DECEMBER 2024 SUPPLY CHAIN PROGRAMS UPDATE

Middle Tennessee State University

Volume 3, Issue 2



TABLE OF CONTENTS:

Page - Topic

- 1 Welcome Message
- 2 Synergy Experience Program
- 3 How You Can Get Involved
- 4 Recent Graduates
- 5 SCMSO Event Recap
- 6 SCMSO Tour Recap
- 7 Faculty Research Brief
- 8 Alumni Spotlight
- 9 Undergraduate Spotlight
- 10 Graduate Spotlight
- 11 Upcoming Events

WELCOME to the December edition of the **MTSU Supply**

We're happy to bring you the latest edition of the MTSU Center for Supply Chain Management & Sustainability newsletter, your dedicated resource for staying informed on the exciting developments, trends, and achievements within the dynamic supply chain education and research world at MTSU.

In this issue, we spotlight our fall semester, student achievements, and explore industry insights that shape the future of supply chain management. Whether you're an industry partner, current student, alumni, Chain Newsletter. or faculty member, our goal is to keep you engaged and inspired by the ever-evolving field of supply chain management.

Our new Center for Supply Chain Management and Sustainability is up and running and offering new programs, partnerships, and opportunities, including the new Synergy programs and events. We also are well on our way to planning the 2025 MTSU Midsouth Supply Chain Summit (Innovation & Sustainability). Thank you for being an integral part of our academic supply chain community. Let's continue to build connections, share knowledge, and drive innovation together.



Dr. Richard J. Tarpey

Richard.Tarpey@mtsu.edu

Assistant Professor, Jones College of Business Director, Center for Supply Chain Management & Sustainability Middle Tennessee State University Department of Management Business and Aerospace Building N136 MTSU Box 75 Murfreesboro, TN 37132 (615) 898-5312 (office) (615) 305-9705 (cell)



JONES COLLEGE OF BUSINESS Supply Chain Management



SYNERGY COLLAB-LAB PROGRAM

The Synergy Collab-Lab Program

- connects students with industry representatives to tackle real-world challenges. Students work in teams guided by faculty mentors and company representatives to develop innovative solutions. Participants gain hands-on experience, practical skills, and industry insights. The program culminates in a final presentation, where your team showcases its solution to industry partners.





This past Spring 2024 semester, students Abdulhakim Ali, Priscilla Hammermeister, and Maya Yelland addressed real-world challenges and presented

their findings and recommendations to Mars Petcare leadership. The trio gained valuable networking opportunities and professional mentorship through this tailored experience, which later provided Maya with a career boost as she has since started her career at Mars Petcare.

This Fall 2024 Semester, students Abdulhakim Ali, Samuel Duffield, Arsanious Helmy, and Michael Tanas worked



on a challenge provided by GEODIS at their warehouse in Lebanon, TN. The students analyzed the problem, prepared recommendations, and presented them to GEODIS leadership on 12/5/2024.



Applications are open for Spring 2025!

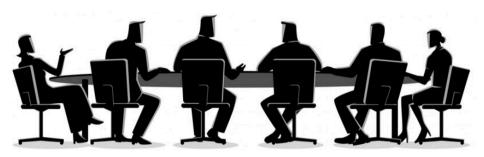
Students - Don't miss out on this valuable opportunity! To apply, scan the QR Code or visit the link below!

https://forms.office.com/Pages/ResponsePage.aspx?

id=QL8udrKAukCG_m3UCay0mTqbVb6YwEBFrArYEppmf2pUNkxGUEw3UTZCUVpOWjFGVFM2WFFHMF NQVC4u

MTSU CENTER FOR SUPPLY CHAIN MANAGEMENT & SUSTAINABILITY

<u>How You Can Get Involved</u>



Mentoring and Internships: Engage with our students through mentoring and internship opportunities, providing practical insights and hands-on experience.

Become a Speaker: Share your expertise at our events or in our classes and inspire the next generation of supply chain leaders.

Sponsor the Center: Support our initiatives through sponsorships that align with your organizational goals. Several opportunities are available, including track sponsorships for the 2025 Midsouth Supply Chain Summit. We had over 300 participants last year and expect more growth in 2025. We intend to continue building partnerships with other universities to bring their supply chain program students to this event. This is a great opportunity for your company to gain name recognition on campus. We have flexible and customizable Supply Chain program, Center, and Summit sponsorship packages available.

Synergy Collab Lab Program: Collaborate with bright, motivated students who bring new insights and cutting-edge knowledge to your projects.

Collaborate on Research: Partner with us on cutting-edge research projects that address real-world supply chain challenges.

Host a Facility Tour: We invite companies to open their doors and host students for facility tours, providing a unique opportunity to inspire, educate, and connect with the future workforce.

