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# info snacks

BITE SIZED SUPPLY CHAIN/LOGISTICS INFORMATION

## Wir Lieben Kaffee

Germany leads European Union member states in coffee imports. In 2017, the country imported 1.1 million metric tons of java.

(see *Global*, p. 32)



**“If you want to serve your customers, be sure to first support your drivers.”**

Noah Wilmot  
Ascent Global Logistics

(see *Good Question*, p. 10)



## \$1 TRILLION

Estimated 2018 holiday sales, thanks to a robust economy, low unemployment rates, consumer confidence, a strong stock market and corporate profits.

## Connect. Collaborate. Deliver.

The three words that guide Chris Cassidy, President of Global Healthcare Logistics Strategy for UPS, through his career.

(see *LeaderShip*, p. 18)

## Business Gets Grounded



According to a DHL Supply Chain global survey of 200+ transportation decision makers in all major industry sectors



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CONTAINERS GET A  
SECOND LIFE  
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## ONLINE COMMENTARY



### 6 M&A Supply Chain Strategies for Success [bit.ly/MA\\_strategies](http://bit.ly/MA_strategies)

After any merger or acquisition, companies are challenged by different customer bases, business models, and supply chains. Logistics managers need to establish partnerships and develop organizational processes that increase operational excellence. Here are six ways to derive significant supply chain value after an M&A.



### The Three P's of S&OP Success [bit.ly/SalesAndOperations](http://bit.ly/SalesAndOperations)

You need a plan if your company seems stuck and can't get to the level of maturity you would like in your sales and operations (S&OP) process. This checklist highlights the critical platform capabilities required to support a comprehensive S&OP process.



### Trends Reshaping the Enterprise Software User Experience [bit.ly/ReshapingEnterpriseSoftware](http://bit.ly/ReshapingEnterpriseSoftware)

Businesses are increasingly realizing user experience (UX) correlates to user engagement. The implications of a successful UX make it more than just a satisfaction ranking. These trends are reshaping enterprise software UX.

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## AIRFREIGHT RESOURCES

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# CHECKING IN

*Keith Biondo*

by Keith Biondo | **Publisher**



## Post Office Dings E-Commerce?

**T**wo recent and important developments will impact domestic and international e-commerce shipments. The first one concerns the U.S. Postal Service's relationship with Amazon. Let me set the stage.

The Postal Service lost \$2.7 billion in 2017. U.S. taxpayers guarantee the perennially stressed postal worker retirement fund. And first-class mail receipts are off by \$1.8 billion YoY vs. FY 2016. Losses have been going on for decades.

Back in 2013, reacting to the reduction in profitable first-class mail as consumers and businesses switched to email, the USPS floated the idea of eliminating Saturday delivery. They never did. Today, in the era of an explosive increase in e-commerce deliveries (Prime-arily Amazon), the Postal Service went in the opposite direction—they make deliveries on Saturday *and* Sunday, contributing to the past year's losses.

The Amazon rate agreement with the Postal Service has expired. For many, it seems unfair that huge e-commerce postal customers use cheap and plentiful Uber-like final-mile delivery services instead of the Postal Service in high-density urban areas (*see bit.ly/GrimyMile*). Yet where there is no Uber delivery density in the suburbs, and especially in rural areas, the Postal Service is the go-to for final-mile delivery.

The Trump administration wants the Postal Service to charge Amazon more. The USPS agrees, floating a 9- to 12-percent rate increase idea. One approach to normalize parcel rates, given the continuing increase in e-commerce shipments, is to consider charging Uber-competitive rates in urban areas, and significantly more where no Uber density exists, given the higher costs of those deliveries to the USPS. Bottom line: Domestic e-commerce delivery costs will rise, and the Postal Service should not subsidize Prime deliveries.

The second development concerns the Trump administration's intent to withdraw the United States from the Universal Postal Union (UPU). Why? "Reciprocity." The USPS in effect subsidizes hundreds of millions of inbound e-commerce shipments to the United States each year. Parcel shipments from Shanghai to New York often cost less than similar parcel deliveries from Los Angeles to New York.

Every president since Ronald Reagan complained about this inequity, but was unable to do anything about it. Until now. The National Association of Manufacturers and U.S. e-commerce companies laud the position.

UPS dialed in: "UPS believes the Administration took the right step in addressing the inequities of the UPU system," said David Abney, chairman and CEO of UPS. "Foreign postal operators should not be given government approved advantages in what is a competitive market. All parties should pay the same parcel delivery rates for the same services from the U.S. Postal Service, regardless of whether the country of origin is foreign or domestic."

We agree. What's your take? Email [editor@inboundlogistics.com](mailto:editor@inboundlogistics.com)

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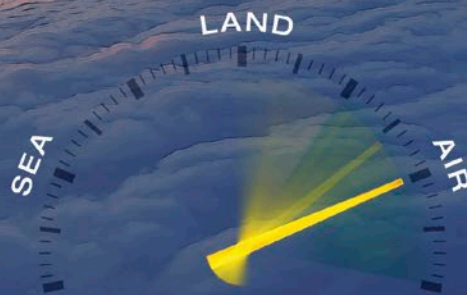
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# Good Question...

READERS WEIGH IN

## What was your first job in logistics and what did it teach you?

Summer seasonal order picker. It taught me an order is only as good as its accuracy; without it, all you would have is empty pallets.

**James Stone**  
*Client Sales Representative*  
*Echo Global Logistics*

Manually tracking and tracing previous-day LTL pickups. It taught me every missed pickup has three stories: why the carrier says it's the shipper's fault, why the shipper says it's the carrier's fault, and the truth.

**Steven Pandolfo**  
*Director, LTL Pricing & Procurement*  
*Sunset Transportation*

In the U.S. Army, I was tasked with clerical functions such as equipment movement and systems management. I learned accountability and the value of inventory management.

**Yanina Rowley**  
*Operations Manager*  
*The TJX Companies*

Import clerk, processing inbound documents and running to customs. It taught me to adapt to customers' needs and pay attention to details.

**Shelley North**  
*Business Development Manager -*  
*Global Transport and Logistics, DSV*



### Driver Appreciation

Beginning when I was 12, my summer job was with Priority Distribution, the 3PL owned by my parents. I would listen to my dad on the phone, and any time he would speak to a driver, his first question was always "How was your day?" It was never "Where's your truck?" From that, I learned the value and importance of talking to people like they're human beings, and not just part of the process of moving goods.

**Drew McElroy**  
*CEO and Co-Founder, Transfix*

I started my career as a dispatcher in a small brokerage office. I learned one of the most important lessons of my career: No freight moves without a driver to move it. If you want to serve your customers, be sure to first support your drivers.

**Noah Wilmot**  
*SVP Carrier Relations & Yield Management,*  
*Domestic Freight Management, Ascent Global Logistics*

OTR truck driver. It's not as easy as it seems, and drivers are the backbone of this industry.

**Sarah Maney**  
*Logistics Coordinator-Broker, RMX Global Logistics*

Coming out of college, knowing absolutely nothing about trucking or supply chain, learning how to deal with people in general and truck drivers specifically, taught me how important drivers are in the business. Being patient, treating them fairly, and doing what you say you will made a huge difference. And it also made drivers some of the most loyal and hardest-working people I have ever managed.

**Joseph McCrabb**  
*Director of Strategic Carrier Development, KINEXO*



I started at 18 years old, loading outbound freight for Southeastern Freight Lines. That taught me the importance of hard work and gave me a good perspective of the touchpoints involved in distributing goods. It sparked my passion for simplifying the logistics process.

**Bobby Harris**  
President and CEO  
BlueGrace Logistics

I started as a temp at Birmingham Cargo Airport in a small freight forwarder's office. I learned from the bottom up—typing air waybills for exports, keying entries, walking to the customs office and post office box multiple times a day. No matter how good or how senior you are, it doesn't hurt to offer to do the menial stuff every now and again.

**Julia Lomas**  
Supply Chain Manager, Logistics  
Walgreens Boots Alliance

Inventory analyst/inbound officer. This position taught me 1) to be detailed and detect anomalies, 2) precision in my workflow, 3) the importance of feedback in a team, 4) measuring my performance via KPIs for steady improvement.

**Chiemeka Ukamba**  
Warehouse Supervisor, DHL

I managed a major sorting hub, with almost 500 doors and more than 130 teamsters driving "jeeps" aka forklifts. Keeping deadlines and getting priority pallets out of inbound and into outbound takes planning and coordination. Preparation is 90 percent of the game.

**Michael Plunkett**  
Director, Tech Mahindra

## Every Position Counts

I was a youngster emptying the trash and cleaning the restrooms for my father, who managed a terminal. I worked my way to the maintenance shop, changing tires, fueling, and doing special projects. I loaded trucks, and made deliveries and pickups. I learned to respect the janitor as much as the president. No one position is more important than another and I'm so grateful for those who had the patience to coach me.

**Sam Hunter**  
Solutions Specialist, Old Dominion Freight Line

Warehouse associate. I offloaded containers and loaded trailers. It showed me hard work and dedication; being inside a container on a hot summer day is not a joke. It made me respect every individual and made me the hands-on leader I am today. It has helped me better connect with my team and understand their everyday obstacles and how to keep everyone motivated.

**Marco Martinez**  
Assistant Operations Manager, Damco

While I was fortunate to get a sales position in LTL right out of college, I worked on the dock, and claims and billing departments first. It taught me how valuable every position is to the organization.

**Michael Rector**  
Senior Account Executive, Purolator International

Back in 1988, coming out of active duty from the Marine Corps, I took a job as a teamster truck driver and later moved into a day-shift warehousing role. Logistics has been the backbone of my understanding of business, economics, and the world at large.

**Jeff Brady**  
Director of Logistics & Transportation, Overstock.com

Loading and unloading trucks for a carrier. I learned "every box every day"—treat each box with the utmost importance. This also taught me about what happens at

the ground level of a supply chain and the effort it takes to facilitate the movement of goods.

**Jon Eberly**  
Vice President, Operations and Implementation, Transplace

## HAVE A GREAT ANSWER TO A GOOD QUESTION?

Be sure to participate next month. We want to know:

**What are your top 3 supply chain predictions for 2019?**

We'll publish some answers. Tell us at [editorial@inboundlogistics.com](mailto:editorial@inboundlogistics.com) or tweet us [#ILMagazine](https://twitter.com/ILMagazine) [#ILgoodquestion](https://twitter.com/ILgoodquestion)



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## A Package Deal

**Re. Protect Your Cargo With Vehicle Tracking**

[bit.ly/track\\_protect\\_cargo](https://bit.ly/track_protect_cargo)

GPS tracking for shipment security is worth the investment only if:

- It can track packages, not just shipments—it can be the difference between recovering stolen goods and recovering an empty trailer. Plus, it helps detect pilferage, part load theft, perhaps even damage at the package level (useful for sensitive pharmaceutical or food shipments).
- It can give you real-time alerts, but only for what's important—route deviations, unscheduled stops, or other anomalies en route can be cause for concern, but they're not always precursors to an incident. The tracking system should, by itself, be able to qualify what constitutes a threat, and what doesn't.

The need for better package-level tracking and visibility is why vehicle tracking systems failed in logistics. It's also why there has been a gradual change in the approach to shipment tracking. Logistics players are shifting from vehicle tracking using GPS fleet trackers or telematics devices to shipment and (eventually) package tracking using portable GPS trackers or Bluetooth beacons.

**Jayshree Makadia, via online**

## Make Your Business Amazon-Tough

**Re. No Industry is Amazon-Proof**

[bit.ly/Amazon-proof](https://bit.ly/Amazon-proof)

Every business should embrace this mindset. Widen the moat through unbeatable customer service and constantly develop new ways to provide value for the customer. That's the only way to fend off any competitor—Amazon or anyone else.

**Gene Hotten, via LinkedIn**

## Resolving Transparency in 2019

**Re. Good Question: What's Your Supply Chain Resolution?**

[bit.ly/SC\\_resolutions](https://bit.ly/SC_resolutions)

Parcel shipping is complex and carriers are not forthcoming with hidden costs, such as surcharges and accessorials. My resolution is to bring more transparency to parcel spending to allow shippers to combat rising shipping costs and optimize their supply chain spend.



**Kim McQuilken**  
President, Sales & Marketing  
Spend Management Experts, via email

## Keys to Cyber Security

**Re. 5 Steps to Protect Your Supply Chain From Cyber Threats**

[bit.ly/preventcyberthreats](https://bit.ly/preventcyberthreats)

Managing the supply chain is a major undertaking unto itself, but adding third-tier suppliers increases the complexity while raising the risk of a cyberattack. It is no longer possible to manage third-party vendors with paper. It requires the latest technologies to not only vet third parties and their partners, but to also continuously scan these partners for vulnerabilities that cybercriminals could exploit. The next step is alerting partners to these vulnerabilities and resolving them. While it takes significant effort to manage these relationships, new automated technologies are able to do much of the heavy lifting.



**Matan Or-Ei**  
Co-Founder and CEO  
Panorays, via email



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### Minimizing Airfreight Costs

To combat trade wars, tariffs, and other obstacles, it's important to optimize your supply chain. One way is to minimize the cost of air freight, which is generally a fast and reliable—but expensive—option.

#### 1 EVALUATE LEAD TIMES AND USE THE APPROPRIATE TRANSPORT MODE

If lead times aren't tight, consider using slower transportation methods, such as ocean, which are often less costly than air freight. Make sure you are not shipping faster than the receiver requires.

#### 2 RELY ON DATA TO KNOW WHERE TO USE AIR TRANSPORT IN YOUR NETWORK

Data can help companies intentionally design where and when to use air in the supply chain by balancing transportation costs vs. inventory carrying costs to provide the necessary service level.

#### 3 IMPROVE DEMAND AND INVENTORY PLANNING

Improving demand planning, coupled with inventory planning, allows supply chain managers to position the right level of inventory in the right location at the right time. As a result, they can limit split shipments, inventory transfers, repositioning, and expedited shipments, saving money for their companies.

#### 4 LOOK FOR OPPORTUNITIES TO PRE-POSITION INVENTORY

Don't move products at the last minute or during peak seasons when freight rates are high and capacity is tight. Move inventory into position as early as it makes sense and take advantage of less-expensive transport modes.

#### 5 USE VISUALIZATION MODELS, WHEN APPLICABLE

Visualization models can help managers understand the root causes of air costs surpassing the set budget. They can then adjust to bring costs back in line or decide if a permanent transport strategy change needs to be made.

#### 6 ALIGN NETWORK TO MAJOR AIRPORT HUBS

When a network is closer to major airport hubs, companies have more time to process orders and move product in and out of the air network, thereby improving service and lowering overall costs.

#### 7 MONITOR SUPPLY CHAIN PERFORMANCE

As companies monitor against supply chain targets and budgets, they're able to see in real time if they're spending more on air costs than originally planned and take corrective action.

#### 8 MINIMIZE CUSTOMS DELAYS

When products are labeled clearly, packaged properly, and accompanied by the correct paperwork, companies avoid fines when shipping products across international borders.

#### 10 KNOW WHAT TO EXPECT WHEN SHIPPING INTERNATIONALLY VS. NATIONALLY

When shipping internationally, supply chain teams must plan farther in advance and understand the risks of long-distance transportation, such as shipping delays. Additionally, consider the longer lead times and increase in touchpoints on the journey. Supply chain teams should be cognizant of these risks and take them into account when planning.

#### 9 MAXIMIZE PACKAGING EFFICIENCY

Many consumers frequently receive multiple packages for the same order filled with packaging materials. Evaluate your split shipments; stop shipping more packages than you need. Additionally, using packaging that is easily transferrable from truck or rail to plane, and back, minimizes the breakdown and repacking process.

Source: Jeff Metersky, Vice President, Solutions Strategy, LLamasoft



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FLIGHT DEPARTS  
10:38 AM

TRACKED ONLINE  
12:25 PM

FLIGHT ARRIVES  
4:02 PM

CARGO ON-HAND  
5:35 PM



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NEWS & TRENDS IMPACTING THE

## CHEMICALS SUPPLY CHAIN

### A PERFECT STORM

Trends such as accelerated globalization, the circular economy, and digitalization are converging to challenge existing strategies and create a perfect storm for the chemical industry, says Dr. Stefan Guertzgen, global director of industry solution marketing for chemicals at SAP, in *Digitalist Magazine*.

As strategies change, the following innovative business models are emerging for chemicals companies:

- **The need to rapidly transform products and services in response to changing market and stakeholder needs will continue unabated.** Preparing for ongoing mergers, acquisitions, and divestitures is critical.
- **More companies will move beyond traditional value chains and start competing as entire ecosystems** built around hot topics like the “circular economy.”
- **Companies will become more customer-centric and focus on selling business outcomes over products.** Think about delivering first-pass quality products instead of paints or reactive resin components.
- **Companies will get another push toward operational excellence and business process automation.** With scalable and commercially feasible digital technologies, companies can realize concepts such as lights-out manufacturing and touchless fulfillment.

### TAKE A NUMBER

- Total U.S. chemicals exports in 2017: **\$130 billion**, accounting for 10 percent of all U.S. goods exports and 9 percent of all global chemicals exports.
- **40 percent** of all chemicals exports and more than half of all U.S. chemicals imports are between companies and their subsidiaries.
- U.S. industrial chemical exports are expected to expand on average **7 percent** per year through 2023.
- The United States had a large and growing trade surplus of **\$33 billion** in industrial chemicals in 2017.

—American Chemistry Council

THE TWO LARGEST NATIONAL MARKETS FOR  
U.S. CHEMICAL EXPORTS IN 2017  
WERE MEXICO (\$21 BILLION)  
AND CANADA (\$22 BILLION)



### TANKS FOR THE ADVICE

Legal compliance when relocating potentially hazardous chemicals requires planning, care, and expertise in USDOT regulations. Brooks Life Sciences offers some quick tips for moving chemicals.

1. **Many common laboratory chemicals are classified as hazardous.** Typically, these include any liquid, solid, or gas with properties that are flammable, combustible, toxic, pathogenic, corrosive, oxidizing, unstable, or irritating to the eyes, lungs, or skin. Federal and state laws carefully control the transport of these chemicals over public roads to reduce the risk of spills or accidents.
2. **The federal government regulates the transport of hazardous chemicals.** The Hazardous Materials Transportation Act (HMTA) controls how potentially dangerous chemicals move across the United States. The HMTA includes detailed provisions for chemical transport procedures, labeling, packaging requirements, employee training, and operational rules. HTMA violations are federal offenses and can carry serious criminal penalties including jail time and fines up to \$75,000.
3. **It can be difficult to ship chemicals with standard shipping services due to extensive paperwork and packaging specifications.** Using a shipping service that specializes in chemical transport can save time and money. Chemical transport professionals have the trained employees, specially designed chemical-safe vehicles, and experience to move hazardous materials rapidly and safely.
4. **Hazardous chemical transport requires permits.** In addition to federal regulations, many hazardous chemicals cannot be transported across state lines without proper documentation. Unique permits may be required for each state that a chemical shipment travels through, and some states require a permit for the transport of hazardous chemicals within the state.
5. **Only trained drivers should transport hazardous chemicals.** Drivers who transport hazardous chemicals are typically required to have specific safety training for the chemicals in their care, for the safety of both the driver and anyone they may encounter on their route.





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# LEADERSHIP

## *Conversations With The Captains of Industry*

By Merrill Douglas

**Chris Cassidy**  
President of Global Healthcare  
Logistics Strategy, UPS



## Committing Head and Heart to Health

**C**HRIS CASSIDY WAS EIGHT YEARS OLD when healthcare became a major theme in his life. Playing with friends, Cassidy was accidentally struck in the head with a golf club. At first, his doctor didn't realize how serious the injury was, and had Cassidy's mother not pressed for a CT scan, the boy might have died.

"My mother's advocacy had a huge impact; it formed my passion for healthcare, which became a bridge to my supply chain management career," says Cassidy, who joined UPS in April 2018 as president of global healthcare logistics strategy.

Cassidy recently told us about the interests and principles that drive his leadership, and about his mission at UPS.

### **IL: Once you discovered your interest in healthcare, what led you to supply chain management?**

I went to Georgia Tech to become an industrial and systems engineer. I love innovation, technology, and process improvement—creating solutions and problem solving. After working as a consultant, and after running three high-tech startup businesses of my own, I went to work for GlaxoSmithKline (GSK) in December 2006 as its SC IT serialization RFID manager. My work was part of an effort, first spurred by a California e-pedigree mandate, to track and trace healthcare

products at the unit, case, and pallet levels. I eventually took a tri-chair lead role, supporting standards organization GS1 in developing requirements for the electronic drug pedigree information system that provided the framework for the federal Drug Supply Chain Security Act.

### **IL: How is supply chain management for healthcare different than for other industries?**

In healthcare logistics, you have to engage both the head and the heart in every decision you make. One North Star I encountered when I joined UPS was, "It's a patient, not a package." In healthcare, it's critical to have visibility and control throughout the end-to-end supply chain—not just the node-to-node elements. Also, because quality assurance and regulatory compliance are crucial, healthcare logistics is more complex and specialized than many other verticals. It requires working closely with customers on designing integrated solutions and services through partnerships.

