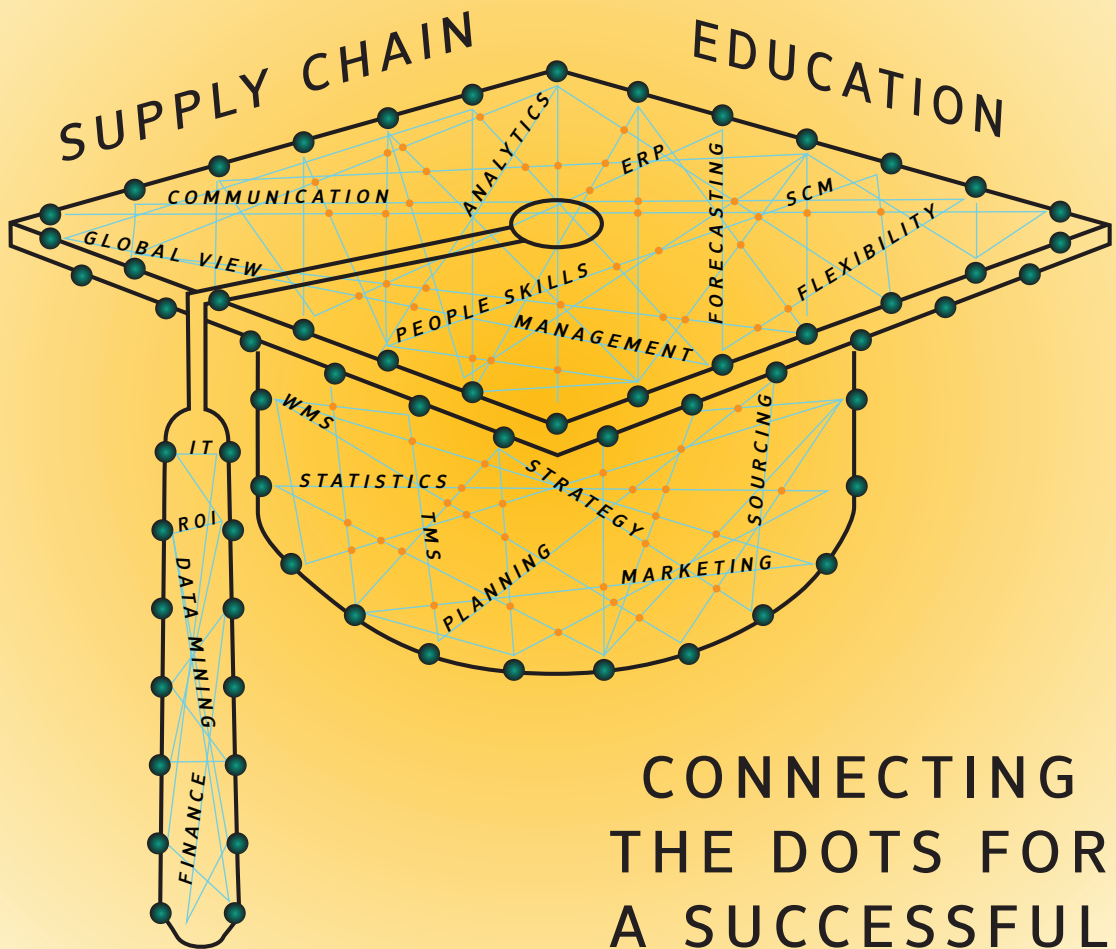


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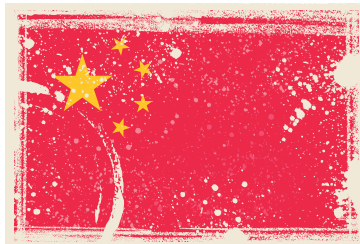
info snacks

BITE SIZED SUPPLY CHAIN/LOGISTICS INFORMATION

MAD IN CHINA

Worried about the Chinese economy yet?

- Chinese investments in Europe and the U.S. dropped 73% in 2018.
- China's net purchases of U.S. real estate fell to the lowest level since 2012—from \$19.1 billion in 2016 to \$2.68 billion in 2018. — *Axios*



80%

of all
cyberattacks take
place in the
supply chain

— *The SANS Institute*



Americans Get a Move On

The 2018 Top 10 moving destination cities (including previous year's ranking):

1. Atlanta (1)
2. Phoenix (2)
3. Tampa (5)
4. Orlando (6)
5. Denver (8)
6. Houston (4)
7. Las Vegas (7)
8. Charlotte (9)
9. Austin (new)
10. Portland (10)

— *Penske Truck Rental*

Damage Control

- More than 1 in 5 consumers surveyed have ordered something that arrived damaged
- More than 1 in 7 ordered something that was never delivered

— *uShip 2018 research*

(See Super-Sizing E-Commerce Deliveries, page 52)





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February 2019 • Vol. 39 • No. 2

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Shifting expectations in delivery times have forced e-commerce and omnichannel retailers to expand their distribution networks, moving closer to their customers in urban areas.

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CHECKING IN



by Keith Biondo | **Publisher**



Knowledge is Power

There are 13,000 unfilled supply chain positions nationwide, according to recent labor surveys. I think there are more. A lot more. To fill those positions, we need young professionals who possess the knowledge and skills necessary to manage the supply chains of the future.

Schools and universities are doing their part to develop curriculums that focus on hard and soft skills (see *Building the Skill Set that Lands the Job*, page 40) You can do your part, too, by transferring the skill set you've cultivated over the years to the next generation of logistics practitioners.

But how do you do that? Are you in? Here are a few ideas:

Offer internships. Paid or unpaid opportunities enable interested students to gain experience and learn from the best: you.

Speak up. Many schools and colleges seek input from the business community. Supply chain is hot right now; get involved and guide people to a great career.

Get on board. Can you find corporate resources to support learning institutions? To support your alma mater?

Become a mentor. Participate in industry organizations that offer opportunities to mentor young supply chain talent.

Inbound Logistics has a special affinity for promoting logistics education that dates back to our genesis, which was wrapped around advancing what was, at the time, a new business concept known as demand-driven logistics. In 1981, our mission was to reach practitioners set in their ways. To promote demand-driven logistics to the next generation of business professionals, we began working with many colleges and universities. Today, we also provide you with several ways to share your knowledge so others will benefit from the day-to-day experience you've painstakingly acquired over the years.

Dialog (page 10) provides the space to share your unique perspectives with thousands of readers interested in broadening their logistics skills.

Good Question (page 8) solicits opinions on the hottest topics impacting supply chain management and logistics.

Logistics surveys presented by *Inbound Logistics* give you an amplified forum to weigh in on the challenges and opportunities facing supply chain managers.

Guest columns offer an open invitation to submit an opinion piece.

Podcasts offer a popular forum to speak directly to younger professionals.

LinkedIn promotes robust business logistics discussions and comments.

To be successful, all these valuable knowledge-transfer channels require the support of professionals just like you who take the time to ensure others looking to learn more have the opportunity to do so.

It has been said that knowledge is power. I believe that is true. That means your logistics knowledge, when shared, becomes even more powerful. ■

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STAFF

PUBLISHER Keith G. Biondo
publisher@inboundlogistics.com

EDITOR Felecia J. Stratton
editor@inboundlogistics.com

SENIOR EDITOR Katrina C. Arabe
karabe@inboundlogistics.com

CONTRIBUTING EDITORS
Sandra Beckwith • Merrill Douglas
Karen M. Kroll

CREATIVE DIRECTOR Jeof Vita
jvita@inboundlogistics.com

DESIGNER Ellen Swandiak
ellen@inboundlogistics.com

DIGITAL DESIGN Amy Palmisano
MANAGER apalmisano@inboundlogistics.com

PUBLICATION MANAGER Sonia Casiano
sonia@inboundlogistics.com

CIRCULATION DIRECTOR Carolyn Smolin

EDITOR AT LARGE Rena Behar

SALES OFFICES

PUBLISHER: Keith Biondo

212-629-1560 • FAX: 212-629-1565
publisher@inboundlogistics.com

WEST/MIDWEST/SOUTHWEST: Harold L. Leddy

847-446-8764 • FAX: 847-305-5890
haroldleddy@inboundlogistics.com

Marshall Leddy

612-234-7436 • FAX: 847-305-5890
marshall@inboundlogistics.com

SOUTHEAST: Gordon H. Harper

404-229-9691 • FAX: 404-355-2036
south@inboundlogistics.com

MIDWEST/ECONOMIC DEVELOPMENT: Joseph Biondo

516-578-8924

jbiondo@inboundlogistics.com

NORTHEAST: Rachael Sprinz

212-629-1560 • FAX: 212-629-1565
rachael@inboundlogistics.com

MEXICO & LATAM: Guillermo Almazo

212-629-1560
mexico@inboundlogistics.com

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- ✓ Cold Inspection Facility
- ✓ Regional Ag Training Center & Lab
- ✓ Ag Inspection Overtime Pay
- ✓ New State of the Art Toll System
- ✓ Bridge Building Renovation
- ✓ BridgeConnect Trade Sessions
- ✓ Unified Cargo Processing (UCP)
- ✓ New State of the Art Security Cameras System



Projects/Services Advantages:

- ★ Improved Safety and Security
- ★ Reduced Border Wait Times
- ★ Increased Capacity
- ★ Process Improvements
- ★ Streamlined Inspections
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Good Question...

READERS WEIGH IN

Should the United States Postal Service be privatized? Why or why not?

YES!

As mail volumes decline, the USPS is shifting its focus to parcels. To succeed, it needs to make changes to its business model. By privatizing, the USPS would be able to make changes without politics getting in the way.

Paul Steiner

*Vice President of Strategic Analysis
Spend Management Experts*

The USPS has more than \$100 billion in unfunded liabilities, an aging infrastructure of post offices and sortation centers, and a backlog of capital investments and no agreed-upon strategy to achieve profitability. More than 70 percent of mail received is junk mail or ads. The government should contract Amazon to run the USPS for 10 years with an option for Amazon to acquire them at the end.

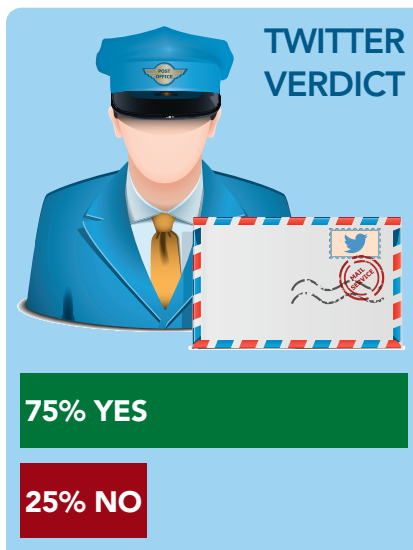
Steven Pandolfo

*Director, Pricing and Procurement
Sunset Transportation*

Last-mile delivery of packages—and not the delivery of letters—is growing in importance. The USPS should sell the naming rights to mailboxes to Amazon and also contract Amazon to manage day-to-day operations.

Brittain Ladd

*Founder and CEO
Six-Page Consulting*



NO!

The post office should remain a government agency but with programs for access to boxes by private companies. Reverse the corporate

foundation model with the post office transacting with private firms desiring access to already established postal infrastructure and services to benefit their bottom line.

Lawrence Hotz

*Marketing Director
WDSrx – Woodfield Distribution*

Wholesale privatization would essentially make rural Americans second-class citizens. Let's not

forget that 44 million of 157 million USPS delivery addresses are located throughout sparsely settled rural America. No private sector shipper would be able to serve our entire country and earn a profit without massively raising rates.

Art Sackler
Manager

*Coalition for a 21st Century
Postal Service*

Privatization would lead to increased service costs. The post office should stay focused on what it was originally intended to do and not try to compete with private services.

Walter Koopaethes
Operations Manager
Thomas

No. Privacy concerns have not been addressed by big tech yet.

Gideon Victor
SQL Developer
XDimensional Technologies

HAVE A GREAT ANSWER TO A GOOD QUESTION?

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We want to know:

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DIALOG

THE ONGOING CONVERSATION
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Future of the Supply Chain



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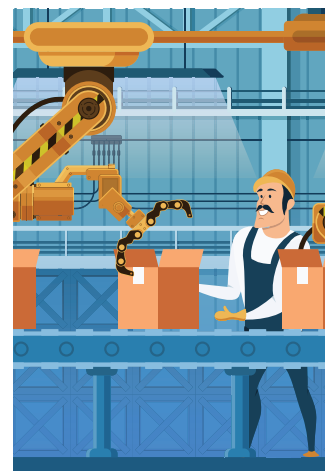


Used to its full potential, AI predicts what consumers will likely purchase before they themselves know. This capability enables the product and brand teams to maximize sales opportunities and gives the supply chain team complete transparency to ensure a commitment made to a customer is a delivered promise. A fully AI-enabled supply chain is a long way off for most retailers but certainly not unachievable.

Graham Parker
CEO, Gravity Supply Chain Solutions, via email

Robots: Must Work Well With Humans

Re. Robots in the Supply Chain: The Perfect Employee?
bit.ly/botsinsupplychain



The pressure from consumer demand for next-day shipping is forcing e-commerce businesses to get faster and more efficient, giving them little choice but to automate.