Join our Advisory Committee: We are excited to invite forward-thinking companies to join our Supply Chain Advisory Committee, a collaborative platform where industry leaders and academia come together to shape the future of education and workforce development.

Congratulations to our Fall 2024 graduates!

James Cunningham, MS - Supply Chain Management Fady Eid, MS - Supply Chain Management Shelby Hix, MS - Supply Chain Management Zachery Meyer, MS - Supply Chain Management Demonte Murry, MS - Supply Chain Management James Vallone, MS - Supply Chain Management Chloe Williams, MS - Supply Chain Management

Duaah Abdullah, BBA - Supply Chain Management Liwaa Alabed BBA - Supply Chain Management Jonathan Blalock, BBA - Supply Chain Management Olivia King, BBA - Supply Chain Management Tina Nofal, BBA - Supply Chain Management David Prince, BBA - Supply Chain Management Mason Thompson, BBA - Supply Chain Management

FALL 2024 SCMSO EVENT RECAP

ALUMNI PANEL





The SCMSO recently hosted an Alumni Panel featuring MTSU graduates Madison Bowman (Dollar General), Maya Yelland (Mars Petcare), Hannah Brown (Health

Corporations of America), and former SCMSO president Jonathan Dunn. They shared insights on the skills and experiences that helped them secure successful careers, offering valuable advice to students.

MOCK INTERVIEW EVENT

SCMSO also hosted a Mock Interview event, giving students the opportunity to sharpen their interview skills and receive personalized résumé advice and coaching. Representatives from Geodis, Mars Petcare, GAP, HCA, and the Tennessee Small Business Development Center provided one-on-one guidance, sharing valuable tips for acing interviews and landing the job!



BLOOD DRIVE

This recurring campus tradition saw an incredible turnout, with 33 students and faculty members donating blood and potentially saving up to 79 lives. Lecturer Kenneth George (pictured) is among those supporting the cause!



FALL 2024 SCMSO TOUR RECAP

This semester, MTSU students had the unique opportunity to witness supply chain operations in action through three exciting facility tours sponsored by the Supply Chain Management Student Organization. Open to all business majors, the tours included visits to the GAP Distribution Center, Reyes Coca-Cola Bottling Facility, and Ascension St. Thomas Hospitals. These experiences brought classroom concepts to life, showcasing real-world logistics and operations.

Ascension St. Thomas Hospital

Students gained a behind-thescenes look at the supply chain operations supporting a nonprofit healthcare facility. This eye-opening tour highlighted the complexity of hospital supply chains and the challenges of balancing hospital requirements, physician preferences, and patient needs.



GAP Distribution Center



Students explored the massive GAP Distribution Center and got a fascinating glimpse of modern supply chain technology. Highlights included robotic sorting arms, winding conveyor tracks shuttling boxes, and automated guided vehicles delivering materials to handlers.

REYES - Coca Cola Bottling

Students enjoyed a fascinating guided tour of the Reyes Coca-Cola bottling plant as it processed an order of Strawberry Fanta from start to finish. The experience was capped off with a delicious Chick-fil-A lunch!







Faculty Research Brief

Research conducted by Dr. Jinfeng Yue and Dr. Richard Tarpey of MTSU



Summary

Dr. Jinfeng Yue, Dr. Richard Tarpey, and three co-authors from other universities recently published a study titled, "Improving a Frontier Approach to Selecting Suppliers for a Make-to-Order Supply Chain" in the Journal of Modelling in Management. The study looks at new techniques for Make to Order (MTO) manufacturers to choose from various suppliers while balancing on-time likelihood and costs. Manufacturers must focus on supplier evaluation criteria in dynamic business environments, such as product quality, delivery compliance, and price. MTO manufacturers are even more pressed to cooperate with multiple suppliers to guarantee delivery time at a reduced cost, especially when the time for bidding is critical. Therefore, a model to aid the MTO manufacturer in selecting sourcing partners and determining the associated quantity allocation for each chosen supplier would facilitate these decisions.

Key Findings

The current study improves an existing selection technique to reduce the likelihood of inefficient solutions being selected. This research aims to improve the supplier selection model for MTO manufacturers facing this decision type. First, assuming the product quality of each supplier is guaranteed, all possible portfolios (supplier combinations) are obtained with both factors of on-time delivery probability and replenishment cost. Next, best performance combinations provide recommendations, including only relatively efficient portfolios to MTO manufacturers using a multiple-attribute decision technique. The resulting portfolios are limited to efficient portfolios, with less efficient portfolios weeded out.

Research Implications

The proposed method provides a pool of more efficient options ranging from higher ontime probability and higher cost to less on-time likelihood and lower cost, resulting in less chance of an inefficient supplier choice. Such a design ensures that regardless of the preference and specific need criteria (cost versus on-time delivery), MTO manufacturers have flexibility in choosing an optimal solution.