### **IL: Tell us about one of the hardest supply chain challenges you've faced in your career.**

In 2011, I was evaluating GSK's child-resistant packaging operations in Tokyo when the earthquake and tsunami caused the disaster at the Fukushima Daiichi nuclear plant. The GSK Imaichi manufacturing facility was only about 68 miles from that plant, putting the site in the radiation contamination zone. We suddenly had to leverage our logistics business



continuity plan to source products elsewhere for the Japanese market. We decided to source the medicines out of the UK, Italy, Germany, France, and Spain. Predictably, this created new challenges, such as setting up mechanisms to bring the product into Japan through Osaka. This natural disaster moved me deeper into supply chain management, working with various third-party logistics companies. It ultimately led me to redefine how a pharma company transformed its end-to-end supply chain logistics.

**//: What was at the top of your agenda when you joined UPS?**

My first 100 days were all about connecting—with my peers, the management committee, the regional staff, and my team. I'm proud of the capabilities UPS has developed since it created its first healthcare strategy in 2002. I want to build on the great work, and refresh the strategic pillars and purpose, based on what I see as an attractive market where technology intersects logistics for home health and e-commerce.

**//: What traits make you an effective leader?**

I'm passionate. I love to innovate and tell a story. I live by three words in my career—connect, collaborate, and deliver—and that starts with building relationships. I find success in seeing people grow and succeed. Also, I'm analytical by nature. I'm an engineer; you can't take that out of me. I love to look at and challenge data and understand the 'why' of it. Finally, I'm an entrepreneur, and I like a good challenge. I believe people are our number-one asset. Processes and systems are important, but their main role is to make people effective.

**//: Which recent IT developments are having the biggest impact on your business and your customers?**

We see a lot of advancements in artificial intelligence (AI) or machine learning, and in robotics. The intersection of IT with industrial engineering—the physical state of things—has become tremendously important. UPS recently created a team called the Advanced Technology Group to focus on smart network technologies. I'm working with them to create a healthcare network-within-a-network. We're looking at how to use innovative technologies to make sure we can see healthcare packages move through our network with the right levels of visibility and control.

Another thing that has become important is the concept of a control tower—a single management layer that sits on

top of all the other activities and participants in the network. As we start to see track and trace, and use technologies such as serialization and blockchain to provide security and fast movement from manufacturer to patient and consumer, we need to create these layers to move the product agilely and affordably throughout the supply chain.

**//: What aspect of your job is most fun?**

The best part is visiting different UPS facilities, meeting with our operations people, and hearing their pride in what they do. The same goes for our clients. I spend most of my time shaping the strategy centrally, but the most fun is understanding how to deploy it locally, within our facilities and operations. I enjoy global traveling, meeting with people, and ultimately being able to drive change and see the results. Also, throughout my career, I've been grateful for the opportunity to live in the United States, UK, and Japan.

**//: How do you spend your time when you're not at work?**

When we get the chance, I love international travel with my wife and three children. At home, we enjoy college football and soccer. We love spending Sunday afternoon around our pool and barbecuing with the extended family. My son and I golf, run, and hike together. I am increasingly involved in community service, particularly with the Atlanta Chamber of Commerce and United Way.

## Take Stock, Move Ahead

"Every day, take five to 10 minutes to reflect on what you did that day and what you learned." That's the first piece of advice Chris Cassidy would offer a young person embarking on a career in supply chain today. "Think about what you did successfully, what you can improve, and what you would do differently next week." Then, based on those reflections, take action to make a difference. "Don't look back; just remain positive and look forward," he says.

While focusing on your current job, don't forget to think about your long-term goals, Cassidy advises. "Of course, the journey will never be what you expect," he notes. But you'll probably achieve more than what you expected.

Finally, focus on depth as well as breadth. "Don't jump from job to job because of titles or promotions," Cassidy says. "Take the time to learn the content of each role."





**Lori Fellmer is vice president of logistics and carrier management with BassTech International, a distributor of specialty raw materials. BassTech supplies inorganic chemicals and engineered polymers to numerous industries, including paint and coatings, roofing and waterproofing, and specialty glass.**

#### RESPONSIBILITIES

Material movement and warehousing, with special emphasis on global sea and air transportation.

#### EXPERIENCE

Logistics manager, Ashland Inc.; general manager, Express Book Freight; vice president and general manager, Clark Worldwide Transportation; operations, trade and pricing management, P&O Nedlloyd.

#### EDUCATION

SUNY Empire State College; B.S., International Business, 2013.

## Lori Fellmer Keeps It Moving

IN LOGISTICS, YOU CAN'T EVER SIT BACK AND SAY nothing's going to happen because it will. It could be weather, it could be a labor strike, it could be a regulatory change. You have to be prepared, and have a second plan. That means knowing the status of your freight in real time, and your options. In supply chain management, the flow of information is so important.

For instance, when Hanjin Shipping filed for bankruptcy in 2016, we had to identify our shipments on Hanjin or affiliate ships. Then, we had to assess the likelihood our shipments would arrive at their intended ports on time and without incident—not a given.

We considered offloading shipments at earlier ports and finding alternate transport routes, then carefully tracking shipments left on the initial ships for expedition upon arrival. Overall, we had a few small delays, but were otherwise okay. But if we hadn't had good visibility to our freight, it would have been hard to react as quickly.

After the 2015 explosion in Tianjin, China introduced new safety

regulations, often without much advance notice. For example, in August 2017, the government suddenly imposed restrictions on moving certain hazardous materials through specific ports. By working with my colleagues in China, as well as with our network of carriers, we were able to re-route our material through alternate ports and, in some cases, with different carriers. We didn't miss a beat.

My role is to bring value to our core business through strategic carrier selection and negotiation, and through operational opportunities, such as building our own ocean consolidations to cut costs and improve sales.

Just as important, I have helped

### The Big Questions

#### How would you describe your job to a five year old?

I play with ships, planes, trucks, and trains all day.

#### What's the best leadership advice you've received?

Be practical. These words usually help bring clarity to complex dilemmas.

#### Do you have a hidden talent?

Baking, particularly crescent cookies.

#### Your words to live by?

No regrets. When things don't go as planned, be richer for the experience and figure out your next move.



build a network of logistics partners that enables an uninterrupted supply chain, despite curve balls such as labor strikes, weather events, or sudden regulatory constraints. Keeping material moving is so important to maintaining business.

In 1985, I was hired to handle the accounting for a non-vessel-operating common carrier. Within months, I was handling sea freight pricing. Next, I was recruited by a steamship line, where my first role was creating rules and a rates tariff for its new trade lane.

A colleague told me, 'I hope you like

this business. Once you're in it, you don't get out.' He was right. I've always thought this industry was fascinating.

I am also addicted to the global aspect of logistics. I have been based in Rotterdam and London, and traveled to offices in India, China, Australia, and elsewhere to work on global initiatives.

When I joined Ashland, it was the first time I worked for a shipper. Seeing the pain and strain of producing and buying raw material, and getting products to customers who have deadlines, provides a different perspective than you get on

the shipping side. You see how logistics is critical to keeping the world ticking and the global economy moving. It's exciting.

Thirty years ago, I regularly represented my company at meetings. It was not unusual to be the only woman—or one of two women—in the room. It's nice to see that changing. Every year, the International Commerce Club of New Jersey, a logistics industry group that I participate in, awards three scholarships. Two years ago, the three scholarship winners were women. That was delightful. ■

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# NOTED

THE SUPPLY CHAIN IN BRIEF

## SHOVEL READY



Online home goods and furniture retailer **Overstock.com** is set to open a 517,000-square-foot distribution center in Kansas City, Kansas. The new warehouse

allows Overstock to offer two-day ground shipping to nearly every customer in the contiguous United States. The retailer intends to expand the distribution center's operations to include returns processing.

## SEALED DEALS



▲ Pet food and treats maker **American Nutrition** chose **Janam Technologies'** XG3-ER gun-shaped, rugged mobile computers to improve operations across three facilities. The company selected Janam's devices to improve supply chain visibility, increase employee productivity, and run its WMS.

The **U.S. Army** chose Boeing subsidiary **Tapestry Solutions** to provide in-transit visibility for ground transportation logistics in the U.S. Central Command's area of operations. Using a centralized database that links cargo movements with vehicles equipped with GPS-based transponders, Tapestry's global distribution management system tracks and manages civilian contractors moving Army equipment and supplies throughout Kuwait, the Trans-Arabian Network, and Iraq.

mix

Supply chain solutions provider **AIT Worldwide Logistics** acquired **WorldFresh Express**, a freight forwarder specializing in perishable food products. The acquisition expands AIT's cold chain capabilities by adding operational knowledge as well as a 13,800-square-foot temperature-controlled facility in Los Angeles. The West Coast facility has distinct zones to hold frozen, refrigerated, and fresh foods.

Supply chain software provider **E2open** acquired transportation management systems provider **Cloud Logistics**. The deal lets E2open offer shippers a unified supply chain platform, providing visibility, collaboration, planning, and execution.

**Universal Logistics Holdings**, an asset-light provider of customized transportation and logistics solutions, acquired **Specialized Rail Service (SRS)**, in a deal that lets Universal further expand into the western United States. With facilities in Clearfield, Utah and Las Vegas, SRS offers intermodal drayage services, as well as transloading, crossdocking, warehousing and distribution, and intermodal facility management.

Logistics solutions provider **Odyssey Logistics & Technology** acquired 3PL **AFF Global Logistics**. The acquisition lets Odyssey offer an end-to-end supply chain solution, supporting its strategy of operating an asset-light logistics business with the scale to support shippers and carriers worldwide.

## UP THE CHAIN

**DeRoy Bryant** joined **Inteva Products**, a tier one automotive supplier of engineered components and systems, as vice president of global supply chain management. Bryant brings more than 25 years of procurement, supply chain management, and supplier diversity program development experience to his new position.





#### GOOD WORKS



**Volga-Dnepr Airlines** organized a delivery of critical aid relief cargo to help victims of Typhoon Mangkhut in Guam. Within 8.5 hours of the customer's confirmation, Volga-Dnepr Airlines positioned one of its An-124-100 freighters at the airport of departure to load a shipment of 64 tons of food supplies and bottled water. The expedited loading process was completed in three hours.

#### GREEN SEEDS



▲ Materials handling company **Crown Equipment** achieved zero landfill status for its Troy, Ohio, manufacturing facility—its sixth location earning this designation. As a result of employees recycling and reusing waste when possible at the location, Crown expects to divert more than 6,000 pounds of the facility's waste from landfills each year.

**Averitt Express** received the 2018 Tennessee Sustainable Transportation Award from the Tennessee Department of Environment and Conservation, in partnership with the Tennessee Department of Transportation. The award recognizes the carrier for increasing the fuel economy of its fleet; Averitt's recent improvements include auxiliary power units, three-minute idle shutdown technology, and aerodynamic side skirts.

## recognition



▲ Southeastern Freight Lines, a provider of regional LTL transportation services, recognized **Malcom Bryant** for **driving 50 years with no accidents**. He received the award during the company's annual Safety and Service Awards celebration. Bryant is the first Southeastern driver to reach this safety milestone.

LTL transportation services provider **Dayton Freight Lines** earned the **2017 Carrier of the Year Award** from transportation logistics company J.B. Hunt for the third time. Dayton Freight was recognized for on-time pickup and delivery performance, customer service, EDI compliance, and responsiveness.

American Logistics Aid Network (ALAN) recognized **The Shippers Group** with its **Outstanding Contribution Award** for donating space and labor that helped non-profits provide comfort to families returning home to Dallas and Atlanta after Hurricane Harvey, and clean up Caribbean communities after Hurricane Irma and Hurricane Maria. ALAN also recognized Estes Express Lines, The Home Depot, MIT's Humanitarian Supply Chain Lab, and LIFT Non-Profit Logistics for their humanitarian achievements.

#### SEALED DEALS

**Glanbia Performance Nutrition**, a sports nutrition products maker, entered a five-year agreement with contract logistics provider **DHL Supply Chain** for warehousing, a warehouse management system, and e-commerce support at Glanbia's 452,000-square-foot facility in North Aurora, Illinois. The facility serves Glanbia Performance Nutrition customers across the world.



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## 3PLs, Tech Providers Empower Ethical Supply Chains

Because they are so busy watching their margins, shippers do not always spend adequate attention and resources on the ethical issues involved in their highly complex supply chains, notes Mark Smolik, vice president, general counsel and secretary, compliance officer for DHL Supply Chain, the logistics division of Deutsche Post DHL.

Ethics, however, is a dangerous place to cut corners, as increasingly “customer purchasing decisions are made by people seeking to do business with suppliers that uphold and promote high ethical standards in everything they do,” Smolik says. A company can suffer severe brand damage when ethical issues along its supply chain become exposed.

An ethical supply chain encompasses myriad challenges, including corruption, workplace conditions and safety, human rights, labor laws, and sustainability. Third-party logistics (3PL) and technology providers can help shippers manage the supply chain’s many potential ethical risks.

Shippers sometimes prefer to manage compliance-related work in house and keep 3PLs focused on moving products, but “in a perfect world we would see both sides come together to leverage best practices and make sure effective controls are in place,” Smolik says.

3PLs provide a unique perspective and expertise on ethics compliance to shippers, helping companies conduct due diligence and operate compliance programs that prevent abuses. “3PLs with the appropriate discipline and infrastructure have the experience that comes from repeatedly shipping in and out of a particular jurisdiction,” he adds. “They understand what’s expected in that area, what’s



Photo courtesy of DHL

**Sustainability is a key ethical supply chain concern. DHL's aerodynamic teardrop trailer provides less air resistance than conventional heavy trucks, reducing fuel consumption and carbon emissions.**

expected from the regulatory environment in which they operate, and what they need to do to comply,” Smolik says.

Technology providers also give shippers the tools to better navigate the supply chain’s ethical minefield. For instance, Citizens Reserve’s Suku platform, which uses blockchain to create one location where cross-continent business partners can communicate and track product location and status, is designed partly to make ethical challenges more manageable.

Even companies that prioritize ethics can struggle to maintain a clear, accurate view of the practices and principles of each partner in a global supply chain. Suku works to bring those partners into sharper focus.

—Tom Gresham

## Automated Material Handling Equipment Market Lifts Growth Projections

The growing presence of start-up companies offering robotic solutions for warehouse automation, the increasing popularity of automated material handling (AMH) equipment among leading industries, significant recovery in global manufacturing, and rising labor cost and safety concerns are among the key factors driving the growth of the AMH market, according to a new study from industry analyst firm Research and Markets.

The AMH equipment market is expected to reach \$53.59 billion by 2024 from \$33.46 billion by 2018 at a compound annual growth rate (CAGR) of 8.2 percent. However, the high upfront cost of AMH equipment for small and mid-sized enterprises, and high integration and switching costs, are factors restraining market growth.

The market for robots is expected to grow at the highest levels from 2018 to 2024. Implementing robots greatly increases the efficiency and productivity for manufacturing and warehouse

operating companies. Moreover, the use of robots can reduce labor costs, protect personnel or employees from injuries, and provide a high return on investment. Such advantages are fueling the demand for robots in manufacturing units and warehousing facilities.

The AMH equipment market for unit load material handling systems will grow at a higher CAGR during 2018–2024, the study estimates. Unit load material handling systems involve appropriately sized items organized into a single unit that can be moved easily. It is a quick and economical method to move a large number of items in a single run.

Unit load material handling systems are widely used in various industries because they are cost effective and capable of handling several items simultaneously, thereby reducing the number of trips and time required for loading and unloading, along with handling costs.



## Cold Comfort: Finding the Right Winter Warehouse

The 2018–2019 winter season is projected to be colder than normal, so it's time for companies to ensure their inventory is protected. Here are three tips for choosing the right warehouse for your business this winter:

**1. Heated facilities.** Find a warehouse that operates a heated facility to keep materials at the right storing temperature and prevent freeze.

**2. Safety record.** Winter can be detrimental to the products being stored. Safety regulations are constantly changing, so look for a warehouse with a strong safety record.

**3. Quality service.** Select a warehouse that values its customers. With the busy holiday season falling in winter, companies are already overwhelmed. Look for a warehouse facility that can reduce stress through quality storage and customer service.

—A. Duie Pyle



## WAIT LOSS PROGRAM

The supply-demand dynamic in the trucking market is out of balance, even as more drivers enter the field. With tight capacity, carriers can pick and choose which shippers and facilities to work with. In order to remain competitive and have access to consistent and reliable supply, it is crucial for shippers to become a shipper of choice.

Preferred shippers take steps to streamline their supply chain and create more carrier-friendly processes. Even small, inexpensive changes—such as staff friendliness—can go a long way.

Convoy's *Carrier Snapshot Report Q3 2018* surveyed 650 small and mid-sized trucking companies to determine what's important to them when working with a shipper. The results, in order of importance:

1. Short wait time
2. Flexible appointments
3. Low rate of tender cancellation
4. Staff friendliness
5. Shipment booking lead time
6. Parking options
7. Facility amenities

Additional survey highlights:

■ 88 percent of carriers use a mobile app to book loads.

■ Average revenue per truck is \$21,691.

■ Carriers report an average \$3.14 rate per loaded mile.

■ On average, 14 percent of total miles in September 2018 were empty.

■ There were 186,121,707 miles wasted in September. These empty miles result in 1,116,730,241 wasted gallons of gas and \$584,422,159.42 in wasted economic value.

## Factory Robots: Better Safe Than Sorry

In the new gig economy, workers are individual contractors—they are mobile, can work from any place, and save their companies time and resources.

A Massachusetts company believes lidar technology could be the key to developing a safer factory robot—and to enabling those robots to take on many of the remaining tasks still completed by human workers.

Lidar is far from a new technology, but the bulk of recent investment in the laser-based system went toward self-driving systems that could sense obstacles around them. Veo Robotics, however, applied similar technology to the assembly line, where robots and human workers must operate in close proximity to each other.

Bloomberg reports that the company's proprietary system creates real-time, 3D maps of factory environments. When the lidar detects a person getting closer to an assembly line robot, the machine automatically slows down and eventually stops. The system also halts the robot if lidar is unable to discern what is happening in its environment.

Although factories widely deploy robots, the report notes that the costs associated with protecting human workers generally keeps them out of the final stages of an assembly line.

Joe Gemma, the U.S. chief executive for Kuka, told Bloomberg that final assembly is the “holy grail of automation.” The company is among the major industrial robot makers helping Veo test its technology on everything from aircraft assembly to oil and natural gas extraction.

Veo, founded in 2016 as the cost of sensor technology plummeted, reported raising \$12 million from venture investment firms about one year ago and plans to begin shipping its systems to customers this year. The system can be installed in less than one day and, at about \$40,000, is about one-tenth the cost of industrial robots themselves.

The system would mark “the end of fear” around massive, fast-moving industrial robots, says co-founder Patrick Sobalvarro. He projects the company could hit \$1 billion in annual revenue in as few as five years.

Veo engineers also insist that although robots could soon be doing even more of the heavy lifting around the factory, human workers would still be needed to ensure the successful completion of final assembly.

—Andy Szal for Thomas



## Companies Go for IoT

Companies will spend \$434.9 billion to design, plan, build, and run Internet of Things (IoT) solutions by 2023, up from \$186.1 billion in 2017, according to research company Forrester.

This spending includes IoT-specific security software, platform software, service provider connectivity, application software, hardware, and professional services. Notably, Forrester predicts that spending in each of these categories will increase year-over-year. Spending on software platforms will be the fastest-growing sector at 34.2 percent annually, reaching \$8.7 billion by 2023.

As IoT impacts businesses across industries, Forrester forecasts that:

**Inventory and supply chain management will be the largest use case** with the market to grow at a 20.2 percent CAGR (compound annual growth rate), reaching \$113.5 billion

by 2023. IoT-enabled solutions help firms manage supply chain relationships, track inventory levels, and manage warehouse operations.

**Smart buildings will improve worker productivity and drive business growth** with spending on smart buildings to reach \$49.6 billion by 2023 at a 12.4 percent CAGR. Because IoT-enabled building management solutions can provide tangible benefits such as increased energy efficiency, worker productivity will improve as well, and drive business growth.

**Fleet management will drive fuel efficiency and preventive maintenance services** as spending grows 8.4 percent annually, pushing it from \$6.4 billion to \$10.4 billion over the next six years. Multiple industry verticals—including construction, transportation, and utilities—are implementing fleet management solutions to help comply from both a safety and environmental perspective.

## Take a Load Off Your Fleet

Maintenance and repair (M&R) is the top factor motivating fleet executives to acquire new trucks, say 40 percent of respondents to a recent Fleet Advantage survey of more than 1,000 fleet executives.

M&R costs have moved front and center in recent years, with more fleet personnel working with their finance departments, the survey finds.

