

SPECIAL SUPPLEMENT

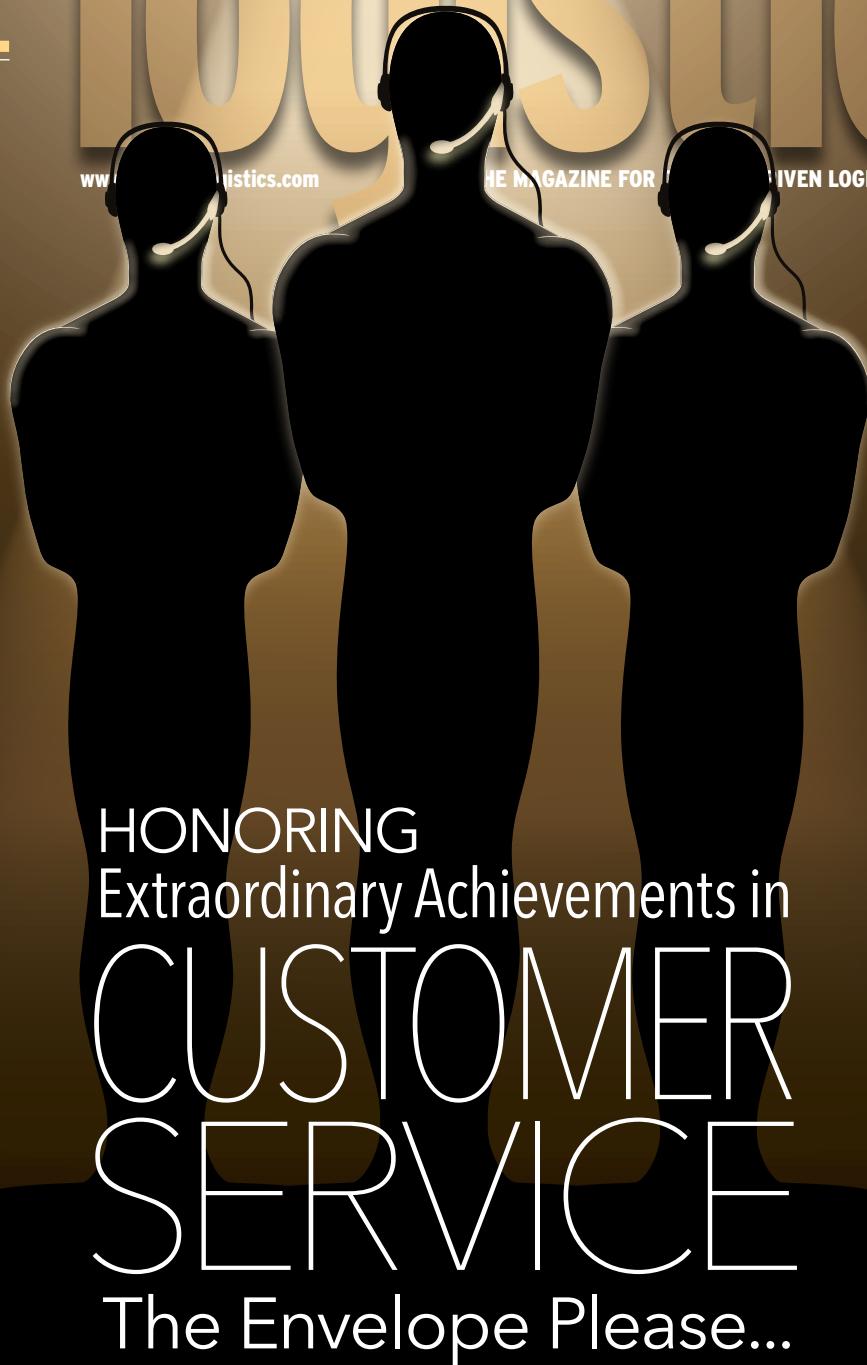
# PANAMA CANAL

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GAME-CHANGER?

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THE MAGAZINE FOR DEMAND-DRIVEN LOGISTICS



**PANAMA CANAL:  
GLOBAL TRADE  
GAME CHANGER**  
page 63

December 2015 • Vol. 35 • No. 12

## INSIGHT

- 6 CHECKING IN**  
*Whatever it takes.*
- 8 DIALOG**  
*The ongoing conversation.*
- 10 GOOD QUESTION**  
*Readers weigh in.*
- 12 10 TIPS**  
*Supporting sustainability throughout your supply chain.*
- 28 THOUGHT LEADER**  
*Realizing the power of a leveraged platform. Sponsored by RR Donnelley.*
- 30 KNOWLEDGE BASE**  
*Free trade - vital to our industry. Sponsored by WSI*
- 32 KNOWLEDGE BASE**  
*The value of a positive customer experience. Sponsored by LeanLogistics.*
- 34 IT MATTERS**  
*Building the connected warehouse.*
- 36 SMART MOVES**  
*Attracting more women to the transportation profession.*
- 38 LEAN SUPPLY CHAIN**  
*RFID: more than just a better barcode.*
- 88 LAST MILE:  
SURPRISING  
SHIPPING LAWS** ▶

## INPRACTICE

### 14 **READER PROFILE** Lin Ding: A Healthy Perspective On Procurement

Lin Ding, procurement manager at Ultimate Medical Academy, is responsible for buying every item the school needs, and implementing strategies for improvement.

### 71 **TOOLKIT** Azteca Foods Craves Inventory Management System ▶

Azteca Foods spices up inventory tracking with an advanced automated system that doesn't cost too much dough.



## INDEPTH

### 40 **Customer Service Superstars**

Logistics plays the role of a lifetime in helping retailers earn rave reviews for outstanding customer service performance. Three leaders reveal their customer service secrets.



December 2015 • Inbound Logistics 1

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DATA CAPTURE  
TECHNOLOGY RIPE  
FOR PICKING  
page 21

December 2015 • Vol. 35 • No. 12

## INFOCUS

### 17 NOTED

### 21 TRENDS

*Distribution centers prepare to reduce picking errors; predictive analytics and Internet of Things revolutionize procurement; mobile-based freight brokerage; transportation and logistics deal value continues to rise.*

### 25 GLOBAL

*SAP releases inaugural Retail Index; The Trans-Pacific Partnership is one step closer to ratification; FMC approves new regulations for OTIs.*

## INFO

### 74 WEB\_CITE CITY

### 78 WHITEPAPER DIGEST

### 80 IN BRIEF

### 84 CALENDAR

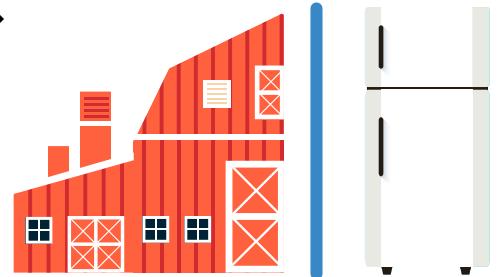
### 85 CLASSIFIED

### 86 RESOURCE CENTER

## INDEPTH

### 46 The Dairy Supply Chain: From Farm to Fridge

How milk and other dairy products moo-ve from tens of thousands of cows to store shelves across the country – with udder efficiency.



### 52 10 Ways to Steer Your Career Drive

Take these steps to help accelerate your logistics career.

### 63 Global Trade Game Changer

As the Panama Canal's \$5.25-billion expansion nears completion, how are shippers and ports preparing?

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#### Optimizing the Holiday Supply Chain With Reliable Delivery Times [bit.ly/HolidaySC](http://bit.ly/HolidaySC)

**Jim Hayden**, Vice President of Solutions, Savi

Timeliness is top of mind during the holiday season. Here's how analytics can help shippers prepare their supply chains to meet delivery spikes.



#### Shipping for the Digital Age [bit.ly/DigitalAgeShipping](http://bit.ly/DigitalAgeShipping)

**Jeremy Bodenhamer**, CEO, ShipHawk

In order to create a consistent end-to-end logistics system, shippers need to connect the technological dots and bring the transportation industry into the digital age.



#### IT Asset Disposition is the Future Of Reverse Logistics [bit.ly/ReverseLogistics](http://bit.ly/ReverseLogistics)

**James Kilkelly**, CEO and Co-Founder, Apto Solutions

As the need for transporting items with potentially sensitive data increases, companies must assess the data risks. This article discusses how to work with an IT asset disposition provider to deliver a secure chain of custody process flow.

## LOGISTICS PLANNER RESOURCES

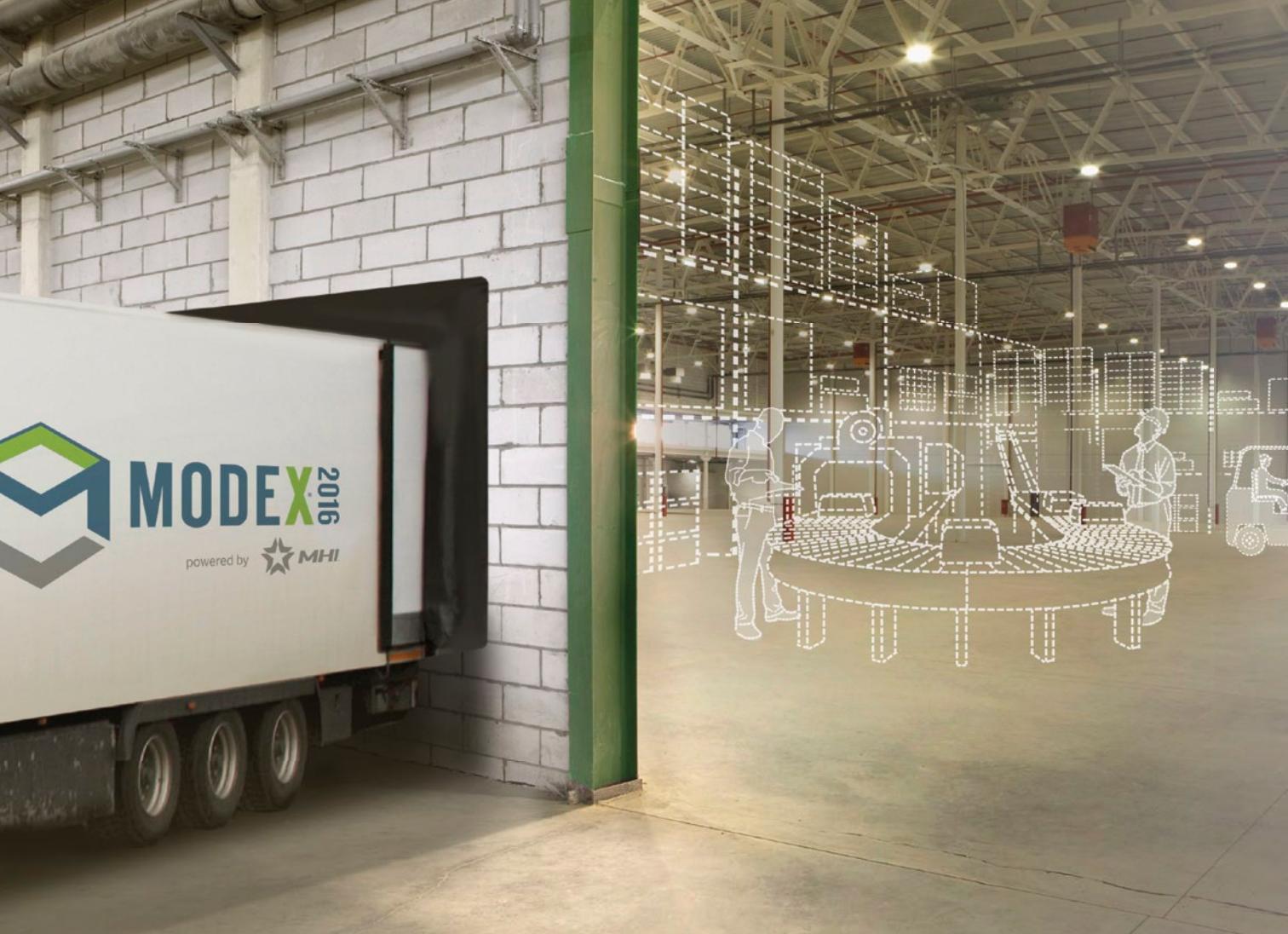
#### Logistics Planner Profiles [bit.ly/PlannerProfiles](http://bit.ly/PlannerProfiles)

The Logistics Planner Profiles let you explore, in depth, the 3PLs, warehousing, technology, and transportation providers that can help you cut transportation and logistics costs, boost efficiency, and improve supply chain operations.

#### Logistics Planner Request For Proposal [bit.ly/PlannerRFP](http://bit.ly/PlannerRFP)

Use this Logistics Planner RFP to have logistics experts look at your specific challenges and needs, and receive free, no-obligation advice, solutions, and information specific to your request.

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# CHECKING IN

*Felecia Stratton*

by Felecia Stratton | Editor



## Whatever It Takes

**S**o you're a retailer, and out of stock on a particular item. Then, of course, a customer orders it. What do you do? When outdoor gear retailer Backcountry was faced with an out of stock that would disappoint a customer, an employee went shopping on a competitor's website, purchased the item with a personal credit card, and shipped it to the customer.

Supply chain managers understand the crucial role that logistics plays in providing good customer service, and enabling your customers to pay it forward to their customers. When it's business as usual, and you have good controls in place, customer service levels are adequate to keep everyone happy. But the true measure of customer service is what your team members, carriers, and supply chain partners do when something goes wrong.

You can work with leading carriers that provide great service, you can implement technology that provides the visibility and capability to redeploy assets and reconfigure your supply chain, and you can rely on a talented pool of internal logistics and supply chain team members to enable good customer service. But *great* customer service comes down to the people behind the systems, and their personal commitment to satisfying customers.

I heard many stories of heroic customer service during a recent visit to Penske Logistics' headquarters in Reading, Pa. One in particular, involving critical shipments moving by truck, stands out. Even though an advance ship notice was issued, when connections arrived to meet the truck, the goods were not on it. With the customer's deadline at risk, Penske deployed a team driver to drive all night, tracked this reshipment truck in transit, met it on the road, and arranged for a crossdock at 3 a.m. to transfer the shipment onto the new vehicle. But by the time Penske accomplished all this, the hours-of-service rules kicked in, and the driver timed out. While the driver sat at a truck stop for the required rest period, the Penske team refused to give up. They called every carrier they could, but no one could deliver the critical shipment the rest of the way. After some creative brainstorming, the team hired a *tow truck* to move the truck from the rest stop to the waiting crossdock, which stayed open to meet the delivery – and the customer's deadline.

The technology was there; the trucks were tracked and the staff had full visibility to the shipments. But, technology did not have the idea to deploy a tow truck to move a critical shipment to its final delivery.

This is just one example of what people can do when everything else fails. They take 24/7 ownership of customer service issues. They exhaust every possible concept and idea. They do whatever it takes to keep their customer commitments.

Technology and equipment are great for enabling standard customer service. But when things go wrong, it's people who drive extraordinary customer service. ■

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# If You Directly Purchased Airfreight Shipping Services Between January 1, 2000 and September 30, 2006, Your Rights may be Affected by a Class Action Lawsuit

## What is this about?

Plaintiffs claim that numerous air cargo carriers conspired to fix prices of Airfreight Shipping Services in violation of U.S. antitrust laws, and that as a result, purchasers paid more for Airfreight Shipping Services than they otherwise would have paid. Defendants deny these claims and have asserted various defenses.

This notice: 1) provides information concerning three new settlements with Asiana Airlines Inc., EVA Airways Corp., and Nippon Cargo Airlines Co. Ltd.; and 2) announces an order certifying a Litigation Class. A trial has been scheduled for April 18, 2016 against the remaining Non-Settling Defendants: Air China Ltd., Air China Cargo Company Ltd., Air India, Air New Zealand Ltd., Atlas Air Worldwide Holdings, Inc., Polar Air Cargo LLC, and Polar Air Cargo Worldwide, Inc. A complete list of Defendants is found on the settlement website: [www.aircargosettlement5.com](http://www.aircargosettlement5.com).

## Who is a class member?

**The Settlement Class** - You are a Settlement Class member in each of the new proposed settlements with Asiana, EVA and Nippon Cargo if you purchased airfreight shipping services directly from any of the Defendants **to** the United States, **from** the United States, or **WITHIN** the United States from January 1, 2000 up to and including September 11, 2006.

**The Litigation Class** - The Court has certified a Litigation Class. You are a member of the Litigation Class if you purchased airfreight shipping services directly from any of the Defendants **to or from** the United States from January 1, 2000 up to and including September 30, 2006.

## What do the Settlements provide?

The settlement with Nippon Cargo provides \$36.35 million, the Asiana settlement provides \$55 million, and the EVA settlement provides \$99 million. These are in addition to prior settlements with other air cargo carriers of approximately \$848 million. The case is continuing against the remaining Non-Settling Defendants.

## What are my options?

At this time, there is no claim form, plan of allocation, or attorneys' fees or reimbursement of expenses to be addressed. There will be a later notice concerning these matters. This notice provides class members a deadline to object and an opportunity to exclude themselves from any of the settlements or the Litigation Class. You must decide at this time if you want to exclude yourself from: 1) any of the settlements described in this notice: Asiana, EVA, and Nippon Cargo; and 2) if you want to exclude yourself from the Litigation Class. Right now you can:

- **Stay in the classes:** This is the only way to get a payment. If you do nothing you will remain in the Litigation Class and be bound by the terms of the settlements.
- **Exclude yourself from one or more of the settlements:** Get no payment. This is the only option that allows you to sue or continue to sue the Settling Defendants concerning the claims in this case. You must exclude yourself by January 22, 2016. You will be eligible to receive payment from any of these settlements from which you do NOT exclude yourself.
- **Exclude yourself from the Litigation Class:** This is the only option that allows you to sue or continue to sue the Non-Settling Defendants concerning the claims in this case. You must exclude yourself by January 22, 2016. You will not be eligible to receive any money from future distributions if the Plaintiffs obtain any money as a result of a trial or from any future settlements with the Non-Settling Defendants.
- **Object:** Write to the Court about why you don't like the Proposed Settlements. The deadline to object is March 4, 2016.

Detailed instructions on how to exclude yourself  
or object are found on [www.aircargosettlement5.com](http://www.aircargosettlement5.com).

The Court will hold a Fairness Hearing on March 24, 2016 at 10:00 a.m., in Courtroom 6C South at the United States Courthouse, 225 Cadman Plaza East, Brooklyn, NY 11201. The Court will consider whether the proposed settlements are fair, reasonable, and adequate.

## This is only a summary.

For more information, visit [www.aircargosettlement5.com](http://www.aircargosettlement5.com), email [administrator@aircargosettlement5.com](mailto:administrator@aircargosettlement5.com), or call toll-free at 1-855-382-6460 in the U.S., U.S. territories, and Canada. Other countries can call 1-513-795-0998, toll charges apply. You may write to: Air Cargo Settlement 5, c/o Garden City Group LLC, P.O. Box 10083, Dublin, OH 43017-6683, USA.

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Avoid 10 common packaging mistakes to keep high transportation costs and inefficiencies from boxing you in.

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Great Logistics Sites: Prime Destinations, Unmistakable Results  
[bit.ly/4topsites](http://bit.ly/4topsites)

## HASH IT OUT

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Using the wrong packaging, weight, or freight class? Here's how to avoid common shipping mistakes.  
[bit.ly/7shippingmistakes](http://bit.ly/7shippingmistakes)

Neta Berger @TheNetaBerger

This will be helpful! @ILMagazine does not disappoint on useful advice.

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Here are some ways to handle the truck shortage.  
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Juan @macasomedina

Realistic shipping deadlines not only prevent last-minute shipping mistakes, but encourage better truck scheduling.

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Truck drivers are the lifeblood of your supply chain. Meet some of these dedicated professionals.  
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Gone are the days of the spreadsheet. The trends all lean toward real-time mobility.  
[bit.ly/weedoutwaste](http://bit.ly/weedoutwaste)

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Jordan Global @JordanGlobal1

Excellent article. Must read for importers! Have a written security program.

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## READER EMAIL

### We Salute You, Too...

I've really enjoyed reading your magazine over many years and appreciate all the great effort that goes into its publishing. Thank you.

Gerald M. Yale

Senior Transportation Specialist  
833d U.S. Army Transportation BN

We appreciate your feedback.

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## SOUNDBITE



“At a time when the shipping industry is facing strong headwinds, scale is more critical than ever. I firmly believe CMA CGM will enable NOL to address the industry's new challenges.”

– RODOLPHE SAADE

Vice Chairman, CMA CGM

on CMA CGM acquiring Neptune Orient Lines (NOL), Southeast Asia's largest container shipping company

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# Good Question...

READERS WEIGH IN

## Is logistics boring?

Readers explain why this adjective does not apply.

How food makes its way to your plate, how your clothes transit from field to factory to shop floor, and how smart-phone components crisscross the globe...this isn't boring stuff, it is vital to the economy.

