



SUPPLY CHAIN

UNIVERSITY OF PITTSBURGH

**2021 SUPPLY CHAIN MANAGEMENT
VIRTUAL SYMPOSIUM**

REIMAGINING SUPPLY CHAINS

MARCH 25 & 26, 2021

DIRECTOR'S MESSAGE

I am honored to welcome you to the Pitt Business Center for Supply Chain Management's 2021 Supply Chain Management Virtual Symposium.



Our theme this year is “Reimagining Supply Chains.” Transformative supply chain changes, which began several years ago, were accelerated due to COVID-19 related disruptions and challenges. Structural changes in the supply chain, which normally might have taken years to execute, were often implemented in a matter of months, if not weeks. The primary drivers of the redesign—changing customer expectations, hardware and software technological developments, building higher resilience, and shifting geographical focus—continue to evolve. In response, companies are placing a renewed focus on experimentation with and reimagination of their supply chains. Our esteemed speakers will present and lead discussions that explore these critical initiatives and advances.

We have a terrific lineup of speakers, who collectively have experience at several of the Gartner Top 25 supply chain companies. **Michelle Eggers** from **P&G**, **Spencer Levy** from **CBRE**, **Andy Walton** from **Walmart**, and **Alex Zelikovsky**, who was formerly with **Lowe's**, **Bed Bath & Beyond**, and **Amazon**, will be sharing their views of how supply chains are being restructured. Our moderator, **Paul Page**, editor of the Logistics Report at **The Wall Street Journal**, will also share his insights. **Lisa Scales**, CEO of the **Greater Pittsburgh Community Food Bank** will introduce the speakers and provide an update about the Food Bank. In keeping with past tradition, we have organized a virtual tour: **Steve Myers**, **Bob Pudlo** and **Marc Richter** will be hosting a tour of **FedEx Ground's** state-of-the-art Houston hub. Also, in keeping with past tradition, we have planned a student poster competition during the event—this year, we opened the competition to other schools in the region. A special thanks to **DHL**, our naming sponsor for the poster competition.

My heartfelt gratitude goes out to our speakers, event presiders, and poster competition judges for volunteering their time with us at our Symposium.

Our Annual Symposium is our marquee event, and is integral to the Center's mission. By facilitating an exciting congregation of industry leaders and the academic community, we create an environment conducive to networking and knowledge sharing.

Beyond the Symposium, we invite you to participate in the Center's many activities. Our Breakfast Speaker Series hosts industry experts who address contemporary supply chain issues during a morning of food and fellowship. Our new discussion series, Fast Focus Forums, examines COVID-19 related supply chain challenges for regional companies. Our case competitions, judged by industry leaders, provide students with hands-on experience in real-world issues. We would be honored if your organization would sponsor the Center. For more information, please speak with me or contact the Center at scmcenter@katz.pitt.edu.

I offer my sincere thanks to all our sponsors for making the Center's activities possible. We are grateful for the generous patronage of our annual sponsors: **ARMADA**, **FedEx Ground**, **Giant Eagle**, **MSA**, **PITT OHIO**, **UPMC**, and **UPS**. Many thanks to our student poster competition naming sponsor **DHL**, competition sponsor **The Traffic Club of Pittsburgh**; our preferred-level sponsor **Catalyst Connection**; and our signature-level sponsor **Pitt Business/Business Analytics & Operations Area**. I am especially grateful to **GENCO** and its Executive Chairman, **Herb Shear**, for providing the seed funding to establish our Center.

Finally, I would like to express my gratitude to my colleagues at the Center—Associate Director and Clinical Associate Professor **Eric Paljug** and Program Manager **Janice Trygar**—as well as the members of our Breakfast Speaker Series Planning Committee and Corporate Advisory Board. Many of them are present today. A special thank you to **Ash Brady**, Applications Support Lead at Katz Graduate School of Business. I deeply appreciate their support, and contribution to the planning, coordination, and execution of the Symposium.