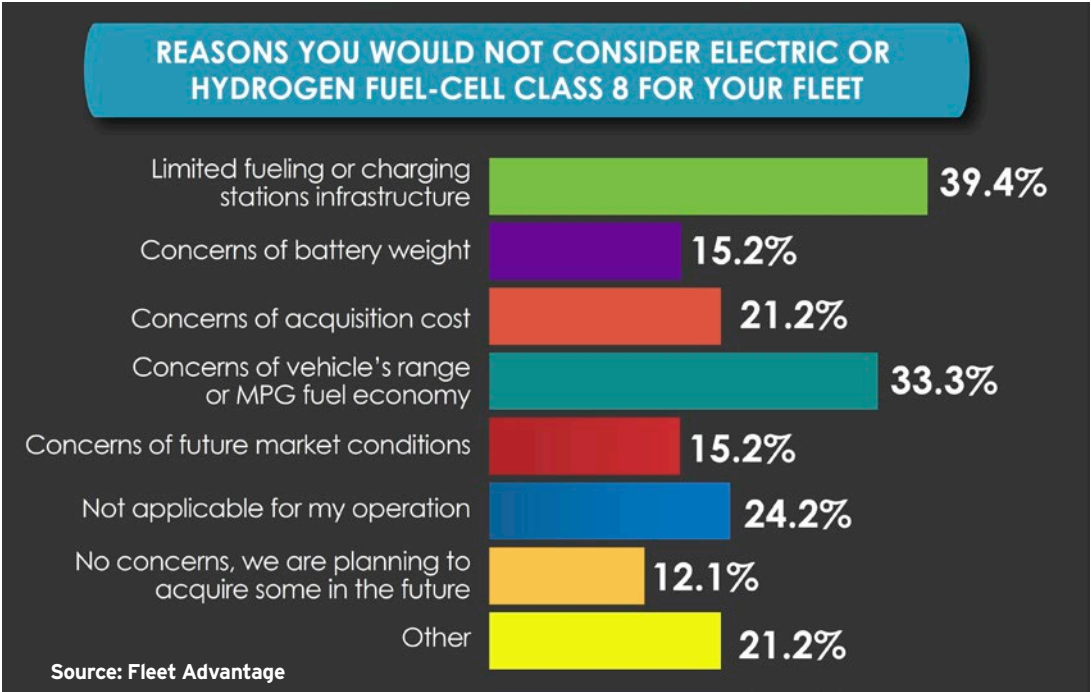
Costs, however, are not the only concern fleets have regarding maintenance; 26.7 percent of respondents also say a safe, well-maintained truck is most beneficial to driver recruitment and retention—critical because the driver shortage remains a difficult issue for many transportation companies. Only compensation ranks higher (50 percent) as most beneficial in driver retention.

Fuel economy ranks second (36.7 percent) as a top

motivator for truck replacement. This is especially important since 86 percent of fleet executive respondents say they’ve experienced a consistent increase in fuel economy in model years 2013 through 2018. The fact that the recent price of diesel has increased above what industry forecasts projected further underscores this perspective.

The survey also asked a handful of questions about electric and hydrogen fuel-cell trucks (see *chart*). The results:

- Only 4 percent of respondents say they are currently procuring these types of trucks
- 53 percent say they either do not see the value nor will they consider the technology for at least another 10 years.
- Nearly one-quarter of respondents (21 percent) also say they believe electric or hydrogen fuel-cell trucks will never be widely used for over-the-road operations.





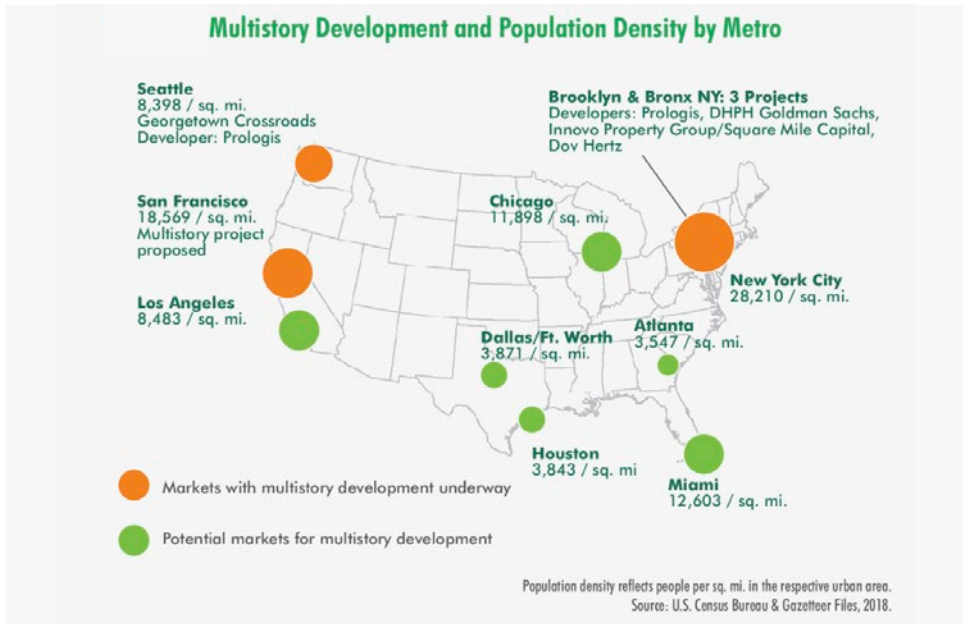
## Things are Looking Up for Multistory Warehouses

Multistory warehouses used to distribute e-commerce orders are popping up in densely populated U.S. metro areas, but conditions for developing the structures aren't as ideal in the United States as in Asia and Europe, finds a CBRE report.

The commercial real estate services firm's analysis finds that New York City, San Francisco, Miami, Chicago, Los Angeles and Seattle offer the most favorable conditions for developing multistory warehouses: a large, densely packed population; high industrial land prices and rents; and significant penetration of e-commerce use among residents.

The CBRE report pinpoints five multistory warehouses currently under development in the United States: Three in New York City, one in San Francisco, and one recently completed in Seattle (see chart).

The multistory warehouse trend is more advanced in parts of Asia and Europe, where populations are more densely packed and land prices are higher. U.S. land prices for industrial development have more than doubled in the past five years to roughly \$30 per buildable square foot. Yet land prices and rents in cities such as Hong Kong, Tokyo, and London remain twice to three times more expensive than in U.S. cities.



"Multistory warehouses are an emerging phenomenon in the United States, but they might pencil out only in the densest neighborhoods and cities," says David Egan, CBRE's global head of industrial & logistics research. "We might need to see some additional adaptations that are common in Asia and Europe, such as smaller delivery trucks, which allow for tighter ramps and, in turn, smaller building footprints."

## Meet Your Match

Supply chain management is increasingly recognized as critical to an organization's success. As a result, it's harder to come by top-tier talent through traditional methods.

Enter SCTalentMatch, a new service launched by veteran supply chain recruiters Don Jacobson and Adam Lenhart that anonymously connects supply chain professionals with employers.

Candidates who are actively seeking jobs or passively interested in assessing new opportunities submit a discipline-specific questionnaire detailing their qualifications, experience, and interests. Companies similarly fill in the attributes they're looking for in top candidates. Then, an algorithm matches the right candidates to the right opportunities. While remaining 100-percent anonymous, candidates can decide whether to formally be considered in the job search process.

The matching algorithm allows for an efficient and quick search process that aligns the interests of candidates and companies on specific desired hard and soft attributes, compensation, and location.

For more information: <https://sctalentmatch.com>

## WHAT WILL RETAILERS FIND UNDER THE TREE?

A common theme connects several strategies retailers are using to prepare for the holiday season: Enhanced capabilities to seamlessly cater to shoppers in stores, online, and on mobile devices. CBRE's annual *Holiday Retail Trends Guide* outlines four trends shaping this season as it unfolds:

- 1. The optimistic shopper.** In a strong economic environment, retailers who excel are those so proficient at selling across multiple channels that few transactions are strictly in-store or online anymore.
- 2. Buy-Online/Ship-to-Store (BOSS)** allows shoppers to select from a wider inventory of merchandise stocked at the retailers' warehouse to be delivered to their nearest store. Retailers bet that BOSS will cut delivery costs and generate add-on sales to shoppers who pick up orders at stores. Key to BOSS' success will be the incentives retailers offer shoppers to use it.
- 3. Experience the rewards of loyalty.** To retain shoppers and build stronger connections to their brands, retailers are enhancing loyalty programs with experiences and access to exclusive events like fashion shows.
- 4. Toys R all of us.** The closure of Toys R Us stores cleared the way for opportunistic retailers to fill the void. Walmart and Target are expanding their toy sections, while others that aren't widely known as toy sellers, including Michaels, Party City, and Ace Hardware, are jumping in with limited toy offerings. At stake is \$1.3 billion in sales in the fast-growing toy category.



## THE STATE OF LOGISTICS OUTSOURCING

In an era where technology continues to migrate consumer spending habits online and away from brick-and-mortar stores, the *2019 Third-Party Logistics Study* highlights how supply chains are also going digital and using science to keep pace.

Here are a few notable findings from the report, which was created and supported by Infosys Consulting, Penn State University, Penske Logistics, and Korn Ferry.

**What are the top concerns and challenges in regards to supply chain decisions?** This can be answered from two different perspectives: the companies that manufacture and distribute goods and services (referred to as shippers in the study) and third-party logistics (3PL) providers.

In order, the top nine concerns for shippers: infrastructure; workforce readiness; economic stability; freight/supply chain transparency; lack of strategic partners/suppliers in the region; regulations/tax structure; security/crime/corruption; executive-level talent; and border-crossing delays.

The list for 3PLs: workforce readiness; infrastructure; economic stability; freight/supply chain transparency; lack of strategic partners/suppliers in the region; executive-level talent; security/crime/corruption; regulation/tax structure; border-crossing delays.

**Shifting consumer buying habits, which include a blend of in-person and online purchases of goods and services, require quicker responses than retail models of the past.** Shippers recognize the need for agility, but 42 percent of survey respondents say they have not made the required changes to improve their agility over the past five years. Fifty-one percent of participants did say, however, that they are open to new ideas, creating more opportunities for 3PLs to introduce and implement innovations.

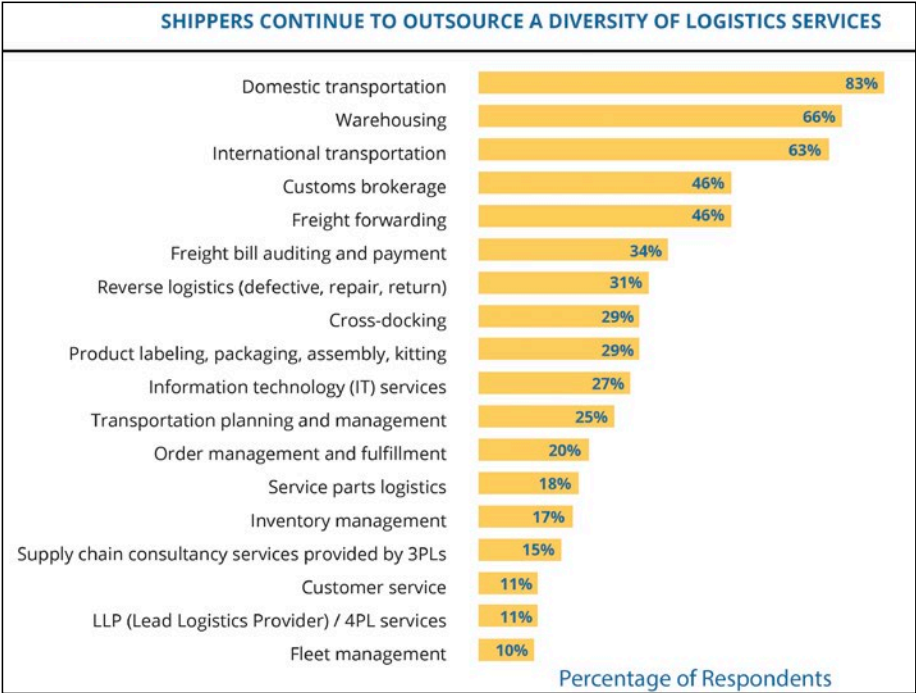
**A key complaint among consumers who choose home or office delivery is that packages become lost more frequently.** Within the supply chain's last mile—defined as the final steps of package delivery to a person's home or business—exists an undervalued concept known as the last yard. The majority of shippers (71 percent) and third-party firms (72 percent) recognize its influence on key retailer metrics such as consumer satisfaction and brand loyalty. Yet, only about one-third of survey takers agree that companies do enough to effectively manage last yard issues.

**In any given week, consumers buy products online for home delivery or in-store pickup and also still visit physical stores to make a purchase or return.** This shopping blend is known as the omni-channel. Retailers have been working hard to emphasize an always-on, always-open shopping experience that provides seamless interaction across all retail sales channels, and that is creating different demands on all supply chains. In the survey, 38 percent of shippers say they are inconsistent across the

omni-channel and 36 percent note they have no capability in this area. To reverse this trend, supply chains are investing in integrated technologies that include: enterprise resource planning software (72 percent), warehouse management systems (56 percent), transportation management networks (38 percent), and supply chain visibility tools (34 percent).

**Disruptions break even the strongest links across supply chains.** When disruptions occur due to natural disasters, extreme weather or pandemics, supermarket shelves are missing key household items and products are out-of-stock online. The most common impacts, according to shipper respondents, are increased transportation and logistics costs (75 percent), transportation and logistics network disruptions (73 percent), and higher supplier costs (66 percent). The level of importance that companies and 3PLs place on mitigating these disruptions is greater than five years ago, with 23 percent of shippers and 22 percent of 3PLs scoring it significantly greater. The study notes that two major tools that companies and third-party logistics organizations can utilize to minimize disruptions are visibility tools (61 percent of shippers and 67 percent of 3PLs) and partnerships (72 percent and 64 percent, respectively). In the area of predictive analytics, 33 percent of 3PLs and 17 percent of companies are using these cutting-edge tools.

**Data sharing between shippers and 3PLs becomes increasingly important.** The key to a successful 3PL-shipper relationship is the foundation-building accomplished during the request for proposal (RFP) process. It ensures that both the short-term and long-term goals of both parties are clearly understood and reasonable expectations are set in the relationship. In the study, 36 percent of shippers and 35 percent of 3PLs agree that there are opportunities to improve how the sales team shares insight and data with account management.



Shippers most frequently outsource domestic transportation, warehousing, international transportation, customs brokerage, and freight forwarding. Less frequently outsourced activities continue to be those that are more strategic and customer-facing.



## What's Ahead for Retail Technology? Ask the Crystal Ball

What technology developments can retailers expect in 2019? Here's some perspective from Adam Silverman, senior vice president of marketing for Theatro, and a former Forrester analyst with 20 years of industry experience.

### 1. E-commerce software will evolve into commerce software that powers both online and offline commerce.

As retailers look to replatform antiquated point-of-sale (POS) and other legacy store systems, they will increasingly leverage functionality within their e-commerce platforms. The traditional notion of a POS will die and give way to a more unified commerce application that maintains inventory and simultaneously helps associates engage with customers.

**2. Advanced intelligence in the supply chain will drive profit and loyalty.** Customer expectations for speed continue to rise in the age of Amazon Prime delivery, and retailers will emphasize fulfillment efficiencies to

address them. Leveraging machine learning and artificial intelligence in the supply chain will generate increased value to retailers, who can optimize their buying and planning functions, and ultimately deliver packages to customers within 24 hours—including a greater expansion of Buy Online Pickup in Store.

**3. Voice takes center stage in retail.** Voice as a computing interface will gain traction in 2019, empowering hourly store employees to gain access to enterprise information with simple voice commands. Just as consumers use voice technology assistants such as Alexa or Siri to answer their questions, voice app platforms allow retail workers to check inventory and order status, look up customer information, or receive tasks based on their skill set or location. Customers will soon expect to see this interaction in their local store as digital assistants enter the mainstream.

## THE NEW FACES OF TRUCKING

Leilani and Cheyenne are not your typical high school students. What sets them apart is that they both share a passion for trucking and see the vast opportunities that industry offers. The students attend Patterson High School, in Patterson, California. Leilani is a senior and is enrolled in one of the first high school trucking programs in the nation. Cheyenne is a junior who is enrolled in the school's supply chain and logistics management class and will be enrolling in the trucking program next year when she is a senior.

The passion these young students have is definitely not the norm as reflected in the current representation of women who are commercial truck drivers—approximately just 6 percent of the commercial truck driver workforce is made up of females and, according to the Bureau of Labor Statistics, this is up only 1.1 percent since 2008.

Having launched this unique high school program in 2017 as a way to proactively address the driver shortage, Dave Dein, CDL coordinator and instructor, is more than ecstatic to have Leilani, his first female truck driving student, enroll in the class this year.

"It takes great courage and grit to choose to be the first at anything," he says. "I have utmost respect for Leilani to pursue a career in this male-dominated industry and I will do everything I can to support her."

He is equally excited that Cheyenne is also looking at trucking as a career path because it will provide the financial stability, adventure, and challenge that she is looking for.

Dein sees the need to not only promote the vast opportunities trucking offers to females, but he also

understands the importance of providing support for those who choose to enter into this industry.

"It is apparent that if we expect to see any significant change in the number of women entering into this industry, there has to be a consistent and an intentional course of action for them to have positive female role models they can connect with," he says.

After Leilani enrolled this year, the first thing Dein did was to find out what resources are currently available to help support females in the trucking industry. He didn't have to search long. The nonprofit Women in Trucking quickly stood out as a premier organization that is dedicated to providing support, resources, and networking opportunities.

One way Leilani and Cheyenne can experience this firsthand is to attend the Women in Trucking Accelerate! Conference, where the students will be able to meet women who have generated their own success in the trucking industry. They can attend seminars designed to empower women and enable them to take on the challenges that they will certainly have to face.

Dein so understands the importance of having Leilani and Cheyenne attend this conference that he created a GoFundMe page to help raise the necessary funds for them to attend.

"My personal goal is for both these young women to find success in the

industry," Dein says. "I hope they can come back and be the necessary and needed role models who will inspire a whole new generation of females to carve out their own road in this exciting industry."



**Leilani and Cheyenne are the first female students enrolled in Patterson High School's trucking driving program.**



## New NAFTA Winners and Losers

**ALTHOUGH THE RECENTLY** announced trade deal between the United States, Mexico, and Canada is not likely to take effect until 2020, assuming each country grants final approval, many have been quick to seize upon the agreement in search of “winners and losers.”

The new deal, known as the United States–Mexico–Canada Agreement (USMCA) is poised to replace the North American Free Trade Agreement (NAFTA), which has been in effect since 1994.

Possible winners seem to include U.S. online retailers that ship to Canada, along with their Canadian consumers and the express delivery companies that transport the goods. Here’s a brief explanation:

Canada has agreed to increase its de minimis threshold for both duties and taxes. The de minimis threshold is the dollar value below which products are exempt from duties and taxes. Canada set its de minimis threshold at C\$20 during the 1980s, well before e-commerce even existed. By comparison, the U.S. de minimis threshold is \$800.

Under the terms of the USMCA, Canada will raise its de minimis level from C\$20 to C\$40 for taxes, according to the Office of the U.S. Trade Representative. Canada will also set a de minimis threshold of C\$150 for duty-free shipments.

Businesses shipping goods that fall below the de minimis threshold do not have to follow “formal entry” procedures. This means a faster and less onerous clearance process for businesses that tend to ship goods valued at less than C\$150. A less burdensome customs process could also be a great incentive for those businesses to expand outreach—and sales—to Canadian consumers.

But, under the terms of the proposed agreement, only shipments arriving in Canada via express delivery carriers would be eligible to benefit from the duty and tax savings. This is a critical distinction, and means that shipments delivered to Canada through the postal system would be unaffected, and subject to the same C\$20 threshold that is now in place. If the express carrier-specific language is ultimately adopted, Canadian consumers will have to consider the potential benefits of selecting an express delivery provider during the online checkout process.

Before a business makes any plans based on the new agreement, it’s important to remember that the deal is still in draft form, and all three governments must approve it. The U.S. Congress is expected to begin deliberations in 2019, with a final outcome to be determined.

The USMCA updates key provisions of NAFTA in a way that would seem to encourage growth in U.S./Canada trade. Given the importance of that relationship to each country, the agreement appears to offer a solid path forward.

—John Costanzo, President, Purolator International



## Do You Need a Larger Customs Bond?

The answer could very well be yes, according to information provided by Tennessee-based transportation company Averitt Express.

A lot of new tariffs have come into effect in 2018, and more are scheduled. These increases are substantial, and if they affect the goods your company imports, you are well aware of how this impacts your business operations.

One area, however, might have escaped your notice. Because your customs bond amount is based on how much duty you pay each year, the new duties could have a tremendous impact on your bond’s size and cost. Customs requires that bond amounts represent at least 10 percent of the duties you will pay in one year. For most companies, the \$50,000 minimum bond amount has always been sufficient, as this was ample coverage for any importer who paid no more than \$500,000 in duty over one year.

The new duties on steel (25 percent) and aluminum (10 percent) imposed earlier this year, followed by significant tariff actions against China (25 percent), have resulted in some companies paying a lot more duty than they ever have before.

In some cases, these increases have resulted in a company paying more than \$500,000 in duty for the first time. When this happens, Customs will send a bond insufficiency notice to the importer and the bonding company, advising them they must secure another, larger bond (carrying a larger premium cost) to cover the increased exposure.

In most cases, once Customs sends the notice, the importer has 30 days to secure the new bond. Where the increase is substantial, however, Customs may require quicker action. This can have an immediate impact on your import operation because securing a new bond can take as long as two weeks. Many supply chains simply cannot afford to have this kind of disruption, so they are forced to pay for what are known as single transaction bonds for each entry. These are quite expensive compared to the use of a continuous bond.

If you receive a bond insufficiency notice from Customs, contact your service provider immediately. It is vital that you resolve this issue as soon as possible to ensure your supply chain continues to move without any hiccups.