Cost-effective robots equipped with high-tech software integrations allow businesses to revolutionize their warehouses to meet demand. Cost-prohibitive, stagnant robot systems will soon be the tech of the past. Emerging technologies are creating adaptable, user-friendly cobots that work with people to tackle repetitive warehouse tasks with optimal efficiency.

Lior Elazay
CEO, inVia Robotics, via email

Today's most advanced DCs use automation and robotic technology as a complement to human workers, not a replacement. These resources must work in concert if the DC is to run at peak efficiency. For the foreseeable future, supply chains will operate on a "man + machine" model—leveraging the efficiencies of automation with the flexibility and skill of humans. The WMS, with its high-level view of all activities and resources, is a logical place to start allocating tasks between man and machine.

Adam Kline
Senior Director of Product Management
Manhattan Associates, via email

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10TIPS

STEP-BY-STEP SOLUTIONS

Becoming a Shipper of Choice

In today's environment, carriers can be selective about the shippers they work with. Here's how to ensure capacity by becoming a "shipper of choice."

1 CREATE AN EFFICIENT DOCK EXPERIENCE.

Shippers who unload efficiently and quickly without depending on driver involvement help carriers avoid poor trailer utilization or excessive trailer inventories.

2 OPTIMIZE SHIPMENT ROUTING.

Shippers who are able to optimize shipment routing and facilitate efficient "one pick, one drop" loads are highly appealing to most carriers. In fact, smarter asset utilization and route optimization benefit both shippers and carriers through improved service levels and lower overall costs.

3 FOCUS ON NETWORK ALIGNMENT.

Shippers should consider the value of aligning their freight to a carrier's preferred lanes and backhaul needs. Carriers with a balanced network can significantly increase operating efficiencies and cost savings with consistent volumes, fewer empty miles, and improved driver productivity.

4 PROVIDE NETWORK VISIBILITY.

Shippers that enable full visibility into their current and forecasted freight demand provide carriers with more certainty that their trucks will arrive at the right place, at the right time. In return, carriers will reward efficient shippers with enhanced service levels and reduced freight costs.

6 BE FLEXIBLE WITH CONTRACT NEGOTIATIONS.

Typically, shippers bid their network annually, but given current market conditions, some are adjusting the lengths and terms of their contracts. Many shippers now request volume guarantees, two- to three-year contracts, price protection tied to performance, or fixed year-over-year price increases to secure rates and stabilize capacity. Shippers can obtain preferred status if they utilize contract flexibility during bids and rate negotiations.

5 GO BEYOND TRANSACTIONAL.

Shippers should focus on moving from purely transactional interactions to the more strategic level. This means creating an atmosphere where both sides realize tangible and sustainable value. Focusing on network alignment is one great way to achieve this status, as is thinking holistically about carrier-friendly business practices and policies.

7 PUT DRIVERS FIRST.

Many carriers evaluate shippers by assessing how well they accommodate drivers with desirable facilities and efficient shipping and receiving docks. Carriers prefer to work with shippers that offer clean and welcoming parking, restrooms, and break areas.

9 BENCHMARK PERFORMANCE.

During times of constrained carrier capacity, shippers should benchmark their performance against industry peers to determine the attractiveness or appeal of their freight to carriers related to operational efficiency, flexibility, and competitive pricing. Understanding how you perform in comparison to similar companies will help in focusing on specific areas that create a carrier- and driver-friendly freight environment.

8 PROVIDE FLEXIBLE SCHEDULES.

In addition to streamlined yard check-in and check-out, shippers can become more desirable by providing flexible appointments with broad delivery windows. Shippers who can enable 24/7 dock access also have a leg up, because it gives carriers added flexibility, a bonus in the face of increasing demand.

10 STAY UP ON MARKET CONDITIONS AND DATA.

Shippers must remain aware of transportation market trends to anticipate emerging issues and outline strategies to address them. For example, increased demand for freight transportation requires more careful monitoring to predict and prepare for periods of tight capacity and price volatility. By recognizing these trends, shippers can better forecast and plan accordingly with their carriers to ensure satisfactory load acceptance and service levels.

SOURCE: Ron Lazo, Vice President, Professional Services, Manhattan Associates

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NEWS & TRENDS IMPACTING THE

LUXURY GOODS SUPPLY CHAIN

DESIGNING A CUSTOM FIT



Luxury brands are taking vertical ownership of their supply chains to ensure longevity, sustainability, and artistry and reduce risk. After all, what better way to ensure a designer's collections are delivered on time than by owning the factory that produces the garments?

Having the design team and development process under one roof means designers can be more agile and invest in developing sample collections, which often require several fittings and toiles before the final prototype is ready. It also saves having to outsource to companies that are mostly abroad, and keeps the skills and artistry alive at home.

Owning supply chains gives way to bigger margins. As Franck Delpal, an expert in vertical integration and a professor at Institut Francais de la Mode in Paris, told the *New York Times*: "If you control the greater part of your supply chain, you get margins at every step, and at the end of the day, it creates big business."

—Don-Alvin Adegeest, FashionUnited

THE LAP OF LUXURY

The global luxury goods industry—which includes drinks, fashion, cosmetics, fragrances, watches, jewelry, luggage, and handbags at the highest end of the market in terms of quality and price—has been on an upward climb for many years.

- Revenue in the luxury goods market amounts to an estimated \$71,810m in 2019. The market is expected to grow annually by 0.7 percent (CAGR 2019–2022).
- The market's largest segment is luxury fashion, with an estimated market volume of \$25,443m in 2019.
- In global comparison, most luxury brand revenue is generated in the United States.

—Statista information

LUXURY IN 2025 - 7 MACRO TRENDS

According to the 17th edition of Bain & Company's annual study, these seven trends will define the future of the luxury brands supply chain:

1. More Chinese-driven purchases...happening in China. Chinese consumers will make up at least 45 percent of the market, and they will make half of their luxury purchases at home in China.

2. E-commerce, online, and digital will permeate every purchase. By 2025, online will represent 25 percent of market value—up from 10 percent today—cannibalizing traditional channels, and online will influence 100 percent of luxury purchases. Further, 50 percent of luxury purchases in the future will be digitally enabled as a result of new technologies such as virtual reality and mobile payments.

3. Footprint consolidation will reshape the store of the future. Foot traffic reduction in physical stores will drive a footprint consolidation, similar to what has already happened in the music and books sectors. Consequently, a store's role will change from a simple point of sale to a true touchpoint with consumers.

4. A youthful market will disrupt luxury's growth path. Gen Z and millennials will represent about 55 percent of the 2025 market and will contribute 130 percent of market growth over the period.

5. Cultures and subcultures will take over consumption trends. Evolving cultures (religion, ethnicity) and subcultures will shape fashion and luxury in 2025. Luxury brands will have to acknowledge and address them to remain relevant.

6. One market to serve markets of one. Brands in 2025 will experience a crossover of typical competitive boundaries. The standard model where brands grow to become either a category specialist or diversified toward lifestyle positioning will be taken to the extremes.

7. Nimble is the new black. This year confirmed the recent trend of higher profitability—from 19 percent EBIT margin in 2017 to 20 percent in 2018. However, the digital disruption will continue to shift the profiles of key expenditures in brands' profit and loss statements. Profitability will stabilize assuming brands adopt a more nimble approach across the value chain.

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LEADERSHIP

Conversations With The Captains of Industry

By Merrill Douglas



Bob Farrell
Executive Chairman,
GlobalTranz

Global Game-Changer

A COMPANY THAT BUILDS A STRONG executive team needs to create opportunities for the best executives to rise, says Bob Farrell. That's why on Jan. 1, 2019, Farrell moved from chairman and chief executive officer to executive chairman at technology and logistics company GlobalTranz, while chief financial officer Renee Krug moved into the CEO role. At the same time, GlobalTranz's vice president of finance, Lara Stell, moved into the CFO spot.

For Farrell, watching talented people succeed is one of the most enjoyable aspects of working at GlobalTranz, the Scottsdale, Ariz.-based firm he joined in 2016. Putting people in positions where they can flourish is a basic principle of his leadership. "Let them generate personal success, and then the company benefits," he says.

We recently spoke with Farrell about his priorities as a leader and about some current projects that keep life interesting at GlobalTranz.

IL: You've worked at many different technology companies. What attracts you to this segment?

We are changing the game. We are applying technology to automate and streamline operations while making

data available for analytics and decision-making—all of which allows customers to scale their business while reducing costs and creating efficiencies. More importantly, we help customers leverage transportation, logistics, and supply chain management to gain competitive and/or operational advantage.

At GlobalTranz, we've been focusing on ways to leverage data through machine learning to facilitate predictive analytics, dashboarding, and reporting so our customers can make real-time business decisions and differentiate themselves from their competition. The convergence of these things makes GlobalTranz an interesting and exciting place for a technologist to come to work.

IL: Tell us about an early experience that helped to shape you as a leader.

I've been in four CEO roles. Very early on, I learned that I was not going to be the one to solve problems directly. Rather, it was my job to put people in the position to make decisions, and make mistakes without fear of punishment, so they could gain the opportunity to improve.

I also learned that in any senior management role there are two things to worry about: the allocation of time and the allocation of capital. If we focus on the best use of our time, and the best way to leverage capital, we will be in a much better position to drive success.

IL: What big challenges do your customers face these days?

Many customers are worried about geopolitical issues. Some import raw materials or finished goods from countries that may be subject to more challenging tariffs in the future. Access to capacity is another big challenge. Our customers also struggle to find talent to hire. They look to providers such as GlobalTranz that have automated processes to help limit the number of additional resources they need, and to make their current resources more productive.

IL: Which current projects make you excited to go to work?

I'm excited about what we're doing with data. We are creating visibility through a control tower that helps customers understand historical trends and predictions for the future, marrying those with information about their current and projected order flow. We use data to drive machine learning, to facilitate better decision-making, and to reduce the number of resources necessary to move goods most effectively.

I'm also excited about our growth, which we achieved through a combination of organic expansion and acquisitions. Acquiring companies and seamlessly integrating them into GlobalTranz is exciting.

IL: How would you describe GlobalTranz's corporate culture?

Our culture is collaborative, empowered, and caring. The caring part is important. Not only do people here care about their colleagues, but they're also connected to their local community. Our people volunteer for Habitat for Humanity, do food drives, and help with disaster relief. We give our staff the ability to take time off to participate in these activities.

At the same time, our culture is competitive; our people want to win. I like to think that A players attract A players, while B players either figure out how to become A players or go home. You end up with a group of smart, collaborative, empowered, competitive people who are at the top of their game.

IL: What's one mistake you've made in your career that taught you an important lesson?

I've learned that in technology, it's important to base your product management plan on "minimum viable product" or MVP. You will always have people asking you to add one more feature to a product, and then one more. Whenever I agree to those requests, two things happen: The delivery cycle for the product becomes longer, and the product isn't as

strong as it would have been if we had stuck to the MVP. Now I'm a stickler for keeping the list of features in the basic product small. We create an MVP that solves problems, and then in future versions we can enhance it with bells and whistles.

IL: Which aspects of your job are the most fun?

I've already mentioned the pleasure of watching people succeed. I also enjoy getting out among our three groups of customers—shippers, carriers, and freight agents.

IL: If you could give your 20-year-old self some advice, what would it be?

Be patient. Follow the old carpenter's adage: measure twice, cut once. You can be decisive and still be deliberate in your thinking. I'd also stress the importance of empathy. I'm an empathetic person, and when I was younger, I thought that would be a limitation. I'm glad it wasn't. I would reassure my 20-year-old self that caring about what's going on with people will serve me well.

IL: How do you like to spend time when you're not working?

I enjoy time with my family. I run marathons, which helps me to de-stress and sometimes gives me a chance to run with my son. I serve on a couple of boards outside our company. Also, my wife and I love to travel. Even though I travel 200,000 miles a year for work, it's a treat to visit new places with my family.

Paranoia May Not Destroy Ya

One business leader Bob Farrell finds inspiring is the late Andrew Grove, a founder of Intel and the company's chairman and CEO for a decade. Grove's book *Only the Paranoid Survive: How to Exploit the Crisis Points That Challenge Every Company* made a strong impression, thanks to its message about not resting on one's laurels.

"Whatever we're doing today isn't going to be sufficient for tomorrow," Farrell says. It's crucial to keep an eye on the innovations that competitors are devising.

"We live in a disruptive environment," he says. "You would not want to be a New York City taxi medallion holder today, for example, given what Uber has done with ride hailing. For the taxi industry, a certain level of paranoia would have been a good thing."



Jennifer Daniel is head of global logistics for Redbubble, an online marketplace that connects independent graphic design, fine art, and photography artists with customers.

RESPONSIBILITIES

Oversees all inbound and outbound shipping from 32 locations around the world.

EXPERIENCE

Senior logistics manager, Redbubble; transportation operations and analytics manager, customs compliance manager, Restoration Hardware; foreign freight and compliance manager, Roost/Gate Five LLC; import manager, Harry & David; international transportation analyst, Williams Sonoma.