**Ryan Petersen**  
CEO, Flexport

If logistics is boring, why has it become the strategic imperative a business must have to differentiate itself in the market today?

**Michael Hejaz**  
(via Facebook)

Logistics is exciting. At any moment, an unexpected event can cause a potential late delivery. Deciding how to handle it can be the difference between a timely delivery and a disappointed customer. Logistics fosters creative solutions for these tough challenges.

**Tony Bryant**  
LLP Manager, Penske Logistics

Not boring at all; every day we learn something different. That's why I love it.

**Vane Jorge**  
(via Facebook)

Logistics is too much fun. I get to make a difference every day.

**William McClennen**  
Account Executive, Greyhound Lines  
(via LinkedIn)

Logistics can be boring for those who consider it as merely transportation management. When you start treating it like the entire process of sourcing, warehousing, and transportation, it will take you to new levels of career satisfaction.

**Prabhat Tripath**  
Visiting Professor,  
Supply Chain Management  
CEPT University, Ahmedabad, India  
(via LinkedIn)



“Never. Uber has a valuation greater than many nations. Within years, self-piloting vehicles, drone deliveries, and home-printed 3D goods will be commonplace. This technological revolution is driven by the logistics of people and things.”

**Robert Gordon** Program Director, Reverse Logistics Management,  
American Public University

Logistics is never boring. It is one of the major functions of supply chain management, and keeps the ball moving. There are challenges every minute, and some of them are unforeseen, keeping logistics professionals alert all the time. The description of boring does not apply.

**R Vijayan**  
Supply Chain Consultant

### HAVE A GREAT ANSWER TO A GOOD QUESTION?

Be sure to participate next month.

We want to know:

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# 10 TIPS

## STEP-BY-STEP SOLUTIONS



## Supporting Sustainability Throughout Your Supply Chain

**C**ompanies can support sustainability throughout their supply chains with many different approaches. Reducing paper by automating manual business processes, optimizing shipments and loads with end-to-end visibility, saving fuel and lowering emissions by avoiding supply chain disruptions, and sourcing materials from suppliers with like-minded sustainability goals are just a few examples. Ed Rusch, vice president of corporate marketing for Elemica, offers these suggestions to utilize technology and a business network to balance growth, revenue, and costs while greening your supply chain.

**1 Empower trading partners.** An industrial strength collaboration platform and communications framework designed to facilitate real-time and accurate information exchange help create efficiencies and remove waste.

**2 Upgrade for efficiency.** Redesign your supply chain network to bring items closer to home where it makes economic sense, and globally source where

assurance of supply balances savings. The shortened supply chain reduces mileage to save on fuel consumption and minimize risk.

**3 Be proactive.** Increase visibility into supply chain operations, including event management that enables tracking and monitoring of material flows as they happen. Incorporate analytics to identify patterns as they develop for data-driven, proactive action.

**4 Optimize transportation processes.** Carrier collaboration and automated processes reduce mileage and carbon emissions. Ensure orders are shipped on time, to the right location, and in the right quantities for successful first-time deliveries.

**5 Use slot-booking applications.** Look for an application that allows you to schedule appointments at docks for arrivals or departures to ensure the distribution center has the right team and equipment to facilitate loading and unloading to reduce wait times and idling.

**6 Prepare for interruptions.** Avoid supply chain disruptions that require expedited shipments to meet customer service deliveries, which can impact transportation spend and the environment.

**7 Develop flexibility.** Promptly adapt to business changes with minimum impact on the environment by building flexibility into supply chain processes.

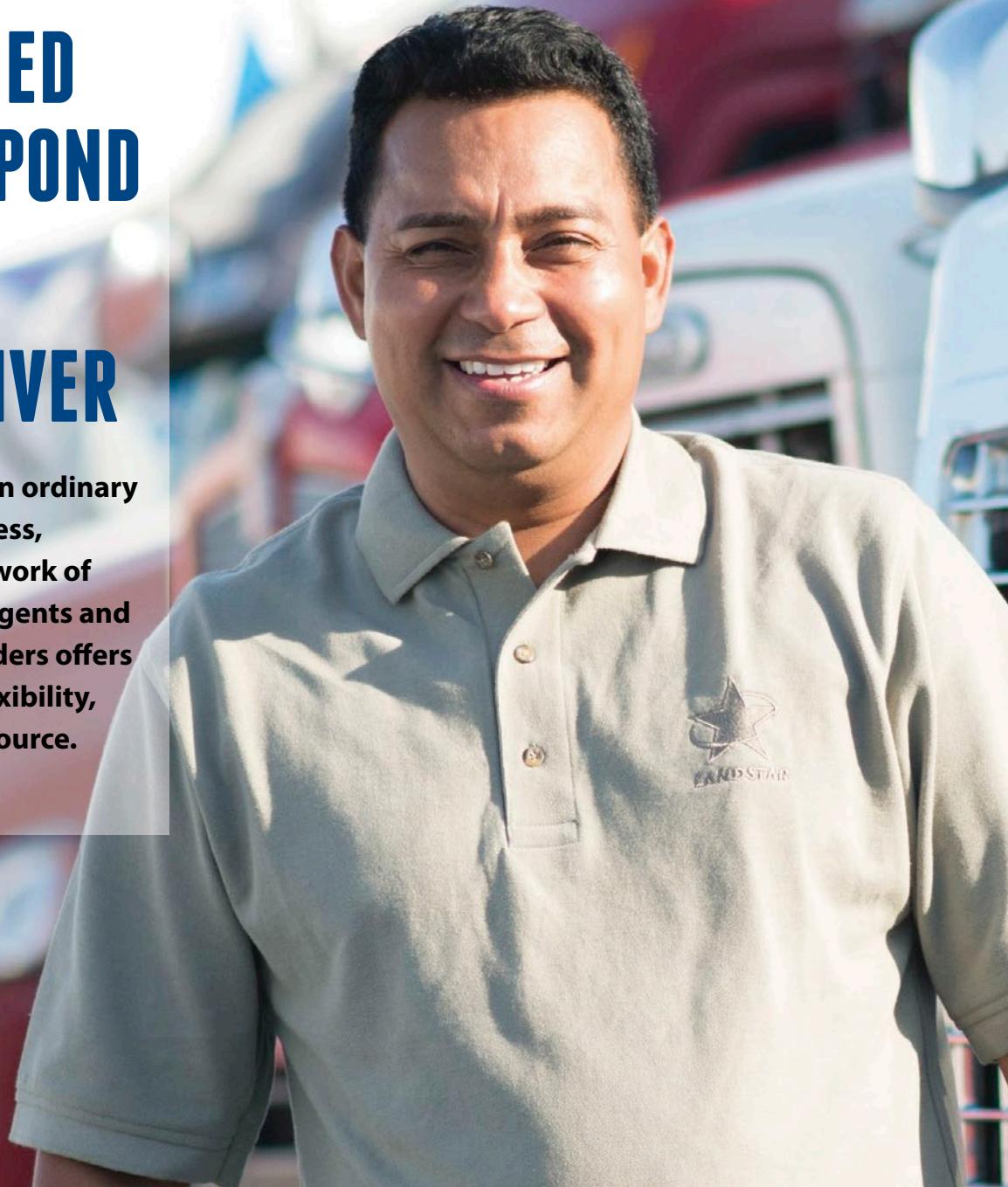
**8 Reduce excess inventories.** Extra stock contributes negatively to the environment by unnecessary energy and resource consumption during manufacturing, transportation, and warehousing.

**9 Optimize material flows.** Collaborate with suppliers for a 100-percent accurate inbound flow of materials and services, reducing the unnecessary waste of resources.

**10 Automate manual processes.** Automating procurement, sourcing, inventory, logistics, and order management limits the use of paper to save trees and other resources. ■

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**Lin Ding is procurement manager at Ultimate Medical Academy in Tampa, Fla. She has held this position since May 2015.**

**RESPONSIBILITIES**

Overseeing procurement, supplier management, and contract management; creating a framework to support the department's procurement activities; implementing purchasing policies and improvement strategies.

**EXPERIENCE**

Financial advisor, Yuebao Investment Co.; purchasing and sourcing coordinator, Seven Halos; public relations specialist (intern), VienneMilano; operations and supply chain coordinator, OnHand; corporate compliance and business analyst, Perimeter Global Logistics.

**EDUCATION**

Bachelor of Economics, International Business, Beijing Institute of Technology, 2010; MS, Supply Chain and Operations Management, University of Texas at Dallas, 2013.

## Lin Ding: A Healthy Perspective on Procurement

**W**HEN I WAS A CHILD IN CHINA, I WANTED TO BE A world traveler. I was curious to see what people were like in other countries, and to get to know their cultures and foods. That's why I studied international business for my bachelor's degree and then came to the United States for graduate school.

I started out pursuing a graduate degree in finance. But after some study and research, I decided that finance wouldn't give me the broad, global perspective I wanted. So I switched to supply chain management.

At Ultimate Medical Academy (UMA), I manage a team of associates with a shared focus on procurement, supplier management, and contract management. UMA helps students train for careers in health care.

My team is responsible for procuring everything the school needs for use as an

educational institution and as a business unit. To accomplish our goals, we have to work with many different variables and groups of people. I work with departments and project owners to identify their needs and define the specifications for solicitations that result in contracts or purchase orders. I also research suppliers and communicate with them on terms, the scope of work, and service performance.

I conduct contract negotiations, sometimes independently, and sometimes with members of a department or project and our legal counsel. I have to make sure that

### The Big Questions

**What's your idea of a perfect day off?**

I would spend a sunny morning at the beach. In the afternoon, I'd check out local boutiques and antique stores. Then, I would end the day at a nice seafood restaurant with a view of the sunset.

**What else do you enjoy?**

I love camping and being out in the wild. I have a wonderful memory of lying in the desert in Death Valley National Park, looking up at the night sky.

**What's the best work-related advice you've ever received?**

Start the day doing the work you find hardest, and finish with the work you find easiest.

**Do you have any regrets?**

I love my work, but I regret being so far from home and missing many moments with my family. I've been in the United States since 2011. I was glad to have a chance to go back to China for a visit in February 2015.

vendors meet all our product and service needs, and comply with all relevant regulations. I'm also responsible for keeping our purchasing activities in line with our corporate budget and financial goals.

Because we buy everything—including specialized items such as information technology and medical equipment—we have to become experts quickly. Members of departments and project teams help us learn about the products and services they use, but we also do a lot of research

ourselves about the items we buy and the suppliers that provide them.

Recently, I became responsible for managing our contracts for textbooks and e-books. This was the first time I worked with publishers, and I had a lot to learn. I contacted our curriculum team to find out about our past relationships with the publishers, and explored how we could help one another.

My team has great technology to help us, and strong policies that are

easy for everyone to apply. Our goal is to make our processes even more clear and user-friendly, and make our data more transparent.

Beyond that, we start new projects almost every day. There are always updates and improvements in the products and services UMA uses. Each new project comes with its own challenges, and based on that experience, my team keeps growing stronger and becoming more knowledgeable in all aspects of the business. ■

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# NOTED

THE SUPPLY CHAIN IN BRIEF

m&a

**Digi International**, an M2M solutions provider, purchased Ontario-based **bluenica**, a company focused on monitoring temperatures of perishable goods in the food industry. The bluenica SaaS application uses wireless sensors, cloud software, and communications gateways to monitor the temperature of perishable goods, and to deliver real-time alerts automatically to smartphones, tablets, and computers.



## UP THE CHAIN



◀ **Victoria McManus** was named executive vice president and chief strategic officer of **The Greenbrier Companies**, which designs, manufactures, and markets rail freight car equipment. In this newly created position, McManus will develop and implement strategic initiatives to diversify and grow the company's business, and enhance its integrated freight car manufacturing, aftermarket, leasing, and services business model.

The **Maryland Port Administration** appointed **Christina E. Correale** director of harbor development to oversee its dredging program. In her new role, Correale is responsible for the selection, environmental feasibility, engineering and design, construction, and operation of dredged material placement sites, with an emphasis on beneficial and innovative reuse.

## GREEN SEEDS

▶ Transit packaging provider **PPS** converted more than 40,000 weekly fresh fish deliveries from single-trip throw-away boxes to returnable transit packaging in the past three years, reducing the level of packaging waste in the UK's seafood logistics sector. PPS boxes are returnable, with leak-proof lids that can be resealed and used up to 120 times during their lifecycle.



**Saddle Creek Logistics Services'** compressed natural gas (CNG) fleet reached the 50-million-mile mark. Since its launch in 2012, the CNG fleet has grown from 40 tractors to 200 dedicated tractors. Each CNG truck

reduces the fleet's carbon footprint by approximately 120,000 pounds of carbon per year. By using CNG trucks instead of diesel, Saddle Creek has replaced more than 9 million gallons of diesel with natural gas.



▲ The Massachusetts Port Authority's **Paul W. Conley Container Terminal** received a 2015 Breathe Easy Leadership Award for making significant contributions to reducing diesel emissions and promoting clean transportation in the Northeast. The Northeast Diesel Collaborative—a cooperative consisting of state environmental agencies, the regional Environmental Protection Agency, and private sector companies—gave the award to Conley Terminal with the objective of reducing diesel emissions, improving public health, and promoting clean diesel technology.

**SEALED DEALS**



▲ Supply chain solutions provider **CEVA Logistics** signed a new agreement with cosmetics retailer **Sephora**, marking its expansion into Brazil's beauty industry. Under the contract, CEVA will consolidate a variety of cosmetics such as makeup, fragrances, hair care products, accessories, body and bath products, and Sephora's private-label brand from 40 distribution points within Brazil into one CEVA multi-user site near São Paulo.

**Allied Business Products**, a distributor of residential and commercial roofing materials, siding, windows, and other products, deployed next-generation Applan vehicle routing and scheduling software from **TMW Systems**. Allied will implement the new solution in more than 200 U.S. business locations to improve distribution efficiency and customer service while reducing planning time, overhead, and wasted mileage.

Third-party logistics provider **Kane Is Able** and **Materne North America**, the maker of fruit snack GoGo squeeZ, signed a long-term agreement for logistics support. KANE will provide both manufacturing logistics and product distribution and fulfillment support for Materne, and operate a 221,000-square-foot dedicated logistics operation in Bolingbrook, Ill., which will serve as Materne's North American distribution center.

**GOOD WORKS**

▼ Terminal tractor manufacturer **TICO Manufacturing** rolled out a special-edition DOT/EPA certified Breast Cancer Awareness Pro-Spotter terminal tractor to raise awareness and support for the fight against breast

cancer in October, National Breast Cancer Awareness month. TICO donated a portion of the proceeds from the purchase of the unit to a cancer organization chosen by the customer.

Pinktober is part of TQL Cares, the company's employee-driven community service initiative. TQL has raised more than \$164,000 since 2010 to support breast cancer research and patients.

**Total Quality Logistics** offices across the nation raised \$45,799 during its Pinktober campaign, the company's month-long blitz to support breast cancer awareness and fundraising.

The **UPS Foundation**, the philanthropic arm of UPS, awarded more than \$7.9 million to 37 non-profit organizations. These grants support programs that champion diversity and inclusion by furthering economic empowerment, education, inclusion, and mentorship.



recognition



▲ **Agility**, a global logistics provider, was named **Partner of the Year** by Flowserve Corporation, which supplies pumps, valves, seals, and related services to the power, oil, gas, chemical, and other industries. Flowserve recognized Agility for providing superior and flexible supply chain solutions, consistent and reliable service, quick response time, and best-in-class IT systems used to track and report on shipments.

**Ralph Garcia**, a driver for ABF Freight, an ArcBest company, was honored with a **Mike Russell Image Award** from the American Trucking Associations (ATA), a national trade association for the trucking industry. Garcia has been with the LTL operator for 23 years, and is based in Albuquerque, N.M. Garcia has driven more than 3.5 million accident-free miles during his 37-year career. The image awards are named in honor of the late Mike Russell, former ATA vice president of public affairs.

**Dayton Freight Lines**, a provider of regional LTL transportation services, recently received two customer awards. For the fifth time, Dayton Freight was honored with the **2015 Transportation Excellence Award** from The Scotts Miracle-Gro Company. This award recognizes superior performance in the regional LTL category. Dayton Freight was also chosen as the **2015 GENCO Regional LTL Carrier of the Year**. This award is based on on-time service, EDI compliance, primary tender acceptance, claims performance, and ease of doing business.



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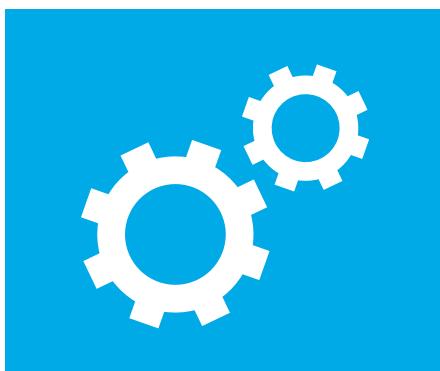
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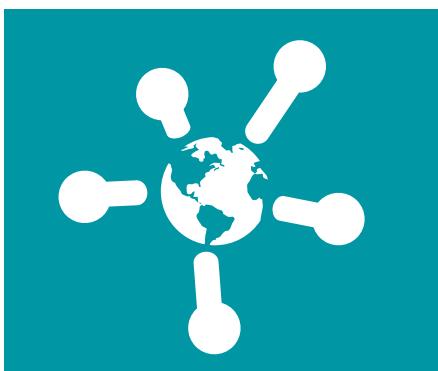
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# TRENDS

SHAPING THE FUTURE OF LOGISTICS

E-commerce trends are driving DCs to mobile technology and voice applications.

## Data Capture Technology Ripe for Picking

**R**educing picking errors remains a high priority for distribution center operators, especially as customer expectations, particularly for faster and more accurate delivery, continue to increase, according to a recent Honeywell survey.

by Chris Lewis

Distribution centers are currently losing an average of more than \$400,000 annually to picking errors, the survey finds. In response, approximately 90 percent of survey respondents—IT decision makers from the United States, United Kingdom, France, and Germany—intend to purchase new mobile and voice-directed technology for their distribution centers by 2020.

Respondents expect the data capture technology, ranging from mobile scanners to wireless headsets, to achieve three goals: reduce errors, cut costs, and increase bottom lines.

“With the rise of e-commerce purchases, customers expect their items to get to them faster than ever,” says Bruce Stubbs, director of industry marketing, Honeywell Sensing and Productivity Solutions. “Mobile and voice

technology allows for a streamlined picking process, so that customers’ orders are fulfilled and delivered to them faster than before.”

In addition to reducing costs and errors, the technology also ensures that distribution centers have the data capture and asset tracking systems they need to improve their omni-channel processes, whether they are fulfilling orders from retailers or online consumers.

“Nearly two-thirds of survey respondents support omni-channel distribution, and more than 80 percent agree that data capture technology has made a positive impact on their omni-channel distribution strategy,” Stubbs adds. “As online orders, tracking, and fulfillment continue to increase, this technology will become vital for distribution centers in all four corners of the world.”

## Predictive Analytics and IoT to Revolutionize Procurement

Procurement decision makers in the United Kingdom, Europe, and North America use savings tracking and spend analytics technologies more than any other technological application, according to the third set of results from Xchanging's 2015 *Global Procurement Study*. The London-based business technology and services provider's survey focuses on the ways in which various technologies, along with technology investments, may soon transform the procurement industry.

While savings tracking and spend analytics technologies are currently implemented by 77 percent and 76 percent, respectively, of the 830 survey participants, two other technologies—predictive analytics and the Internet of Things (IoT)—will likely revolutionize the industry in the short term. Nearly 80 percent of survey respondents believe they will both have an impact shortly.

"Predictive analytics will drive a far more strategic approach to sourcing, while also creating further opportunities for automation to increase accuracy and efficiency," says Luke Spikes, CEO, Global Supply Chain Analytics, Xchanging. "On the other hand, because the supply chain landscape is increasingly global, IoT can enable businesses to track the exact whereabouts and condition of goods in transit, automatically monitor inventory levels, and remove human error from the process."

Five technology investments are currently considered a top priority for survey respondents: process enhancement

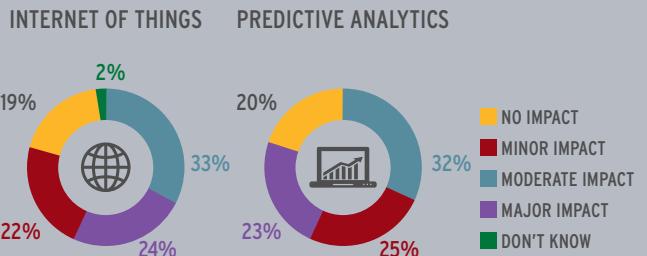
(28 percent), automation (24 percent), talent development (22 percent), procurement analytics (20 percent), and e-sourcing (16 percent).

"Procurement leaders ignore technology-driven progress at their peril," Spikes notes. "If they don't seize the opportunity, they will quickly fall behind their competitors."