I hope that we will be back to meeting in-person by the time of our next Symposium. In the meanwhile, I am delighted to once again warmly welcome you all to our 2021 virtual Symposium! I hope the Symposium proves to be a rewarding and enjoyable experience.

With best regards,
Prakash Mirchandani, Director
Pitt Business Center for Supply Chain Management

EVENT SCHEDULE

Thursday, March 25, 2021

5:00 – 5:10 p.m.	Check-in and Speed Networking
5:10 – 5:15 p.m.	Welcome - <i>Prakash Mirchandani</i>
5:15 – 5:20 pm.	Dean's Remarks
5:20 – 5:50 p.m.	FedEx Ground Virtual Hub Tour and Engineering Panel <i>Panelists: Steve Myers, Bob Pudlo and Marc Richter</i>
5:50 – 6:00 p.m.	Q&A
6:00 – 6:30 p.m.	Happy Hour and Speed Networking
6:30 p.m.	Thank You Message (Networking Continues)

Friday, March 26, 2021

7:15 – 7:55 a.m	Check In, Coffee, and Networking
7:55 – 8:00 a.m.	Welcome
8:00 – 8:05 a.m.	Dean's Remarks
8:05 – 8:10 a.m.	Speaker Introductions <i>by Lisa Scales</i>
8:10 – 8:40 a.m.	"The Way Forward." Megatrends, Commercial Real Estate and Logistics in a Post-COVID19 World <i>Talk by Spencer Levy</i>
8:40 - 8:48 a.m.	Q&A
8:50 – 9:20 a.m.	Realities Meant for Reimagining: Preparing our Supply Chains for Tomorrow <i>Talk by Michelle Eggers</i>
9:20 – 9:28 a.m.	Q&A
9:30 – 10:05 a.m.	Coffee and Networking (Theme Rooms)
10:05 – 10:35 a.m.	Reimagining Omni-Channel Supply Chain and Technology Landscape <i>Talk by Alex Zelikovsky</i>
10:35 – 10:43 a.m.	Q&A
10:45 – 11:15 a.m.	Don't Look Back—Walmart's Journey to Best in Class <i>Talk by Andy Walton</i>
11:15 – 11:23 a.m.	Q&A
11:25 a.m. – 12 p.m.	Lunch with Networking Alternate Activity: Visit DHL Student Poster Competition Presenters
12 – 12:10 p.m.	Greater Pittsburgh Community Food Bank: COVID19 Challenges Food Bank Update <i>by Lisa Scales</i>
12:10 – 12:25 p.m.	The DHL Student Poster Competition Awards and Wrap-up
12:25 – 1:00 p.m.	Open Networking Meet with Board Members and Speakers
1:00 p.m.	Thank You Message (Networking Continues)

FEDEX GROUND VIRTUAL TOUR HOSTS



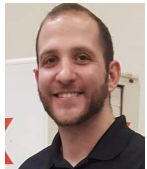
STEVE MYERS, SENIOR VICE PRESIDENT, OPERATIONS PLANNING AND ENGINEERING, FEDEX GROUND

Steve Myers is Senior Vice President, Operations Planning & Engineering for FedEx Ground, headquartered in Moon Township, Pa. Steve has more than 30 years of experience with FedEx Ground. In his current role, Steve oversees all operations planning and engineering activities for the company. Steve oversees Dock, First and Last Mile & Process Engineering, Service Measurement and SQL, Decision Science, ISP negotiations, Business Agility, Facilities and Technology Innovation, Operations Design, as well as Network and Linehaul Engineering. He has been honored with the prestigious FedEx Ground Five Star Award. Steve is a member of the Salvation Army Advisory Board, an active supporter of Children's Hospital of Pittsburgh, and was one of the Executive Champions for the 2014 and 2015 FedEx United Way Campaigns. He is also a member of the University of Pittsburgh's Center for Supply Chain Management Council Advisory Board. Steve earned his bachelor's degree from Lehigh University and his master's degree from the Katz Graduate School of Business, University of Pittsburgh.



