SPECIAL REPORT

GEORGIA: THE LOGISTICS ADVANTAGE a **II THOMAS**[™]company

THE MAGAZINE FOR DEMAND-DRIVEN LOGISTICS • MARCH 2019

2019 GLOBAL LOGISTICS GUIDE

Map out your global supply chain strategy with these country-bycountry snapshots.

COUNTRIES' LOGISTICS SCORES

GUIDE TO GLOBAL TRADE MANAGEMENT SOLUTIONS

5 GLOBAL REGIONS TO WATCH

 TODAY'S DISTRIBUTION CENTERS: YOU SAY YOU WANT AN EVOLUTION?



125M consumers. 1.5M rail lifts. 1B sq. ft. of industrial space. Only here.

The Port of NY & NJ is the largest port on the East Coast and the third largest in the U.S. It's the gateway to one of the most concentrated consumer markets in the world, with access to more than 125 million consumers in the Northeast, Midwest, and Canada by truck or rail; a capacity for 1.5 million rail lifts annually; and 1 billion sq. ft. dedicated to warehousing and distribution space within the region. With the Port of NY & NJ, your goods are destined to reach a vast market.

Visit www.portnynj.com to learn more.

The Port is a facility of the Port Authority of NY & NJ

UASC

CMA COM

Info **SNACKS**

BITE SIZED SUPPLY CHAIN/LOGISTICS INFORMATION

Hospitals Need a Dose of TECHNOLOGY

According to a survey of 100 hospital leaders conducted by Sage Growth Partners on behalf of supply chain management vendor Syft

Close to 50% of hospitals use manual processes like spreadsheets to manage supply chain data **37%** use Excel or other tools to track margins per case for operating room procedures





The U.S. maritime industry now employs nearly 650,0000 Americans across all 50 states and contributes \$154 billion to the nation's economic growth annually.

-Transportation Institute

"Without data you're just a person with an opinion."

-W. Edwards Deming





"Keep in touch with the voice of the customer and anchor your business model on honest feedback."

-Dan Martin, President, IFCO North America on a lesson learned early in his career.

(See LeaderShip, p. 18)

U.S. trade hits milestone in 2018

For the first time ever, U.S. trade with the world topped



And for the first time in 12 years, the United States set records for total trade, exports, imports, and the size of its trade deficit — all in one year.

-WorldCity



78% of logistics companies expect to provide sameday delivery in 2023

40% of logistics companies anticipate delivery within a two-hour window by 2028

-Zebra Technologies survey (See Lean Supply Chain, p. 28)

inbound OCG ISTICS a ITHOMAS^T company

March 2019 • Vol. 39 • No. 3

INSIGHT

- 8 CHECKING IN Global trade resilience.
- **10 GOOD QUESTION** What advice would you give someone just starting out in logistics/supply chain?
- **12 DIALOG** The ongoing conversation.
- **14 10 TIPS** Optimizing a 3PL partnership.
- **28 LEAN SUPPLY CHAIN** Four rules for success in omnichannel retail.
- **30 VIEWPOINT** Support matters for women in logistics.
- **32 IT MATTERS** Al for logistics.
- **104 LAST MILE** Will freight go underground?



INPRACTICE

18 LEADERSHIP Dan Martin: Emotional Quotient

Dan Martin, president of IFCO North America, shares his leadership philosophy and reveals why failure can be as important to career development as success.

20 READER PROFILE Bernice Cannon: Shooting for an Optimized Supply Chain

Bernice Cannon, supply chain manager for Nouryon, a specialty chemicals company, is perfecting the formula for supply chain visibility.

3 E TALES Getting Up on the Right Side of the Bedding

Direct-to-consumer bedding e-tailer Buffy Inc. woke up in a logistics world where customers demand quick-turn, nohassle deliveries and returns, but it's not losing any sleep over it.





INDEPTH

5 2019 GLOBAL LOGISTICS GUIDE

Inbound Logistics' 15th annual Global Logistics Guide gives you a world of advice-country by country-on recent developments, issues, opportunities, and concerns likely to affect your global supply chain networks.

PREMIUM SERVICE ON A GLOBAL SCALE.

T

OD·DOMESTIC

OD·EXPEDITED

OD·**PEOPLE**

DOW

OD·GLOBAL

OD·TECHNOLOGY

HELPING THE WORLD KEEP PROMISES.

SEAMLESS, RELIABLE ACCESS TO MARKETS WORLDWIDE

Old Dominion ships throughout North America and points beyond with the same award-winning claims ratio and ontime delivery that we're known for domestically.* To ensure worry-free processing, OD also offers customs brokerage and compliance services. Whether you're shipping FCL or LCL via ocean or air freight, we make sure your shipment receives the same personalized, premium service OD provides coast-to-coast in the U.S.

For more information, visit odfl.com or call 1-800-432-6335.

Old Dominion Freight Line, the Old Dominion logo, OD Household Services and Helping The World Keep Promises are registered service marks of Old Dominion Freight Line, Inc. ©2019 Old Dominion Freight Line, Inc. Major League Baseball trademarks and copyrights are used with the permission of Major League Baseball Properties. Visit MLB.com. *Source: 2018 Mastio & Co. National LTL Carrier Report





March 2019 • Vol. 39 • No. 3

GLOBAL TRADE MANAGEMENT SOLUTIONS GUIDE

INFOCUS

- **1** INFO SNACKS
- **16 VERTICAL FOCUS: RETAIL**
- 22 NOTED

24 TAKEAWAYS

Understanding the holdup in supply chain digitization; transportation contractors dominate USPS' list of suppliers; ERP implementations may be more successful than surveys indicate; the future seems bleak for physical retail stores; a big boost in the automated material handling equipment market.

- **92 PRODUCT SPOTLIGHT** *Storage systems.*
- 94 IN BRIEF

INFO

- 86 WEB_CITE CITY
- **90 SUPPLY CHAIN INSIGHTS**
- **98 CALENDAR**
- **101 SUPPLY CHAIN SOLUTIONS**
- **102 RESOURCE CENTER**



Don't know where to start in your search for a GTM solution? Peruse some of these leading vendors and their offerings to make an informed decision.

1 THE TRICKS OF TRADE

A look at the five regions and countries that merit serious thought by any company doing business globally.

TODAY'S DC: YOU SAY YOU WANT AN EVOLUTION?

New distribution centers are morphing to accommodate e-commerce fulfillment demands and rapid delivery expectations.

SPONSORED

GEORGIA: The Logistics Advantage

In the world of logistics, Georgia offers both the ways and the means.



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, co-chairman; Carl T. Holst-Knudsen, co-chairman. 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

I AM THE FIRST LINE OF DEFENSE AGAINST PANIC AND CHAOS.

When the customer service line rings at 3AM, chances are the person on the other end doesn't want to talk to a machine. Or listen to excuses. That's why I'm here 24/7. I am a curator of solutions. I know your business and what you need. I specialize in answers. And results. I'm not here just to listen to your problems, I own them. I am *Piloting Business*"



pilotdelivers.com / 1-800-HI-PILOT



DEALING WITH GLOBAL VOLATILITY? GET AGILE WITH INFORMATION TECHNOLOGY bit.ly/supplychainagility

ONLINE COMMENTARY

Automation Changes the Game for E-tailers

bit.ly/e-tail_automation

How can e-tailers keep customers over the long term? Through technology integration and automation across the supply chain. Here's how to start.

inbound entropy to the second second

a II THOMAS[™] company

Fashion History Predicts Future of Pharma Fulfillment

bit.ly/fashion_pharma Some seismic changes in the fashion industry parallel developments in the pharmaceutical supply chain. Find out how to blend fashion with pharma.



Global economic volatility is putting increased pressure on supply chain managers. Here's how you can use information technology to get agile.

FOR MORE NEWS, TRENDS, AND COMMENTARY SEE INBOUNDLOGISTICS.COM

3PL RESOURCES

3PL Decision Support Tool

bit.ly/IL3PLDST

Choose the services and capabilities you need from a provider and the Decision Support Tool will find matching companies. You can even contact them directly from the search results.

3PL Request for Proposal

bit.ly/IL3PLRFP

Describe your supply chain challenge, then browse the list of top 3PLs and select specific companies to receive your RFP and provide free, no-obligation advice, solutions, and information.

QUICKBYTES

INBOUND LOGISTICS PODCAST

The *IL* Podcast provides the most relevant and topical information from the third-party logistics and supply chain management world as presented by the most influential thought leaders in the industry.

bit.ly/ILMagPodcastPage

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/IL_WCC**

WHITEPAPER DIGEST

Looking for insight into supply chain best practices and trends? Want to review the latest logistics sector research? Our whitepaper database is packed with up-todate information on all aspects of supply chain operations. **bit.ly/IL WPDigest**

Keep up to date with the very latest:

- bit.ly/ILMagPodcastPage
- facebook.com/InboundLogistics
- 🎔 @ILMagazine
- in linkedin.com/company/ inbound-logistics
- youtube.com/user/InboundLogistics





Service Mode Contract Party Telephone Service Contract Party Telephone Service Contract Party Telephone Service Contract Party Telephone -B/L Carrier Contact Office Service Type Place of Receipt Service Mode j-B/L Survey Service Mode Contract Party Service Mode Contract Party

e-Doc No.