"By using them to their full advantage, and becoming fully educated about their processes, procurement leaders can enhance the performances of their organizations and increase their bottom lines," he adds.

### TECHNOLOGY'S IMPACT ON PROCUREMENT

Procurement leaders say IoT and predictive analytics will have a moderate to major impact on supply chain operations.



Source: Xchanging

## Freight Brokerage in the Palm of Your Hand

The trucking industry logs nearly 20 billion "empty miles" each year. This waste of mileage has a detrimental impact on North America's trucking and freight logistics market, and leads to high operating costs and a lack of resource productivity.

To address these concerns, an alternative to traditional, web-based freight brokering in North America is quickly emerging: mobile-based freight brokerage.

By streamlining the freight brokerage process, mobile technology is anticipated to ease the trucking industry's current inefficiencies by reducing operating costs; improving communication and visibility for all trucking professionals, from top to bottom; and enhancing the productivity of resources, including fuel.

"Mobile-based brokering also aims to

provide flexibility to fleets—with the ability to access all freight information and transparency from freight pickup to drop-off, all in the palms of their hands," says Wallace Lau, senior industry analyst for Frost & Sullivan's Automotive and Transportation Practice. "It also helps automate processes such as dispatch, load finding, delivery status, and driver payment."

Traditional freight brokers currently assist 99 percent of the trucking and freight logistics market. But, by 2025, the market will prefer mobile-based brokering over web-based brokering, according to Frost & Sullivan.

Aside from the benefits of mobile-based technology, Frost & Sullivan anticipates the transition will primarily occur as a result of digitization. Freight brokers will

need to combine features from their traditional brokering, along with load boards and web-based freight brokering, into one solution for drivers and fleets.

"Mobile-based freight brokering will provide an opportunity to enhance the productivity and efficiency of both shippers and carriers," Lau says. "Mobile-based platforms will also have the potential to minimize the carbon footprint through improved freight logistics, while also reducing the driver shortage strain on the trucking industry."



# Transportation and Logistics: Let's Make a Deal

If it seems that there's a new merger or acquisition announcement daily in the transportation and logistics sector, you're not imagining it. Deal value rose considerably—from \$63.1 billion during the first three quarters of 2014 to \$97.9 billion during the first nine months of 2015, a 55 percent year-over-year increase. That's according to PwC US' third-quarter analysis of global deal activity in the sector.

During the third quarter of 2015, 44 transactions occurred, resulting in a total value of \$28.8 billion, a 27-percent decline when compared to the second quarter's aggregate. And six of these transactions were considered megadeals—valued at \$1 billion or more, comprising \$18.3 billion of the third quarter total.

“Following a strong start to the first half of the year, transportation and logistics

deal activity tapered off slightly during the third quarter, though we are expected to still be on track to have a successful year for deal activity in the sector,” says Jonathan Kletzel, PwC's U.S. transportation and logistics leader.

As in previous quarters, cross-border expansion was a primary cause of many transactions, especially in countries with advanced economies, as 55 percent of their transactions involved transnational activity. Strategic investors interested in expanding their operations to ultimately create a global transportation network oversaw 48 percent of all cross-border transactions.

Aside from cross-border expansion and strategic investments, logistics companies continued to influence transportation and logistics activity as well, encompassing 23 percent of all transactions.

“As more companies make the decision to outsource logistics services, and turn to third-party suppliers, efficiencies in scale and geographic reach will become critical drivers of inorganic growth,” Kletzel says. “These deals were primarily driven by the need to fill a specific gap, gain scale, or expand margins.

“Also, growing consumer demand, as a result of an improving economy, is leading to increased freight volume, creating a potential opportunity for logistics companies to consolidate,” he adds.

The fourth quarter historically has been a popular time for merger and acquisition activity, as strategic investors prepare for the next year's operations. As a result, PwC predicts the mergers and acquisitions environment will likely see increased activity in 2016.



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# GLOBAL

THE WORLD AT A GLANCE

by Chris Lewis



Changing up store arrangements can improve consumers' experience.

## Today's Digital Economy: What's in Store for Retailers?

Retailers are currently pressured to adjust their internal and customer-facing strategies to meet consumer demands, which are evolving at a rapid pace. But they must be willing to evolve as well, according to SAP's inaugural Retail Index survey conducted in partnership with global forecasting firm Oxford Economics.

The survey of senior retail executives reveals a focus on three goals to better serve customers:

**1.** Retailers should create more inclusive views of their customers through external and internal data, including social media networks.

**2.** Trend lines show that neither online nor in-store sales alone will sustain growth. For this reason, it's important that retailers also incorporate each of their online, mobile, and in-store sales tactics into an integrated digital strategy.

**3.** Retailers should regularly alter store arrangements and product offerings so that customers' in-store experiences improve—a principal objective for 97 percent of survey respondents.

"We are immersed in a new digital

economy, as traditional brands look at ways to up their digital game and deliver a unified customer strategy," says Lori Mitchell-Keller, global general manager of SAP Consumer Industries. "SAP's 2015 Retail Index indicates that consumers also value brands that create more engaging and personalized experiences across all touchpoints. The key is to keep in-store experiences high on the

digital innovation agenda."

"Retailers are at an inflection point," adds Edward Cone, deputy director of thought leadership, Oxford Economics. "Established methods of driving growth need to give way to newer approaches. But there are great opportunities for companies that meet their customers—wherever they may be."

### Improving the Customer Experience

Here's how retail executives plan to improve the customer experience, today and in three years.

	Today	In Three Years
Loyalty management and offerings	80%	98%
Online channel integration	79%	91%
Assisted selling	76%	88%
Digital marketing and sales	68%	95%
Mobile channel integration	53%	89%
Personalization for the end consumer	41%	54%
New products that extend beyond core offerings	38%	62%
Smart products/IoT	23%	43%

Source: SAP/Oxford Economics survey of retail executives



## The Trans-Pacific Partnership: One Step Closer to Ratification

For years, financial experts have been forecasting the potential impact the Trans-Pacific Partnership (TPP) will have on the global economy once it is finally ratified. Some predict that the TPP will represent 40 percent of the world's economic output, while others anticipate it will strengthen the economic ties of the 12 participating countries (*see map below*), including the United States, Canada, and Mexico.

Now that an agreement was reached on Oct. 5, 2015, the TPP—one of the largest free trade agreements in history—is one step closer to ratification, and logistics professionals throughout the world should respond accordingly.

“The ways in which companies approach TPP matters, and compliance will be key,” says Melissa Harrington, sales director, content business at Waterloo, Ontario-based Descartes Systems Group, a software provider for logistics companies. “The Rules of Origin—the criteria used to determine the national origin of a product—will be of particular importance.

“Importers and exporters need to have

effective processes and procedures in place to ensure compliance with the program before using it,” she adds.

To initiate effective processes and procedures, logistics professionals should review the TPP's text, which was published on the U.S. Trade Representative website, USTR.gov, on Nov. 5, 2015. Among other significant statistics, the text reveals that the TPP will ultimately reduce or eliminate 18,000 tariffs.

Consequently, according to Harrington, importers and exporters should evaluate the products they receive from the 12 TPP-affiliated countries to see whether or not they qualify for preferential duty treatment, which is fully defined in the agreement.

“U.S. importers should also review where they are currently sourcing their products from, so that they can determine if re-sourcing goods from a TPP country makes business sense,” Harrington suggests.

“Additionally, both importers and exporters should take a closer look at their existing trade management systems and processes to ensure they are prepared to

take advantage of the TPP,” she notes.

Although an agreement has been reached, the ratification process may still take some time, as each of the 12 countries will need to individually review the TPP's potential impact.

“Because the TPP has an open architecture, other countries can join at a later date,” Harrington says. “If the TPP works the way it's supposed to, it will set a new precedent for future trade programs between nations—where countries will join the TPP instead of creating a new trade agreement.”

## Ocean Intermediaries Plug Into New Rules

After nearly two years of review, the U.S. Federal Maritime Commission (FMC) voted 4-1 to revise various regulations under its Ocean Transportation Intermediary (OTI) Licensing and Financial Responsibility Requirements and General Duties.

Among the revisions, OTIs must now file all licenses and renewals electronically. In addition, all OTIs will be required to renew their licenses every three years, a regulation that takes effect on Dec. 9, 2016. The FMC will publish a schedule on its website for currently licensed OTIs to renew their licenses in 2016.

Furthermore, OTI licensees will now be responsible for ensuring their agents respond to any FMC request for records as quickly as possible. At the same time, due to a new regulation, no one can advertise or act as an ocean transportation intermediary unless they have either a valid OTI license or are properly registered.

Meanwhile, two other regulations have been created (Section 515.17) or revised (Section 515.42(c)). The new regulation requires the FMC to administer an appeals process whenever applications for OTI

### Trans-Pacific Partnership (TPP) Participating Countries



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licenses are denied; the revised regulation allows forwarders to offer electronic certifications to whichever carriers have been granted the forwarding services.

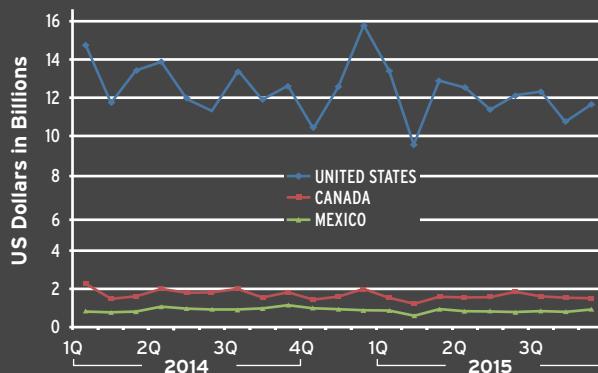
The FMC has also prohibited eliminating a regulation that requires registered, foreign-based non-vessel-operating common carriers (NVOCCs) to use U.S.-licensed OTIs if they are offering their services in the United States. According to the FMC, contrary to some parties' beliefs, it still has the authority to continue its obligation.

"The new OTI rules strike the appropriate balance between our regulatory responsibilities in the area of international waterborne commerce, and the mandate President Obama gave us to reduce unnecessary or cumbersome regulations," concludes Richard Lidinsky, commissioner of the FMC.

## China Imports From North America Drop

The slowdown in China's economy is taking a toll on imports from the Americas. China's imports from North America dropped 9 percent, while its imports from South America were down 11 percent in Sept. 2015 compared with Sept. 2014.

### CIF US\$ Value January 2014-September 2015



Source: Datamyne, www.datamyne.com



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## Realizing the Power of a Leveraged Platform

**Q: How can today's manufacturers deal with increasing regulations, demand volatility, and shifting global trade currents?**

**A:** One way a manufacturer can mitigate the effects of increasing regulations and demand volatility is by working with a third-party logistics (3PL) provider with a leveraged platform. When a 3PL provider utilizes a leveraged platform, it is employing the same best practices to manage its own supply chain needs as it uses to meet the needs of its client base. Benefits include consistent and sizeable freight volume and expertise regarding the impact of logistics on a business overall.



CHUCK

FATTORE

President  
RR Donnelley Logistics

A leveraged platform is also likely to have a global transportation network, strong carrier relationships, and simplified pricing to help manufacturers cost-effectively manage domestic and international shipping and distribution needs. Also, advanced transportation management systems employed by providers with leveraged platforms simplify less-than-truckload management by allowing shippers to easily compare competitors and gather reliable quotes for the most cost-effective rates. Shippers can leverage a transparent, technology-backed network to control shipping costs while streamlining the logistics management process.

**Q: What innovative sustainability initiatives also increase efficiency in logistics?**

**A:** According to *T&L 2030*, a series of studies produced by professional services firm PwC, supply chain stakeholders are expected to support sustainability goals of the other parties in the shipping process. With this in mind, successful companies identify, measure, and continuously improve efficiencies associated with consumption and use of energy and other resources. In logistics, companies can join the EPA's SmartWay Partnership to promote energy efficiency throughout their shipping activities. The Partnership brings key freight shippers, trucking companies, railroads, logistics companies, and trade/professional associations together to follow mutually advantageous efficiencies.

**Q: Why do companies have such a hard time embracing global trade management?**

**A:** One reason is the ever-increasing complexity of global trade management. This can be mitigated by using a single-source 3PL provider that understands how to put both domestic and international distribution systems to work for its customers. The experts who man such interconnected global networks deliver deep, valuable and actionable insights on the best ways to deliver freight to its final destination. A 3PL provider often has extensive knowledge of U.S. and foreign requirements and regulations, which helps reduce the amount of time spent managing customs, duty/tax calculations, and other transportation requirements.

Another reason organizations experience challenges with global trade management is the lack of visibility into the supply chain. Shippers often seek increased visibility into their global shipments. A leveraged platform with technology-backed solutions can be used to gain a complete understanding of shipping and delivery trends that impact project outcomes. These tools let shippers view tracking information in real time and seamlessly trace shipments to know exactly where freight is, no matter what stage of the delivery process.

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## Free Trade – Vital to Our Industry

**F**ree trade has been a pillar of the U.S. economy for much of our nation's history. Over the past several decades, the United States has negotiated many bilateral and multilateral free trade agreements (FTAs) to increase access to other countries' markets while opening the U.S. market and benefiting consumers. In addition to membership in the World Trade Organization, the United States has free trade agreements in place with 20 other countries.

For the United States, the international trade of goods and services represented 30% of the economy, or over \$5 trillion in 2014. The export side of the equation supports almost 12 million jobs spread across both the manufacturing and service sectors of our economy.

For our industry, trade represents an outsize role. From port workers to truck drivers, train crews to warehouse workers, thousands of supply chain jobs depend on exports. The handling of products for export alone generates over \$192 billion in revenue for the U.S. logistics industry annually.

### Trans-Pacific Partnership

Over seven years ago, the United States began negotiating a comprehensive free trade agreement covering many countries on the Pacific Rim. The Trans-Pacific Partnership (TPP) has grown to encompass 12 countries, including our NAFTA partners Mexico and Canada, as well as Japan, Singapore, Malaysia, Vietnam, Australia, New Zealand, Chile, Peru, and Brunei. These countries represent 800 million people, 40% of global GDP, and 15% of global trade overall.

Only during 2015, as the TPP agreement neared completion, has it become a regular news item. First with the very close vote to approve "fast track" authority, which requires a yes or no vote on the entire agreement by the U.S. Congress without amendments; and more recently with the announcement of the successful completion of treaty negotiations.

The next steps for the United States will be for the President to submit the agreement to Congress for approval. Congress is then required to vote on the agreement within 90 days.

Given the importance of free trade to our industry, it is

important that our industry is armed with accurate facts. Here are the positive effects of free trade and TPP on the U.S. economy:

- 11.7 million U.S. jobs attributed to trade.
- 5,600 jobs created for every billion dollars in exported goods and services (2013).
- 25% of U.S. manufacturing jobs support exports.
- Over 13% of the U.S. economy attributable to exports of goods and services (2013).
- The typical American consumer can purchase 29% more goods and services per dollar due to the positive effects of free trade (U.S. Council of Economic Advisors).
- \$700 billion in U.S. goods (44% of total) were exported to TPP countries in 2013.
- One-third of the world's GDP (\$27 trillion+ per year) is produced by TPP countries.
- Countries that have free trade agreements with the United States purchase 12 times more goods and services per capita from the United States than non-FTA countries. Consequently, the potential for trade growth with current non-FTA countries participating in TPP are huge.
- The single greatest benefit for the United States from the TPP agreement will be the removal of trade barriers with Japan, the world's third largest economy. Over 200 pages of the agreement address reductions/elimination of Japanese tariffs.
- The TPP contains extensive provisions addressing employee rights and labor protections. These provisions require other partner countries to bring their standards closer to U.S. rules, while eliminating unfair advantages these countries have under current trade rules.

In the coming months, there will be considerable rhetoric and political posturing regarding the effects of TPP on the U.S. economy. The TPP represents a phenomenal opportunity for our industry to continue to grow and prosper. As an industry, it is vitally important that we make our voice heard to our representatives in Washington D.C. by actively touting the benefits to our economy of free trade, and more specifically the Trans-Pacific Partnership.

# SOMETIMES THE BEST ANSWERS ARE PRETTY OBVIOUS

What if instead of spending time and resources on competing, two ports combined their strengths and collaborated?

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## The Value of a Positive Customer Experience

**W**e have all been there – we purchase a product and something about it doesn't meet our expectations. While many companies have figured out that an "easy return" goes a long way in customer satisfaction, there are still those that make it challenging. Let's be honest, we have avoided ordering from companies that don't make this process painless, or even better, FREE!

The same is true with purchasing software. While customers are typically not looking for a free return policy, most customers are looking for a positive experience to happen after the purchase. The days of installed software are behind us and this allows for a more flexible, responsive customer service process. No longer are solutions dependent upon, or restricted by, what resides on your hardware. Instead it relies on how far reaching your brainstorming and idea generation can take you, along with whom you choose as a software partner.

### Two Levels of Engagement

When it comes to driving value out of the partnership there are two levels that need to be considered. The combination of these will ensure that you are covering the basic blocking and tackling while setting a vision for the way you will maximize your investment over time.

**Tactical:** What new functionality do I need assistance setting up? What problems arise in the daily process that could be avoided with implementing a new piece of the technology or modifying my current setup? Why isn't my current setup working the way I expected?

These questions are addressed by the tactical relationship the provider has with their customer and is what drives the business forward daily. Troubleshooting and problem solving is the responsibility of a customer support team. This team ensures that you keep moving forward with your processes and don't miss a beat. Important aspects include: ease of requesting help, professional team members, seamless escalation of incidents, and a single point of contact through full resolution. This team should also feed key data back to the organization to allow for a more robust customer engagement strategy.

Another important component of this relationship is the self-serve option for basic functions. Picture this: you are rushing around in the morning and stop into your favorite coffee shop to grab a cup of black coffee. There is a line of 20 people and you know that this

will slow you down. You see a station where you can fill up a cup and drop your money in a receptacle. You fill up and are back on your way. This simple modification to the shop's process gave you a high level of customer satisfaction. How would your perception of the customer service you received change if you stood in the line only to be late to your morning meeting? Giving customer documentation, training and other resources via a knowledge base often keeps customers moving and increase the usage of a technology.

**Strategic:** What business changes are coming up in our organization that would need to be addressed by the software? What are we not taking advantage of today that would be of interest? How could we change business process to better align? How are my other customers handling similar issues?

Relationship managers are key to the ongoing and long-term vision of the partnership.

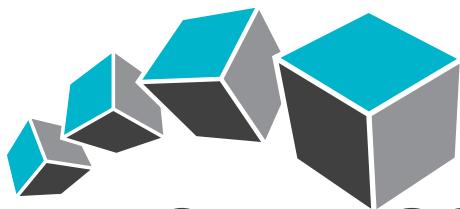
1. They open the conversation to understand your current and future business needs.
2. As your advocate, the Relationship Manager will act as your voice internally to give your perspective on future development.
3. Look for this person to also act as a "priority manager." It is not only about identifying value increasing opportunities, but to create touch points to ensure that you are implementing and seeing results from your recent projects.

### Keys to Success

Remember that this is a partnership and there are things that every customer can do to increase the likelihood of accelerating ROI.

■ **Release Cycles.** Pay close attention to the new features and functions your software partner is introducing and build a process around it. Reviewing the items with your internal team to identify areas of interest will allow you to quickly turn around and implement.

■ **Resources:** It is important to be clear who is responsible for engaging with your software partner at the tactical and strategic level. The tactical contact should have an intimate understanding of your processes and the way you are currently utilizing the software. Bandwidth of this individual is also critical. If they are too busy fighting daily fires, how will they ever begin to look ahead and implement the next best thing for your organization? The strategic contact should be involved in setting the direction for your organization and be able to explain not only where you are headed, but the timing and objective of the projects.



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## [ IT MATTERS ]

BY SID GEDDAM

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# Building the Connected Warehouse

**B**oxes, pallets, and forklifts aren't the only things that move throughout a warehouse. Data also flows across a range of warehouse business processes, from the receipt of goods to storage and tracking, picking and packing, and outbound transportation.

How effectively a business utilizes that information has a massive impact on warehouse and supply chain performance. Outdated, unreliable data that languishes in loosely connected systems typically results in inefficient warehouse operations.

Businesses can optimize warehouse performance with real-time data that flows through a centralized warehouse management system (WMS) to synchronize all warehouse processes. Leveraging real-time data on inventory, products, and customers is the foundation for the ideal connected warehouse that eliminates waste, enables informed decision-making, and streamlines operations.

### Visibility Drives Value

The connected warehouse is linked to internal enterprise resource planning (ERP) and customer relationship management (CRM) systems, as well as supply chain partner applications. The connected warehouse can also increasingly integrate with Internet of Things devices, such as smart forklifts, robots, and voice picking.

By linking warehouse operations to CRM, companies equip sales and service personnel with real-time information to grow the business. Integration between a warehouse and ERP system supports more accurate planning and forecasting with insights into stock levels, inventory turns, and carrying costs that impact the bottom line.