## Strong Im/Ex Market Fuels South Korea Trade Growth

Air trade in South Korea will remain steady due to strong exports of high technology, basic materials, and machinery parts, as well as imports of industrial raw materials and machinery parts, predicts the DHL Global Trade Barometer, an early indicator of global trade developments calculated using artificial intelligence and big data. The Barometer also expects ocean imports to perform well, mainly fueled by basic raw materials, chemical products, and personal and household goods.

"South Korea's major industries continue to underpin global innovation in technology," says SP Song, managing director, DHL Global Forwarding Korea. "Exports of memory chips, for example, jumped 31.5 percent from the year before to help fuel an 8.7-percent increase in the country's exports in August 2018.

"The government has also proposed a 2019 budget of 471 trillion won (US\$420 billion)—the highest increase in 10 years—with a focus on amplifying employment and innovation, contributing to a positive trade outlook in the months to come," Song adds.

The Barometer's results also suggest that despite intensifying global trade disputes, mainly between China and the United States, world trade is expected to grow over the next few months, albeit at a slower pace. The growth outlook looks positive for all Asia Pacific countries, with



India leading the ranks, along with optimistic outlooks for South Korea, China, and Japan. This is testament to the Asian economy's resilience, especially in technology and manufacturing.

In the Global Trade Barometer methodology, an index value higher than 50 indicates positive growth, while values below 50 indicate contraction.

## Growth in the Line of Beauty



**Beauty retailer Feelunique targets further Asia expansion by partnering with SEKO Logistics for cross-border growth into China.**

brands, and lower shipping thresholds that will open up Feelunique to a much wider consumer population in China.

Locating a distribution hub in Hong Kong allows Feelunique to get closer to one of the world's fastest growing beauty markets while also retaining the benefits of cross-border retailing into China.

To serve its rapidly growing customer base in mainland China, Feelunique—Europe's leading online beauty retailer with more than 32,000 products and 500 brands across makeup, skincare, haircare, and fragrances—is set to open a distribution hub in Hong Kong in partnership with SEKO Logistics, a third-party logistics provider based in Itasca, Illinois.

The cross-border online retailer ships to more than 120 countries and operates dedicated websites in the UK, France, the EU, Germany, Norway, China and the United States. In only three years since the launch of Feelunique's dedicated Chinese website, sales to the region have grown exponentially.

China already accounts for 20 percent of Feelunique's annual sales, with orders being shipped from the UK. Opening a distribution hub in Hong Kong will enhance customer convenience, provide access to a wider choice of products from popular



# THAT’S A LATTE COFFEE

When it comes to coffee imports, Germany is way out in front of EU member states, with 2017 imports totaling 1.1 million metric tons (*see chart*), according to Eurostat’s most recent statistics.

The Italians are also well known for their love of coffee and last year, they imported slightly more than 550,000 metric tons. Belgium came in third for coffee imports with 268,000 metric tons.

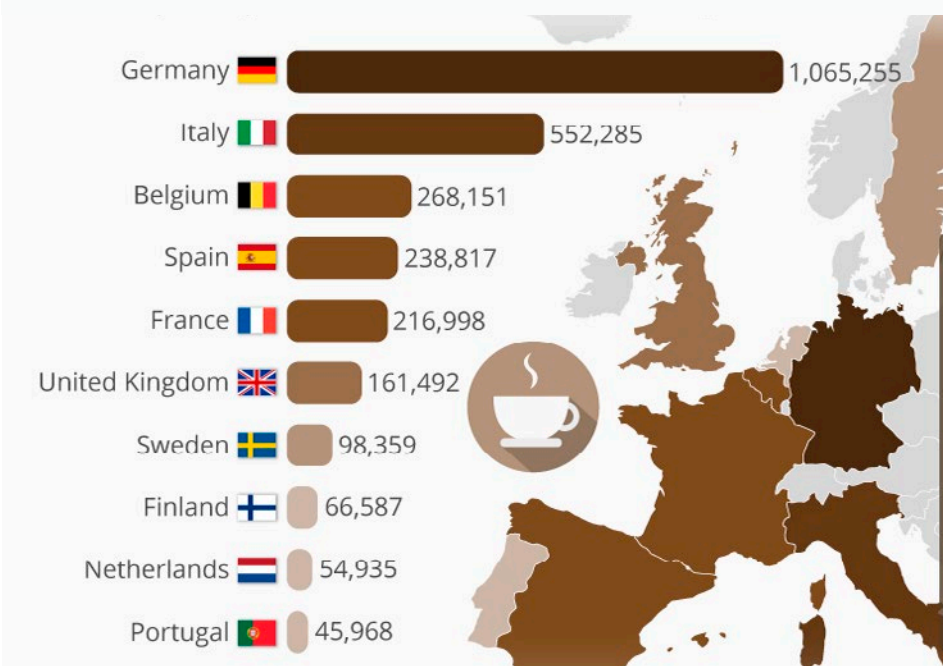
Of the countries exporting coffee to Europe, Brazil ships the most. In 2017, the EU imported 840,000-plus metric tons of coffee from Brazil, more than second-place Vietnam (671,698) and third-place Honduras (210,883).

In total, the EU imported almost 3 million metric tons of coffee in 2017, 5 percent more than 10 years ago. In total, the amount imported was worth €8.8 billion (US\$10 billion).

—Niall McCarthy, Statista

## Germany is Well-Caffeinated

Coffee imports by EU Member States in 2017 (metric tons)



SOURCE: Eurostat

# Click & Collect Not Clicking Yet

Fewer than half of retailers responding to an OrderDynamics survey provide shoppers with access to basic inventory visibility.

Of the 2,000+ worldwide retailers participating in *Omni-2000 Research: Global*, only a surprising 38.1 percent show basic inventory visibility on product pages. A strict like-for-like, year-over-year comparison finds a 30.7-percent decrease in active online inventory visibility. This is a concerning drop in an industry experiencing so much change.

Passive inventory visibility is a factor in this drop. Unlike active inventory visibility, a passive approach signals only when a good is out of stock.

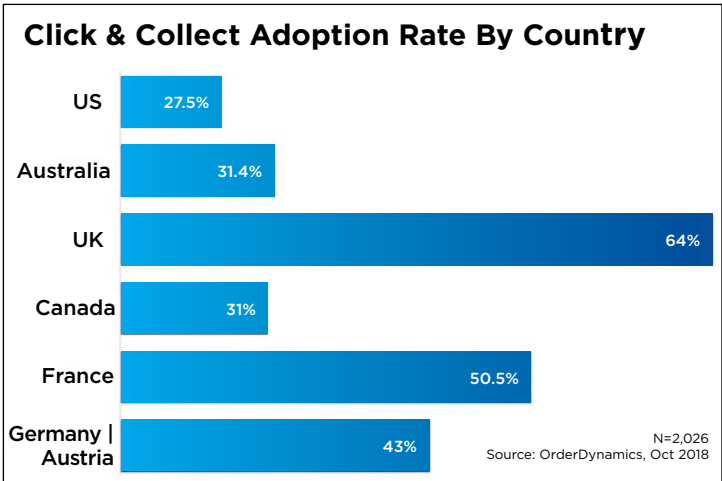
Based on data collected from retailers in a variety of sectors across the United States, UK, Canada, Australia, France, Germany, and Austria, the report reveals:

- 37.6 percent of retailers offer click & collect today.
- 34.8 percent of Buy Online Pickup In Store (BOPIS) retailers commit to having orders ready within 24 hours.
- 72.6 percent of omni-channel retailers offer Buy Online, Return In Store (BORIS).
- 11.4 percent of omni-channel merchants have a site optimized for mobile commerce.

For the second year in a row, the UK is the leading country in click & collect (*see chart*), with 64 percent of retailers offering the service. Consistent with 2017 *Omni-1000* results, the United States lags, ranking lowest of the countries assessed, with only 27.5

percent of retailer respondents providing BOPIS. More than 69 percent of consumers acknowledge having tried omni-channel retailing and would like to see more of it.

As such, retailers are missing an opportunity for promotion. Further, only 57.1 percent of retailers offering the service advertise it on their website’s home page.



N=2,026  
Source: OrderDynamics, Oct 2018



## PANAMA CANAL IN THE ZONE

The Panama Canal closed its 2018 fiscal year with a record 442.1 million Panama Canal tons (PC/UMS), which represents a 9.5-percent increase from the previous year. This surpasses cargo projections of 429.4 million PC/UMS tons for FY 2018, as well as the 403.8 million PC/UMS tons registered in FY 2017.

The transit of liquefied petroleum gas (LPG) and liquefied natural gas (LNG) carriers, containerships, chemical tankers, and vehicle carriers fueled the increase.

Containers continue to serve as the leading market segment for tonnage through the Canal, accounting for 159 million PC/UMS tons of total cargo, of which 112.6 million PC/UMS tons transited the expanded Canal. Tankers—which include LPG and LNG carriers—represent the following market segment with 130.3 million PC/UMS tons.

The next leading segments include bulk carriers (73.7 million PC/UMS tons) and vehicle carriers (49.5 million PC/UMS tons).

In terms of cargo tonnage, the main routes using the Panama Canal in FY 2018 were between:

- Asia and the U.S. East Coast
- The West Coast of South America and the U.S. East Coast
- The West Coast of South America and Europe
- The West Coast of Central America and the U.S. East Coast and intercoastal South America.

The main users during FY 2018 were the United States, China, Mexico, Chile and Japan. Nearly 63 percent of the total cargo transiting the Canal has its origin or destination in the United States.



## Plastics Supply Chain Turns Off the Tap

HP Inc. and IKEA are joining the NextWave Plastics global consortium—a collaborative initiative that brings together leading companies to “turn off the tap” of plastic entering the ocean. The goal is not only to scale their own ocean-bound plastics supply chain efforts, but to also extend across industries to make it commercially viable for all, for maximum impact.

Since September 2016, when it announced that it would join the First Mile Coalition to clean up plastic waste and create economic opportunity for Haiti, HP and its partners have built a fully functioning ocean-bound plastics supply chain using bottles collected in Haiti. Along with joining NextWave, the tech giant has sourced 250 metric tons of ocean-bound plastics from Haiti; more than 12 million plastic bottles are being upcycled into Original HP ink cartridges instead of entering the Caribbean Sea.

In June 2018, IKEA announced its updated sustainability strategy, with new commitments to become people and planet positive by 2030. Commitments include removing single-use plastic products across its stores by 2020 and designing all IKEA products with new circular principles by 2030, with the goal to use only renewable and recycled materials.

In 2017, as part of a United Nations commitment to Sustainable Development Goal 14, Dell Technologies and Lonely Whale launched NextWave Plastics to build on Dell’s ocean-bound plastic program launched in 2016. Since then, NextWave members Bureo, Dell Technologies, General Motors, Herman Miller, Humanscale, Interface, and Trek Bicycle have each developed their product use cases to demonstrate the viability of integrating ocean-bound plastics found in areas such as Indonesia, Chile, Philippines, Cameroon, and Denmark, into their supply chains.

NextWave member companies are currently sourcing verified ocean-bound plastics from Cameroon, Chile, Denmark, Haiti, Indonesia, and the Philippines. They are committed to expanding supply chain efforts in those countries and adding new supply sources from a minimum of three additional countries including India, Taiwan, and Thailand by 2025. Through these efforts, NextWave companies will also expand the types of material sourced and will work closely with other supply chain development initiatives to create scale within priority communities.

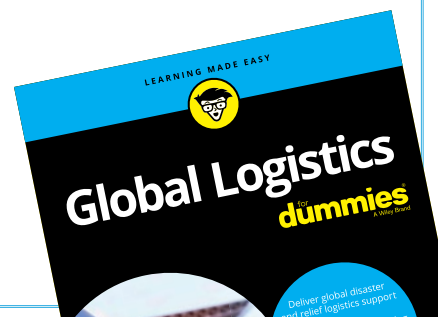
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## Global Logistics for Dummies



Your guide to the global logistics environment, with practical, actionable advice from SOLE-The International Society of Logistics

- Make a case for “going global”
- Involve the whole business
- Understand cultural differences
- Learn from best practices
- Participate in global disaster relief
- Recover from losses/theft







ProMat2017

## Why NextGen Tech Like Blockchain and AI Will Transform Your Supply Chain



George Prest  
CEO  
MHI  
gprest@mhi.org

*Blockchain and AI directly address supply chain leaders' top two operational challenges: increasing customer demands and hiring qualified workers.*

**T**oday's supply chains are no longer simple Point A to Point B networks. They're a digital, on-demand, and always-on ecosystem of complex, interconnected relationships. Every link relies on a coordinated, non-stop exchange of data in order to meet customer expectations for flexibility, visibility, and transparency—regardless of available workforce. Addressing these challenges requires next generation (NextGen) technologies like robotics and automation, predictive analytics, the Internet of Things (IoT), wearable and mobile devices, as well as driverless vehicles and drones.

For five years MHI has annually monitored the effects of NewGen tech on supply chains. Our surveys asked 1,100 business leaders how their supply chain operations, security, and workforce are affected by these technologies. Findings are released in the MHI Annual Industry Report. (Download "Overcoming Barriers to NextGen Supply Chain Innovation" at [MHI.org](http://MHI.org).)

Two technologies—Blockchain and Artificial Intelligence (AI)—will significantly impact supply chains.

- **Blockchain** (distributed ledger technology) is a continuously expanding list of records linked across a decentralized network and secured via cryptography. Within the next five years, 54% of respondents anticipate adopting it (yet 88% of them have little to no understanding of it).

- **AI** (machines that learn problem-solving and perform tasks that typically require human intelligence) will do decision-making, speech recognition, visual perception, and language translation. It's anticipated by 53% of respondents to effect competitive advantage or industry disruption.

These two technologies alone will directly address what supply chain leaders say are their top two operational challenges: increasing customer demands on supply chains (73%) and hiring qualified workers (64%).

Blockchain's encryption and consensus mechanisms make the data trustworthy and safe, as each trading partner is assigned a unique access key. It also lets trading partners track and trace products with pinpoint accuracy. Product recalls can be addressed quickly and discreetly—minimizing brand damage, costs, and customer inconvenience. This would alleviate some supply chain partners' fears of cyberattacks due to customers' growing demand for transparency.

Survey respondents also say the top skills needed are

strategic problem solving (49%) and analytics/modeling/visualization (43%). Front line warehouse workers are also scarce. Thus companies expect more automation. In the next five years 73% say they will adopt robotics and automation while 47% will embrace AI to handle a wide variety of continuously changing products. Administratively, AI helps automate verification, analysis, simulation, and forecasting processes, reducing the need for people with those skillsets.

Want more examples? At ProMat 2019, MHI will debut a new Solutions Center for Emerging Technologies. This area of the show floor assembles suppliers of NextGen innovations: robotics, sensors, augmented reality wearables, automated storage and retrieval systems, self-guided and autonomous vehicles, driverless trucks, drones, Industrial Internet of Things (IIoT), and predictive analytics.

The largest international manufacturing and supply chain event in North and South America, ProMat runs April 8-11, 2019 in McCormick Place in Chicago. Nearly 1,000 exhibitors will showcase the latest solutions for maintaining competitiveness across the supply chain.

Please accept our invitation to attend and learn more about putting these technologies to work for you. For more information or to register, please visit [ProMatShow.com](http://ProMatShow.com).



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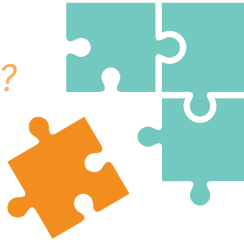
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**have complete visibility of our transportation network. The intangibles that Trinity brings to the table are priceless. We were looking for a company that would manage our freight better; what we found was a true partner in transportation management,"** said Don Parker, Albaugh Logistics Manager.



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## [VIEWPOINT]

BY RACHAL SNIDER

Vice President of Customer Supply Chain, GlobalTranz  
rachal.jordan@globaltranz.com | 866-275-1407

# How to Become a Shipper of Choice

**A**s shippers, carriers, and logistics service providers prepare for a busy Q4 2018, here are some ideas for easing the capacity crunch, controlling costs, and becoming a “shipper of choice.”

### **Carriers in the driver’s seat.**

When the freight market shifted, so did the balance between shippers and carriers. In today’s market, carriers can afford to be selective about the shippers they choose to work with. So what makes a shipper, and its freight, undesirable to carriers? And how can shippers avoid these costly hits to their reputation?

The largest factor boils down to Hours of Service (HoS). When the ELD mandate enforcement period began in April 2018, carriers’ available time—as measured by HoS—instantly became more valuable. It turns out time is money, after all. Any delays that waste time are to be avoided, and repeat offenders risk becoming persona non grata to carriers.

Hands down, the primary culprit for unanticipated and unwelcome delays is excessive loading and unloading time at shipper facilities.

Typical detention charges kick in only after a two-hour grace

period, and typically amount to only about \$50–\$100 per hour. Because those charges don’t begin to cover lost potential revenue, many carriers bake the cost of their lost time into the rates they offer to problem shippers.

You can make the case that loading and unloading delays at shipper facilities are partly to blame for the current capacity shortage. Eliminating shipper delays could increase available capacity by a whopping 30 percent, says Bob Costello, chief economist at the American Trucking Associations.

**No time to wait.** The most effective approach to addressing excessive wait times is to eliminate them altogether, through the use of drop trailer programs.

Drop trailer programs can be challenging for shippers to design, implement, and manage, which is why many turn to 3PLs for assistance. Shippers can take advantage of a 3PL’s access to capacity to identify carriers that

are willing and able to participate in drop trailer programs.

Once the 3PL identifies appropriate carriers, it can manage the drop trailer program on the shipper’s behalf, eliminating excessive wait times while relieving shippers from managing the program.

But drop trailer is not always an option, due to insufficient yard space or other factors. In these cases, 3PLs can assist shippers by analyzing the root cause of shipping dock delays. Identifying peak loading hours, then planning pickups and deliveries accordingly, can be effective when drop trailer programs are not feasible.

**Be hospitable to drivers.** Ensure that dock staff are courteous, and that drivers can use restroom facilities and easily park their trucks in convenient locations. People tend to do business with people they like. Carriers look dimly upon shippers who chased low rates at the bottom of the market instead of building mutually beneficial relationships.

And in the current market, there is plenty of freight to go around, and not nearly enough trucks to haul it all. ■



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## LEAN SUPPLY CHAIN

BY PAUL A. MYERSON

Instructor, Management and Decision Sciences, Monmouth University and author of books on Lean and the Supply Chain for McGraw-Hill, Pearson, and Productivity Press  
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# Going Straight to the Sourcing

**S**trategic sourcing, which consultants popularized in the late 1980s/early 1990s, is a supply chain management approach that formalizes the way organizations gather and use information to leverage consolidated purchasing power and find the best values in the marketplace.

Strategic sourcing involves developing supply channels at the lowest total cost, as opposed to the lowest purchase price. It expands upon traditional purchasing to include all activities within the procurement cycle—from specification to receipt and payment of goods and services.

Many users achieved significant savings. However, there wasn't necessarily a focus on other costs, and they often neglected longer-term, collaborative relationships with suppliers.

To pursue these opportunities, some purchasers coordinated efforts with their organization's supply chain and operational executives. This evolved into Lean Strategic Sourcing (LSS), which provides four strategic benefits:

1. Greater buy-in from key functional areas that care about both cost and performance.

2. Improved chances of implementing identified sourcing savings.

3. Improved quality and reduced waste.

4. Additional cost reduction opportunities via collaboration with supply partners.

### Steps to Implementation

Here's how to implement Lean Strategic Sourcing:

- Collaborate to streamline and redesign procurement operations and purchasing to improve financial performance.

- LSS, at a granular level, takes advantage of Kaizen strategies. One way to achieve it is by improving logistics management and its associated costs, such as taking control of and consolidating shipments and analyzing costs. This requires constant focus on cost cutting that does not compromise quality or reliability, and provides a balance between sourcing and operations.

- LSS relies on reducing waste of time, efforts, and funds

through better compliance and process improvement initiatives.

- Collaborating with suppliers to develop favorable contract terms, optimize transport costs, and create a supply network that minimizes the chances for potential disruptions.

Ultimately, LSS success requires that organizations:

- Map and communicate an LSS process to facilitate buy-in across the company. Cross-functional input provides a common understanding of sourcing processes as well as issues that impact the company, enabling solutions that address problem areas.

- Develop project milestones and deadlines to drive results.

- Create a team member incentive structure and compensation plan tied to process improvement results.

- Consider global markets for certain product categories, but model potential risks and mitigation strategies.

Remember “structure follows strategy.” It is best to first develop and refine your LSS, then make sure that your supply chain and operations structure are aligned. That gives you a better chance for future success. ■



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# 12 WAYS TO INCREASE SUPPLY CHAIN VELOCITY

44 Inbound Logistics • November 2018

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THANKS TO THE AMAZON EFFECT, CONSUMERS EXPECT THE WORLD—AND THEY WANT IT FAST. HERE'S ADVICE ON HOW TO SPEED THINGS UP— FROM THE WAY YOU DESIGN YOUR FOOTPRINT TO HOW YOU EXECUTE THE FINAL MILE.

BY MERRILL DOUGLAS

**A**s Amazon and other retail leaders continue to disrupt established business models, supply chain velocity is increasingly crucial. “Speed is the number-one thing that this new e-commerce demand in the marketplace is driving,” says Kristi Montgomery, vice president, innovation, research, and development at third-party logistics (3PL) provider Kenco, in Chattanooga.