B/L Issue Place Place of Delivery Service Contract i-Dispatch e-Doc No. B/L No. Contract Party Cargo Ready Date Service Type Service Type Cargo Ready Date i-B/L Telephone Allow Partial Load Company Name Allow Partial Load Carrier Contact Office Cargo Ready Date B/L Issue Place Contract Party Service Contract Person B/L Issue Place Contract Party Service Contract Ci-Dispatch

Evergreen i-B/L, i-Dispatch Ever Innovative, Ever Efficient, Ever Reliable

By introducing the paperless i-B/L and digitalized i-Dispatch document transmission, Evergreen ShipmentLink portal is now offering a pioneering functionality to turbocharge your efficiency.



EVE

CHECKINGIN

Kith Bour



by Keith Biondo | Publisher

Global Trade Resilience

few years ago, many business analysts projected a worldwide recession. Their reasons were sound: tariffs, trade wars, attempts to limit low-cost cross-border labor, walls, disintegration of highly regarded trade agreements. Yet their conclusions turned out to be hyperbolic.

Those projections were off for a variety of reasons. But thoughtful analysts honestly misread where the global economy was headed based on historical data and the millions of data points they had to wrap their heads around.

Here's an example. Two years ago, *IL* hosted a supply chain summit attended by Mexican business leaders and others heavily invested in U.S.-Mexico trade. The backdrop was an impending Mexican election where avowed Socialist Andrés Manuel López Obrador was projected to win, while the U.S. president pronounced "NAFTA bad" and "build a wall." The attendees were crying in their Tecate. My view, however, was that the overarching interests of the two countries would guide us to a less catastrophic end point.

Two years later, I again asked attendees of the same summit about prospects for the U.S.-Mexico relationship in 2019-2020. Thumbs up or thumbs down? From the podium I saw a sea of thumbs up. This was during the closing negotiations of the USMCA trade agreement and some attending had direct knowledge of how that agreement was proceeding.

Turning to Brexit, and its impact on global trade, the initial news was grim. Two recent studies, however, clearly show the bad news bombshell was a bust. Economic activity was up in most countries despite the uncertainty. I asked one well-respected analyst why we got it so wrong two years ago. "Well, there are millions of datapoints to project from," he answered.

In the United States, during that time frame, many dourly predicted a recession, high unemployment, and the impossibility of being able to compete on manufacturing with low-labor-cost countries, especially those without an overabundance of government regulations raising costs and liabilities. That did not happen-yet-but recent political events may change that. Leading transportation and other economic indicators point to a U.S. slowdown.

Millions of smart businesspeople around the globe ignore these distractions as much as possible, and set about every day to make their companies more competitive and efficient. It looks like, despite the obstacles, global trade will continue to show resilience.

Let's hope that continues.



www.inboundlogistics.com

STAFF

PUBLISHER	Keith G. Biondo publisher@inboundlogistics.com	
EDITOR	Felecia J. Stratton editor@inboundlogistics.com	
SENIOR EDITOR	Katrina C. Arabe karabe@inboundlogistics.com	
CONTENT MANAGER	Isabel Blake iblake@inboundlogistics.com	
CONTRIBUTING EDITORS Jennifer Baljko • Merrill Douglas Karen M. Kroll • Mike Ogle • Beth Pride		
CREATIVE DIRECTOR	Jeof Vita jvita@inboundlogistics.com	
DESIGNER	Ellen Swandiak ellen®inboundlogistics.com	
DIGITAL DESIGN MANAGER	Amy Palmisano apalmisano@inboundlogistics.com	
PUBLICATION MANAGER	Sonia Casiano sonia@inboundlogistics.com	
CIRCULATION DIRECTOR	Carolyn Smolin	
EDITOR AT LARGE	Rena Behar	

SALES OFFICES

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

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

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

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

MIDWEST/ECONOMIC DEVELOPMENT: Joseph Biondo

516-578-8924 ibiondo@inboundlogistics.com

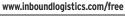
NORTHEAST: Rachael Sprinz 212-629-1560 • FAX: 212-629-1565 rachael@inboundlogistics.com

MEXICO & LATAM: Guillermo Almazo

212-629-1560 mexico@inboundlogistics.com

Texico@inboundiogistics.com

FREE SUBSCRIPTIONS





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

Inbound Logistics welcomes comments and submissions. Email us at editorial@inboundlogistics.com; call (212) 629+1560; or mail 5 Penn Plaza, NY, NY 10001. For advertising 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 may subscribe online at bit.ly/get_il. Subscriptions price to others: in North America: \$95 per year. Foreign subscriptions: \$229. Single copy price: No. Amer. \$10, foreign \$19, back issues \$15.



Proven solution for the Industrial Real Estate Market

Contact us: industrial@artha.com.mx 01 800 00 ARTHA

- Ready-to-build industrial land strategically located in 5 industrial parks
- Industrial buildings for lease
- Build-to-Suit projects in Mexico's key markets



Good Question...

READERS WEIGH IN

What advice would you give someone just starting out in logistics/supply chain?

Ask every question you can. Figure out the "why" and not only will you learn more about the overall process, you'll understand how a seemingly small change could create significant problems for someone else.

Mary O'Connell

Pricing Analyst Sunset Transportation

Make what it means to be emotionally intelligent a priority and embrace the principles as your landscape of interaction will be dynamically diverse. **Understand that learning is a daily objective and be a lifelong learner.** Be first at knowing who your customers are, internal and external, their expectations, and how to serve them. Make customer centricity a core value.

Elijah Ray

Chief Customer Officer Sunland Logistics Solutions

Start at the most junior position in a warehouse or office and **learn your way upward.** And question the status quo.

Anil Eapen Director, Ellaycom

Don't expect to be good at it

quickly. Problems are inevitable. Things will go wrong, but be patient.

> David Cram Operations Supervisor ABF Freight

Enjoy the chaos and *be fearless*.

Maureen Pierno Customer Service Manager Pottle's Transportation

Find a Mentor

Lean on an experienced mentor to get you to your goals faster. Many baby boomers are retiring and looking to pass the torch. These veterans can put things in perspective, helping you achieve milestones.

Sean Mueller

Director, Business Development and Solutions Symbia Logistics

Find mentors who will champion your leadership development;

know who the experts are in every functional area of your company and within your supply chain and involve yourself in ways you can learn from them. Don't be afraid to ask questions; network inside and outside your company.

Robin Siekerman

VP Marketing & Customer Solutions, The Shippers Group

Seek knowledge from experienced individuals and

network. Absorb as much knowledge as possible. Many aspects of the logistics/supply chain industry are learned with experience.

Brian Garza

Logistics Freight Manager Mikmac Logistics



Good Question...

READERS WEIGH IN

Embrace Change

Always be willing to learn. In an ever-changing industry, complacency is death.

Kyle Morris

Logistics Solutions Manager Ward Transport and Logistics

Expect the unexpected. Learn to prioritize early and often. The only constant is change.

Matt Gleisberg Director of Operations ModCloth

Soak up every opportunity to

learn. Every detail matters. Cultivate critical listening and problem solving. Gratitude and kindness are everything.

Jerusha Gray

Logistics and Inventory Supervisor Nikwax

Find a company with a trainee

program and learn as much as you can to get your foot in the door.

Carolina A. Corriveau

Supply Chain Recruiting Specialist JCPenney

Keep an open mind; know that every company uses a different ERP tool. It takes time to fully know the ins and outs of your role; don't get discouraged.

Jeff Brown

Project Manager (Operations) Amazon.com

Be flexible and willing to adapt to

change as the industry is constantly evolving. Stay engaged with the technological advancements impacting the industry and learn the systems that are optimizing the way we use data to make informed decisions and better service customers.

Mark Casiano

Senior Vice President Odyssey Logistics & Technology

Grind it out on an overnight or weekend shift. It's a 24/7 business, and as people typically don't like working off-hour shifts, you will advance your career and knowledge faster than the competition.

James Hedemark Operations Manager, Cap Logistics

Take pride in doing your job

properly. Have standards and be professional at all levels.

Jason Allbright

Lift Truck Operator Shipping Department SHIROKI North America **Stay adaptable** as changes occur all the time.

Carolyn Harris

Supply Chain Logistics Coordinator Morton Salt



Never assume, always confirm. Chris Ascencio Jr. Operations, DSV

Don't stay in one position for more than 2.5 years if you want to gain experience and be versatile.