Extending the warehouse to external partner systems can elevate performance across the full supply chain ecosystem by better aligning warehouse/partner processes and giving all stakeholders on-demand transparency that's vital to identifying gaps and areas for cost-efficient improvement. It also increases the resilience of the supply network to adapt swiftly to changing conditions, from delays at an overseas factory to a downturn in customer demand.

### The Internet of Things

New opportunities to drive warehouse and supply chain performance are emerging from smart-device technologies, as well as artificial intelligence systems that optimize routes for robot or

human operators, from within the warehouse to around the world.

Besides making warehouse operations faster and more efficient, these Internet of Things technologies generate a wealth of real-time information that all supply chain stakeholders, including the warehouse, can capture and analyze for actionable insights.

One key objective of many companies is to future-proof warehouse operations as the pace of business change continues to accelerate. Companies are looking for the agility to not only react swiftly to change, but to drive change by taking advantage of disruptive technologies for greater efficiency, partner collaboration, and competitive advantage. To meet these objectives, companies are growing more interested in agile, cloud-based WMS solutions that don't hamstring them with the high cost, inflexibility, and delays of outdated, on-premise legacy systems.

Building the connected warehouse is a milestone in maximizing warehouse efficiency, and positioning a company to decisively navigate changes across the supply chain. Real-time data intelligence delivers the visibility and control needed to effect measurable improvements across the entire extended supply chain. Companies that pay as much attention to data as they do to forklifts and daily shipments gain a competitive advantage. ■

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## [ SMART MOVES ]

BY CHERYL CITRONE

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# Attracting More Women To the Transportation Profession

**M**ore than 13 million Americans comprise the transportation workforce, and nearly half of them are eligible for retirement within the next 10 years, according to the U.S. Department of Transportation. Not only is this particular workforce an older population, it's also male dominated, as women account for as little as 13 percent of transportation occupations nationally, reports the Bureau of Labor Statistics.

These numbers have generated discussion about how to increase awareness of career opportunities to boost the future of the transportation sector, and especially how to utilize the untapped pool of female talent.

### Developing the Workforce

One initiative providing a strategic approach to transportation workforce development is the National Network for Transportation Workforce (NNTW), sponsored by the U.S. Department of Transportation Federal Highway Administration. The network is comprised of five regional centers hosted by the University of Memphis, the University of Vermont, the University of Wisconsin-Madison, Montana State University, and California State University Long Beach.

The network coordinates regionally based programs that ensure students and

individuals seeking workforce reentry, career transition, or career advancement are made aware of opportunities, required education, skills training, and ladders to success.

Additionally, the NNTW is partnering with 100 transportation-related organizations nationally through these five regional centers to help advance its ability to identify solutions for the industry's growing talent challenges. Vaco Logistics is one of the first of these 100 strategic partnerships and is working closely with the Southeast Transportation Workforce Center, housed within the University of Memphis, to provide a national focus on attracting women to the profession.

Women make up 47 percent of the workforce but have a low representation in transportation occupations nationally. This gap represents a great opportunity because by filling traditionally male-dominated roles, like those in

transportation, women can earn up to 30 percent more than they would in a traditionally female-dominated role.

Young professional women are a key target as they bring a solid foundation in emerging technologies, a skill unique to the millennial generation. Transportation professionals must take action to increase awareness of opportunities in transportation. They must also highlight the societal impact that transportation professionals have in our communities to frame the industry in a way that is more attractive to women.

### Laying the Groundwork

As companies lend time and expertise in talent management to the regional transportation network, we are able to help coordinate successful practices and resources at all levels across the transportation education, workforce, and labor communities. This groundwork and collaboration is vital to developing solutions to the industry's workforce challenges.

As more organizations from all corners of the transportation industry partner with the NNTW's five regional centers, we will be able to gather meaningful and measurable goal-oriented research, as well as be able to reach more young professional women. ■

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## THE LEAN SUPPLY CHAIN

BY PAUL A. MYERSON

Professor of Practice in Supply Chain Management at Lehigh University and author of books on Lean for McGraw-Hill, and supply chain for Pearson  
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# RFID: More Than Just a Better Barcode

**R**adio Frequency Identification Technology (RFID) offers a multitude of benefits that can significantly reduce and eliminate waste in the extended supply chain.

RFID, an automatic identification method using electronic tags that have a microchip and printed antenna, is a lot more than just a small improvement from barcode technology. Barcodes offer a status report at a certain point in time and are an automated form of data entry, whereas RFID, in the long term, will potentially offer complete and continuous visibility throughout manufacturing, shipping, warehousing, and sales.

The data RFID collects can be received faster than barcodes, gives more information about products, and uses less labor. As RFID chips become more sophisticated, less expensive, with more standardized data, they will bring even more efficiencies.

One decade ago, Walmart was one of the first businesses to implement RFID with its major vendors to track pallets of merchandise along its supply chain from vendor to distribution centers. In 2010, the giant retailer stated plans to place RFID tags on individual garments. Other retailers, such as Macy's, have since followed suit. The goal of

implementing RFID is to track the exact location of a given item anywhere in its supply chain or in-store.

While this is promising, a Gartner 2010 survey found 51 percent of companies were not doing anything with RFID, which indicates the technology and its applications are still not widely understood.

RFID has many uses throughout the extended supply chain, including:

- It can track manufactured products through the factory and through shipping to the customer.

- Retail store operations can use item level tagging to count, track, and replenish inventory from stockroom to stores.

- RFID can track inventory through yard management, shipping, and distribution centers.

- It can track assets such as vehicles, tools, and equipment.

RFID also helps reduce and eliminate waste in a variety of functional areas, such as:

- **Manufacturing.** RFID improves accuracy, reduces labor and associated

costs, and provides improved visibility as a result of real-time tracking of materials (especially raw and work-in-process inventory to support manufacturing).

- **Distribution.** RFID boosts efficiency, visibility, and accuracy in selection and distribution processes, and reduces distribution costs. It also has significant impact on crossdock warehouses, where products from a supplier or manufacturing plant are distributed directly to a customer or retail chain with minimal to no handling or storage time in a crossdocking facility.

- **Retail.** RFID aids in cycle counting and triggering replenishment from the store's back end to the front end, especially on expensive items and simultaneous "one shot" scanning of goods at checkout.

While many segments of the business world use RFID, one reason for its relatively slow adoption rate is the cost of tags and related technologies, which has been steadily dropping. Considering the value RFID adds, its mass adoption isn't a question of if, but when. ■

Parts of this column are adapted from *Lean Supply Chain & Logistics Management* (McGraw-Hill; 2012), *Lean Retail and Wholesale* (McGraw-Hill; 2014) and *Supply Chain and Logistics Management Made Easy* (Pearson, 2015) by Paul A. Myerson with permission from McGraw-Hill and Pearson, respectively.

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# CUSTOMER SERVICE SUPERSTARS

And The Winners Are...

**Logistics plays the role of a lifetime in helping retailers earn rave reviews for outstanding customer service performance. Settle back and pass the popcorn as three leaders reveal their winning secrets.**

**BY MERRILL DOUGLAS**

All retailers say they always put their customers first. But some businesses rise above the rest in their ability to dazzle with outstanding service. If customer service were Hollywood, those companies would top the A-list.

As you'd imagine, logistics often plays a pivotal part in the work of such superstars. How do companies deliver the exceptional service that transforms customers into devoted fans? Let's roll out the red carpet and zoom in for a close-up.



## NEWEGG: LISTEN AND ACT

E-commerce retailer Newegg racks up accolades for customer service year after year. In 2013, *Forbes* gave the electronics-focused company a place in its Top 10 list of Customer Service Champions. And in 2015, Forrester Research named Newegg among the top 15 brands in its Customer Experience Index.

Feedback is the fuel that powers Newegg's successful efforts to win the hearts of shoppers. The company continually mines information from customer phone calls and online comments to improve operations and deliver what customers need, according to Sue Martin, vice president of customer service at Newegg, based in City of Industry, Calif.

Some customers go to extremes to make their voices heard—such as the one who posted a YouTube video complaining that Newegg sold him a used product as new, and not for the first time. When a customer service agent spotted the video, Martin called the customer and listened carefully to his concerns. The customer soon replaced his video with a new one lauding Newegg for its quick and attentive response.

Then Martin worked with the logistics department to get to the root of the problem. It turned out this was not a returned item. Newegg had used the product in a photo shoot, and then restored it to its box, which later went back to the warehouse with other new products. Thanks to the customer's feedback, Newegg ended that procedure. "We now sell any products we use to take pictures for our website as 'open box,'" she says.

Although the incident didn't involve a product return, the customer service and logistics teams took further steps to ensure that no one ever ships a used item by mistake. "Returns are no longer touched by the same people who handle new items," Martin says. "They go to a different area of the warehouse."

### BREAK A LEG

Complaints from customers who ordered a particular brand of speakers also launched an investigation. "The speakers were shipping broken," Martin says of the faulty products. "The bottom legs were breaking off." The customer service team informed the logistics team, which contacted the manufacturer.

At first, the manufacturer denied the problem. Because the speakers didn't sell in large numbers, returns to Newegg and customer complaints didn't set off the manufacturer's alarm bells. "So we invited a team from the manufacturer to visit our warehouse, and we took them to the area with all those broken speakers," Martin says. In the end, the manufacturer—a very large company—changed its packaging to better protect the product. "We haven't had any returns since," she adds.

In Newegg's call center, feedback powers friendly competitions that encourage agents to go the extra mile for their customers. For example, agents might

form teams to play a version of Pac-Man. "For every positive story a customer shares online or in another venue using an agent's name, that agent's team can move forward," Martin says. "If they get negative feedback, the team gets 'eaten.'" The winning team earns a pizza party or similar reward.

### CALL MY AGENT

Solving a customer's problem often hinges on the ability to expedite a shipment, send a replacement product, or accept a return. So logistics plays a key role in Newegg's customer service strategy. "Our agents are empowered to contact a warehouse to set up an expedited delivery, or pull a product back," Martin says.

Say, for example, a customer orders equipment needed to give a presentation at an out-of-town meeting, and the shipment is delayed. On request, Newegg might expedite a replacement to the customer's hotel.

If a product is out of stock in one region, Newegg might ship it from one warehouse to another, or buy it from a third-party vendor that participates in its Newegg Marketplace. "We work directly with manufacturers, and even drop-ship if we need to," Martin says.

In an emergency, Newegg might even make a personal delivery. Martin recalls a customer who returned a hard drive and then realized it was the wrong drive—one containing sensitive information. "He called us in an absolute state of panic," she says.

The Newegg warehouse had already sent the drive to the manufacturer. Luckily, the manufacturer was able to track it down. And to compound the good fortune, the manufacturer, customer, and call center were all located in greater Los Angeles. "Our sales manager jumped into a car, picked up the drive from the manufacturer, and personally delivered it to the customer," Martin says.



Newegg's call center agents specialize in show-stopping customer service.



## BACKCOUNTRY: GEARHEADS PLAY LEAD ROLE

Do business with Backcountry, and the company promises two things: “amazing customer service” and “blisteringly fast fulfillment.”

Based in Park City, Utah, Backcountry is an e-commerce merchant that specializes in clothing and gear for outdoor sports. “Our primary mission is connecting customers to their passions,” says Chris Purkey, vice president of the department Backcountry calls “Gearhead operations.”

“Gearhead” is Backcountry’s name for a customer service agent. “It’s a badge of honor, given the love we have for the gear we sell,” Purkey says. Gearheads are skilled athletes with deep knowledge of Backcountry’s products. Their job is to inform, advise, and make sure customers get exactly what they need.

They fulfill that mission even when a solution demands extreme measures. Consider the time a pair of pants, en route to a customer, went astray and then turned up in a battered package too damaged to sell. “They were the last pair we had in stock,” Purkey says. What’s worse, the manufacturer had stopped making that item.

To get the customer the pants he wanted, the Gearheads went shopping on a competitor’s website. “I bought the pants with my own credit card,” Purkey says. The customer has since placed several more orders.

### GEARHEADS, CUSTOMERS MEET CUTE

In 2014, Backcountry started a program to encourage long-term, one-on-one relationships between Gearheads and consumers. Some customers choose their own Gearheads — perhaps due to a shared love of skiing in Vermont or hiking in the Rockies, or their preference for a certain brand of fishing gear. In other cases, Gearheads reach out to shoppers.

“When customers place an order with Backcountry.com, there’s a good chance they’ll get a friendly follow-up call from one of our Gearheads,” Purkey says. From then on, any time they buy or return a product, or post a review or question online, Backcountry’s homegrown customer relationship management (CRM) system captures that data and notifies their personal Gearhead. “This helps ensure we get ahead of any possible issues, or need for advice or help,” he explains.

Purkey’s team works closely with their supply chain counterparts to resolve any delivery issues. “We offer customer feedback directly to the supply chain, so they can hold carriers accountable,” he says.

“To the same degree, we hold ourselves accountable to ensure that our internal processes — such as processing warranties or returns — are accurate and timely, and create a positive experience for customers,” Purkey adds.

On the logistics side, customer service efforts focus heavily on a goal Backcountry set in 2001: to provide same-day shipping for



**Backcountry has deep roots in Utah. Its corporate headquarters sits just north of old town Park City and within a quick pedal or a few footsteps of the Wasatch Mountains.**

every order placed by 5 p.m. Mountain Time. Today, Backcountry hits that goal 99.5 percent of the time, says Jeff Carter, the company’s vice president of global fulfillment.

Backcountry operates two distribution centers (DCs), one near its headquarters and one in Christiansburg, Va. The company uses a proprietary warehouse management system (WMS) designed for maximum picking flexibility to maintain speed in both facilities. If demand suddenly spikes for product housed in one zone, the software can reassign pickers on the fly.

Cross-training also provides flexibility. Say, for example, a limited-time free shipping offer boosts sales by 30 percent. How to handle

## Backcountry’s customer service efforts focus on providing same-day shipping for every order placed by 5 p.m. Mountain Time.

the spike? “Being able to move employees from an inbound function into an outbound function helps,” Carter says.

Another strategy is to focus on multi-item orders early in the day. Single items are easier to pack, so it makes sense to save them for second shift, when deadline pressure starts to build. Backcountry also schedules extra workers, including part-timers, for the second shift.

Locating the DCs strategically near the package carrier’s facilities helps, too. In Utah, Backcountry has until 11 or 11:30 p.m. to get orders ready for UPS pickup. “In Virginia it’s a little trickier, because 5 p.m. Mountain Time is 7 p.m. Eastern Time,” Carter notes. Employees there have only 3.5 hours to get packages ready for the 10:30 p.m. pickup. “We’re constantly hounding UPS to move that to 11 p.m.,” he says.

Keeping Backcountry’s same-day shipping promise is especially challenging on Black Friday and Cyber Monday. “We start early and just keep pushing toward that 5 p.m. deadline,” Carter says. Good forecasting helps the company plan for the surge in orders. And, in 2009, Backcountry added a 10-hour Sunday shift to reduce the volume it has to handle on Monday. “During the holiday period, those Sundays become full days for us,” Carter notes.



## U-HAUL: BOX OFFICE SUCCESS

U-Haul's U-Box service caters to moving and storage customers who want to handle at least part of the job on their own. One hallmark of this service is the variety of choices it gives consumers.

"We're proud of the options we offer," says Chasan Royer, U-Box project manager at U-Haul in Phoenix, Ariz.

U-Box provides storage containers that customers fill with personal items at home or at a local U-Haul location. Depending on the customer's needs, the box might stay at the retail location, or U-Haul might ship it to another city.

Some customers load their own U-Boxes, while others rely on U-Haul's professional "Moving Helpers" to do the job. A customer can use a personal vehicle with a hitch to tow one or two boxes on a trailer between home and the U-Haul Center, or let a U-Haul-certified driver carry the boxes on a flatbed truck.

Another crucial customer service value for U-Box is information. "We're the only company in the industry that provides a one-way shipping quote, instantly and automatically," Royer says. Customers log into the U-Box web portal to track the progress of their shipments and learn when they'll be charged for various aspects of the transaction.

"Certainty is a big deal for us," says Royer. "We want customers to know exactly what will happen and when. And if anything goes off track, we try to provide transparency through MyUhaul.com."

Do-it-yourselfers get information to help with processes such as loading a U-Box or hitching a trailer to a vehicle. "We constantly give our frontline employees educational materials they can pass along to the customer," Royer says. Besides printed instructions, customers can opt to receive emails or text messages, or check online for instructional videos.

### TAKING PRIDE IN PERFORMANCE

On-time performance and communication are other points of pride. "We require all our carriers to meet an on-time pickup and delivery goal of 98 percent," says Craig Picone, senior freight buyer for U-Box. Drivers who haul U-Boxes between cities must also set pickup and delivery appointments, and make four check calls while in transit. Carriers must meet those communications requirements at least 95 percent of the time.

Based on U-Haul's 70 years of experience renting trucks and trailers, the U-Box team knows that convenience is an important service value. "We can offer convenience by providing more neighborhood locations that are near our customers," Royer says. Not all U-Haul locations offer the U-Box service, but the company continues to add them. In metropolitan areas, most customers can find

a U-Box within three miles or fewer, either at a company-owned site or through a reseller.

To make sure customers can always get the boxes they need, Picone and his team continually analyze the inventory at U-Haul locations. They work with carriers to deliver freshly built boxes and to reposition boxes that have been delivered and unloaded. "The worst thing is to have too many boxes where there are no customers, and not enough boxes where there are customers," says Picone.

The drive to balance U-Box inventory includes efforts by traffic management teams who work in regional U-Haul offices. "The traffic managers use our internal tools to make sure inventory is where it needs to be," Royer says.

Like other service stars, U-Haul sometimes takes extraordinary measures to deliver what customers need. Take the time a customer driving a 26-foot U-Haul rental truck broke down on



**U-Haul designed its U-Box service to make moving and storage more convenient and less of a hassle through various delivery and pickup solutions that give customers all the time they need to load and unload their U-Box containers.**

the way from New Mexico to Washington. With no replacement truck available nearby, the truck and trailer department contacted U-Box. "We got that truck unloaded into U-Boxes, and then shipped the U-Boxes from where they broke down in Colorado into Washington," recalls Picone.

Among the partners that help to make the U-Box service outstanding is GlobalTranz. The Phoenix-based third-party logistics company chooses the carriers for many shipments of loaded U-Boxes and monitors their performance. Sometimes it consolidates boxes from several customers to produce faster, more efficient trips.

