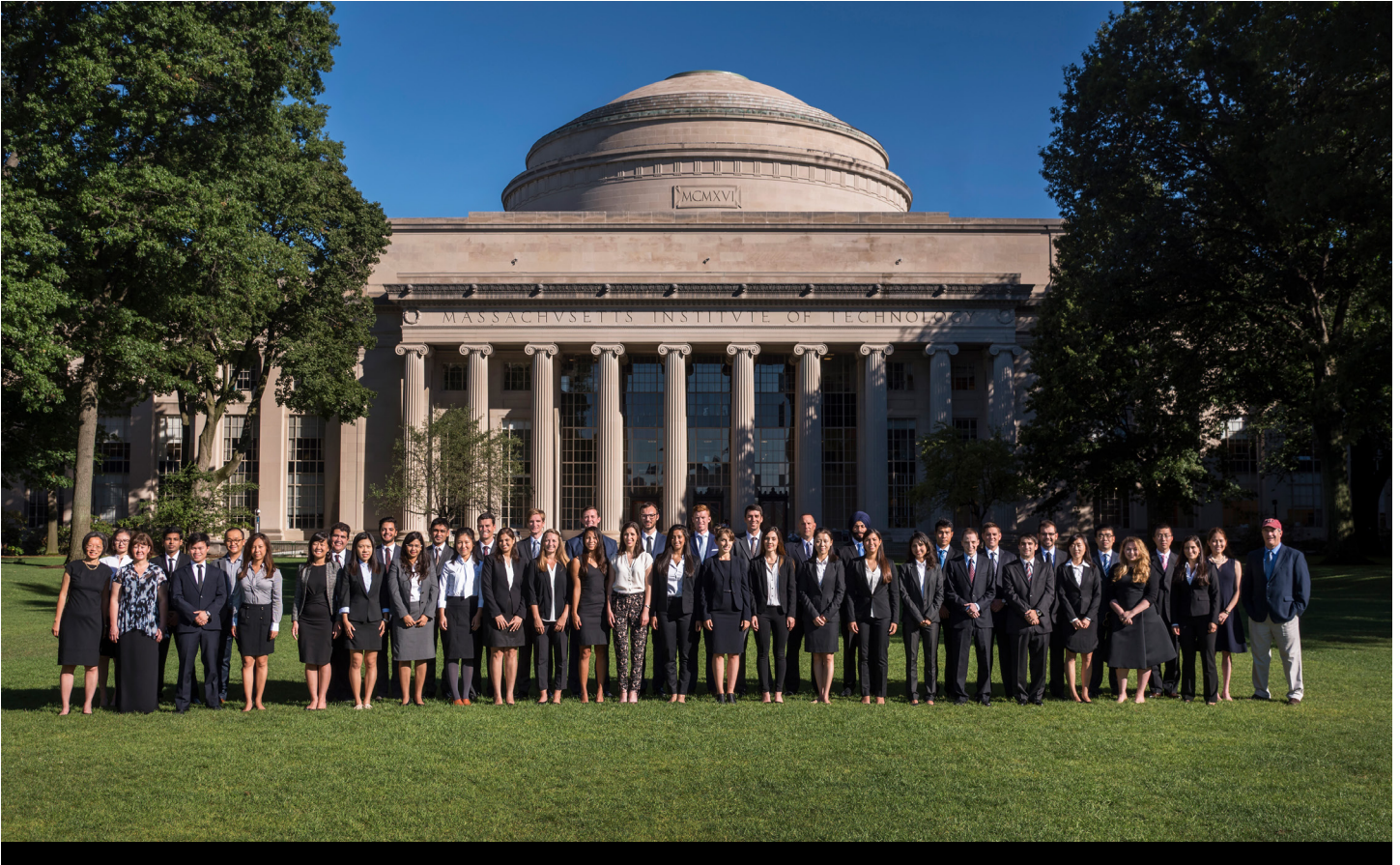
AT&Kearney

Microsoft

HERSHEY'S

AlixPartners

Class of 2017 (Ongoing)



Class Profile

Students: 40

Countries: 14

Female: 50%

Male: 50%

Average age: 28

Median GMAT: 700

Prior work experience: 6 Years

Thesis research partners: 16

Companies recruiting: 60+

Job offer as of February 2016: 56%

Class of 2016-2017 placement



amazon.com

Deloitte.