Mohammed Bouakka Supply Chain Management Professional

Don't forget to **see the whole picture** while getting involved in the details.

Valeria Cruz Alayza Supply Chain, Central America Bottling Corp.

HAVE A GREAT ANSWER TO A GOOD QUESTION?

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

What's the first thing you would do to address the supply chain talent gap?

We'll publish some answers. Tell us at editorial@inboundlogistics.com or tweet us @ILMagazine #ILgoodquestion

[INSIGHT]



@ILMagazine

Drayage is currently the most neglected area of the transit supply chain. The nuances of drayage create distinct challenges and opportunities that are quite different from other trucking segments such as FTL and LTL.

> -Jeff Fluhr, general partner at Craft Ventures, which contributed to the recent \$3.5 million in seed financing for Dray Alliance, an on-demand drayage solution for shippers and enterprises

Quick

Conquering Global Logistics

Develop one consistent global view with quick access to information that could affect shipments. For example, tap into real-time risk scenarios, such as weather or natural disasters. Integrating this kind of data into a seamless dashboard provides shippers with transparency and an overview of active shipments that are potentially at risk, allowing them to plan accordingly or to adjust strategy.

> -Charlie Midkiff SVP Global Managed Logistics Services Odyssey Logistics & Technology



Re. 10 Tips: Increasing Supply Chain Visibility bit.lv/visibilityhow-to

Modern manufacturers are utilizing increasingly complex supply chain networks and struggling with visibility—you can't fix what you can't see. Cutting-edge technology is the solution for eradicating these blind spots, but as a result, demand for transparency will surge as the regionalization trend drives production closer to end consumers.

> — Marcin Fic Vice President, Supply Chain Solutions, Flex

Want to join the conversation?

FOLLOW US:

- Iinkedin.com/company/inbound-logistics
- facebook.com/InboundLogistics
- twitter.com/ILMagazine
- youtube.com/user/InboundLogistics
- j inboundlogistics.com/cms/podcast

DROP US A LINE: editorial@inboundlogistics.com

Re. Driver Shortage or Lack of Innovation? bit.lv/innovatefirst

This article posits that making the industry more technologyfriendly will address the driver shortage. Reader Lee disagrees and column author John McDonald addresses his points.

LEE I'm not clear how this article suggests managing the industry-wide driver shortage. The innovations discussed here do not reduce the number of drivers needed to get the product from point A to point B. How does warehouse automation make the career of a driver more appealing to millennials? State-of-the-art sensors and IoT functionality may be worth the investment from an efficiency perspective, but are millennials going to opt in to driving as a career because of it?

No matter how much you innovate in the supply side, it doesn't change the dimensions and cube of product. A truckload of bottled water is not going to get any smaller.

Addressing the driver shortage will require solutions around pay, road time, the regulated driving age, engaging a more diverse labor market, and the future of autonomous driving solutions.

-Lee, via online

JOHN You're completely right: The driver shortage itself will require a different set of solutions than those I've discussed here. My thought is that before logistics companies can address the driver shortage in the ways you suggested, they have to think about how they are adapting to a rapidly changing digital transformation we're seeing in all industries globally.

Businesses can't afford to make the choice to keep things the way they are if they want to remain competitive and stay in business. Furthermore, potential new drivers don't want to work for an industry that feels antiquated, so if we can make the industry itself more technologically appealing, I think that some of your points, including engaging a pool of diverse labor, will be easier and more effective as well. And hey, you've given me great thoughts for a follow-up article!

> —John McDonald CEO, ClearObject



nVision Global.

🗌 Scan me

Freight Audit & Payment • TMS • Claims
Managed services • Business Intelligence

Discover the Unseen Opportunities in Your Supply Chain

Global Leader in Freight Audit and Payment from Past 25+ Years

Freight Audit & Payment • TMS
Contract Management • Rate Procurement
Freight Claims • Shipment Visibility
Business Intelligence



Atlanta, GA (USA) • San Jose, Costa Rica • Maastricht, Netherlands • Cluj, Romania • Sao Paulo, Brazil • Kolkata, India • Delhi, India • Ningbo, China

sales@nvisionglobal.com www.nvisionglobal.com



Optimizing a 3PL Partnership

Taking time to invest in a strong relationship with your third-party logistics (3PL) provider can have a remarkable return on investment for your business.

1 START WITH THE END GAME IN MIND.

Consider how you will define the partnership's success. Enhancing your brand? Gaining better control of inventory? Offering fast or free delivery? Improving the customer experience? All of the above? Having a clear idea of your desired outcome can help you identify priorities and give clear direction to your provider.

.....

2 CONSIDER YOUR CUSTOMERS' SERVICE-LEVEL EXPECTATIONS.

Do your customers expect same- or next-day shipments, or would they be satisfied with two- or three-day service? Are products one-size-fits-all or is personalization required? Communicate these expectations to your 3PL so it can design a solution that meets them.

3 SET HIGH STANDARDS.

Your provider should pay careful attention to solution design and utilize proven processes to uphold service excellence. Confirm that it leverages methodologies such as Lean Six Sigma to ensure quality and accuracy. Expect your 3PL to spur continuous improvement by sharing innovative ideas to reduce costs, increase productivity, and improve service.

4 CAPABILITIES AND RESOURCES.

Develop an itemized list of requirements for achieving your desired outcome and confirm up front that your 3PL can accommodate them. The list may include strategically located facilities, a robust order management system, customization capabilities, call center support, or returns processing, among others.

5 SHARE

A well-run supply chain depends on data. For example, sharing projected order volumes can help your 3PL secure sufficient space and staffing and prevent service issues. The 3PL can use detailed shipment history to conduct a transportation analysis and determine the most cost-effective network configuration.

O PROVIDE SPECIFICS UP FRONT.

Let your provider know your exact requirements and parameters and establish a clear timeline. Whenever possible, make the 3PL aware of storage component needs, seasonal variations, promotional activity, and inbound/outbound delivery requirements to avoid surprises.

7 ANTICIPATE GROWTH.

Your business is always changing and, ideally, growing. Confirm that your provider can scale space, staff, and technology to accommodate your needs now and in the future. Typically, a shared space environment offers the most flexibility with the least commitment.

LO TAP YOUR 3PL'S RANGE OF SERVICES.

Warehousing, fulfillment, transportation, value-added services, technology—the more help you can obtain from one provider, the more seamless, scalable, and cost-effective your supply chain will be. Centralizing the logistics function helps to ensure that you provide consistent service and offers better predictability and reliable deliveries. If getting closer to your customer is a priority, consider leveraging your provider's facility network.

8 BE OPEN TO FRESH IDEAS.

An experienced provider might propose a solution you hadn't even considered adding a distribution node, redesigning the flow of goods through the warehouse, moving product configuration or customization closer to the consumer. Don't be afraid to tap the 3PL's knowledge and best practices.

9 APPROACH THE RELATIONSHIP COLLABORATIVELY.

Recognize your 3PL as a trusted partner who shares your business goals. It has a vested interest in your success and values your input and feedback.



WE BRING YOU CLOSER TO YOUR CUSTOMERS









In today's fast moving world, improving the supply chain is the only way to bridge the gap between you and your trading partners. To accomplish this, you will need an innovative team of dedicated professionals with over 35 years of experience in logistics and ocean transportation. You will need more than a positive customer experience. You will need a company committed to improvement and innovation. At Seaboard Marine, your customers are closer because our customers are at the center of everything we do. NORTH AMERICA CARIBBEAN CENTRAL AMERICA SOUTH AMERICA







FEDEX TESTS LAST-MILE ROBOT

For retailers, it's a race to the finish line to solve the crucial last mile of delivery. FedEx hopes to help its retail partners win that race.

• The expediter is teaming up with DEKA Development & Research to test a robot to handle home deliveries for retail partners ranging from Walmart to Pizza Hut.

• The robots are battery-powered and outfitted with cameras and software to help them avoid obstacles as they roam sidewalks and roadways.

• FedEx will work with its retail partners to determine if autonomous delivery is the most costefficient solution for the last mile, which accounts for at least 50 percent of total delivery costs.

E-COMMERCE CONTINUES TO CLICK

IN 2018:

Online spending with U.S. merchants: **\$517.36 BILLION** Up 15% from 2017

Total retail sales: **\$3.6 TRILLION** Up 3.9% year over year

E-commerce share of retail market: 14.3% TOTAL SALES Up 12.9% from 2017

E-commerce sales represented 51.9% OF RETAIL SALES GROWTH

The largest share of growth since 2008, when e-commerce accounted for 63.8% of all sales growth.

SOURCE: INTERNET RETAILER



DSW NAILS IT

In today's retail environment, innovation is the name of the game to attract customers. Shoe retailer DSW is no stranger to this concept, creating an unlikely match made in heaven.

