

HIGHER EDUCATION THAT WORKS

ACHIEVING 100% JOB PLACEMENT THROUGH A
MARKET-DRIVEN APPROACH



FOREWORD

What did we envision our supply chain management programs at USF to be? Asked to a room of academics in the fall of 2012, it was a fair question. While a safe answer to such a question in academic circles usually amounts to “student success,” achieving that goal requires tackling many other challenges. Among these include assessing future demand for such talent, nurturing relationships with key industry partners to help identify the skills and training needed – as well as for hiring future talent – and leveraging cutting-edge research to help shape the knowledge and experience levels of undergraduate and graduate students

and executives. The path to building new, discrete degree programs from a single, occasionally taught elective course required a balanced understanding of such factors, and a mutually shared vision of many different stakeholder groups from across the university and business community. The dynamic nature of supply chain management also underscores the importance of continued collaboration, so that tomorrow’s leaders will have the agility and foresight to address future needs.

—Rob Hooker

Director of Student Success and Associate Professor, Supply Chain Management

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01 FINDING THE RIGHT PROGRAM TO MEET WORKFORCE NEEDS

The need has never been greater for higher education practitioners to guide students into academic programs leading to well-paying, sustainable career paths. Rapid changes in technology and opportunities created by the global economy demand that institutions respond to emerging jobs and skill sets that in many cases didn't exist a few decades ago.

These realities are evident amid a growing perception gap around the value of a college education. A recent Gallup/Lumina poll suggests that 95 percent of chief academic officers rate their institutions as very or somewhat effective at preparing students for careers. Yet just 13 percent of Americans believe college graduates are well-prepared for success in the workplace, and only 11 percent

of business leaders strongly agree that graduating students possess the skills and competencies their companies need.

At the University of South Florida, this has led to the development of forward-thinking curricula that include industry partnerships, along with certification and training opportunities that prepare graduates to enter talent pipelines equipped with the skills necessary to thrive from day one.

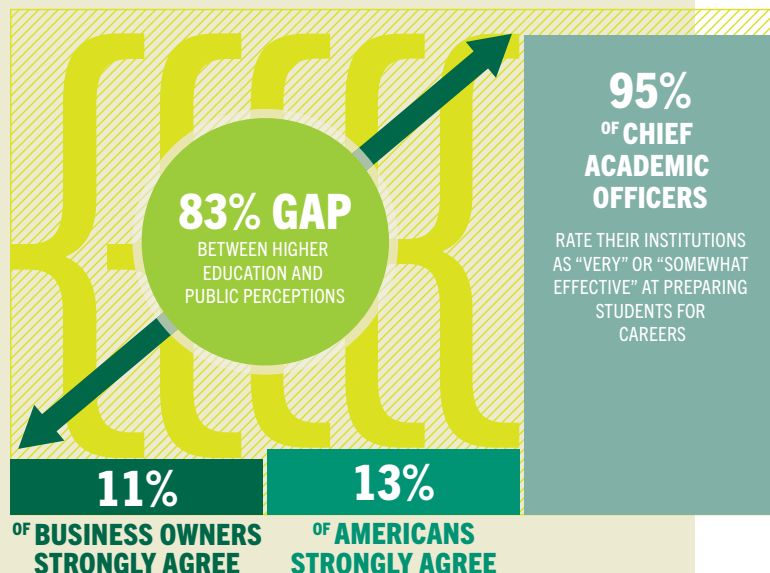
Leaders in the USF Muma College of Business recognized such an opportunity in supply chain management. The sector has grown in size and scope to match the dramatic increase in flow of goods, services and finances brought on by a 40-fold increase in global exports over the past century.

Supply chain career opportunities are expanding at a rate six times that of typical jobs by 2031, according to the U.S. Bureau of Labor Statistics.



SUPPLY CHAIN CAREERS ARE EXPANDING SIX TIMES FASTER THAN TYPICAL JOBS.

