

SPECIAL JOINT SUPPLEMENT

OIL, GAS & ENERGY

FUELING THE VALUE CHAIN

inbound logistics

www.inboundlogistics.com

THE MAGAZINE FOR DEMAND-DRIVEN LOGISTICS • FEBRUARY 2015

GLOBAL LOGISTICS

COLD CHAIN

SUPPLY CHAIN

NETWORK MODELING

PARCEL SHIPPING

FORECASTING

FINANCE

DIM WEIGHT

CONTRACT NEGOTIATIONS

WAREHOUSE MANAGEMENT

CUSTOMS COMPLIANCE

SECURING CAPACITY

TRANSPORTATION

REVERSE LOGISTICS

ECONOMIC DEVELOPMENT

FULFILLMENT

HAZMAT

VENDOR COMPLIANCE

MANUFACTURING

EXPEDITED AIR

SUSTAINABILITY

CROSS-BORDER TRADE

3PLS

SAAS

PALETS

PURCHASING

LOGISTICS

LTL TRUCKING

CARRIER SELECTION

VALUEMENT

EMERGING MARKETS

HOLIDAY PEAK

TRUCKING

POCKET TOWN

PORTS

ROUTING GUIDES

OMNICHANNEL LOGISTICS

MATERIALS MANAGEMENT

TECHNOLOGY

DC NETWORKS

TALENT GAP

CARGO SECURITY

FLEET MANAGEMENT

OCEAN FREIGHT

SITE SELECTION

WMS

INTERMODAL

AIR FREIGHT

MARKETING

TODAY'S SUPPLY CHAIN GRADUATES

GAINING A WORKING KNOWLEDGE

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl



#CULTURE SHOCKED

"I heard the stories, but when I came to LEGACY I realized the focus on customer service is for real. Our culture empowers us to go the extra mile."

Jen – LEGACY Client Services



LEGACY
SUPPLY CHAIN SERVICES

Learn how LEGACY's culture can make a difference for your business at
LEGACYscs.com/culture-shocked

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl

inbound logistics

THE MAGAZINE FOR DEMAND-DRIVEN LOGISTICS

DOWN GOES THE BOOM
page 51

**OIL, GAS &
ENERGY**
page 51

February 2015 • Vol. 35 • No. 2

INSIGHT

- 4 CHECKING IN**
Supply chain education and the Integration of Things.
- 6 DIALOG**
The ongoing conversation.
- 8 10 TIPS**
Fine-tuning your warehouse layout.
- 26 LEAN SUPPLY CHAIN**
Designing a new strategy for a new year.
- 28 VIEWPOINT**
Seven common shipping mistakes and how to avoid them.
- 30 IT MATTERS**
Protecting your brand with product lifecycle management.
- 80 LAST MILE: RACK AND ROLL HAUL OF FAME**

INFOCUS

- 13 NOTED**
- 17 TRENDS**
Maritime industry opposes repeal of the Jones Act ... Digital technologies shake up supply chain solutions... The 10 best warehouse networks.
- 23 GLOBAL**
UK truck driver shortage focuses on young people... The United States and Cuba open new trade opportunities... Panama approves new port development.

INPRACTICE

- 10 READER PROFILE Lauren Corbett: Help is on the Way**
Lauren Corbett, program assistant, acquisitions and logistics, at International Relief and Development, secures donated supplies, and makes sure they get to people in need.
- 63 TOOLKIT The Kings of ACE**
With mandated ACE compliance deadlines on the horizon, HW St. John bet on an automated solution that streamlines processes and deals customers a winning hand.

INDEPTH

- 32 Today's Supply Chain Education: It's All in Your Head**
The list of competencies employers seek when they recruit supply chain professionals keeps growing longer and more complex. Here's how degree-granting programs keep pace, and enable well-rounded graduates to fill prime positions.
- 45 Logistics and Supply Chain Education Resource Guide**
Ready to boost your skills? Explore the education programs offered by these schools and associations.
- 51 IL/CHEMICAL WEEK JOINT SUPPLEMENT Down Goes the Boom**
Volatility in the oil and gas business is forcing producers and industry to confront a legacy of poor logistics execution.



INFO: 66 WEB_CITE CITY 70 WHITEPAPER DIGEST 72 IN BRIEF 76 CALENDAR 77 CLASSIFIED 78 RESOURCE CENTER

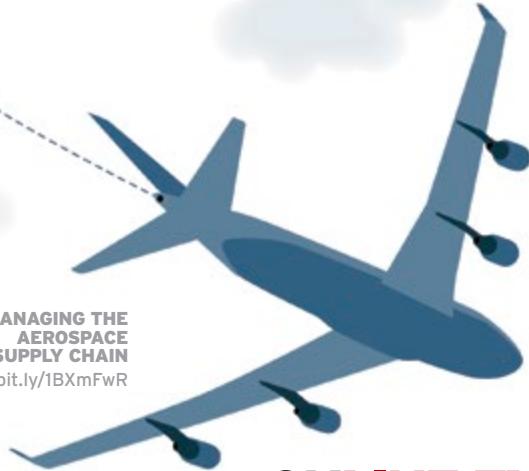
February 2015 • Inbound Logistics 1

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl



MANAGING THE
AEROSPACE
SUPPLY CHAIN
bit.ly/1BXmFwR



inbound logistics

www.inboundlogistics.com

ONLINE EXCLUSIVES

QUICKBYTES

30 UNDER 30

Meet the next generation of supply chain professionals: The 2014 winners of the 30 Under 30 Rising Supply Chain Stars program. Explore some of the brightest new lights in our industry's firmament and see what makes them shine.

bit.ly/1L-30-Under-30

LOGISTICS & SUPPLY CHAIN NEWS

For up-to-the-minute information, bookmark the *IL* news page. Enjoy opinions, commentary, and links to the latest news to help you stay on top of your game.

bit.ly/1L-News

WEB_CITE CITY®

The most comprehensive and clutter-free online directory of supply chain websites – organized by category, cross-referenced, and fully searchable. You can browse by category or search for companies by name.

bit.ly/1L_WCC

Keep up to date with the very latest:

[facebook.com/InboundLogistics](https://www.facebook.com/InboundLogistics)

[@ILMagazine](https://twitter.com/ILMagazine)

[linkedin.com/company/inbound-logistics](https://www.linkedin.com/company/inbound-logistics)

2 Inbound Logistics • February 2015



Managing the Aerospace Supply Chain bit.ly/1BXmFwR

Thierry Tosi, Vice President and General Manager, Rockwell Collins Service Solutions

Today's aftermarket aerospace and defense supply chain requirements are changing how companies secure the critical spare parts needed to improve customer service and enhance product uptime and profitability. This article shows you how to move aftermarket parts cost effectively.



Contingency Planning Keeps Freight Moving bit.ly/1vurOQk

Marcia Faschingbauer, President, Excargo Services

It's vital that companies institute contingency plans to keep freight and operations moving despite any obstacle, big or small. Be prepared with these contingency planning tips.



Filling the Manufacturing Skills Gap With Technology bit.ly/1zjSoLq

Joe Langner, Executive Vice President of Mid-market Solutions, Sage North America

The right tech tools can help fill the talent gap by improving business processes and productivity within your existing team. Check out how manufacturers can use technology to stretch the capabilities of their existing workforce.

EDUCATION RESOURCES

Find an Education Program bit.ly/16ejo30

The Logistics and Supply Chain Education Decision Support Tool will help you find learning opportunities from leading logistics institutions.

Education Request for Proposal bit.ly/1F2Co0s

Use this Education RFP to contact leading universities and professional institutions that can help you improve your logistics and supply chain skillsets.

CHAMPION *of* ON-TIME DELIVERY

At Saia, we know there's nothing more important to our customers than reliable pickup performance and on-time delivery – and it all starts the second your shipment enters our system. That's when our entire team gets to work: optimizing transit routes, sharing critical information and tracking progress in real time using state-of-the-art technology. And with many of the industry's most committed and experienced drivers at the wheel, Saia isn't simply moving freight. We're delivering confidence and peace of mind – because your name is on the line.

The Saia logo features the word "SAIA" in a white, stylized, serif font with a decorative flourish underneath, set against a red rectangular background.

LTL Freight

1-800-765-7242 / www.saia.com

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl

CHECKING IN

Felecia Stratton

by Felecia Stratton | Editor



Supply Chain Education and The Integration of Things

You've heard about the Internet of Things? Well, today's supply chain education is about the Integration of Things. Integration is a buzzword you're used to hearing nearly everywhere you turn in today's supply chain—in the context of technology deployment, data validation, business process change, or logistics outsourcing. Enabling systems and solutions to perform seamlessly when change is a constant churn is no easy task. That's why companies are embracing integration as a continuous process of improvement.

Like integration, upgrading the knowledge and skills of today's supply chain professional is a continuous process. The role of supply chain practitioner is evolving by integrating technology, functional expertise, and experience to identify problems and engineer solutions.

Where does the new generation of supply chain professionals gain these integrated skills? From universities and schools that are evolving to integrate into their curriculum new skills that companies like yours demand. It's no longer enough for new recruits to just know transportation, or purchasing, or marketing. And industry veterans have just as much opportunity to step up their game and take advantage of postgraduate programs and career development certifications to boost their skills in these new directions.

Today's supply chain education curriculum, at both the undergraduate and postgraduate levels, in the classroom and online, embraces perspective. Whether it's tying marketing to logistics, automotive to consumer packaged goods, or materials engineering to procurement, there's a lot to be learned by eschewing convention and opening new doors.

Take, for example, the role of procurement. Traditionally, purchasing has been driven solely by cost. But that's changing. Chief purchasing officers now have the power to facilitate collaboration by inviting different functions—transportation, finance, operations—into the decision-making process and taking a more strategic approach to sourcing. Today's supply chain education reflects that.

The feature article in our annual Education and Career Development issue follows a similar thread. In *Today's Supply Chain Education: It's All In Your Head* (page 32), Merrill Douglas talks with a number of university professors and administrators to explore how the classroom is preparing a new crop of graduates armed with the skills your company needs to meet market demands and competitive pressures.

And if you are interested in integrating new supply chain skills into your professional career plan, the Logistics & Supply Chain Education Resource Guide on page 45 is a good place to start. ■

inbound
logistics

Vol. 35, No. 2

February 2015

THE MAGAZINE FOR DEMAND-DRIVEN LOGISTICS

www.inboundlogistics.com

STAFF

PUBLISHER Keith G. Biondo
publisher@inboundlogistics.com

EDITOR Felecia J. Stratton
editor@inboundlogistics.com

MANAGING EDITOR Lauren Muskett
lmuskett@inboundlogistics.com

SENIOR WRITER Joseph O'Reilly
joseph@inboundlogistics.com

ASSOCIATE EDITOR Jason McDowell
jmcowell@inboundlogistics.com

CONTRIBUTING EDITORS
Merrill Douglas
Mary Shacklett

CREATIVE DIRECTOR Michael Murphy
mmurphy@inboundlogistics.com

**ASSOC. ART DIRECTOR/
PRODUCTION MGR.** Mary Brennan
mbrennan@inboundlogistics.com

**DIGITAL DESIGN
MANAGER** Amy Palmisano
apalmisano@inboundlogistics.com

PUBLICATION MANAGER Sonia Casiano
sonia@inboundlogistics.com

CIRCULATION DIRECTOR Carolyn Smolin

SALES OFFICES

PUBLISHER: Keith Biondo
(212) 629-1560 • FAX: (212) 629-1565
publisher@inboundlogistics.com

WEST/MIDWEST/SOUTHWEST: Harold L. Leddy
(847) 446-8764 • FAX: (847) 305-5890
haroldleddy@inboundlogistics.com

Marshall Leddy
(612) 234-7436 • FAX: (847) 305-5890
marshall@inboundlogistics.com

SOUTHEAST: Gordon H. Harper
(404) 229-9691 • FAX: (404) 355-2036
south@inboundlogistics.com

MOBILE, AL: Peter Muller
(251) 232-1920 • FAX: (251) 343-0541
petermuller@inboundlogistics.com

NORTHEAST: Rachael Sprinz
(212) 629-1560 • FAX: (212) 629-1565
rachael@inboundlogistics.com

FREE SUBSCRIPTIONS

www.inboundlogistics.com/free



Inbound Logistics supports sustainable best practices. Our mission is rooted in helping companies match demand to supply, eliminating waste from the supply chain. This magazine is printed on paper sourced from fast growing renewable timber.

Inbound Logistics welcomes comments and submissions. Contact us at 5 Penn Plaza, NY, NY 10001, (212) 629-1560, Fax (212) 629-1565, e-mail: editorial@inboundlogistics.com. For advertising, reprint, or subscription information, call (212) 629-1560, or e-mail publisher@inboundlogistics.com. Inbound Logistics is distributed without cost to those qualified in North America. Interested readers must complete and return the qualification card published in this issue, or may subscribe online at www.inboundlogistics.com/free. Subscription price to others: in North America: \$95 per year. Foreign subscriptions: \$229. Single copy price: No. Amer. \$10, foreign \$19, back issues \$15. Periodicals postage paid at New York, NY, and additional mailing offices.





Reach new markets with
the UPS® logistics experts

Meet customer demands across the globe

According to the 4th annual UPS Change in the (Supply) Chain survey, **less than half of high-tech companies** feel knowledgeable when it comes to **expanding into international markets**.

Here's where UPS can help.

Simplify Customs Clearance

With expertise in customs clearance and connections to over 220 countries and territories, we'll streamline operations and help save you time. And best of all, we'll make sure your products reach your customers quickly and securely.

Reduce Time-in-Transit

We can ensure optimal staging of your inventory to help reduce time-in-transit and overall transportation costs.

Improve Customer Service

Get your products to your customers when and where they need it with quick and reliable shipping options like UPS Worldwide Express® Service.

Together, we'll make sure that your product launches as seamlessly as your products run.

Visit ups.com/hightechsurvey to learn more about working with UPS.



Copyright ©2014 United Parcel Service of America, Inc.

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl



DIALOG

THE ONGOING
CONVERSATION

Follow us:

facebook.com/InboundLogistics

twitter.com/ILMagazine

linkedin.com/company/inbound-logistics

Drop us a line:

editor@inboundlogistics.com

or send snail mail to

Dialog, c/o Inbound Logistics
5 Penn Plaza, NY, NY 10001



It was a pleasure helping out with *IL's* December issue on customer service (*It's the Thought That Counts*—bit.ly/1wi0q0W). Love the magazine. You provide really good content for this industry. It's so needed.

Adam Robinson, Cerasis Inc.

Thank you for helping to develop the 30 Under 30 program (*A New Generation Shaping the Future of Supply Chain*—bit.ly/SupplyChain30Under30). This is a sorely needed vehicle in our industry, and I expect it to get more competitive in the future.

Bhart A. Sarin, Ingredion Inc.



Rebecca Slomski @Becky_SAP
12 JAN 2015

@ILMagazine, what say you on the U.S. manufacturing rebound?

Inbound Logistics

The rebound is real in certain sectors, but we have much work to do—from education to championing so-called blue-collar careers, and more.

PSU Supply Chain @PSUSupplyChain

9 FEB 2015

Inbound Logistics featured six Penn Staters in their 30 Under 30 from the supply chain industry, three of which are @SmealCollege alumni!



Junior League of San Antonio

10 FEB 2015

Congratulations to our member for this awesome accomplishment! Alejandra Baptista of NuStar Energy was named to *Inbound Logistics' 30 Under 30 Rising Supply Chain Stars!*—bit.ly/1FeBrma



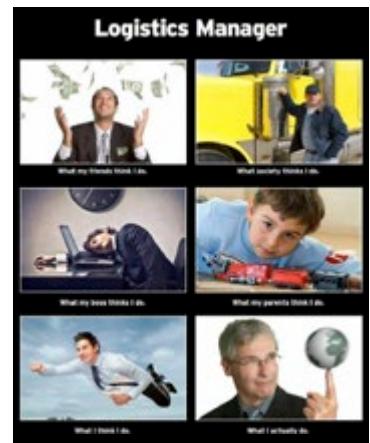
Inbound Logistics

13 JAN 2015

The Ins and Outs of Crossdocking Solutions—bit.ly/1JPwvYG

Tom McConnell

Great high-level summary article. Beyond the technology to help drive appropriate advanced optimization execution and service compliance, leveraging volume across multiple customers and their supply chains establishes a strong ROI. 3PLs are a



Inbound Logistics

19 JAN 2015

Olivier Storch

Nice. And accurate.

Larry Stetz

I love it! I've come to expect puzzled looks when I tell people my area of expertise is logistics.

good source to establish the ground rules and share in the mutually beneficial results across multiple parties.



HOT TOPICS | *IL* articles getting the most impressions on LinkedIn: Managing the Aerospace Supply Chain: bit.ly/1CCfEGW • Building an Effective Supply Chain Team: bit.ly/1rffy3x • Choosing Enterprise vs. Software-as-a-Service TMS: bit.ly/1qDxOrx • 30 Under 30—A New Generation Shaping the Future of the Supply Chain: bit.ly/SupplyChain30Under30 • Incoterms® 2010: Speaking the Same Language: bit.ly/1qhgMaL

Only pay for the speed you need... Dynamic Routing!SM

At Lynden, we understand that plans change but deadlines don't. That's why we proudly offer our exclusive Dynamic Routing system. Designed to work around your unique requirements, Dynamic Routing allows you to choose the mode of transportation — air, sea or land — to control the speed of your deliveries so they arrive just as they are needed. With Lynden, you only pay for the speed you need!



LYNDEN
Innovative Transportation Solutions

www.lynden.com 1-888-596-3361

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl

10 TIPS

STEP-BY-STEP SOLUTIONS



Fine-Tuning Your Warehouse Layout

Developing an efficient and safe warehouse can be challenging. Here is some advice from Walt Swietlik, director of customer relations and sales support for loading dock equipment company Rite-Hite.

1 Know your business requirements.

Before you design your facility, examine your books. The data will show you what to expect in terms of stock turns, returns, and volume, which is the starting point for determining the size of the warehouse, the storage capacity required, and the number of dock stations needed.

2 Be prepared for an onslaught of intermodal traffic.

Look at the length and type of trailers coming in and out of your warehouse, and pay attention to whether or not intermodal traffic is increasing. Intermodal chassis are often a different height than standard trailers and may have an obstructed rear impact guard. It is important to make sure docks and restraints can accommodate both.

3 Allow extra space in the receiving area.

The receiving area is one of the most important parts of the warehouse, and is often a hive of cross-docking activity. Working in a cramped space can cause injuries, and other profit-sapping mishaps.

4 Don't make interior doors too big. Why waste energy? Don't make your facility's doors any larger than they have to be—particularly in cooler or freezer areas. If you occasionally need a larger opening, put one larger door into your layout and keep the others smaller.

5 Design safety in from the start.

You don't need to decide between safety and efficiency—they can go hand in hand. Make sure safety signage is always visible, but don't rely on it alone. Provide foolproof products and processes such as impactable doors or interlocked dock controls.

6 Ensure the yard supports the warehouse.

Warehouses require schedules for inbound and outbound shipments. Congestion outside the warehouse, caused by parking area constraints, will affect these activities. It is important to understand the capacity of your yard to avoid potential bottlenecks.

7 Separate pedestrian and forklift traffic.

Signs and painted lines aren't enough. About 110,000 forklift accidents occur each year, many involving pedestrians, according to OSHA. Physical barriers, both permanent and temporary, keep pedestrian and forklift traffic apart.

8 "Button up" your dock stations.

Seals, shelters, and doors prevent contaminants from entering the building. A seal around dock stations saves energy, protects cargo, provides employee comfort, and improves the bottom line. Food manufacturers may consider vertical levelers in a "drive-thru" application. This allows trailer doors to remain closed until the trailer is positioned at the loading dock, providing an uninterrupted cold chain and additional level of security.

9 Take advantage of mezzanine opportunities.

When a warehouse's physical footprint is limited, it can be expanded upward using mezzanines to add capacity. New forklift technology and safety equipment designed specifically for elevated platforms—such as reciprocating barriers that can't be open in both directions at the same time—make mezzanines a better and safer bet.

10 Protect your cargo from tampering.

Trailers at the dock become an extension of your warehouse, so be sure to consider cargo security issues. Use interlocked controls that sense external tampering, and implement restraints that automatically "re-fire" if they lose proper engagement with the trailer's rig. ■

COLLABORATIVE OUTSOURCING®

SUCCESSFUL OUTCOMES, ACHIEVED TOGETHER.

Your best plus our best. A relationship that accelerates sustained savings, improved performance, and smart analytics.

solutions@chrobinson.com | 800.323.7587



Learn how you can Accelerate Your Advantage® in Collaborative Outsourcing® at www.accelerateyouradvantage.com



C.H. ROBINSON

» Accelerate Your Advantage®

© 2014 C.H. Robinson Worldwide, Inc. All Rights Reserved.

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl



Lauren Corbett: Help is on the Way

I AM FASCINATED WITH HOW THE WORLD WORKS, and with the notion of connecting people and ideas. Since I began working at International Relief and Development (IRD), I've come to understand the crucial role logistics plays in international development.