EDUCATION

BA, International Relations, San Francisco State University, 2001

Jennifer Daniel: Mastering the Art of Logistics

THE 300,000 INDEPENDENT, THIRD-PARTY ARTISTS WHO sell their artwork on Redbubble, as well as their customers, can be located anywhere in the world. Artists upload their designs to our website and set a price for it, then we offer those designs for sale on about 65 different print-on-demand products. When customers place an order, we route that information to a printer near the customer who drop-ships the finished product.

One logistics challenge is managing the drop-ship network because we don't run the shipping system. However, I negotiate contracts with shipping companies and provide guidance on how we want orders to ship.

We use postal shipping for most standard shipments, so we have to understand postal networks around the world. We've had some successes, but the systems aren't always as fast and reliable as parcel companies. And each country's postal system is different.

Europe had been a challenging area for us; deliveries were unreliable. One key step was putting staff in Europe, because it was difficult to ensure that our marketplace standards for shipping were met in Europe when our staff is based in San Francisco.

We also found a strong shipping carrier in Germany. We were able to cut costs and enable overnight delivery, as opposed to three to five days. We extended that relationship into several locations across Europe.

The Big Questions

What hobbies or activities make you better at managing logistics?

Cooking. With both cooking and logistics, you need to adapt when things don't go exactly how you want.

What significant insight have you gained from traveling?

There's a humility that comes with

traveling. You see how people can be wildly different and yet wildly the same in their challenges and what's important to them. It's also harder to demonize people when you've met them.

What's the best supply chain advice that you've received?

Priorities may shift at any time, so be flexible.

We're working to be forward-looking in our strategies. In 2017, products shipped from 24 locations. In 2018, that number increased to 32 locations.

This growth is exciting. To prepare for it, we've implemented more financial controls and pulled together more information on shipping costs. It's a challenge to make strategic decisions if you don't understand costs and their drivers. I love using my operational expertise in a creative environment to help independent artists make money in a challenging industry.

I've always been interested in other cultures and have traveled to about 25

countries. I studied international relations, and partway through my degree I took some time off and backpacked through Southern Africa.

When I returned, a classmate asked if I'd like to work for a freight forwarder. It sounded like one of the best ways to apply my love of international cultures.

After that, I moved to Williams Sonoma as a coordinator in the customs department. I was mentored by some wonderful people and grew in that role.

Then, I took a year off to backpack around the world. When I came back, I was hired for my first managerial position at Harry and David, where I

started an import program for the non-perishable goods it uses in its baskets and boxes.

Next, I started the import department for Roost, a home décor wholesaler. Then I moved to Restoration Hardware as customs compliance manager, and then into a role overseeing financials and data for its home delivery and parcel networks.

About three years ago, Redbubble recruited me. I love being at a small, young, growing company. The things that I do here can become legacy processes, procedures, and systems. I have an opportunity to have a great impact. ■



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THE SUPPLY CHAIN IN BRIEF



GREEN SEEDS

DHL rolled out a new fleet of electric delivery vans to serve U.S. markets, moving closer to its target of operating 70 percent of first- and last-mile delivery services with clean transport modes by 2025 and eventually reducing logistics-related emissions to zero by 2050. Equipment manufacturer Workhorse Group produced the fleet of 63 NGEN-1000 electric delivery cargo vans.

UP THE CHAIN



N. Joe Limbaugh was appointed senior vice president of supply chain, operations support, and marketing at **Motion Industries**, a distributor of maintenance, repair, and operation replacement parts and a wholly owned subsidiary of Genuine Parts Company. Reporting directly to the president of Motion Industries, Limbaugh heads supply chain and marketing operations.

Fiat Chrysler Automobiles N.V. (FCA) promoted **Carl Smiley** to chief purchasing and supply chain officer. Smiley was also named to the company's Group Executive Council (GEC), the highest operational body within FCA. The appointment is part of the company's efforts to broaden the GEC's purview by adding the supply chain management function.

SEALED DEALS

Better Made Snack Foods awarded a 10-year contract for the supply of mobile equipment, software, and support services to **Quest Solution**. Quest will install its *Route Edge* software to provide Better Made's delivery fleet with handheld supply chain and inventory management devices, automate the delivery and sales process, and analyze customer information to predict demand.



Phillips Pet Food & Supplies chose **Transervice Logistics'** dedicated contract carriage solution at its new Iowa distribution

center. Phillips opened the warehouse to serve the Midwest region and ensure the compliant delivery of refrigerated products.

Performance Food Group (PFG), a marketer and distributor, selected food service supply chain company **ArrowStream** as its software solutions supplier. PFG adopted ArrowStream's *Crossbow* technology system to help optimize its supply chain.

Range manufacturer **AGA Rangemaster** outsourced its retail transportation to **Yusen Logistics** in the UK. The logistics provider designed a bespoke solution for AGA Rangemaster's retail customers, crossdocking products at its dedicated white goods facility and offering consolidation opportunities with other leading brands.



m&a



Symbia Logistics, a warehousing, logistics, and e-commerce fulfillment company, acquired three businesses: **Mountain States Logistics**, **Innovative Fulfillment Solutions**, and **Nevada Distribution Services**. The acquisitions are part of its growth strategy, along with the grand opening of its e-commerce fulfillment center in Aurora, Colorado (*pictured*).

CFI, a subsidiary of Montreal-based TFI International, bought Chicago-based **Optimal Freight** from its parent company. Transferring Optimal Freight to CFI allows it to fit with U.S. operations and expand beyond the Canadian market.

Logistics Plus acquired international freight forwarding and foreign principal agent (FPA) service provider **H.C. Bennett**, which now operates as Logistics Plus's FPA services department within the international division.

Supply chain management software company **TECSYS** acquired **OrderDynamics**, a software system offering out-of-the-box distributed order management. TECSYS expands its omnichannel distribution with this deal.

Visibility platform **project44** acquired **GateHouse Logistics**, creating the largest visibility platform across North America and Europe. GateHouse Logistics brings its GDPR-compliant network of systems to project44's customers.

recognition

Global Cold Chain Alliance (GCCA) member **RLS Logistics** won the **2018 Wrangler Award** from the Food Cowboy Foundation, a GCCA strategic partner working to reduce food waste. RLS Logistics received the award for its commitment to reducing waste via its support of Food Cowboy's donation hotline.

Order picking solutions provider **UNEX Manufacturing** received the **Most Valuable Supplier Award for 2018** from the Material Handling Equipment Distributors Association for the fourth consecutive year. The award recognizes companies that demonstrate exemplary commitment to their dealer network, employees, and community.

Third-party logistics provider **Kane Is Able** was named **Warehouse of the Year 2018** by Whole Foods Market based on its performance across 11 key operational metrics. Kane operates two warehouses that receive shipments from Whole Foods' smaller suppliers and consolidate them for delivery.

GOOD WORKS

PLS Logistics partnered with the Kids In Need Foundation (KINF) by giving the organization access to its proprietary TMS, a reduced rate on shipments, and a rebate. PLS also participated in KINF's new "Supply a Classroom" program and funded a classroom in the Pittsburgh area. KINF is a national organization that distributes school supplies to underprivileged students all over the world.

INTERMODAL'S HIGH FIVE

Full-year results for intermodal freight are the strongest in five years, finds the Intermodal Association of North America's (IANA) Q4 and year-end *Intermodal Market Trends & Statistics* report.

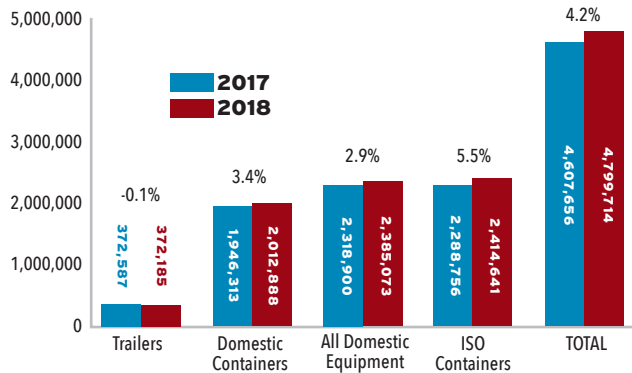
Intermodal freight volumes posted a fourth-quarter growth rate of 4.2 percent year-over-year, while quarterly international intermodal volume increased by 5.5 percent and domestic containers grew by 3.4 percent. Trailer loads fell 0.1 percent, the first time since 2016.

"All intermodal markets recorded an increase of at least 4.9 percent, and all regions saw traffic climb during 2018," says Joni Casey, president and CEO of IANA. "While we did see some year-end tapering, total volumes increased 5.6 percent for the year."

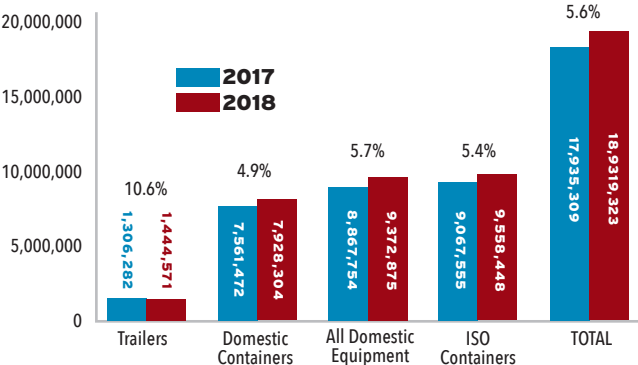
The seven highest-density trade corridors accounted for 62.6 percent of total volume and were up collectively 5.1 percent for the fourth quarter. Growth ranged from 13.1 percent in the Midwest-Northwest corridor to 0.9 percent in the Trans-Canada lane. The South Central-Southwest lane advanced 9.7 percent, while the Intra-Southeast was close behind with 9.4 percent. The Southeast-Southwest lane booked a 7-percent gain, and the Northeast-Midwest corridor saw a 5.7-percent increase. The Southwest-Midwest managed 1 percent.

Intermodal marketing company volumes fell for the first time since Q1 of 2017. Solid 4.5-percent growth in intermodal loads largely offset the 6.3-percent drop in highway loads.

4TH QUARTER 2018 INTERMODAL VOLUME COMPARISONS



YEAR-END 2018 INTERMODAL VOLUME COMPARISONS



New onboarding events for Walmart drivers include assessments, mentorship, and a faster hiring process that has cut in half the time between a candidate's initial interview and mandatory driving assessment, expediting the time it takes to complete a new hire.



Walmart Rolls Back Driver Shortage Concern

Even the mighty Walmart is not immune from the challenges of recruiting and retaining qualified drivers.

To combat the driver shortage, Walmart is giving its drivers a \$0.01 per-mile increase and a 50-cent increase in activity pay for arrive and arrive/drop occurrences. That means Walmart drivers will now be paid up to one dollar every time they arrive at their destination and drop a trailer.

With this increase, Walmart drivers can earn an average of \$87,500 in their first year of employment with an all-in rate of nearly 89 cents per mile. Furthermore, in the Northeast region, Walmart is offering a 5-percent premium on mileage and eight different activities.

The company also dramatically revamped its hiring and onboarding program, shortening the application and onboarding time by more than 50 percent.

Each year, Walmart's 8,000 drivers travel more than 700 million miles and deliver millions of cases of merchandise to 4,700 Walmart and Sam's Club locations across the nation. To drive for Walmart, a commercial driver must have at least 30 months of full-time experience with no serious traffic violations in the past three years.

Despite Challenges, Shippers Forge Ahead

Shippers experienced a range of supply chain challenges in 2018, according to results from Averitt Express' fourth annual *State of the North American Supply Chain* survey. More than 2,300 North American shippers from a variety of industries participated.

The results provide a clear view of the road that shippers traveled in the previous year. The findings, as they relate to 2018, may not come as a big surprise to many who had a direct involvement in supply chain management. Nonetheless, they confirm that certain issues were widespread. At the same time, the feedback illustrates the service challenges shippers experienced and how they chose to react.

Ultimately, tight capacity and increasing freight costs were the bane of 2018. Boosted by a consumer recovery that began in 2017, supply chain operations were at the same time hindered as the trucking industry adjusted to the electronic logging device mandate that went into effect in late 2017.

When Averitt asked shippers about their outlook on the state of supply chains in 2019, there was a stark contrast from the year before. The results show a rising anticipation that shipping volumes will head downward. From an economic standpoint, the results correlate with analysts' general predictions.

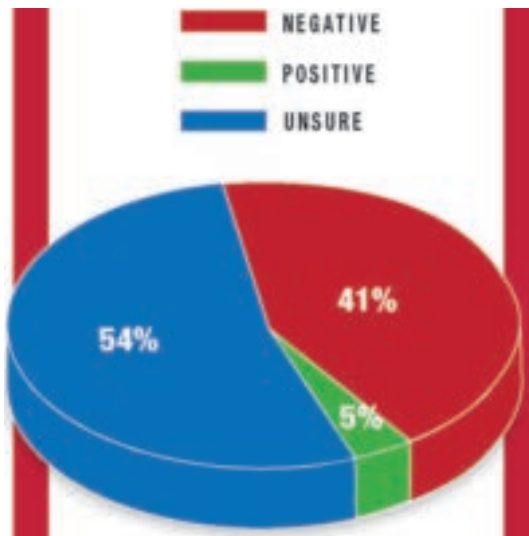
Last year was also a hot one for most industries that experienced relief from tax overhauls. This year, however, the steam may start to escape as worries about international trade relations continue to grow.