Since 2017, the company has experimented with adding nail services in two of its Columbus, Ohio, stores in a partnership with W Nail Bar, jumping on the opportunity to satisfy multiple consumer needs at once: allowing patrons to shop for a new pair of sandals and get their feet ready for display, under one roof.

The move resulted in return engagements and increased customer loyalty. Following that success, DSW plans to add more in-store salons to some store locations in Austin, Texas; Washington, D.C.; and Dublin, Ohio.

.....

AMAZON POPS UP, POPS BACK DOWN

Recognizing where and how your customers like to shop is critical to maximize spending, maintain efficiency, and ensure longevity. Amazon is adjusting its retail strategy to do just that.

Amazon took advantage of flexible pop-up leases to learn more about its consumer base, allowing it to experiment relatively risk-free. Based on its findings,

44THE E-TAILER IS CLOSING THE DOORS ON ITS U.S. POP-UP STORES, WHILE OTHERWISE EXPANDING ITS PHYSICAL RETAIL PRESENCE. **77** the company is shaping its retail strategy accordingly. Moving forward, Amazon plans to allocate its efforts in a different way. Instead of continuing the pop-ups,

the company has decided instead to invest in expanding the more-successful Amazon Books and Amazon 4-Star stores.



48 HOURS, 465 STORE CLOSURES

Within a two-day period, major retailers JCPenney, Gap, Victoria's Secret, and Foot Locker announced massive closures, totaling approximately 465 stores. Although disheartening, the news isn't much of a surprise in an era when online purchases reign supreme.

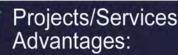
In the fourth quarter of 2018, Gap, JCPenney, and Victoria's Secret reported a decline in sales. And while Foot Locker actually reported some growth, it still plans to close more than 165 stores. Gap is expected to close 230 locations and JCPenney plans to close 18 stores, although industry experts predict more closures will follow. Victoria's Secret plans to shut down 53 stores this year after seeing a 3-percent decline in sales.

\star PHARR AHEAD OF THE REST \star



New Projects/Services Checklist:

- 2 Northbound Commercial Primary Lanes
- 2 Northbound Commercial Exit Lanes
- ✓ Gate to Gate/F.A.S.T. Lane
- Dock Expansion
- Cold Inspection Facility
- Regional Ag Training Center & Lab
- ✓Ag Inspection Overtime Pay
- ✓ New State of the Art Toll System
- Bridge Building Renovation
- BridgeConnect Trade Sessions
- ✓ Unified Cargo Processing (UCP)
- New State of the Art Security Cameras System



- * Improved Safety and Security
- * Reduced Border Wait Times
- ★ Increased Capacity
- * Process Improvements
- * Streamlined Inspections
- Improved Commercial Truck Throughput
- * Smart Technologies
- * Joint Inspections (U.S. & Mexico)
- * Competitive Logistics Network
- * Faster Connectivity to Port of Brownsville
- *Bi-National Coordination for Expedited Crossings
- * Maximum Efficiency







www.pharrbridge.com (956) 402-4660

Your Connection. Your Business. Your Bridge.

LEADERSHIP Conversations with the Captains of Industry

Dan Martin: Emotional Quotient



Dan Martin's leadership philosophy encompasses building a collaborative leadership team, staying close to the customer, and acknowledging that failure can be as important to career development as success.

by Merrill Douglas

From the start of his career, Dan Martin understood the power of information technology. "Whether it was IBM AS400s in the early 1980s, SAP in the 1990s and 2000s, and now the Internet of Things, staying ahead of technology and embracing the latest innovations has been critical," says Martin, president of IFCO North America, a global supplier of reusable plastic containers (RPCs) for fresh produce. Martin first joined the company in 2001. Before taking the helm of the North American business in 2018, he served as senior vice president of sales and customer operations at CHEP USA.

We had a chance to talk with Martin about his career, his leadership philosophy, and his current agenda at IFCO.

IL: If we were to follow you around at work for a week, what would we see?

On a typical day, I'm running around from meeting to meeting, two or three minutes late for each one. I spend a lot of time balanced between executional activities—which every leader does—and activities aimed at developing our vision and strategy. I try not to firefight too much, but that's inevitable.

I'm collaborative with my leadership team. For example, during my first 90 days here, we wanted to create a foundation for how we bring people into IFCO. That foundation started with our vision and values. We developed a value platform that we all embraced, and we all look to recruit people with the same values and visions.

IL: Any other lessons you learned early on?

Keep in touch with the voice of the customer and anchor your business model on honest feedback.

IL: How do you get that feedback at IFCO North America?

We have someone at the company whose first job each day is to assemble any customer complaints we received the day before and send them to my leadership team. That's in my inbox at 7 a.m. It's a great way to start the day, grounding us with the concerns of our customers. We also get feedback through our MyIFCO platform and our website, but a lot of it comes from phone calls. Our customer service reps log the information, and we capture it in Salesforce.

We also get tremendous feedback through visits to our

customers' sites. Finally, we conduct a biannual Net Promoter Survey, which is an imperative part of how we build our customer service strategy.

IL: What changes have you seen at IFCO since you joined?

The biggest, most visible, and very public changes have involved increased concerns about food safety and the innovations that we've created around that. For example, IFCO has developed SmartCycle and SmartGuardian, systems that help us maintain the proper controls and stay one step ahead of industry requirements and our customers' sanitation needs.

IL: How have mentors influenced you?

My first mentor was my father, who worked in the consumer packaged goods industry for 40 years. What made him successful was an incredible ability to listen, read people, and follow his emotional intelligence. Among my other mentors, I'm especially grateful to a couple of leaders who allowed me to fail in a safe environment. One way you grow is to experiment, trying to develop through your successes, but also through failures. Many risk-averse leaders miss this as a key developmental area.

IL: Describe a failure that taught you an important lesson.

Early in my career, I took some wrong turns as a leader. I listened less and commanded more, and I probably wasn't as compassionate a leader as I am now. You just learn that over time, by failing and losing good people because you weren't able to appreciate the value they brought to the workplace.

IL: What's at the top of your agenda at IFCO these days?

We're investing in automation, much of it due to the shrinking blue-collar workforce in North America. We're running trials on equipment we co-invented for sorting our product by size as it comes into our building. We're automating our infeed line, where our crates are flipped, sorted, and counted as they come in, as well as our outfeed lines and stacking area. We're also doing a lot of work on digital applications for tracking assets.

IL: What's one characteristic every leader should possess?

In the days of the Industrial Revolution, leadership was about managing mass workforces from the top down. With today's workforce, leadership requires a strong EQ (emotional quotient).

Let Pythons be Pythons

Many years ago, when Dan Martin was in charge of Los Angeles-area operations for a truck rental company, he received a strange request. "I got a call to eradicate a 22-foot python in the cab of a straight truck," he says.

The truck got towed in, and Martin went to work not wrangling the snake himself, but finding someone to do the job. "This was before the days of the internet, so I took out my *Yellow Pages* and started looking for a pest disposal company," he says. "The first two I called didn't want to touch a python, but I finally found someone who would."

Apparently, a customer, on returning the truck, had left a pet behind, Martin says, "and that became my fun for the day."

We deal with a lot more white-collar workers than blue-collar, and with a lot more millennials. You have to be plugged into their needs. To attract talented employees, you need to be flexible, striking a balance between their day-to-day work and projects that allow them to innovate.

IL: What are your biggest recruiting and talent challenges?

Finding the right balance of characteristics. We look for people who have experience, who are flexible and willing to change, and who fit well with our company culture. Our talent management process starts with creating an individual development plan for each employee, and then helping people not only to improve what they do on the job, but also to improve personally.

IL: What's most fun about your job?

Customer engagement. Even when it involves problem solving, the challenges and issues we face and the collaboration and spirit of partnership that we can create with customers is so rewarding. I also enjoy seeing our product in action, out with our customers, because I know the inherent value RPCs bring to the supply chain.

IL: Outside of work, how do you like to spend your time?

I enjoy spending every bit of my time outside work with my family, which includes my three semi-adult kids. I'm also an avid runner, which helps to keep me balanced.

READERPROFILE as told to Karen Kroll

Shooting for an Optimized Supply Chain



BERNICE CANNON is supply chain manager

for Nouryon, a global specialty chemicals company, formerly AkzoNobel Specialty Chemicals.

RESPONSIBILITIES

Oversight of logistics and supply planning; liaison between the business and the production plant.

EXPERIENCE

Supply chain manager, North America, and customer service manager, both with AkzoNobel; account service manager, FMC Corporation; management trainee, Enterprise Rent-A-Car.