It's not only e-commerce merchants—or retailers in general—who feel what is known as the Amazon effect. “Business-to-business (B2B) companies expect the same level of customer service as consumers,” says Salim Shaikh, senior director, global industry strategy at JDA Software in Scottsdale, Arizona. “Increasingly, B2B companies expect more speed, more responsiveness, more automation, and better customer service.”

From upstream planning to final-mile delivery, companies use a variety of strategies to meet the demand for near-instant gratification. Here are one dozen things your company can do to get your supply chain running faster.



## 1. MOVE CLOSER TO CUSTOMERS

“Our customers are changing their distribution center (DC) footprint and going to hundreds of smaller DCs around the country,” says Montgomery. The goal is to shorten the last mile to enable next-day or two-day delivery.

Beyond Kenco’s own customer base, some of the largest U.S. retailers are redesigning their distribution networks to speed the flow. Montgomery points to Home Depot, which announced in June 2018 that over the next five years it will add 170 new DCs in the United States, at a cost of \$1.2 billion. One goal of this move is to provide next-day or same-day delivery of commonly ordered items.

## 2. FIND A PARTNER TO EXTEND YOUR FOOTPRINT

Not every company can operate enough DCs to get within fast shipping range of most customers. But a logistics partner can give even a small merchant that kind of reach.

That’s the idea behind ShipBob, a Chicago-based 3PL that serves small and mid-sized e-commerce companies. ShipBob holds inventory for retailers in facilities throughout the United States. Receiving orders from the retailer’s e-commerce system, ShipBob picks and packs product in the warehouse nearest the consumer, providing next-day or two-day delivery via UPS, the U.S. Postal Service, or DHL.

“ShipBob is Amazon Prime for the rest of the e-commerce world,” says Dhruv Saxena, the company’s CEO.

Bakblade, a Chicago-based firm whose flagship product is a back and body groomer for men, keeps inventory in all of ShipBob’s warehouses. “We cover so much ground across the country, and California is just as strong as New York. So we spread the inventory evenly,” says Matt Dryfhout, Bakblade’s founder and a managing partner. “That helps us keep competitive with two-day free shipping that everybody expects.”

ShipBob also helps to maintain velocity through its data links with Bakblade’s overseas manufacturer and its freight forwarder. “The communication from our freight forwarder until product arrives at ShipBob is key,” Dryfhout says.



**Bakblade, which sells a men's groomer, partners with a 3PL to offer the expedited, free shipping customers now expect.**

## 3. EMPLOY DATA ON HAND, FOR BETTER PLANNING

“E-commerce is a lot of math and science,” says Saxena. Because e-commerce software tracks every transaction between merchant and customer, this retail channel gives companies a wealth of data that they can use to improve supply chain speed—for example, by determining how to balance inventory among different DCs.

“Companies can capture data not only on customer behavior, but also on inventory turns and inventory movement, to help make good decisions,” Saxena says. “They have the same available data that Walmart and Amazon have for themselves.”

ShipBob’s software does those calculations on behalf of its customers, forecasting what quantities of which inventory the merchant should stock in ShipBob’s various fulfillment centers, based on customer order patterns, including seasonal fluctuations. The forecasts let retailers fill orders quickly without resorting to high-cost expedited services.

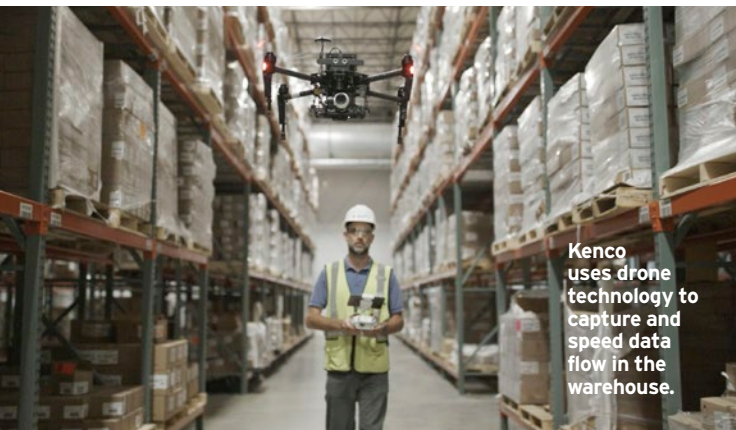
## 4. INVEST IN VISIBILITY

In 2017 and 2018, Kenco surveyed supply chain leaders to learn how they approach innovation. One question the survey explored is how companies set priorities for their investments. Visibility tools emerged as the number-one target for investment.

Eighty-three percent of respondents to the 2017 survey said they hoped to invest in technologies that influence supply chain visibility. In 2018, the number was 85 percent.

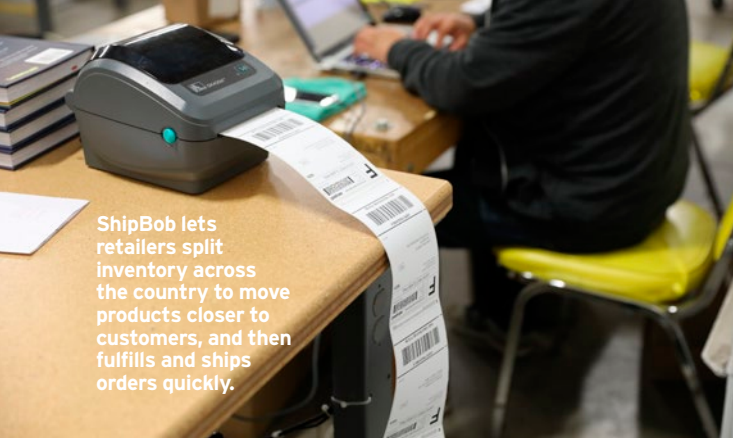
Visibility provides several benefits, including the ability to keep customers up to date on the status of their orders. It helps to boost supply chain velocity by giving a company the information it needs to effectively expand its distribution footprint.

“To have 170 new distribution centers across the country and be able to get product to 90 percent of the population in one day, we have to know where all that inventory is and what it is,” Montgomery says. With that knowledge, when orders come in, the right product will be available to ship from the right DC.



**Kenco uses drone technology to capture and speed data flow in the warehouse.**





ShipBob lets retailers split inventory across the country to move products closer to customers, and then fulfills and ships orders quickly.

## 5. EXPERIMENT WITH IoT

In Kenco's recent survey, 46 percent of respondents say they plan to invest in sensors and the Internet of Things (IoT). These technologies provide the raw data that fuels visibility tools. "IoT can enable inventory tracking and segmentation, as well as geographical placement," Montgomery says.

But as companies implement new data collection technologies, they should start with small proof-of-concept installations, Montgomery cautions. "Everything we do for customers is a pilot," she says. "We take a technology, put it into a small portion of the supply chain, and have very strong metrics around how we will measure the success." A 90-day pilot requires only a small investment and provides valuable information about whether the company should roll out the technology further, she says.

## 6. USE PREDICTIVE ANALYTICS TO SENSE POTENTIAL DISRUPTIONS

Collect data from external sources, such as news and weather reports, and social media, and then run that data through advanced analytics, recommends Shaikh. The results may alert you in advance about upcoming events that could disrupt the supply chain. Disruptions might include everything from bad weather to port congestion to an industry strike.

"Predictive analytics includes leveraging proactive risk mitigation plans and what-if scenarios and simulations to predict a disruption before it actually happens," says Shaikh. For example, history might show that when the Port of Long Beach becomes congested, or when a hurricane closes the Port of Wilmington in North Carolina, your shipment is likely to be delayed by one week. "Because you can predict that, you can better plan for that disruption," he says. Good contingency plans help to maintain the speedy flow of goods.

## 7. DEPLOY MACHINE LEARNING AND AUTOMATION TO CIRCUMVENT DISRUPTIONS

As a company collects data on disruptions and their consequences, smart IT systems can learn from the experience and develop plans to mitigate future disruptions.

"So as a company grows, there isn't a need to add more planners," Shaikh says. "The planners can leverage automation and machine learning to do the predictive analytics. Then planners can use their time for more value-added activities, such as supply chain collaboration with suppliers or customers."

The ultimate goal is an autonomous, self-learning supply chain that not only strategizes to avoid disruptions, but puts those strategies into action. "Determine if you can automate decision making through artificial intelligence (AI) and machine learning, so that you don't just throw inventory, planners, and expedited freight at the problem," Shaikh says.

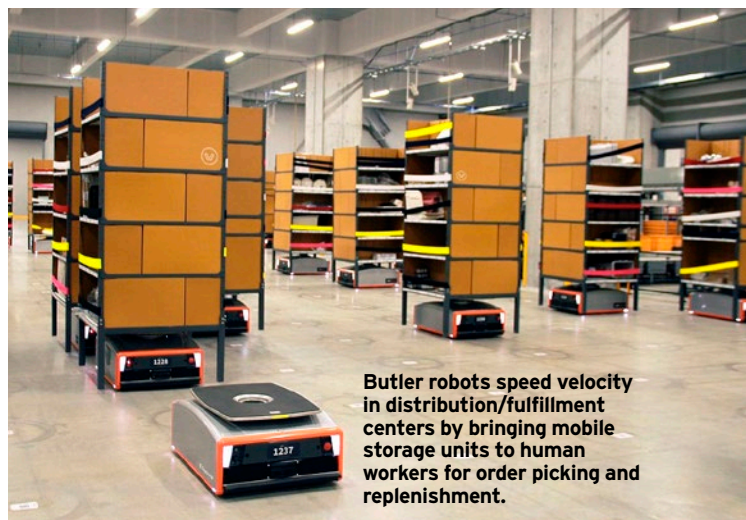
## 8. AUTOMATE YOUR WAREHOUSE

From sorters and conveyors to robots, companies have embraced automation to speed up a range of distribution or fulfillment center processes. One new vendor in the warehouse automation field is GreyOrange, a Singapore-based company that plans to establish U.S. headquarters in Atlanta.

GreyOrange offers three main solutions: the Butler, an autonomous robot that transports mobile storage units to human operators for order picking and replenishment; the Butler PickPal, a robot that picks items from a mobile storage unit into boxes or bags for shipping; and the Sorter, a high-speed sortation system.

"GreyMatter, our software platform, powers both Butler solutions using AI algorithms and machine learning to optimize path planning, maximize storage, streamline zoning, improve space utilization, and accelerate order fulfillment," says Samay Kohli, co-founder and CEO of GreyOrange.

The Butler system helped a home furnishing chain in Japan quadruple the throughput in its warehouse. "In Latin America, one client was able to fulfill 50 percent more orders while reducing operational expenses significantly," Kohli says.



Butler robots speed velocity in distribution/fulfillment centers by bringing mobile storage units to human workers for order picking and replenishment.





CommerceHub improves customers' experience by letting them work directly in the platform to track package deliveries.

## 9. EXPAND CAPACITY WITH AUTONOMOUS VEHICLES

The driver shortage is a well-known pain point for companies that need to move product. Demand for drivers outpaces supply not only in long-distance transportation, but also in the final mile, says Adriel Lubarsky, director of business development at UDelv, a Burlingame, California, firm that provides autonomous vehicles for local delivery.

UDelv currently operates in parts of the San Francisco Bay area, serving a variety of retailers, including a grocery store, a florist, restaurants, an auto parts company, and an office supply company. Each item on the vehicle rides in a separate compartment, which opens automatically when the recipient—summoned by a text message—comes to the curb or parking lot to receive the delivery.

Today, each UDelv vehicle has a safety driver onboard, ready to grab the wheel if the need arises. But as the intelligent vehicles learn more about the roadways they travel, drivers will be able to stay behind, Lubarsky says.

For a company that can't make all its deliveries fast enough because it doesn't have enough drivers to handle the daily volume, autonomous vehicles like UDelv's can supplement the regular fleet. "A company can always have a couple more cars that are there when they need them, and that they can rent out when they don't," Lubarsky says.

## 10. EMPLOY DIGITAL TECHNOLOGY TO MANAGE LAST-MILE DELIVERY FOR LARGE ITEMS

When a customer orders a large item, such as a couch or a home theater system, the ensuing delivery is especially complex. Any small hiccup—say, a miscommunicated appointment time or heavy traffic that delays the driver—may force carrier and customer to reschedule, slowing the delivery and marring the customer's experience.

A solution such as the new Active Delivery Management

(ADM) from CommerceHub in Albany, can improve crucial communications, making sure large items arrive as scheduled and customers are pleased with the delivery.

"We notify the customer when the delivery agent will arrive, and if there are any revisions to the delivery," says Mike Amend, COO at CommerceHub. "We also allow the customer to work directly with the platform," he adds.

A customer who is running late and can't meet the carrier can use the platform to reschedule. "ADM stitches together delivery agents and customers to create a seamless experience, so customers can get their items on time," Amend says.

## 11. TAP LOCAL COURIERS

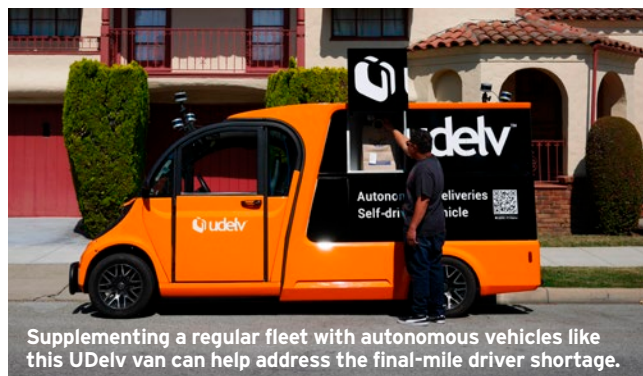
A retailer doesn't have to restrict same-day deliveries only to customers located very close to its DC or store. A local courier company may cover a surprisingly wide area. "You're not constrained to offering same-day delivery from Chicago only to Chicago," says Saxena, by way of example. "If your 3PL has the technology and contracts with local last-mile providers, they can offer same-day delivery to a much wider radius, all the way into parts of Indiana, Ohio, and Michigan."

## 12. JOIN A NETWORK TO FIND CAPACITY FAST

Say you need to make a white-glove delivery tomorrow in Lake Charles, Louisiana. You have a preferred last-mile carrier in that region, but that carrier doesn't have space available tomorrow on a truck headed anywhere near your consumer. What to do?

"Using a single agent, or a few agents, will not give you the sophistication needed to meet customers' growing expectations about speed, cost, service, and delivery options," says Amend. With a platform such as ADM, you get access to a wide network of last-mile carriers, including multiple local carriers in markets where a national retailer might not know the territory. "That opens various opportunities related to capacity or different agents that can deliver faster," he says.

No one is sure what the next big disruption in e-commerce and omnichannel fulfillment will be. Four-hour delivery? Via drone? Whatever the big innovators devise, it will force everyone else to get even more creative about speeding up the supply chain, from way upstream to the final mile. ■



Supplementing a regular fleet with autonomous vehicles like this UDelv van can help address the final-mile driver shortage.





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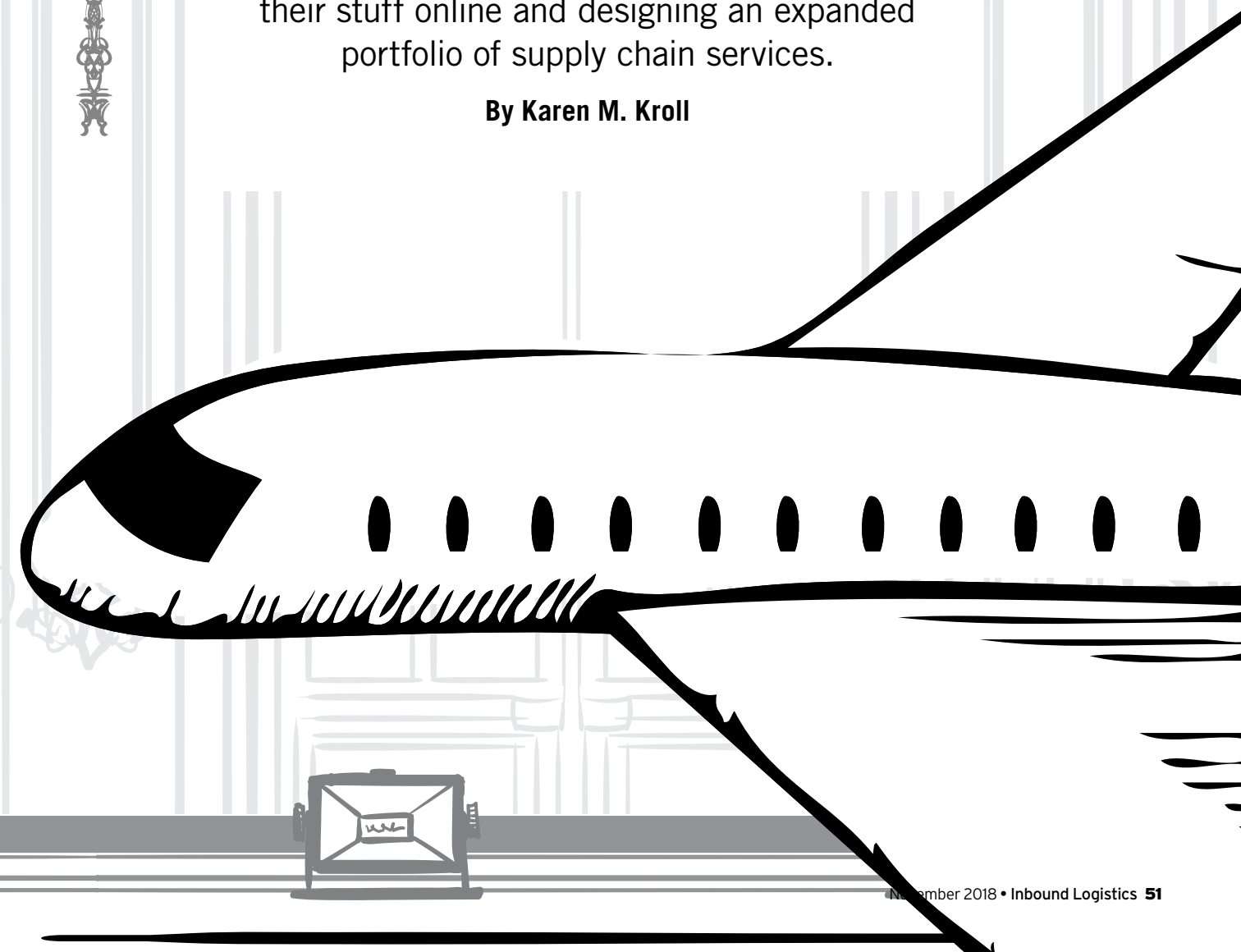


# PROJECT RUNWAY

AIRFREIGHT FORWARDERS  
MODEL NEW SERVICE COLLECTIONS

Traditional forwarders stay in fashion by strutting  
their stuff online and designing an expanded  
portfolio of supply chain services.

By Karen M. Kroll



November 2018 • Inbound Logistics 51



**D**igital disrupters have upended shopping, travel planning, and financial services. Is the airfreight forwarding market next? Indeed, what shippers often call “tech forwarders,” because they offer online access to freight forwarding services, are having an impact on the industry. However, instead of traditional freight forwarders becoming extinct, many are boosting their digital capabilities, while also expanding the range of supply chain services they offer.

“Airfreight forwarders saw they were behind in technology and in being accessible online,” says Nick Bailey, head of research with Transport Intelligence, which provides market research to the global logistics sector. At the same time, they view these as capabilities they can gain back, he adds.

#### Role of Online Services

Moreover, while they make forwarding services more accessible online, few airfreight forwarding platforms actually transport goods or guarantee on-time delivery. “They offer an easier user interface,” Bailey says. “But, can this provide a sustainable advantage?”



**Traditional airfreight forwarders are boosting their capabilities based on changing shipper needs. Panalpina, for example, now offers paperless flights and temperature-controlled shipments, among other innovative services.**



Some say yes. They view the role digital airfreight forwarders play as similar to the services provided by travel-booking sites that act as a liaison between the service providers—in this case, the air carriers—and the customers, Bailey says.

And, online-only forwarders may find a niche within the small business market. Smaller companies tend to have less complicated shipments, and few can dedicate much manpower to their shipping functions. An online platform may be all they need.

Another potential role for online platforms is helping transportation providers optimize their networks, says Cathy Roberson, founder and head analyst with Logistics Trends & Insights LLC in Atlanta. For instance, a cargo plane moving items from Atlanta to Chicago might use a platform to search for backhaul cargo it can transport on the return trip.

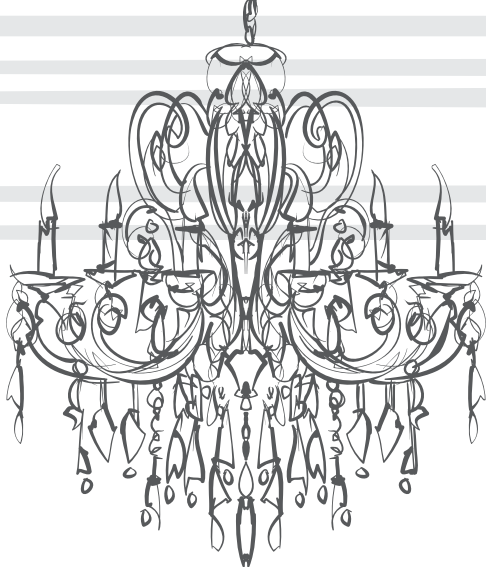
#### People Power

Yet even as airfreight forwarding solutions become more automated, a need for people will remain, especially during emergencies. “Say a shipping line goes bankrupt,” Roberson says. “An online platform won’t help find alternative solutions.”