Among the key findings:

- 26.05 percent of shippers experienced challenges with freight capacity in 2018.
- 69.59 percent expect to ship more freight in 2019 than last year—a 6.3 percentage point decrease from the previous year's survey.
- 41 percent view trade tariffs as having a negative impact on their business in 2018, compared to only 5 percent who report positive effects.

From the driver shortage to trade wars, shippers faced challenges at nearly every point in the supply chain. While perception of the near-term economy may indicate

How Did Trade Tariffs Impact Your Business in 2018?



When Averitt asked shippers what kind of impact trade tariffs had on their business in 2018, the response was a stark contrast to the perceptions gauged in 2016. A majority said the negative impact was higher supply chain costs. One key issue that importers experienced is the inability to find more cost-efficient domestic sources for raw materials and products.

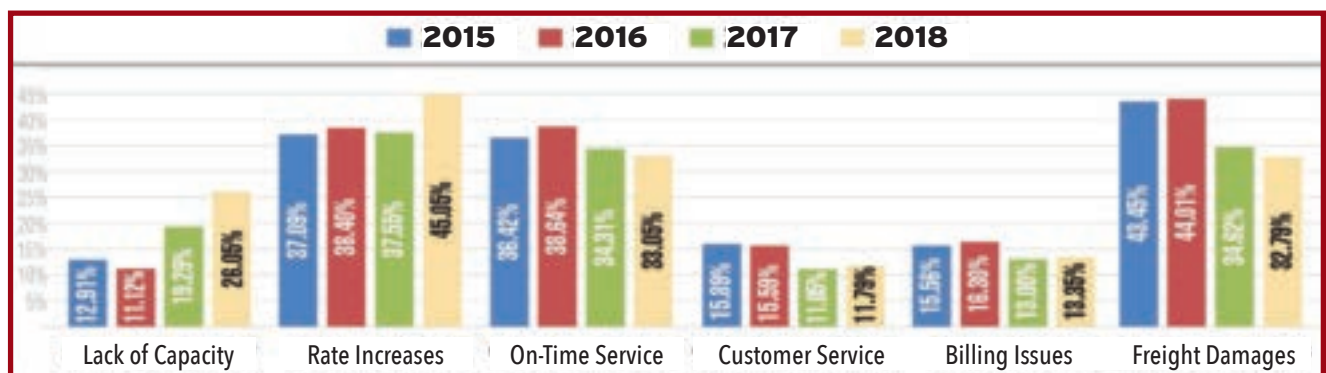
a slowdown in freight movement is looming, shippers and carriers should not dismiss past challenges.

Freight capacity will likely remain a hurdle for shippers for years to come. The driver shortage continues to grow and will likely carry on for the foreseeable future. To that note, plan ahead as much as possible and work closely with your transportation partners. Two-way communication will be crucial to the success of both shippers and carriers.

As the year continues, all eyes will be focused on the state of international trade. Reshoring and nearshoring of manufacturing may see a surge as more businesses look to bypass the increased costs of managing a global supply chain.

At the same time, we may also look forward to a year that could usher in new agreements that will help businesses grow both at home and abroad.

Shippers Share Biggest Carrier Challenges



SOURCE: *State of the North American Supply Chain* survey, Averitt Express

LEVERAGING DATA FOR SPEED AND EFFICIENCY

Constant optimizations drive transportation and logistics (T&L) processes. To compete in this ever-evolving sector, you need to be able to take full advantage of the data at your disposal. Here are the critical steps you can take to manage your T&L data to best optimize for efficiency, price, and speed.

Share information. Data is generated constantly throughout the product journey. Still, there are too many gaps in the available data. For example, you may have information about a specific shipment from one location to another, but does it connect to any data related to the order's placement, or its final destination? Having end-to-end visibility can help maximize efficiency by revealing opportunities for optimization. A centralized data management system allows you to view and monitor the different steps of the product journey holistically.

If you want to have a clear view of live data coming from a variety of different data sources and real-time systems, dashboards work great. If you have real-time data coming from, say, an active barcode on a package or truck with GPS tracking, you need a real-time way to analyze it. If you can spot trends in the data as fast as it is coming in, you can make immediate improvements and gain meaningful insights. Streamlining and reporting using one dashboard leads to better communication and provides more opportunity to gain actionable insights from the data.

Clean up your data. Data cleaning is the process of identifying and fixing or removing inaccurate information from your data network. Companies that do not have a plan in place to build and maintain data cleansing will run into some major roadblocks the more data they collect.

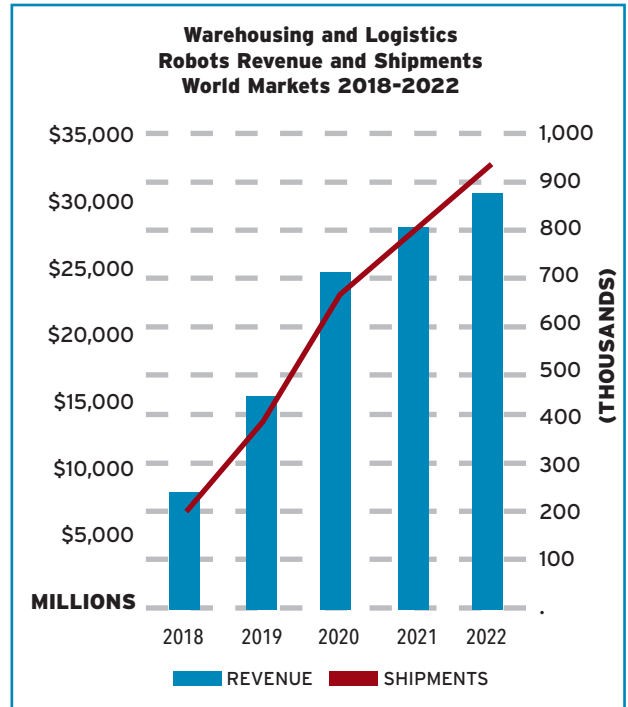
The first step is to develop unified data standards for recording information. When you fail to do so, data is more difficult to use and share with others. This leads to further gaps in your data. Another simple change that you can make for cleaner, higher-quality data is to stop having employees enter data manually. Instead, automate your systems when possible to streamline your process, mitigate human error, and clean up existing data.

Invest in more technology and talent. If you want to manage data more effectively, you need to treat analytics and data reporting as more than just a side project. Give it the focus it deserves by investing in more effective technology and data talent.

From optimization to automation, many great technologies can help logistics companies run as efficiently as possible. Just make sure that you have the right systems in place to manage, analyze, and visualize all the data coming in from various sources.

When developing talent, you can form your data team internally or use an external consultant, depending on what makes sense for your business. To move the needle quickly, an external team that specializes in AI, machine learning, and logistics, may be your best option.

-iDashboards



SOURCE: TRACTICA

Robots on the March

A growing number of warehousing and logistics companies are incorporating robots to remain competitive in a market driven in large part by consumers that demand rapid fulfillment.

At the same time, robotic warehousing and logistics technologies are advancing in capability and becoming more affordable each year. The demand for robots and the supply of advanced robotic solutions to optimize logistics processes, combined with labor shortages, have created a tipping point that could lead to widespread adoption of robots in warehouses and logistics operations to assist and displace human workers.

Tractica forecasts that worldwide shipments of warehousing and logistics robots will grow rapidly over the next five years from 194,000 units in 2018 to 938,000 units annually by 2022, with the rate of growth slowing after 2021 as many major players will have adopted robotic systems by then (see chart above). Worldwide revenue for this category will increase from \$8.3 billion in 2018 to \$30.8 billion in 2022, providing significant opportunities for established participants and emerging players.

"The warehousing and logistics robot market is experiencing strong growth, and supply chains are being transformed as companies replace fixed infrastructure and outdated processes with flexible, scalable robotic solutions to meet the changing demands of modern commerce," says Glenn Sanders, senior analyst, Tractica.

Choosing a Freight Bill Processor

As freight payment processor IPS Worldwide heads to bankruptcy court, shippers are reminded how important it is to be diligent when choosing a freight bill processor. Stanley Black & Decker learned it the hard way, alleging in an interview that IPS “diverted, stole or otherwise misappropriated” its funds and owed the company an estimated \$41 million.

When selecting a freight bill processor, look for best-in-class providers that:

- Never co-mingle clients’ funds with their own operating cash.
- Will not use client funds for any purposes other than to pay carriers.
- Have their financial statements audited by a reputable public accounting firm annually.
- Confirm the soundness of their internal controls by having a SSAE 18 (Statement on Standards for Attestation Engagements No.18) Type II and an ISAE 3402



(International Standard on Assurance Engagements 3402) Type II performed annually and share their auditors’ reports with prospective clients.

- Have a significant (approximately \$50 million) employee dishonesty bond in place.
- Have no or minimal debt.
- Are Privacy Shield Framework certified to ensure compliance and commitment to data privacy. Shippers with European Union data should look for

freight processors that are GDPR-compliant or working toward compliance.

In addition, shippers should ask their carriers about freight payment vendors that make payments to them. Carriers can identify those who make payments according to the shipper’s instructions and those who do not.

Carriers are also a good source of information as to the quality of the vendor’s audit and how well the vendor responds to their inquiries.

–Harold Friedman, *Data2Logistics*

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GPA'S TRIPLE CROWN

The Georgia Ports Authority's (GPA) new Big Berth/Big Ship program will allow the Port of Savannah to simultaneously handle six 14,000-TEU vessels by 2024.

"No other single container terminal in North America has the ability to expand berth capacity at this rate," said GPA Executive Director Griff Lynch at the Georgia Foreign Trade Conference, where he unveiled the program. Currently, Savannah's Garden City Terminal is equipped to handle two of these vessels and by April 2019 that number will increase to three.

Over the next five years, the GPA plans to add another 21 Neo-Panamax ship-to-shore cranes, replacing 14 of its older models to bring the total fleet to 37. Dock upgrades are already underway to support the new, larger cranes.

The Savannah market is also seeing significant private development. Over the past two years, private investors have added 9 million square feet of available space, bringing Savannah's total industrial real estate market to 60.6 million square feet. The rate of construction has since accelerated, with another 9.2 million square feet of industrial space currently under construction.

In addition to the ship-to-shore cranes, GPA is adding one dozen new rubber-tired gantry cranes, which will bring the number of Garden City Terminal's container handling cranes to 158. Phase I of the Mason Mega Rail project will be complete in October 2019. Full completion one year later will double the Port of Savannah's rail lift capacity to 1 million containers per year.

In late 2021, the Savannah Harbor Expansion Project is slated for completion, delivering the deeper water necessary to better accommodate the larger vessels now calling on the U.S. East Coast.

Photo: Stephen B. Morton



Containers and ship-to-shore cranes work vessels at the Georgia Ports Authority Garden City Terminal.



DHL Writes Prescription for Medical Express Service

DHL Express has launched DHL Medical Express Service (WMX) between Brazil and the United States for pharmaceutical and clinical research sector shippers. The transportation solution, piloted in Brazil, addresses increased demand for faster and more predictable lead times, given the regulatory complexities that can delay exports.

The service ultimately impacts clinical trial patients, as temperature-sensitive biological products and new patient-specific treatments will be in the right hands exactly when needed.

With its medical express service, DHL Express can manage the export and regulatory requirements for urgent shipments with specific temperature needs from several major cities in Brazil to most U.S. destinations in 24 to 48 hours. DHL has upgraded and validated its WMX service points in Brazil to meet several Brazilian federal, state, and city regulations around Ministry of Health and Sanitary controls and licensing requirements.

The successful implementation of the DHL WMX clinical trial platform at DHL Express Brazil includes a dedicated customer service center with bilingual staff and an onboarding team to support investigator sites. The WMX service includes dry ice supplies and temperature-controlled packaging fulfillment, online tools for placing bookings and ordering supplies, and a web-based interface—Express Logistics Platform (ELP)—that connects sites. The DHL customer service team and all the operational back office systems reside within the DHL operation and are also integrated into ELP.

Qualified customers receive a choice of temperature options—ambient, chilled, or frozen—through specialized thermal packaging. Pre-determined contingencies circumvent delays, and DHL quality control centers monitor the shipments 24/7.

The service is capable of transporting laboratory kits and medical devices, biological samples (blood, saliva, urine, tissues), research products, vaccines, drugs for commercial and non-commercial use, and medical devices.

Brexit: Supply Chain Opportunity or Threat?



The UK leaving the European Union is no longer an uncertainty. Brexit is a reality that businesses around the world have to face and prepare for. Whether you import/export to the UK directly or indirectly, Brexit will impact your business operations in terms of cost and timelines. This can be an opportunity or a threat depending on how

your business is prepared to handle it.

While the specific mechanics of Brexit separation remain unclear, what is clear is that it will impact EU and UK logistics workers; regulatory issues will create new production, packaging, and distribution standards/norms; potential trade tariffs will impact the bottom line due to tax structures and duties; and challenges to the free movement of goods, along with demand and supply issues, will arise.