GlobalTranz employees know that when they handle a U-Box shipment, they're moving a customer's personal belongings. "When it doesn't show up on time, it's not like one pallet not showing up at Walmart," says Mike Leto, president of sales for GlobalTranz. "So we make sure those situations never arise." ■

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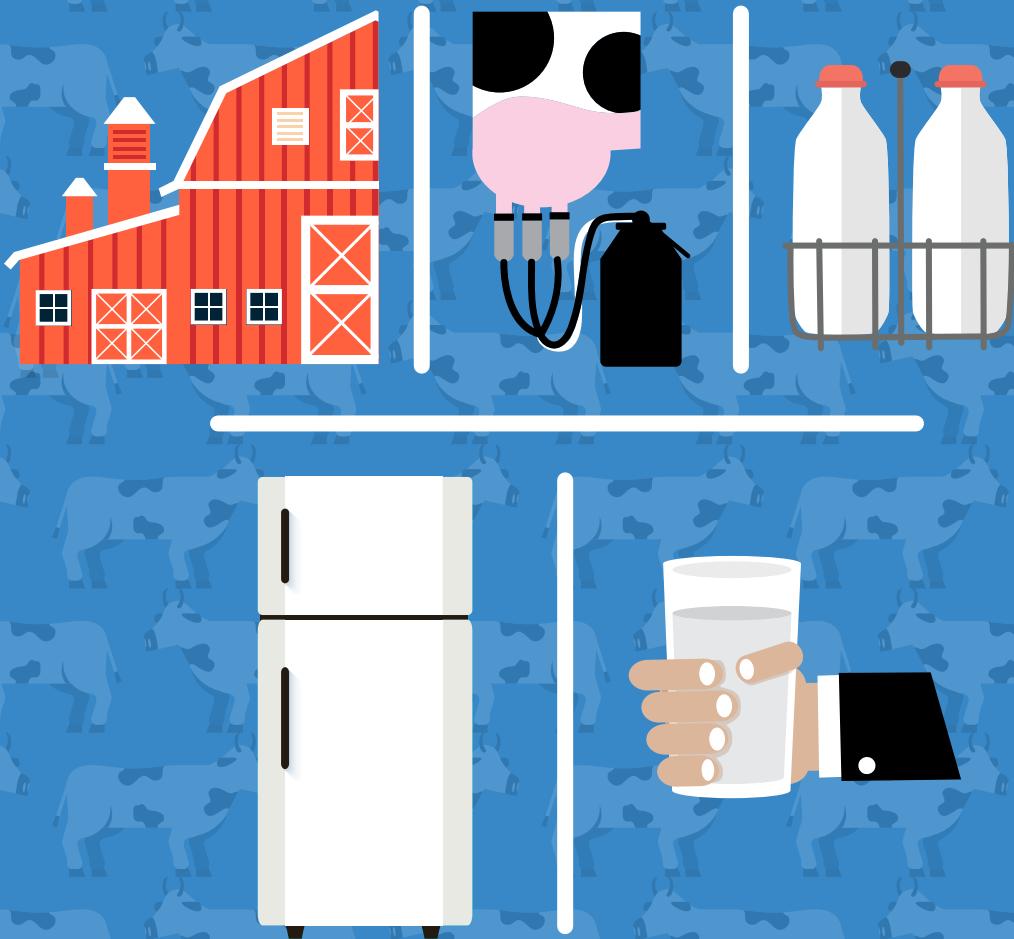
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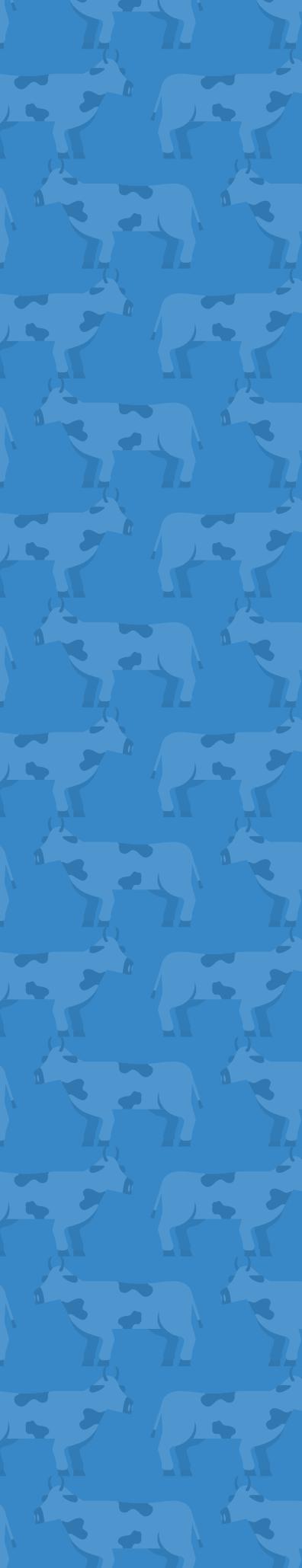
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The Dairy Supply Chain:

# FROM FARM TO FRIDGE





## HOW MILK AND OTHER DAIRY PRODUCTS MOO-VE FROM TENS OF THOUSANDS OF COWS TO STORE SHELVES ACROSS THE COUNTRY – WITH UDDER EFFICIENCY.

BY KAREN M. KROLL

**M**any dairy farmers, processors, and distributors employ technology to automate tasks previously done manually. Automation not only streamlines the work, but it often allows farmers to produce more and better products, and to continually monitor the health of their herds. It also helps those products move from farms to consumers' tables more quickly and with greater visibility.

December 2015 • Inbound Logistics 47



Ron Hurlimann has been a dairy farmer for nearly all his 62 years. Even though he can sense when a cow isn't feeling well, Hurlimann recently affixed radio-frequency identification (RFID) tags to the 100 head of cattle on the dairy farm that he owns and operates on the Oregon coast. The RFID tags track when a cow is eating or resting, as well as its health. Low activity or a cold body temperature can signal that a cow isn't feeling well, while a spike in activity can mean a cow is in heat.

Hurlimann's total investment for tags, sensors, and a laptop totalled approximately \$14,000. But, that investment has been worth it. "The technology is a huge plus," Hurlimann says. "I can tell if cows are sick without scrutinizing them." Even experienced dairy farmers can overlook a cow whose behavior has undergone a slight change, he notes.

These technological capabilities are increasingly critical as the dairy supply chain grows more complex. One reason for the complexity is the proliferation of new dairy products, such as lactose-free milk, organic and Greek yogurt, and single-serve packages of ice cream.

Another reason for supply chain complexity is legislative. While dairy products have always been subject to temperature and cleanliness testing, the requirements are likely to become even more stringent when additional provisions within the Food Safety Modernization Act, which became law in 2011, go into effect. One example is the March 31, 2016, deadline for the final regulations related to the sanitary transportation of food. "Storage and shipping requirements will grow more rigorous," says Bryan Whitmore, director of business development for Ryder Systems, a third-party logistics provider based in Miami, Fla.

An efficient, effective supply chain is increasingly key to success within the dairy industry. "Time, temperature, humidity, cost, distance, demand, forecasting, and



**The start of the dairy supply chain: A farm manager prepares cows to be milked.**

packaging are all important considerations in developing a strong dairy supply chain," says Josh Thomas, senior director of communications for the Oregon Dairy Products Commission.

#### HOW NOW DAIRY COW?

The dairy supply chain starts on one of the approximately 50,000 dairy farms in the United States. Milk typically moves from the cows via pipes connected to cooling storage tanks, also located on the farm. "That is where the cold chain begins," says Thomas. Milk remains in the storage tanks, where it's kept at below 40 degrees Fahrenheit for no more than 48 hours.

Tanker trucks pick up and transport the milk to a dairy processor, where it's tested to ensure it has been properly chilled, and is free of bacteria. Any milk that fails is discarded. "Milk is one of the most tested food and beverage products," Thomas notes.

At the processor, milk is homogenized, pasteurized, packaged, and shipped to retailers in refrigerated trucks. It often is on store shelves within two days after it

leaves the farm, although some milk products, such as cheeses, take longer.

Ensuring that milk moves rapidly from farm to store shelf is a complicated undertaking. Despite some recent consolidation, the dairy industry remains largely fragmented. In 2012, only 1,800 farms had at least 1,000 cows, according to the U.S. Department of Agriculture.

Even though milk poses a high risk of expiration and spoilage, it usually moves by truck rather than faster and more expensive transportation modes because of its weight. As a result, "supply chains need resilience to eliminate transportation and storage disruptions," says Elliot Rabinovich, a supply chain management professor at Arizona State University.

In fact, the goal is to ensure the milk doesn't remain in one place. "It's critical to be moving the product at all times," notes Will Salter, chief executive officer and president of Paragon Software Systems, a routing and scheduling software provider with U.S. offices in Frisco, Texas.

The current 80,000-pound weight limit for trucks can also be problematic, given

the growth in some farms and processing plants. “Outdated federal transportation rules force trucks to leave plants when they are less than full because the trucks reach the current weight limit before they meet their capacity limit,” says Chelsea Woodey, director of political programs for the International Dairy Foods Association.

Another challenge is simply the fact that dairy cows can’t be turned on and off like machines. While most dairy cow production naturally jumps about 10 to 15 percent in the spring, dairy consumption doesn’t automatically follow. “It’s a balancing act,” says Charles Nicholson, clinical associate professor in the department of

supply chain and information systems at Penn State University. “Dairy farms need to have production to handle the peak months, but then they have unused capacity during other months.”

#### **THERE’S GOT TO BE A BETTER WHEY**

The many ways in which milk can be processed—into cheese, yogurt, and cream, to name a few—also increase supply chain complexity. For instance, whey, a byproduct of making cheese, used to be flushed away or used as animal feed. Now, it’s often processed for use in infant formula, snack foods, and body-building products, among other items. While this

offers an opportunity for additional revenue, the whey processing may occur at a different plant than the one making the cheese. That adds steps to the supply chain.

It’s a similar situation with the proliferation of customized packaging options, such as four-packs of yogurt in which each carton is a different flavor, as well as the growing interest in specialty products, such as lactose-free or organic milk. “It creates SKU proliferation,” says Whitmore.

Technology plays an increasing role in helping dairy supply chain partners meet the challenges they face. It often starts on the farm, with what the Midwest Dairy

## **Relay Races to Optimize its Supply Chain**

**V**isitors to online grocer Relay Foods’ website see colorful pictures of organic dairy products, produce, and artisanal cheeses, and read engaging profiles of some of the company’s farmer partners. What they probably won’t notice is Relay’s mastery of logistics and commitment to an efficient, effective supply chain.

“We put a lot of thought into our logistics operation,” says Kevin Kurzendoerfer, chief operating officer for the Charlottesville, Va.-based company. “It’s one reason we’re ahead of other players in the online grocery sector.”

For instance, when customers place orders for milk, they receive products with at least five days of use remaining. “We are constantly turning the milk; it’s built into our inventory management system,” Kurzendoerfer says.

Relay currently serves 12 markets in the Washington, D.C. area. It partners with about 50 farms and 200 artisan producers, and offers more than 8,000 products, with a focus on healthy, local, and organic foods. The company offers two delivery options: It delivers food to about 140 “pick-up” locations where customers get their orders; or it delivers directly to customer homes for a monthly fee.

#### **LEARNING FROM LEADERS**

Efficient fulfillment and logistics strategies are critical to the company’s success. To launch these strategies, the management team studied other online grocers to learn what they were doing, and how to adopt or adapt those

best practices for their market. They then built information systems platforms to track products and serve customers from end-to-end. “We track products from the minute they come into our facility until they’re with a customer,” Kurzendoerfer says. “That has enabled us to maintain full data integrity.”

For instance, Relay tests dairy products for temperature and quality upon receipt, and then holds them in temperature-controlled coolers or freezers. Sensors log the temperature every 30 seconds, and record the information in a database.

Relay’s systems platform essentially combines a virtual retail store with a warehouse management system. So, the moment a customer orders, say, a gallon of milk, it’s taken from inventory.

Orders placed before midnight are delivered the following day. When delivering products, Relay uses packaging originally designed for sensitive medicines to ensure milk and other refrigerated items remain cool for eight hours. Customers receive a text message stating the time their order was delivered so they know approximately how long the products will keep their temperature.

Thanks to these efforts, Relay has become a significant online grocer in the Mid-Atlantic area. “We’ve broken our share of eggs and melted our share of ice cream along the way,” Kurzendoerfer says. “But we have learned from those experiences, and now deliver products in perfect condition.”



Association calls “precision dairy farming.” This term refers to the use of technology to measure physiological, behavioral, and production indicators on individual animals. The goals include maximizing animal performance, early detection of health problems or disease in individual cows and the herd, identifying production problems, and minimizing the use of medication through preventive health measures, according to the association.

One example of precision dairy farming is the robotic milking machine. Cows enter the milking parlor and a laser detects their udders. An arm of the robot attaches to the udders and begins milking. While the milking is underway, the system watches for impurities or other problems.

These machines offer several compelling benefits. First, farmers can milk the cows when they want, rather than adhering to a schedule, says Tim Richards, chair of agribusiness and resource management at Arizona State University. “This is better for the cows,” he adds.

Second, milking machines reduce the farmer’s workload. That can be key, given the difficulty some farmers face finding workers interested in milking, Hurlimann says.

However, the technology’s price tag — often low to mid-six figures — can put it out of reach for many farmers, Hurlimann notes.

Another technology tool is feed and milking management software that tracks the cows’ diet and milk production, among other information, Nicholson says. For instance, a farmer can receive reports on a cow’s somatic cell count, which indicates the quality of the milk and the health of the animal.

Some larger farms use technology to eliminate one step in the traditional supply chain. Rather than moving milk from cows to a refrigerated storage tank, from which it’s pumped into a trailer to head to the processor, milk is pumped from

**“Time, temperature, humidity, cost, distance, demand, forecasting, and packaging are all important considerations in developing a strong dairy supply chain.”**

Josh Thomas, Senior Director of Communications, Oregon Dairy Products Commission

the milking machines directly into a trailer. Drivers hauling the milk leave an empty trailer with the farmers, and attach the full trailer to their rigs. This can cut driver waiting time and reduce the need for on-farm storage. “It typically makes sense for farms with at least 1,000 cows,” Nicholson says.

Some farmers use RFID tags and GPS software to keep tabs on their cows’ location. An even newer solution is the use of drones to monitor larger herds and farms.

### HERD IT THROUGH THE GRAPEVINE

The price tags of many technical tools available to dairy farmers is one reason why the average farm is growing in size. The midpoint herd size — half of all cows are in herds smaller than the midpoint, and half are in herds that are larger — jumped from 101 in 1992 to 900 in 2012, according to the U.S. Department of Agriculture.

Similarly, economies of scale prompted the aggregation of small processing plants in the 1990s. “Improvements in technology are scale-intensive,” says Richards. “Dairy farms have to be big to take advantage of

the available hardware and software.”

Some different solutions come into play once milk leaves the farm. One potential remedy is legislative. In September 2015, Representative Reid Ribble (R-WI 8th District) proposed the Safe, Flexible and Efficient (SAFE) Trucking Act, or HR 3488, which would allow states to set weight limits of up to 91,000 pounds, although trucks would be required to have a sixth axle.

Raising the weight limit would mean fewer trucks on the road. Europe and Canada already allow trucks weighing more than 100,000 pounds, according to information provided by Ribble.

Routing and scheduling software optimizes the time required to move milk from farms to processing plants. The solutions can determine the most efficient route, and help ensure the trucks sent to each farm are the right size. “Farmers don’t want to waste milk by not being able to transport it because the truck is too small,” Salter says. At the same time, sending trucks that are larger than needed, and travel half-full, wastes money.



**SKU proliferation – many variations of the same product – complicates the supply chain and poses a major challenge to dairy logistics managers.**

When it comes to transporting products to retailers, most processors try to time their deliveries for early in the day so products can move right onto the shelves and in customers' view. Processors enter the agreed-to delivery time with the store into the software, and the routing software accommodates it.

On the flip side, a supermarket may use software to track trucks on their way, so employees are available to receive, unload, and store dairy and other temperature-sensitive products, Salter says. The transportation department can also let individual stores know of any delays or early deliveries by phone, email, or text.

Another shift is a greater demand for sales visibility between wholesalers or distributors, and processors or manufacturers. "The information provided back upstream allows the processor to see which products are selling fast or slow," says Derek Curtis, vice president with HighJump Software, a Minneapolis-based supply chain software provider. "The sales data drives production and tactical decisions, as well as marketing and strategic directions."

Another area of change is the growing use of handheld devices by truckers working within the dairy supply chain. While larger dairies have been using mobile technology to help truckers on the road stay abreast of pricing changes or upcoming promotions, and to track their trucks' locations, the technology is becoming affordable for firms of all sizes. "Carriers no longer need client-server technology and big hardware," Curtis says. "A carrier with 10 trucks can now afford it."

In addition to boosting efficiency, the handheld devices can cut shrinkage. "They provide asset accountability and inventory accountability," Curtis says.

For most milk products, trucking is the only viable transportation mode, given the need to quickly and inexpensively move products to retailers and restaurants. But some companies producing dairy



**Some dairy businesses partner with third-party logistics providers such as Ryder to ensure milk and other perishable products are delivered on time at peak freshness.**

products with longer expiration dates, such as some shredded cheese products, are exploring rail transportation. First, of course, they need to get the product into "shelf-stable form," Nicholson says. They also need to conduct cost-benefit analyses to determine which markets they can best serve this way.

The generally regional nature of the milk supply chains within the United States — given the cost of transportation, it rarely makes sense to ship liquid milk across the country — can present challenges when milk production climbs. Yet, the pounds of milk produced per cow increased from about 17,186 in 1998 to 22,258 in 2014, according to the U.S. Department of Agriculture.

"For instance, the nearly 68 million people in the Midwest are going to drink only so much milk," says David Closs, chair of the department of supply chain

management at Michigan State University. "This is where the supply chain part really comes in."

One option is to ship dry milk — essentially milk in which most of the moisture has evaporated — longer distances, and even outside the country. According to the USDA, exports of dairy products reached about \$7 billion in 2013. Most of the growth was in dry manufactured dairy products.

This is one example of how the dairy supply chain is changing along with the market. It also highlights the need for strong supply chains. Given the number of variables to balance — inbound and outbound costs, increasing SKU counts, regulations, and rapid product expirations, to name a few — efficiency and visibility are critical. "It's easy to move into the red quickly because there are so many angles to manage," Curtis says. ■

# 10

## WAYS TO STEER A CAREER DRIVE

TAKE THESE STEPS TO HELP ADVANCE  
YOUR LOGISTICS CAREER.

By Tamara Chapman

## 1 DON'T RUSH INTO YOUR NEXT OPPORTUNITY BEFORE YOU'VE MADE THE MOST OF THE ONE YOU HAVE.

This is especially true for people in entry-level and junior positions, says Adrian Gonzalez, president of Adelante SCM, a learning and networking community for supply chain and logistics professionals. Gonzalez considers career nurturing and development the charge of both employer and employee.

“The individual has some responsibility for career development, but the company you work for also has some responsibility,” he says, noting that employers should clearly articulate career paths and milestones. For example, within three years of serving in Role X, you should be ready to take on the responsibilities associated with Role Y.

But while you're charting your path to Role Y, be sure to savor the years in Role X. “You have to resist the temptation of wanting to become a vice president after one year. There is immense value in being on the front lines,” Gonzalez explains, noting that many senior leaders at successful firms launched their logistics careers by driving trucks and loading boxes.

“Cherish your time on the front lines,” Gonzalez says. “You may not see it now, but it will be extremely valuable later. And embrace those opportunities to get your hands dirty.”

The dirt under your fingernails will translate into a deep — rather than a cursory or theoretical — knowledge of how the company operates, “because you've actually done it yourself. You've lived it,” he adds.

By the time you get to the corner office, you'll not only have insight and knowledge, you'll have what Gonzalez calls “credibility as a leader.”

## 2 KNOW WHEN TO MOVE.

Once you've made the most of the job you have, it might be time to circulate your resume. But how do you know when you've milked a position for every drop of value? Read between the lines of your performance evaluation, recommends Carl Rossi, director of global logistics for Westinghouse Electric Co., headquartered in Pennsylvania's Cranberry Township. When the review process starts feeling pro forma, that's a signal inertia has set in.

Before landing at Westinghouse, which provides nuclear power plant products and services to utilities throughout the world, Rossi moved many times, but not so often as to suggest instability. He segued from a decade-long sales and operations post at a less-than-truckload regulated motor carrier to a job as manager of North American logistics at Honeywell International. He later served a seven-year stint with one of the country's largest third-party logistics providers. In between these posts and his current gig, he joined Gulf Coast cleanup efforts as a supply chain leader for BP Exploration and Production.

**G**iven the day-to-day complexity of logistics, it may seem like all you can do is take care of business. But it's also important to take care of your career. If it's languishing on the back burner, now may be the time to turn up the heat and start cooking.

Whether you want to advance within your current company or move to a new one, whether you want to try a new job in logistics or get even better at the one you have, a few simple steps will help you meet your career goals. These apply to almost any advancement-minded go-getter, from the young college graduate and the still-learning apprentice to the mid-career professional facing a fork in the road.

Although his career moves were a mixture of calculated transitions, serendipitous chances, and the occasional setback, Rossi kept his antenna tuned for complacency and its kissing cousin, stagnation.

One of his moves was triggered by indifference from management after some organizational changes. While his work and department weren't disparaged, neither were they deemed imperative.

"I knew I was not going to rise any higher at the organization because of its nature and the direction it was taking," Rossi says. "My mentor had retired a few years prior, and my area became less of a priority."

Those foes of career satisfaction often show up in annual performance reviews and in negotiations about raises. "If you have the same kinds of reviews year after year, you no longer see a clear career path, and you don't see improvement, then chances are it's time to move on," Rossi says.



**"Cherish your time on the front lines, and embrace those opportunities to get your hands dirty."**

**—Adrian Gonzalez,**  
President, Adelante SCM

### **3 ENHANCE YOUR CREDENTIALS.**

Learning on the job is essential; after all, if you're not learning, you're stagnating. But even if every day teaches you something new, it's essential that you learn even more—outside the job.

The possibilities for continuing education are endless, ranging from college classes to occasional conference workshops. But, career-focused professionals should pursue educational opportunities that result in a degree or certification, says Mitch Kostoulakos, founder of Massachusetts-based Ad Hoc Logistics LLC, a consultancy specializing in international logistics analysis and regulatory assistance for smaller companies. Degrees and certifications add oomph to your resume and tell prospective employers that you're serious about your work.

Graduate degrees such as MBAs are always impressive, but they don't necessarily speak to expertise. Certifications, on the other hand, testify to highly specialized knowledge. That's why Kostoulakos completed the Certified Transportation and Logistics program through the American Society of Transportation and Logistics.

"I wanted to become an expert and become known as an expert,"

he says. "Certifications demonstrate both expertise and professionalism. When I look for a financial planner, I only want to work with a certified professional. Professionals like to do business with other professionals."

That said, it's important to choose the right certification and then to put it to work on your behalf.