I originally started here as an intern, assisting with the day-to-day operations of IRD's acquisitions and logistics department. Because we're such a small department—just four of us—I had a chance to participate in all aspects of our projects, and soak up a great deal of knowledge.

After three months as an intern, IRD offered me a fulltime job. I do the same kind of work I did as an intern, supporting our programs to deliver non-food commodities to vulnerable people in need. The big difference is instead of simply assisting, I manage projects on my own.

IRD delivers medical equipment and supplies, pharmaceuticals, clothing and

shoes, winterization kits, hygiene kits, and school kits to people all over the world. Many of the people we help are in conflict or post-conflict environments. Usually, we work with our colleagues in the field to identify a need, then put out a call to our network of donors and partners to fill it.

Occasionally, donors approach us with aid. For example, during the recent Ebola crisis, partners told us, "We put together a container of pharmaceuticals that we'd like to get to Sierra Leone. Can you help us?" They come to us because we have contacts on the ground with the means to distribute aid where it's needed.

Once we secure a donation, we work with one of several freight forwarders

Lauren Corbett is program assistant, acquisitions and logistics, at International Relief and Development (IRD), a not-for-profit, non-governmental organization in Arlington, Va. She joined IRD in 2014.

RESPONSIBILITIES

Working with donors to obtain in-kind donations and arranging to ship them to consignees for use in programs around the world.

EXPERIENCE

Teaching assistant, Aldea Yanapay, Peru; intern, Office of Intellectual Property and Innovation, U.S. Trade Representative; research assistant, University of Virginia; intern, acquisitions and logistics, IRD.

EDUCATION

B.S. economics and foreign affairs, University of Virginia, 2013.

The Big Questions

What's the best piece of work-related advice you've received?

Don't be afraid to make mistakes. You'll never learn anything new or grasp anything fully until you get your hands around it. Just go for it.

What movie will you never get tired of?

Love Actually.

Do you have a hidden talent?

Baking. It's a kind of therapy for me, and it also helps me make friends. People love you when you bake for them.

What do you like to do outside of work?

I love to travel. I'm always planning or daydreaming about my next adventure.

to handle the transportation. About 90 percent of our loads move by ocean. The main exceptions are pharmaceuticals.

My department manages each load from the time it's picked up until it gets to the destination country. My colleagues and I make sure all the required documentation reaches customs officials at the other end. When the shipment is complete, we monitor and evaluate the distribution, and go back to the donor with a final analysis of the impact we've made.

We don't have our own warehouse. Instead, we work with local partners, such as

Gleanings for the World, which lets us use space in its warehouse in Lynchburg, Va.

My work in logistics is like solving a series of puzzles. It can be stressful sometimes, but when we get all the pieces together, the result can be great. The most frequent puzzle we deal with is how to pay for transporting a load of donated supplies.

One answer to the fundraising puzzle is a partnership we recently formed with the Savers chain of thrift shops in the Washington, D.C., area. Small donors who want to support us can give gently used items to Savers, which then pays

us a portion of the value of those goods. The money we receive goes directly to our programs.

I did a lot of the work involved in pushing the partnership through, getting the contract signed, getting the marketing campaign approved, and launching it. I'm excited to see where the partnership goes in the future.

This position has made me realize the importance of logistics in international development and relief. Wherever my career takes me next, I know I'll be involved with logistics. ■

ALLIANCEshippers inc.®



Our Business Priorities:

- ✓ **The Customer**
- ✓ **The Customer**
- ✓ **The Customer**
- ✓ **Service**
- ✓ **Service**
- ✓ **Service**

For more information about all of our services, visit us at: www.alliance.com

Expedited Ground. Anywhere in the Country.

Over 30 Years of Experience.

We've been in business since 1983, with 40 local offices, a network of experienced partners, and TSA APPROVED drivers in every market.

Streamline Operations.

Eliminate the need for different vendors with one point of contact. How easy is that?

No Headaches, Just Efficiency.

Our skilled staff of solution providers has a say "YES" attitude. American Expediting is "THE" dedicated courier for 3pl's, Freight Forwarders, Air Couriers, Ltl and TL needing special handling or expedited, time definite response.

Establish your account today!



**American
Expediting®**

1.800.525.3278

info@amexpediting.com

www.amexpediting.com

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl

NOTED

THE SUPPLY CHAIN IN BRIEF



recognition

DHL Express Sub Saharan Africa received **61 separate awards in 2014** from external parties such as government bodies, trade associations, and media, up from 22 awards received in 2013.

UP THE CHAIN



◀ **Matt Rock** was appointed global supply chain director for UK-based **Pentland Brands**, the company behind the Kickers, Speedo, and Berghaus apparel lines. Rock was promoted from his position as managing director of the company's lifestyle division.

Freight brokerage firm **Total Quality Logistics** promoted **Kerry Byrne** to president. Byrne had been an executive vice president with the company for 10 years.

LumenRadio, a Swedish wireless technology company, named **Sofia Rosberg** its new purchasing and supply chain manager. In her new role, Rosberg is responsible for optimizing the company's supply chain.

m&a

Software and technology company **Dematic Group** acquired FSU Investments Limited, which holds a majority stake in European materials handling provider **SDI Group Limited**. Dematic plans to purchase the remaining stake in SDI from shareholders.

Manitoulin Transport, a trucking company, purchased the less-than-truckload division of **Hi-Way 13**, a carrier with a strong presence in western Canada. From the acquisition, Manitoulin gains the division's tractor and trailer fleets, and a network of Alberta terminals in Calgary, Edmonton, Provost, Wetaskiwin, and Camrose.

Paragon Software Systems, a provider of truck routing and scheduling solutions, bought software developer **Axida**. The two companies already share several clients and had jointly developed multiple software solutions. They continue to operate as separate entities.

Transportation and logistics provider **Radiant Logistics** acquired third-party logistics firm **Wheels Group**. Radiant gains truck brokerage capabilities and an intermodal platform, and both companies add service line and geographic expansions.

GREEN SEEDS

Restaurant supplier and distributor **Golden State Foods** opened a new LEED Gold Certified distribution center in Chicago. The 158,000-foot location is 40 percent more energy efficient than comparable buildings, and features hydrogen-powered fork trucks, clear panel windows, LED lighting, rainwater for irrigation purposes, and a Cascade refrigeration system.

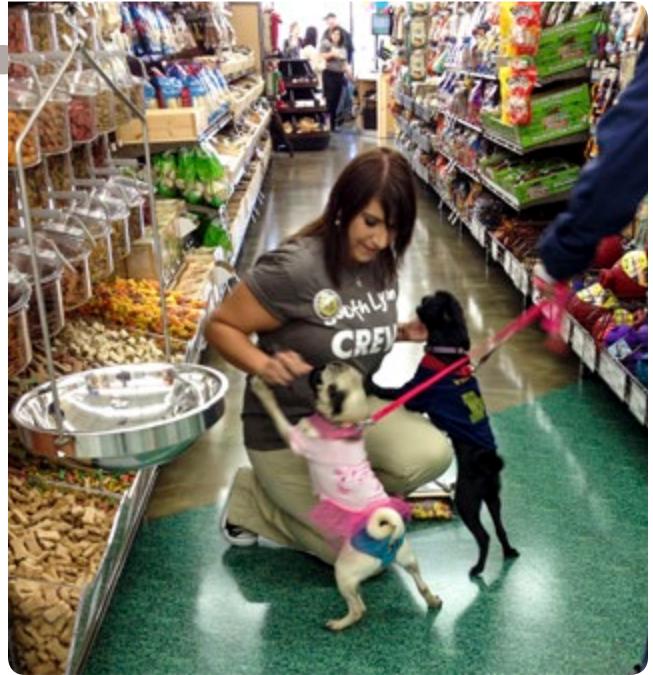
Third-party logistics company **CLX Logistics** joined the EPA's Smartway Program, committing to more cost-effective and environmentally efficient freight transportation.

SEALED DEALS

Lord Daniel Sportswear selected **NGC Software's** fashion enterprise resource planning solution to improve efficiency in its operations. The platform provides the clothing manufacturer with flexible reporting, control of finished goods, and improved core business processes.

▶ Retailer **Pet Supplies Plus** contracted **Transplace** to manage all domestic transportation activities. Transplace provides Pet Supplies Plus with its proprietary Software-as-a-Service transportation management system, and a dedicated team to improve supply chain efficiencies.

Software developer **OpenText** chose **Amber Road's** Export On-Demand solution to ensure full compliance with new regulations when exporting to Cuba. The product helps OpenText manage restricted products and export licenses.



Hockey equipment manufacturer **Bauer Hockey** selected software provider **Epicor Software's** retail software suite to power its "Own the Moment" retail promotion, which displays hockey equipment in a

store with an ice rink where customers can test it. Epicor's point of sale, mobile store, merchandising, customer response management, and sales audit solutions help Bauer deliver an interactive shopping experience to its customers.



recognition

The Truckload Carriers Association recognized Canadian trucking company **Bison Transport** as one of the **Best Fleets to Drive For**. Bison has been named to the list six times in the contest's seven-year history.

◀ **UPS Freight** was named a **2014 Strategic Partner of the Year** by third-party logistics company Unishippers. The 3PL evaluated carriers on service quality, loss and damage events, claims resolution, and customer service.



***Bigger* benefits. That's *Ryder*.**

35 million square feet of warehouse space, 200,000-plus vehicles, 800 fuel and service facilities—that's how Ryder delivers more and gives you the ability to help your business run better. Discover how outsourcing with us can improve your fleet management and supply chain performance at ryder.com.

FLEET MANAGEMENT | SUPPLY CHAIN SOLUTIONS



Ryder and the Ryder logo are registered trademarks of Ryder System, Inc. Copyright © 2014 Ryder System, Inc. Ever better is a trademark of Ryder System, Inc.

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl

DLS Worldwide: Powered by 150 years of **excellence**



Honoring
One Hundred
Fifty Years

RR DONNELLEY

DLS Worldwide, a leveraged platform logistics provider is powered by 150 years of **RR Donnelley** success.

DLS Worldwide's nationwide network also means its offices are easy to find and hard to resist. Come find out how RR Donnelley's scale and resources can work for your business at **dls-ww.com**.

RR DONNELLEY

1000 Windham Parkway, Bolingbrook, IL 60490
877.744.3818 (toll-free), centralops@dls-ww.com, dls-ww.com

© 2015 R.R. Donnelley & Sons Company, all rights reserved. RR Donnelley® is registered trademark of R. R. Donnelley & Sons Company.

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl

TRENDS

SHAPING THE FUTURE OF LOGISTICS

While Sen. John McCain seeks to repeal provisions of the Jones Act, U.S. flag carriers such as Crowley counter that the act protects U.S. jobs, the domestic shipbuilding industry, and national defense.



The Jones Act: Time to Change Course?

Debate over the Keystone XL Pipeline Act has raised a new regulatory specter. The U.S. maritime industry fears that an amendment recently introduced by U.S. Senator John McCain (R-AZ) will counter the pro-jobs pipeline bill by gutting the Jones Act and existing cabotage regs.

by Joseph O'Reilly

The senator's amendment seeks to repeal provisions set forth in the 1920 Jones Act, which requires vessels moving freight between U.S. ports be built in the United States. The measure was meant to protect domestic shipping interests and jobs from foreign encroachment.

"In Washington, sometimes up is down and offense is defense, but an amendment

that seeks to eliminate highly skilled, steady middle-class jobs employing hundreds of thousands of our countrymen should never be called good for America," says Captain Don Marcus, president of the International Organization of Masters, Mates, and Pilots, a union representing sea captains and deck officers on U.S. flagged vessels.

The maritime industry argues that such

a reversal would decimate the nation's shipping industry, eliminating as many as 400,000 U.S. jobs across 26 states, contributing to the closing of shipyards and related industries.

Beyond threats to the domestic economy, there's perceived risk that this amendment would also compromise national security by destabilizing the military's strategic sealift needs. The Jones Act ensures that the U.S. has a reliable source

of domestically built ships and skilled American crews available for its military and humanitarian aid operations.

"Without the sealift capability and American maritime jobs provided by the Jones Act and the Maritime Security Program, the U.S. Armed Forces would be forced to rely on foreign-flag ships and crews with unknown loyalties to transport critical military cargo and personnel to overseas operations," says Marcus.

Digital Technology: A Disruptive Force?

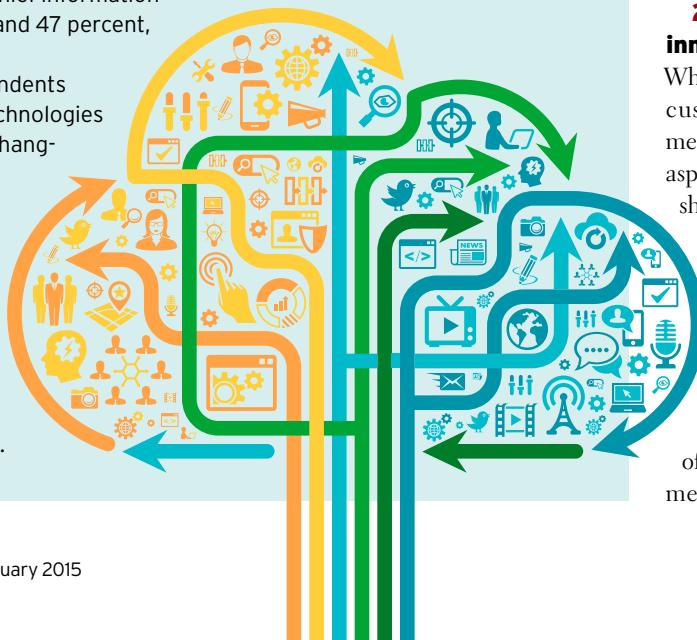
Companies are streamlining a broader range of business functions, including procurement and supply chain, according to *Disrupt or Be Disrupted: The Impact of Digital Technologies on Global Business Services*, a new study conducted by Accenture and HfS Research. The report examines where and how digital technologies—Software-as-a-Service (SaaS), big data and analytics, cloud and mobile—are being deployed to improve business operations and outcomes.

The key trends include:

- Digital technologies will have the largest projected changes in procurement (45 percent of respondents expect the digital transformation to "extensively impact" advanced shared services models over the next two to three years, compared to 18 percent over the past two to three years) and supply chain management (49 percent vs. 20 percent). Significant increases are also expected in finance and accounting services (23 percent to 40 percent), human resources (23 percent to 31 percent), and engineering (13 percent to 27 percent).

- Chief financial officers (CFOs), who have long assumed a leadership role with respect to prioritizing, deploying, and managing shared services, currently play a strong role determining what processes are best purposed for the digital transformation. Thirty-seven percent of CFOs make the final decision about implementation, and another 52 percent provide major input—second only to the chief information officer (40 percent and 47 percent, respectively).

- While all respondents agree that digital technologies are fundamentally changing the industries in which they operate, 24 percent have no plans to appoint a dedicated senior executive to lead digital transformation strategy, guide investments, or measure success.



Procurement Pays Dividends

Best-in-class procurement organizations are expanding their purview to drive company-wide innovation and top-line growth, according to a recent IBM study. Findings in the *Chief Procurement Officer Study* run counter to traditional perceptions where procurement predominantly serves as the gatekeeper to corporate spending.

In fact, top organizations are nearly twice as likely to introduce new innovations into the company, and 1.5 times more likely to influence senior leadership to enter a new market than their lower-performing counterparts.

More than 1,000 senior procurement leaders from \$1 billion-plus companies in 41 countries contributed to the research, which was conducted by the IBM Institute of Business Value.

Top chief procurement officers (CPOs) are driving enterprise agendas through three common initiatives:

1. Focusing on the company's broader goals, not just procurement.

Top procurement organizations set their sights beyond mastering the procurement basics. For example, the study found that top CPOs are nearly twice as likely to focus on driving revenue growth and competitive advantage than their lower-performing counterparts.

2. Serving as a conduit for innovation from strategic partners.

When it comes to working with partners, customers, and suppliers, top procurement organizations go beyond the tactical aspects of transaction support. The study shows that 92 percent of high-performing procurement officers feel they can add value to external stakeholder relationships, as opposed to 68 percent of underperformers. To that end, 52 percent of high-performing CPOs leverage suppliers to co-develop new technologies, compared to 39 percent of lower performing CPOs. Top procurement organizations strive to engage with

internal stakeholders, as well as understand the needs of end customers to gain a full picture of the business ecosystem.

3. Embracing advanced technology to drive higher value results. High-performing procurement organizations deploy advanced data-driven tools to make more informed procurement decisions. For example, 41 percent of top CPOs have integrated advanced analytics capabilities into their procurement organization, compared to just 16 percent of lower-performing CPOs. These CPOs are also more focused on social collaboration, talent development, and automating basic processes as a means to help advance the procurement function.

“True procurement leaders who see the bigger picture can use their unique vantage point to drive innovation, grow revenue, and expand competitive advantage,” says Terrence Curley, director, strategic supply management, IBM.

Where to House Your Warehouse

Optimizing distribution networks has become a fluid process for many U.S. shippers. Shifting sourcing dynamics, migrating demand, omni-channel maturation, and logistics outsourcing are swiftly changing how companies align distribution nodes. Chicago Consulting’s 21st annual 10 Best Warehouse Networks assessment, which takes into account U.S. government census data and geographically based growth statistics, underscores these trends.

Chicago Consulting added two new criteria in 2015 that address the emergence of same-day delivery: first, the percentage of the population that is within 65 miles of the closest warehouse; and second, “the percentages of the population that are served in one, two, three, and four days by conventional carriers in which deliveries

start the day after freight is picked up,” explains Terry Harris, managing partner of the consulting firm.

The 10 Best Warehouse Networks were developed based on the lowest possible transit lead times to customers represented by the U.S. population (*see chart, next page*). For example, Vincennes, Ind., provides the lowest possible transit lead time for one warehouse. Any other location will increase transit time to the U.S. population. Similarly, putting three warehouses in any locations other than Boyertown, Pa., Jackson, Tenn., and Porterville, Calif., will cause the transit time to be longer than 1.29 days.

The percent throughput specifies the amount of material that would flow through these warehouses based on them serving the territories closest to them. The



**I KNOW your shipments
and how to handle them.**

**WE KNOW what it takes to get them
there next-day.**

Holland, the next-day delivery leader, is committed to knowing your business inside and out. Annual winner of the Quest for Quality Award since its inception, we deliver the most next-day service lanes in our area – from Chicago to Chattanooga, St. Paul to St. Louis – and annually record one of the lowest claim ratios in the industry. Want to know more? Call **866.465.5263** or go to hollandregional.com/nextday today for details!

©2015 YRC Worldwide Inc.

Holland




hollandregional.com/social
866.465.5263

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl

same-day statistic represents the population within 65 miles of any warehouse.

The transit time percentage statistics represent the amount of the population that is within one, two, three, or four days of the closest warehouse.

Time-to-market is not the only criterion for locating warehouses, according to Harris. Other factors include:

- Costs
- Inbound transportation
- Labor

- Ocean, rail, road, and air infrastructure
- Local carrier market
- Sustainability
- Support from economic development organizations. ■

The 10 Best Warehouse Networks (2015)

Networks with the lowest time-to-market

NUMBER OF WAREHOUSES	Best Locations, (% Throughput)	Avg. Distance to Customers (Miles)	Avg. Transit Time (Days)	Transit Time (%)			
				Next Day	2nd Day	3rd Day	4th Day
ONE	Vincennes, IN 100%	806	2.28	21.3%	58.4%	78.3%	82.2%
TWO	Ashland, KY 76% Porterville, CA 24%	491	1.49	39.6%	80.7%	98.4%	99.4%
THREE	Jackson, TN 45% Porterville, CA 23% Boyertown, PA 32%	383	1.29	53.4%	90.5%	99.3%	99.3%
FOUR	Chicago, IL 22% Porterville, CA 23% Meridian, MS 29% Stroudsburg, PA 26%	321	1.21	65.7%	94.4%	99.3%	99.3%
FIVE	Brooklyn, NY 23% Grand Prairie, TX 15% Macon, GA 19% Porterville, CA 21% Chicago, IL 22%	265	1.13	80.6%	96.9%	99.3%	99.3%
SIX	Brooklyn, NY 23% Grand Prairie, TX 15% Macon, GA 19% Bell Gardens, CA 16% Chicago, IL 22% Bonney Lake, WA 5%	235	1.08	84.9%	99.1%	99.4%	99.4%
SEVEN	Brooklyn, NY 23% Grand Prairie, TX 15% Murphy, NC 14% Bell Gardens, CA 16% Lakeland, FL 6% Bonney Lake, WA 5% Chicago, IL 21%	215	1.07	88.9%	99.1%	99.4%	99.5%
EIGHT	Brooklyn, NY 23% Palestine, TX 13% Murphy, NC 14% Aurora, CA 5% Lakeland, FL 6% Bell Gardens, CA 15% Chicago, IL 20% Bonney Lake, WA 4%	200	1.05	91.5%	99.4%	99.4%	99.5%
NINE	Brooklyn, NY 23% Aurora, CO 5% Murphy, NC 14% Pasadena, CA 10% Lakeland, FL 6% Oakland, CA 5% Chicago, IL 20% Bonney Lake, WA 4% Palestine, TX 13%	186	1.04	92.3%	99.4%	99.4%	99.5%
TEN	Astoria, NY 20% Palestine, TX 13% Athens, GA 13% Aurora, CO 5% Lakeland, FL 6% Pasadena, CA 10% Marion, OH 11% Oakland, CA 5% Rockford, IL 13% Bonney Lake, WA 4%	172	1.04	92.5%	99.4%	99.4%	99.5%

Source: Chicago Consulting



Fresher solutions. That's Ryder.