Moreover, not all links within most global supply chains are digital, says Matt Castle, vice president of global forwarding products and services with C.H. Robinson, a provider of multimodal transportation services and third-party logistics based in Eden Prairie, Minnesota. “Where they’re not, some level of manual interaction is needed,” he says.

To compete in today’s market, freight forwarders have to offer more than just transportation functions. “They need to offer other supply chain solutions,” says





Steven Joiner, senior lecturer in marketing, logistics and operations management at the University of North Texas.

To that end, many forwarders provide data and analytic capabilities that help shippers build sustainable supply chains. Airfreight forwarders can work with shippers to develop solutions that allow them to move goods efficiently and at a lower overall cost.

Rising trade tensions, such as the recent imposition of tariffs on everything from live eels to aromatic salts traveling from China to the United States, will ripple throughout the air cargo industry. They may prompt more shippers to use airfreight forwarders as consultants, Roberson says.

In contrast, an entirely digital relationship often becomes very transactional, Castle says. A shipper requests space and the solution finds it. The solution is unable to assess and improve the shipper's overall supply chain.

Many traditional forwarders also are applying technology to streamline the forwarding process, by automating traditionally manual processes, such as booking and tracking shipments. They're also using technology to provide greater visibility to shipments.

### AI in the Air

Some airfreight forwarders are experimenting with artificial intelligence (AI), Bailey says. For instance, they're using AI to help with demand planning and to predict restocking cycles. Others are deploying AI to read customer emails and identify the most important information.

Forwarders are "asserting that this is a technology that will really see them achieve business process efficiency gains over the next couple of years," Bailey writes in a report titled *The Changing Role of Forwarders*.

Many in the airfreight industry also are keeping an eye on blockchain. However, it's not currently clear how blockchain can be used to create value within airfreight transportation, Bailey says.

## Air Freight Stays In Style

Air freight continues to grow, but at a slower pace than it recently has. Freight volumes are trending up at a 4-percent annualized rate, reports the International Air Transport Association (IATA), helped by strong consumer confidence and an ongoing upturn in the global investment cycle.

"This is well below the double-digit rates of 2016 and 2017 but is still faster than the average pace over the past decade," IATA says.

"There are a lot of things to be positive about," notes David Oxley, IATA senior economist. "However, it's not as positive as it was 18 months ago."

The inventory restocking cycle, which drove airfreight growth in 2016 and 2017, has largely concluded. In addition, manufacturing firms' export order books have weakened, IATA says. Traditionally, growth in airfreight demand has correlated to changes in manufacturing, Oxley adds. The growth of cross-border e-commerce shipments, many of which travel via air freight, only partially offsets these changes, Oxley says.

### Working with Forwarders

How can shippers most effectively work with airfreight forwarders? To start, ongoing planning and open communication are critical in gaining access to air capacity, Castle says, adding that he recognizes shippers often use air freight when supply chains are inadvertently disrupted. That can render the notion of "planning" a luxury. Even so, "hours and days can make a difference in the solutions we can design," he says.

"Be more mode-agnostic," Roberson suggests. Often a combination of transportation modes can provide an efficient, cost-effective transportation solution. Of course, combining transportation modes also requires solid supply chain planning.

At the same time, consider the trade-off between the cost of air freight and the cost to carry inventory, says Seock-Jin Hong, Ph.D., assistant professor at the University of North Texas. To be sure, air freight is expensive. However, if it allows a company to cut inventory carrying costs, that may have a greater impact on its bottom line than lowering transportation expenses. "Reduce not just transportation costs, but total supply chain costs," he says. ■



# AIRFREIGHT FORWARDERS GUIDE

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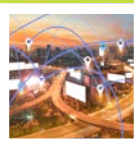
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**How to Prioritize  
and Select Logistics  
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# How to Prioritize and Select Logistics Technology

Technology is the backbone of today's logistics systems, and shippers want to make the right choices for mission-critical systems. One key question is when to outsource technology development vs. managing it with in-house resources. It can be challenging to secure internal information technology staff to focus on developing and implementing essential functions such as transportation management, warehouse management, and purchase order management.

These three high-priority systems are typically outsourced, either directly or as part of a 3PL relationship that provides technology and customization. Shippers will face similar issues with emerging technologies that will enter the mainstream at some point.

**Transportation Management System.** A TMS delivers value in planning, decision-making, shipment follow-up, and KPI tracking. With a TMS, you can define the most efficient shipment schemes according to your specified parameters, and rank according to your priorities. Shipments can then be tracked using a status/event-driven design that enables you to select the best pricing, consolidate orders, customize and run reports, and audit freight bills. Contracted carriers are also integrated into the TMS; allowing them to tender shipments and specify routing. With the TMS tracking every event, you have true visibility into your Key Performance Indicators, supported by accurate reporting.

**Warehouse Management System.** A WMS enables your supply chain to maintain a tight and optimized inventory to reduce transportation costs, transit time and turnaround time to avoid shipment overlap. Using a WMS allows you to configure your supply chain for your business; enabling you to pinpoint the specifics of individual items, including data elements such as UPCs, vendor SKUs, min/max levels for replenishment, preferred storage/fulfillment locations, and weights/dims. It is most beneficial to use a WMS that features capabilities for asset tracking, lot control, barcoding, and kitting as needed to meet your requirements.

**Purchase Order Management.** If your company sources from five or more vendors, either domestically or internationally, a purchase order management system will help bring discipline to your operation.

Look for an outsourced PO management provider that delivers visibility within your supply chain and enables you to manage vendors by exception, with better control over inbound shipments and end-to-end visibility. Dashboards and reports deliver data-driven insights that help decrease shipping costs and keep production and delivery dates on track.

**Emerging Technologies.** Key technologies that are making their way into everyday application include artificial intelligence, Internet of Things, and blockchain. Blockchain has the potential to be the most disruptive to the industry status quo with data that is more secure and more available – removing friction from the system for all parties.



## HOW TO SELECT A TMS

Selecting a TMS can have enterprise-wide implications. Here's a list of items to consider in your decision-making process.



- **CONFIGURABLE VS. CUSTOMIZABLE:** Configurable means you can select parameters aligned with your needs. Customizable offers the most flexibility, but usually requires costly IT development work.
- **INTEGRATION:** Choose a tool that will integrate with existing systems such as your ERP and WMS.
- **BUDGET:** Do some due diligence to understand the investment required in human resources, hardware, and software.
- **TIMELINE:** Design and implementation will take longer than you think, so allow your vendors the time to do the job well.
- **COMPANY:** Vet the company for its culture and experience. A good cultural fit will help pave the way for a successful project.
- **INTERNAL CULTURE:** What is your appetite for change? Often, major IT implementations fail because the internal resources were not prioritized to ensure the project's success.





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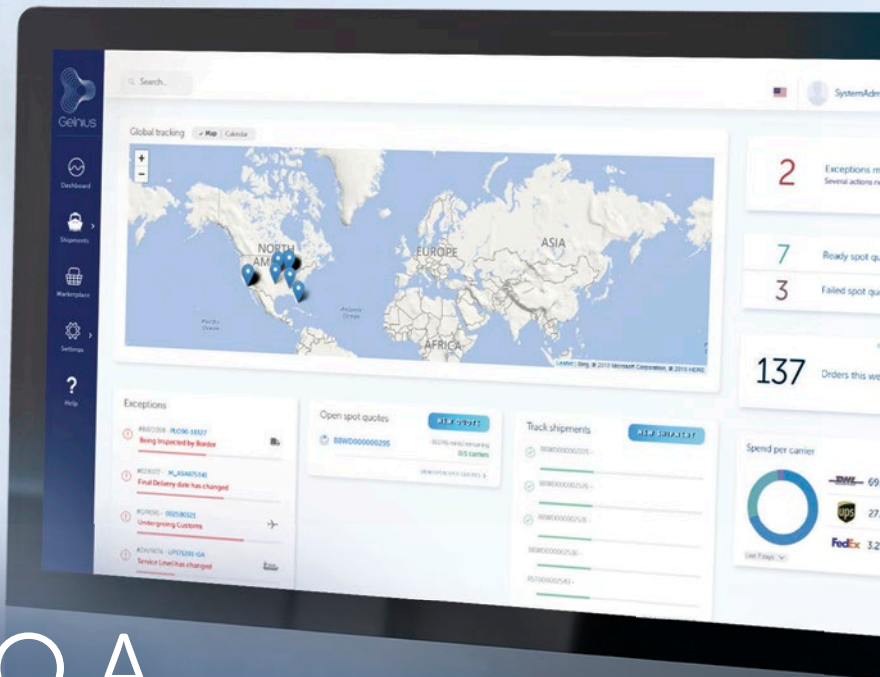
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# How to Use a TMS for Shipment Visibility And Connectivity



## 4 TMS TAKEAWAYS



Medium to large shippers may have millions of dollars of materials and inventory on the highway and often do not know exactly where it is located. Delayed shipments can have a significant economic impact on shippers and receivers, and the lack of visibility from a legacy transportation management system (TMS) into shipment status only exacerbates the problem.

For companies that are using an older transportation solution that is woefully out of date, or still trying to run their operations with spreadsheets and an Access database, a modern TMS will completely transform the efficiency of their supply chain.

With a full-featured TMS, shippers extend their capabilities in both strategic and tactical terms by going beyond the fundamental TMS functions of routing, rating, and payments to uncover the data-driven insights a modern system is capable of producing.

With a powerful transportation management system designed for the speed and complexity of today's supply chains, shippers for commercial and consumer customers can better manage modern connected commerce, in which receivers expect a constant flow of information and alerts about their shipments. A TMS helps deliver a personalized shipping experience, even for business-to-business (B2B) networks.

Users experience centralized information flows to all stakeholders, while the TMS automates functions such as rating, routing, mode optimization, and shipment tracking and reporting. Most companies should start with visibility and connectivity functions in order to quickly streamline their processes and reduce labor costs. The TMS will deliver visibility for both domestic and international shipments and connectivity with any partner in the ecosystem. Then organizations are ready to engage with the data generated by the TMS to enable sophisticated shipment planning and optimization.

Private fleet operators can even use the TMS to secure inbound vendor backhauls and other backhaul opportunities to optimize fleet utilization.

Users can automate alerts and exception management to notify all stakeholders of delays. Organizations see a rapid return on investment from more efficient processes and workflows and better customer service. Rather than staff call centers to handle customer service questions, a TMS can proactively provide self-service alerts to all stakeholders within the shipment lifecycle. Load planners stay focused on optimizing the network rather than dealing with exceptions.

With more efficient processes and workflows in place, users can be seen as shippers of choice by carriers to help ensure they have access to capacity in the marketplace.

- **AUTOMATE PROCESSES:** Improve customer service with automatic alerts and notifications while reducing labor costs. The TMS can integrate with other business processes such as purchase orders, accounting and warehouse management systems.
- **IMPROVE SERVICE:** With greater visibility and more efficient workflows from origin to destination, shippers will be better able to retain their customers. Executing shipments with track and trace functionality delivers companies visibility into their supply chain, making it easier to meet customer expectations.
- **LEVERAGE CONNECTIVITY:** Use shipment visibility to help carriers and shippers align their networks and operations so carriers are able to provide the level of service the shippers require. Pass information to supply chain partners to improve communication and eliminate duplication of data processing.
- **DIVE INTO DATA:** Use the data generated in the TMS to help improve the customer experience and identify areas where processes can be optimized. Analyze transportation costs to optimize the transportation spend in real-time.



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# How to Make Your Holiday Shipping Less Frightful



## 5 STEPS TO HOLIDAY SHIPPING MAGIC

A month before Christmas, a major snowstorm blanketed the Northeast. Traffic is snarled for weeks and truckloads of gifts are stuck in distribution centers and trailers. The Christmas buying rush could be in jeopardy for a large part of the country. Even Santa and his red-nosed reindeer friend are unable to save the day.



Without a solid 3PL relationship, the perfect storm could turn into a perfect disaster for a manufacturer or retail supplier's holiday revenue projections. With so much at stake this holiday shipping season, retail suppliers and 3PL partners must have a plan to deal with the inevitable disasters and near disasters.

Shipments from Asia could be delayed, eating into the timeline of a company's domestic supply chain. The effects from a major storm like Hurricane Florence or Michael could easily ripple for many weeks as trucking capacity is understandably rerouted to recovery efforts.

Trucking capacity is a challenging issue in the best of times. Severe weather events and other external issues can often exacerbate those problems. If a situation develops that requires you to resort to expedited shipping, work with a 3PL that has comprehensive experience in managing those moves, both ground and air freight.

One of the critical steps is to develop a long-term partnership, so you're not scrambling to find help when loads of products are behind schedule. You will not only have a better chance of avoiding problems during the holiday rush, but you could also maximize your logistics processes throughout the year.

Working with a 3PL can give you the technological edge to manage those problems quickly and comprehensively. With a robust TMS, you have visibility into the route, mode, price, and transit on one screen, so you don't have to manage the quoting process with individual carriers manually.

While it will not be quite the same as a red sleigh pulled by eight tiny reindeer, your 3PL relationship can help your holiday shipping season go down in history for the right reasons.



- **PARTNER WITH A COMPREHENSIVE 3PL.** Work with a partner that has an enterprise-level view of your operations, not one that is focused on transactions or filling their own trucks.
- **ENSURE YOUR 3PL SUPPORTS YOU.** Use a 3PL that can support all your needs, including international airfreight forwarding, ocean freight forwarding, customs brokerage, full truckload, less-than-truckload (LTL), and distribution.
- **SET SCHEDULES.** Look at time-definite delivery options to meet tight schedules for crucial shopping days and promotions.
- **LEAN ON TECHNOLOGY.** As supply chains become more complex with decentralized warehousing, drop shipping, and other wrinkles, use a platform that allows you to manage your shipments no matter who's carrying them.
- **BE FLEXIBLE.** Each year's holiday season is different from the one before it. A few years ago, Amazon's sales were huge, and UPS couldn't keep up. This year, Toys R Us is closed, so online sales could spike again, or other retailers could face toy shortages unless they plan ahead. Stay alert to what might make this year's challenges unique.



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# How to Use Expedited Service For Painless Shipping to Mexico

As the second-largest economy in Latin America, Mexico has long been a destination for economic opportunity. For U.S. companies, cross-border regulations, varying border operating hours, and differing procedures for both import and export may complicate shipping and cause significant supply chain delays.

One way to manage the complexity is by using an expedited carrier. With expedited service, it is not only the speed of the service but also the level of communication that is provided that can simplify the process of moving goods in either direction.

Expedited shipping isn't just for emergencies anymore. Many companies use an expedite carrier simply to ensure precise delivery requirements are met, or premium communication is provided. Expedited shipping means less handling and greater oversight for each step of the shipment. Services are available in a range of truck sizes as well as air freight.

Crossing goods in and out of Mexico can be a confusing and sometimes frustrating ordeal, so it is essential to use experienced carriers that can manage the process in a timely fashion.

Utilizing carriers that voluntarily participate in the Customs Trade Partnership Against Terrorism (C-TPAT) program with U.S. Customs and Border Protection provides an advantage, as they are less likely to be examined at U.S. ports of entry.

Standard truck freight bound for Mexico typically involves multiple lengthy steps. Once all the correct documents are obtained, a freight forwarder works with a Mexican customs broker to prepare the shipment to cross the border. The forwarder inspects the load to ensure correct quantity and description, and completes customs documentation.

Once this has been completed, and the consignee pays the duties in Mexico, the forwarder hires a local drayage company. The drayage company then moves the shipment over the border and through customs clearance. Once at the dray yard in Mexico, it is common that another carrier then completes the shipment. It is not uncommon for this process to take days, or even weeks, should any bit of information be missing, or an inexperienced carrier is not well versed in remedying these situations.

This process is much more streamlined when using an expedite carrier, as many of them will already have direct relationships with Mexican customs brokers and are set up to have their shipments receive preferential treatment to be processed due to the time-critical nature of their usual shipments. Also, there is often not another carrier involved for the drayage, as the expedite carrier itself will cross and deliver the goods to their final destination in Mexico.

Before you ship to or from Mexico, ensure you are working with an experienced trans-border carrier that can manage the complexities involved with this important trade partner south of the border.



## KNOW YOUR MEXICAN CUSTOMS DOCUMENTS

Shippers must understand customs requirements for goods moving into Mexico.



- **PEDIMENTO DE IMPORTACIÓN:** The basic Mexican import/export document that must be completed for all commercial crossings.
- **PREFILE:** The document required for entry into the United States from Mexico.
- **CARTA DE INSTRUCCIONES:** A form that contains all the information for all parties involved to be on the same page.
- **COMMERCIAL INVOICE** (in Spanish).
- **BILL OF LADING**
- **GUARANTEE OF PAYMENT** of additional duties for undervalued goods (see Customs Valuation) if applicable.
- **DOCUMENTS DEMONSTRATING COMPLIANCE** with Mexican product safety and performance regulations if applicable.
- **NAFTA CERTIFICATE OF ORIGIN** for products qualifying as North American to receive preferential treatment. The exporter can complete this document, and it does not have to be validated or formalized.



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An aerial photograph of a port area with a city in the background. In the foreground, there are several long trains of colorful shipping containers (red, blue, white) on tracks. To the left, a body of water with a few boats and a pier is visible. In the background, a city with various buildings and a large green park area is situated. Mountains are visible in the far distance under a clear sky.

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## IT Toolkit | by Karen M. Kroll

### Amway India Inks Digitized Warehouse Plan

In 1959, Richard DeVos and Jay Van Andel launched Amway with a single product—a biodegradable and concentrated multi-purpose cleaner. From that modest start, Amway now offers about 500 nutrition, beauty, home, and energy and sports products in 100 countries. Its products are available through independent distributors known as Amway business owners, or ABOs. Amway ranks among the world’s largest direct-selling companies.

To stay competitive in the e-commerce game, direct seller Amway India spruces up warehouse efficiency and accuracy by deploying WMS solutions.

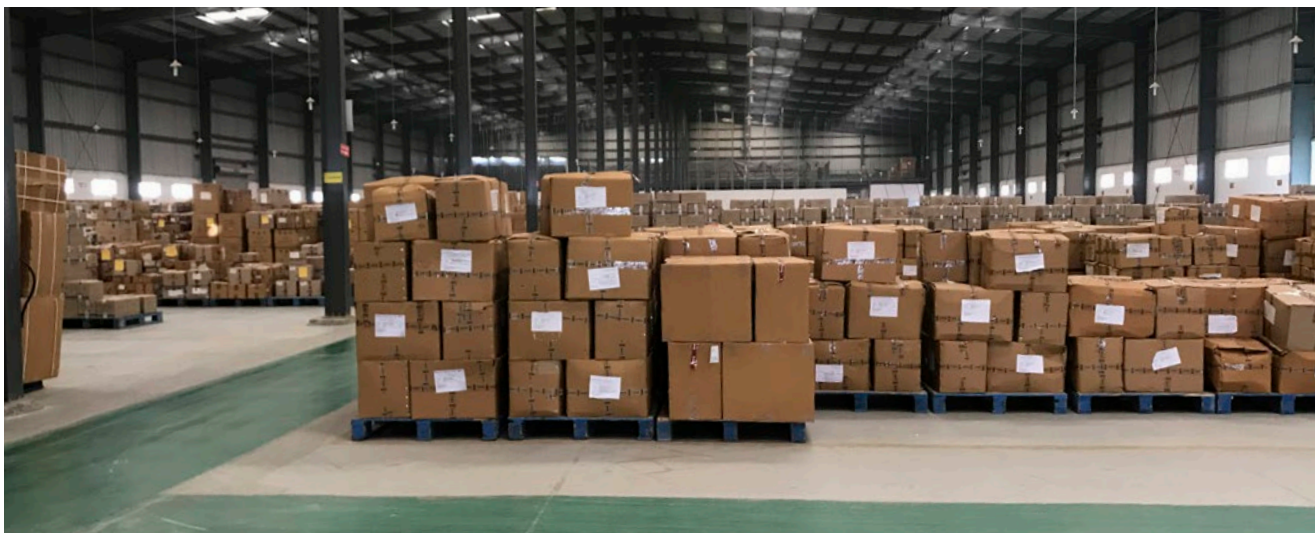
While Amway has always sold directly to consumers, like many other businesses it has been challenged by the rise of Amazon and other e-commerce marketers. In the late 1990s, “the world started to digitize,” says Marc Van Puijssen, director, global shop/retail replenishment program with Amway. At the time, Amway was still processing many orders by phone.

What’s more, a patchwork of stand-alone, homegrown systems drove Amway’s supply chain. “We had little transparency,” Van Puijssen says, adding that the systems in place at the time wouldn’t sustain the company through a changing competitive landscape.

The lack of consistency prompted Amway to shift to off-the-shelf, standardized solutions that together would form a cohesive digital platform across each region of the world, including the Americas, Europe, and India/Asia. By aligning its operations by region, Amway gained “more transparency and more opportunity to take control and create synergies,” Van Puijssen says.

In addition, as e-commerce sales continued to increase, Amway looked at opportunities to work more closely with its carriers, so it could provide customers more comprehensive delivery information. Aligning regional operations helped with the effort, as well.