EDUCATION

Ball State University, B.S., Business Management, 1993; Keller Graduate School of Management, MBA, International Business, 2014. y company became Nouryon effective October 1, 2018. We then had 60 days to change the name from AkzoNobel, or we'd be out of compliance with Department of Transportation regulations. We had to complete permits and registrations, change titles, and overhaul our paperwork.

This was one of our biggest accomplishments. The key was communication across the organization. We made sure everybody understood what needed to be done and held weekly meetings to ensure we were complying with the regulations.

Currently, we manage an integrated, global supply chain with a regional focus. Unlike many supply chains, electric power is our most expensive raw material. So we're willing to pay a little more in logistics costs to optimize our power consumption. We look at power costs and volume at all our production facilities, along with the customer's location, to determine which location to fill an order from. Even if a customer is closer to one site, we might produce their orders at a site that's farther away, if we'll save enough on power to make up for the transportation costs.

Another current project is working with our vendors to understand the platforms they offer that can increase visibility into our supply chain. For instance, our fleet consists of about 620 rail cars. I can track and trace them, but I also need to know where they are at a push of a button, especially during hurricanes or other weather events. I'm working with one of our vendors to develop a visibility platform.

I went to school for accounting, but in my third year, decided I didn't want to work in accounting for the

Bernice Cannon Answers the Big Questions

1 What hobbies or activities make you better at supply chain management and logistics?

Puzzles. Supply chain and logistics are like a big puzzle. You're trying to figure out the best solution to, for instance, getting more production out of a plant or reducing inventory costs.

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

I figure out how to get candy to a store near you.

3 If you could throw a dinner party and invite anyone, who would you invite? My mom, because she has always encouraged me. My former boss, Jo Shepherd, because she believed in me. My high school teacher, Ms. Paul, because she told me to dream big. My best friend, Monique, because she's always in my corner. And I would invite former president Barack Obama.

4 If you had \$1 million to start a new venture, what would you do?

I'd set up a service for single parents who are less fortunate to help them build their skillset so they can provide for their families.

5 What would you tell your 18-yearold self?

Take more risks, believe in yourself, and know that you are unstoppable.

[IN PRACTICE]

rest of my life. I finished my degree in business management with a human resources concentration.

In 2000, I joined AkzoNobel's polymers division as the customer service manager. I reported into the supply chain, and took on roles in inventory management, ocean freight, and logistics.

I knew bits and pieces of the supply chain because customer service touches them all, but didn't know it in depth and in detail. So, I started digging into it.

I found a mentor within the

AkzoNobel organization who knew me and my capabilities and also had been in supply chain. I started visiting sites and meeting managers. I'd ask, 'what do you do in purchasing? What do you do in logistics?' I needed to understand how we all interacted.

Everyone was willing to talk. I've stuck my foot in my mouth many times, but people realized I was a straight-shooter and my honesty and integrity were real.

On my agenda now is optimizing our inventory and logistics. We're aiming

for growth and want to make sure our costs don't increase as fast as we grow. We're looking at where we can increase production in plants that are already constrained, and reviewing our storage location options to determine which one is more cost-effective.

I love the dynamics of supply chain. There's always action, whether it's figuring out how we can best serve our customers or dealing with a derailment on the railroad. It's always something different that keeps you on your toes.



[IN FOCUS]

The Supply Chain in Brief

> GREEN SEEDS



3M, a global manufacturing and technology company, aims to source 100 percent of its energy needs from renewable electricity

in all its facilities around the world, beginning with its St. Paul, Minnesota, headquarters (*pictured*). Along with converting operations to wind and solar power, the company produces solutions for customers that improve the reliability and efficiency of renewable energy.

> SHOVEL READY

Walmart is set to open a new consolidation center in Colton, California, in July 2019. The distribution center, which is expected to create more than 600 full-time jobs for the area by 2021, streamlines the replenishment process for suppliers to improve stock availability.



Maersk acquired custom brokerage business **Vandergrift**. The purchase allows Maersk to strengthen, broaden, and streamline its service offerings to customers.

3PL and supply chain management provider **C.H. Robinson** purchased **The Space Cargo Group**, a provider of international freight forwarding. The acquisition is part of its global growth strategy.

Freight brokerage firm **FLS Transportation Services** acquired **Scott Logistics** as part of its goal to increase its U.S. footprint and provide customers of both companies with greater coverage.

GlobalTranz Enterprises acquired **Our Freight Guy**, a freight brokerage and logistics company. Our Freight Guy's Riverside, California, location will become a GlobalTranz branch office.

J.B. Hunt Transport, a subsidiary of J.B. Hunt Transport Services, purchased **Cory 1st Choice Home Delivery**. The investment advances its final-mile delivery capabilities for bulky products.

> GOOD WORKS

Averitt Express

associates (*pictured*) provided more than 4,100 hours of community service as part of the annual 40 for 40 Community Challenge. From Oct.



1 through Dec. 31, 2018, they served 4,166 hours, with 87 facilities across Averitt's system giving to various efforts including clothing, food and toy drives, and blood donations.

C.R. England and **England Logistics** set a goal to provide funding for one million meals for children in 2019 across the United States and Mexico as part of the One Initiative campaign, which fights childhood hunger. In 2018, the companies funded more than 1.6 million donated meals.



> SEALED DEALS

CEVA Logistics expanded its global partnership with **IKEA** to open a New York distribution center. Located on Staten Island, the center prioritizes home delivery to customers who order products online or



purchase items at an IKEA store or Planning Studio. CEVA manages the site under a five-year deal, providing warehouse management and fulfillment services.



Pet food manufacturer **Royal Canin** rolled out **FuturMaster's** cloud-based demand planning software as part of a supply chain initiative to standardize processes across

the globe and improve efficiencies. The new technology helps manage the growing complexity of supplying the right products at the right time to more than 100 markets around the world.

Rituals Cosmetics, a home and body cosmetics brand, selected **Logility Voyager Solutions** in an SaaS environment to help increase forecast accuracy, minimize the potential for lost sales, position inventory across the supply chain, and support the speed and frequency of new product innovations.

> UP THE CHAIN



Torben Weilmuenster was elected chairman of the governing council of **Poseidon**, a pharmaceutical logistics network. The group is comprised of pharma ocean freight shippers and logistics providers aiming to reform pharmaceutical logistics and make ocean freight the default mode for bulk medicines. Weilmuenster currently heads global supply chain management at Merz Pharma GmbH & Co. KgaA.

> RECOGNITION



Southeastern Freight Lines, a provider of regional LTL transportation services, received Home Depot's **2019 LTL Carpet Carrier of the Year** award. Key metrics include adherence to transit time standards, gap time of final delivery, and ability to provide electronic status updates within defined time frames.

Scott's Miracle-Gro Company presented **Dayton Freight Lines**, a provider of regional LTL transportation services, with the **Transportation Excellence** award, which recognizes superior performance in the LTL category. This is the eighth time Dayton has received the award.

Tyson Foods named **Transplace**, a provider of transportation management services and logistics technology solutions, its **3PL of the Year**. Tyson gives the award to third-party contract carriers for excellence in customer service, communication, safety, and innovation.

G&D Integrated, a supplier of transportation and logistics services, received furniture e-tailer Wayfair's **2018 Platinum Carrier** award. Wayfair presents the award to companies providing outstanding middle-mile transportation services.

[IN FOCUS]

Shaping the Future of the Global Supply Chain

Let's Get Digital

Transitioning to a cloud-based platform with real-time visibility and automation capabilities is crucial for retailers to maintain full control of their supply chains. Yet 85 percent of U.S. retailers haven't digitized their supply chains, finds research from Gravity Supply Chain Solutions.

Although only 15 percent of U.S. retail businesses have digitized their supply chains, 60 percent of respondents recognize the need for digitization to create seamless omnichannel retail experiences.

What is causing the holdup? Cost is the primary reason for relying on manual supply chain processes, say 46 percent of respondents. That hesitation can be attributed to a fear of failing to deliver ROI, considering that a further 29 percent cite the inability to justify cost as the most significant obstacle to supply chain digitization.

However, a majority of respondents do recognize the value in completing digitization:



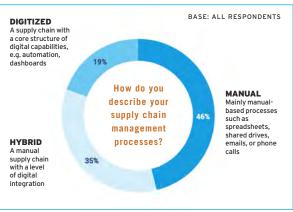
• **44 percent** say the lower cost of operation is the strongest benefit.

• **40 percent** say higher profit margins are the greatest draw.

• **36 percent** are encouraged by the potential for greater customer experiences.

These perceptions aren't far off. Of those who have already fully digitized their supply chains, 76 percent say their organization has enough data and insight to make the right supply chain decisions, while more than 55 percent say order tracking across all touchpoints has improved the customer experience. And 53 percent say personalization of products has increased.

The survey's key takeaway? The majority of retailers understand the value of supply chain digitization and that it presents a massive opportunity to improve customer loyalty and meet consumer demand in the most efficient way possible.