According to the 2013 *FORTUNE Datastore*, nine of the top ten food and beverage companies use Ryder to streamline their supply chains, unlock efficiencies, and bring more value to the table. Discover how outsourcing with us can improve your fleet management and supply chain performance at ryder.com.

FLEET MANAGEMENT | SUPPLY CHAIN SOLUTIONS



Ryder and the Ryder logo are registered trademarks of Ryder System, Inc. Copyright © 2014 Ryder System, Inc. Ever better is a trademark of Ryder System, Inc. Copyright 2013 Time Inc. FORTUNE® and the FORTUNE Database names are trademarks of Time Inc. All rights reserved. For requests for commercial publication or use of substantial portions of the FORTUNE Databases, please contact datastore@fortune.com.

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl

The only targeted event on **Click & Collect,** in-store pick up, and locker strategies in the US

April 8-9, 2015, Atlanta, GA

Join us to gain industry intelligence, network with top retail, eTail, supply chain, and logistics decision-makers, and form new business relationships.

Confirmed speakers include:



Alexis Maybank
Co-founder and
Strategic Advisor
Gilt Groupe



Jim Hourigan
Chief Operating Officer
BuildDirect



Michelle Harmon
Brand Partnerships Consultant
FreshDirect

Register now to secure your place.



Register now - on your phone

Scan this QR pattern with the camera on your smartphone to register now.

Don't have a smartphone? You can also register and get the offer on our website: www.terrapinn.com/clickandcollect

**CLICK &
COLLECT**
SHOW USA 2015

www.terrapinn.com/clickandcollect

Featured
sponsors

ebay
enterprise

DESCARTES

MXD
GROUP

wnDirect

XPO LastMile

SEKO

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl

GLOBAL

THE WORLD AT A GLANCE

by Joseph O'Reilly



Only the Good Drive Young

With all the talk about the U.S. driver shortage, it's easy to forget that similar labor constraints exist elsewhere around the world. For example, recruiting younger people into the trucking industry has become a challenge in the United Kingdom, according to *Barriers to Youth Employment in the Freight Transport Sector*, a report by a UK Parliamentary group. The research finds that only two percent of all heavy goods vehicle (HGV) drivers are younger than 25 years of age, while 60 percent are older than 45.

"It is also striking that there are slightly more managing directors in transport and distribution businesses who are under the age of 25 than there are HGV drivers, which shows the number of barriers to getting young people driving," says Rob Ffello, a Stoke-on-Trent member of parliament.

The group pins the driver shortage on society's lack of awareness, and government's failure to promote vocational education. "Logistics is too often considered a job of last resort," notes the report. "By pursuing this agenda, and highlighting universities as markers for education quality, government may have devalued skills that are crucial to the economy."

U.S., Cuba Ride Trade Winds

President Obama's recent Cuba directive is likely to shake up trade ties between the two countries—or at least fuel speculation. Landmark talks, which began in January 2015, may bring a resolution to more than 50 years of economic sanctions and a well-documented trade embargo against President Fidel Castro's communist regime.

The talks are just that—a first step that could open the door to further negotiations, and perhaps a more normalized relationship between the two countries. From a trade perspective, "that's a good thing," says Jay Brickman, vice president government services

February 2015 • Inbound Logistics 23

and Cuba service for steamship line Crowley Maritime.

Crowley has been serving the Cuba market weekly for 14 years. Historically, the Office of Foreign Assets Control and Department of Commerce have authorized special waivers for transporting goods to Cuba. Much of what moves southbound is agricultural in nature.

“With the exception of a few items, all northbound shipments to the United States are prohibited,” says Brickman. But this could change. And it couldn’t be happening at a better time for Cuba.

The country’s reckoning as a transshipment hub has been a focal point, thanks in large part to Brazil, which is helping to bankroll a \$1-billion overhaul at the Port of Mariel. Situated 30 miles west of Havana, the new complex can handle 800,000 TEUs annually. When dredging is complete, Mariel will be able to accommodate new Panamax vessels transiting the Panama Canal.

The investment is a huge play to capture



If the United States lifts trade restrictions against Cuba, northbound shipments might once again travel through the Port of Havana.

some transshipment volume expected to surge through the Caribbean region beginning in 2016. But competition is stiff. Panama, U.S. South Florida ports, Jamaica, the Dominican Republic, the Bahamas, and Colombia all have eyes on the expected cargo growth. Cuba has a lot to gain—especially if certain cards fall into place.

It’s still too early to conjecture how this most recent diplomatic dalliance will

play out. Social, political, and economic reforms do not come easily or quickly. Stateside, Congress needs consensus to lift economic sanctions. But the possibility poses some intriguing questions.

Brickman doesn’t think Cuba will necessarily factor into the transshipment fray. It’s targeting about eight percent market share for the region, which is “not super ambitious,” he says. Rather, Cuba’s real opportunity lies in becoming more of a manufacturing and distribution hub.

“Cuba has created a 180-square-mile industrial development zone contiguous with the Mariel port,” Brickman says. “You’ll be able to drive directly from the port into the industrial development zone. This is different than a free trade zone because it encourages investment that can combine production for local market and for manipulation and export. This is more important for the port’s future than transshipment.”

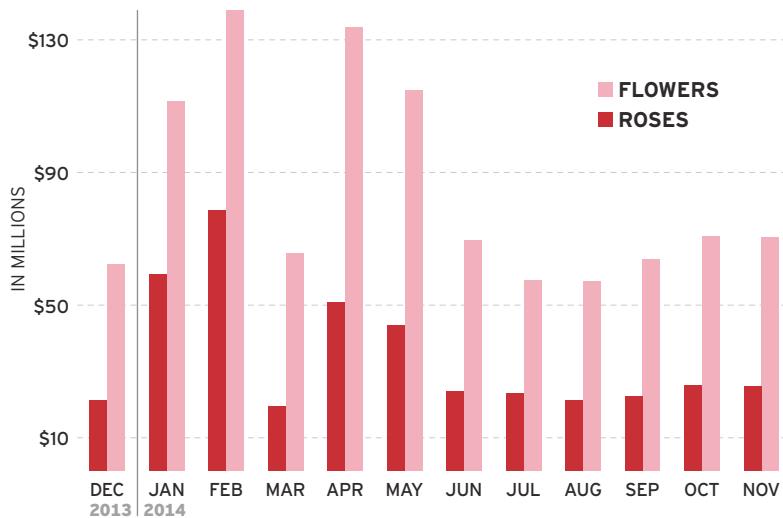
Investments in the new zone can be wholly foreign-owned, which is drawing interest from Chinese and Brazilian companies that have a major stake in the region.

Given Cuba’s proximity to the United States, particularly South Florida’s booming consumption market—Miami is fewer than 250 miles from Havana—there’s also offshoring potential. Whether Cuba opens up to importing U.S. goods remains to be seen. But there’s plenty of incentive to grow its industrial base for exports.

“With regards to outsourcing, industries

Roses Rise in February

In 2014, February flower imports (fresh cut) reached more than \$138 million; about 52 percent of those were roses. Roses continue to be the number-one flower purchased in the United States, and the top Valentine’s Day bouquet.



Source: Zepol Corporation, www.zepol.com

generally try to get into a place with a significant local market,” Brickman says. “Cuba has a population of 11 million people, many with low incomes. It’s not China. Nor is it like Ireland, which offers access to the common market.”

Cuba presents an interesting dilemma. There is a lot of inertia, especially dealing with an insular, socialist economy. “But Cuba is making adjustments to become more competitive and attractive,” says Brickman.

It just might take some time before that happens.

Seaway Floats On \$7-Billion Investment

The Great Lakes-St. Lawrence system is one of North America’s most underappreciated transportation assets, especially when you consider that it facilitates more than \$35 billion in trade, and contributes 227,000 jobs to the United States and Canadian economies. But if capital inflows are any indication, that recognition may be changing.

As reshoring activity picks up pace, the waterway’s importance connecting the heartland with global markets is once again front and center. Maritime trade consultant Martin Associates has documented how much capital is being sunk into an inland system that for many years was synonymous with the Edmund Fitzgerald.

Total investment in the Great Lakes-St. Lawrence system is approaching \$6.9 billion, including capital spending on ships, ports and terminals, and waterway infrastructure, according to Martin Associates. Of that amount, \$4.7 billion was invested in the navigation system between 2009 and 2013, and another \$2.2 billion is committed to improvements between 2014 and 2018.

It has truly been a public-private effort, with 67 percent of funding coming from

government and 33 percent from the business community. Among the notable outlays, American, Canadian, and international ship owners are spending \$4 billion on the biggest renewal of the Great Lakes-St. Lawrence fleets in 30 years. The U.S. and Canadian governments have also dedicated close to \$1 billion to modernize the seaway’s lock infrastructure and technology during this 10-year period. And, Great Lakes and St. Lawrence River ports and terminals are collectively investing more than \$1.7 billion on expanding docks, equipment, facilities, and intermodal connections.

Such investment has not gone unnoticed by the business community. “The Great Lakes-St. Lawrence system is integral to ArcelorMittal’s steel and mining facilities in Canada and the United States as we utilize shipping for millions of tons of raw materials and finished products,” says Sean Donnelly, president and CEO of ArcelorMittal Dofasco, Canada’s largest flat-rolled steel producer. “Investments in fleet renewal, and improvements to infrastructure contribute to our business success and to the sustainability and profitability of the entire marine transport supply chain.” ■

Panama OKs New Port

Concurrent with canal expansion, Panama is starting to build out surrounding infrastructure, which will be equally important as the country looks to compete as a Latin American distribution and logistics hub.

The Panama Canal Board of Directors approved the development of a transshipment port in Panama’s Corozal region. When completed, the facility will accommodate more than five million TEUs at the canal’s Pacific entrance.

The project’s first phase features three docking positions for new Panamax ships, and a handling capacity of about three million TEUs. The new port may also grow canal tonnage, given the proximity of both facilities to one another.



DIMENSIONAL WEIGHT IS HERE.

DO YOU HAVE THE RIGHT-SIZED BOXES?

Optimize your set of box sizes for your unique shipping needs to reduce shipping costs.

www.cubicsolutions.info | +1(415)697-2742 | contact@cubicsolutions.info



THE LEAN SUPPLY CHAIN

BY PAUL A. MYERSON

Professor of Practice in Supply Chain Management at Lehigh University, Managing Partner, LPA, LLC and author of *Lean Supply Chain & Logistics Management*
paul@psi planner.com | 732-441-3879

Designing a New Strategy for a New Year

With the New Year upon us, retailers and manufacturers need to rethink their supply chains and find new ways to work together, according to the *2016 Future Supply Chain*, a report from the Global Commerce Initiative and Capgemini.

Here's a look at some external and internal industry trends from a Lean perspective. It's not hard to see how important Lean philosophy is to a solid supply chain strategy.

External Trends

Global economics. New markets such as Brazil, China, and India will evolve quickly, compared with the changes that occurred in North America and Western Europe, requiring a flexible, agile supply chain.

Ecology, sustainability, and a scarcity of natural resources. In the past, most companies concerned themselves primarily with forward logistics processes. Today, many companies also focus on reverse logistics issues on the demand side, as a result of environmental concerns, and an awareness of how the process can add value to both the customer and the bottom line. Moving forward, environmental considerations will have a greater impact on many logistics decisions.

Demographics. The distribution end of the supply chain now feels the impact

of an aging population and increases in urban populations in Western countries. Companies will have to pay attention to wastes resulting from city congestion, and excess inventory from changing tastes.

New technology and the information explosion. Technologies such as RFID can be enablers for a Lean supply chain.

Regulations. Governments will continue to enact more environmental regulations. Management must get creative, and develop flexible work times and rules that allow facilities to be used to full capacity with less environmental stress.

Internal Trends

Consumer behavior. E-commerce and mobile technology have created a demanding and empowered consumer. This omni-channel approach requires new thinking in terms of product development, delivery, and replenishment.

Product flow. Urbanization, energy prices, and regulation will impact transportation, and require creative supply chain solutions.

Information flow. More collaboration and information sharing will be required, and data will be increasingly managed with analytics tools.

Some key aspects of the *2016 Future Supply Chain* report's glimpse into the future tie in nicely with Lean concepts. Both recommend that companies significantly reduce lead times end-to-end in the value chain, as opposed to sub-optimizing individual parts. Supply chain managers must improve the physical layout of their supply chains, and find better ways to match supply with demand, such as real-time sharing of data—starting with consumer demand.

Ultimately, the report's outlook for the supply chain dovetails nicely with Lean thinking, as it points out the importance of true collaboration by supply chain managers and executives who look not only at efficiency and cost, but innovation and collaboration as well. It will require additional training and more skills and tools to accomplish these goals.

Now might be a good time for you to start thinking about “the vision thing” (as George H.W. Bush once referred to it), as it is required to establish the guidelines for a Lean, sustainable supply chain. ■

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

AMERICAN ENERGY

SUMMIT

MARCH 23-24, 2015

— ARLINGTON, VIRGINIA —

Bringing leaders together

to empower solutions

visit www.defenseleadership.org to register

You are invited to attend the
2015 American Energy Summit
in Arlington, VA – Crystal City Marriott

Join top government officials, energy experts, and industry leaders at the **2015 American Energy Summit** and receive the latest details on:

- The energy programs of the **U.S. Department of Defense**, one of the largest consumers of energy in the world. Get the latest details on the 2015 priorities and programs of the Office of the Assistant Secretary of Defense for Operational Energy Plans and Programs; new opportunities for solar installations on hundreds of thousands of military installations; the expanding use of biofuels by the Air Force and Navy; the development of highly efficient portable batteries; \$9 billion to improve energy use in military operations through 2017; and the latest news on Multiple Award Task Order Contracts.
- \$27.9 billion in 2015 discretionary funds for the **U.S. Department of Energy**, including \$4.2 billion in the Department's discretionary applied energy programs to drive energy sector innovation; \$2.3 billion for the Office of Energy Efficiency and Renewable Energy; additional investments in clean energy to accelerate both research and the development and deployment of new technologies; incentives for States to modernize their electricity grids and reduce energy waste; and investments for identifying and analyzing critical infrastructure vulnerabilities.
- New billions of dollars in spending for the energy programs of the **U.S. Department of Agriculture**; **U.S. Department of Transportation**; **U.S. Department of Homeland Security**; **U.S. Department of the Interior**; **U.S. Department of Commerce**; and much more.

REGISTRATION TYPES & FEES

Active Duty Military	No Charge
Government Officials	No Charge
Credentialed News Media	No Charge
Regular Registration (Early Rate)	\$495
VIP Registration (Early Rate)	\$595

Exhibiting:

10' x 10' Exhibitor Space	\$2,000
10' x 20' Exhibitor Space	\$2,500

Sponsor Packages:

Titanium	\$10,000
Platinum	\$7,500
Gold	\$5,000
Supporting	\$3,000
Contributing	\$1,000

For more information or to receive an early discount on
Exhibiting or Sponsorship Packages:
Please contact, Brooke Parks,
Parks@defenseleadership.org

NAVY CONTRACTING SUMMIT

MAY 11 – 12, 2015

— NORFOLK, VIRGINIA —

ARMY CONTRACTING SUMMIT

JUNE 22 - 23, 2015

— KILLEEN, TX —

REGISTER TODAY!



[VIEWPOINT]

BY EREZ SCHANIN

Vice President of Operations, G-Force Shipping
erez.schanin@gforcanship.com | 877-743-6723

Seven Common Shipping Mistakes And How to Avoid Them

Moving cargo is part of daily operations for a wide array of industry sectors worldwide, and processes to maximize time and cost-efficiency can be surprisingly detail-oriented.

When moving freight is an every day operation, proper execution is a must. It can be easy to overlook the following mistakes, resulting in unwanted and unnecessary organizational spends and headaches.

1. Improper packaging. Improperly packaged freight results in a higher probability of shipment damage. Carriers have begun declining many damage claims due to improper packaging. Eliminate unnecessary costs and limit liability by taking time to consult with a packaging professional.

2. Inaccurate shipment weight. Some organizations may not have the proper equipment to weigh cargo, which leads to estimated weights. Carriers have certified scales at their terminals, and will re-weigh shipments and tack on a fee to the bill if the original estimate is inaccurate. Re-weighing fees add up quickly, so purchasing a proper scale from the start saves money.

3. Inaccurate freight class. Businesses often search for ways to ship freight at the lowest class possible, because lower classes cost less. Carriers

will most likely catch incorrect class designations, resulting in a re-classification fee. Freight class is a large factor in how carriers determine their charges, so they spend a lot of time and effort on re-classing freight to ensure they are getting paid correctly.

4. Shipment services. Shippers must understand the consignee's capability to receive freight. For example, if the consignee doesn't have a lift gate when the cargo requires one, the shipment could be brought back to the carrier's terminal. The carrier will provide a lift gate and add a redelivery charge to the invoice. Knowing where your freight is going, and assigning the proper services to your shipment in advance, are important factors in maximizing effectiveness and efficiency.

5. Relying on a single carrier for all shipments. Some shippers rely on one carrier for all their transportation needs. While it is reasonable to form trusting relationships, relying on one carrier alone to handle all your shipping can cost you big time. If the carrier experiences a strike or downsizes its facilities,

you can find yourself with a lot of freight piling up and nobody to move it. It is a wise business practice to have contacts with several carriers in order to enjoy competitive rates and flexible operations.

6. Delivery receipt. Consignees should inspect all freight they receive, and note any abnormalities before signing the delivery receipt. If damage is omitted on the delivery receipt, it will be difficult to recover any costs with a damage claim. Shippers and carriers can point to a clean delivery receipt, and claim any damage must have taken place after delivery. When in doubt, make a note that there are possible damages pending inspection.

7. Incorrect address. This remains one of the most common shipping mistakes. If shippers don't take time to check the destination address on the bill of lading, freight could wind up where it doesn't belong. Even one wrong number in the ZIP code can result in a time-consuming effort to track down a shipment.

Ask for Help

Most of these mistakes can be avoided by reaching out for help. By simply contacting the carrier or freight representative, you can greatly reduce the risk of falling victim to an easily avoidable shipping mistake. ■



SHIPPERSCONFERENCE
2015
TRANSPORTATIONEXPO

April 12 - 15 | Orlando, FL
Swan and Dolphin Resort

The NASSTRAC Annual Shippers Conference & Transportation Expo is geared to your business needs, connects you with transportation decision-makers from broad market segments and provides you with interactive sessions for true professional development.

You want real world takeaways based on solutions that work.

Experience what true professional development is all about at the **NASSTRAC Shippers Conference & Transportation Expo.**

Visit www.nasstrac.org/conference to learn more and to register today.

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl



[IT MATTERS]

BY MARK BURSTEIN

President of Sales, Marketing, and R&D, NGC Software
info@ngcsoftware.com | 800-690-0642

Protecting Your Brand With Product Lifecycle Management

Product Lifecycle Management (PLM) and supply chain management traditionally focus on metrics such as speed to market, cost reduction, consumer trend response times, and supply chain agility. But there's a new imperative: ensuring ethical sourcing and social compliance.

Designing and delivering great brands means ensuring products are safe, manufactured responsibly, and comply with myriad complex government regulations. Businesses can't afford to be associated with unsafe working conditions, child labor, factory accidents, and products that contain banned substances or don't comply with regulations.

Three Keys to Compliance

Managing ethical sourcing and social compliance is extraordinarily complex, involving brands, retailers, and a host of third parties. It can be broken down into three basic parts:

1. Evaluate. Companies must evaluate their vendors in areas such as social compliance, and ask them to provide full transparency about subcontractors, and traditional metrics such as price, quality, and performance.

2. Manage. Companies must also manage a host of conflicting requirements, including Standards of Vendor Engagements (SOVEs) that may be

different for each customer, as well as government, environmental, and quality regulations. Then they need to take corrective action when vendors fail to meet requirements.

3. Report. Finally, allow stakeholders in product development, sourcing, and logistics to access and share information, which promotes supply chain transparency and increases confidence among trading partners.

While traditionally viewed as a tool for product design and development, PLM can play a much larger role—orchestrating all information, processes, departments, and geographies.

PLM ensures a seamless, real-time flow of information that includes all areas of compliance: vendor, environmental, regulatory, and product. Approach product design and manufacturing with PLM as the hub of an integrated compliance system.

The following characteristics make PLM an ideal platform for managing social compliance and ethical sourcing.

■ **Easy access to information.** PLM systems can provide internal and external stakeholders with centralized access to audit and test results, SOVEs, vendor factory profiles, information on capabilities and capacity planning, and other vital data. The system can house vendor scorecards and KPIs, helping to determine the most appropriate vendors for sourcing decisions.

■ **Workflow management.** Proactive calendars—common in PLM systems—keep track of audits and certification dates. Rather than relying on emails, faxes, and spreadsheets, communication takes place within the system, with collaboration that is tied to SKUs, audits, or purchase orders.