DOES HIGHER EDUCATION PREPARE GRADUATES FOR THE WORKFORCE?¹



That growth has led to the creation of a complex ecosystem of job roles – many requiring specialized technical and critical thinking skills – across manufacturing, distribution, retail, transportation, logistics, government and service.

Starting roughly a decade ago, when supply chain management programs were virtually nonexistent in higher education, USF, in conjunction with key industry partners, began laying the groundwork for what would come to represent a leading-edge approach to curriculum building.

¹ Gallup/Lumina poll, UCLA Cooperative Institutional Research Program, Gallup/Inside Higher Ed poll



02 MAKING THE CASE FOR A NEW PROGRAM

What began as an infrequently taught special topics/elective course – Foundations of Supply Chain Management – became an undergraduate concentration by 2013. Three years later, after witnessing 100 percent placement of supply chain management concentration graduates into jobs in the field, Muma College of Business leaders and partners in the business community recognized the need to align their then-current offerings to meet soaring growth within the space. They made the case to university leaders and Florida legislators for the creation of a full, globally focused, end-to-end bachelor of science program in supply chain management, which launched in fall 2020.

Between conception and launch, USF took an innovative approach by designing bachelor's and master's degrees programs from the ground up in consultation with industry partners such as Amazon, Bristol-Myers Squibb

and C.H. Robinson, among

others. Executives from those companies joined the then-Lynn Pippenger Dean of the Muma College of Business, Moez Limayem, along with key faculty members including Rob Hooker, Donna Davis, James Stock and Kerry Walsh, to identify the skills, training and certification graduates would need and to develop a vision for the program to grow. Their input and expertise would be vital to creating the program's blueprint and ensuring its sustainability.

"We brought them on campus into the dean's boardroom, discussed required skills and goals, and essentially white-boarded the curriculum over a series of discussions," said Hooker, an associate professor who teaches in the supply chain management program and serves as the program's director of student success. "Industry partnerships are a huge differentiator for us."

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PRE-2011



"FOUNDATIONS OF SUPPLY CHAIN MANAGEMENT" ELECTIVE CLASS INFREQUENTLY OFFERED

2013



CLASS BECOMES CONCENTRATION

2016



PLANNING FOR DEGREE PROGRAMS BEGINS

2020



BACHELOR'S AND MASTER'S DEGREE PROGRAMS LAUNCH

NATIONAL
In 2010, supply chain careers projected to grow nearly **double** the rate of others.¹

STATE
Planned Panama Canal expansion and new trade patterns suggest Florida could support 32,000 new industry jobs per year.

This could generate \$3.3B in sales, \$2.1B in wages and \$193M in tax revenue.²

UNIVERSITY
Recognizing the opportunity, USF forms a 20-member **executive advisory board** to guide next steps.

From 2010-2012, Florida creates nearly **23,000** trade and logistics jobs and **9,000** manufacturing jobs. Exports rise to record **\$66B**.³

STATE
By 2013, state investments create a **first-ever** statewide freight mobility and trade plan.

The state develops innovative programs for employer-driven training and company-specific export development.³

UNIVERSITY
New supply chain concentration graduates earn **100 percent job placement**.

USF's Executive Advisory Board expressed need for graduates with **specialized system training**, leading to planning for degree programs.

UNIVERSITY
USF brings executive advisory board in to **whiteboard curriculum** based on needed skills, credentialing and system training.

USF leaders approach Florida SUS institutions to assess offerings and **secure letters of support**.

USF's data-informed proposal to create Florida's first global, end-to-end supply chain degree program **earns state approval**.

STATE
While supply chain career growth slows on the national scale at this time¹, the **Panama Canal expansion** opens, and Florida opportunities continue to surge.

NATIONAL
Global disruptions including the COVID-19 pandemic underscore the need to strengthen domestic supply chain.

U.S. supply chain careers are now projected to grow **six times** the rate of others.¹

STATE
Florida supply chain jobs total over **1 million** in 2020 – the fourth highest in the U.S.