SOURCE: GRAVITY SUPPLY CHAIN SOLUTIONS

NO LIGHT AT END OF RETAIL TUNNEL

The decline of physical retail stores isn't expected to slow down any time soon, finds a Coresight Research report. U.S. retailers have announced 2,187 closings to date in 2019, including 749 Gymboree stores, 251 Shopko stores, and 94 Charlotte Russe locations. Payless ShoeSource also is reported to be considering its second bankruptcy.

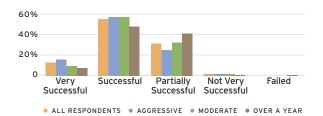
Online retail growth, flat and declining sales, and rising interest rates play a role in the decline.

Bankruptcies also are continuing at a rapid pace "with the number of filings in the first six weeks of 2019 already at one-third of last year's total," the report states. And it's likely we could see more closings this year, as a number of companies are currently in the bankruptcy process or on their way there.

Coresight tracked 5,524 closings in 2018, which included all Toys "R" Us stores and hundreds of Kmart and Sears locations. The record year for closings was 2017 with 8,139 shuttered stores.

SOURCE: 2018 MINT JUTRAS ERP IMPLEMENTATION STUDY

HOW WOULD YOU RATE THE SUCCESS OF YOUR ERP IMPLEMENTATION?



ERP Drives ROI

In the past, studies have shown a lack of success in Enterprise Resource Planning (ERP) implementations. But those statistics may be out of date, according to a survey conducted by Mint Jutras and published by Ultra Consultants.

Sixty-seven percent of manufacturers and distributors responding to the survey rate their ERP implementations as successful or very successful (*see chart*).

Study highlights include:

• The primary reasons for success have to do with people and process, with factors including top management support and change management.

• Lack of implementation success could be due to factors such as inadequate business process re-engineering and lack of effective project planning.

• While many ERP implementations meet schedule, budget, and ROI expectations, the study shows a significant number of manufacturing and distribution companies overrate their success and leave additional attainable returns on the table.

10 Best Paying Trucking Companies

		Annual Salary	Pay Per Hour
1	Sysco	\$87,204	\$41.92
2	Walmart	\$86,000	\$41.35
3	Epes Transport	\$83,921	\$40.35
4	Acme Truck Line	\$82,892	\$39.85
5	Brady Trucking	\$79,906	\$38.42
6	GP Transco	\$78,400	\$37.69
7	Trimac Transportation	\$76,796	\$36.92
8	Estes Trucking	\$75,000	\$36.06
9	ABF Freight	\$73,562	\$35.37
10	Holland Freight	\$72,339	\$34.78

SOURCE: TRUCKDRIVERSALARY.COM

Keeping Air Cargo Safe

Here are a few tips for keeping your air cargo safe during large freight shipments:

Audit and analyze processes to find potential threats.

Go over the shipment process from start to finish. At each step, determine what security threats are present and where extra precautions are necessary. Revisit this plan each time a process changes to stay on top of any security concerns. Train team members thoroughly for security measures at all steps.

■ Use a layered approach. Layering security methods multiplies effectiveness. You can do this by combining different tools, such as using both security seals and tamperevident tape. It also can mean providing security at multiple points. For air cargo, this could mean securing the aircraft door, the cargo container, and the individual units separately for better combined results.

■ Utilize barcodes and digital tracking. Cargo theft is becoming extremely advanced and complex. People will go as far as setting up false shipment records or infiltrating shipment plans early in the process. Using barcode tracking and digital records makes it more difficult to falsify records or steal information.

■ Use tamper-evident seals. Tamper-evident seals deter theft because potential thieves cannot attempt to break into the shipment without leaving clear evidence. Tamper-evident seals that are used for air transport include padlock seals, bolt seals, pull-tight seals, and more.

-American Casting and Manufacturing

BACK TO SCHOOL

Developed countries need to "urgently" boost adult training and education programs to deal with future mass job upheaval brought on by automation, recommends an Organization for Economic Cooperation and Development (OECD) report.

One in seven jobs is at risk of being fully automated while another 30 percent will likely be overhauled, the OECD analysis finds.

But only 40 percent of workers in the jobs most at risk receive training, far less than the 59 percent of those with jobs at low risk, it finds.

Lack of motivation is a problem, with half of adults not wanting training. Eleven percent want to train but lack time, money, or support from their employer.

Greece, Japan, and Slovakia performed poorly in most areas, but there was still plenty of room for improvement in betterperforming countries such as Norway and Denmark.

The report recommends countries promote the benefits of adult learning and target training in areas where jobs are most likely to become obsolete in the future.

TAKEAWAYS

Southeast Asia Connects

Southeast Asian nations Cambodia, Malaysia, Singapore, and Vietnam are among the most connected companies in the world, beating expectations by the widest margins.

That's one finding of DHL's Global Connectedness Index an analysis of globalization as measured by international trade flows, capital, information, and people. Improved supply chain networks within the region and ASEAN policy initiatives promoting economic integration are factors contributing to Southeast Asia's high scores.

Singapore remains the world's second-most-connected country, and the only Asia Pacific country to feature in the Top 10 ranking. Myanmar experienced the biggest improvement, jumping 23 spots to 133rd position. Hong Kong retains its second place behind Singapore on the depth dimension of the Index, which measures the proportion of overall physical, intellectual, and human capital that crosses national borders. Japan and South Korea continue to rank among the top five in global breadth of the same flows.

Overall, the index is a testament to Southeast Asia's connection and commitment to the global economy. After establishing the ASEAN Economic Community in 2015, the region has seen impressive trade flow improvements, specifically, significant advances in reducing tariffs and improving logistics.

Top USPS Suppliers, Fiscal Year 2018

RANK	FY17	COMPANY	FY18
1	1	FedEx	\$2,001,154,528.78
2	2	Eagle Express Lines / Hoovestol	\$480,806,282.38
3	3	EnergyUnited Electric Membership Corp.	\$429,307,400.89
4	5	Victory Packaging	\$220,139,733.80
5	10	UPS	\$205,556,407.96
6	22	FCA US (formerly Chrysler Group)	\$178,607,251.00
7	7	HP Enterprise Services	\$177,293,718.97
8	9	Wheeler Bros	\$171,581,826.95
9	8	Northrop Grumman Corp/Solystic SAS	\$169,690,459.91
10	11	United Airlines	\$167,470,951.91

Transport Companies Mail It In

In 2018, the U.S. Postal Service (USPS) spent nearly \$16 billion on outside purchases, and six of its top 10 contractors provide transportation services or equipment (*see chart*), according to Husch Blackwell's annual *Top 150 U.S. Postal Service Suppliers* list.

As a whole, air transportation suppliers increased their USPS revenue in 2018 from 2017's totals:

• UPS had \$206 million in revenue in FY 2018, which ups its 2017 total by \$34 million and raises its ranking five notches to No. 5.

• United Airlines revenue increased by \$3 million.

Delta Airlines
 increased by \$11 million.
 American Airlines

American Annies
increased by \$6 million.
Kalitta Air increased

by \$19 million.

These increases suggest the Postal Service is either moving more mail volume by air or paying more to do so. Mail haulers Hoovestol and its affiliated company Eagle Express Lines again took second place with \$480 million in revenue, freighting an additional \$28 million from last year. The next largest ground carrier is Postal Fleet Services, with \$161 million

44 FEDEX, WHICH CARRIES PACKAGES AND LETTERS FOR THE POSTAL SERVICE, INCREASED ITS REVENUES BY \$400 MILLION, JETTING TO THE \$2 BILLION MARK FOR THE FIRST TIME AND LANDING A NEW RECORD FOR SINGLE-YEAR SUPPLIER REVENUE.**77**

in revenue. Wheeler Bros., which provides automotive parts for the Postal Service's aging fleet, had \$171 million in revenue to hold down the No. 8 spot.

FCA US (formerly Chrysler Group) accelerated from No. 22 to No. 6 with \$178 million in revenue. FCA supplies the Postal Service with roughly 19,000 commercially available ProMaster vans from Fiat Chrysler Automobiles.

SOURCE: HUSCH BLACKWELL

Technology companies also figure prominently in 2018's Top 10 Suppliers list. EnergyUnited Electric Membership Corporation, which provides telecommunication and energy billing services, again ranked third, this time with \$429 million in revenue, an increase of \$27 million over last year.

Computer equipment provider HP Enterprise Services was still No. 7, but with \$21 million less revenue than 2017.

Northrop Grumman Corporation/Solystic SAS ranked No. 9 with \$169 million in revenue. Accenture Federal Services saw a revenue decline of \$39 million, dropping to No. 11.

The only company in the Top 10 not providing technology or transportation services is packaging products supplier Victory Packaging.