■ **Improved collaboration and reporting.** PLM systems help improve collaboration worldwide, ensuring that all parties work toward common goals for compliance and sourcing, with traceability and accountability throughout.

Ensuring ethical sourcing and social compliance can be daunting—but companies can't afford to ignore it. Most companies can take advantage of PLM's capabilities as a central system for ensuring compliance, which is at the heart of brand protection. And this gets back to the central mission of PLM: developing and furthering your company's brand. ■

CAN EVERYONE
ON YOUR TEAM
SOLVE THIS?

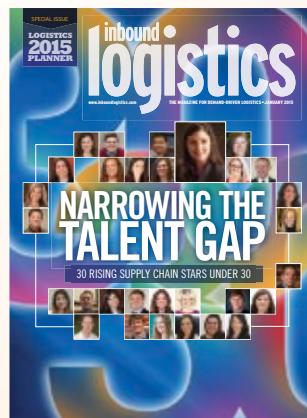
$$ICC = \frac{C + T + I + W + X + (S - R1) + (O - R2)}{\text{Annual \$ Material Cost}}$$

If not, they should be reading this.

Spread the good news by getting your vendors, partners, and team members reading *Inbound Logistics*.

Point them to bit.ly/get_il

**inbound
logistics**
THE MAGAZINE FOR DEMAND-DRIVEN LOGISTICS



ICC=inventory carrying costs C=capital T=taxes I=insurance W=warehouse costs X=shrinkage S=scrap O=obsolescence costs R=recovery

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl



GLOBAL LOGISTICS
COLD CHAIN
SUPPLY CHAIN
NETWORK MODELING

PARCEL SHIPPING
REID
FORECASTING
FINANCE

DIM WEIGHT
CONTRACT NEGOTIATIONS
WAREHOUSE MANAGEMENT
CUSTOMS COMPLIANCE

SECURING CAPACITY
TRANSPORTATION
REVERSE LOGISTICS
ECONOMIC DEVELOPMENT

FULFILLMENT
HAZMAT
VENDOR COMPLIANCE
MANUFACTURING

EXPEDITED AIR
SUSTAINABILITY
CROSS-BORDER TRADE

3PLS
SAAS
PALLETS
PURCHASING
LOGISTICS
LTL TRUCKING
ROUTING GUIDES

CARRIER SELECTION
YARD MANAGEMENT
EMERGING MARKETS
HOURS OF SERVICE RULES
PACKAGING
TMS
PORT SELECTION

OMNICHANNEL LOGISTICS
MATERIALS HANDLING
4PLS
TECHNOLOGY
DC NETWORKS
TALENT GAP
CARGO SECURITY

SMARTWAY CARRIERS
CUSTOMS
MULTIMODAL TRANSPORT

INTERMODAL
AIR FREIGHT
MARKETING
FLEET MANAGEMENT
OCEAN FREIGHT
SITE SELECTION
WMS

The list of competencies employers seek when they recruit supply chain professionals keeps growing longer and more complex. Here's how degree-granting programs keep pace, and enable well-rounded graduates to fill prime positions.

TODAY'S SUPPLY CHAIN EDUCATION: IT'S ALL IN YOUR HEAD

By Merrill Douglas

As corporate leaders discover the competitive power of a well-run supply chain, they've started looking for a new kind of supply chain professional. It's not enough to know logistics, or procurement, or demand planning inside out. The 21st century practitioner needs to grasp all the links in the chain, from raw materials through finished product and final delivery.

That's not all employers want. They also are looking for supply chain practitioners who communicate well with colleagues in sales, marketing, finance, and other departments; know how to use data analytics and modeling tools; understand sustainability and social responsibility; excel at soft skills such as collaboration and negotiation; and have the international savvy to succeed in a global economy.

Those are big shoes to fill. No one knows that better than directors of college and university programs that prepare graduates to step into supply chain management roles.



Companies are looking for employees who understand the supply chain from end to end, and around the world. Schools such as the Global Supply Chain Institute at the University of Tennessee are responding by adjusting curriculum to give employers what they want.

“If we listened to our advisory board, and took to the letter every skill they want our undergraduates to have, we’d have to offer a 15-year program,” says Shay Scott, managing director of the Global Supply Chain Institute at the University of Tennessee (UT), Knoxville.

No degree-granting program can promise that all its graduates will deliver all items on every supply chain executive’s wish list. But the people who run those programs, on both the undergraduate and graduate level, are working hard to give employers what they want.

Broader Perspective

Some programs respond to expanding industry needs by enlarging their focus.

For example, at the University of San Diego (USD), the Master of Science in Supply Chain Management curriculum was designed to emphasize sourcing. But employers who sent students to the two-year program said they wanted employees to understand the supply chain from end-to-end and around the world. “So we added subjects such as logistics, and a strong international component,” says Lauren Lukens, director of the USD program.

UT has a similar story, although it starts

at a different point in the chain. “Ten years ago, UT primarily offered a logistics program,” says Scott. Today, though, companies look for employees with wider expertise. So UT also has adjusted.

“Through a deliberate shift in strategy, and a significant change in staffing and team players, we have converted to a broad-based supply chain program,” says Scott, whose institution offers both undergraduate and graduate degrees.

That trend of cultivating broader skills doesn’t stop with the supply chain.

The path a product travels from sourcing to production to the marketplace also touches on disciplines such as marketing, finance, and accounting. “Employees have to understand processes across functional areas,” says Roby Thomas, program director for the Master in Supply Chain Management at Elmhurst College in Elmhurst, Ill. That’s why Elmhurst organizes its program around processes, not functions.

Supply chain professionals today work with colleagues throughout the organization. “They need to be able to connect supply chain with the language they understand,” says Ravi Anupindi, professor of supply chain management and faculty

director of the Master of Supply Chain Management Program at the University of Michigan in Ann Arbor.

One way Michigan prepares students for interdisciplinary collaboration is through direct contact. Students in the supply chain program may take electives such as marketing or negotiation in the Master of Business Administration (MBA) program. MBA students may also take supply chain electives. “Supply chain students and MBA students mix in the same classroom,” Anupindi says. Team projects that unite students from both programs offer opportunities for cross-fertilization.

USD’s two-year MS program—taught mainly online, but with five on-campus modules as well—offers a course on finance and risk management. “The intention is to help students understand not only how these areas affect their positions, but also how to interact with the finance departments within their companies and what might be important to those players,” Lukens says.

The program used to include a one-unit marketing course, but USD now integrates marketing-related content into several other classes. “Marketing hits so many different points of the supply chain,

Equipping Professionals and Their Companies With the Ultimate Tools for Success

At the University of San Diego, learning is driven by “real-world” case studies and assignments with focus on Supply Chain Management issues, approaches and tools. Students work to identify gaps between their organization’s processes and the processes of world-class companies.

- Supply and Demand Planning
- Logistics Network Design
- Sourcing and Procurement
- Inventory Management
- Production Planning and Scheduling
- Global Transportation Management



Nationally ranked by Gartner, Inc., and *U.S. News & World Report*, the University of San Diego’s Master of Science in Supply Chain Management (**MS-SCM**) degree was the first program to be **ISM**[®] approved by the Institute of Supply Management (ISM). Designed for the working professional, the degree can be earned part-time over two years, in a program combining online learning with visits to USD’s campus.

FOR MORE INFORMATION

www.sandiego.edu/msscsm
msscsm@sandiego.edu
(619) 260-7901



it wasn't fair to offer a one-unit course that barely skimmed the surface of what marketing means for supply chain professionals," Lukens says.

Big Data

Like their peers in just about any other business discipline, students aiming for supply chain careers must learn to extract business knowledge from data. Thanks especially to the rise of social media, companies today collect masses of data on customers' shopping and buying habits.

Internal business systems add to the glut. "The optimization technology used in the supply chain also collects tremendous amounts of data," says Gary LaPoint, professor of supply chain practice at Syracuse

tools available today, companies can make better use of data from sources such as enterprise resource planning (ERP) systems. "That is one big area of change we've seen, and something we've put a lot more focus on in our curriculum," says Thomas.

Along with using big data to gain new insights, supply chain students learn to use advanced technology to test different options before making decisions. "Students are being exposed to more modeling techniques, simulation, and gaming," says Gary Gittings, director of the online graduate programs in supply chain management at Penn State University. Recent advances in technology allow students to work on robust problems in scenarios that duplicate conditions they would face in the workplace.

value lies in the interaction between different areas of the supply chain," Scott says.

Within the online American Public University System, professors in the Transportation and Logistics Management program created an open forum for discussing new technologies that could reshape the industry.

"A lot of discussion revolves around 3D printing, and unmanned aerial vehicles or drones," says Stacey Little, the program's director. One instructor who teaches a course on air transportation plans to start a forum for discussing the implications of product delivery by drone, such as how the practice might affect government regulation of air space.

3D printing entered the supply chain curriculum at Penn State, too. "We're not focused too much on making cool key chains," says John Jordan, clinical professor of supply chain and information systems. "We're more concerned with the impact of making items on site rather than moving mass-produced finished goods."

The use of 3D printing for customized products, such as prosthetics, will force the industry to rethink inventory management. "What does the warehouse look like for SKUs of one? We don't know—it's all new," Jordan says. Those are the kinds of questions he raises with his students.

Corporate Citizenship

While supply chain professionals still concentrate on how to deliver excellent products as efficiently as possible, they also keep an eye on other values. "We're beginning to see a focus on social and environmental issues," says Anupindi. "This is more prominent in some industries than in others, but it will become more important."

What impact does a company make on the environment when it sources materials, or manufactures and delivers product? Can it guarantee that its suppliers don't operate sweat shops, employ child labor, or use conflict minerals?

In many companies, two separate organizations look after those issues, one charged with sustainability and the other with corporate responsibility, Anupindi says. Neither of those teams talks to the supply chain organization. To nurture professionals who can integrate all three concerns, Michigan's MS program weaves questions



Elmhurst College structures its Master in Supply Chain Management program around processes, rather than functions, to help students cultivate a broader skill set.

University. "Companies sometimes don't know what to do with it all."

Syracuse helps students in its undergraduate and graduate supply chain programs learn to make good use of data analytics software, starting with Microsoft Excel and Access. "We're also introducing other statistical packages, such as R, Google Analytics, Tableau, and Mini-Tab," says LaPoint. A growing number of undergraduates double-major in supply chain management and information studies, he adds.

With easier, more intuitive analytics

Undergraduate and masters-level students at UT make heavy use of simulation software. Students might employ it to run a virtual business for three years, making hundreds of decisions along the way. "They get the chance to put their learning into action, and see how it impacts the business's financial results," Scott says.

Such exercises become increasingly important as more corporations emphasize supply chains as strategic assets. "The undergrads are entering a world where they need to be able to explain that the greatest



Tim Engstrom

*Adjunct Faculty, Department of Business
Divisional VP, Supply Chain & E-Commerce, Walgreen Co.*

Choose real-world experience.

**UNDERSTAND BUSINESS FROM END TO END
WITH OUR M.S. IN SUPPLY CHAIN MANAGEMENT.**

Join the experts at Elmhurst College. When you're ready to advance your business career, follow the experts in connecting the world. Our faculty members have industry experience in strategic sourcing and collaboration, logistics, operations management, and e-commerce. They've led teams in all kinds of places from small start-ups to multibillion dollar corporations. They can take you where you want to go.

Graduate Programs Information Session

Saturday, March 21

9:00 a.m.

**Frick Center, Founders Lounge
Elmhurst College**

Reserve Your Space

Call: (630) 617-3300

Email: sps@elmhurst.edu

Visit: elmhurst.edu/chooseElmhurst

Follow us on

f [facebook.com/SPSelmhurst](https://www.facebook.com/SPSelmhurst)

t twitter.com/SPSelmhurst



SCHOOL FOR PROFESSIONAL STUDIES

*Meeting you where you are.
Taking you where you want to go.*

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl

of sustainability and ethics into its courses on sourcing and other relevant topics. “The case studies we have developed also highlight the role of engaging with other stakeholders,” Anupindi says.

At Penn State, Jordan spends one week covering questions of product provenance and supply chain transparency. Those are becoming important issues at many companies. “If marketing makes a public commitment to going conflict-free, or fair trade, or cruelty-free for your supply base, somebody has to document that commitment,” he says.

On paper, supply chain management

or preparing for internships, must learn it’s often more effective to pop into someone’s office, or make a phone call, than to send a text.

At Syracuse, many lessons on the softer side of supply chain management come up informally in the classroom. “Students also learn a lot by attending meetings at the businesses where projects are being implemented,” says LaPoint.

Besides the ability to work with people in a business setting, the supply chain profession requires other skills you can’t pick up from textbooks. “Employers are looking for logistics professionals who embrace

they need, where they can get it, and what they need to make the decision,” Little says.

Instructors also let students decide how long a paper should be to fulfill the assignment. “It is a good exercise to prepare them for what will happen out in the world,” she adds.

Worldly Wisdom

Because many supply chains today cross international borders, companies also want employees who operate with ease on the global stage.

“We’re seeing companies that are interested in students with language skills,” says LaPoint. “As a result, more students are taking language classes on campus.”

Many students hone their global skills by studying abroad. That opportunity is so important that even the mostly online MS program at USD will soon offer an overseas version of the international negotiations class that students otherwise take in San Diego.

“The same faculty who teach this on campus also teach abroad,” says Lukens. “The faculty are in Asia and Europe every year.” Soon, supply chain students will have the option to join one of those international sojourns.

Although APUS doesn’t provide an international experience, it does offer courses focused on the international supply chain. Not only must students understand that people in different cultures conduct business in different ways, but they must also consider how transportation infrastructure differs from country to country. “In the United States, it’s easy to get a product from Point A to Point B,” Little says. “But go to Haiti and try to do the same thing.”

Beyond content-specific knowledge, students headed for supply chain careers need general-purpose management skills. “They have to be adept business people who can influence well, work on teams, and communicate in ways that weren’t expected from graduates in predecessor fields, such as transportation, 20 years ago,” says Scott.

That’s why UT is launching a “Business Passport” certification program designed to help undergraduates majoring in supply chain and other fields polish their professional abilities. On the graduate level, the Executive MBA for the Global Supply Chain program coaches its students—most



The University of Michigan’s annual Spotlight! competition features teams of students who present their operations and manufacturing solutions to a panel of executives from some of the world’s major corporations.

might look like a numbers-heavy discipline with an emphasis on engineering and information science. But most successful supply chain professionals are good at working with people. “Some critically needed skill sets are the abilities to communicate and develop collaborative relationships,” Gittings says.

For the rising generation of supply chain practitioners, lessons in “soft” business skills might start with a primer on old-school communication. “One challenge we face is getting students out of the mindset that everything is done with an email or text message,” says LaPoint. Students working on projects with local businesses,

change, are flexible, and are strong decision makers,” says Little.

Unfortunately, most people aren’t wired to deal with uncertainty and ambiguity. “Many students come in asking, ‘How long will it take to do the homework?’ or ‘How many papers do we have to write, and how long do you want them to be?’” Little adds. “Simple answers to those questions don’t prepare students for workplace realities.”

To address that concern, professors in the APUS Transportation and Logistics program sometimes give open-ended assignments based on scenarios with limited information. “We want students to make assumptions, and tell us what data

of whom are mid-career professionals—on how to make presentations and influence others.

“They learn to speak the language of business—how to communicate with the chief financial officer, and how to talk about working capital and internal rates of return without using traditional supply chain words,” says Scott.

To teach the crucial business skill of networking, the Transportation and Logistics Management programs at APUS encourage far-flung online classmates to get acquainted. “We set up Facebook and LinkedIn pages for our program,” Little says. Instructors also make a point of connecting students who express similar interests, or who work in different locations for the same companies. The networks students build in class could eventually help them in the business world, she adds.

The Real World

While using the classroom to prepare students for the “real world,” many supply chain programs either encourage or require students to apply their new knowledge in actual business settings. At Elmhurst College, for example, many undergraduate supply chain majors do internships. “A good network of Chicago companies keep coming back for our interns,” Thomas notes.

Elmhurst’s graduate students in supply chain management, most of whom are working professionals, spend the second year of the program conducting capstone projects, focused on issues at their own firms.

“They identify a problem and write a proposal,” Thomas says. “When the proposal is done, they write a thesis based on the project and do a presentation. Some of these projects have saved millions of dollars at companies such as Bosch, Walgreens, Motorola, and Kraft, as well as medium-sized and smaller companies.”

Michigan’s program places teams of two or three supply chain and MBA students in 14-week summer internships run by the school’s Tauber Institute of Global Operations. Working with one faculty advisor from the business school, and one from the school of engineering, each team conducts a project for its sponsor corporation, with a list of specific deliverables. In the fall, teams present the results to judges drawn from the corporate world in

a one-day competition called “Spotlight!”

Both students and faculty learn a great deal from the experience. “We have converted some of those engagements into case studies we use in class,” says Anupindi. Corporate sponsors use the competition to size up potential recruits.

Industry Input

Besides sponsoring students for internships and projects, corporate partners work with supply chain programs to keep curricula synched with their needs.

Often, that relationship includes a corporate advisory council. At USD, the MS program works with the board of the Supply Chain Management Institute, which draws members from about 25 companies. “I frequently touch base with all the members,” says Lukens. “When we were going through our curriculum review, they all took part.”

Directors of the supply chain programs at Syracuse hold a formal meeting each spring and fall with an advisory board that represents sectors as diverse as manufacturing, transportation, consulting, and athletics. They also hold a monthly teleconference.

“We ask them what is going on in their industries,” says LaPoint. Board members provide feedback on skill sets that students require, and offer projects for teams of students to work on.

At Elmhurst College, the classroom is filled with a great deal of corporate expertise. “About half our faculty are people from industry,” says Thomas. The school holds ongoing conversations with supply chain executives at companies in the Chicago area, such as Walgreens, where the vice president of supply chain operations is an Elmhurst alumnus.

“We also have a yearly review,” says Thomas. “A team from Elmhurst College and from industry exchange ideas and see how we can incorporate those into the appropriate classes.”

Specifications for the ideal supply chain keep evolving. The shoes that new graduates must fill in their jobs will only keep getting larger. But supply chain programs and their industry partners are doing all they can to ensure that when students enter or return to the corporate world, they are laced up and ready to run. ■

THINKING OUTSIDE THE BOOK

Because the list of cutting-edge subjects of interest to supply chain managers changes so quickly, John Jordan at Penn State University’s Smeal College of Business created a syllabus that leaves plenty of room for updates. The class is called Topics in Supply Chain Management.

“The point of this course is to identify issues that haven’t made it into the textbooks yet,” says Jordan, clinical professor of supply chain and information systems.

Rather than teach techniques, Jordan raises questions and intriguing possibilities. Some examples:

The Internet of Things: Sensors installed on machines can help maintenance teams predict when a system will need replacement parts. But who owns that data—the machine’s owner, the manufacturer, or the service provider? Where do you transmit the data, and how? “We have to figure out an organizational workflow,” Jordan says.

Crowdsourcing: Some companies are using design competitions to create new products. “For a supply chain professional, what does it mean when you’re getting your specs from a crowd board rather than from a research and development department?” asks Jordan. “You’re feeding the new product development model with a very different process.”

Social media: How can Facebook, YouTube, Twitter, and other social sites aid supply chain operations? Consider how Twitter lit up when an earthquake centered in Virginia rattled the eastern United States in August 2011. “People in New York knew it was coming,” says Jordan. “For someone running a warehouse, that’s useful to know.”



HOW TO LAY OUT A WAREHOUSE

or other supply chain facilities using Systematic Layout Planning (SLP) to optimize your warehouse, distribution center, inbound hub or service center

May 18-20, 2015 | Overland Park, KS
University of Kansas Edwards Campus

KU CONTINUING EDUCATION
The University of Kansas

kuce.ku.edu/warehouse



Georgia Professional Tech Education

SUPPLY CHAIN & LOGISTICS CERTIFICATES & COURSES

Developing Leaders and Solutions for Global Supply Chains

Position yourself for career success

- Supply Chain Management Certificate
- Distribution Operations Analysis and Design Certificate **NEW!**
- Strategic Sourcing and Supply Management Certificate **NEW!**
- Supply and Demand Planning Certificate **NEW!**
- Lean Supply Chain Professional Certificate

Download FREE Catalog:
pe.gatech.edu/supplychain-2015



ONLINE. ANYTIME. ANYWHERE.

Maine Maritime Academy has a fully accredited Masters degree program available online. Check out our trimester International Logistics Management program at:

MAINEMARITIME.EDU/ACADEMICS/GRADUATE-PROGRAMS/ONLINE

Graduate Admissions | 207-326-2212 | online@mma.edu



MAINE MARITIME ACADEMY



JobsInLogistics
.com

FIND JOBS - FIND CANDIDATES

**Supply Chain • Transportation • Logistics
Freight Forwarding • 3PL • Warehousing**

3PL Staffing Firm

Specializing in direct and contract hiring including:

- CEO's, COO's, CFO's, CIO's, CMO's, CLO's
- Vice Presidents / Directors
- Sales Managers
- Directors Of Business Development
- Solutions Engineers
- TMS/WMS/LMS Systems Implementation Managers
- Carrier Sourcing Managers
- Freight Brokerage / Branch Managers
- Facility Managers
- Pricing Managers
- IT Managers
- Trade Compliance Managers

SRI Search Resources Inc.
"Building world class supply chain organizations one individual at a time."