BCG
THE BOSTON CONSULTING GROUP

AT&T



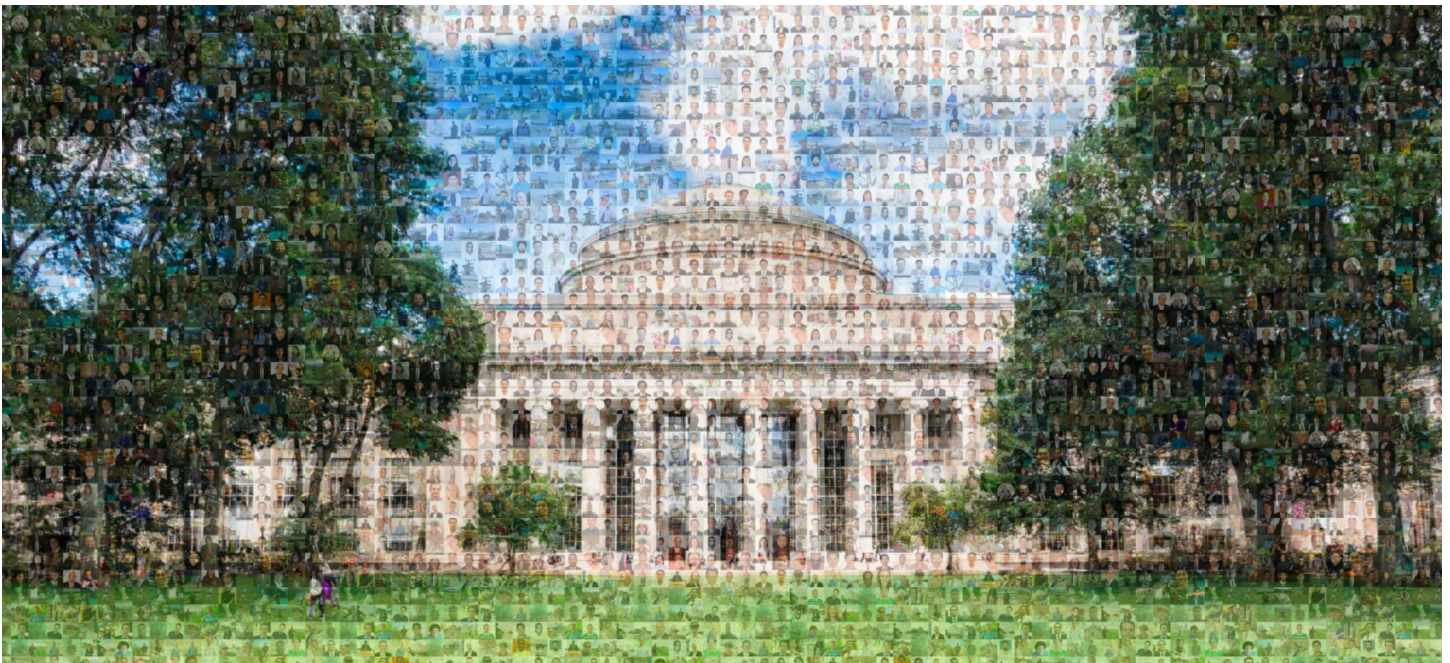
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MITx MicroMasters in Supply Chain Management



On October 7, 2015, President Rafael Reif announced the launch of the MITx MicroMasters Credential in Supply Chain Management. This is a new educational certification program that offers learners around the world a way to gain and demonstrate expertise in the growing field of Supply Chain Management. Additionally, students earning the MITx MicroMasters Credential have the opportunity to apply those credits toward a Masters Degree at MIT through the Blended Supply Chain Management Program.

