

Rise of Logistics Technology

Florida International University

by Eric Williams and Robert Christensen



Eric Williams

The focus of the Florida International University (FIU) Supply Chain curriculum is based on Technology applications for the classes offered. A core course description of TRA 4202 – Logistics Technology, applies the use of information technology in logistics: SAP and Magaya modules, EDI, databases, Internet, decision support systems for logistics, and commercial logistics software.

The application of quantitative models and simulation in logistics is part of a program designed for students to enter and make significant contributions to the multi-modal cargo industry.

Anthony D. Miyazaki, PhD, Chairperson for the Department of Marketing, saw the need for this program and brought it to life. Dr. Ron Mesia, Director, Ryder Center for Supply Chain Management, developed the criterion with Miyazaki. Mesia has an engineering background that includes overseeing FedEx's Latin America development, and Microsoft and Nortel Networks Supply Chain experience. Tina Valladares, Administrative Coordinator for the Ryder Center at FIU, assists with both the administration and student coordination within the Marketing department. This article was suggested and executed by Eric Williams whose friendship with Ron Mesia predates their working relationship at FedEx.

Miami is the largest distribution center for Latin America. The numbers detail the TUs, capacity, frequency, and historical data. Port Miami, Panama Canal expansion, air and cargo trends are some of the research projects that encompass the logistics program at FIU.

Mesia stated that, "FIU is focused on teaching the foundations of supply chain management, inventory, transportation, global logistics, distribution, trade and compliance, etc. Beyond that, FIU teaches logistics strategy and logistic simulation. Due to industry advancements, the curriculum is adapting to accommodate new technologies. FIU uses SAP and Magaya technology as well as other platforms students will need to add substance to the workforce. When FIU students graduate, they can provide significant contributions to employers due to practical education they received in the classroom. FIU also uses applied simulation to enhance their tactical and strategic logistics decisions."

Mesia went on to say, "Even though our department is not in the College of Engineering, we push students into the quantitative and technology aspects of the supply chain. SAP, previously offered only in the College of Engineering, is now offered within logistics classes. This knowledge prepares the students leaving FIU to have technology incorporated into their logistics. It's not easy – if it was, everybody could do it."

Miyazaki added, "Everything's an exchange. We use the Kotler model, which focuses on the customer-side, distribution approach to marketing exchange. It involves three different flows: information, innovation, and compensation. Information flows back and forth between the buyer and seller. Innovation is the actual product, and compensation calculates all associated costs. Marketing isn't about advertising. It wasn't until I presented this theory to our science and engineering management department, explaining that logistics is about efficiencies, that they took an interest." According to Mesia, "Supply chain and logistics program also includes a marketing component. It reformatted its export/marketing certificate to become an import/export supply chain management certificate. We made it tough, but the number of students applying for the certificate skyrocketed because people want to learn, including many engineering students who have come to recognize the importance of logistics. FIU has turned logistics into an official STEM program. We have put the paperwork together and soon we will offer a Master of Science in Transportation and Logistics."

"Logistics," Mesia further explained, "is the entire world, and supply chain management is the world beyond. At one time, I used to say, this was a definition for marketing. But the truth is that marketing, logistics, and the supply chain all involve moving things from place to place and making the customer satisfied in the process. This combination saves and makes money, and from that perspective, they go hand in hand. We're developing a team of people, in tandem with the Ryder Center, and building a global logistics advisory board. Our goal is to connect with the industry."

"At FIU it's critical for each student to come into something that's not static, but has an opportunity to change. By employing this philosophy, I believe FIU is building an environment for creative solutions. In some cases, it changes everything for those individuals who demonstrate the willingness to work through the challenges of this difficult curriculum."

Changes at FIU will evolve rapidly over the next five to ten years. "Students will be amazed," Miyazaki said, "at the vastly improved

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impact this will make in their lives, trying to imagine how the future may look or what potential changes they will see. Students are excited to make changes that will affect our world.”

Eric Williams offered this observation: “In Miami, there are almost 1,000 multinational corporations, including Volkswagen, Siemens, Boeing, and others. Their chief complaint is the inability to find educated logistics people. It is ironic to note that even though Miami serves as the hub for Latin America, the universities for logistics we depend on are located in states as far away as Massachusetts, Georgia, Tennessee, and Ohio.” Williams recognizes the funding problem state schools face and the time it takes to build quality programs. With this program, FIU has something to feel proud about. The timing of FIU’s efforts provides a wonderful opportunity for the students.

Miyazaki directed his thoughts to the executives and sales divisions of Miami’s logistics companies and noted, “FIU wanted to make sure that its logistics and supply-chain students know both the technical side and the people side. And to that end, FIU offers a sales and customer relationship management certificate. This way, logistics and supply-chain majors will have the ability to do sales and have the added confidence that a CRM certificate brings. We realize that you can be a numbers person and figure out traffic flow, but at some point, you’re probably going to need to deal with people and sell your product. That is a real world goal.”

There’s such diversity in the worldwide aviation industry, and it’s tough for students to even start understanding which area to enter. What can students do in aviation or marine, and where are the openings in ground transportation? “Students realize logistics goes hand in hand with product development,” according to Valladares.

“The pricing side,” Valladares further noted, “is about the revenue coming in. You’re adding company value with this necessary part of the equation. Promotion is the flow of good information. It’s the one place where one can make a massive impact on the distribution side. We teach the importance of having better channels, where you save money for yourself and your customer. You can change economies, in essence, by changing distribution systems. That’s the key. Our world has become global, and behind the globalization, there has to be a good logistics strategy.”

Miyazaki stated, “For our sales program, we use Salesforce. The idea is to train the students in what’s in the industry today and tomorrow. At FIU or any university, we can’t teach students every program and every piece of software that exists. But we know that if we teach the key programs, it will enable students to be able to adapt to others. Every course is limited by the time we have during each semester. The idea is to get the concept to each student that everything done in logistics has an IT-component side.”

“We are building the foundation of the FIU global logistics board, and for that particular board, we are going global. In fact, one thing that Tina Valladares accomplished when she first came on board was securing LinkedIn worldwide for advisory-board candidates. We have people from all over the world to assist and advise our studies and programs.”

Mesia also noted, “FIU will be actively working with the community through training sessions and awarding certifications for qualified graduates. The more we can do, the more FIU fosters information technology. We have an amazing information systems group and information technology group at FIU, and we will be working with them as one. As we develop certifications and professional executive training, we want to make sure it is more than academic only. Our goal is to develop curriculum that speaks to the logistics industry. When we know what you want, we will assemble the courses you need.”

“We are serious and will pay experts to come and help us train. What is happening now provides the impetus to push ahead. We’ve just introduced our online version that starts in the fall. Working students may study with FIU online from anywhere, not just in Miami. We are creating hubs across the US to provide students seeking an undergraduate education the ability to advance to a degree that helps them move up.” Miyazaki concluded, “We welcome students who want solid training. Our doors are open and if they are willing to work, we are happy to instruct. I promise you, students will benefit from their hard work.”



NOTE: For information please visit: <http://business.fiu.edu/landon/logistics.cfm>