"It does no good to get a certification nobody has ever heard of," Kostoulakos says, recommending enrollment in programs affiliated with recognized institutions—say, an organization that publishes and maintains professional standards of conduct. Also, be sure the certification is based on testing, research, or other measurable criteria. Kostoulakos prefers certification programs that require continuing education and recertification—a sign that the knowledge and skills are up-to-date.

It's also a good idea to take a look at the marketplace, identify what skills are in demand, and choose a certification program accordingly.

Once you earn the certification, make sure people know about it. "Let your employer know what you had to do to get it and what you think it is worth," he says.

And in the interest of spreading the word internally and externally, be sure to include the certification on your business card, resume, and LinkedIn page. Reference it in cover letters, and when you land an interview, trumpet it to your next employer.

"Lead a job interview with your certifications, because not everyone has them," Kostoulakos says, noting that they can be more differentiating than college degrees.

Although certifications may not be essential for advancement within a company, they're definitely useful for moves to a new firm. "For logistics managers within a small company who want to move to a larger one, certification will help," Kostoulakos says.

### **4 KEEP UP WITH THE LOGISTICS FIELD—AND WITH THE WORLD OF BUSINESS.**

In his demanding job at Westinghouse, Carl Rossi needs to stay abreast of everything related to logistics and nuclear energy. Keeping up is a never-ending process of "reading, training, and talking to people," he says,

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Rossi recommends staying on top of consumer trends and business news, monitoring them for developments that might have lasting implications for the logistics field. “For example, we have no idea what impact 3D printing will have on the supply chain,” Rossi says. “But I will read everything I can about 3D printing because I know that five years from now, 3D printers that can be deployed anywhere will completely disrupt the supply chain. Instead of shipping widgets from China to Chicago, someone in Chicago will just print the widget. That’s the kind of trend we have to keep our eye on.”

That’s also the kind of thinking that brings value to an employer and opportunity to an advancement-minded professional.

## 5 HONE YOUR ANALYTICAL SKILLS

Like Rossi and Kostoulakos, Adrian Gonzalez considers constant learning essential. “You have to keep learning to remain an effective leader because so much is changing in this industry, and the pace of change continues to accelerate,” he says.

But then the question becomes, what to learn?

“When you look at some trends in play today, having strong analytical skills is growing more important,” says Gonzalez. “There is so much information out there related to the supply chain. It’s increasingly important to take in all the information and effectively analyze it, draw out insights, and then understand what you are going to do with that knowledge, and what action you should take.”

Currently, too many supply chain and logistics professionals are unsure how to use data to drive innovation. The solution to that, may be as simple as a catch-up class in statistics or a workshop on spreadsheets. As Gonzalez notes, a “power user of Excel,” someone who knows how to leverage the program’s full data and number-crunching capabilities, can often spot problems and identify solutions.

Structured education isn’t the only way to sharpen analytical skills. You can learn a lot from others on your team. “If you are not currently in an analytical role, but you’re sitting near a transportation analyst, ask good questions, such as ‘what are you trying to figure out here’ and ‘how is this software tool helping you?’” Gonzalez says.

## 6 LEARN THE LANGUAGE OF THE EXECUTIVE TEAM.

While you’re polishing your analytical skills, remember this: If you want to be taken seriously by the people who run your company, and if you want them to spot your leadership potential, you’ll need to talk their talk.

“More and more these days, a supply chain leader has to be able to make the business case to the chief financial officer (CFO) and

other higher-ups,” Gonzalez explains. “When you request funding and tools for investments in technology and in people to drive a transformational project, you have to ask in the language that the CFO and the chief executive officer appreciate.

“If you say to an executive, ‘we want to implement a transportation management system that will improve on-time deliveries from 92 to 97 percent,’ that sounds good, but what does it mean?” Gonzalez says. “What does a five-percent improvement mean? How does that help the company? You have to link the investment to line items on the profit and loss and balance sheets. How will the system improve order-to-cash cycle time? How will it reduce capital costs?”

To learn how to link supply chain metrics with financial metrics, start with a refresher course in accounting or finance. Or, find a mentor within the company who can help you master essential concepts.



“Develop a good, concise elevator pitch on what you do and how you do it, and use it when opportunity arises.”

—Carl Rossi,  
Director of Global Logistics, Westinghouse Electric Co.

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## 7 NETWORK, NETWORK, NETWORK—EVERYWHERE.

When it comes to networking, Gonzalez, Kostoulakos, and Rossi agree: It's a must—even if you're not seeking a promotion or new job.

Rossi champions LinkedIn, and recommends it as a way to keep in touch with people from past jobs whom you admire. You can still learn from them, even if you're no longer in day-to-day contact. And who knows when one of them might have an opportunity to share? That's how Rossi came to be part of the Gulf Coast cleanup.

And, Gonzalez says, don't forget to connect with the people within your own organization. They can help you succeed—and just as important, you can help them.

Kostoulakos acknowledges that the modern workplace makes networking more challenging. "It's tough to do these days, because many people work remotely," he says. But that's where email comes in handy. Reach out through the inbox and ask for advice or suggestions. You'll not only learn a lot, you'll become a better team player.

**"For logistics managers in a small company who want to move to a larger one, earning a degree or certification will help."**

**—Mitch Kostoulakos,**  
Founder, Ad Hoc Logistics

## 8 ATTEND THE RIGHT INDUSTRY CONFERENCES.

Conferences offer the perfect blend of networking and education opportunities, but choosing the right one requires some thought.

"While you can spend an entire year just traveling to different conferences, cost and time prevent you from going to them all," Gonzalez says. So, before paying a registration fee, align your workplace goals and objectives with the programming on offer.

"Let's say you've been tasked with shifting product sourcing from China to Mexico," Gonzalez says. "Obviously you will be interested in programs showcasing other companies that have done this. What best practices and solutions are out there?"

Don't forget user conferences hosted by technology vendors. "You'll learn from other customers who are using the same tool," Gonzalez says. "And it's a great opportunity to meet face-to-face with technology partners to discuss what is or isn't working."

If there's still room in your calendar for another conference, Gonzalez suggests a plunge into a different pool. "Get out of your

comfort zone," he says. "If all you do is transportation, for example, you're limiting your upward mobility. There is value in going deep in a particular area, but if you have no understanding of the business processes you're focused on, then you also have a limited understanding of your impact on the supply chain."

That advice holds up even when you're at a conference and deciding which presentations to attend. "Allocate some time to attend a session that has nothing to do with your current role," Gonzales recommends. "If you're in transportation, go to a sales and operations planning session. If you're in supply chain planning, go to a session on risk management."

## 9 HONE YOUR ELEVATOR PITCH.

Whether you're seeking a promotion or a new job, it pays to understand exactly what you have to offer, so that you can share that pertinent information effectively. Rossi puts it this way: "Have a good, concise elevator speech on what you do and how you do it."

Rossi speaks from experience, having deployed his elevator speech on more than one occasion. "In cases where I saw opportunities, I would sit down with supervisors and be very clear about what I thought I could do, about additional responsibility, and about where I could help," he recalls.

More often than not, it worked. In one instance, it landed him the chance to travel to the Philippines to address a persistent warehousing issue. Rossi's elevator speech also came in handy on a shuttle ride to the airport, when he happened to sit next to his boss. It was the perfect opportunity to chat casually about his aspirations, and his ready-for-prime-time elevator speech allowed him to convey his point quickly—and memorably.

## 10 THINK—AND ACT—LIKE AN ENTREPRENEUR.

The best career advice Adrian Gonzalez ever received came from his father, the proprietor of his own grocery store: "Be your own boss."

As Gonzalez sees it, that kind of entrepreneurial thinking applies to people who have no intention of leaving the world of hierarchies and org charts. It's a state of mind that applies everywhere and to anyone who wants to build a resume stuffed with achievements.

An entrepreneurial thinker asks good questions and asks them daily—"always with an eye on how I can take this information to do my job better and help my company be more productive," he explains.

"You don't need to go out and launch your own company," Gonzalez says. "You can be an entrepreneur within a company by continuously looking for opportunities where you can improve the status quo." ■



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—Stacy Mumm  
Project Manager, Strategic Supply Chain Operations, Under Armour  
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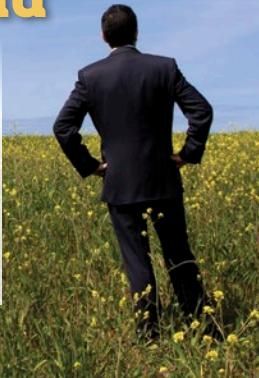


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# GLOBAL TRADE GAME CHANGER

AS THE PANAMA CANAL'S \$5.25-BILLION  
EXPANSION NEARS COMPLETION,  
HOW ARE SHIPPERS AND PORTS PREPARING?

**T**he buzz around the Panama Canal expansion is reaching fever pitch as the unprecedented project, in its final stages, redraws the rules for global trade. In response, ports and other stakeholders have been investing in infrastructure to ensure products traveling through the expanded canal enter and exit the United States efficiently and expeditiously.

Many stakeholders in the U.S. shipping community view the expansion as a tremendous opportunity, as the ambitious upgrade is expected to significantly increase container trade between Asia and the United States.

The Panama Canal expansion is 94 percent complete and on track for its scheduled 2016 completion, reports the Panama Canal Authority (ACP). The expansion is the largest project at the canal since its original construction in 1907, creating an additional lane of traffic through a new set of locks. The existing locks allow the passage of vessels that can carry up to 5,000 TEUs. After the expansion is completed, post-Panamax vessels, with capacity up to 13,000 TEUs, will be able to move through the Panama Canal.

The expansion program's main objective is to increase capacity to meet demand growth with enhanced customer service, according to the ACP. The expansion is based on six years of research, which included more than 100 studies on economic feasibility, market demand, environmental impact, and other technical engineering aspects.

In November 2014, the Panama Canal postponed non-critical maintenance work at the locks, changed its booking system, canceled draft restrictions, and added more crews to operate tugs, locomotives, and locks.

#### **GROWTH SPURT**

While this significant construction effort nears completion, the Panama Canal has already experienced significant volume increases, with record cargo tonnage in 2015. The recent spike in demand can be attributed, in part, to traffic diverted from

the U.S. West Coast and a higher-than-normal volume of shipments requiring additional security measures, including tankers and gas carriers, reports the ACP.

In Georgia, work is well underway on the Savannah Harbor Expansion Project (SHEP), an effort designed to support increased volumes from the Panama Canal expansion and other factors shifting trade from the U.S. West Coast to the East Coast.

By deepening the Savannah River to 47 feet at mean water level, SHEP will enable the port to more efficiently serve the larger vessels that are expected after the Panama Canal expansion is complete, according to the Georgia Port Authority (GPA). Vessels in this class, which are already calling on the Port of Savannah,

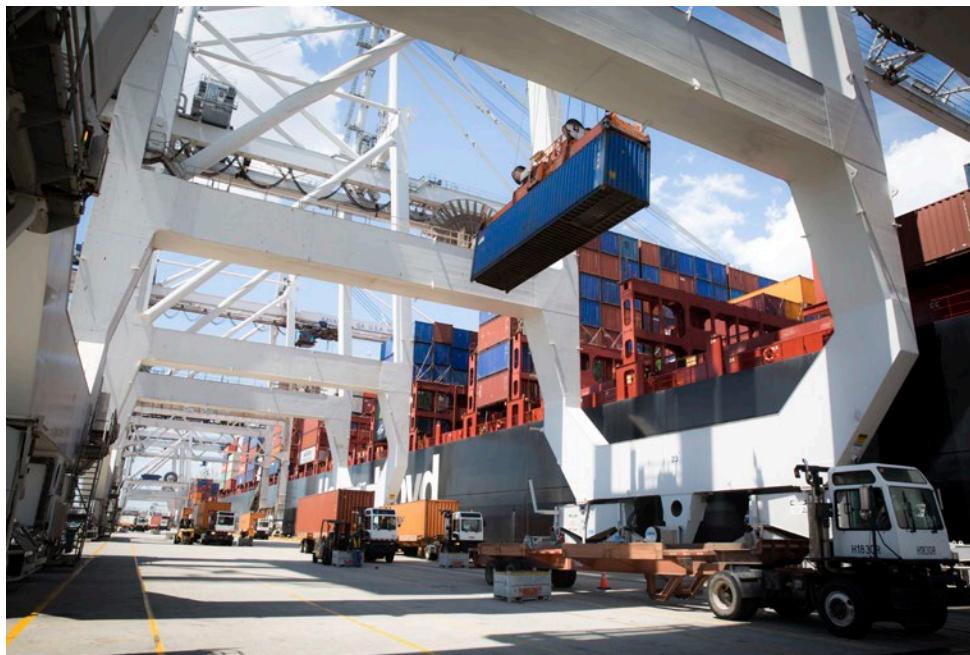
will be able to do so with heavier loads and greater flexibility once the deepening project is finished.

In addition, the port is purchasing four ship-to-shore cranes, which will bring the total number of electric-powered container cranes to 26. Savannah is also adding 30 electric rubber-tired gantry cranes (RTGs), continuing GPA's transition of its container handling fleet to electric power, and bringing its RTG fleet to 146.

GPA also states it will soon finish construction on Gate 8, a \$27-million project featuring a new multi-lane truck gate designed to avoid congestion at Savannah's Garden City Terminal, which completes 10,000 truck moves per day.

Beyond the terminal gates, the Georgia Department of Transportation will complete the Jimmy Deloach Parkway extension by spring 2016, providing a direct truck route between I-95 and Garden City Terminal.

The GPA expects cargo expansion as a result of the widened Panama Canal to be incremental, but steady, as shipping lines



**Terminal investments in new cranes, rail expansion, and roads position the Port of Savannah to meet volume increases expected from the Panama Canal expansion.**

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take advantage of the cost savings of an all-water route to serve the U.S. Southeast market, one of the fastest growing regions in the nation.

“The number of megaships calling on Savannah is expected to increase with the expansion of the Panama Canal,” says a GPA spokesperson.

Down in Florida, PortMiami has already invested more than \$1 billion in capital infrastructure projects that are now complete. The port currently offers super post-Panamax gantry cranes that can ser-

vice cargo vessels up to 22 containers wide, nine containers above deck, and 11 containers below. Additionally, a completed -50/-52-foot dredge project now allows the port to accommodate the largest container vessels sailing the oceans, including neo-Panamax vessels that can carry up to 13,000 TEUs.

System. The port also offers on-dock intermodal rail service through a partnership with Florida East Coast Railway (FECR). Since 2010, FECR’s vision to carry goods transiting through the expanded Panama Canal has been a key initiative for the railroad and its port partners, which include PortMiami and Port Everglades in Ft. Lauderdale. The railroad says it has made significant improvements to its infrastructure, enhancing intermodal service for both importers and exporters.

“In 2014, we opened a 43-acre

Intermodal Container Transfer Facility (ICTF) adjacent to Port Everglades, and returned on-dock intermodal rail service to PortMiami, providing seamless ship-to-rail transfer and expediting the track to market for shippers,” says Jim Hertwig, president and CEO of FECR.

“When the doors on the locks open, we are ready for business,” he adds.

PortMiami officials echo his comments: “We are positioned to capture new trade

opportunities once the canal expansion is complete.”

Port Everglades already handles post-Panamax ships, which are too large to fit through the Panama Canal today, but the ships must be lightly loaded. “This is inefficient and will drive business elsewhere,” notes Ellen Kennedy, a Port Everglades spokesperson.

To better prepare for the Panama Canal expansion, Port Everglades partnered with the U.S. Army Corps of Engineers to begin an 18-year effort to deepen and widen its navigational channels and turning basin. The project’s objectives are to deepen the main navigational channel from 42 feet to 50 feet, and to widen the entrance channel and maneuverability-constrained Southport Access Channel. The port planned to begin the design for the project in 2015; the construction will be complete in 2022.

**ASIAN TRADE ON THE RISE**

Asian trade at PortMiami is already on the rise, with multiple weekly services from Miami to Asia through three of the world’s major carrier alliances including 2M, O3, and G6. “Once the canal expansion opens, we anticipate additional growth in Asian trade,” a port spokesperson says.

During 2015, trade with Latin America and the Caribbean accounted for approximately 50 percent of PortMiami’s shipping traffic. Seaboard Marine, currently the largest cargo partner at the port, handled more cargo to Latin America and the Caribbean than any other carrier shipping via PortMiami.

FECR expects a steady increase in the number of ocean carriers choosing South Florida as the gateway to the United States once the canal expansion is completed. The railroad anticipates increased intermodal volume for both import and export business, particularly from China to South Florida, as South Florida ports are ready to handle larger vessels that will be able to traverse the canal.

“In Florida, there are currently four southbound intermodal moves for every

opportunities once the canal expansion is complete.”

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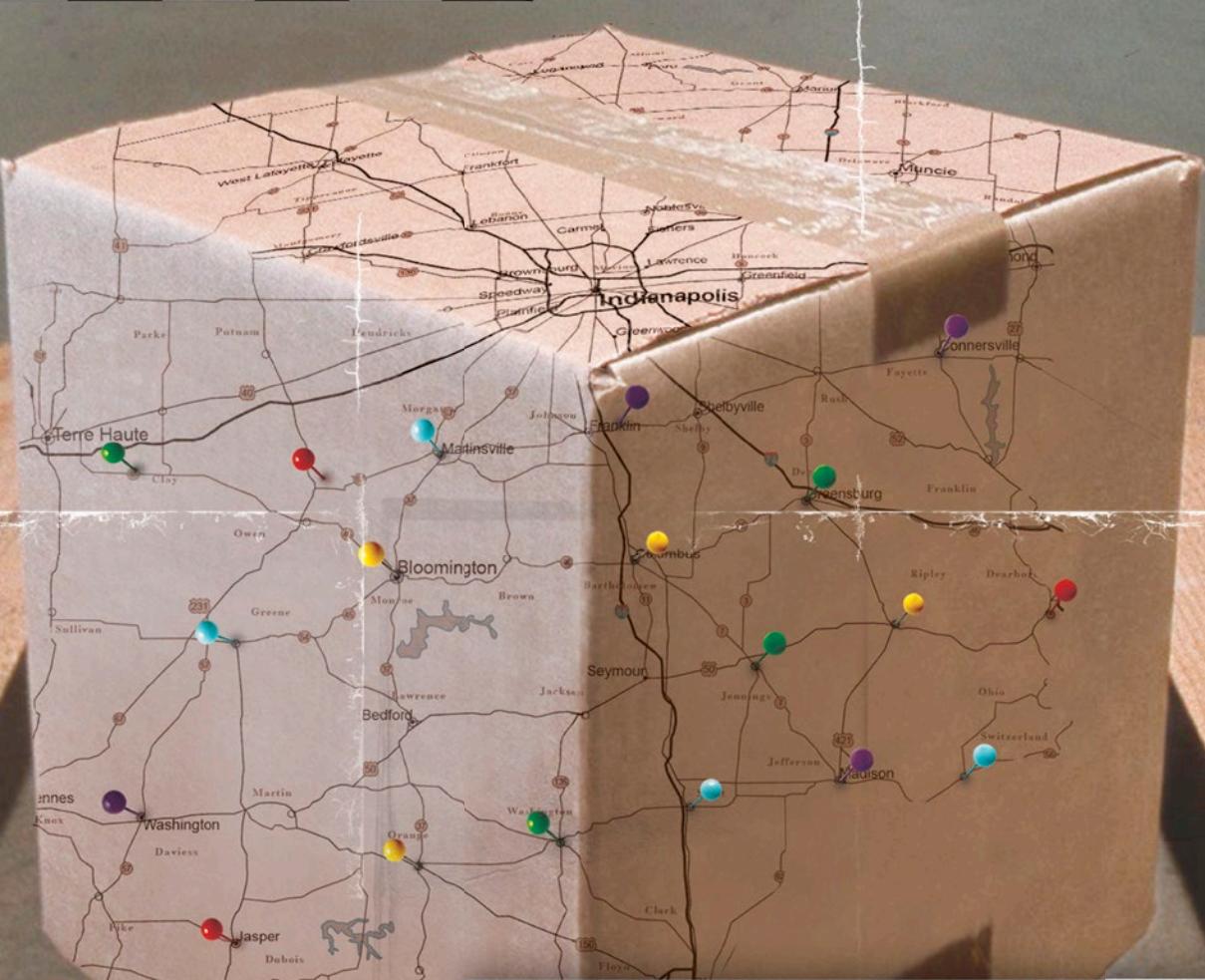
“In Florida, there are currently four southbound intermodal moves for every



**The Port of Savannah’s Garden City Terminal, which spans 1,200 acres, has the capacity to handle an increased volume of cargo from super post-Panamax vessels.**

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one coming north,” says Hertwig. “That means when ships dock in Miami or Ft. Lauderdale, they receive ‘backhaul’ rates because of the imbalance.

“With the anticipated increase in freight moving through South Florida upon completion of the expansion, FECR expects the system to begin to balance as a result, offering shippers, carriers, third parties, and ultimately end customers better economies of scale,” he adds.