In addition, potential areas that will be affected by Brexit include:

- Tariffs—shippers may pay more on raw materials or finished/intermediate goods, based on EU and UK negotiations.
- Forex currency—any depreciation of the pound due to Brexit will create more opportunity for exports from the UK. But, import costs will go up.

- Supply chain delays—the imposition of new customs requirements and additional documentation will likely cause clearance delays and additional labeling.

- Taxation—the UK could reduce corporate taxation to maintain and grow its share in trading activity, leading to enhanced logistics needs.

Even though answers to many of these questions are still unknown, it is important that businesses do not wait for concrete answers or policies, but begin to work through potential scenarios and plan their responses now. Strategies include:

- Analyze the business supply chain and set future goals.
- Standardize data on all aspects of logistics.
- Assess and model scenarios to identify the likely impacts of Brexit and how to manage them.
- Run a cost-benefit and risk assessment.
- Run pilot projects and review the results.

Further big ideas to balance the Brexit impact include:

Faster digitization. It's time to digitize and standardize internal, external, and intra-company processes to bring in transparency, documentation handling, and price discovery.

Market platforms. Multimodal capabilities for handling e-commerce platforms are the norm of the future. They provide an opportunity to both optimize on cost and find models to benefit from the opportunities Brexit creates.

Businesses can find creative ways to reap the benefits of Brexit and reduce their liabilities and risks with a well-designed logistics strategy.

– Ruchi Dogra, CoFounder and Director, FreightCrate Technologies

Canada Bupkus on BOPIS

Canada lags behind several other countries, but is still ahead of the United States when it comes to Buy Online Pickup In-Store (BOPIS)

options, according to a new survey from OrderDynamics, a Tecsys company. *Omni-2000 Research: Canada* highlights the country's retail market efficiencies in a host of omnichannel capabilities.

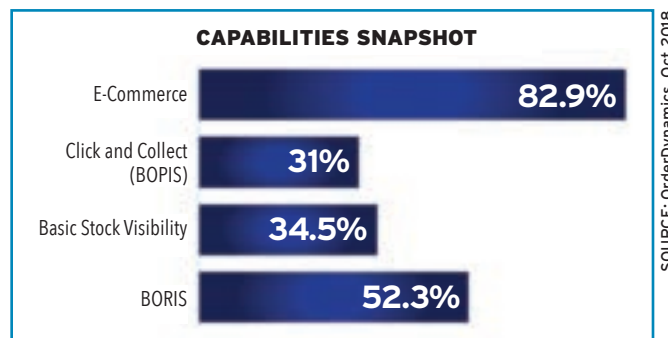
Compared to 37.6 percent of global retailers offering BOPIS, 31 percent of Canadian retailers offer the service. Despite falling behind other countries analyzed in the study, including the UK, Australia, France, Germany, and Austria, Canada has made significant progress in developing omnichannel retail capabilities.

Based on data collected from 281 retail chains in Canada with a minimum of 10 store locations, other key findings include:

- 82.9 percent offer some form of free shipping.
- 34.5 percent offer basic, active inventory visibility.
- 13.9 percent of all retailers provide free return deliveries.
- 74.7 percent of omnichannel retailers offer Buy Online Return In-Store (BORIS).

- 71.2 percent of retailers have a mobile-responsive site.
- 19.5 percent of omnichannel retailers have an active Instagram shop.

Pegged as a country in the omnichannel development phase, Canada has seen improvements since the *Omni-1000* report conducted in 2017. Compared to previous research, Canada now has 70 percent more retailers offering e-commerce and more than 50 percent more retailers offering free shipping. The average minimum basket value for free shipping has also decreased, moving from \$60.87 to \$48.89, making this option more accessible to consumers.



Virgin Atlantic, Delta Cargo Fly Away Home to Heathrow

Virgin Atlantic Cargo and Delta Cargo are poised for takeoff to their new home: the new purpose-built dnata City East, London Heathrow's state-of-the-art cargo facility. The move supports the airlines' growing cargo businesses, enhances their trans-Atlantic partnership, and future-proofs the joint venture's position in the UK market by doubling the size of their cargo footprint at the airport.

Virgin and Delta aligned their cargo operations under one roof in the UK in June 2016, and the carriers now share cargo facilities at major U.S. gateways, notably Atlanta, Boston, Miami, New York, Orlando, and Washington Dulles.

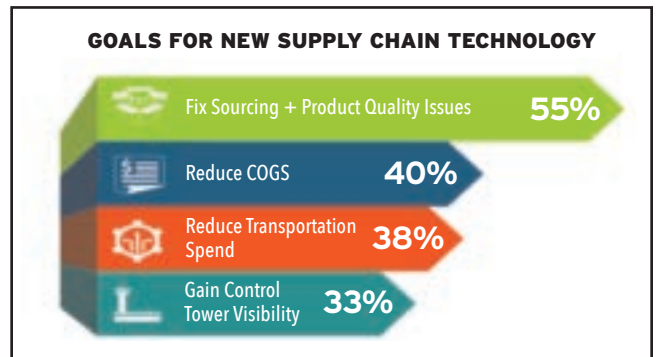
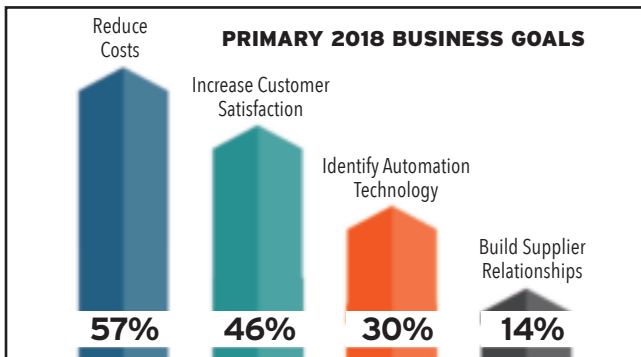
The move to the new facility—scheduled for the second half of 2019—will ultimately increase the size of Virgin and Delta's cargo operation at Heathrow to 335,000 square feet and help shippers benefit from greater automation and faster truck and cargo handling times.

Inside the warehouse, technology investments will enable staff using handheld devices to efficiently manage the flow of cargo, while the double-train ETV system will increase storage to 245 positions for pallets and containers. Customer



trucks arriving at the facility will benefit from a new door management system, which enables drivers to complete paperwork at the gatehouse on arrival without leaving their vehicles and to then be immediately assigned to one of the facility's 18 cargo doors.

The new location will also provide further benefits for shippers using Virgin Atlantic Cargo and Delta Cargo services to move temperature-controlled healthcare and life science products, as well as offering a dedicated perishables zone and an enlarged AVI center for live animals.



IS TECHNOLOGY THE SOLUTION TO GLOBAL SUPPLY CHAIN COMPLEXITY?

As global trade continues to transform the way companies are producing, moving, buying, and selling goods across borders, it's important for supply chain leaders to know about trade trends that can help them benchmark their company against the leaders and laggards.

To sort through emerging and existing technology, a recent survey by global trade management software provider Amber Road and the Association of American Exporters and Importers provides insight into what technology companies are using, the challenges these systems are expected to solve, and how companies are implementing them.

Here are some key statistics from the survey of more than 120 supply chain executives in a cross-cut of industries and roles.

■ While 77 percent of respondents state tariffs and duties top their list of concerns for 2019, 57 percent are looking to reduce supply chain costs (see chart above).

■ More than 50 percent are looking to solve sourcing and quality issues using technology (see chart above).

■ Only 40 percent are leveraging a Global Trade Management system for supply chain execution.

■ Even then, not all processes are automated, indicating continued reliance on manual processes.

■ Blockchain is being considered at 30 percent of responding companies; probably the same 33 percent that consider their companies as leaders in technology adoption.

The report gives guidance on how to build the “right” technology stack. Although finding the right stack might sound daunting at first, this task should be seen as a way to spark your company's innovativeness in finding new ways to compete and win.

Download the report at: bit.ly/TradeTrendsInbound

– Gary M. Barraco, Product Evangelist, Amber Road

Trade War Threatens Sourcing Ethics, Quality Control

The U.S.-China tariff standoff in 2018 triggered challenges to global sourcing and there may be subsequent threats to ethics and quality control, according to a recent report by global quality control and supplier compliance service provider QIMA.

The geographic sourcing diversification movement away from China is already underway, confirms QIMA's year-end survey of 100+ businesses across the globe. Seventy-five percent of respondents report they are already sourcing suppliers in new markets or plan to do so soon.

The markets seeing more activity include those with less developed manufacturing industries and infrastructure than China, such as Indonesia, Cambodia, Bangladesh, Turkey, and Vietnam. These are all markets where factory compliance, workers' rights, safety, waste management, and quality control issues persist, according to the report.

For instance, Vietnam, Indonesia, and Turkey saw their average factory scores deteriorate by -5.1 percent, -3.2 percent, and -3.1 percent in 2018, respectively, QIMA reports.

On a more positive note, many global brands are taking



Quality control activities in different parts of Asia grew significantly in 2018. Bangladesh, an ever-popular destination for textile and apparel, saw a particularly strong influx of buyers, resulting in 37 percent growth.

action to mitigate the risks of shifting sourcing markets, with QIMA handling an uptick in requests for inspections and audits in most of these emerging markets. For example, the demand for inspections and audits expanded by more than 50 percent in Indonesia and Cambodia.

QIMA audit data going as far back as 2016 shows a slow yet steady upward climb of ethical scores in the textile and apparel sector. That trend—coupled with the fact that this industry has faced high levels of consumer-driven ethical accountability—validates the argument that increased demands for transparency in supply chains result in better sourcing ethics down the line.

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"I had a fantastic experience in the T&L program, which set me up for success. I get to work in tandem with a dedicated team, surrounded by a big industry, in a fast-paced and engaging environment—a dream come true."
— T. J. Ahvenniemi,
Class of 2014

Transportation and Logistics Management

The University of Wisconsin-Superior is located on the shore of Lake Superior where a major international transportation hub serves world markets using all five modes of transportation—rail, highway, marine, air and pipeline, along with intermodal service.

However, it isn't just the location that makes the University of Wisconsin-Superior's undergraduate Transportation and Logistics Management (T&L) program unique. Faculty with extensive research and industry experience design the curriculum, with input from an advisory group of industry leaders. Coursework is built on a liberal arts foundation plus core business courses. T&L students take a wide range of required and elective courses such as Transportation Economics, Supply Chain Management, International and Intermodal Transportation Management, Environmental Law, and courses in specific modes of transportation. Many classes are available online—an attractive option for place-bound students or for working professionals.

Students gain hands-on experience by engaging in simulations, learning from guest lecturers, going on field trips, attending conferences, competing in case study competitions, and completing internships that often result in job offers before graduation.

As an Intermodal Association of North America (IANA) Scholarship University, UW-Superior's T&L students have the opportunity to tour transportation facilities throughout the country and participate in the annual IANA Expo and intercollegiate case-study competition. Students have access to numerous scholarship and research fellowship opportunities.

The UW-Superior T&L program is also home to the Transportation and Logistics Research Center (TLRC). Since its founding in 1999, the TLRC has received over \$11 million in grants, contracts and sponsorships from federal, state and private sources in support of its mission of applied transportation/logistics/supply chain research, education, and advisory services.

Supply Chain Management

The Supply Chain Management (SCM) undergraduate concentration is the most recent program addition to the School of Business and Economics at UW-Superior. It joins and complements the T&L major. Students study the complex world of supply chains by taking classes that emphasize quantitative analysis and problem solving. They learn the business of coordinating people, products, and materials through classroom instruction, real-world experiences, and state-of-the-art computer simulations.

With the addition of this program, students can now choose from four plans of study:

- A four-year plan earning a B.S. or a B.A. degree in Transportation and Logistics.
- An accelerated plan that leads to graduating in 3.5 years with a T&L major.
- A four-year plan leading to a double major in T&L and Business Administration with a concentration in Supply Chain Management.
- A four-year plan earning a B.S. or a B.A. degree in Business Administration with a Supply Chain Management Concentration.

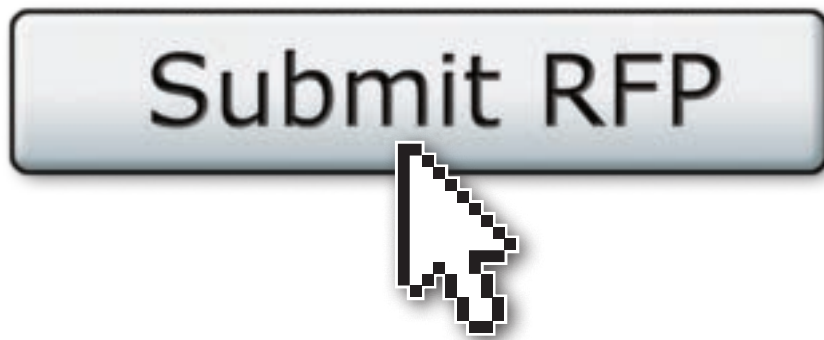
Faculty, staff, and students in the T&L and SCM Program, in conjunction with professional organizations and companies, have developed a Partners in Education Program that provides multiple opportunities for interaction with T&L and SCM students. Opportunities for industry involvement include internships, facility tours, job shadowing, scholarships and class research projects. We invite you to partner with us.