BOB PUDLO, VICE PRESIDENT, OPERATIONS SUPPORT AND ENGINEERING, FEDEX GROUND

Bob Pudlo is Vice President of Operations Support & Engineering for FedEx Ground, headquartered in Moon Township, Pa. Bob has more than 32 years of experience with the company, joining FedEx Ground predecessor RPS, Inc. as a Hub Industrial Engineer in 1988. Bob has held various positions throughout the company before assuming his current role in 2008. He has been honored with the prestigious FedEx Ground Five Star award. In the community, Bob serves on the board of directors for Junior Achievement of Western PA. In addition, Bob also serves on advisory boards for the Carnegie Science Center and the Institute of Industrial & Systems Engineers. Bob earned his bachelor's degree in industrial and systems engineering from Penn State University and his master's from the University of Toledo.



MARC RICHTER, PRODUCT OWNER, NETWORK DESIGN AND ANALYTICS, FEDEX GROUND

Marc Richter is a Product Owner on the Network Design and Analytics team at FedEx Ground. In his seven years at FedEx Ground, he has held increasingly important roles. He managed the outbound operations in New Berlin, WI, and opened the Houston FedEx Ground hub in Cypress, TX while serving as their Engineering Specialist. He was recently promoted to Product Owner on the Network Design and Analytics team. In this position he will have the opportunity to utilize his field experience while assisting in the development of tools of the future that are needed to manage the FedEx Ground Network. He has a B.S. in Industrial and Manufacturing Engineering from University of Wisconsin-Milwaukee.

SPEAKERS



MICHELLE EGGERS, VICE-PRESIDENT NA MARKET OPERATIONS AND GLOBAL LOGISTICS PURCHASES, PROCTER & GAMBLE

Michelle Eggers is the Vice-President of NA Market Operations and Global Logistics Purchases for Procter & Gamble. Michelle has more than 25 years of experience in Engineering, Manufacturing and Purchasing working across all P&G's categories and regions. She has been exposed to many industries during that time including Pulp and Paper, Flavors and Fragrances, Contract Manufacturing, Brand and Business Services and most recently Logistics. Over the last 5 years, she has had the opportunity to lead not just Global Logistics Purchases, but also P&G's Global Physical Distribution Center of Excellence which led the innovation program for P&G Physical Distribution Operations. Prior to her role in Logistics, she worked for P&G in Moscow, Russia where she led all purchases activities for their Eastern European Business and Brand Building Purchases for Middle East, Africa, India. She currently leads P&G's "Bold Actions" team focusing on Economic Empowerment for Multi-cultural Start Ups and Entrepreneurs. Michelle graduated from Clarkson University with a BS in Chemical Engineering.



SPENCER LEVY, CHAIRMAN OF AMERICAS RESEARCH AND SENIOR ECONOMIC ADVISOR, CBRE

Spencer Levy is the Chairman of Americas Head of Research and Senior Economic Advisor for CBRE. Spencer is the chief spokesman on real estate matters for CBRE in the Americas and is one of the most sought-after speakers in the commercial real estate industry. He is regularly quoted in major business publications and frequently is a guest on business television, including Bloomberg, CNBC, CNN, PBS and Fox Business. Spencer combines his experience as a lawyer, investment banker and capital markets leader to create content that goes deep and touches on all aspects of commercial real estate. He is the host of CBRE's podcast, The Weekly Take, the commercial real estate industry's leading podcast. Spencer is a recipient of multiple industry awards, including the CORENET Luminary Award for Excellence in Public Speaking (which he has won twice), and the CBRE Trammell Crow Master Builder Award. Spencer sits on the boards of the Baltimore Leadership School for Young Women and Harvard Alumni. He is a graduate of Cornell University and Harvard Law School.