AMH EQUIPMENT GETS A LIFT



LOS ANGELES AREA

World Trade Week | est. 1926 The Automated Material Handling (AMH) equipment market is expected to reach \$53.59 billion by 2024,

333

according to a Research and Markets report. One major motivator behind the market boost is a growing presence of start-up companies that employ robotic solutions for warehouse automation.

The increasing popularity of AMH equipment among leading industries, significant recovery in global manufacturing, and rising labor costs and safety concerns also contribute to growth. However, small- and mid-sized enterprises struggle with the high upfront expenses of AMH equipment as well as high integration and switching costs.

Robots offer a host of benefits, such as increasing manufacturing and warehouse operating efficiency and productivity. They also reduce labor costs, protect employees from injuries, and provide a high return on investment. As such, it is no surprise that the demand for robots in manufacturing units and warehousing facilities is gaining speed, the report notes.

The AMH equipment market for unit load material handling systems is estimated to increase even more. Unit load material handling systems involve appropriately sized items organized into a single unit that can be moved easily. It is a quick and economical way to move a large number of items in a single run.

The packaging industry, however, is expected to provide the most growth for the AMH market over the next six years, as the equipment enhances packaging quality, says the report. The equipment can work with various packaging designs and multiple pack sizes for different products and can optimize the packaging of small, large, and fragile products quickly, while eliminating human errors.

93RD ANNUAL WORLD TRADE WEEK KICKOFF BREAKFAST SOUTHERN CALIFORNIA: THE ENGINE OF GLOBAL TRADE & ECONOMIC GROWTH

RSVP NOW AT LACHAMBER.COM/EVENTS

THURSDAY, MAY 2 • INTERCONTINENTAL LOS ANGELES DOWNTOWN

Join more than 800 executives and members of the diplomatic corps to commence a month-long celebration of world trade in Southern California.

CORPORATE TABLES AVAILABLE! Opportunities now available to sponsor scholarships for high school and university students preparing for a profession in international trade.



For more information, contact Jasmin Sakai-Gonzalez, 213.580.7569 or jgonzalez@lachamber.com. | worldtradeweek.com



[INSIGHT]

LEANSUPPLYCHAIN

by Paul A. Myerson

Instructor, Management and Decision Sciences, Monmouth University and author of books on Lean and the Supply Chain for McGraw-Hill, Pearson, and Productivity Press pmyerson@monmouth.edu | 732-571-7523

Omnichannel Retail: 4 Rules for Success

While it's not possible to be truly omniscient when it comes to omnichannel retail and your supply chain, it is possible to try to anticipate some of the challenges ahead.

Omnichannel decisionmakers anticipate disruptions led by drones, autonomous vehicles, and crowdsourced delivery, finds a recent Zebra Technologies study.

Survey results indicate that in response to today's consumer, who expects an integrated, faster purchasing transaction, and the growth of e-commerce, 78 percent of logistics companies expect to provide same-day delivery by 2023 and 40 percent anticipate delivery within a two-hour window by 2028.

To successfully navigate these "whitewater rapids," as described in my January 2019 commentary for *Inbound Logistics*, companies will have to select winning processes and technologies—and not wait until the last minute. So, in a way, they need to be somewhat omniscient.

A Bain & Company whitepaper titled Modern Retail Supply Chains: Backbone for Omnichannel points out the following four basic rules for success to consider when adapting to the new and evolving reality of omnichannel retail.

UNDERSTAND YOUR BUSINESS AND CUSTOMER STRATEGY.

Learn as much as you can about your customers, including how they shop, how they want to receive and return goods, and what they will pay for. Understanding these strategies can help you avoid unnecessary changes and investments that can disrupt your supply chain and harm your bottom line.

2 DEVELOP CAPABILITIES TO SUPPORT YOUR STRATEGY.

Customize services to meet customer needs. For example, do they desire sameday delivery? Buy online and pick up in store? Developing these capabilities involves decisions such as whether to insource or outsource activities including e-commerce fulfillment, transportation, and returns and how to integrate these and other processes with the rest of your supply chain.

3 ADAPT YOUR OPERATING MODEL.

Take a 360 view and involve other functions such as marketing, merchandising, e-commerce, store management, and IT in supply chain decisions. There are plenty of trade-offs in operating decisions such as cost versus service (for example, transportation costs versus same-day delivery), so these decisions should be as collaborative as possible to ensure that there is buy-in and that success is measured properly.

4 INVEST IN TECHNOLOGY AND ANALYTICS.

Improve technology throughout the supply chain to help with all kinds of processes, from forecasting and customer order tracking to reordering quantities and restocking locations. By linking these decisions with your strategy, you can avoid a lot of unnecessary investments because it can be tempting to jump on the latest technology without first doing your due diligence.

Starting with these four rules should lead you down the right path to make positive changes to people, processes, and technologies in your supply chain.



Leading Asia Service Partner in the Expanded 2018 OCEAN Alliance Network

Using the resources of the expanded 2018 OCEAN Alliance network **COSCO SHIPPING** is powering the latest evolution in service to the TransPacific shipper, with an even larger selection of services, faster transit times, more direct port pairs and scheduling reliability. We cater to our customers with shipping solutions designed to deliver value through increasingly global supply chains -- by every measure, **COSCO SHIPPING** offers you a range of impressive advantages --

- Sreater Frequency......42 Loops
- **Wost Transpacific......168 Port Pairs**

The numbers are even more impressive when you consider that **COSCO SHIPPING Lines** operates 356 international and domestic routes including 227 international and feeder services, 43 domestic services, 86 Yangtze River and Pearl River services, calling at 267 ports in 85 countries and regions. It all adds up to a world-class ocean carrier with world-wide capabilities. Now more than ever there truly is no equal to Asia and the world. Contact **COSCO SHIPPING** today



We Deliver Value

COSCO SHIPPING Lines (North America) Inc. 100 Lighting Way, Secaucus, NJ 07094 (866) 830-2550



[INSIGHT]



by Renata Mihich Managing Director DHL Global Forwarding Canada renata.mihich@dhl.com 289-562-6701

Women in Logistics: Support Matters

One of my most meaningful career moments happened when I had my first child. I received a promotion and my boss informed me that I would take over my new role when I returned from maternity leave. I saw this as the company's commitment to me and my career advancement. This support played an important role in my professional growth, but I realize that I am more the exception than the rule in the supply chain sector.

As in many other industries, one reason women leave logistics is the perception that they must make a choice between advancing their careers and embracing the demands of parenthood. This results in a low percentage—14 percent according to a Gartner study—of women striving for and holding executive-level positions, which may conflict with their parental duties. The logistics industry still struggles when it comes to supporting female employees long enough to watch them grow into senior roles.

But there is hope. The same Gartner study finds the number of supply chain companies committed to improving gender diversity increased from 43 percent in 2017 to 50 percent in 2018. As a woman in logistics, I know how crucial a company's dedication to supporting a woman is to her success.

The most effective gender diversity initiatives start from the top, driven by CEOs, management boards, and investors. Leaders must establish formal goals, then work to meet them. Gartner's 2018 survey asked women in supply chain, "What is the most important action to recruit and retain women?" The number one recommendation is to change cultural values, leadership orientation, and behaviors.

Companies can start by embracing proven methods such as using genderneutral language, highlighting flexibility and benefits in job descriptions, and diversifying interview panels.

PLANNING FOR SUCCESS

Gartner also found that when it comes to advancing women to leadership positions, practicing "integrated pipeline planning" was the top priority. This means a proactive and dedicated process involving recruitment, development, mentorship and sponsorship, rewards and recognition, and succession planning. When a company values its female employees and supports them every step of the way, they are more likely to commit to and succeed in the company.

Company support is important, but the representation and visibility of women in leadership roles is crucial to successfully recruiting and retaining female employees. On average, companies with more women vice presidents have 50 percent or more women in the total supply chain organization. By 2023 the logistics sector expects to see women hold 30 percent of VP positions. The presence of more women at all levels, but especially at leadership levels, improves gender equity and increases talent diversity.

A NEW PERSPECTIVE

Attracting more women to the logistics sector is a challenge, but change doesn't happen overnight. Now is the time to push for diversity and gender equality to engage women in logistics, which happens to be my long-term goal. This not only benefits women in general, but all employees, because it brings new perspectives to the table, which ultimately drives value for our customers. We need to share women's success stories both internally and externally if we want to encourage women to join and stay in this sector.

Representation is powerful because it inspires hope for a future that once seemed impossible. I am proof that this is possible in a company that values talent, dedication, and drive in its female employees.



ACCESS A FAR-REACHING NETWORK OF FREIGHT EXPERTS WITH DLS WORLDWIDE



Our proven capabilities and deep understanding of domestic and international shipping are demonstrated daily through our team of dedicated transportation specialists at more than 160 offices across the United States.