Florida aims to create 300,000 new supply chain jobs and become a **top 10 global economy** by 2030.⁴

UNIVERSITY
Graduates earn **100 percent job placement** and other outcomes (pg. 8).

A MARKET-DRIVEN APPROACH TO PROGRAM DEVELOPMENT

When institutions explore the idea of adding a new academic program, it's important to consider things that are already in place, such as geography, natural resources and regional social and economic factors that might influence the program's success – or contribute to its failure.

In USF's case, developing top-tier supply chain management programs made perfect sense because of Florida's geography, existing logistics and industry workforce demand that aligns with a state legislative priority to become the national leader in workforce development by 2030.

Critical to the program's development was the need to train students to take on both known and unknown challenges they would encounter in the ever-evolving supply chain management space.

Following the global economy's rapid expansion in the early 1990s, supply chain became more complex and more vulnerable to geopolitical developments, extreme weather events and, more recently, game-changing public health crises such as the COVID-19 pandemic.

It wouldn't be enough to turn out graduates versed in theory; the program would need to help students develop dynamic skill sets in areas such as predictive analytics and artificial intelligence, the technologies behind



GEOGRAPHIC CONSIDERATIONS

Florida has 15 deep water ports, a land port and excellent airports and rail systems. It's within a two-day drive of population centers along the U.S. Eastern Seaboard and acts as a gateway to Latin American markets. Those factors positioned USF and the Tampa Bay region as a hub for supply chain research and executive training, giving Muma College of Business leaders confidence that program graduates who preferred to stay close to home would be able to find jobs without leaving the state, yet possess the skills that would allow them to work anywhere they chose.



such features as suggestions from online sellers like Amazon to add items to your shopping cart based on your past purchase behavior. While many people mistakenly envision supply chain as ships, crates and steel shelving, graduates would need to understand every stage of the process — from procurement, to manufacturing, to logistics, to marketing, to reverse logistics — and they would need to be resourceful enough to handle unforeseen circumstances that could cause disruptions at any one of those stages.

“We needed to ensure our graduates were ready not just for what supply chain is now, but what it would be in the future,” Hooker said. “They needed to understand how to predict what people will need before they need it, and to think about how to solve problems that haven’t even been invented yet.”

To accomplish that, USF’s program would need to be as agile and innovative as the supply chain space it was created to serve.

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The Muma College of Business team understood the need to develop a curriculum responsive to industry demands and equip students with the necessary real-world skills and

experiences to step directly into their jobs. Again working closely with partners, they introduced students in the bachelor’s and master’s degree programs to industry-standard tools from their first weeks in class.

Supply chain faculty tend to be deeply embedded within the industry, and by leveraging those relationships they gained access to software platforms and data and implemented them into coursework.

This provided students with opportunities to learn technology such as MercuryGate Transportation Management Systems and earn certificates for Citizens Data Science/Tableau; SAP; Global Citizens, which integrates United Nations global sustainability goals; and Lean Six Sigma, which is designed to eliminate waste and improve performance.

To complement the in-class experience, USF’s student-led Council of Supply Chain Management Professionals (CSCMP) provides social and extracurricular learning and leadership opportunities



THE CURRICULUM IS DESIGNED TO NOT ONLY PREPARE STUDENTS WITH KNOWLEDGE BUT ALSO PRACTICAL SKILLS, PROVEN EXPERIENCE AND EARNED CERTIFICATES THROUGHOUT THE PROGRAM.

and is a resource for broadening skill sets and building industry relationships. The only supply chain student roundtable in Florida, CSCMP hosts networking events with supply chain leaders and facilitates interaction between current and future industry professionals.

Around the time the bachelor's and master's degree programs were launched, USF partnered with Tampa-based Jabil, a worldwide manufacturing services company, to open the Supply Chain Innovation Lab. The lab brings together

industry and academic experts for research projects tackling some of supply chain's biggest challenges and provides experiential learning opportunities for student research assistants.