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Brian Thompson
Chief Commercial
Officer
SMC³
sales@smc3.com

In the first-of-its-kind LTL certification program, SMC³ hopes to share its lifetime of LTL expertise with shippers, 3PLs, carriers, freight forwarders and future supply chain leaders.

The Next Frontier in LTL Education

In the less-than-truckload arena, the knowledge-transfer gap is widening.

The economy is booming. Professionals throughout the transportation arena are taking advantage of the strong job market by moving into new supply chain positions. Add to this job shuffling the influx of recently graduated college students thrust into new supply chain roles and the retirement of trusted logistics leaders, and the issue becomes clear.

LTL is an incredibly complex mode of transportation, and experience in the field isn't easily gained. When longtime employees with decades of experience in the industry leave, a hole in the collective knowledge of their organizations opens up. The same holds true for upwardly mobile logistics leaders that change jobs.

To fill this void, SMC³, the transportation industry's leading authority for LTL data, technology and supply chain education, is developing the industry's only LTL certification program. Upon earning this SMC³-backed distinction, students will have developed the skills and competencies demanded by the 21st century LTL industry.

The certification courses will provide a flexible learning experience in an interactive and engaging environment. SMC³'s on-demand online learning platform is a convenient option for students that wish to learn at their own pace. Experienced logistics players who simply need a brush up on a few key components can also opt for intensive, classroom-style lectures.

Shared knowledge creates a strong and unified supply chain, and SMC³ has more than 82 years supporting the complex niche of LTL transportation. The company transfers this deep knowledge of all aspects of the supply chain to attendees at its twice-yearly logistics conferences, Jump Start and Connections. Shippers, 3PLs, carriers and technology providers look to SMC³ to benefit from this knowledge-sharing, learning about the latest technological disruptors and how to confront emerging supply chain challenges.

With education as one of its foundational tenets, SMC³ also creates rating, transit-time and shipment execution and visibility technology solutions that benefit the entire industry. Thousands of industry trading partners rely on SMC³ technology solutions to make informed business decisions, achieve higher returns on their transportation investment, and meet ever-changing market demands.

With the certification class, SMC³ will extend its lifetime of LTL expertise past its two annual conferences and into the classroom, where students can achieve a thorough understanding of the industry from the LTL specialists at SMC³.

SMC³ has enabled stakeholders to navigate the LTL industry for decades. In the first-of-its-kind LTL certification program, SMC³ hopes to share its lifetime of LTL expertise with shippers, 3PLs, carriers, freight forwarders and future supply chain leaders looking to master their LTL knowledge and take their careers to the next level.

For more details about SMC³'s LTL certification program, coming later this year, contact customersupport@smc3.com.

The course will cover the following areas:

- ▶ The Fundamentals of LTL
- ▶ Operations
- ▶ Carrier Pricing & Costing
- ▶ Transportation Laws & Regulations
- ▶ Business Analytics



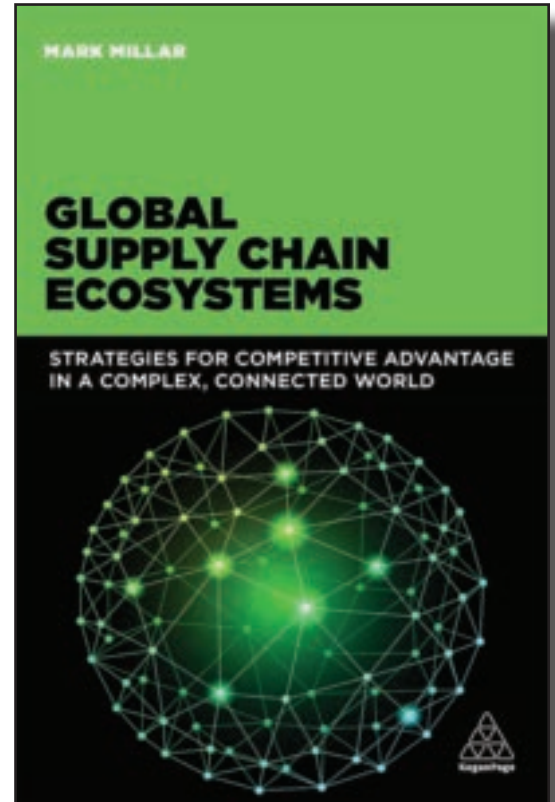
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ABOUT MARK MILLAR, MBA

Acknowledged as an engaging and energetic presenter who delivers a memorable impact, Mark has completed over 450 speaking engagements at corporate events, client functions, management briefings and industry conferences in 28 countries across five continents.

A visiting lecturer at Hong Kong Polytechnic University, industry peers recently recognized Millar as The Most Inspiring Supply Chain Professional at the 2018 Supply Chain Asia Awards.

www.markmillar.com
mark@markmillar.com



REVERSE LOGISTICS

by VALERIE METZKER

Head of Business Development, Roadie
info@roadie.com | 844-476-2343

Retail Combats a \$351-Billion Problem

The next time you think about returning an item to Amazon, be forewarned: Return too many items in one year, and you might just be exiled for good.

Amazon's controversial decision to ban return-happy customers in an effort to reduce returns costs shows the lengths retailers are willing to go.

Last year, total merchandise returns cost U.S. retailers \$351 billion in lost sales. That number will climb as online retail becomes the default choice for convenience-craving customers.

Hundreds of retailers grapple with these losses. Despite growing concerns, many retailers see free and flexible return policies as an essential part of staying competitive—ignoring (for now) the risk that this billion-dollar “ticking time bomb” might one day go off.

To speed resales, create more convenient returns experiences, and use flexible policies as a selling point, retailers are finding new alternatives:

Crowdsource delivery for faster 1:1 customer returns. While many retailers are ramping up same-day delivery, few have focused on returns. Even Amazon requires most customers

to drop off returns at the post office, despite customer demand for more convenient options.

So why not offer customers at-home pickup? Retailers schedule a pickup through a crowdsourced delivery fleet, customers leave items outside their doors, and then someone picks it up that very same day.

More than convenience, crowdsourcing returns allows for faster, and even same-day, restock and resell. Given that less than half of returned items are resold at full price, margin-conscious retailers are under enormous pressure to turn around product while it can still be sold at full-ticket value.

Invest in return optimization technology. Instead of abandoning returns at a distribution center or landfill, retailers are looking to emerging startups to help solve reverse logistics issues. These tech-enabled partnerships have become increasingly important since retail's omnichannel transformation.

Based on real-time data, Oporto predicts where to route returned items and determines the most profitable resale price, while Happy Returns provides centralized, in-person return locations for online retailers.

Some companies try to prevent a return from happening in the first place. Supply.ai's ReturnSense tracks customer behavior in real time and detects the likelihood of a future return, giving retailers an opportunity to intervene and suggest a different product.

Take advantage of physical footprint. Major U.S. retailers now use their brick-and-mortar stores for speedier delivery, leveraging ship-from-store capabilities to expedite returns, restocks, and resale.

Rather than letting distressed inventory end up in waste piles, retailers stand to gain something from their billion-dollar returns reality. By implementing a strategic returns policy, retailers can quickly restock shelves, resell items at profit, and build a more loyal customer base.

Who knows? Some may even lift the ban on customers who simply change their minds. ■

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What's Your New Year's Resolution?



[IT MATTERS]

BY DOUG SURRETT

Chief Product Strategist, BluJay Solutions
pr@blujaysolutions.com | 866-584-7280

Time to Get Cracking on Compliance

As the global marketplace expands and countries start to flex their economic muscle, the rules that keep goods moving across borders will only get more complex. How can your company keep up?

Automating your import/export processes is one smart step. A future-oriented customs management suite that goes beyond electronic customs declarations, with flexible integration and multi-country support from one platform, eases workloads and reduces errors that lead to inefficiency and costly fines.

When shopping for a customs system, make sure it can accommodate future customs and compliance developments with:

Integrated knowledge database. In light of globally diverse and dynamically changing regulations, laws, and tariffs, customs systems should have constantly updated knowledge databases.

Limitations and preferences. It should be recognizable prior to import whether goods are subject to any import restrictions, what the underlying tariffs are, and whether you can apply a tariff preference.

Interfaces with the existing IT environment. Through

integration, all IT solutions can work with one central database to save time, avoid transmission errors, and ensure a standardized and consistent database.

Integrated workflow management that automatically defines the proper individual customs clearance processes and assigns them to the right employees for handling.

An integrated document management system, which files all documents that are part of a customs clearance process in a digital folder, so you find them quickly and meet audit requirements.

Fully or semi-automatic classification of goods is a significant simplification. Classifying means attributing the right commodity number to one's own goods.

Automatic tariff assessment. Attributing the correct customs tariff to a commodity is the basis of all import and export processes. An intelligent customs management suite can automate the attribution process to the

furthest extent, which greatly reduces the risk of error.

Backup. All supply chain partners demand fast, safe, and simple access to data. Having integrated data backup is essential for a modern customs system.

Correct handling of the Anti-Terrorism Directive. In the fight against terrorism, regulations often center around embargo measures aimed at prohibiting business contact with certain people, organizations, and affiliations.

Simplified manual input. Automation does not eliminate manual input, so it is important to simplify input activities when possible.

Automatic customs value assessment, which is complex and should be supported by a high-performance IT system.

Powered by people. Licensed customs brokers to interpret and implement changes into the software are invaluable, and save time and resources for companies that do not have to staff experts for these functions.

As changes continue to invade global trade, it's time to take advantage of future-oriented customs management suites. ■



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[SUPPLY CHAIN SECURITY]

BY MATAN OR-EL

Co-Founder and CEO, Panorays
Matan@panorays.com | 929-356-2004

The ABCs of Supply Chain Cybersecurity

Supply chain cybersecurity is one of the biggest issues facing logistics planners. In fact, 80 percent of all cyberattacks take place in the supply chain, according to the SANS Institute.

As cybercriminals leverage techniques to hack a part of the supply chain that can then be used across an entire industry, here are the ABCs of fighting back.

A is for automation. It is key to protecting your supply chain.

B is for being aware. More third parties are being added to the supply chain while new data privacy regulations take effect. At the same time, cybercriminals are dynamically changing their tactics to stay ahead of the latest technologies—and they are succeeding at an alarming rate.

Many attacks are difficult to detect; as a result, companies are often unaware that they are being breached. Fifty-nine percent of companies experienced a third-party data breach, yet only 16 percent say they effectively mitigate third-party risks, indicates a Ponemon Institute survey. And the average number of third parties that companies employ grew from 378 in 2016, to 471 in 2017, to 588 in 2018.

C is for checking the chain. To avoid breaches, companies must manage their third-party security. Checking the chain seems daunting, but you can't sidestep it or accomplish it through one vetting process. Companies that employ vendors and suffer data breaches can face stiff penalties for not complying with data privacy regulations, along with damage to their reputations.

The only way to effectively review today's large and complex supply chain is to automate the processes. It's no longer practical for companies to take months filling out a paper questionnaire and having it reviewed. Because cyber posture constantly changes, most paper surveys are obsolete before they even hit the desk. Automating these processes means that companies can vet third-party vendors in days and not months and can continuously monitor them for changes.

Security inquiries can check

for compliance with key regulations. Automation also offers a way to define relationships along with access to only the data that is necessary for collaborating. Identifying the riskiest vendors is the key to defining a well-prioritized mitigation roadmap.

D is for defendable cyber postures. Automated continuous monitoring alerts teams to any change in a company's or vendor's cyber posture. Companies can act on that information immediately. Latest technologies allow companies to have an ongoing conversation with their vendors to remediate any security holes and to be aware of any changes.

Companies should ensure that all vendors are aware of and comply with corporate best practices and legal policies. Spelling out liabilities and consequences to vendors ensures that everyone follows the same game rules.