All fees company paid.
847-382-3877
Fax: 847-382-3878
www.srimatch.com

**Stand Out
In Your Field**

"Earning my CTB reinforced the knowledge I needed to move forward in today's third party logistics arena. It gave me instant credibility and set me apart in this highly competitive industry."



703.299.5700

tianet.org/ctb



**CERTIFIED
TRANSPORTATION
BROKER**

**The Industry's Only
Certification Program**

**Stillman School of Business
at Seton Hall University**



**A TOP RANKED MBA
FOR Working Professionals**

**MBA Specialization and Undergraduate
Certificate in Supply Chain Management**

- Go beyond theory and use real data to solve practical problems that arise in real-world supply chains
- Collaborate with full-time MBAs and working professionals from a variety of backgrounds and areas of expertise
- Visit corporate partners and gain hands-on experience with actual supply chains
- Join an *active* student chapter of APICS

FOR MORE INFORMATION

call (973) 761-9262 email mba@shu.edu
visit business.shu.edu

 STILLMAN SCHOOL
OF BUSINESS
SETON HALL UNIVERSITY
South Orange, New Jersey



Your career demands that you advance the goods.
Make time to advance yourself.

- Professional certifications from AST&L
- Certification in Transportation & Logistics (CTL)
 - Professional Designation in Logistics & Supply Chain Management (PLS)
 - Global Logistics Associate (GLA)



www.astl.org | 773.355.4900



Supply Chain Management Graduate Certificate

In-depth study of **Operations, Logistics, Marketing, Sales, Services**

- Creative, hands-on environment
- Industry experts
- Convenient online courses
- One year completion
- Designed for real-world, immediate application



"The Lehigh experience provided me with tools in supply chain management that I quickly applied to ongoing projects with all my teams. The online capability, live interaction, and taped sessions are excellent."

- Digno Caballero
 VP of Operations/ Supply Chain Director
 Bacardi U.S.A. (Florida)



84,000+ ALUMNI = PROVEN SUCCESS

The Leader in Logistics Distance Learning Since 1923



"ILM puts the Logic in Logistics."



8 ACADEMIC AND PROFESSIONAL CAREER TRACKS NOW AVAILABLE!

www.ilm.edu



GEORGIA LOGISTICS SUMMIT

MARCH 31 - APRIL 1, 2015

GEORGIA WORLD CONGRESS CENTER | ATLANTA

INNOVATING YOUR BUSINESS FOR A HIGH-GROWTH FUTURE...

Connect with over 2,000 attendees from across the nation and globe as they explore supply chain solutions with leading shippers and subject matter experts at this year's **Georgia Logistics Summit!**

Focus areas for this year's event include:

- E-Commerce
- Intermodal Freight
- Perishables

Register today and don't miss your chance to **Connect, Compete and Grow** your business!

LEARN MORE AT
GEORGIALOGISTICS.COM
912.963.2551

a division of the Georgia Department of Economic Development

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl



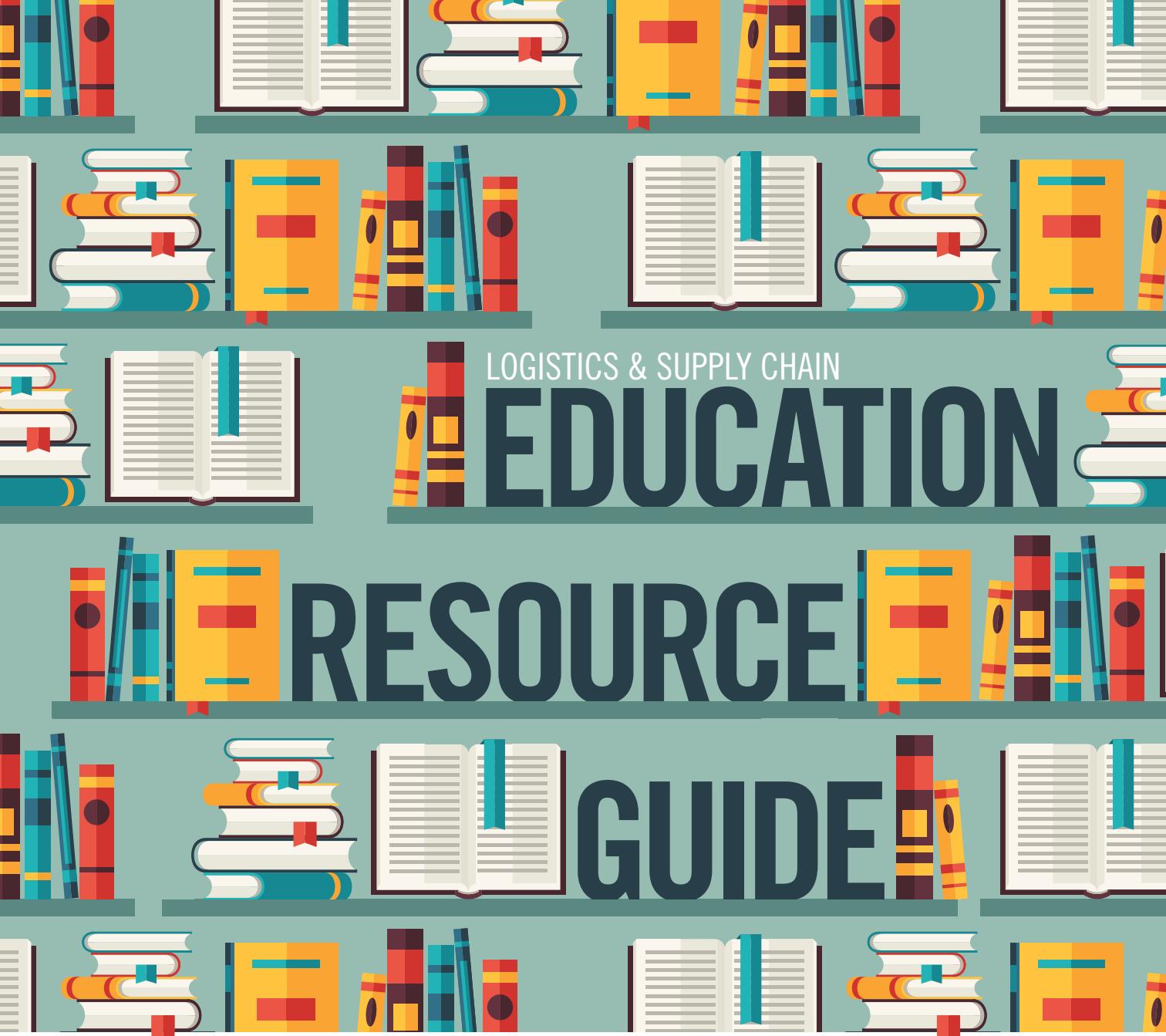
**They've done their part.
Can you do yours?**

Hire a Veteran.

Sponsored by Inbound Logistics

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl



Online Decision Support

Extended education listings are available online. Consult the Logistics and Supply Chain Education Decision Support Tool: inboundlogistics.com/find-a-logistics-school

Don't see your school or university here?

Submit your credentials to our Logistics and Supply Chain Education database: bit.ly/edu_questionnaire

M

arket demands, competitive pressures, and a looming talent gap have created high demand for skilled supply chain professionals who are well-rounded in many areas of logistics, transportation, marketing, finance, and more.

To help companies meet their need for these skilled recruits, universities and professional associations have enhanced their curriculum, and now offer a host of undergraduate, graduate, and certificate programs specializing in logistics, supply chain, and transportation management. Some schools have also created programs that fill industry knowledge and skill gaps. Online or on-site degree programs are available to synchronize with a working professional's overloaded schedule.

Whether you're preparing to seek out a new position, or striving to stand out in your current job, further instruction in logistics, supply chain, or transportation management may offer the edge you need.

On the following pages, *IL* provides data from a selection of schools and associations that submitted information about their logistics, supply chain, and transportation education offerings. This *Supply Chain & Logistics Education Resource Guide* puts a world of learning at your fingertips.

LOGISTICS & SUPPLY CHAIN EDUCATION RESOURCE GUIDE

SCHOOL NAME	URL & PHONE	Years offering logistics education	UNDERGRADUATE				GRADUATE				CONTINUING EDUCATION				VOCATIONAL/TRADE/TECHNICAL				COURSE LOCATIONS							
			Logistics or Supply Chain Major	Logistics or Supply Chain Minor	Logistics or Supply Chain Coursework	Logistics or Supply Chain Certification	Global Trade Coursework	Operations Management Coursework	Supply Chain Engineering Coursework	Master's Degree Program	MBA Concentration	MBA Coursework	Doctoral Program	Certificate Programs	Distance Learning Events	Executive Programs	Seminars & Short Courses	Warehouse Management	Inventory Management	Freight Management	Logistics Sales	Logistics Technology	Distance Learning	On Campus	On Site (Off Campus)	At Events (Off Campus)
American Public University	studyatAPU.com/TLM 877-777-9081	DNR	●	●					●	●			●	●								●				
American Society of Transportation & Logistics	astl.org 773-355-4900	68		●	●	●							●	●	●	●	●	●	●	●		●		●	●	●
Auburn University	business.auburn.edu 334-844-4908	43	●	●	●				●				●									●	●			
Bellevue University	bellevue.edu 800-756-7920	9	●						●				●	●	●							●	●	●		
California State University—Dominguez Hills	csudh.edu/ee/ logistics.html 310-243-2336	10											●				●					●	●			
California State University—Fullerton	extension.fullerton.edu 657-278-5872	DNR											●			●						●	●	●	●	
California State University, Long Beach—CITT	ccpe.csulb.edu/citt 562-985-2872	DNR							●				●	●		●		●	●	●		●	●	●	●	
Central Washington University	cwu.edu/business 509-963-2664	13	●	●	●	●		●								●						●	●			
City Colleges of Chicago—Richard J. Daley College	ccc.edu/Colleges/daley 773-838-7785	8	●	●	●	●	●										●	●	●	●	●	●				
Columbus State Community College	csccl.edu 614-287-5175	18	●	●	●	●							●	●		●	●	●	●	●		●	●	●		
Dunlap-Stone University	dunlap-stone.edu 602-648-5750	18	●	●	●	●							●	●			●					●				
East Carolina University	ecu.edu 252-328-6369	13	●	●					●	●			●									●	●			
Elmhurst College	elmhurst.edu 630-617-3069	23	●						●	●												●				
Embry-Riddle Aeronautical University—Worldwide	worldwide.erau.edu 800-522-6787	DNR	●	●	●	●	●	●	●	●			●	●								●	●			
Gaston College	gaston.edu 704-922-6200	33	●	●	●								●	●		●						●	●			
George Mason University—School of Public Policy	policy.gmu.edu 703-993-8099	DNR							●		●		●	●								●	●			

DNR = Did not report

LOGISTICS & SUPPLY CHAIN EDUCATION RESOURCE GUIDE

SCHOOL NAME	URL & PHONE	Years offering logistics education	UNDERGRADUATE				GRADUATE				CONTINUING EDUCATION				VOCATIONAL/TRADE/TECHNICAL				COURSE LOCATIONS								
			Logistics or Supply Chain Major	Logistics or Supply Chain Minor	Logistics or Supply Chain Coursework	Logistics or Supply Chain Certification	Global Trade Coursework	Operations Management Coursework	Supply Chain Engineering Coursework	Master's Degree Program	MBA Concentration	MBA Coursework	Doctoral Program	Certificate Programs	Distance Learning Events	Executive Programs	Seminars & Short Courses	Warehouse Management	Inventory Management	Freight Management	Logistics Sales	Logistics Technology	Distance Learning	On Campus	On Site (Off Campus)	At Events (Off Campus)	Seminars (Off Campus)
Georgia Institute of Technology	isye.gatech.edu 404-894-2300	DNR		●			●	●	●		●		●	●	●	●							●				
Georgia Southern University	georgiasouthern.edu 912-478-6625	23	●	●	●		●		●	●	●	●					●	●	●	●			●				
Georgia Tech Supply Chain & Logistics Institute	scl.gatech.edu 404-894-2343	DNR		●			●	●	●		●		●	●	●	●							●	●	●	●	
Golden Gate University	ggu.edu 415-442-6500	109				●	●		●	●	●	●					●					●	●				
Governors State University	govst.edu/cbpa 708-534-4391	DNR	●	●		●	●		●	●												●		●			
HEC Montreal	hec.ca/en 514-340-6000	15	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●			●	●			
Institute of Logistical Management	ilm.edu 888-456-4600	DNR			●								●				●	●	●			●					
Iowa State University	iastate.edu 515-294-6060	30	●	●	●		●	●	●	●	●			●	●								●	●	●	●	●
Ivy Tech Community College	ivytech.edu/indianapolis 317-921-4800	10	●	●	●								●									●	●				
John Carroll University	jcu.edu 216-397-1886	70	●	●			●															●					
Lehigh University	lehigh.edu 610-758-4952	14	●	●					●	●		●	●		●							●	●				
Loyola University Chicago	luc.edu/scm 312-915-7654	13		●			●		●	●		●		●	●							●	●	●	●	●	
Maine Maritime Academy	ibl.mainemaritime.edu 207-326-2212	50+							●							●	●					●	●				
Marquette University	business.marquette.edu 414-288-7142	DNR	●	●	●		●	●	●	●												●	●		●		
Massachusetts Institute of Technology	executive.mit.edu 617-253-7166	11											●		●	●						●					
Missouri State University	missouristate.edu 417-836-6346	16	●	●	●		●			●												●	●				

DNR = Did not report

LOGISTICS & SUPPLY CHAIN EDUCATION RESOURCE GUIDE

SCHOOL NAME	URL & PHONE	Years offering logistics education	UNDERGRADUATE				GRADUATE				CONTINUING EDUCATION				VOCATIONAL/TRADE/TECHNICAL				COURSE LOCATIONS							
			Logistics or Supply Chain Major	Logistics or Supply Chain Minor	Logistics or Supply Chain Coursework	Logistics or Supply Chain Certification	Global Trade Coursework	Operations Management Coursework	Supply Chain Engineering Coursework	Master's Degree Program	MBA Concentration	MBA Coursework	Doctoral Program	Certificate Programs	Distance Learning Events	Executive Programs	Seminars & Short Courses	Warehouse Management	Inventory Management	Freight Management	Logistics Sales	Logistics Technology	Distance Learning	On Campus	On Site (Off Campus)	At Events (Off Campus)
Moraine Valley Community College	morainevalley.edu 708-974-5714	9		●									●			●				●						
Mount Royal University	conted.mtroyal.ca 403-440-7785	11											●													●
Neeley School of Business—Texas Christian University	neeley.tcu.edu 817-257-7527	DNR	●	●					●				●	●												●
North Dakota State University	ndsu.edu/transportation 701-231-7938	9			●				●		●		●	●												●
Northeastern University	cba.neu.edu 617-373-3282	23								●	●		●													●
Northwestern University	northwestern.edu 847-491-3741	61		●	●				●		●	●			●	●										●
Ohio State University—Fisher College of Business	fisher.osu.edu 614-292-8808	55	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Pennsylvania State University	psu.edu 814-865-0073	49	●	●		●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●
Portland State University School of Business	pdx.edu/sba 503-725-3712	18	●	●		●	●		●																	●
Purdue University	krannert.purdue.edu 765-496-0773	53	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
St. Louis University	cscms.slu.edu 314-977-3617	16	●	●	●	●			●	●	●		●	●	●	●	●	●	●							●
Seton Hall University	shu.edu 973-761-9000	5			●					●	●		●													●
State University of New York—Maritime College	sunymaritime.edu 718-409-7200	141	●			●			●				●													●
Supply Chain Council	supply-chain.org 202-962-0440	18			●								●													●
Syracuse University—Whitman School of Management	whitman.syr.edu 315-443-3460	96	●	●		●	●		●	●	●	●	●	●	●											●
Texas A&M University	id.tamu.edu 979-845-4984	DNR	●	●				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

DNR = Did not report



**NOT ALL CARRIERS
ARE THE SAME.
WE PROVE IT BY BEING DIFFERENT.**

We believe in giving our drivers the tools, the training and the motivation to be the best in the industry. In making unprecedented investments in equipment, processes and facilities to improve customer service and operational efficiency without cutting corners or risking lives.

We believe in Doing it Right because you deserve nothing less.

See what we're doing at ARDoingItRight.com or call.

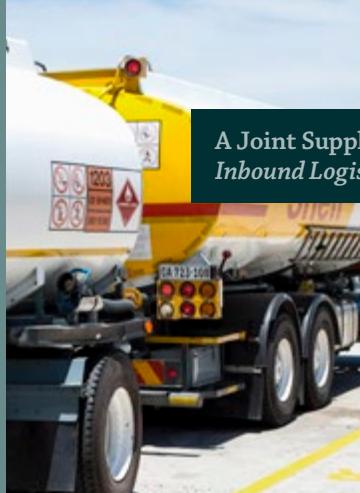


**DOING IT
RIGHT.**

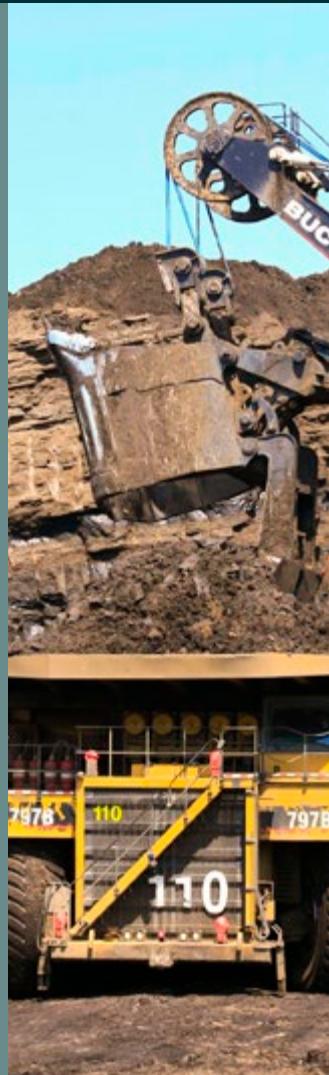
600 N. HURSTBOURNE PKWY., STE. 110
LOUISVILLE, KY 40412
502.777.7020

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl



A Joint Supplement from
Inbound Logistics and Chemical Week



Oil, Gas & Energy

Hot issues and trends in the oil, gas,
and energy value chain challenge supply
chains to run like well-oiled machines.

By Joseph O'Reilly



February 2015 • Inbound Logistics 51

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl

Down Goes the Boom

Volatility in the oil and gas business is forcing producers and industry to confront a legacy of poor logistics execution.

The North American oil and gas industry has always wavered between boom and bust. Volatility comes with the business. Supply and demand ebbs and flows as geopolitical flare-ups dictate. Wellheads dry up. New ones emerge. Producers are constantly on the move looking to locate the next big rig, whether it's offshore or on land, drilling for conventional liquid oil or unconventional shale gas.

The last decade has been an out-and-out land grab in the North American energy sector, demonstrated by explosive growth in Northern Alberta's tar sands, North Dakota's Bakken shale formation, Appalachia's Marcellus Basin, and the Eagle Ford and Permian plays in Texas. This impact is now being felt throughout the broader supply chain

as cheaper energy lures industrial bases closer to demand.

For all the upstream potential, there are also inevitable headwinds. The oil and gas industry is hypersensitive to macroeconomic pressures, especially consumption in China and conflict in the Middle East. This past year was no different. As global demand for oil waned in

2014 and OPEC, the world's largest oil cartel, resisted cutting back production to inflate prices, supply flooded the market. Now falling oil prices are eroding margins. Simply, it costs more to produce.

Other pressures come to bear as well. Regulatory inertia with regards to hydraulic fracturing and crude by rail remains a latent concern. The rapid growth of liquefied natural gas (LNG) has kicked open a new export market for North American producers. It's also kick-starting a transportation revolution as carriers across all modes explore LNG for locomotion. On the legislative side, the Keystone XL pipeline impasse directly impacts midstream activities.

External factors notwithstanding, energy companies need only look under the hood to identify where they're leaking oil – and money. Industry has long been laggard in managing costs. Growth has focused on increasing yields and generating revenue. Consequently, producers have been slow to manage and

DO YOU KNOW WHERE TO FIND
SAVINGS
IN YOUR SUPPLY CHAIN?



DISCOVER LOGISTICS EXPERTISE AT
C.H. ROBINSON'S OIL AND GAS SOLUTIONS.



C.H. ROBINSON

»Accelerate Your Advantage®

800.323.7587 | solutions@chrobinson.com

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl

optimize their supply chains. Now these systemic failures are lowering the boom as industry confronts an inevitable bust.

Capital Punishment

The amount of investment that has seeped into the oil and gas space over the past decade is unprecedented. Speaking at the second annual SCM Leaders On Demand oil & gas symposium in Houston, Texas, in November 2014, Dennis Cassidy, managing director for consulting firm AlixPartners, documented this outlay.