To help immerse students in the culture and work environments within the supply chain field, the program's strong industry partnerships would once again represent a vital link to the real world. Right from the start, supply chain executives became a regular presence in classrooms, virtually and in person. They sat in on lectures and class projects, offering insight and sometimes leading discussions and answering questions. They brought along clients representing household brands from around the world, including Johnson & Johnson, Disney, Coca-Cola and guitar manufacturer Gibson.



05 “FUTURE-PROOFING” AND CONTINUING EDUCATION

The contributions of industry partners have helped USF take steps to “future-proof” the program. Their input and guidance help ensure that what students learn won’t become quickly outdated, and that their skills and understanding of the space are closely aligned with the expectations of supply chain business leaders.

In addition to coursework, program leaders knew experiential learning would be crucial, so the decision was made to require paid internships or co-ops for every student. Other opportunities emerged through CSCMP, the student-led council, which organized workshops, speaker engagements and tours with a focus in supply chain management.

The master’s degree program, meanwhile, needed to offer flexibility to accommodate its target enrollees – professionals with three or more years of experience working in the supply chain industry. Muma College of Business leaders designed a curriculum that would require only one week in the classroom each semester followed by fully online course delivery. A seminar course covers topics such as blockchain, robotics, the Internet of Things and smart robotics, and students wrap up with a capstone project in which they tackle a supply chain problem from their own workplace.

Photo: At USF’s regular “Meet the Employer” events, students in the program network with supply chain industry leaders and get connected with internship and employment opportunities.

06 OUTCOMES

\$18

AVERAGE HOURLY
INTERNSHIP PAY

↑64%

FROM 2021
TO 2022

2-3

AVERAGE JOB OFFERS
PRIOR TO GRADUATION

BEFORE GRADUATION

100% GRADUATE JOB
PLACEMENT

AVERAGE STARTING SALARY:

\$65-75K

WITH
OFFERS UP TO
\$90K

\$3-16K

SIGNING BONUSES

AFTER GRADUATION

>35%

EARN PROMOTIONS WITHIN
FIRST 18 MONTHS ON THE JOB

15%

ARE PROMOTED WITHIN
THEIR FIRST YEAR

CAREER

Students in the supply chain management bachelor's degree program receive at least two to three job offers, on average, prior to graduation. Starting salaries for graduates average \$65,000-\$75,000 – with some offers of up to \$90,000. Signing bonuses range from \$3,000 to \$16,000.

They are moving into roles with global supply chain leaders in sectors including retail (Amazon and Target), logistics (FedEx, UPS and DHL), aerospace (General Dynamics, Honeywell, Lockheed Martin and Raytheon), industrial (PPG Industries and Masonite International), pharmaceutical (Bristol-Myers Squibb, Johnson & Johnson and Amgen), finance (Citi, Deloitte, PwC and Raymond James) and entertainment and media (The Walt Disney Co., Universal Studios and Technicolor).

More than 35 percent of graduates earn promotions within 18 months of their first job placement, with 15 percent promoted within their first year.

The undergraduate program's enrollment has grown from 20 students in the first fall cohort in 2014 to 119 in Spring 2022, but program leaders have been able to maintain small class sizes and ensure industry partner participation in 100 percent of courses. Average hourly pay for internships has risen from around \$11 to more than \$18.

These outcomes can be traced back to the thinking behind designing a program that was 95 percent co-created with industry executives, and a commitment to continuing to leverage those partnerships in the classroom, through experiential learning opportunities and, in some cases, into the workforce.

"Supply chain is all about relationships," Hooker said. "From the very beginning, the relationships that Muma College of Business leaders and faculty had with industry partners were a driving force behind the way we designed and built the programs and the success we've experienced so far."

THANK YOU FOR READING.

Your feedback is important to us. Did you find the information in this case study useful?

YES

NO