### POISED AND PREPARED

PortMiami, Port Everglades, and the Port of Savannah all experienced volume growth in 2015, and officials representing the ports are confident their respective facilities are prepared for even greater volumes after the canal expansion is complete.

In 2015, PortMiami posted a 15-percent increase in containerized cargo movements with a total of 1,007,800 TEUs. Investments in on-dock intermodal rail and a tunnel to provide access to highways are providing shippers with fast service, port officials note.

Port Everglades reports that containerized cargo volumes grew five percent during 2015, based on reports between Oct. 1, 2014 and Sept. 30, 2015, reaching 1,060,506 TEUs.

The Port of Savannah experienced 17-percent growth in container unit volumes in 2015. The port was able to handle the cargo influx without congestion due to several facets of the operation, which is designed to provide efficient and flexible service, according to the GPA.

The fact that it is an owner-operator and does not lease out terminal space to different shipping lines already provides time savings, according to the GPA. With nearly 10,000 feet of contiguous berth space at Garden City Terminal, arriving vessels may be handled on a first-come, first-served basis, rather than having to wait for limited space at a leased facility. GPA currently operates 22 ship-to-shore cranes and 136 rubber-tired gantry cranes.

At 1,200 acres, Garden City Terminal has the capacity to handle influxes of cargo from super post-Panamax vessels carrying freight for multiple, allied shipping lines. Also, as a single terminal, container handling equipment can be concentrated in the areas of need—an advantage not offered by separate, leased facilities. Truck drivers have only one check-in process when delivering and picking up boxes for separate shipping lines. Turn times average 33 minutes for a one-box run and 53 minutes for a two-box run. Truck chassis

are in one location, simplifying the process for truckers.

Savannah’s pre-registration and tracking software further enhances efficiency by speeding truck interactions at the gates, and informing crane operators when a specific truck has arrived to deliver or receive a load.

Another part of being an owner-operator is the increased incentive to maintain and invest in terminal infrastructure. The GPA makes continual investments to keep capacity roughly 20 percent above demand, helping to avoid congestion. Garden City Terminal’s location west of Savannah and direct links to Interstates 95 and 16, only six miles from the port, mean truck drivers do not have to deal with city traffic.

Savannah is a hub for distribution centers operated by major retail outlets. The DCs are within minutes of the terminal, which reduces drive time and increases supply chain efficiency. At 38 weekly vessel calls, Savannah provides a wide range of global connections. “This means more choices to more destinations, with greater scheduling flexibility,” says a GPA spokesperson.

The Port of Savannah provides on-terminal service from Class I railroads Norfolk Southern and CSX Transportation, speeding the transition from ship to rail (or vice



**As a single terminal, the Port of Savannah can concentrate its container handling equipment in the areas of need—a benefit not found in separate, leased facilities.**

versa). Savannah features fast westward rail transit times in the South Atlantic region, including overnight service to a five-state area including Alabama, Georgia, Florida, North Carolina, and South Carolina.

Many view the Panama Canal expansion as a tremendous opportunity. “The biggest challenge is having the infrastructure in place to handle big ships, and we are ready,” say PortMiami officials. The Port of Savannah echoes those words.

Establishing an alternative shipping gateway to traditional routes upon the completion of the Panama Canal expansion is beneficial to southeastern U.S.-based companies that are demanding new supply chain options to traditional routes that have been hampered by infrastructure limitations, labor strife, and port and road congestion, resulting in delays and frustration, says FECR.



**Jim Hertwig, president and CEO of FECR (third from left), meets with Panama Canal and PortMiami officials at the expansion construction site.**

“Nobody wins when supply chains are interrupted,” says Hertwig. “The problems that have been experienced and the breakdowns that have occurred are far more costly than the consumer on the street realizes, but insiders get it.

“In the long term, the hope is that this global effort to address these issues will ultimately result in enhancements in supply chains across the country,” he adds. “The goal is a safe, secure, and fluid supply chain.”

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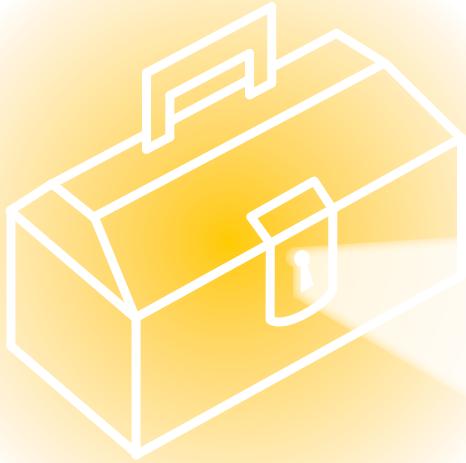
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## I.T. Toolkit | by Jason McDowell

# Azteca Foods Craves Inventory Management System

**M**any manufacturers and distributors still use paper-based inventory systems and other manual processes in their daily operations. But for companies such as Azteca Foods, with perishable products and distribution operations that span the globe, there just isn't time to do things the old way anymore. Implementing new technology is necessary to remain a market leader.

Azteca Foods is a family owned and operated company that offers a variety of products to meet the needs of consumers, chefs, and manufacturing partners through retail, food service, and industrial businesses – both domestic and global. Consumers can find the company's products, which include tortillas and ready-to-bake salad shells, in the refrigerated section of most leading grocers. Azteca Foods is headquartered in Chicago, where it operates a 100,000-square-foot manufacturing facility that employs more than 135 people.

In the past, Azteca used a paper-based system that required employees and line supervisors to record data with clipboards

at the end of each shift. But that system wasn't keeping pace with the global company's warehousing and distribution needs. "Supervisors and warehouse personnel had to use paper tally sheets to total and reconcile the cases moved from the production line into the finished goods warehouse," recalls Nannette V. Zander, vice president of information technology for Azteca Foods. "If a mistake occurred, they needed to recount and reconcile with manufacturing. And because the system was paper-based, we couldn't search electronically or report with our ERP system."

The old system inhibited the company's operation and negatively impacted

Azteca Foods spices up inventory tracking with an advanced automated system that doesn't cost too much dough.



the bottom line, because it was too time-consuming to keep up with the volume of products Azteca manufactured and distributed to global customers. While searching for a new solution to automate these manual processes, Azteca also had Verizon at its facility, working on installing network extenders to expand cellular service because the company had trouble getting cellphone signals inside the building.

### Azteca, Meet Barcoding

When Azteca told Verizon about the problems it had with inventory management and traceability, Verizon pointed Azteca in the direction of its partner company, Baltimore, Md.-based Barcoding, Inc., a systems integrator specializing in developing, deploying, and managing enterprise-wide solutions that help companies increase operational efficiency, collect data, and manage inventory.

“Azteca wanted a way to track pallets of goods moving throughout its warehouse,” says David Mikesell, senior software engineer, Barcoding. “As pallets came off the line, Azteca sought to assign a unique number to each. Then, it could use that identifier to trace its pallets.

“Azteca also wanted to eliminate its manual data entry processes,” he adds. “Operators had to write down what they produced and received in order to balance finished goods data at the end of a shift. Barcoding recommended and implemented a barcode scanning system, consisting of Zebra MC65 handheld computers, a customized mobile software application, an internally hosted web service, and network extenders to give Azteca maximum wireless coverage inside the facility.”

Barcoding also created a custom mobile application for the handheld computers using its CaptureSoft eXpress web-based software platform.

Barcoding was able to design and provide a solution that would work wirelessly on the Verizon network. This saved Azteca significant time and money by using and expanding the existing infrastructure instead of having to install new facility-wide wireless capability.



**A new barcode scanning solution provides Azteca Foods with full traceability of products moving into its finished goods warehouse.**

Azteca was pleased with the solution that Barcoding delivered. “We required a solution that assigned an ID number to every pallet right off the production line,” says Zander. “Barcoding listened to our concerns and developed a web service solution to accomplish our goals. In addition, Barcoding collects our data, and updates our devices and back-end database via the web.”

When pallets come off the line, warehouse operators scan a barcode. The custom-built application then gathers information such as the shift, the line, the product, and the number of cases on the pallet. All this data is compiled into a unique pallet identification number. The application then stores the data, and transfers it to Azteca’s back-end system.

With the ability to generate and assign individual numbers to each pallet, the pallets become fully traceable once they move into the finished goods warehouse. Now Azteca is able to tell where each pallet is located in the warehouse, exactly how much and what product it contains, which shift or line created it, and which pallets need to ship to each specific customer. The time saved from eliminating manual processes alone has had a positive impact on the company’s bottom line. In addition, the new system has improved employee productivity and significantly enhanced

the accuracy of collected data.

Now that it collects data reliably, in real time, Azteca can run reports in just a few seconds to double-check and balance production data with each warehouse shift, a system that works much better than the company’s previous method of ground-level checks with paper checklists. Besides saving significant time on the warehouse floor, the new automation has eliminated the human errors that often occur with manual processes. Verizon’s network extenders allow for facility-wide wireless data access instead of requiring workers to seek out specific access points.

### Backup Plan

In addition to its installation and ongoing support of the new system, Barcoding also provides a reliable backup service by collecting data on its own servers, ensuring that workers can keep creating shipments if Azteca’s servers go down.

A shift to automation can be uncomfortable for workers in any operation, but Azteca’s employees adapted quickly to the new system. “While hesitant at first, the warehouse personnel are now excited to be a part of the solution, and have been helpful in its implementation at Azteca,” Zander says. “Management now has the information available to track and

report on the pallets in the warehouse.”

In fact, one noticeable impact on the operation has been at the ground level, with the floor employees and supervisors who use the new equipment. “The excitement and enthusiasm of the line supervisors was striking,” says Mikesell. “Even while we were explaining the new system, and demonstrating the hand-held application, the supervisors were discussing ways they could use and expand the system to make their operation more efficient.”

Along with the response from Azteca’s workforce, the impact on the company’s overall operation has also been positive. “Barcoding did an excellent job of figuring out how to best make our scanning solution work,” says Zander. “They were careful to understand all our requirements and create a customized solution that will help drive efficiency, accuracy, and connectivity well into the future.”

The solution had such a positive impact on operations that Barcoding honored Azteca with its Innovator of the Year Award, which recognizes companies that have implemented a mobile or automated data capture solution that greatly impacts the business’s efficiency, accuracy, and connectivity. When delivering the award to Azteca during Barcoding’s annual conference,

Shane Snyder, president, Barcoding Inc., commended Azteca Foods “for demonstrating how a seemingly small change in operations — such as assigning pallet numbers — can have a huge impact on an organization.”



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With these large successes in improving Azteca’s facility behind them, the two companies are looking toward the future to see how they can expand the solution and improve operations even further. “Our solution opens many possibilities in other departments, as well as other facilities,” says Zander.

A few ideas are already in the works. Azteca is exploring options for adding printing capabilities to the new system. “Azteca would like to expand the solution by introducing printers that create pallet tickets,” Mikesell explains. “In turn, the company can use the tickets to track product in the shipping process.” Azteca is also looking at connecting the new database with its existing ERP system so it can integrate production information with other business processes.

The supply chain has become so complicated and inundated with so many forms of data that keeping track of it all manually won’t be an option for much longer. It’s important for businesses to look ahead and keep pace with technologies that will help them

grow. Companies can benefit by following Azteca’s example and replacing manual processes with automation to help reduce overhead, maintain a reasonable bottom line, keep shipping times to a minimum, and compete on a global scale. ■

## 3PLs



### Landstar • www.landstar.com

Landstar provides transportation management solutions including global and domestic transportation logistics services. Landstar, long known for its safety-first culture, continues to emphasize safety, security and compliance. Our services include truckload and LTL, rail intermodal, air and ocean cargo, expedited air and truck, heavy-haul/specialized, cross-border, project cargo, customs brokerage, transportation management systems, integrated solutions, outsourced logistics and warehousing.

### Pacific Coast Warehouse Company • www.pcwc.com

Pacific Coast Warehouse Company (PCWC) is a third-party logistics provider based in California, with more than 70,000 food grade rack and bulk pallet storage positions in the southern and northern California markets. PCWC offers a complete line of warehousing and value-added services, as well as all levels of transportation service, including drayage, intermodal, full truckload, flatbed, and LTL. For more information about Pacific Coast Warehouse Co., visit www.pcwc.com.



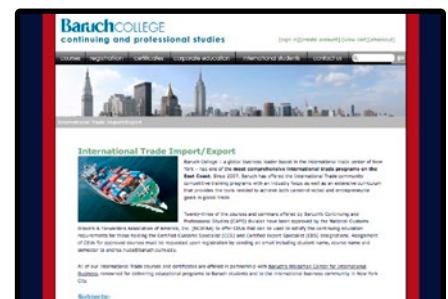
### RR Donnelly Logistics • www.rrdonnelley.com/logistics

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## EDUCATION

### Baruch College Division of Continuing and Professional Studies iem.baruched.com

Trade globally...learn locally! Baruch College's Weissman Center for International Business and Division of Continuing and Professional Studies (CAPS) runs 45+ practical courses and 7 rigorous certificate programs to develop and advance your international trade career. We offer Customs Broker License Test Preparation, Import and Export Operations, Logistics, Supply Chain Management, International Entrepreneurship, NASBITE-endorsed Certified Global Business Professional test preparation, and more. Earn NCBFAA-approved CEUs in selected courses and seminars. Taught by industry experts on our NYC campus, NJ port area, onsite, and online.



**IN THIS SECTION:**

**Education - Food Logistics**



**Elmhurst College**  
[www.elmhurst.edu/admission/school\\_for\\_professional\\_studies](http://www.elmhurst.edu/admission/school_for_professional_studies)

Whether you're pursuing graduate studies or an accelerated undergraduate program, the School for Professional Studies at Elmhurst will open the door to a wealth of opportunities. Wherever you are in your career, a certificate in your field can help you reach your goals. The School for Professional Studies at Elmhurst offers a wide range of certificate programs at both the undergraduate and graduate level. From the Elmhurst MBA to a master's in supply chain management to a leadership-focused MSN, our dynamic graduate programs will hone your leadership skills and prepare you for success. Courses are conveniently scheduled online or in the evenings.

**Penn State University, Smeal College of Business**  
[www.smeal.psu.edu/mps](http://www.smeal.psu.edu/mps)

**Master of Professional Studies in Supply Chain Management and Graduate Certificate in Supply Chain Management.** Through mastery of curriculum grounded in proven theory, best practices, and emerging innovation, graduates of Penn State's online master's and graduate certificate supply chain programs attain the knowledge and analytical skills for designing and managing the future's most sophisticated supply chains. Students engage in problem-based exercises coupled with collaborative learning experiences emphasizing interaction among fellow students, guided by top flight experienced faculty in courses offered through a convenient digital learning space, unconstrained by a set time or place.



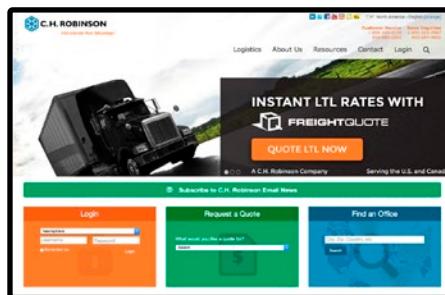
**University of San Diego • [www.sandiego.edu/msscm](http://www.sandiego.edu/msscm)**

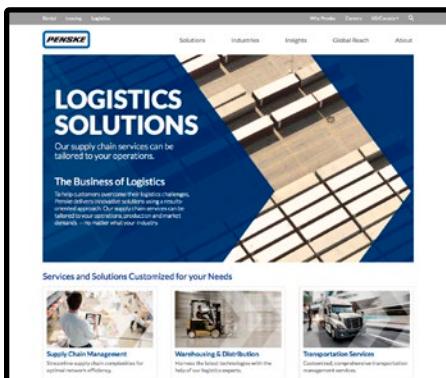
The University of San Diego's ISM-approved Master of Science in Supply Chain Management is delivered via e-learning with only a few on-campus sessions per year. Through relevant curriculum with applied learning, you'll develop leadership competencies that will enable you to initiate change and drive improvements across increasingly complex supply chain networks. Join us now for two years that will change your life!

**FOOD LOGISTICS**

**C.H. Robinson Worldwide, Inc. • [www.chrobinson.com](http://www.chrobinson.com)**

Founded in 1905, C.H. Robinson Worldwide, Inc. is one of the largest third-party logistics companies in the world, providing multimodal transportation, fresh produce sourcing, and information services to more than 32,000 customers globally, ranging from Fortune 500 companies to small businesses in a variety of industries. For more information about our company, visit our website at [www.chrobinson.com](http://www.chrobinson.com).





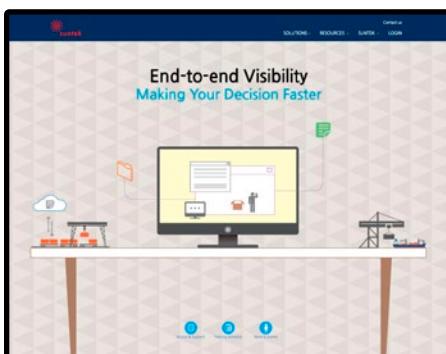
**Penske Logistics • [www.penskelogistics.com](http://www.penskelogistics.com)**

Penske Logistics is an award-winning logistics services provider with operations in North America, South America, Europe, and Asia. Our products and services range from dedicated contract carriage and distribution center management to transportation management and fully customized solutions. No matter what your needs or industry, Penske Logistics engineers supply chain solutions that deliver business results like boosting productivity, improving service, and shrinking carbon footprints. Call us today at 1-800-529-6531 to learn more.

**LOGISTICS IT**

**LeanLogistics • [www.leanlogistics.com](http://www.leanlogistics.com)**

LeanLogistics meets the needs of major shippers of goods with its far-reaching, true Software-as-a-Service (SaaS) technology—On-Demand TMS®. Customers reduce their transportation cost and increase efficiency with a typical payback of less than one year. Dozens of companies have selected On-Demand TMS® to address challenges such as obtaining carrier coverage, managing ever-changing networks, controlling inbound freight, creating continuous-move opportunities, and settling freight bills quickly and accurately.



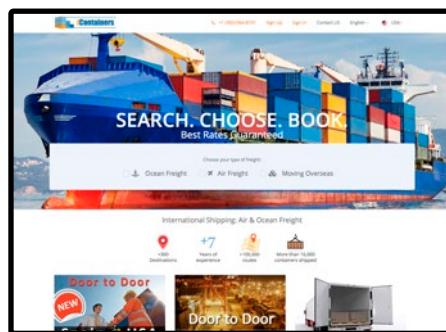
**Suntek Systems • [www.ilogisys.com](http://www.ilogisys.com)**

Suntek provides its logistics management software, *iLogisys*, for freight forwarders, NVOCCs, 3PLs, and customs brokers. As the company's flagship solution, *iLogisys* offers simple and efficient methods of logistics operation, collaboration tools between related parties, extensive supply chain visibility, B2B EDI connectivity, and more control over business management. The cost-effective and feature-rich *iLogisys* products boost your customer satisfaction, and increase sales opportunities for business growth.

**OCEAN**

**iContainers • [www.icontainers.com/us](http://www.icontainers.com/us)**

iContainers is a pioneering service that offers real-time freight quotes from the top shipping companies. Within 15 seconds, you get a free quote for your shipping, anywhere in the world. It not only provides real-time ocean freight quotes, it also includes an easy way to book and pay shipments online, all the necessary tools to manage import/export documentation, a system to track shipments, and easy access to all shipments, details, final quote, and legal invoice. Shippers can log on two to four hours each day; search thousands of transportation options; find the best routes, schedules and rates; and once the shipment is made, track in real time. iContainers supervises the entire process, no matter if you are a large firm, small company, or an individual.



**IN THIS SECTION:**

**Temperature-Controlled Shipping - Trucking-LTL**

**TEMPERATURE-CONTROLLED SHIPPING**

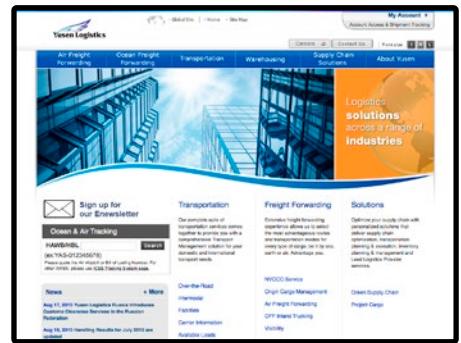


**Lynden • www.lynden.com**

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.

**Yusen Logistics • us.yusen-logistics.com**

Yusen Logistics offers a complete transport and logistics portfolio of services to some of the world's largest companies. We offer full end-to-end service coverage including origin cargo management, ocean freight forwarding, airfreight forwarding, warehousing, reverse logistics, surface transportation, and integrated supply chain solutions. We are committed to contributing to the sustainable development of our society through safe, environmentally friendly options.