Automation opens up meaningful collaboration with vendors and defends against compliance violations. It saves money and reputation, expedites vendor approvals, and keeps the supply chain secure. ■



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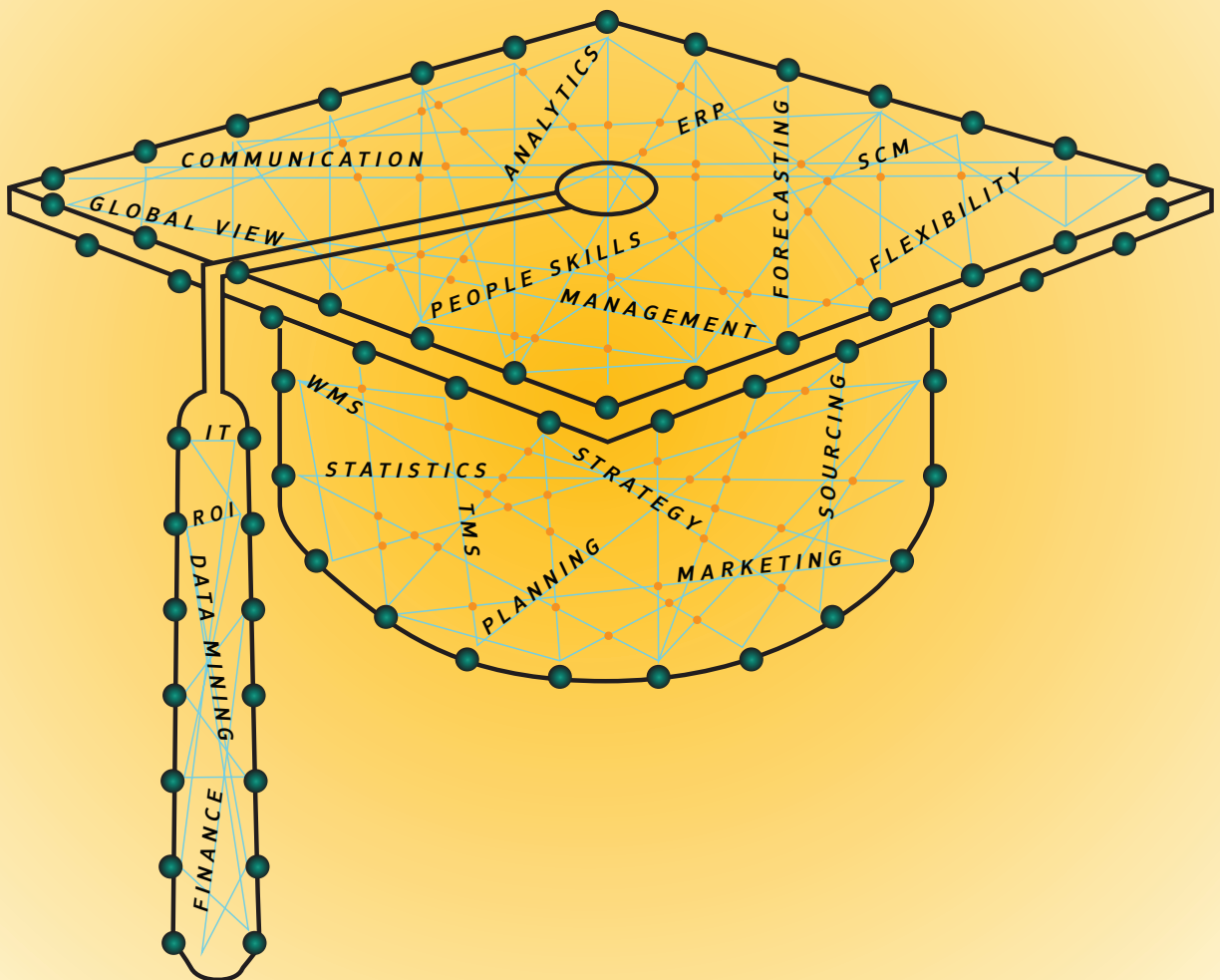


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*AN IDEAL SUPPLY CHAIN EDUCATION REQUIRES
A CURRICULUM THAT CONNECTS ALL THE DOTS.*

BY MERRILL DOUGLAS

People who want to launch careers in supply chain management can choose from a rich array of academic programs at all levels of study; just look at the Education Resource Guide (*page 46*). But what exactly should schools cover to ensure students gain the knowledge and skill it takes to manage today's supply chain challenges?

The perfect supply chain curriculum operates in three dimensions, says Nicholas Petruzzi, professor of supply chain management and chair of the Department of Supply Chain and Information Systems at Penn State University's Smeal College of Business. It helps students 1) master a body of knowledge, 2) develop both hard and soft skills, and 3) learn to apply those skills.

We asked faculty from four supply chain programs to share their thoughts on the ideal supply chain curriculum. Here's what they told us.

MASTERY OF THE BASICS

In Penn State's undergraduate supply chain program, mastering knowledge starts with the same foundational courses in business and economics that all students take at Smeal. Then, of course, supply chain majors take courses specific to that field.

"Our curriculum is designed around the notion of source, make, and deliver," says Petruzzi. "It's all about the 'puts'—inputs, outputs, and throughputs."

Students spend two years in courses that focus on areas such as new product development, sourcing, manufacturing strategy, inventory planning, and all the other functions attached to the product life cycle.

Like their counterparts at Penn State, supply chain majors in the undergraduate or full-time MBA program at Michigan State University (MSU) take both core business courses and courses focused on supply chain management. The supply chain curriculum starts with

**"STUDENTS HAVE TO
LEARN WHERE DATA
COMES FROM AND WHAT
SYSTEMS FACILITATE THE
EMERGENCE OF THAT
DATA."**

a broad introductory class, followed by drill-down courses in logistics, operations management, and procurement, plus electives in topics such as project management, negotiation, and transportation.

MSU's core business curriculum also emphasizes information technology, teaching students to use Microsoft Excel, Access, and the programming language Python. "This training makes sure students get the tools they need, along with statistics and quantitative research, to learn how to use data to make better decisions," says Judith Whipple, professor of supply chain management at MSU's Eli Broad College of Business.

In addition, students get an introduction to supply chain-specific software, such as the SAP enterprise resource planning (ERP) system, which integrates many management functions in one solution.

"Students learn about the theory of integration and use the software to see how we communicate data across the firm," Whipple says. Two MSU-developed supply chain simulations allow students to design supply chains and see how their decisions affect operations throughout the company.

GROUNDING IN STATISTICS

The ideal supply chain curriculum is a topic fresh on the minds of educators at the University of Illinois at Chicago (UIC), which debuted a new MS in supply chain and operations management in fall 2018.

A student who starts work toward this degree must come with some grounding in statistics, says Matthew Liotine, clinical associate professor of information and decision sciences, who developed the curriculum and now directs the program at the university's College of Business Administration.

Knowledge of Microsoft Excel is also a prerequisite. Within the masters program, students take four required courses—Data and Prescriptive Analytics, Operations Management, Supply Chain Management, and a capstone course called Applied Supply Chain Strategy and Practice.

The Supply Chain Management course covers all the functional domains of supply chain. "For example, it's managing inventory, managing logistics, knowing when to offer promotions and how promotions should be structured, and pricing policies," Liotine says. Since students come to the program from a diverse array of backgrounds, it's important to make sure they all have a fundamental understanding of the field.

For Julie Niederhoff, associate professor of supply chain management at Syracuse University's Whitman School of Management, the ideal supply chain curriculum starts with a focus on core business functions, especially marketing and finance. "It's difficult to make a



A supply chain management graduate student presents his research on big data to students, alumni, and professionals as part of the Whitman School's annual Harry E. Salzberg Memorial Lecture program.

supply chain decision and understand its impact on the organization if you don't have some sense of how the supply chain affects finance," she says.

Within the supply chain discipline itself, students need to learn the foundational concepts of management science and cover topics such as sourcing, selling, logistics, inventory control, quality management, and product management.

"But to understand how all of those topics fit together, a good curriculum also links out into some foundational-level understanding of how those decisions affect marketing, finance, and risk exposure—and corporate social responsibility and sustainability, which are becoming increasingly important," Niederhoff says.

SKILL DEVELOPMENT

Two of the hottest topics among students these days are sustainability and data analytics, which come up in a variety of classes. Students need to consider both sustainability and costs among the tradeoffs that influence decisions. "Living in the information age, we have a lot more to work with to help make sound decisions," says Petruzzi.

To help students hone their analytical skills, faculty focus not only on how to use mathematical models and information technology, but also how to think through the ambiguous situations the real world presents.

"The perfect curriculum is loaded with depth," says Petruzzi. "That might mean students are required to write papers or complete problem sets—anything that engages all of the complex reasoning skills we keep advancing over the four years."

For their electives at UIC, students choose from a menu of courses. One example is Enterprise Operations and Supply Chain Systems, which focuses on the use of ERP systems. "Students have to learn where data comes from and what systems facilitate the emergence of that data," Liotine says.

A course called Managing Service Operations looks at what it takes to run operations in a company that sells services rather than goods, while a course

Students in the MS in Supply Chain and Operations Management program at the University of Illinois at Chicago learn all the functional domains of supply chain management.



called Quality Control and Lean Process Management teaches Six Sigma principles and potentially qualifies students for a Six Sigma green belt.

Students who want more depth in certain areas may take courses elsewhere in the business school in subjects such as accounting, electronic marketing and e-commerce, risk management, and data mining.

The MS program at Syracuse also employs electives to broaden students' understanding of supply chain issues. In the past, electives have concentrated on tactical, internal activities through the lens of operations or logistics.

"There's a traditional set of electives, which are focused on customer satisfaction, quality, keeping costs down—all the issues we tend to think about in the interface between marketing and supply chain," Niederhoff says. "But there's also a growing awareness that we need to keep risks low and think about how supply chain decisions are affecting risk exposure from currency fluctuation, political issues, and other events."

Students in Syracuse's MS in supply chain management program usually study finance and marketing in courses

taught by Whitman faculty outside the supply chain program. But at another institution, if the courses in those topics didn't cover the material a supply chain professional requires, the program might develop a specialized class.

Electives may also address corporate social responsibility, global sustainability, and how companies use their resources. "That comes down to new technologies such as drones, automation, self-driving vehicles, or other options, as well as data," Niederhoff says.

SEEKING COUNSEL

Supply chain management is a quickly evolving discipline, and an academic program needs to keep students up to date. MSU works closely with a corporate supply chain council composed of practicing supply chain professionals to inform faculty on the latest industry issues and aid in curriculum development. In addition, MSU often designs short, one-credit classes to cover highly specific, timely topics, with industry experts frequently serving as guest lecturers. A class on compliance and global supply chains, for

example, may bring in individuals who work in customs and compliance.

Students also need to hone their communications and people skills. Class assignments let them practice written and oral arguments while group projects let them perform as team members and as leaders.

And while courses in a supply chain program must teach how to use information technology and mathematical models, students also need to develop managerial insights. “Metaphorically, we’re learning how a hammer and a screwdriver work,” Niederhoff says. “But it’s much more important for students to learn when to use them—the right tool for the right situation.”

REAL-WORLD APPLICATION

In the third dimension, students apply their knowledge and skills in the real world. Penn State’s Center for Supply Chain Research connects the program with companies that ask students to tackle actual supply chain problems—for example, recommending whether to invest in a particular technology. A student team might pursue one of those challenges for course credit or as an extracurricular experience and

“TO BE A GOOD SUPPLY CHAIN MANAGER MEANS DEVELOPING FLEXIBILITY AND PEOPLE SKILLS, NOT JUST TECHNICAL SKILLS.”

provide the company with a final report or presentation.

MSU uses a capstone course to integrate all of a student’s newly gained knowledge and skills. “The capstone class is predominately case-based,” says Whipple. “Students are pulling from all the different courses they’ve had, even non-supply chain courses.”

The similar capstone class at UIC challenges students to work on real problems for real companies in the Chicago area. One recent class worked with Hub Group to develop pricing for rail shipments.

“Hub Group had all the data and

wanted somebody to recluster the origins and destinations so they could get an easier way to come up with tariffs,” Liotine says. “We gave that to some students to work on.”

Another company asked students to help identify a better way to manage less-than-truckload shipments.

Besides giving students the chance to apply their skills, these service projects may also help them forge valuable connections, spilling over into opportunities for internships or summer jobs.

Supply chain majors who want to jumpstart their entry into the global economy can take advantage of MSU’s study abroad program, including overseas courses designed for business majors. Many of those courses take students to visit companies in the host country, and MSU is in the process of developing additional supply chain-specific overseas programs.

Beyond the classroom, MSU students can raise their supply chain skills through the student-run Supply Chain Management Association, which hosts guest speakers, sponsors corporate tours, and holds leadership retreats, and the majority of students graduate with at least one internship under their belts. UIC is also planning to add a study abroad component to its graduate program, with international projects of one or two weeks at foreign companies.

PRACTICAL EXPERIENCE

Like the other faculty who spoke with us, Niederhoff acknowledges the value of study abroad. Also, like the others, she stresses the value of internships or other practical experience, including volunteer jobs, all of which teach the importance of the human factor in real world projects.

“It’s hard to convey to students how much negotiation with people is part of the supply chain,” Niederhoff says. “To be a good operations and supply chain manager or member of the team means developing that flexibility, awareness, and people skills, not just technical skills.”

By combining all of these factors, institutions can set up their students for supply chain success. ■



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SUPER-

E-commerce

Heavy, bulky e-commerce orders serve up delivery challenges



RESIZING the Deliveries

that are as oversized as the merchandise being delivered.

By Sandra Beckwith

When Marcia Turner decided to buy two sofas at Pier 1, she knew she'd have to pay a delivery and set-up fee because she didn't have a vehicle that was large enough to haul the furniture home.

The \$169 fee was the same whether she ordered in the store or online, so Turner made the purchase online through Pier 1 affiliate Ebates.com, a third-party cash-back site. The \$174 rebate she received made it easier for Turner to accept the steep delivery fee. "I thought the delivery price was high, but I didn't have other options," says the Western New York resident.

Like millions of other consumers, Turner is conditioned to expect "free" shipping when ordering online, regardless of what she purchases. Online shoppers don't always realize that delivering oversized goods such as furniture, appliances, and big screen TVs requires far more expense, effort, skill, and communication than the typical e-commerce order.

"If drivers can't find the front door when delivering a book, they walk around looking for it. Imagine two people doing that while carrying a sofa," says Chris Bell, head of custom supply chain at online home goods retailer Wayfair.