**As part of its digital supply chain transformation, Amway implemented 50 strategic warehouse locations across the globe with JDA Software. And, in four months alone, 28 warehouse sites in India went live in record speed.**

Amway's digitization efforts have continued over the years, driven by changing business conditions and advancing technology. India is a case in point. Between November 2017 and late March 2018—a total of about four months—Amway India implemented a new warehouse management system (WMS) to handle inbound receipts, storage, order picking, packing, and shipping, as well as distribution and pick-up center replenishment.

The implementations normally would have taken more than twice as long. Why the aggressive timeline? Several years ago, Amway had 39 warehouses in India, driven in part by regulations in the country that required most companies to pay taxes when moving products from one state to another (India has 29 states and seven union territories). To minimize the inter-state

taxes, Amway maintained at least one distribution center in each state.

In mid-2017, India replaced the state taxes with a national goods and services tax (GST). This shift allowed Amway “to reset our distribution network, because we were no longer forced to have a warehouse or a distribution center in each state,” says Van Puijssen. It made sense for Amway to wait until this change in the tax regime was complete before implementing a new WMS across its India operations.

### Making IT Work

At the same time, Amway India was just months from deploying a new Enterprise Resource Planning (ERP) system, with a fixed implementation date. Van Puijssen and his colleagues needed the new WMS successfully running by the time it deployed the new ERP system.

The two events acted as bookends to the WMS implementation, leaving “limited available time for us to roll out the system aggressively,” Van Puijssen adds.

Van Puijssen and his colleagues made it work by partnering with JDA Software Group, a Scottsdale, Arizona-based consultancy and provider of supply chain management, manufacturing planning, retail planning, store operations, and other software solutions.

Amway had previously implemented a warehouse management solution from RedPrairie, which merged with JDA in 2012. Amway also was working with JDA's fulfillment and inventory optimization solutions. The two companies have enjoyed a strong partnership, Van Puijssen says.

One differentiating feature of JDA's technology is its extensibility capability, which means that customers can develop their own additional capabilities for the systems without having to consult JDA, says Peter Heuvel, senior solution advisor with JDA. For instance, Amway Netherlands photographs each order before it ships, and integrates the image within its JDA systems. If a claim later arises stating that some items are broken or missing, the company can show what was in the box at the outset.

## AMWAY INDIA ATTAINS GAINS

The benefits of the JDA warehouse management system implementation at Amway India include overall efficiency gains on several hundred orders shipped each month, driven by:

- Shipping orders the same day they're entered into the system.
- Automatically generating shipping labels.
- Eliminating the need to manually check each package before it ships.



To manage the implementation, Van Puijssen acted as program director, while also calling on Amway's Supply Chain Center of Excellence. Amway India engaged Cognizant, an integration services company, to provide assistance. "These deployments are not just about implementing a system," Van Puijssen adds. "They are also about redesigning and reengineering many of the warehouse's operational processes."

JDA has "an extended partner landscape across all our solutions," Heuvel says. The partners extend JDA's own services and capabilities, and can provide customers an extra pair of hands when needed.

Somewhat surprisingly, JDA itself wasn't involved in the India project. That's because the initial implementations of its solutions with Amway had already taken place years earlier. After the initial install, JDA typically is less involved.

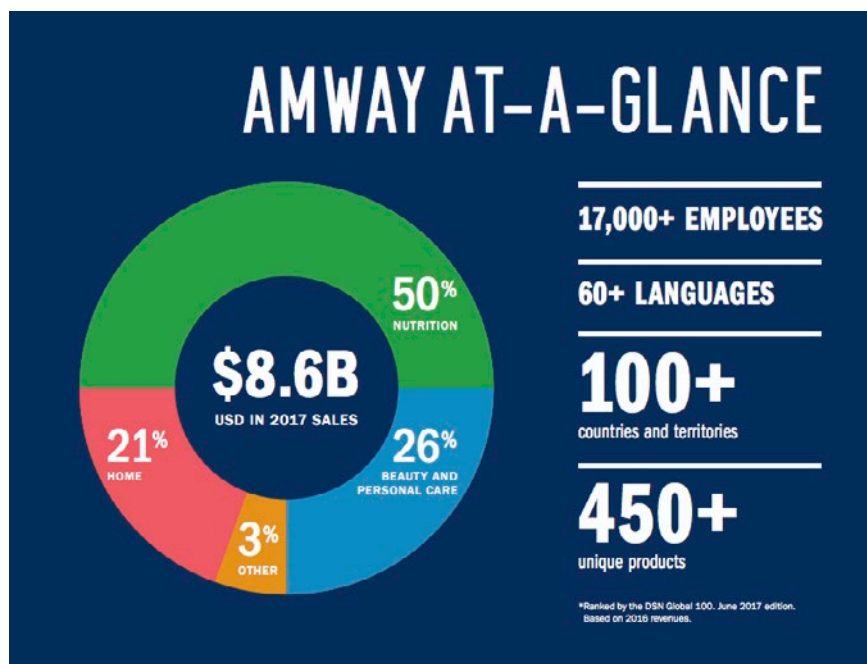
"We welcome the fact that customers over time are able to embrace the solutions and roll out those systems without JDA's involvement," Heuvel says.

### Changing Disciplines

As with any significant technology implementation, effective change management is critical to success. That's especially true when the change will impose more discipline within a process. For example, the JDA WMS limits employees' abilities to do "workarounds," Van Puijssen says. Previously, employees had more freedom to deviate from established processes. While most employees followed the correct processes, the few who didn't could throw off records and information.

In contrast, the new environment is "workflow-driven," Van Puijssen says. The solution assigns tasks that must be completed within the system. If they're not, the system won't allow the affected orders to be shipped.

Along with enforcing more discipline, the solution has helped Amway better



organize workflows within its warehouses. For instance, instead of employees going back and forth between the same two locations, their movements are combined, boosting efficiency.

The new WMS also eliminates the need for Amway to manually check each shipment—unpacking and then repacking every product to count and verify they're the correct ones. Now Amway can verify shipment accuracy by double-checking that the weight of the box and the products inside approaches the weight the WMS indicates is correct. "If the weights are in sync, we can just let the order go," Van Puijssen says. That eliminates a lot of manual work.

In addition, the JDA system automatically generates shipping labels containing carrier information and the address of the respective Amway business owners. "In the past, people had to handwrite address details on the box," Van Puijssen says. "The automatic shipping labels are an absolute gain."

These efficiencies add up, given that Amway India ships an average of several hundred thousand orders per month. "By making the whole fulfillment process more efficient, we are in a much

better position to ship orders on the day that they are inserted into our system," Van Puijssen says. Previously, order fulfillment could take two or three days.

Amway will continue implementing the JDA warehouse management system in other locations through 2018 and into next year. "We are satisfied with the tool and overall support we get from JDA," Van Puijssen says. Amway also will begin deploying other JDA solutions, including JDA Demand and JDA Enterprise Supply Planning.

Ten to 15 years ago, most organizations invested in individual systems, says Heuvel. Today, more companies are investing in suites of products. "Amazon is challenging everybody," he adds. "Companies need to secure their spot in the marketplace by continuing to invest in modernizing their supply chain and IT landscape." That often requires coordinated solutions.

The goal of all these deployments within Amway? "To make sure that the right levels of inventory are at the right locations at the right time," Van Puijssen says. "And to make sure that we deliver pristine service while also minimizing costs."



# Supply Chain Insights

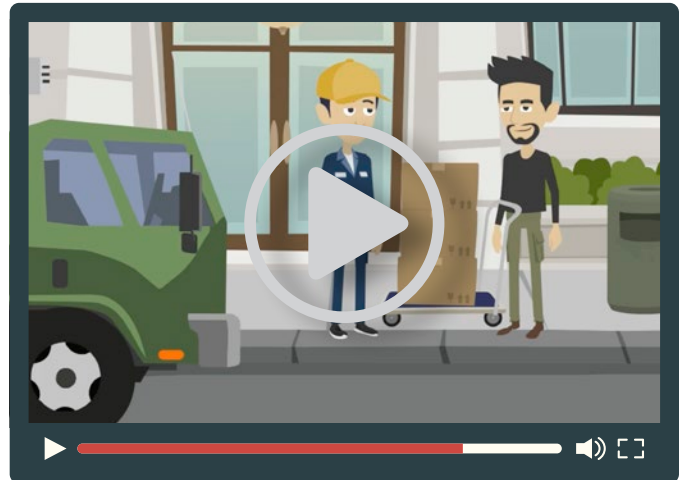
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## whitepapers



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### The Do's and Don'ts of TMS Selection and Implementation

enVista

Transportation is often the largest supply chain cost for a company. A TMS can yield 6-8 percent savings on transportation costs, yet only a fraction of companies take advantage of one. In this whitepaper, you'll learn the do's and don'ts of selecting and effectively implementing the right TMS for your company to realize transportation savings and improve your operations.



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### 4 Signs It's Time For a New WMS

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# Supply Chain Insights

## whitepapers



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### Generate and Communicate Actionable Visibility Data

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### Enhancing Container Visibility

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## e-book



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*Amber Road*

Are you among the 58 percent of shippers who indicate their biggest concern involves rising transportation costs, driven by a growing demand for shorter home delivery guarantees and an ever-expanding network of inventory distribution points? Download this e-book to learn how an automated, multi-mode solution enables you to strategically choose the fastest and most economical shipping routes across various contracts.

## podcast



Kevin Ledversis

### Warehouse Labor: What Can You Do To Retain Employees and Reduce Turnover?

*GUEST: KEVIN LEDVERISIS*

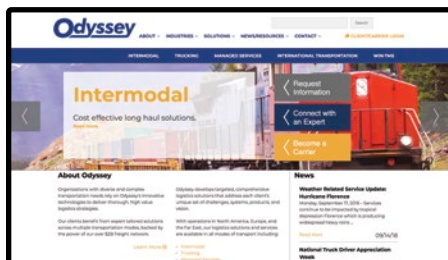
*Director of Sales, Newcastle Systems*

Warehouse labor is demanding work and because of that, warehouses are constantly dealing with the issues of low employee retention and high turnover rates. Without adequately staffed distribution centers, supply chain efficiency suffers. Tune in as Kevin Ledversis of Newcastle Systems discusses potential solutions, ranging from managers on the floor to mobile-powered workstations.





## 3PL

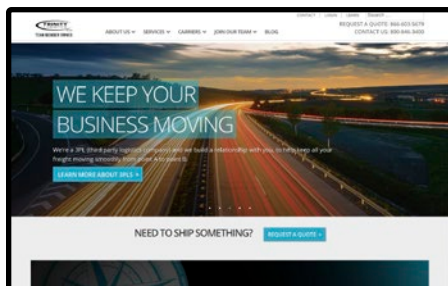


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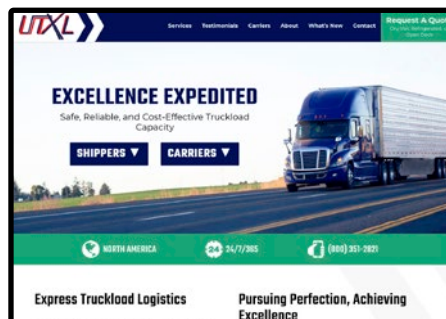


### Trinity Logistics • [www.trinitylogistics.com](http://www.trinitylogistics.com)

Trinity Logistics is a team member owned leading third-party logistics company specializing in freight arrangement and supply chain solutions. Trinity can help you gain control and visibility of your supply chain, reduce costs, improve performance, and increase efficiency. With 35 years of experience and a relationship-driven team, Trinity is the 3PL company you can rely on.

### UTXL • [www.utxl.com](http://www.utxl.com)

Whether you need a core transportation service provider or a resourceful backup relief valve, turn to UTXL. UTXL handles truckload and multiple stop shipments (consolidated LTL) between any points in North America, and can arrange service to or from any state with satellite and/or cellular equipped teams and single drivers for your van, reefer, flatbed, or oversized shipments. Shippers nationwide rely on UTXL for reliable service and economical prices; you can, too. Check out the website for all the details.



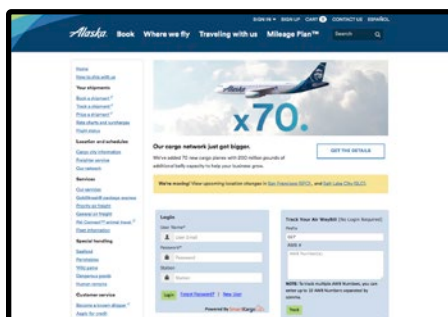


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## Air Cargo

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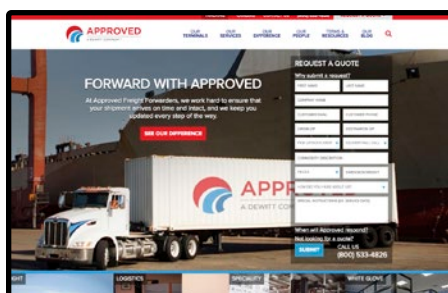
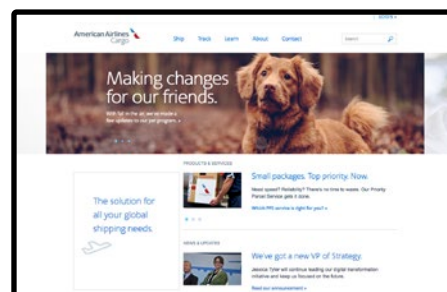
## AIR CARGO

**Alaska Air Cargo • [www.alaskaair.com](http://www.alaskaair.com)**

Alaska Air Cargo provides reliable air cargo services to meet your shipping needs. Whether it be small packages, full ULD shipments, or chartered freighter service, Alaska Air Cargo offers a variety of options, including GoldStreak® Package Express, a next-available-flight service for items up to 100 pounds; Priority Air Freight for time-sensitive shipments that are larger than GoldStreak and need to be at a destination by a specific time; and Animal Express, a priority express service that ensures animals a safe and comfortable journey.

**American Airlines Cargo • [www.aacargo.com](http://www.aacargo.com)**

American Airlines Cargo is your shipping solution, providing more than 100 million pounds of weekly cargo lift to major cities in the United States, Europe, Canada, Mexico, the Caribbean, Latin America and Asia. For almost 80 years, American Airlines Cargo has consistently pushed the edge of cargo technology and expanded its network around the world. American Airlines Cargo locations are worldwide; visit the website to search for one near you.

**Approved Freight Forwarders • [www.approvedforwarders.com](http://www.approvedforwarders.com)**

Since 1991, Approved has been dedicated to the unique shipping needs of the Hawaii and Guam trades, and provides freight forwarding throughout the mainland U.S. Approved accommodates all types of commodities and all sizes of freight. Its highly trained logistics experts use advanced technology to tailor shipping solutions that fit your specific requirements. Approved works hard to ensure that your shipment arrives on time and intact, and keeps you updated every step of the way. To learn more about Approved's freight and logistics solutions, sailing schedules, and competitive rates, visit the website.

**Echo Global Logistics • [www.echo.com](http://www.echo.com)**

Echo Global Logistics, Inc. (Nasdaq: ECHO) is a provider of technology-enabled transportation and supply chain management services. Echo maintains a proprietary, Web-based technology platform that compiles and analyzes data from its network of more than 30,000 transportation providers to serve its clients' needs. Offering freight brokerage and managed transportation services across all major modes, Echo works to simplify the critical tasks involved in transportation management.





## AIR CARGO



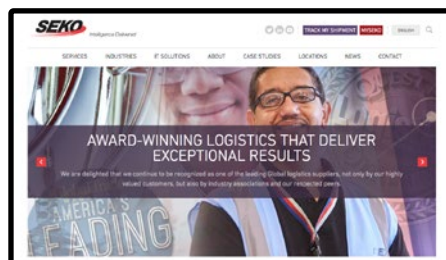
### Lynden • [www.lynden.com](http://www.lynden.com)

Over land, on the water, in the air—or in any combination—Lynden has been helping customers solve transportation problems for almost a century. Operating in such challenging areas as Alaska, Western Canada and Russia, as well as other areas around the globe, Lynden has built a reputation of superior service to diverse industries.

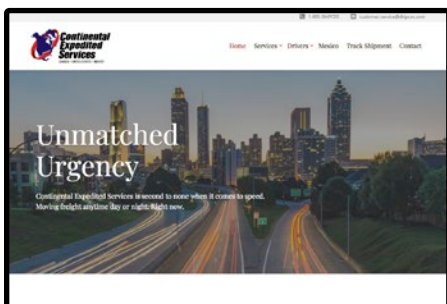
### SEKO Logistics • [www.sekologistics.com](http://www.sekologistics.com)

SEKO prides itself on a commitment to customer service, whether it's a 2 a.m. pickup for a critical industrial part for a plant that is 4,000 miles away, or the cost savings achieved from proactive communication with your vendors overseas.

SEKO offices have the knowledge and expertise to expedite or to consolidate, depending on your need. From Hong Kong to Amsterdam, SEKO knows how to serve its clients. As a non-asset-based third-party logistics provider, SEKO has the flexibility to meet your supply chain needs using a variety of modes and carriers.



## EXPEDITED AIR



### Continental Expedited Services • [www.continentalexpedited.com](http://www.continentalexpedited.com)

Continental Expedited Services (CES) is one of the largest and fastest-growing providers of premium transportation services in North America, accommodating a full range of transportation solutions with one-call, door-to-door services to and from almost any location in the world. CES's 24-hour service center can provide, within minutes, a competitive price and response time for your time-sensitive freight. When you have a critical shipping emergency, call CES for the most reliable expedited service throughout the United States, Mexico, Canada, and now around the world.

### RR Donnelley's DLS Worldwide • [www.dlsworldwide.rrd.com](http://www.dlsworldwide.rrd.com)

Experience the benefits that only come from working with a major, global shipper that is also a top-ranked 3PL. We offer multiple transportation modes, an established multi-carrier network, volume-leveraged rates and service levels, along with technology-enabled systems and processes. Visit our website and contact us today to see why customers have relied on us for nearly 150 years.

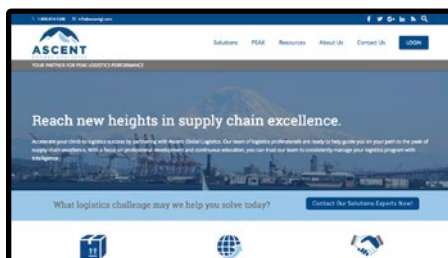




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### Freight Forwarding - Warehousing

## FREIGHT FORWARDING



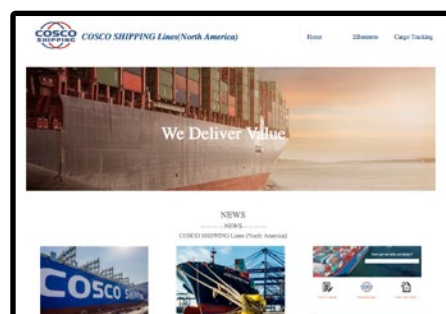
### Ascent Global Logistics • [www.ascentgl.com](http://www.ascentgl.com)

Ascent Global Logistics is a light-asset U.S. based global logistics provider that specializes in domestic transportation management, international freight forwarding and retail consolidation solutions. Ascent Global Logistics is committed to providing customized logistics solutions, premium customer service and state-of-the-art technology tools to help clients accelerate their climb to supply chain excellence.

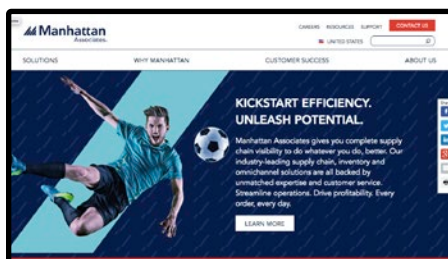
## INTERMODAL

### COSCO Shipping Lines (North America) Inc. • [www.cosco-usa.com](http://www.cosco-usa.com)

COSCO SHIPPING brings the highest quality of ocean cargo transportation services to every corner of the globe, with one of the largest, newest and "greenest" fleets making frequent and timely calls to the busiest ports worldwide. COSCO SHIPPING delivers your containerized cargo quickly, economically and securely, interfacing with rail, road, barge, air and more, with advanced equipment and technology leading the way to absolute supply chain efficiency. And, there is no other ocean carrier who knows China better.



## TMS



### Manhattan Associates • [www.manh.com](http://www.manh.com)

For 23 years, Manhattan Associates has provided global supply chain excellence to organizations that consider supply chain software, processes, and technology strategic to market leadership. The company's platform-based supply chain software portfolios—Manhattan SCOPE®, Manhattan SCALE™ and Manhattan Carrier™—are designed to deliver both business agility and total cost of ownership advantages and are used by 1,200 companies globally.