**ANDY WALTON, GENERAL MANAGER, DISTRIBUTION CENTER, WALMART**

Andy attended the United States Military Academy at West Point and graduated in 2003 with a BS in Management and Systems Engineering. He then served in the United States Army as an Infantry Officer and led Soldiers on a combat deployment in support of Operation Iraqi Freedom in 2005. He served in the Army for five and half years before transitioning out to begin work with Bechtel Plant Machinery in Monroeville, Pa. Andy worked in the Fleet Support and Logistics area, supporting the Nuclear Navy's Fleet of subs and carriers. Andy graduated from the Katz Graduate School of Business MBA program in 2011. He then joined Walmart's Supply Chain in 2016 as an Assistant General Manager for a Grocery Distribution Center in Johnstown, NY. He is currently the General Manager for the Distribution Center that services 117 Walmart Stores and 21 Sam's Club in New York and throughout the New England region.

**ALEX ZELIKOVSKY, FORMER VICE PRESIDENT, ECOMMERCE TECHNOLOGY AT LOWE'S**

Alex Zelikovsky is an accomplished executive, technologist & supply chain leader with P&L experience. Alex drove on-line product strategy, including Search, Product Pages, Cart & Checkout and Post Purchase customer experience at Lowe's companies. He led omni-channel technology vision and supply chain strategy at Bed Bath & Beyond, and was instrumental in driving digital commerce solutions, including: ship-direct from Stores/DCs/Vendors, Buy On-line Pick-up In Store (BOPIS), curbside pick-up, same-day delivery, home delivery, real-time (cross-channel) inventory visibility, dynamic pricing and offer management. Alex started his digital career journey at Amazon.com, where he led the initial design and built of Amazon.com global distribution network. He possesses extensive supply chain management and optimization expertise. He also held senior supply chain and technology roles at Sephora/LVMH and Procter & Gamble. Alex co-authored "Achieving Stretch Goals Efficiently", 2011, Business Expert Press. Additionally, he served as an Adjunct Professor at Purdue University, Krannert School of Management, where he developed and taught a graduate course in E-Commerce Strategy and Operations. He earned his MBA from the University of Chicago, Booth School of Business.

EVENT PRESIDERS

**PAUL PAGE, EDITOR, LOGISTICS REPORT, THE WALL STREET JOURNAL**

Paul Page is editor of The Wall Street Journal's Logistics Report, the Journal's dedicated site for all things supply chain and logistics that he helped launch in 2015. He came to the Journal from Congressional Quarterly, where he was economic policy editor from 2012 to 2015. He has had a long career in logistics reporting, including nearly 20 years at The Journal of Commerce, where he was editorial director from 2009 to 2012. Paul is an innovative, agile journalist who has led publishing operations in new strategic directions, developed and implemented new editorial models to meet changing market demands and organized, trained and molded staffs at various operations to bring high-quality business writing to high-level readership in a dynamic publishing environment. Paul holds a BA in Communications and Literature from American University.

**LISA SCALES, PRESIDENT AND CEO, GREATER PITTSBURGH COMMUNITY FOOD BANK**

Lisa Scales has been President and CEO of Greater Pittsburgh Community Food Bank since 2012, leading the organization in distributing food for nearly 40 million meals annually through a network of 600 community partners in 11 counties of southwestern Pennsylvania. She holds a Juris Doctor (J.D.) degree from Boston University School of Law and Bachelor of Arts degree in Social Sciences from Seton Hill University, from which she received the 2019 Distinguished Alumna Leadership Award. Scales serves on the Board of Directors of Adagio Health and is an advisory board member of the Center for Supply Chain Management at the University of Pittsburgh, the Centers for Community Engagement at Robert Morris University, and the University of Pittsburgh Johnson Institute for Responsible Leadership. Additionally, Scales is a member of the University of Pittsburgh Institute of Politics Board of Fellows and an advisory team member of the Greater Pittsburgh Nonprofit Partnership. She currently serves as Chair of Feeding Pennsylvania, a statewide association of Feeding America food banks. In 2018 Scales was the recipient of the Greater Pittsburgh ATHENA Award; in 2020 she received Duquesne University's Eileen Zungolo Spirit of Service Award; in January Pittsburgh Magazine named Scales as Pittsburgher of the Year; and Pittsburgh City Council deemed February 11, 2021 as 'Lisa Scales Day' in honor of her leadership and efforts to feed families in need during this critical time.