“There has been a renaissance in capital flooding into the oil and gas industry,” he said. “More than \$1 trillion was invested worldwide in 2014; 75 percent of that was spent in upstream activities at the wellhead. There has also been a midstream bonanza in the United States, as industry looks for ways to build infrastructure to get oil to market.”

But there’s a problem. Given market volatility and deteriorating oil prices, energy companies and their backers aren’t seeing the same kind of returns as in the past. Easy capital is drying up. Companies can’t just knock on Wall Street doors looking for free handouts anymore. Investors simply won’t support an industry that is underperforming. So an uneasy pressure is building within the oil and gas business that threatens to burst.

“The industry is on an unsustainable path,” Cassidy said. “Something has to give.”

AlixPartners has been tracking these changing dynamics, recently partnering with UK-based Oxford Economics to survey C-level oil and gas executives at more than 250 global companies across all industry streams. The results are eye opening.

For one, 70 percent of executives report they are not actively managing costs. Why? Invariably, everything the business is evaluated



The expansion of LNG use has created a new export market for producers and fuel source for freight carriers.

on – such as incentives, agreements, and leaseholds – pivots on growth. It comes down to two primary levers, according to Cassidy: First, absolute throughput at the wellhead, then portfolio management – or how companies are structuring deals and aligning with global partners.

Consequently, AlixPartners discovered that project management and cost management are far down the priority list.

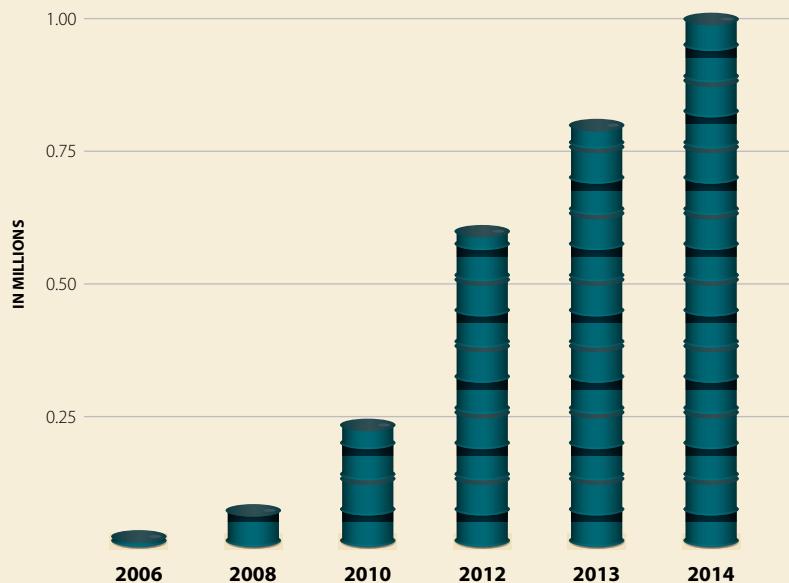
“Consider that these companies are custodians of \$1 trillion,” Cassidy noted. “But only 20 percent of the time do they expect a project to come in at or under budget; and only 47 percent of the time do they expect a project’s rate of return to land within their original planned horizon.”

AlixPartners’ research points to several reasons why oil and gas companies are delivering projects below expectations:

- Lack of technology for execution.
 - Synergies in planning processes are incomplete, inconsistent, and often too siloed.
 - Culture is not focused on project management.
 - Competition for resources.
 - Lack of centralized processes.
 - Inaccurate data.
 - Poor talent acquisition.
- The failure to properly apply

Bakken Daily Oil Production

The Bakken reached an important milestone in 2014 when it surpassed one million barrels of production daily, which equates to 76 percent of the oil imported from Saudi Arabia.



Source: EIA



Expertise.

Deringer couples competitive brokerage rates with boutique customer service. Over the years, Deringer has achieved many firsts in the industry. Some of these accomplishments include earning one of the first Customs Brokerage Licenses, participation in many Customs pilot programs, and receiving the first national permit.

CUSTOMS BROKERAGE FREIGHT FORWARDING WAREHOUSING AND DISTRIBUTION CARGO INSURANCE CONSULTING

DERINGER[®]

Managing Logistics • Maximizing Opportunity

Contact our service specialists for information on our wide range of services.

1-888-612-6239 www.nderinger.com



Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl

and integrate logistics technology contributes to many visibility problems that oil and gas companies encounter. As sophisticated as industry is on the production side, back-end support is years behind.

Considering the complexity of managing well site logistics in a just-in-time (JIT) environment, costs can quickly spiral out of control.

“One of the industry’s unique challenges is moving equipment and materials to latitude-longitude coordinates,” explains Alaster Love, vice president, oil and gas for Frisco, Texas-based third-party logistics provider Transplace. “For example, deliveries can sometimes be six miles into a ranch in a remote area.”

As onshore development in North America expands, the amount of materials (frac sand) needed to facilitate drilling is growing accordingly. Consolidating resources

and managing longer lead times in a decentralized, JIT environment is fraught with risk.

Oil Pressure

“Oil and gas companies also operate 24/7/365, so it’s sometimes necessary to receive equipment first-flight-out because of operational costs,” Love adds. “If an oil well goes down, even if it’s onshore, it’s a tremendous loss. Other industries don’t have this type of pressure.”

In these types of remote environments, where companies often rely on many small mom-and-pop carriers and local contractors to deliver requisite materials and services, transportation management becomes a critical success factor. But industry has been slow to adopt and use solutions to manage this complexity.

“Some of the biggest oil and gas

companies don’t know what their supply chain spend is,” Love notes.

Talent acquisition is another area that would seemingly be top of mind among C-level observers. Cassidy’s clients often point to human resources as one concern they grapple with. Yet it ranks low in importance.

“It’s startling that the majority of items affecting the success of oil and gas projects are execution related,” Cassidy said. “Management affects these items.”

While there is a burning platform for better project and cost management, industry is still largely externally focused. Surveyed executives report they are trying to do a better job of forecasting and tracking macroeconomics – in other words, predicting the price of oil. But that’s a moving target and ultimately a losing proposition.

Realistically, many of these



Shell is the majority shareholder of the Athabasca Oil Sands Project, a joint venture between Shell Canada (60 percent), Chevron Canada (20 percent) and Marathon Oil Canada (20 percent).



Always forward thinking.

We take safety seriously...

We may have been awarded the prestigious **ATA President's Trophy in 2010 AND 2014**, but... today, we are focused on the next mile!

With an **Experience Modification Rate (EMR) that is 40% below the industry average & driver turnover 1/3rd of the national average**, Dupré is the right partner for your logistics needs. For a no obligation operational analysis, please contact our team. We are committed to safe service, improving operations & increasing **YOUR** competitive advantage.

DUPRÉ LOGISTICS, LLC » 201 Energy Parkway, Suite 500 » Lafayette, LA 70508 » 866.686.5478 » www.duprelogistics.com
For forward thinking about logistics, visit blog.duprelogistics.com.

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl

challenges, and the levers producers need to pull, are within management's control. But change, as often is the case in siloed supply chains, does not come easily. Case in point: when oil and gas executives were asked whether they are ready to assume these new challenges, 80 percent said "no."

That sentiment is likely to change in an \$80/barrel environment.

"Professionalizing" Logistics

Given these stiff headwinds, it's inevitable that energy companies will turn to logistics service providers for guidance. The growing complexity of on-site logistics demands a different management structure to ensure operations run as seamlessly and efficiently as possible – especially when you consider the amount of outsourcing activity at well sites.

Alberta, Canada's Athabasca tar sands have been the epicenter of North America's natural gas renaissance over the past decade. Most of this growth is

volume of transportation is required to deliver frac sand and water necessary to facilitate this process."

The volume of inbound material movements challenges well sites because historically there has been a low level of coordination at the field level. "It's common knowledge that logistics is an afterthought in the unconventional space," Edem adds. "Everybody is a logistics manager and coordinator."

That's the core problem. It's a fragmented and decentralized environment, which only breeds inefficiency. The growing volume of transport activity in remote areas also increases risk exposure.

About six years ago, Shell Canada began looking more closely at how it manages logistics in the field. The company saw a need to enhance data quality, reduce manual processes, and improve its social license to operate – in other words, the level of acceptance or approval by local communities and stakeholders of mining companies and their operations. Shell recognized that

all the areas we manage."

Shell put in place field logistics coordinators tasked with receiving requirements from various businesses, then planning and sourcing assets to meet demand. As easy as it sounds, the approach presented a sea-change shift in how sites operate.

An unconventional wellhead is a hub of activity. Drilling groups, frac crews, production facilities, and construction/maintenance are all dependent on transportation. A high volume of service calls and multiple on-site representatives (OSRs) need materials "yesterday." Transportation tends to be highly uncoordinated. In a decentralized environment, consolidation is challenging. Backhaul opportunities go wanting.

By 2013, Shell decided that it needed to push its logistics delivery model to another level by adopting a 4PL-type model. The strategy was not without precedent. The multinational has used DHL as a 4PL provider in its Oman oil field operations. Applying that experience to North America was an attractive option.

"Pre-2009, we were highly decentralized," recalls Edem. "From 2009 to 2011, we put in centralized logistics at the field level. Then we made a push to professionalize this further with the 4PL concept."

Migrating to a 4PL Model

Today, Shell uses 4PLs throughout its North American operational footprint. For example, Ryder manages unconventional freight in the United States, while Schneider handles bulk and water moves. In Canada, Shell works with Menlo Worldwide.

Shell defines the 4PL role as an entity without assets. In other words, the "lead" logistics provider is charged with sourcing the resources and expertise necessary to manage 3PL activities and create value. But given the relative novelty of using

"Consider that oil and gas companies are custodians of \$1 trillion. They expect a project to come in at or under budget only 20 percent of the time; and they expect a project's rate of return to land within their original planned horizon only 47 percent of the time."

–Dennis Cassidy, managing director, AlixPartners

in "unconventional" development, where horizontal drilling and fracturing are necessary to tap harder-to-reach gas reservoirs.

"The key difference between conventional and unconventional is hydraulic fracturing," says Asuyuo Edem, manager of unconventional logistics, Shell Oil Company. "A huge

professionalizing logistics and increasing safety go hand in hand.

"The first time I went into a wellhead to manage logistics, the site manager said he didn't need my help to manage dispatch. That man is now one of our strongest advocates," Edem says. "We've moved from ground zero to setting up logistics cells in almost

4PLs in the oil and gas space, Shell and its outsourced logistics partners have been challenged with adapting solutions that have traditionally been optimized for retail and manufacturing.

3PL on the Scene

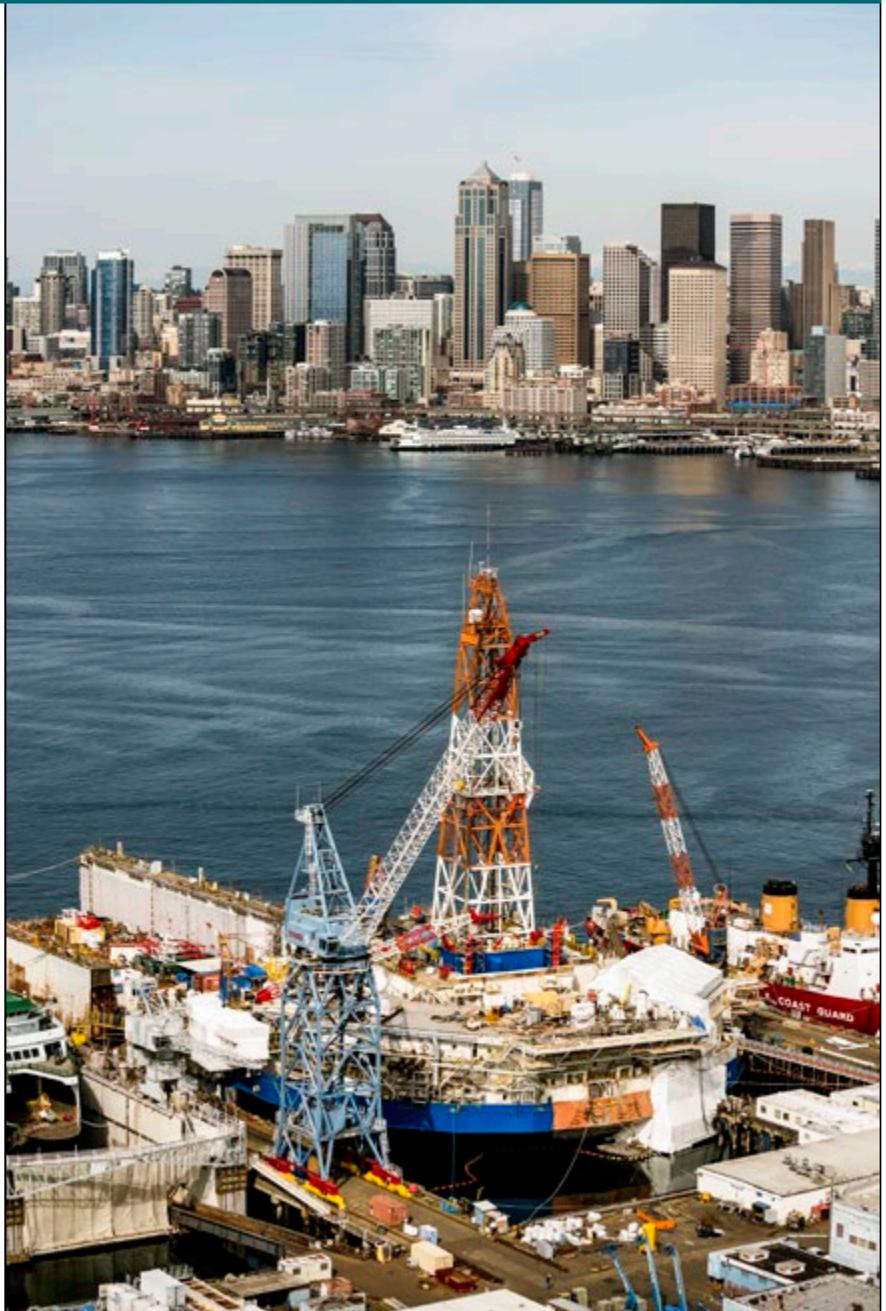
Menlo entered the picture in 2013. The San Cupertino, Calif.-based 3PL started up its oil and gas operations about three years prior, with an account in Anchorage, Alaska. Andy Graff, a 15-year veteran with the company, who also spent five years working on a drilling rig in Prudhoe Bay, currently serves as senior program manager for oil and gas accounts.

Most upstream producers are at the “firefighting stage” in terms of their operational maturation, says Graff. “There are a lot of 3 a.m. phone calls, hotshot trucks, team drivers, air freight, and other considerations that ultimately increase overall costs,” he says. “Five to 10 years ago, those were accepted practices. In the words of one CFO, “logistics was a rounding error.”

But times are changing. As natural gas becomes more difficult to reach, especially in unconventional shale formations, producers are drilling holes in their supply chains to mine new efficiencies and economies that offset increasing exploration and production costs. Logistics is an area ripe for improvement.

When Menlo came on board, it prioritized a few key facets within its existing solutions set. First, the 3PL wanted to invest in the business overall. In some industries, such as retail, it’s easy to leverage other resources. But oil and gas has unique requirements – from transportation equipment to labor. The 3PL specifically trained its team on oil and gas process and terminology. It placed special emphasis on building a safety culture.

Menlo also wanted to create a scalable solution that could match



The just-in-time nature of oil and gas supply chains, and top-down pressure to develop productive new sites, places a premium on timely delivery of equipment and materials.

the volatility of upstream logistics. Producers are on the move all the time, migrating between sites. It’s a dynamic that differs from other industries where, seasonality aside, operations are more constant.

Importantly, Lean principles underpin these mandates. For example, Menlo worked with Shell to

create a strategic vision, then a five-year roadmap that underscored goals they wanted to achieve during the project’s lifetime.

“On a more tactical level, we break that roadmap down into what we call an impact matrix, which allows us to focus on initiatives that deliver the lowest level of effort and highest

Resources To Fuel Your Supply Chain

The following logistics experts can help you improve productivity, compliance, and customer service in your oil, gas, and energy value chain.

C.H. Robinson

C.H. Robinson, an expert in oil and gas logistics, can help you develop and implement proven standard operating procedures and controls, obtain specialized equipment for regular and expedited shipments to serve your customers, and leverage critical logistics information to identify options for improving service and reducing costs.

Learn more at www.chrobinson.com/en/us/Logistics/Industries/Oil-Gas

A.N. Deringer

As one of the largest, privately held customs brokers in North America, Deringer helps deliver value to you and your customers by providing integrated supply chain solutions including customs brokerage, international transportation, warehousing and distribution, and oil and gas compliance.

Learn more at www.nderinger.com

Dupré Logistics

Dupré's Energy Distribution Services Group manages the inventories of thousands of retail and fleet fueling stations, as well as managing dedicated fleets. Its automated data flow is customizable, which means you choose the types of data you'd like integrated into your business' system. Dupré Logistics' Energy Services Group has delivered 99.7 percent error-free service over a five-year period.

Learn more at www.duprellogistics.com

returns – quick wins,” explains Graff. “That generates initial savings and creates a baseline for success moving forward.”

Deploying Solutions

Given the oil and gas industry's logistics immaturity, it has ample opportunities to adapt best practices from other disciplines. Automotive, for example, presents similar JIT dynamics that dictate inventory management tactics; CPG companies know the cost of selling and moving product down to the cent.

“Oil and gas companies generally hold too much inventory,” says Love. “They can't recognize demand, and don't have confidence in shipment tracking or arrival times. If companies had a more efficient logistics program – and therefore visibility – they wouldn't have to stockpile additional inventory. They could buy as they need.”

Poor visibility and inefficient inventory management inevitably bleed into transportation. That became a burning platform for Menlo as it progressed with Shell's project.

“Carrier management is a big focus for us,” says Graff. “It comes down to visibility and data reporting. Before we got involved, much of the communication was hearsay. Decision-making was based on perceptions among local operators. Bringing data in to track incidents, service failures, late deliveries – in effect, putting data behind those comments – drives a lot of value for our carriers and customers.”

Menlo also saw opportunity to help Shell's OSRs become more proactive in identifying and communicating their requirements. Better planning on the front end reduces costs and creates efficiencies for carriers and operators.

Menlo identified several tactical deployments to address these concerns. Adapting a transportation management solution to the needs of

the well site was a cardinal consideration. Logistics technology has largely been developed and optimized for mature retail and manufacturing supply chains. Well site logistics requires more nuanced tweaks.

“We were challenged to bring in a system that created value for end users and field coordinators,” Graff adds. “OSRs are making or receiving 100 phone calls every day. So how can you make that communication more efficient from their initial order request to carrier dispatch?”

Menlo deployed its traditional over-the-road transportation solution. Further, it developed a front-end order entry interface that is customized for use in the field. Importantly, the 3PL is also helping Shell incorporate freight audit payment functionality to better understand and assess transportation performance.

A Quick Win

Traditionally, oil and gas companies haven't had resources at the local level to audit carrier invoices. As Menlo has worked with Shell and other energy companies this has become a quick win from day one. In fact, Graff points to one project in Alaska where the 3PL paid for itself on two months of freight audit payment savings alone.

Love agrees. Producers can find cost savings by calculating freight accessorials. “These benchmarks are used by shippers to change carrier behavior; or by carriers to make sure they're properly compensated for all the extra service they provide to the shipper,” he says.

“Common examples include detention and stop-off charges, both of which contribute to and affect a shipper's costs,” Love adds. “Benchmarking against the market can put companies in a better position to control accessorial costs. Executing the right action plan can help uncover savings.”



The Drill Down: In 2014, more than \$1 trillion was invested worldwide in the oil and gas industry; 75 percent of that has been spent in upstream activities at the wellhead.

Beyond freight spend, Menlo has also helped Shell’s on-site workers capture more accurate data and gain better visibility into all aspects of the operation. For example, given the capricious nature of drilling, producers often lease, rather than buy, equipment. But local operators make their own decisions, often without economy in mind. Menlo helped Shell reel in those costs.

OSRs now have access to a low-level Web tool – a simple interface for use in the field – that lets them access information, and track resources and utilization in real time. This pushes the envelope further as operators begin using KPIs to measure performance and align benchmarks with organizational goals.

When Shell began taking a more proactive approach to logistics management in the field, it had some clear targets in mind. First and foremost, the company wanted to improve its safety culture.

“We have been able to dramatically reduce our transportation risk exposure. It’s one of the strongest drivers,” says Edem. “Although cost and efficiency are important, safety in light of the social license to operate is a big deal.”

Logistics Pays Off

Consequently, Shell has reduced serious incident rates by more than 50 percent. As is often the case, prioritizing logistics pays dividends in countless ways.

“Between 2011 and June 2014, we totaled 80 million truck miles, and 850,000 moves,” Edem says. “In that space, we’ve reduced about eight million truck miles through optimization, consolidation, and backhauls. We’ve taken about 80,000 trucks off the road. Consider the impact that has on risk exposure and safety. That’s a huge win.”

Bringing Menlo into the fold has similarly accelerated the

maturation. “We often see a six-month return on investment with our oil and gas engagements – in other words, after six months we’ve saved more money than we’ve invoiced. It’s not a 24-month ROI,” says Graff.