**TRUCKING**



**Roadrunner Transportation Systems • www.rrts.com**

Roadrunner Transportation Systems provides flexible and responsive supply chain solutions throughout the United States and Canada. The company is dedicated to a customer-focused culture that delivers reliable and personalized service. It strives to maintain the highest ethical standards while continuing to be a best-valued logistics provider in the industry. The leading asset-light provider offers a full suite of solutions, from customized and expedited logistics to comprehensive global supply chain services.

**TRUCKING-LTL**

**Saia LTL Freight • www.saia.com**

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# WhitePaperDigest

Industry experts amass supply chain management best practices and skill sets, and invest in new research and evaluation tools. Now you can benefit. *Inbound Logistics* has selected this collection of whitepapers that will give you a jump on important supply chain issues. For more information on any of these whitepapers, visit the Web sites listed below.



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## Weber Logistics

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**TITLE:** *Benefits of Supply Chain Services in Northern CA: Stockton on the Rise*  
**DOWNLOAD:** [bit.ly/1HIRPKV](http://bit.ly/1HIRPKV)  
**SUMMARY:** Warehousing and distribution in northern California was historically centered in the East Bay area. Many are turning inland to Stockton for their supply chain needs. This whitepaper serves as a primer on the Stockton market - and the benefits of utilizing logistical services there - for anyone responsible for the storage and distribution of food and beverage, or consumer goods products.

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## J.B. Hunt

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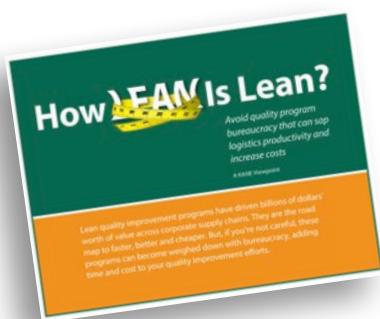
**TITLE:** *Dwell: How Intermodal Terminal Congestion Impacts Capacity and Service*  
**DOWNLOAD:** <http://jb.ht/WhitePaperDwell>  
**SUMMARY:** The railroad industry is experiencing a congestion issue called "dwell" that, when combined with recent and forecast increases in rail volume, impacts capacity, service, and growth. Dwell is the period of time starting when a container is unloaded from the train and ending when the container has departed from the rail facility. This whitepaper examines the problem with dwell, and offers solutions.

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## Kane Is Able

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**TITLE:** *How Lean is Lean?*  
**DOWNLOAD:** <http://hubs.ly/H01md510>  
**SUMMARY:** Lean quality improvement programs have driven billions of dollars worth of value across corporate supply chains. But, if you're not careful, these programs can become weighed down with bureaucracy, adding time and cost to your quality improvement efforts. This eBook reviews practical ways to make sure Lean program management doesn't get in the way of getting the work done.





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## Penske Logistics

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**TITLE:** *Turn Your Warehouse on its Head: Improve Productivity, Quality, and Safety From the Ground Up*

**DOWNLOAD:** [bit.ly/1Q4WekQ](http://bit.ly/1Q4WekQ)

**SUMMARY:** This whitepaper from the experts at Penske Logistics focuses on a bottom-up approach to successfully launching an effective labor management software program. It offers actionable steps for creating the right culture, phasing in the implementation, and ensuring benchmarks are met. Additionally, it cites an industry success story and lists six steps to assessing the efficiency of your warehouse.

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## C.H. Robinson

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**TITLE:** *Do "Favored Shippers" Really Receive Better Pricing and Service?*

**DOWNLOAD:** [bit.ly/1jkqPHb](http://bit.ly/1jkqPHb)

**SUMMARY:** Anecdotal evidence and some qualitative research suggests that "favored shippers" – companies for which carriers prefer to haul freight – obtain better pricing and service. But do they? In this paper, Iowa State University researchers explain how they sought to understand the voice of U.S. truckload carriers; how they quantitatively measured the effects of "favored shipper" characteristics on transportation costs; and what characteristics actually make shippers favored in the transportation marketplace.

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## C3 Solutions

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**TITLE:** *Becoming a Shipper of Choice*

**DOWNLOAD:** [bit.ly/1HIRRZX](http://bit.ly/1HIRRZX)

**SUMMARY:** If you are a shipper relying on for-hire carriers, or an asset-light 3PL, you are no doubt aware that there are, at present, several significant issues conspiring to make it more expensive and more difficult to get your goods delivered. The solution for many is to become what's known as a "shipper of choice." This whitepaper explains how shippers can sustain and grow their bottom line by becoming carrier friendly.



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## Sealed Air

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**TITLE:** *Dimensional Weight: Don't Let It Weigh You Down*

**DOWNLOAD:** [bit.ly/1WzKQvH](http://bit.ly/1WzKQvH)

**SUMMARY:** Dim weight pricing changes do not have to weigh heavily on manufacturers and retailers from a financial or operational perspective. By taking the proactive steps outlined in this whitepaper, companies can help ensure they are protecting their customers' products, their reputations, and their bottom lines.

## Share your whitepaper with /L readers!

*WhitePaper Digest* is designed to bring readers up-to-date information on all aspects of supply chain management. We're building a database of SCM whitepapers, and you can help. E-mail us with whitepaper recommendations: [editorial@inboundlogistics.com](mailto:editorial@inboundlogistics.com)

### //Transportation//

The **CMA CGM Group** upgraded its services with five export solutions for transporting Moroccan citrus fruits and vegetables to Russia, North America, Europe, the Middle East, and Africa. The five maritime services include 14 weekly calls at Moroccan ports.

Following a successful test phase, **Lufthansa Cargo** permanently added Vietnam to its route network. The cargo airline now operates a Boeing 777F weekly to Ho Chi Minh City. The freighter departs every Thursday from Frankfurt, heads to Ho Chi Minh City via Mumbai, and terminates at Hong Kong.

**UPS** expanded its UPS Worldwide Express service to more than 41,000 new postal codes around the world. This is the largest one-time expansion of the service in its history, giving shippers earlier guaranteed-delivery options that previously had only end-of-day guarantees. The service is part of the UPS Express portfolio, which offers three guaranteed time-of-day delivery options that include customs clearance. UPS Worldwide Express service is available in 65 countries.

**IAG Cargo** put its first commercial Boeing 787-9 to work on the busy London-to-Delhi route. Businesses trading on this route now have more than 24 tons of capacity on each daily flight. With the aircraft's larger holds, IAG Cargo (created by the 2011 merger of British Airways World Cargo and Iberia Cargo) provides shippers a weekly lift of up to more than 1,000 tons for the Indian market.



To help improve energy efficiency, **Maersk Line** added 12,900 Carrier Transicold PrimeLINE container refrigeration units to its fleet, and is installing the units on 40-foot high-cube containers. The PrimeLINE unit's energy efficiency helps Maersk move toward its 2020 target to improve carbon dioxide efficiency by 30 percent, relative to a 2010 baseline.

Express delivery company **TNT** added air connections to Sweden and Finland, and additional last-mile delivery capacity in large business centers to strengthen its international services to the Nordics. By expanding the coverage of its international, morning delivery services in Sweden, Denmark, Norway, and Finland, TNT serves 34 percent more businesses in the region by noon the next business day, benefitting urgent parcel and freight shippers.

### //Technology//

Claims management solutions provider **TranSolutions** released the industry's first software system dedicated to helping carriers manage cargo claims being filed against them. *CarrierClaim* can be integrated with the carrier's TMS, accounting software, or other internal systems. *CarrierClaim* stores supporting documentation, photos, and follow-up notes with the claim record in one location.



**enVista**, a global supply chain consulting and IT services firm, released a new direct store delivery system called *Stack Sleeve*, which is designed to optimize beverage delivery loads within the truck and reduce delivery times. The *Stack Sleeve* system can be used in the warehouse and during delivery for both route and bulk customers from one vehicle. In addition to the physical sleeves, the *Stack Sleeve* software application organizes cases to be picked into each sleeve.

**Bestpass**, a provider of single-source payment and streamlined toll management services to commercial fleets, introduced exclusion zones, a new feature that sends dynamic, timely alerts to fleet managers, allowing them to catch instances of unplanned toll usage or company policy breaches. Bestpass' exclusion zone reporting can be received months in advance, allowing for immediate corrective efforts with drivers.

**View Technologies**, a joint venture between Stanley Black & Decker and RF Controls, unveiled *inView*, a software framework that enables solutions providers to access real-time data for the billions of items incorporating RAIN RFID (Passive UHF) tags in retail, manufacturing, and logistics. The *inView* platform provides item-level visibility that can be integrated into enterprise systems, applications, and IoT platforms.

**TECSYS**, a supply chain management software company, released its smartphone *Delivery Management* solution, designed to help logistics managers gain control of their internal transportation operation and manage delivery volumes, turnaround times, and logistics costs. The solution enables users to create, pick up, and deliver shipments directly from a smartphone and offers real-time, online shipment traceability.



**Clearpath Robotics**, a field and service robotics maker, unveiled its first self-driving warehouse robot, OTTO. Using the same underlying self-driving technology popularized by the Google self-driving car, OTTO is designed for intelligent heavy-load transport in industrial environments, and can increase throughput and decrease operating costs.

**PeopleNet**, a provider of fleet mobility technology, unveiled new integration features with *TMT Fleet Maintenance* from TMW Systems, which provides transportation management software to fleets and logistics service providers. The new features automate the process of road call issues and give fleets more options for preventive maintenance.

**WorkWave**, a provider of cloud-based field service management and last-mile fleet management software solutions, unveiled *WorkWave Fleet*, its mobile-first flexible route planning solution. With features such as real-time dispatching and intra-day planning for rapid rescheduling, *WorkWave Fleet* helps field service and transportation and logistics businesses save time and costs while increasing capacity.

**COVETRA**, a track-and-trace technology services provider, launched an integrated serialization-based solution for protecting infant formula from counterfeiting. The system, which was developed to meet the increasing need for brand and supply chain integrity of infant formula, enables track-and-trace and diversion detection throughout the supply chain.

The **American Association of Port Authorities** unveiled an interactive hemispheric map of its member ports on its website. Shippers can gather statistics about individual ports and use this tool to access information about each port's primary cargoes and channel depths.

## // Services //

**Logistics Plus**, a worldwide provider of transportation, logistics, and supply chain solutions, moved its Dallas/Ft. Worth warehouse to a new facility located in Haslet, Texas. The new facility has 180,000 square feet of storage space—more than double its previous location—and can handle large, heavy equipment with a pneumatic tire forklift that has 62,000 pounds of lifting capacity.

To keep pace with the surging pharmaceutical industry, **3PL MD Logistics** doubled its storage capacity for pharmaceutical and medical device products. The company expanded into an additional 173,000 square feet of controlled room temperature pharmaceutical warehouse space near its flagship Midwest facility in Indianapolis, Ind., and is also investing \$1.5 million in additional cold storage at the existing facility.

**Massachusetts Port Authority** rolled out a new mobile application that aims to shorten truck times at the Port of Boston's Conley Container Terminal. The app, called *Forecast Mobile Lite*, provides trucking companies and drivers access to container availability information in real time on their smartphones before they arrive at the terminal, saving time and avoiding potential issues at the terminal gate.

**Yusen Logistics** opened its dedicated Pharma Gateway at Amsterdam Schiphol Airport. This new operation represents the official launch of Yusen Logistics' GDP-compliant global pharma airfreight services, its latest step to bolster services to the pharmaceutical supply chain.

**JZ Expedited Logistics** moved to a larger and newly renovated office and warehouse in Jacksonville, Fla. The new 40,000-square-foot facility includes 32,000 square feet of warehouse space with 2,500 square feet of ambient temperature-controlled space for sensitive products such as cosmetics, candies, precious artwork, and tobacco products. The new warehouse has two CSX rail dock doors to accommodate heavy commodities such as rolled paper and lumber.

**Langham Logistics**, a 3PL and freight management company, expanded its warehousing operations by adding a 240,000-square-foot facility in Plainfield, Ind. The warehouse is equipped with racking to handle more than 10,000 pallets and features approximately 100,000 square feet of temperature-controlled space.

**American Airlines Cargo** started a new leasing program for temperature-controlled containers for shippers moving time- and temperature-sensitive products. The high-tech units, called CSafe Global RKN, can maintain a precise temperature of 39.2 to 77 degrees Fahrenheit through long flights and extended hold times.

**TAGG Logistics**, a third-party e-commerce fulfillment, retail distribution, and logistics provider to middle-market healthcare and consumer products companies, expanded its West Coast operations with the opening of a new fulfillment center in Reno, Nev. The new 153,000-square-foot warehouse serves as a multi-channel distribution center designed for direct-to-consumer fulfillment, retail distribution of pallet and case quantities, and high-volume kitting and assembly.

**DHL**, an international express services provider, opened a new service center in Herndon, Va., to serve the area of northern Virginia known as the "Dulles Corridor." The \$1.5-million, 18,000-square-foot facility can process more than 2,500 shipments per hour. It is located adjacent to the Washington Dulles International Airport, and operates as the local center for pick-up, delivery, and sorting operations of international shipments.

**Kenco Logistics**, a provider of integrated logistics solutions, opened a new 300,000-square-foot distribution center in Kalamazoo, Mich. The facility meets standards for handling medical products and includes 17 loading docks and 120 truck trailer parking spots.



**UTi Worldwide**, a global supply chain services and solutions provider, installed the first of the more than 450 UTi ByBox shipment lockers it plans to deploy throughout South Africa to give online retailers and their customers a secure, convenient, and efficient option for collecting and sending parcels. The first UTi ByBox was installed at an Engen service station in suburban Johannesburg. Retail centers, business parks, and university campuses are also among the types of locations targeted for the UTi ByBox deployment.

Cold chain solutions provider

**Envirotainer** opened a new station in Shanghai, China, to support growing cold chain services to pharmaceutical companies. With the new service station, Envirotainer has more capacity to release its RKN e1 containers to the Chinese and Asian market. The containers allow pharmaceutical companies to ship temperature-sensitive products faster and more efficiently to their final destination.

### //Products//

Loading dock solutions provider **APS Resource** introduced its S.W.A.T. (Secondary Warning Alert Technology) module, which adds an extra layer of protection for dock operations by visually alerting workers to use caution any time dock status changes. The module works in combination with LED dock lights and vehicle restraints.

LED fixture manufacturer **TERRALUX** introduced a new line for storage areas and loading docks in warehouses. The SL series can be mounted on walls or ceilings with optional backup battery power and occupancy sensors. The lights can cut energy use by 80 percent compared to fluorescent bulbs.

**Intelligrated**, an automated materials handling solutions provider, launched two enhanced palletizer models, the Alvey 890i and 891i. The new models handle a wide array of package types and intricate stacking patterns in a small footprint. Operators create new load configurations through a 10-inch color touchscreen interface while using standard features such as automatic layer-centering compression dams and package stops that can be relocated or installed in minutes.



**UNEX Manufacturing**, an order picking solutions provider, unveiled Pick-Plank, a mechanical order picking device that affixes to a pallet and converts each pick slot from a static to a dynamic storage position, allowing all items on a pallet to be accessible from the aisle. It is suitable for case picking less than a full pallet, eliminating the need for the picker to have to reach or crawl into the storage position.

**ORBIS Corporation**, a manufacturer of sustainable and reusable packaging, introduced PlastiCorr, a plastic, reusable corrugated box that is designed to work seamlessly with existing automated packaging lines. Expected to bring environmental, economic, and operational benefits, the product supports supply chain efficiency for food, beverage, and consumer packaged goods companies.

Packaging company **Pelican BioThermal** unveiled Chronos Express, a temperature-controlled packaging solution designed to safely transport pharmaceuticals, tissue, diagnostics/clinical trials, vaccines, and blood samples. This new single-use shipper system can maintain consistent temperatures for more than 72 hours.

Weighing system technology manufacturer **Quantronix** introduced the CubiScan 75, an overhead dimensioning device that quickly measures outbound parcels and other daily shipments. CubiScan 75 is equipped with 3-D cameras and integrates with shipping software, a barcode scanner, and label printer to create a shipping/manifesting workstation.

Protective packaging specialist **Storopack** introduced the FOAMplus Bagpacker<sup>2</sup>, an updated version of its FOAMplus Bagpacker packaging system. The on-demand foam-in-bag system protects sensitive goods during shipping. Its foam cushions adapt to the goods to be packaged and are suitable for shipping sensitive items of all sizes.

# CALENDAR

YOUR LOGISTICS  
DATEBOOK

FEB  
28

Retail Industry Leaders Association (RILA)

## Retail Supply Chain Conference 2016

[www.retailsupplychain.org](http://www.retailsupplychain.org) | Dallas | FEB 28-MAR 2

**AUDIENCE:** Stakeholders in the retail supply chain; logistics, supply chain, and distribution professionals  
**FOCUS:** Changing nature of retail; the supply chain's critical role in serving the customer; how DC design decisions impact the bottom line; leveraging analytics for supply chain advantage

**JAN 20-21, 2016** Orlando, Fla.

marcus evans

## Supply Chain Risk Management

[bit.ly/marcusevansSCconference](http://bit.ly/marcusevansSCconference)

**AUDIENCE:** Supply chain risk professionals  
**FOCUS:** Strategies for overall supply chain visibility; meeting heightened regulatory standards; capitalizing on advances in software visibility and internal strategy

**MAR 30-31, 2016** Atlanta, Ga.

Terrapinn

## Home Delivery World 2016

[www.terrapinn.com/conference/home-delivery-world/index.stm](http://www.terrapinn.com/conference/home-delivery-world/index.stm)

**AUDIENCE:** Supply chain, transportation, fulfillment, logistics, e-commerce, IT, and warehousing professionals  
**FOCUS:** Same- and next-day delivery strategies; omni-channel logistics; next-gen systems platforms; delivery solutions to big and small box retailers and merchants

### CONFERENCES

**JAN 18-20, 2016** Atlanta, Ga.

SMC<sup>3</sup>

## Jump Start 2016

[www.smc3jumpstart.com](http://www.smc3jumpstart.com)

**AUDIENCE:** Supply chain, logistics, and transportation professionals  
**FOCUS:** Issues and trends impacting the U.S. trucking industry; strengthening supply chain collaborations; updates on the Panama Canal expansion

**JAN 18-22, 2016** Lake Buena Vista, Fla.

PEX Network

## Process Excellence Week

[bit.ly/pexweek.com](http://bit.ly/pexweek.com)

**AUDIENCE:** Operational excellence and business transformation executives  
**FOCUS:** Case studies in operational excellence, strategic business transformation, BPM, and continuous improvement; aligning strategy with operational excellence to drive sustainable, enterprise-wide transformation

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**Pennsylvania State University,  
Smeal College of Business** pg. 59  
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**Transportation Intermediaries  
Association (TIA)** pg. 60  
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**INDEX**

ADVERTISER	PAGE	ADVERTISER	PAGE
Alliance Shippers, Inc.	15	Lynden	24
American Public University	60	MODEX	5, 84
APICS	61	Northwest Seaport Alliance	31
AT&T	9	Pacific Coast Warehouse	11, Cover 3
Bahri General Cargo	27	Pennsylvania State University, Smeal College of Business	59
Baruch College	61	Penske Logistics	19
C.H. Robinson	3	Retail Supply Chain Conference 2016	20
California State University, Long Beach	61	Roadrunner Transportation Systems	29
East Carolina University	60	RR Donnelley	16, 28
Elmhurst College	57	Saia	Cover 2
Express Carriers Association	70	SMC <sup>3</sup> Jumpstart 2016	33
Georgia Ports Authority	65	Transportation Intermediaries Association (TIA)	60
Hoosier Energy	67	University of San Diego	55
iLogisys/Suntek Systems	Cover 4	Veritiv	73
JobsinLogistics.com	62	Wagner Logistics	23
Joplin Regional Partnership	69	WSI (Warehouse Specialists, Inc.)	30
Landstar	13	Yusen Logistics	45
LeanLogistics	32		

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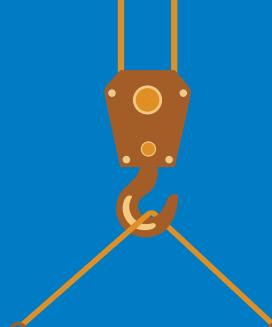
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## SURPRISING SHIPPING LAWS

You may be familiar with the standard laws to follow when importing or exporting products, but some obscure shipping laws are still on the books. Check this list before packing up those playing cards!



### KEEP IT CASUAL

Albania prohibits shipping extravagant clothing, as well as items of clothing contrary to Albanian tastes, into the country.



### NO BELLS AND WHISTLES

Shipping bells or other musical instruments (even parts of them) to Italy is against the law. The same goes for clocks and clock supplies.



### A STICKY SITUATION

Chewing gum has historically been banned from entering Singapore. The country recently relaxed that law to allow dental hygiene gum.



### PLAYING WITH A FULL DECK

You cannot send playing cards, unless in complete decks and properly wrapped, into Germany. Countries including Czech Republic and Denmark also enforce this law.



### JAILHOUSE BLOCK

You can't import goods to Australia that have been made wholly or partly in prisons or by convict labor.



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