ABSTRACTS

THURSDAY, MARCH 25, 2021

FEDEX GROUND VIRTUAL HUB TOUR AND ENGINEERING PANEL

Please join us for this exciting virtual tour of FedEx Ground's automated, state-of-the-art hub with 22,500 package per hour sortation capability in Houston, Texas. Learn about the planning, engineering and technology that powers this 800,000 square-foot facility.

FedEx Ground gives customers dependable business-to-business delivery or convenient residential service. In 2019, FedEx Ground announced three transformational operational changes to enhance its competitive position in e-commerce: year-round, seven-day residential delivery, the integration of FedEx SmartPost volume into standard operations, and the addition of large package capabilities. And the company continues to invest in new facilities and emerging technologies. The result is the industry's most automated hub network and continual improvement in speed, efficiency, and reliability.

FRIDAY, MARCH 26, 2021

MICHELLE EGGERS

REALITIES MEANT FOR REIMAGINING: PREPARING OUR SUPPLY CHAINS FOR TOMORROW

When we all were experiencing shortages of consumer products last year due to the COVID19-related demand surge, P&G personnel were hard at work at replenishing inventory to keep retail shelves stocked up. And, P&G's output actually saw a significant year-on-year increase. Michelle will discuss how P&G accomplished this daunting task, the challenges they are facing, and how they are overcoming the challenges. Adopting an end-to-end supply chain perspective, she will also discuss global initiatives at P&G that are making the impossible possible. The core theme across all the initiatives she will discuss—from digitization to building resiliency to transformational innovation—will be how to navigate ecosystems and foster relationships to deliver long-term value.

SPENCER LEVY

"THE WAY FORWARD." MEGATRENDS, COMMERCIAL REAL ESTATE AND LOGISTICS IN A POST-COVID-19 WORLD

The pandemic has completely disrupted how we live, work and play. Join Spencer Levy, Chairman of Americas Research, CBRE and host of the podcast, [The Weekly Take](#), as he shares his thoughts on The Way Forward for the economy, commercial real estate, and logistics, especially as conditions evolve due to a new U.S. administration and the vaccine. While the world has definitely changed in the last twelve months, there remains a large amount of uncertainty regarding the long-term ramifications of these changes. Some changes will recede as the virus does, others are secular shifts. Spencer will help sort all of this out.

ANDY WALTON

DON'T LOOK BACK - WALMART'S JOURNEY TO BEST IN CLASS

As the General Manager of one of Walmart's largest Distribution Centers, which serves both Walmart and Sam Club stores, Andy Walton has seen firsthand the dramatic transformation occurring in the retail industry, particularly following COVID-19. In this talk, he will begin by discussing changing customer expectations, and illustrate how Walmart has responded by adapting its business models. He will outline Walmart's initiatives such as Curbside Grocery Pickup, Pickup Tower, and Direct-to-Home Delivery. He will also discuss the Walmart's cutting-edge investments in automation, and implementation of proactive solutions in anticipation of "what's next."

ALEX ZELIKOVSKY

REIMAGINING OMNI-CHANNEL SUPPLY CHAIN AND TECHNOLOGY LANDSCAPE

During the COVID-19 pandemic, key retailers including Walmart, Kroger, and Bed Bath & Beyond are keeping their businesses operational and protecting their employees and customers by leveraging three key strategies: virtual inventory pooling, last-mile delivery and omnichannel technology. These strategies, which we refer to as real options, are delivering value during the pandemic but will continue to drive business in the future. They infuse companies with the flexibility and agility to survive seismic market disruptions and help them maneuver into stretch opportunities for success, such as by repurposing stores, rebalancing inventory, refining how merchandise reaches customers and developing other technologies to support success.

THE DHL POSTER COMPETITION

- Sponsored by DHL and the Traffic Club of Pittsburgh -

Graduate and undergraduate students from local universities were able to explore their areas of interest in supply chain management through the poster session.