Manufacturers, retailers, and carriers, though, are acutely aware of the many challenges large e-commerce deliveries present, particularly in the last mile. Among the issues:

- Because of their size, cost, and packaging, deliveries typically can't be left outside.
- Customers need to be home to accept delivery, so good communication and tracking are essential.
- Depending on the service level provided, delivery personnel might need to set up and test the items.
- Delivering oversized items often requires at least two strong people.
- Because delivery personnel come into homes, they need more than muscles—they must also be personable and have customer service skills.
- Since oversized goods can't be put on a conveyor in a warehouse, moving them is more labor-intensive than other types of merchandise sold online.
- Bulky oversized merchandise is more likely to get damaged than other types of e-commerce goods. Inspecting orders before delivery can add to the timeline.
- Large items take up more space in trucks, so they're more expensive to ship.
- Returns of oversized items are costly and time-consuming.

In spite of these issues, as consumers

continue to feel more comfortable buying large items online, those making, selling, and transporting them are forced to find ways to address the challenges.

After deciding that outsourced fulfillment didn't give it enough control over the process, Wayfair brought it in-house. The Boston-based retailer, which offers more than 10 million products, now uses a network that includes 27 of its own last-mile delivery facilities and seven consolidation and crossdock centers.

"Until about four years ago, a third party took the order from the supplier to the customer," says Bell. "Today, we still have hundreds of partners that include truckload and less-than-truckload carriers, but 60 percent of the orders flow through our own middle-mile and final-mile hubs."

Pilot Freight Services, which specializes in home delivery of what it refers to as "H3D" (heavy, hard-to-handle) cargo, knows that its transportation and logistics services are an extension of the retailer's brand. For that reason, Pilot's final-mile delivery services include value-added options that coincide with a brand's consumer promise.

"Some retailers offer various levels of service that consumers can choose from, but it depends on the commodity, its value, and what the retailer wants to

OVERSIZED ORDERS BY THE NUMBERS

Research shows that consumers are buying more big and bulky items online; 22 percent of Americans have bought an oversized item online in the past year, according to uShip.

23%

of consumers surveyed say they've purchased furniture, décor, or tools online.

(Nielsen)

In 2018, retail e-commerce revenue from furniture and home furnishing sales amounted to **\$65.1 billion** and is projected to increase to almost **\$100 billion** in 2022.

(Statista)

In 2018, furniture and home furnishing sales accounted for

12.9%

of total U.S. retail e-commerce sales.

(Statista)

Online furniture purchases began growing at a compound annual rate of about

15%

in 2014 and that rate will continue through 2019.

(Forrester)

Between **17-20%** of U.S. online shoppers purchased home textiles, housewares, and small appliances online in 2017. **About 2%** bought major home appliances through e-commerce.

(NPD Group)

Online mattress sales have skyrocketed in recent years, with e-commerce market share doubling from **5% to 10%** between 2016 and 2017.

(VisualCapitalist.com)

provide,” says Mark Fierek, Pilot’s vice president of e-commerce sales.

One of its service levels lets Pilot do a quality check in the distribution center after receiving furniture from the manufacturer. If there’s damage—a chipped corner or broken leg—Pilot gets retailer authorization to use a local furniture technician for the repair before scheduling delivery.

“When our customers use this ‘deluxing’ service, we see a 98.7-percent stick rate inside customer homes,” says Fierek.

SEKO Logistics, a freight forwarder and third-party logistics provider based in Illinois, recently introduced its “Save the Sale” program, which offers an in-home process for addressing potential product problems during delivery.

For example, if SEKO delivers a new smart TV in a carton with a tear, the customer might worry the product is damaged and refuse delivery.

“We have a small window of opportunity to address this so the retailer doesn’t lose the sale and the customer is happy,” says Brian Bourke, SEKO’s vice president of marketing.

The SEKO driver addresses the situation immediately by connecting the consumer with customer service—either SEKO’s or the participating retailer’s—to explore possible options that will help avoid a return.

“When you ship big and bulky items, returns are incredibly expensive because the retailer can’t recover the cost of returning a refused item and shipping another one,” explains Bourke. “We’re trying to mitigate that loss.”

Another challenge with last-mile delivery involves customer communication. It’s not just about consumers expecting the ability to track and monitor shipments. The customer also



Odd Oversized Orders

Companies providing final mile delivery of oversized e-commerce orders report that it’s not all big-screen TVs and BarcaLoungers.

- During 2018, shipping marketplace uShip helped get a cigarette vending machine, vintage coin-operated children’s rocket ship ride, and 1969 Bolens Diablo Rogue snowmobile to their destinations.
- Roadie, the first “on-the-way” delivery service, has transported pole vaulting sticks and dog kennels, among others.
- Online home store Wayfair routinely ships goods that need special delivery vehicles or handling, including a 28-foot shuffleboard that was too long for a standard 26-foot box truck, an indoor hot tub that required three men to carry it upstairs in the customer’s home, and a 3,000-pound wooden storage shed.

has to be home to allow entry and accept delivery.

“Scheduling is the biggest problem, because the driver has to be at the pickup location at the right time and the consumer needs to be home for that drop-off,” says Valerie Metzker, head of business development at Roadie, the first “on-the-way” delivery service.

Roadie lets consumers use a combination of real-time GPS tracking and telephone communication.

“If you’re expecting your love seat delivery at 3 p.m. Tuesday, we send text updates,” she says. “That means if you’re dropping off your dry cleaning and get a text that your delivery will arrive in five minutes, you know to hustle back home. You can’t get this down-to-the-minute visibility with a less-than-truckload or parcel carrier.”

Is finding drivers who can embrace that level of communication, handle

product set-up, and provide acceptable—if not superior—customer service skills another challenge given the truck driver shortage?

One reason for the driver shortage actually works in favor of the final-mile oversized delivery segment, notes Fierek, who has deep experience with this as chairman of the board of the Specialized Furniture Carriers. Millennials, he says, don’t want long-distance, over-the-road work so they migrate to final-mile jobs because they can be home every night.

“You can make a decent living in this space,” he adds.

In addition, platforms such as uShip, which connect shippers with carriers, allow drivers who prefer to drive regionally to fill their unused capacity with oversized orders.

“Thousands of high-quality owner-operators with small truck fleets operating regionally and nationally can deliver great service

from origin to destination,” says Mike Williams, CEO of uShip.

Last-mile delivery of oversized goods is evolving as more shoppers like Turner order big and bulky items online and companies gain experience delivering goods in ways that meet consumer expectations for speed, quality, and service. They aren’t there yet, though, as 2018 research from uShip shows: More than one in five consumers surveyed have ordered something that arrived damaged and more than one in seven ordered something that was never delivered.

“Oversized deliveries are ripe for disruption,” says Bell at Wayfair. “We’re using technology, people, and processes to change what normal looks like. We’re transforming what used to be a poor experience into one that’s not only seamless, but also one that customers would enjoy having again.” ■

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bit.ly/TransportEvolution

The Logistics Transport Evolution: The Road Ahead

DHL

Now more than ever, ground transportation is a strategic component of business success as seen by respondents to a DHL Supply Chain worldwide survey. Three-quarters of companies surveyed indicate that investing in improving ground transportation will positively impact their sales, and they are willing to pay for and partner with 3PLs for value-added services that can show a measurable ROI.

podcast



What Shippers Need to Know When Technology Alone Isn't the Answer

GUEST: Ryan O'Halloran, Trinity Logistics

Rapidly changing customer demands are constantly creating new challenges for shippers to address. Some of the most impactful responses typically revolve around implementing new software or technology. Without the proper industry knowledge behind the switch, however, are shippers getting the biggest bang for their buck? Ryan O'Halloran of Trinity Logistics gives his take on how technology alone can't necessarily run the whole logistics program.



//Technology//

Ivanti Supply Chain software released the latest version of its mobile device management system. *Avalanche 6.3* adds Android Enterprise support, enhanced security features, new asset management capabilities, and expanded app access and control.

Demand-driven sales and supply chain platform **Alloy** added intelligent demand forecasting to its suite of product offerings. The feature provides consumer brands with dynamically updated daily forecasts based on automatic data collection, AI, and data science forecasting models.

Consolhub launched its consolidated ocean shipment booking platform. The system is designed to simplify and speed up the booking process for consolidated ocean shipments. It collects shipping providers, routes, and prices for comparison, and provides online booking and document validation.



//Products//

One Way Solutions released a stackable, nine-legged plastic pallet for improved stability. The 48-by-48-foot pallet holds up to 572 units per truckload, is 100 percent recyclable, and resists insects, bacteria, and fungi.

Sitma Machinery introduced the Sitma e-Wrap 2.0 at the February 2019 Stuttgart trade fair. The company redesigned its e-Wrap packaging machine to meet customer demand for savings and efficiency, adding the ability to integrate and automate advanced processes.

To enable state-of-the-art inventory management for omnichannel retailers, RFID solution provider **SML RFID** added the GB5U8 to its line of RFID inlays. The smallest RFID inlay designed for broad use in the retail market and inventory management, the GB5U8 can be combined with an RFID EAS tag.

◀ **Janam Technologies** added a new high-performance UHF RFID sled for its XT2 rugged mobile computer line. The sled snaps onto the XT2 to add RFID-reading ability along with tag writing and tag locationing, with less than 1 pound of additional weight.



▲ **Crown Equipment** CG and CD Series forklifts are designed for both indoor and outdoor heavy-duty, materials-handling applications. Both products are part of the company's expanded internal combustion line of counterbalance forklifts.

//Transportation//

ZIM and the **2M Alliance** (Maersk and MSC) announced a second strategic cooperation agreement, following their earlier partnership on Asia-U.S. East Coast networks. The new arrangement combines vessel sharing, slot exchange, and purchase across Asia-East Mediterranean and Asia-American Pacific Northwest trade, with two new strings operating in each region.

Ocean Alliance, which was recently extended through 2027, and **CMA CGM** unveiled their new service—the Ocean Alliance Day 3 Product, which starts April 2019 and is the largest service offering on the transpacific trade. The service gives CMA CGM shippers the use of approximately 330 container ships and an estimated carrying capacity of 3.8 million TEUs,

as well as 19 transpacific services and other strengthened global routes.

Orient Overseas Container Line Limited (OOCL) introduced two new direct services: an Intra-America service and an Asia-South America East Coast product. Both are designed to expand the ocean carrier's network within South America.

// Services //

Virgin Atlantic Cargo and **Delta Cargo** are planning to move into a new purpose-built facility, known as the dnata City East cargo facility, at London's Heathrow Airport in the second half of 2019. The move doubles the airlines' cargo footprint at Heathrow, enhancing their transatlantic capabilities, service levels, and handling speed.

SEKO Logistics opened its own operation in Ireland, one of Europe's fastest-growing economies, including an office and warehouse facility at Dublin Airport. The move follows a number of other recent global investments by SEKO and gives the 3PL the platform to expand, particularly in the retail, high-tech, and medical device sectors.



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Los Angeles - Rochester - Charlotte

Brothers Freight Management - a Full Service Transportation Provider - Offers Competitive Pay and Negotiable Terms:

- Company Drivers Start at \$.50c+ per mile plus bonuses!
- Owner Operators average \$1.95 per mile plus bonuses! Monthly minimum of 10,000+ miles guaranteed!
- Benefits Available after 3 Months of Employment

Minimum Job Requirements Include:

- 2 Years of Class A Experience
- A Clean MVR (DMV) Driving History
- Must be at Least 23 Years Old

For More Information, contact

Walter • 888-595-0514

Info@brothersfreightmanagement.com

Brothers Freight Management is also Looking for Experienced Broker Sales Personnel



\$59,593

Average annual supply chain graduate salary



\$43.52

Average hourly salary of a senior-level logistics manager (10 years of experience)



In January 2019, transportation and warehousing jobs increased by

27,000.

Warehousing and storage accounted for more than half of this gain, adding

15,000

jobs. Over the year, transportation and warehousing jobs increased by

219,000.

SUPPLY CHAIN WORKERS:

High Demand, Short Supply

Over the next decade, nearly 3.5 million manufacturing jobs will likely be needed and 2 million are expected to go unfilled due to the skills gap.

1,980,100

Projected number of jobs for heavy and tractor-trailer truck drivers in 2026, representing a 6-percent bump or increase of 108,400 from 2016



Some of the most in-demand manufacturing and logistics roles for 2019 include:

- ASSEMBLERS
- FORKLIFT OPERATORS
- PACKAGERS
- PRODUCTION WORKERS
- WAREHOUSE LABORERS

Sources: Randstad 2019 Salary Guide; Bureau of Labor Statistics; PayScale; Glassdoor; National Public Radio



\$30.11

Average hourly salary of an entry-level warehouse manager (1 year of experience)



Average truck driver pay in the United States rose an estimated

10%

in 2018



13,242

open jobs for supply chain graduates on Glassdoor



Employment opportunities for forklift operators will increase by

6%

between 2016 and 2026



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- Dedicated Fleet Services
- Bonded Warehousing
- Container Storage
- Contract Carrier Authority
- Driver & Equipment Leasing
- Driver Management Services
- Home Deliveries
- In-House Custom Services
- LTL & TL Services
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- Warehousing

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