ALUMNI SPOTLIGHT Maya Yelland

Graduated: Spring 2024

Q: Tell us a little about your current position at MARS. I am a Customer Supply Representative on the Walmart account. This means that I am responsible for all the orders that Walmart places, from the moment it comes into our

system, to the time it arrives at Walmart's DC and is closed out. Walmart is the biggest account at Mars, counting for over 33% of the sales volume every year, so it is quite a large responsibility.

Q: What do you like about your job the most?

My favorite part of the job is how there is always something to learn. With being in supply chain, there are constant problems to fix and different processes to learn, and even to come up with. Of course, my second favorite part (or maybe a tie for first...) is that I can bring my dog, Leo, to work with me!

Q: Which course or professor at MTSU had the greatest impact on your career readiness?

Dr. Tarpey, Dr. Welborn, and Dr. Morgan were the most impactful professors. Dr. Welborn's KPI class was where I first learned about the supply chain field. Dr. Tarpey and Dr. Morgan's classes, both being project-based, really got me excited about the possibilities in supply chain and prepared me for the variability of the field.

Q: Are there any memorable events, extracurriculars, or internships from your time at MTSU that you feel significantly contributed to your success?

The Mock Interview event that I attended in the fall of 2023 was, for me, the most significant event I attended as I met my line manager there. The Mock Interview is a wonderful way to practice your interview skills but also to meet active hiring managers and ensure that they remember you. The most impactful extracurricular, in a way, was the independent project that I worked on with two other students. The project we did was in unison with Mars Petcare and it was incredibly impactful as it was a real, active problem they were facing.

Q: What advice would you give to current supply chain students?

My advice would be to go to events! Get to know people, students and professionals. The more people you know, and build a genuine relationship with, the more opportunities you will receive in the future.



UNDERGRADUATE STUDENT SPOTLIGHT: **Tina Nofal**

Expected Graduation Date: December 2024

Q: What brought you to Middle Tennessee State University?

I chose MTSU because of its great reputation, especially for the Supply Chain Management program. I wanted a school that offered strong academics but had many opportunities to gain

experience and grow my networking skills. The campus atmosphere and the amount of study abroad programs offered.

Q: Why did you choose to study Supply Chain Management?

I've always been curious about how businesses run smoothly and how products get from point A to point B—especially when it involves multiple countries and different industries. Supply Chain Management stood out because it combines problem-solving, strategy, and logistics, which I find exciting. Plus, with my minor in Information Systems, I'm able to learn more about the tech side of business operations, which I think is the future of supply chain management. It's the perfect blend of what I'm passionate about!

Q: What have you learned so far from the program?

So far, I've learned a ton about the inner workings of supply chains, from logistics and inventory management to procurement and business analytics. The program has also helped me develop a deeper understanding of how companies optimize their operations. Plus, my coursework in Information Systems has given me a solid understanding of how technology plays a big role in improving supply chain efficiency. I feel like I'm building a strong foundation for a career in this field, and I'm excited to keep learning.

Q: What do you view as the most significant challenge about the program?

One of the biggest challenges has been applying it in the real world. It's one thing to learn the concepts in class, but it's another to see how they play out in real companies. That's where my study abroad experiences and internship at Schnieder Electric helped. I had the chance to visit the headquarters of Volkswagen and other companies, which gave me a unique perspective on how global supply chains function. It made the classroom material feel more relevant and gave me a better understanding of how things work on a larger scale.

Q: What are your future career goals after graduation?

After graduation, I'm looking to work in a supply chain management role where I can help companies improve their operations and become more efficient. I'm especially interested in working for global companies because I think there's so much to learn about managing supply chains at a scale. In the long run, I'd love to take on a leadership role!



GRADUATE STUDENT SPOTLIGHT: Naw Moo Paw

Expected Graduation Date: May 2025

Q: What brought you to Middle Tennessee State University?

I chose MTSU because it allows me to be close to my family.

Q: Why did you choose Supply Chain Management at MTSU?

Dr. Cliff recommended the program to me. The way he describes the program interests me. When I researched information on the program, I saw myself working in the Supply Chain field, so I chose Supply Chain Management for my Master's.

Q: What have you achieved through the program?

I haven't been in the program for long, but I have gained and enhanced skills such as project management and analytics skills. I've learned how to apply Lean Six Sigma for project improvement. The skills that I obtain can be applied in both personal and professional settings.

Q: What do you see as the most significant challenge to the program?

The most significant challenge I see in the program is understanding and applying the different concepts that I learn in my classes. It takes a while for me to fully grasp the different concepts, but when I do, everything makes sense.

Q: What are your career goals after graduation?

My career goal is to reach a position where I can be a positive influence on other people. I want to work in different roles in Supply Chain and gain as much experience as possible so that I can share my experience and help other students who are interested in Supply Chain Management to gain more knowledge about the field.