CTL took the lead in the development and launch of this new initiative by incorporating its existing online courses (SCx1 Supply Chain Fundamentals and SC2x Supply Chain Design) into the more comprehensive MicroMasters Credential curriculum. The MITx MicroMasters Credential in Supply Chain Management is a stand-alone certification program designed and administered by MIT's Center for Transportation & Logistics and supported by the Office of Digital Learning (ODL). It is run separately from the residential MIT Supply Chain Management (SCMr) Masters Program.

The MicroMasters credential consists of five intensive on-line courses covering all aspects of logistics and supply chain management (equivalent to one semester worth of courses in the SCMr program). Students submit graded homework every week and take mid-term and final exams. To earn the MicroMasters Credential they also have to pass a proctored exam. The total cost of this new MicroMasters Credential is approximately \$1,350, including the cost of the five courses and the capstone exam. The five courses are:

- **CTL.SC0x** Supply Chain Analytics
- **CTL.SC1x** Supply Chain Fundamentals
- **CTL.SC2x** Supply Chain Design
- **CTL.SC3x** Supply Chain Dynamics
- **CTL.SC4x** Supply Chain Technology & Systems
- **EXAM** Comprehensive Proctored Final Exam

It is important to note that the MicroMasters is NOT a degree-granting program, nor is it a guarantee of admissions to MIT or the Supply Chain Management graduate program. It is a separate standalone professional certificate.

As of December 2016, over 150,000 learners from more than 190 countries across the globe have participated in at least one of the MicroMasters courses! A total of 17,000 verified students are enrolled in the SCx courses. Currently, the team is working on final development of the last course, the design of the comprehensive final exam, and preparing for the first cohort of MicroMasters graduates entering MIT in the SCM Blended program track.

To learn more, please visit <http://scm.mit.edu/micromasters>

Key Figures

17,000+ Verified Students

150,000+ Learners

190+ Countries



Supply Chain Executive Education



Executive Education at MIT

For over a decade, MIT CTL has educated thousands of executives through our popular executive education course, *Supply Chain Management: Driving Strategic Advantage*. This four-day, supply chain and logistics-focused course is offered every January and June, and features a comprehensive array of management simulations and case studies, interactive lectures and discussion sessions, and presentations by distinguished lecturers and MIT CTL faculty. What's better than that? Every Supply Chain Exchange partner company is given one complimentary seat to this course every year as well as options for larger group discounts.

Interested in learning more? Visit <http://ctl.mit.edu/execed>

Key Figures

98 June Attendees

49 January Attendees

10 Custom Courses Developed

300+ Custom Course Attendees

Custom Courses

MIT CTL partners with organizations on site to provide customized executive education experiences to individual enterprises and consortia. Custom courses give organizations the opportunity to direct focused education on specific issues crucial to their company goals, such as supply chain financial analysis, strategy, and scenario planning. An online component can be included which will enable all students to start the course with a common knowledge base, allowing them to get more out of their learning experience and communicate better with their peers during the in-person class.

If you're interested in having MIT CTL design a custom education course for your organization, please reach out to **Jim Rice, Deputy Director**, at jrice@mit.edu.

CCx Custom Online Executive Education Courses

CTL offers custom online programs comprised of content from the SCx series (see p. 42), customized based on the organization's needs. Components of the Custom Course Experience (CCx) include videos, quick questions, and practice problems. Courses are built on demand.

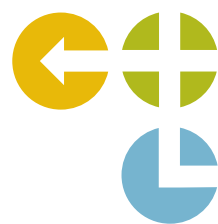
Custom courses and custom online courses can be crafted around a variety of different supply chain topics, for example:

- Forecasting
- Inventory
- Transportation
- Network Design
- Finance
- Sourcing
- Planning
- Demand Management
- Process & Organizational Design

This learning tool has been incorporated into our workshops and Executive Education Course since early 2016. If you are interested in our blended custom offerings, please reach out to **Jim Rice at jrice@mit.edu**.



NOTES

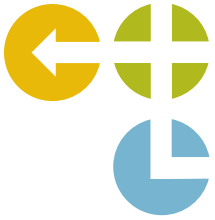


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