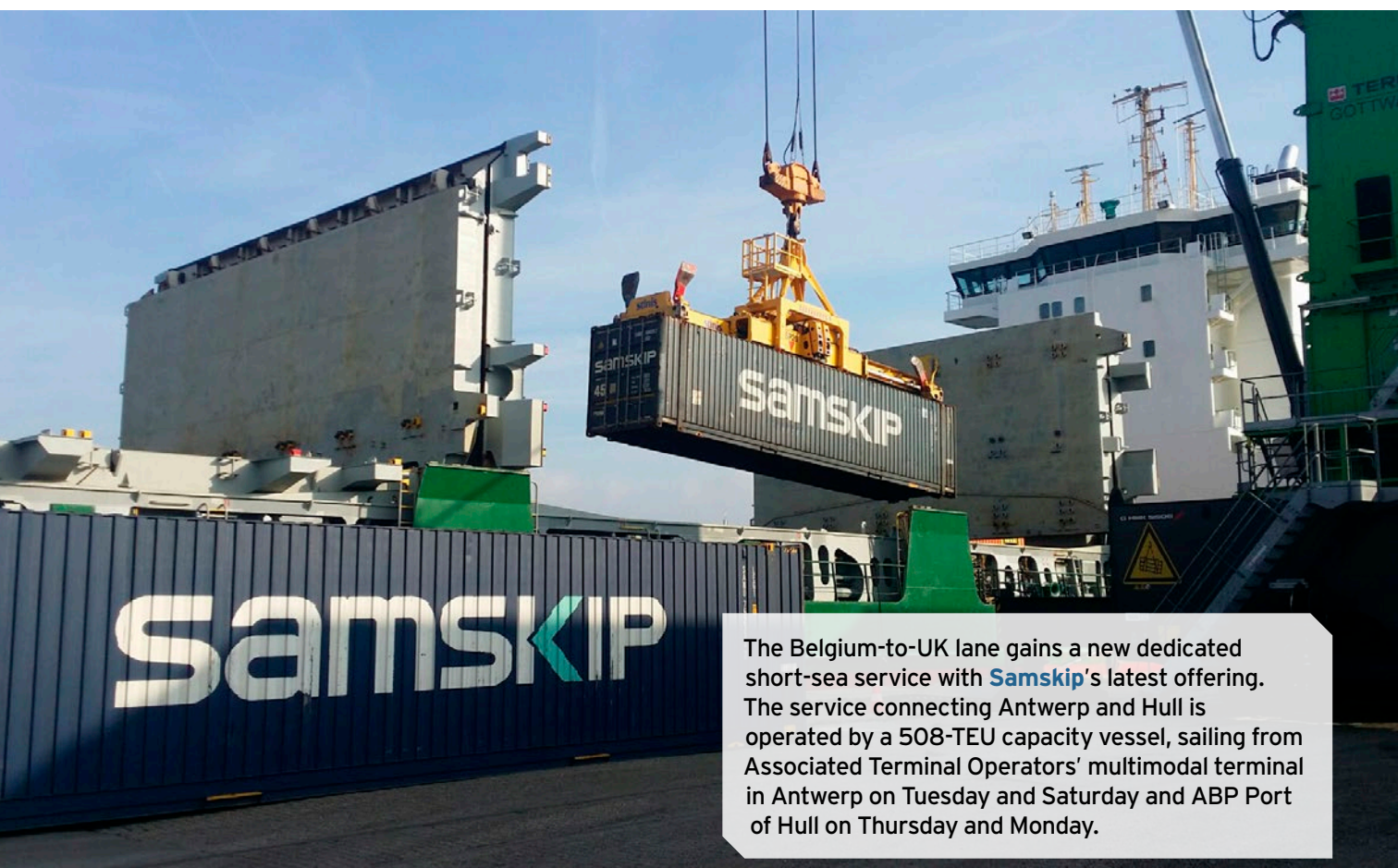
## WAREHOUSING

### Regal Logistics • [www.regallogistics.com](http://www.regallogistics.com)

With nearly 5 decades of experience, Regal Logistics specializes in high volume, mass retailer distribution and offers a comprehensive program of dedicated and shared warehousing, distribution, e-commerce and transportation services—including retailer consolidation, import deconsolidation and cross docking—and value added, reverse logistics and product recall services. With 2.4 million square feet of high velocity Distribution Center in Seattle, Los Angeles and Charleston, Regal offers a superior way to accelerate product to market, while reducing costs, with better access to important markets throughout the world. Regal distributes customer product to hundreds of retailers including Walmart, for which Regal is an authorized trailer pool facility, Amazon, Target, Neiman Marcus & JCPenney.







The Belgium-to-UK lane gains a new dedicated short-sea service with **Samskip**'s latest offering. The service connecting Antwerp and Hull is operated by a 508-TEU capacity vessel, sailing from Associated Terminal Operators' multimodal terminal in Antwerp on Tuesday and Saturday and ABP Port of Hull on Thursday and Monday.

### //Transportation//

Airfreight shippers can take advantage of a new Shenzhen-to-Zurich flight, the first of its kind linking China and Switzerland, scheduled to fly twice weekly using **Hainan Airlines'** belly capacity. Globe Air Cargo Switzerland markets this cargo route, which focuses on instruments, pharmaceuticals, and industrial components.

To bolster services to ocean shippers in the U.S. Gulf market, shipping line **OOCL** introduced its new China-U.S. Gulf route. It calls on strategic ports in Houston and Mobile, and stops at Shanghai, Ningbo, Xiamen, and Yantian.

**MSC** and **ZIM** have teamed up to offer shippers a faster connection between the India sub-continent and the Mediterranean. The ZII-ZIM India Israel Service calls on Nhava Sheva,

Mundra, and Haifa while the ZIE-ZIM India East Med Express covers Mundra, Nhava Sheva, Colombo, Port Said West, Mersin, Piraeus, Istanbul, Mersin, and Iskenderun.

Ocean shippers can expect improved and consolidated service on the Mediterranean-to-U.S. East Coast lane now that **Hapag-Lloyd**, **Ocean Network Express**, and **Yang Ming** are joining **CMA CGM**, **COSCO**, and **OOCL** to enhance



their Mediterranean-U.S. East Coast service. The carriers are consolidating two services into one larger loop, and deploying six 8,000-TEU vessels.

3PL **SPARX Logistics** launched a weekly LCL service linking France to Canada. The new service, which departs from Le Havre and Montreal, includes multiple consolidated containers per week and is accessible from all parts of France to all parts of Canada.

## //Technology//

Small to mid-sized fleets can stay connected with a new industrial truck telematics platform that uses Bluetooth. **I.D. Systems**, a provider of enterprise asset management technology, launched PowerFleet Essence, which consists of the OC53 operator console mounted on the industrial truck and the PowerFleet Control Center app.



Letting warehouse workers receive instructions and capture data hands-free and eyes-free, **Honeywell's** integrated voice-directed productivity solution for SAP Business One users is designed to enhance picking in small- and mid-sized DCs. Honeywell's Guided Work Solutions is a software application that runs on the Android operating system, supporting warehousing tasks such as picking, receiving, put-away, packing, and shipping inventory.

Shippers operating private fleets or utilizing dedicated contract carriers can now market their available or anticipated capacity to other shippers using Backhaul Assist, a new capability from collaborative transportation network **Lanehub**. With Backhaul Assist, shippers with

empty mileage in their private or dedicated fleets can find matches with other shippers' consistent lanes.

Raw materials buyers and sellers can streamline the way they acquire and manage bulk transportation services such as barge, truck, and rail with Conduit, a quoting and operations engine from software solutions provider **Basin Commerce**. Conduit acts as a shipper's privately branded quoting and management workflow platform for its transportation partners network.



**Steel King's** SK2000 Closed-Tube Roll Form Rack Systems feature a fully welded tubular upright, giving the racks higher impact resistance than open-back style uprights. Suited for multi-level pick module/distribution centers, they support a range of warehouse applications and markets including food and beverage, retail, agriculture, and automotive.





Automotive suppliers and other shippers can save storage and transport costs with the collapsible CabCube 2.0 large load carrier from plastic load carrier maker **Cabka-IPS**. Thanks to its collapsible rings, users can easily and quickly fold up and stack the carrier, including the underside and lid, reducing volumes by up to 80 percent.

Global supply chain players of all sizes can now get information about upstream supply and downstream demand in real time. **Eximchain**, a platform focused on blockchain for global supply chains, launched its mainnet, which lets supply chain stakeholders verify their credibility, obtain financing and new contracts help, manage applications, and take part in governance of their own data.

Retailers can now streamline last-mile delivery of large or bulk merchandise via white-glove, curbside, or in-home delivery through **CommerceHub's** Active Delivery Management. This new solution lets retailers leverage a network of carriers, centralize delivery tracking, provide visibility to customers, and take control of end-to-end fulfillment.

**Trucker Tools** introduced upgrades to its Smart Capacity carrier relationship and capacity management platform. The enhancements include digital assist online price negotiation tools that streamline the price bid and counter offer process, and advanced lane search tools that enable carriers to search by preferred lanes and rank lane-specific loads.

## //Products//

To protect cargo tanks that carry chemicals and other cargo types that can damage tank surfaces, coating maker **Jotun** developed the new Tankguard Flexline cargo tank coating. The product is designed to support greater cargo flexibility, long-term performance, and vessel utilization.

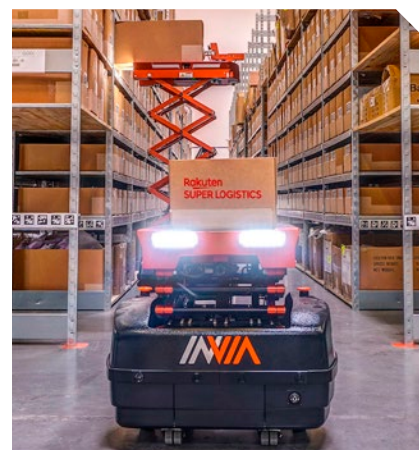
**Mezzanine Safeti-Gates** unveiled dock safety gate models that provide fall protection for loading dock employees. When the trailer is in place for material to be loaded and unloaded to the facility, the safety gate is open and the elevated dock area remains safe.

The new LiteSpeed Washdown High Performance Door by materials-handling systems manufacturer **Rite-Hite** makes it easier for food operations facilities to keep high-speed doors clean. The door meets FDA and U.S. Department of Agriculture clean Good Manufacturing Practices and guidelines. Its PVC vinyl curtain operates on a stainless-steel frame designed without a header or motor shrouds, two areas that harbor bacteria.

Shippers can protect high-value goods with GO Real-Time Secure Tracker from technology and engineering company **Emerson**. The solution combines GPS tracking technology with a C-TPAT-compliant steel locking bolt that provides added security against theft of high-value cargo transported over the road or via ocean. Attached to a container's locking mechanism, GO Real-Time Secure signals if container doors have been compromised.

## //Services//

**Dayton Freight Lines**, a provider of LTL transportation services, opened a service center in Knoxville, Tennessee. The new facility is the company's fourth service center in



**Rakuten Super Logistics (RSL)** opened two e-commerce fulfillment centers to expand its operations into the New Jersey and Chicago area markets. RSL will also expand the use of robotics in all of its 11 locations in 2019, and let e-tailers offer one-day delivery to consumers.



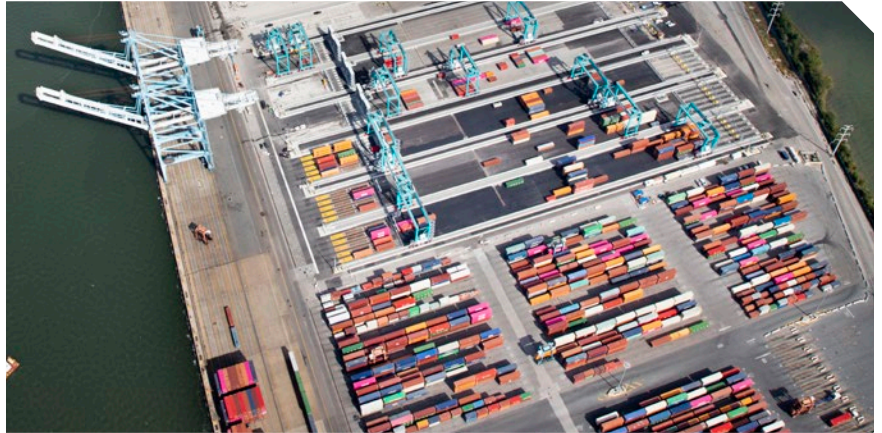
Tennessee, allowing it to provide shippers with statewide coverage and flexible LTL service.

**United Cargo** expanded the options it offers pharmaceuticals and other life science product shippers by approving the new CSafe RAP active container for in-flight use. With an extended battery run time of more than 120 hours, the CSafe RAP maintains temperature integrity and accommodates up to four standard U.S. pallets or five standard Euro pallets.

Supply chain solutions provider **Seldat** opened two warehouses in Canada, within the greater area of Toronto, Ontario and Vancouver, British Columbia. With these additional distribution centers, Seldat provides non-Canadian companies a master distribution agreement that cuts costs because import duties are calculated on the FOB price from the factory, rather than the selling price.

**Kerry Logistics Network Limited** formed a new subsidiary in Pakistan to tap into the increasing trade in South Asia and new business opportunities along the China-Pakistan Economic Corridor. The subsidiary provides air and ocean freight, cross-border road freight to Afghanistan and China, project logistics, and inland trucking services through offices in Karachi and Lahore.

**Ryder System**, a provider of commercial fleet management, dedicated transportation, and supply chain solutions, expanded Ryder Last Mile—a home delivery



Port of Virginia's **Norfolk International Terminals (NIT)** marked a milestone in its expansion project, as its first new semi-automated container stacks started processing container transactions for over-the-road trucks in October 2018. By the end of 2018, NIT plans to commission nine new rail-mounted gantry (RMG) stacks. By 2020, NIT will offer service via 30 RMG stacks.

and white-glove installation solution for bulky goods—in 11 North American markets. The expansion strengthens Ryder's e-commerce fulfillment capabilities, reduces delivery times, and brings appliance delivery and installation to new markets.

In time for the holidays, online retailers can get help processing e-commerce returns with Full Stack Returns from **Happy Returns**. Full Stack Returns captures all returns—whether by mail, in stores, or through the company's Return Bars. Dashboard reporting offers retailers a comprehensive view of returns through all channels and provides channel-specific insights.

**Penske Truck Leasing** opened a facility in Tallahassee, Florida, to offer shippers full-service truck leasing, consumer and commercial

truck rental, contract truck fleet maintenance, and connected fleet solutions, to address issues and options related to onboard technology systems (ELDs, telematics, onboard cameras, etc.). The 14,400-square-foot location is housed on 4.3 acres with four truck bays and a wash bay.

To help West Coast shippers meet the needs of consumers more quickly and flexibly, **Pilot Freight Services** opened a 44,000-square-foot multi-client warehouse in Salt Lake City, Utah. The warehouse supports two-day deliveries to most of the Western United States, without taking on the tax and financial implications of distributing e-commerce products out of California.



# CALENDAR

## YOUR LOGISTICS DATEBOOK

JAN  
28

SMC<sup>3</sup>

### Jump Start 2019

smc3jumpstart.com | Atlanta, Ga. | JAN 28-30, 2019

**AUDIENCE:** Logistics and transportation professionals, from shippers, 3PLs, carriers, logistics service providers, and technology verticals

**FOCUS:** How to confront emerging supply chain challenges; supply chain visibility and AI's expanding role in the industry; intermodal in a post-ELD world; crossborder logistics—new traps, pitfalls, and critical issues; freight profitability analysis

**MAR 19–21, 2019** San Diego, Calif.

Worldwide Business Research

### LogiMed

logimedusa.wbresearch.com

**AUDIENCE:** Supply chain vice presidents and directors from medical device and diagnostics manufacturers

**FOCUS:** Integrating better customer service strategies throughout the supply chain; establishing an end-to-end supply chain digitalization transformation; collecting data on vendor-managed inventory; cost optimizing the supply chain; improving patient care

**APR 7–10, 2019** Tucson, Ariz.

Express Carriers Association (ECA)

### 2019 ECA MarketPlace

expresscarriers.org/events

**AUDIENCE:** Supply chain and logistics professionals

**FOCUS:** Forming logistics partnerships; finding regional and specialized carriers that can provide a viable supply chain alternative; new technologies and transportation services

**APR 8–11, 2019** Chicago, Ill.

MHI

### ProMat 2019

promatshow.com

**AUDIENCE:** Manufacturing and supply chain professionals

**FOCUS:** The latest manufacturing, distribution, and supply chain systems; optimizing the future connected supply chain; the future of drone delivery; mobile robots and their supply chain impact; new strategies for facility energy savings

#### CONFERENCES

**DEC 3–4** Houston, Texas

University of Houston and  
Blockchain Technology Initiatives

### XChain2: Blockchain for Supply Chain and Logistics Forum

blockchainsupplychain.io

**AUDIENCE:** Supply chain stakeholders, solution providers, and business leaders

**FOCUS:** Blockchain, AI, and IoT synergies and their supply chain impact; how these technologies have solved real-world problems in logistics; how to incorporate blockchain, AI, and IoT into business practices

**JAN 21–23, 2019** San Antonio, Texas

National Industrial Transportation League (NITL)

### 2019 Transportation Summit

nitl.org

**AUDIENCE:** Logistics professionals

**FOCUS:** Highway transportation update; trends in rail and ocean transportation; navigating the intergenerational workforce; rail, ocean, and highway freight transportation challenges

**JAN 21–25, 2019** ChampionsGate, Fla.

PEX Network

### OPEX Week: Business Transformation World Summit 2019

opexweek.com

**AUDIENCE:** Operational excellence and business transformation executives

**FOCUS:** Aligning transformation strategy, OPEX, and process architecture; 3M's value-driven global transformation; harnessing intelligent technology solutions and process reengineering

**FEB 3–5, 2019** Sea Island, Ga.

Georgia Ports Authority

### Georgia Foreign Trade Conference

gaforeigntrade.com

**AUDIENCE:** Senior-level shippers, maritime executives, senior managers, and decision-makers

**FOCUS:** Current and future market conditions and growth opportunities; challenges facing shippers, carriers, ports, terminals, and the maritime community; changing legislation and new technologies impacting global trade

**FEB 5–7, 2019** Vancouver, Canada

Informa Exhibitions

### Cargo Logistics Canada

cargologisticscanada.com

**AUDIENCE:** Stakeholders in import, export, and domestic supply chains

**FOCUS:** Economic and trade outlook for Canada and North America; forecast for ocean carriers and Canadian/North American supply chains; retail supply chain prognosis; global cold chain market outlook in Canada and internationally; distribution logistics in the age of e-commerce; deciphering U.S. trade policy

**MAR 10–12, 2019** Savannah, Ga.

International Warehouse Logistics Association (IWLA)

### 2019 IWLA Convention & Expo

bit.ly/IWLA2019

**AUDIENCE:** Warehouse logistics stakeholders

**FOCUS:** The warehouse reimaged; incorporating partners' roles in driving logistics forward; effective warehousing strategies; the latest in warehousing innovation

#### SEMINARS & WORKSHOPS

**APR 25–26, 2019** Cambridge, Mass.

MIT Sloan Executive Education

### Supply Chain Strategy and Management

bit.ly/MITsupplychainstrategy

**AUDIENCE:** Logistics and supply chain professionals

**FOCUS:** The next big trend in supply chain strategy, and the key skills required to be successful; how to better structure a company's supply chain strategy; guidelines for making strategic sourcing and make-buy decisions; assimilating sustainability into your supply chain strategy



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- Carrier Sourcing Managers
- Freight Brokerage / Branch Managers
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### Trinity Logistics pg. 3, 38

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### UTXL pg. 13

[www.utxl.com](http://www.utxl.com) 816-891-7770

## Air Cargo

### Alaska Air Cargo Cover 2

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### American Airlines Cargo pg. 15

[www.aacargo.com](http://www.aacargo.com) 800-CARGO-AA2

## Associations

### MHI pg. 36

[www.mhi.org](http://www.mhi.org) 704-676-1190

### SOLE - The International Society of Logistics pg. 35

[www.sole.org](http://www.sole.org) 301-459-8446

## Data Analytics

### Thomas WebTrax pg. 49

[www.Thomasnet.com/webtrax](http://www.Thomasnet.com/webtrax) 800-699-9822

## Events

### Cargo Logistics Canada pg. 70

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## Ocean

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# Shipping Containers Get a **SECOND LIFE**

Compact, watertight, and easily soundproofed, used shipping containers moonlight as building blocks in dynamic new projects.



## HOUSING A CLOUD

A shipping container provides the home for a groundbreaking new device that uses clean energy to pull water from the air. The air-to-water machine, designed by the Skysource/Skywater Alliance, takes cues from the way clouds are formed—taking in warm air that hits cold air and forms droplets of condensation. Powered by a biomass gasifier—filled with wood chips, coconut shells, or other biomass—the system stores water in a tank inside the shipping container. The tank can then be hooked up to a bottle refill station or a tap.



## A GRANDE COFFEE SPOT

Starbucks recycled 29 shipping containers to form the structure of a store in a new mall in Hualien City, Taiwan. The containers provide 3,444 square feet for coffee drinkers, with skylights letting in natural light. While the Taiwan outlet is the first store built entirely of shipping containers, Starbucks uses containers in more than 40 locations worldwide.

### OTHER SIDELINES FOR SHIPPING CONTAINERS

Music venue	Pop-up shop
Food truck	Sauna
Swimming pool	Gym
Camping pod	Recording studio



## HOME SWEET HOME

What to do when you need to build an apartment complex on an awkward triangular site? Architectural firm Lot-ek turned to 140 shipping containers to build this residential project called Drivelines Studios in South Africa. Choosing the containers based on color, the firm left them unpainted, stacked them securely, modified them onsite, and installed insulation. Lot-ek also added operable windows for natural ventilation as well as a staircase framework and elevators for access. With homes varying in size between 300 square feet and 600 square feet, Drivelines Studios totals 75,000 square feet.

Sources: *TheFutureOfThings.com*; *Fast Company*; *New Atlas*



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