While these quick impacts are positive, they also speak to the execution gap that still exists for many oil and gas companies. Declining oil prices will only widen that divide.

Shell and other leading edge energy companies, in concert with 3PL partners, are working toward establishing industry standards that raise the bar for everyone that plays in the oil and gas space. This entails sharing best practices, standardizing regulations, and developing the social license to operate.

“We have a lot of companies with different models and preferences,” Graff says. “But there are areas where we can find collaboration.” **O&G**

A Perfect Match



Loving the latest issue? Keep reading at InboundLogistics.com. You'll find exclusive commentary, news updates, targeted search tools, and more.

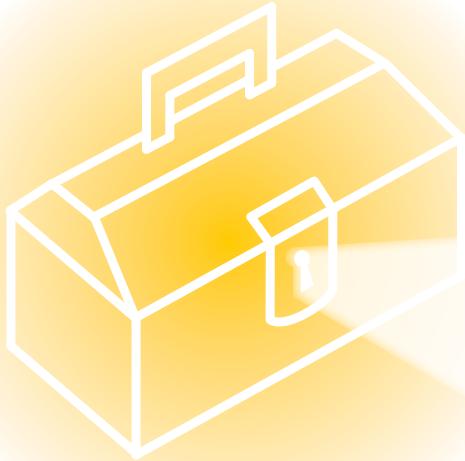
Every monthly issue of *IL* is packed with great content – but don't forget to check in with us online for even more invaluable supply chain coverage and resources. Looking for a new 3PL or logistics technology provider? Try one of our decision support tools or submit an RFP. Want expert opinions on top-of-mind industry issues? Browse our online-only commentaries from logistics leaders.

There's so much to discover—only at InboundLogistics.com!

**inbound
logistics**
THE MAGAZINE FOR DEMAND-DRIVEN LOGISTICS

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl



I.T. Toolkit | by Mary Shacklett

The Kings of ACE

Achieving automated commercial environment (ACE) compliance before the mandatory deadline was of paramount importance to customs broker and international freight forwarder HW St. John, and to its shipper customers. With help from a third-party technology provider, HW St. John was able to automate electronic filings to meet looming ACE requirements, and gain improved visibility of shipping and customs for more efficient filing.

HW St. John, a family-owned business that has operated in Valley Stream, N.Y., for 112 years, wanted to make sure it was fully compliant with ACE before the first 2015 deadline.

ACE, a system implemented by U.S. Customs and Border Protection (CBP), aims to improve the movement of imports and exports into and out of the United States. In 2015, the system will introduce enhancements designed to improve the collecting, sharing, and processing of data submitted to CBP and to other U.S. government agencies. These

new enhancements will also facilitate improved cargo security.

From CBP's perspective, an enhanced ACE system will streamline the import and export of goods, and serve as a single portal into U.S. government agencies associated with customs that interact with the trade community. The goal is to combine greater electronic transfer of information with higher levels of workflow automation and security, and eliminate a plethora of paper-based and manual customs processes by the end of 2016.

When it came time to face the ACE, HW St. John bet on an automated solution that streamlines processes and deals customers a winning hand.



“We are a small and agile business,” says Richard Hanel, president and CEO of HW St. John. “We have demonstrated this agility with our shipper customers in the past by embracing technology early. As one example, we implemented electronic data interchange when the requirements for electronic document transfers were first mandated.

“We believe in being aggressive in preparing our systems for compliance with ACE,” he adds. “We want the system in place and working in advance of mandated deadlines. We expect to pass along the benefits of being ready and fully compliant to shippers, who must also concern themselves with meeting the new ACE requirements.”

Traders and customs brokers must meet several intermediate deadlines to achieve compliance:

■ May 1, 2015: The deadline for mandatory use of ACE for all electronic manifest filing.

■ Nov. 1, 2015: The deadline for mandatory use of ACE for all electronic cargo release and related entry summary filing.

■ Oct. 1, 2016: The deadline for mandatory use of ACE for all remaining portions of the CBP cargo process.

Early on, HW St. John had its eye on the 2015 deadlines. “Many of our shippers are Fortune 500 companies,” says Hanel. “They expect comprehensive transportation and customs reporting. They want to know the customs duty costs, and the ports through which their goods are moving.

“Today’s trade environment is significantly different from a few years ago,” he notes. “As a small company, we have to provide the same level of reporting and service as our larger competitors do. The workforce automation and electronics document processing and forwarding that is available in today’s highly automated customs systems enable us to comply with ACE and offer a high level of reporting and customer service.”

To meet upcoming ACE mandates,



ACE facilitates the cargo inspection and clearance process through paperless transactions and communication with CBP. HW St. John was an early adopter of technology to help meet ACE requirements.

HW St. John proactively moved to a new customs system from Kewill, a multimodal transportation management software provider with offices worldwide. Kewill’s system delivers the electronic information transfers and automation ACE requires.

“We are currently in a pilot phase with the system, and we are testing it by electronically transmitting entries to customers,” says Hanel. “We wanted to work out any bugs before the mandatory electronic manifest filing goes into effect to ensure a seamless and improved customs experience for shippers.”

Hanel says it took HW St. John about 10 to 12 months to complete a full migration to the new system, which also involved a learning curve for employees. The company and its customers are already beginning to see the benefits of increased

automation and shipment visibility.

“This system gives us a way to keep shippers well informed of transportation and customs processes,” says Hanel. “We can receive an electronic report concerning the status of a ship en route, and immediately e-forward this information to keep shippers posted. With the inter-governmental agency automation ACE provides, we can also send notices and releases—such as new information about FDA requirements.

“We like to say we have full tracking capabilities,” Hanel adds. “But when we can deliver additional value to customers by automatically sending out vital shipping information, it can be a strong competitive advantage.”

Risky Business

Like other companies making the transition to ACE, HW St. John initially found that a system change also meant a significant adjustment in how the company did business.

“Implementing a new system runs a risk of business disruption, or a drop in customer service levels,” notes Jay Waldron, senior vice president, logistics and customs brokerage solutions for Kewill. “Companies have to be careful about how they approach a system implementation for ACE or any other logistics technology. Their plan should include how to mitigate risks throughout the system conversion process.

“Risk management was crucial to HW St. John,” Waldron adds. “The company wanted to make its automated system conversion completely transparent to customers.”

“We had a specific vision of our goals and expectations when we started this project,” adds Hanel. “We worked collaboratively with our systems vendor. At the beginning of the project, I thought the process was taking too long. But Kewill explained how certain processes and upgrades had to be made in order to effect a seamless migration.

“Overall, the system conversion took eight to 12 months instead of the original six to eight months I had hoped for, but we stayed within budget and I was happy with the results,” Hanel says.

Hanel was especially concerned about getting his staff fully trained and comfortable with the new customs system.

“Moving to a system of this caliber creates a learning curve,” he says. “Kewill provided us with one week of concentrated training. During that week, we not only came to understand the new system, but we also began to see the ease of use and efficiencies it could deliver.”

Seeing Initial Results

HW St. John has its customs system in place well in advance of ACE mandated deadlines, and is anticipating performance and cost improvements.

“The computing speed alone impresses us,” says Hanel. “We updated the servers in our data center, so work gets processed quicker, and we can be more responsive to shippers. In the past, it took our system nearly one hour to perform a single critical update. Now, that same update process takes five to 10 minutes.”

As an early ACE adopter, HW St. John is able to pass along some of its new streamlined benefits to customers.

“There is more visibility and capability in customs transactions involving U.S. government agencies, and it improves government reporting,” says Hanel.

In some ways, HW St. John doesn't see significant change in many customs processes; in other ways, the differences are noticeable.

“We see the benefit when a particular customs transaction engages many different U.S. government agencies, and the workflow needs to be integrated so it touches all these agencies,” says Hanel.

“For instance, a single transaction might involve the U.S. Drug Administration, the Federal Drug Administration (USDA), and the U.S. Fish and Wildlife Service,” he explains. “In the past, we didn't have a fully integrated business or system process that made this transaction straightforward.

Using the old process, we first had to obtain a release from Fish and Wildlife, then we had to submit the correct documentation to customs and to the USDA. Many times, the process would stall while we waited for Fish and Wildlife to provide us with the paper certification.

“With the new electronic automation, this entire process happens right away,” Hanel adds. “Turnaround is faster, which helps shippers obtain quicker release for their goods.”

An expedited customs process with less margin for error is critical for shippers and their brokers/freight forwarders. Nearly 74 percent of respondents to a recent

information to CBP at least 48 hours before a ship departs or arrives. This information includes the shipper, container contents, and shipment origin and destination. Doing this work gives us an opportunity for a new revenue stream, but more importantly, it is a way to improve national security because it provides full visibility of what cargo is getting loaded into containers. At last report, between 85 and 90 percent of importers are now complying with the 10+2 standard.”

Investing in a new customs system with enhanced automation and electronic filing capability isn't an inexpensive or trivial undertaking. It took HW St. John, which decided to slowly move to a new customs

“Since we implemented an automated system, shippers are seeing the difference in improved visibility into customs and shipping transactions, and more efficient document filing processes.”

—Richard Hanel, President and CEO, HW St. John

Transport Intelligence survey say a sudden increase in costs would “impact” or “significantly impact” revenue and profitability; while 72.7 percent of respondents rate poor schedule compliance from transportation partners as “likely to have the same level of impact.”

To meet this challenge, HW St. John's new customs system gives the company and its customers seamless integration with CBP's Security Filing and Additional Carrier Requirements (commonly known as 10+2), which was implemented in 2009. The rule applies to import/export cargo arriving or departing the United States by vessel, and failure to comply could ultimately result in monetary penalties, increased inspections, and cargo delays.

“After the Sept. 11, 2001, terrorist attacks, our company recognized we didn't have visibility into the cargo loaded in containers, and we needed it for security purposes,” says Hanel. “On the documentation side, we are required to submit 10 pieces of

system, nearly one year of effort to effect a successful transition that didn't adversely impact customers. The company is seeing the difference in improved visibility of shipping and customs transactions, and more efficient U.S. customs document filing processes.

“It's difficult for small companies to decide to invest in technology, but three generations of our family have worked in this business, and recognize the need to continue to invest in the company,” explains Hanel. “With the changing customs and security requirements, and ACE in particular, we recognized we had to improve our customs system, and revise business operations. You sometimes have to spend money to make money.”

Hanel says the next step for HW St. John is implementing a new accounting system that will give the company greater insight into all aspects of the business, including ways to apply financial checks and balances to everyday business processes. ■

3PLs



American Expediting Company • www.amexpediting.com

American Expediting has grown over three decades—from a single operation to hundreds of dedicated logistics professionals nationwide. But its mission remains the same: to deliver on time, every time. Couriers are equipped with two-way communications devices and GPS, and the on-time performance metric is more than 99 percent. From messengers, couriers with cars, vans and trucks, to next-flight-out and direct drive shipments, to warehousing, distribution, fulfillment, and more, American Expediting's solutions are custom-tailored to your exact requirements, schedule, and budget.

FIDELITONE • www.fidelitone.com

FIDELITONE helps you earn your customers' loyalty through supply chain management and specialized services in order fulfillment, last-mile delivery, and transportation. We manage resources, create right fit solutions, and optimize supply chain processes to advance your business performance and profitability.

At every step and in every service, FIDELITONE employees focus on the touchpoints that safeguard your brand and keep your customers coming back.



Flagship Logistics Group • www.flagshipfoodgroup.com

Flagship Logistics Group specializes in frozen and refrigerated LTL (less-than-load) transportation, third-party contract warehousing, manufacturing support, and general outsourced logistical services for customers anywhere in the United States, using five strategically located temperature-controlled distribution warehouses, regional cross-dock/cold storage facilities, and a reliable network of temperature-controlled carrier partners.

Freightsaver.com • www.freightsaver.com

At Freightsaver.com, our customers always come first. We built our company on the principle of outstanding customer service, and strive for excellence with every shipment we manage. We negotiate with top-tier domestic and international carriers to provide our clients with customized shipping solutions at competitive pricing. As our customer, you'll always be in the driver's seat. Whenever you need us, you'll have direct access to a dedicated team member who is familiar with your specific freight activity, and can answer your questions and provide proactive solutions.



IN THIS SECTION:

3PLs

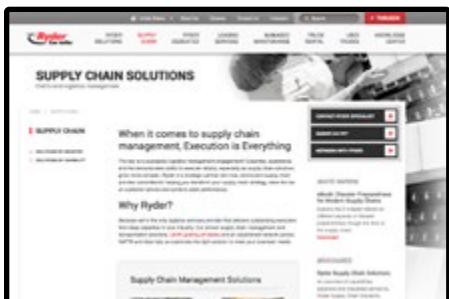


LEGACY Supply Chain Services • www.legacyscs.com

LEGACY Supply Chain Services is a 3PL with more than 38 years of supply chain experience. LEGACY's expanded North American distribution footprint includes more than 6 million square feet of dedicated and multi-client space in 50 locations, across 19 states and three Canadian provinces. Full-service solutions include warehousing and distribution, international and domestic transportation, customs and compliance, and installation services. LEGACY excels at providing high-touch service to clients across industries including consumer goods, technology, industrial manufacturing, retail, food and beverage, aftermarket automotive, life sciences, and government.

RR Donnelley • www.rrdonnelley.com/logistics

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



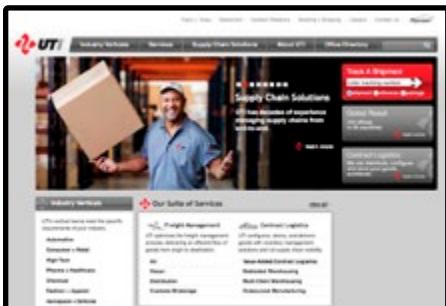
Ryder Supply Chain Solutions • www.ryderscs.com

Ryder Supply Chain Solutions is an end-to-end supply chain partner with nearly 80 years of experience helping customers in North America, the UK, and Asia transform their supply chains by delivering the best in operational execution. Ryder provides a full range of services, from optimizing day-to-day logistics operations to synchronizing the supply of parts and finished goods with customer demand. At Ryder, we understand that when it comes to logistics, Execution is Everything.

UPS • www.ups.com

Logistics solutions from UPS can hard-wire your supply chain for success. A superior product only gets you so far. You also need an agile supply chain and customer service that provides the same high level of quality. Plug in to UPS logistics expertise and give yourself greater efficiency and a more competitive edge.





UTI • www.go2uti.com

UTI is an industry-leading supply chain management company that delivers competitive advantage to our clients' supply chains. With innovative, integrated solutions configured to your specific requirements within any major vertical market, we design, manage, and service supply chains efficiently and cost-effectively. UTI's 310 offices and 230 logistics centers in 59 countries enable us to develop and implement client-centric, global solutions with services that include freight forwarding, contract logistics, customs brokerage, distribution, and managed transportation services.

EDUCATION

Elmhurst College • www.elmhurst.edu/scm

The MS in Supply Chain Management program at Elmhurst College is designed for professionals with at least three years of work experience in any area of business, and provides them with a broad perspective on supply chain management. Combining coursework in logistics, manufacturing, inventory, transportation, technology, and procurement management, this 21-month part-time program culminates with a team presentation of a "real-world" consulting project, requiring one year of work and development.



**Maine Maritime Academy
http://mainemaritime.edu/academics/graduate-programs/online**

Maine Maritime Academy is a co-educational, public college on the coast of Maine offering 18 degree programs in engineering, management, science, and transportation. The college serves undergraduate and graduate students in career-oriented programs of study. The Graduate school offers two MS degree programs, one on campus and one online. Maine Maritime Academy was ranked the #1 Best Public College by *Money* magazine's Best Colleges list released in August of 2014.

University of San Diego • www.sandiego.edu/mssc

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!



IN THIS SECTION:

Oil/Gas/Energy Logistics - Trucking-LTL

OIL/GAS/ENERGY LOGISTICS



A.N. Deringer • www.nderinger.com

Customer care, service excellence, and a firm commitment to customs compliance illustrate the differences that have led to Deringer's success as a leading logistics provider for more than 90 years. Deringer's turnkey logistics services include customs brokerage, international freight forwarding, warehousing and distribution, cargo insurance, and consulting. With more than 30 offices and a strong network of international agents, Deringer helps companies optimize efficiencies in their supply chain.

Dupré Logistics • www.duprelogistics.com

With specific emphasis in the chemical, consumer products, and beverage industries, Dupré's unique solutions provide expertise in dedicated fleets, transportation management/brokerage, materials handling, and reverse logistics. Dupré works to understand your business and measure how our system meets your expectations.



C.H. Robinson Worldwide, Inc. • 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.

TRUCKING-LTL

Saia LTL Freight • www.saia.com

For nearly 90 years, Saia LTL Freight has been providing customers with fast, reliable regional and interregional shipping. With 147 terminals located in 34 states, Saia LTL Freight offers a range of products and services that are backed up by a guarantee like no other in the industry. Our Customer Service Indicators, or CSIs, allow us to measure our performance each month against a set of six indices that our shippers said are the most important to them.



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.



Ryder

TITLE: *Be Nimble - Drive a Nimble Supply Chain*

DOWNLOAD: bit.ly/1BvKCNr

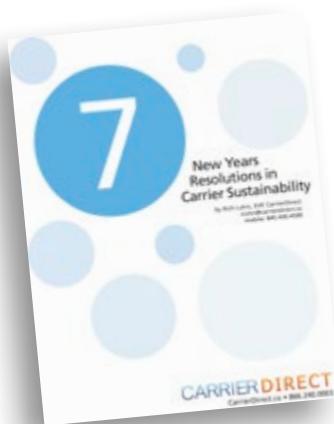
SUMMARY: As companies look for ways to stay competitive, they should consider evaluating the type of fleet they operate. With many new trends in the trucking industry, there are several factors to consider when choosing between owning a fleet or using a dedicated contract carrier. This whitepaper provides some guidance.

C.H. Robinson

TITLE: *Add Resilience to Supply Chains*

DOWNLOAD: bit.ly/1lmthtV

SUMMARY: Natural disasters and other events can disrupt connections between you, suppliers, and customers. You can circumvent disruptions or minimize their impact on the supply chain. This whitepaper explores which companies face the greatest risk for disruption, what supply chain mapping can reveal about risk, and how you can build resilience into your supply chain.

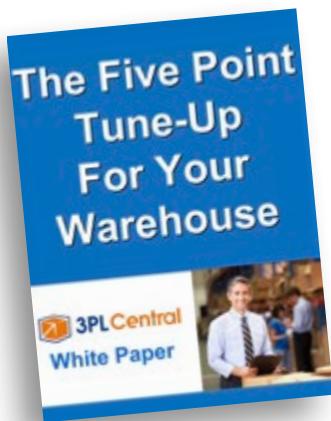


Carrier Direct

TITLE: *Seven New Year's Resolutions in Carrier Sustainability*

DOWNLOAD: bit.ly/1DlnQZ

SUMMARY: In today's rapidly evolving technological world, where electronic decisions are made instantaneously and data mining is king, it can be hard to remember that carrier profitability is based on simple, logical ingredients. It is easy to become so techno-dependent that the basic fundamentals of truck transport are lost in the shuffle, or buried under mounds of data and marketing "strategies." The simple fact is, the keys to success in transportation lie in minimizing distance, maximizing payload, and adhering to a disciplined business model. This whitepaper provides the seven fundamental factors that create the difference between industry leaders and "the other guys."



3PL Central

TITLE: *The Five Point Tune-Up For Your Warehouse*

DOWNLOAD: bit.ly/1BvKkqg

SUMMARY: Is your warehouse 100 percent ready to seize all the opportunities 2015 has to offer? To help make sure you are, download 3PL Central's latest free whitepaper. Written by warehouse professionals, this publication will provide you with a step-by-step guide to improving your efficiency, assessing your current assets, and increasing your overall profitability.

DHL

TITLE: *Building the Smarter Energy Supply Chain*

DOWNLOAD: bit.ly/1lmtywQ

SUMMARY: This comprehensive whitepaper provides an overview on building a smarter supply chain in the energy sector. It urges logistics executives to rethink traditional energy supply chain models, and implement a highly integrated approach, before logistics drives up costs and destroys profit margins. The report – based on research by Lisa Harrington, associate director at the Supply Chain Management Center of the Robert H. Smith School of Business, University of Maryland – advocates an orchestrated, data-driven, end-to-end supply chain model that increases visibility and reliability, and reduces costs and risk.

enVista

TITLE: *Out with the Old – In with the New!
Managing Inbound Freight Fuels Greater Efficiencies*

DOWNLOAD: bit.ly/1BvKjCG

SUMMARY: Need to reduce transportation costs? Inbound transportation is an area rich with opportunity. In this whitepaper from enVista, you will learn how Transportation Management Systems have evolved to better address expanding inbound requirements. You'll also learn ways to reduce your transportation spend.

Cerasis

TITLE: *The Complete Guide for Shippers to Process & Master Freight Claims*

DOWNLOAD: bit.ly/1DilqfE

SUMMARY: Understanding freight claims is vital to running an efficient transportation and logistics department. Unrecovered freight claims have a direct impact on the bottom line of a company – and the tougher the economic times and thinner the margins, the greater the impact. Download this whitepaper to learn the difference between freight claims and freight liability, tips to mitigate freight damage, steps toward successful freight claims, and more.