The poster competition will be held from 9:30 to 10:05 a.m. Additionally, there will be an exclusive meeting between the judges and poster competition participants. Attendees are invited to visit the poster session between 11:25 a.m. to 12:00 p.m.

GRADUATE DIVISION FINALISTS

Team	Poster Title
Josh Lockwood	Sustainability and Responsiveness: Allies or Enemies?
Daniel Pomerantz	Source Locally: Opportunities and Challenges
Yongyi (Sely) Zhong	The Human-less Robotic Supply Chain

UNDERGRADUATE DIVISION FINALISTS

Team	Poster Title
William Heintz Tori Kopchak Lance Robertson	What Last-Mile Delivery Can Teach us about the Distribution of the COVID-19 Vaccine
Rachael Lieberman Allison Maliska	Changing Supermarket Industry Dynamics: A Supply Chain Perspective Through the Lens of a Global Pandemic
Kimberly Nguyen Cynthiya Mahumane Livi Reynolds	The New Silk Road Strengthens the Global Supply Chains
Erika Nolan	Real SCM Impact from Big Data: Inequality Aversion Pricing in e-commerce Business

JUDGES

GRADUATE DIVISION

Paul Page | Editor, Logistics Report, The Wall Street Journal

Jim Szilagy | Vice President & Chief Supply Chain Officer, UPMC

Alex Zelikovsky (Chair) | Former Vice President, E-Commerce Technology, Lowe's

UNDERGRADUATE DIVISION

Michelle Eggers (Chair) | Vice President, NA Market Operations and Global Logistics Purchases, Procter & Gamble

Spencer Levy | Chairman of Americas Research and Senior Economic Advisor, CBRE

Adam Walker | CEO, Summit Container Corporation, Homestead Packaging Co.

Meredith Williams | Director, Solution Design, DHL

1ST ROUND JUDGES

Ednilson Bernardes | Professor, Supply Chain Management, Program Coordinator, Global Supply Chain Management, West Virginia University

Matt Drake | Associate Professor of Supply Chain Management, Duquesne University

Eric Paljug | Clinical Associate Professor of Business Administration, Assoc. Director, Center for Supply Chain Management, University of Pittsburgh

Sangho Shim | Associate Professor, Industrial and Manufacturing Engineering, School of Engineering, Mathematics and Science, Robert Morris University

John S. Stakeley | Assistant Professor of Management, Dept. of Business and Entrepreneurship, Chatham University

PRIZES

GRADUATE POSTER ENTRIES

- \$750 for First Place
- \$400 for Second Place
- \$250 for Third Place

UNDERGRADUATE POSTER ENTRIES

- \$600 for First Place
- \$300 for Second Place
- \$200 for Third Place
- \$100 for Fourth Place

Many thanks to our judges for their assistance in judging our poster competition.

The DHL Student Poster Competition is sponsored by DHL and the Traffic Club of Pittsburgh.

Thank You to Our Annual Sponsors



Thank You to Our Event Sponsors



Thank You to Our Event Supporters



SPECIAL THANKS TO OUR EVENT PRESIDERS:

Paul Page | Editor, *The Wall Street Journal*

Lisa Scales | President and CEO, Great Pittsburgh Community Food Bank

The Center has been established with funding from GENCO,
and its (former) Executive Chairman, Herb Shear.

Mark Your Calendar

UPCOMING EVENTS (TENTATIVE):

- FAST FOCUS FORUM - THURSDAY, MAY 13, 2021
- SUMMER MIXER - THURSDAY, JULY 15, 2021

Check our webpage for the speakers and topics:

www.business.pitt.edu/scm



Center News

The Katz School Ranked as a

TOP 25

Graduate Supply Chain
Management Program

(Gartner 2020)

Fast Focus Forums Launched
(May 2020) Five held so far

Get Involved

Center for Supply Chain Management

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Eric Paljug, Associate Director
Janice Trygar, Program Manager

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