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



Expedited carrier **TNT Express** expanded its international delivery options to include guaranteed next-day delivery to all postal codes in Germany, as well as optional delivery before noon. The services are available for both heavy freight and parcels.

//Transportation//

Logistics company **Expeditors** began a dedicated daily air service between Washington D.C., and Brussels, Belgium. The door-to-door Transatlantic Healthcare Service documents each step from receipt to delivery, ensuring that pharmaceutical cargo stays within optimal temperature ranges.

Non-vessel-operating common carrier **Troy Container Line** launched a new less-than-containerload direct export service from Chicago to Dubai. From Dubai, the route also connects to 15 other international destinations.

Less-than-truckload carrier **Reddaway's** new Guaranteed Friday to Monday service accelerates two-day Friday shipments for delivery by 3:30 p.m. on Monday, benefiting shippers who traditionally use two-day lanes and need faster delivery times.

Ocean carrier **Maersk Line** added Boston as its second U.S. port of call after New York on its TA5 service, followed by Baltimore, Norfolk, Savannah, and Charleston.

//Services//

Third-party logistics company **LeSaint Logistics** expanded its Duncan, S.C., location to include a storage area for hazardous materials, increasing the company's service options for the chemical sector. LeSaint also

operates a full transportation fleet, as well as a dedicated fleet, out of the 320,000-square-foot facility.

Third-party logistics company **CEVA Logistics** opened a new 208,406-square-foot logistics facility in Chicago. From the new building, CEVA offers air and ground freight forwarding and consolidation, global full- and less-than-containerload, customs brokerage, warehousing, distribution, home delivery, domestic air freight, expedited services, and temperature-controlled storage and transport.

Canadian 3PL **SCI Logistics** opened a transportation center in Halifax, Nova Scotia. The facility provides white-glove service; technical services such as configuration, staging, and installation of equipment; and final-mile delivery of high-value products.

Transportation provider **Pinnacle Freight Services** is moving operations to a new warehouse and distribution center in Florence, N.J., beginning April 1, 2015. The larger facility accommodates multiple temperature ranges and expanded freight volume for shippers needing Northeast distribution.

Yusen Logistics opened its sixth Australian facility in Greystanes, a western suburb of Sydney. The 134,548-square-foot warehouse contains 18,500 pallet locations, and is dedicated to a major U.S. retailer.

BHT-1300-CE one- and two-dimensional handheld bar-code terminals from **DENSO ADC** feature a rugged design, and area-imaging technology that scans faster than comparable laser models. Preinstalled software includes a keyboard interface application, wireless setting tool, application launcher, backup tool, and the Windows Embedded Compact 7 operating system.

Freight forwarder **ICAT Logistics** expanded its service portfolio with a new subsidiary, **ICAT Customs Brokerage**. The new entity has a corporate customs broker license, eliminating the need for ICAT to use a third-party broker for import and export transactions.

Specialized furniture carrier **Zenith Global Logistics** opened a new warehouse and hub in Orlando, Fla. The 20,000-square-foot facility allows Zenith to run loads from California, Mississippi, Texas, and its East Coast hubs direct to Florida.

Reusable packaging manufacturer **ORBIS Corporation** opened a new plant near Mexico City to increase response times to the Latin American market. The 265,000-square-foot plant offers injection and structural foam molding, and dunnage fabrication.

Panalpina, a freight forwarder and logistics provider, opened new facilities in Africa. The new Morocco and Kenya locations provide air and ocean freight,



and logistics solutions primarily to Africa's energy and infrastructure sectors.

Third-party logistics company **Transportation Solutions Enterprises** changed its name to **Redwood Logistics** to better represent its parent entity, the Redwood Group of Companies. The rebranding also includes a new website.

//Technology//

The *Savanna.NET* warehouse execution system from logistics technology provider **Westfalia Technologies** combines the functions of a warehouse control system with a warehouse management system. The single application allows manufacturers and distributors to reduce complexity in their operations

by directing and optimizing internal material flow and order picking.

SkyBitz, a developer of asset tracking solutions, released the *Insight Now* dashboard feature on its Web application, *SkyBitz Insight*. The new option provides real-time information and reports that allow transportation managers to monitor fleets and make operational decisions.

Document solutions provider **Pegasus TransTech** updated its *TRANSFLO Mobile+* load tracking mobile app. New features in version 1.2 include customizable pickup and delivery status for loads, enhanced commenting and messaging so

drivers can communicate with management in greater detail, and improved logic for driving restrictions.

MyForwarder.com allows shippers to post freight for bidding by forwarders around the world. Users on both sides can quote, accept, and process entire shipments using the site's embedded tools.

Bar-code and RFID labeling company **NiceLabel** collaborated with chemical solutions provider **Chemwatch** to produce a free cloud-based solution that helps users comply with the labeling requirements of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

The Web-based software lets chemical users and shippers print GHS-compliant labels from their web browser.

Logistics software developer **WiseTech Global** enhanced the customs brokerage capabilities of its *CargoWise One* logistics execution solution to be fully compliant with upcoming Automated Commercial Environment requirements.

Marathon Data Systems added the Reload and Time-Windowed Traffic feature to its *Viamente Route Planner* solution. The new feature improves the routing process by calculating load capacities and incorporating return reload trips into routes.

//Products//

The InsulWall from modular solutions provider **Randall Manufacturing** lets foodservice distributors and temperature-controlled warehouses reconfigure their refrigerated storage areas as customer needs change or grow. The InsulWall is thin enough to fit easily behind and between racking systems.

Innovative Logistic Products, a designer and manufacturer of safety products for the logistics sector, introduced the Drop Chock for chocking truck tires. The device connects the chock block to the trailer on a swing-mounted bar, and allows the driver to safely swing the block down in front of the tire and lock it in place.

InterCore's Driver Alertness Detection System (DADS) provides a real-time monitoring and warning



Lift truck manufacturer **Hyster Company's** 3,000-to-7,000-pound forklift line now includes a new industrial engine from Power Solutions International (PSI). The PSI engines feature improved travel and hoist speeds, and increased horsepower over the previous engine. Hyster Variable Power Technology lets operators save fuel by scaling power usage based on current tasks and applications.

solution that can help prevent accidents caused by driver fatigue, lack of alertness, or distractions. When the DADS service detects reduced driver alertness that could lead to unsafe vehicle operation, it alerts the driver using audio and visual signals, and notifies dispatch centers.

The reusable USB Temp and Humidity Logger from **PakSense** features an operating range of -40 degrees to 185 degrees Fahrenheit, and is accurate within one degree. Humidity readings are accurate within three percent. Users can program the recording interval from one minute to 24 hours, and download data via USB.

BC-9 series cushion-tire forklifts from **Hyundai** offer load capacities ranging from 4,000 to 6,400 pounds. All models include multiple safety features, such as Curve Control, which slows the forklift down when turning; the Load Indicator System, which prevents operators from exceeding load limits; and an anti-rollback system.

Equipment monitoring solutions provider **IOG Products'** Digi-Shock GT device documents all impact and temperature breaches during transportation, enabling shippers to identify where in the supply chain a shipment was mishandled or damaged.



PECO Pallet, a pallet rental services company, opened a new Chicago depot that can process 500,000 pallets per month, and store up to 250,000 pallets at one time. The facility's design focuses on workstation layout and equipment that minimizes operator steps and maximizes pallet quality.

Your Library of Logistics Best Practices

Inbound Logistics' online library of "how to" articles gives you instant access to practical, instructive guidance on topics ranging from managing your supply chain after a natural disaster to fostering long-term 3PL partnerships, balancing export demand, and choosing a transportation management system. Find these exclusive guides, and many more, at:

inboundlogistics.com/how

ANOTHER **inbound logistics** INNOVATION
inboundlogistics.com

CALENDAR

YOUR LOGISTICS
DATEBOOK

MAY
3

Institute for Supply Management

ISM 2015 Annual Conference

conference.ism.ws | Phoenix, Ariz. | MAY 3-6, 2015

AUDIENCE: Supply chain managers

FOCUS: Power negotiation, integrated supply chains, finance from the chief procurement officer's perspective, success in sales and operations planning, managing supply chain cyber risk

MAY 3-6, 2015 Orlando, Fla.

Warehousing Education and Research Council

WERC 2015

www.werc.org

AUDIENCE: Distribution, fulfillment, logistics, and warehousing professionals

FOCUS: Facility tours, warehousing industry trends, warehousing technology and products exhibition

MAY 12-14, 2015 Phoenix, Ariz.

Gartner

Gartner Supply Chain Executive Conference

www.gartner.com

AUDIENCE: Logistics and supply chain professionals

FOCUS: Supply chain collaboration, transformation, and operations planning; supply chain performance management, analytics and segmentation

CONFERENCES

MAR 23-25, 2015 Orlando, Fla.

Transportation and Logistics Council

41st Annual Transportation and Logistics Council Conference

www.tlcouncil.org

AUDIENCE: Transportation, logistics, and supply chain professionals

FOCUS: New transport industry laws and regulations, freight claims and cargo insurance, reverse logistics, Certified Claims Professional primer class

MAR 23-26, 2015 Chicago, Ill.

Materials Handling Institute

ProMat 2015

www.promatshow.com

AUDIENCE: Distribution, logistics, manufacturing, procurement, and supply chain professionals

FOCUS: Materials handling and logistics innovations and their applications, ergonomics, worker safety, supply chain visibility, materials handling exhibition

MAR 31-APR 1, 2015 Atlanta, Ga.

Center of Innovation for Logistics

2015 Georgia Logistics Summit

www.georgialogistics.com/logistics-summit

AUDIENCE: Supply chain and logistics professionals

FOCUS: International logistics, the logistics of manufacturing, growth and expansion in Georgia, enabling logistics for rapid growth

APR 8-9, 2015 Atlanta, Ga.

Terrapinn

Home Delivery World 2015

www.terrapinn.com/homedelivery

AUDIENCE: Retail and e-commerce professionals, home delivery stakeholders

FOCUS: Latest models and strategies for ship-from-store and in-store pickup, reverse logistics, final-mile innovations and strategies

APR 12-15, 2015 Orlando, Fla.

National Shippers Strategic Transportation Council

NASSTRAC Annual Shippers Conference & Transportation Expo

www.nasstrac.org

AUDIENCE: Transportation, logistics, and supply chain professionals

FOCUS: Density-based pricing, buyer relationships, supply chain innovations, sustainability

APR 13-15, 2015 Atlanta, Ga.

Georgia Tech

2015 National Logistics & Distribution Conference

www.nldcinfo.com

AUDIENCE: Supply chain, procurement, operations, and transportation executives

FOCUS: Drones in a same-day delivery world, leading and engaging all generations, forecasting the economic impact of same-day delivery, Home Depot fulfillment center tour

SEMINARS & WORKSHOPS

APR 16-17, 2015 Cambridge, Mass.

MIT Sloan Executive Education

Supply Chain Strategy and Management

executive.mit.edu

AUDIENCE: Logistics and supply chain professionals

FOCUS: Assimilating sustainability into supply chain strategy, how to better structure a supply chain, integrating e-business and technology into supply chain strategy

MAY 31-JUNE 5, 2015 Lansing, Mich.

Michigan State University

Purchasing and Supply Chain Management

execed.broad.msu.edu

AUDIENCE: Supply chain, logistics, procurement professionals

FOCUS: Current strategies and practices for procurement and supply chain excellence, building sustainable competitive advantage

3PL Staffing Firm

Specializing in direct and contract hiring including:

- CEO's, COO's, CFO's, CIO's, CMO's, CLO's
- Vice Presidents / Directors
- Sales Managers
- Directors Of Business Development
- Solutions Engineers
- TMS/WMS/LMS Systems Implementation Managers
- Carrier Sourcing Managers
- Freight Brokerage / Branch Managers
- Facility Managers
- Pricing Managers
- IT Managers
- Trade Compliance Managers

SR Search Resources Inc.

"Building world class supply chain organizations one individual at a time."

All fees company paid.
847-382-3877
Fax: 847-382-3878
www.srimatch.com

HOW MANY freight claims do you file per month?



If it's more than 10, MyEZClaim Freight Claim Software can reduce your filing costs:

- ▶ Mine claim data to identify problem carriers or products
- ▶ Lower administrative costs by reducing filing time to just 15 minutes per claim
- ▶ Avoid costly missed deadlines with automated system alerts
- ▶ Cloud-based software as a Service (SaaS)

Visit www.TranSolutionsInc.com, call 480.473.2453 or email sales@myezclaim.com to learn more.

TranSolutions

7^{YRS} SPECIAL FINANCING

ZERO DOWN
NO INTEREST
NO PAYMENTS

For one year on Fabric Structures



INNOVATIVE & LOW COST BUILDING SOLUTIONS

- Fabric structures up to 300' wide and at any length.
- Lower energy costs with natural lighting.
- Stay warmer in the winter... and cooler in the summer.
- One-stop shop offering all services in house.
- Spacious interiors with no support posts.
- Low in cost per square foot.
- Easy to disassemble and relocate.

MADE IN USA



ClearSpan
Fabric Structures

Call 1.866.643.1010 and use code ADIL or visit www.ClearSpan.com/ADIL and we'll send you a free gift.

Supply Chain Solutions with Organization. Precision. Honesty.

Global Warehouse Solutions specializes in finding solutions to your company's storage, transportation, inspection, pick/pack, rework, and assembly challenges. Think of us as an extension of your company, freeing you from having to micromanage every detail.

Our revolutionary new computerized system allows us to accurately track and manage your inventory, allowing for greater speed and efficiency.

Global Warehouse Solutions provides warehousing and distribution options as a strategic complement to our transportation and delivery services. Unlike public warehouses, our secure facilities provide the flexibility, responsiveness, reliability,

and personal touch needed to optimize product flow and improve storage and inventory requirements.

With our asset-based facilities, plus access to 300,000 square feet of warehouse space, we can provide the short- or long-term solutions to meet your warehousing and distribution challenges. Contact us today.

GLOBAL WAREHOUSE SOLUTIONS

20600 NW 47 Ave., Miami Gardens, FL 33055
305-624-6623

www.global-warehousesolutions.com

WAREHOUSING • LOGISTICS • DISTRIBUTION



RESOURCE CENTER

02.15

INBOUND LOGISTICS WORKS FOR YOU!

3PLs

A.N. Deringer pg. 55
www.anderinger.com 888-612-6239

A&R Logistics pg. 50
www.ardoingitright.com 502-777-7020

C.H. Robinson pg. 9, 53
www.accelerateyouradvantage.com 800-323-7587

Dupré Logistics pg. 57
www.duprelogistics.com 866-686-5478

LEGACY Supply Chain Services Cover 2
www.legacyscs.com/culture-shocked 800-361-5028

Lynden pg. 7
www.lynden.com 888-596-3361

RR Donnelley Logistics pg. 16
www.dls-ww.com 877-744-3818

Ryder pg. 15, 21
www.ryder.com 888-793-3702

Air/Ground Expedited

American Expediting pg. 12
www.amexpediting.com 800-525-3278

UPS pg. 5
ups.com/hightechsurvey 800-PICK-UPS

Career Development/Education

AST&L pg. 42
www.astl.org 773-355-4900

Elmhurst College pg. 37
www.elmhurst.edu/chooseElmhurst 630-617-3300

JobsInLogistics.com pg. 41
www.jobsinlogistics.com 877-JOB-POST

Georgia Tech Supply Chain & Logistics Institute pg. 40
www.pe.gatech.edu/supplychain-2015 404-385-3501

University of Kansas Continuing Education pg. 40
www.kuce.ku.edu/warehouse 877-404-5823

Maine Maritime Academy pg. 40
www.mainemaritime.edu/academics/graduate-programs/online 207-326-2212

Seton Hall University pg. 41
business.shu.edu 973-761-9262

Transportation Intermediaries Association (TIA) pg. 41
www.tianet.org/ctb 703-299-5700

University of San Diego pg. 35
www.sandiego.edu/msscm 619-260-7901

Events

American Energy Summit pg. 27
www.defenseleadership.org 202-552-0179

Click & Collect Show USA 2015 pg. 22
www.terrapinn.com/clickandcollect 212-379-6322

Georgia Logistics Summit pg. 43
www.georgialogistics.com 912-963-2551

PROMAT 2015 Cover 3
www.promatshow.com 704-676-1190

For a specific response, contact these advertisers directly. Please tell them you saw their ad in *Inbound Logistics*.

For faster service, go online: inboundlogistics.com/rfp

Use our Resource Center and let the information you need find you.

**NASSTRAC 2015 Annual Conference
& Transportation Expo** pg. 29
www.nasstrac.org/conference 202-367-1174

Intermodal
Alliance Shippers, Inc. pg. 11
www.alliance.com 800-222-0451

Logistics IT
iLogisys/Suntek Systems Cover 4
www.ilogisys.com 949-789-0070

Packaging Services
Cubic Solutions pg. 25
www.cubicsolutions.info 415-697-2742

Trucking
Holland pg. 19
www.hollandregional.com 800-456-6322

Saia pg. 3
www.saia.com 800-765-7242

For a specific response, contact these advertisers directly. Please tell them you saw their ad in *Inbound Logistics*.

For faster service, go online: inboundlogistics.com/rfp

INDEX

ADVERTISER	PAGE	ADVERTISER	PAGE
A.N. Deringer	55	JobsInLogistics.com	41
A&R Logistics	50	LEGACY Supply Chain Services	Cover 2
Alliance Shippers, Inc.	11	Lynden	7
American Energy Summit	27	Maine Maritime Academy	40
American Expediting	12	NASSTRAC 2015 Annual Conference & Transportation Expo	29
AST&L	42	PROMAT 2015	Cover 3
C.H. Robinson	9, 53	RR Donnelley Logistics	16
Click & Collect Show USA 2015	22	Ryder	15, 21
Cubic Solutions	25	Saia	3
Dupré Logistics	57	Seton Hall University	41
Elmhurst College	37	Transportation Intermediaries Association (TIA)	41
Georgia Logistics Summit	43	University of Kansas Continuing Education	40
Georgia Tech Supply Chain & Logistics Institute	40	University of San Diego	35
Holland	19	UPS	5
iLogisys/Suntek Systems	Cover 4		

Inbound Logistics (ISSN 0888-8493, USPS 703990) is mailed monthly to approximately 60,000 business professionals who buy, specify, or recommend logistics technology, transportation, and related services, by Thomas Publishing Company LLC, 5 Penn Plaza, NY, NY 10001. José E. Andrade, chairman; Carl T. Holst-Knudsen, president. Periodicals postage paid at New York, NY, and additional mailing offices. All rights reserved. The publisher accepts no responsibility for the validity of claims of any products or services described. No part of this publication may be reproduced or transmitted in any form or by any electronic means, or stored in any information retrieval system, without permission from the publisher.

POSTMASTER SEND ADDRESS CHANGES TO: Inbound Logistics, 5 Penn Plaza, New York, NY 10001

February 2015 • Inbound Logistics 79

Got 3PL challenges?

Get free expert solutions at inboundlogistics.com/3pl



Rack and Roll Haul of Fame

Remember the fun and freedom you had as a child riding a scooter? The team at Nimble Scooters captured that feeling and applied it helping workers get around the warehouse in a flash.

Nimble Cargo Scooters are heavy-duty kick-scooters that help transport objects over short distances in the front cargo space, which can carry 2.4 cubic feet of cargo. Designed to coexist with industrial vehicles, the scooters are compact enough to fit where most electric carts and forklifts can't—allowing workers to take them virtually anywhere in the warehouse.

Made from aircraft-grade aluminum and high-density polyethylene plastic, the scooters are made in the USA, and approved by OSHA.



FIND WHAT'S NEXT

See the latest manufacturing and supply chain solutions in action, in person. All in one place. ProMat.

At ProMat, you can:

- Discover the latest innovations from more than 800 solution providers.
- Learn about new ideas driving productivity in more than 100 educational sessions.
- Build strong business partnerships with suppliers.
- Network with your peers.

When you need to maximize efficiency targets, streamline your operations, speed time to market and cut costs, start by exploring what's next at ProMat 2015.

ATTENDANCE IS FREE.
REGISTER AT PROMATSHOW.COM

McCormick Place South | Chicago, Illinois
March 23-26, 2015 | ProMatShow.com

ProMat Keynotes



TRANSFORMING YOUR MANUFACTURING BUSINESS FOR THE NEW DIGITAL AGE

Renee Niemi, Director of the Android and Chrome Global Business, Google for Work



CONSCIOUS CAPITALISM: BLUEPRINT FOR A NEW SYSTEM FOR DOING BUSINESS

John Mackey, Co-Founder & CEO, Whole Foods Market



WHAT'S NEXT – THE FUTURE OF TECHNOLOGY

Steve Wozniak Co-Founder of Apple & Founder, Chairman & CEO of Wheels of Zeus



powered by



Agile SCM Software for Sea/Air Freight Business



Agile, Adaptive, Aligned SCM Software designed to manage every activities in your sea/air freight business: interaction with potential customers, shipping order management, online shipment tracking, automated status update, and warehousing.