$\mathsf{LTL} \cdot \mathsf{Truckload} \cdot \mathsf{Air} \, \cdot \mathsf{Ocean} \cdot \mathsf{Intermodal} \cdot \mathsf{White} \, \mathsf{Glove}$

Visit dls-ww.com or email agentinquiry@dls-ww.com to learn more.

© 1998 - 2019 R.R. Donnelley & Sons Company, all rights reserved. RR DONNELLEY, RRD, RRD (Stylized) and COMMUNICATIONS ENABLED are trade-marks or registered trademarks of R. R. Donnelley & Sons Company. All other trademarks are the property of R. R. Donnelley or their respective owners.



[INSIGHT]



by Nikos Papageorgiou Vice President of Customer Success (pictured) and Varun Dodla, Chief Technology Officer, Slync slync@corporateink.com 617-969-9192

AI for Logistics: Turning Complexity into Predictive Outcomes

Availability of low-cost Artificial Intelligence (AI) services through cloud-based enterprise software has been a driver for experimentation and adoption. But its true value proposition is far from evident for many logistics leaders.

Headlines about AI's "Matrix-like" domination over humanity add to the confusion. Most real-world applications are limited to intelligent virtual assistants that can act as a driving force for AI adoption but won't deliver the business value... unless one is looking for showtimes.

AI's value prop for logistics manifests in the white space between the grandiose and the simplistic—specifically, enabling predictions and proactive exception management.

THE AI IMPERATIVE IN GLOBAL LOGISTICS

What if AI could tame the complexities of today's supply chain, predict exceptions, and empower operational teams to proactively manage these exceptions before they occur?

Consider the supply chain complexities of a large U.S. manufacturer that ships products to a multitude of customers in countries worldwide. Potentially hundreds, if not thousands, of transportation lanes involving a mind-boggling number of partners—truckers, ocean and air carriers, 3PLs, customs brokers, country affiliates have to be managed in harmony.

Increasing customer expectations for on-time in-full deliveries, backorder avoidance, quality of service, process compliance (e.g., cold chain), and the overall customer experience pressures margins and operational capabilities of 3PLs, carriers, and shippers.

The good news? Supply chain in all its complexities is organically filled with data. Every event in the product journey, such as a shipment milestone, hand-off, or document generates data that can be harnessed. AI can't do it alone, but as a piece of the digitization puzzle, it can convert data to predictive insights.

Among the various fields of AI, machine learning (ML) is the most promising for global logistics.

Machine learning allows supply chain leaders to build predictive models that can learn and self-optimize from data or identify patterns on raw data by emulating logical reasoning. The ML model output could be lead time, on-time performance, service level, cost, or a combination of these, while the model inputs have to reflect the complexity of a given supply chain – lanes, modes, carriers, costs, historical performance, Incoterms, realtime feeds, IoT sensors. It all depends on the use case.

HOW TO GET STARTED

AI needs data, lots of it. Thus, taking a digitization-first approach to establish a digital environment where data is electronically generated, or captured and stored, is key. IoT-generated data is good, but even data sitting in disconnected legacy systems or just exchanged via email can be a sufficient foundation by utilizing the right aggregation engine.

Developing "fast-fail" pilots is another important starting point. Build the right cross-functional internal team with deep expertise in the issues on hand and identify a partner that can support quick (4-12 week) proof-of-value projects. AI is not the only or always the best option, so accelerating discovery is key to target quick wins and re-evaluate.

Through enabling predictions and better exception management, AI is taming supply chain complexity and powering a digital transformation that brings more proactivity, efficiency, and results to the supply chain.

EXPLORE THE INTERSECTION OF PLANNING, POLICY, AND PRACTICE

EARN YOUR MASTER'S IN TRANSPORTATION POLICY, OPERATIONS, AND LOGISTICS



DRIVE YOUR FUTURE SCHAR.GMU.EDU/TPOL

High speed, best service

The Port of Long Beach and our partners move your goods to market quickly and efficiently while offering you unparalleled customer service.



INE

www.POLB.com

2019 GLOBAL LOGISTICS GUIDE

BY MIKE OGLE

SOURCES: World Bank GDP 2017, World Bank Exports 2017, World Bank Imports 2017, Taiwan Data, U.S. Exports/Imports, Japan Exports/Imports, U.S. FDI July 2018 report, World Economic Forum, International Monetary Fund Inbound Logistics' 15th annual Global Logistics Guide provides an around-the-world look at the issues, opportunities, and concerns likely to affect global supply chain networks.

Supply chains don't thrive on uncertainty, but that is what they are getting in 2019. Uncertainty regarding the U.S.-China relationship is motivating many companies to spread their manufacturing and logistics bets around Asia, gambling on finding the region more open and able to help than in years past. Regional agreements make it even easier to identify locations to establish operations and trade more freely throughout Asia.

Brexit uncertainty has many countries and companies scrambling to develop contingency plans to either mitigate possible losses of trade with Britain or to step into the potential void and establish new opportunities. An interesting mix of investment in global trade agreements and infrastructure contrasts with growing protectionism and unrest around the world focused on perceived growing trade imbalances.

Following the money always helps, so we offer the latest available data on Foreign Direct Investment (FDI) to understand where recent flows from the United States are going. Despite the uncertainty, overall growth of just below 3 percent is expected worldwide in 2019, but has been continually downgraded, particularly in the Euro zone.



Growing cooperation through trade pacts and joint investments among the region's countries is driving strength in Asia. Uncertainty surrounding the U.S.-China trade skirmish clouds the region's 2019 trade outlook. But the increased pressure and risk are already causing higher levels of investment in the region to flow to other countries—particularly Vietnam and Thailand, where labor costs are still low, but finding skilled workers is growing more challenging.

KEY

LPI The Logistics Performance Index ranges from 1 to 5, a higher score represents better performance. The World Bank provides this score based on its survey of forwarders and express carriers on the logistics "friendliness" of countries where they operate and trade. Countries are scored on customs, infrastructure, international shipments, logistics competence, tracking and tracing, and timeliness.

X FACTOR A +1, 0, or -1 score based on existing/potential disruptions or opportunities/strengths.

US FDI Foreign Direct Investment.

ALL AMOUNTS in US\$ billions.

HONG KONG

			/:
GDP	\$341	X FACTOR	2
EXPORTS	\$642		
IMPORTS	\$639		100
US FDI	\$81		Mod

China-U.S. trade tensions slowing economic arowth • Investina in high-speed rail hub and other links to mainland China Uncertainty over long-term relationship with mainland and autonomy regarding trade and infrastructure policies, despite 50-year autonomy guarantees promised in 1997 • Once the primary gateway to most Asian countries, but now fifth-busiest container port due to growth of other China ports • Wealth still greatly depends on tourism, retail, finance, and trade • Desirability results in space shortages and high costs.



VIETNAM

GDP	\$224	X FACTOR
EXPORTS	\$227	1
IMPORTS	\$221	
US FDI	NA	_

China's largest trading partner in the region, benefits most from U.S.-China trade issues • Aggressively participating in EU tariffs deal and the TPP, and joining WTO to increase global trade and encourage foreign investment • U.S. has become its largest export market, taking much of the low-tech, low-value work that once headed to China Speed of companies shifting to seek non-China r<mark>egional</mark> opportunities challenges shortterm infrastructure availability and facilities capacity, but the country is willing to invest and partner to make growth happen.

WORLD

BANK LPI

SCORE

1

SOUTH KOREA

#**S**#

GDP	\$1,531	X FACTOR
EXPORTS	\$660	
IMPORTS	\$577	
US FDI	\$42	U

Identified as early winner of the U.S.-China trade war, but in a relative sense • Strong center of manufacturing capability and exports, but traditionally concentrated in a group of large industrial conglomerates Currently affected by U.S.-China trade tensions and U.S. negotiations with North Korea • Reunification could provide a boost • Capable infrastructure and educated workforce with current low overall unemployment, but youth unemployment at 10 percent • Shipbuilding strength as a percentage of world output falling.

3.61 WORLD BANK LPI SCORE

CHINA

GDP	\$12,238	X FACTOR
EXPORTS	\$2,418	
IMPORTS	\$2,208	
US FDI	\$108	· L

U.S. trade war casts a potential shadow, but a growing middle class, strong and growing infrastructure, and technology strength provide counterbalance Shifting from a manufacturing base for exports toward services, consumption, and manufacturing for its own market Consumption is now more than half of the economy • Concerns regarding central controls and intellectual property • Multimonth manufacturing sector contraction not surprising due to trade tensions, but China also has governmental and industrial debt hangover.



JAPAN

GDP	\$4,872	X FACTO
EXPORTS	\$878	
IMPORTS	\$850	÷ ()
US FDI	\$129	

R

Stable, modern, tech-savvy, and pro-business economic policies make Japan the world's third-largest economy • China slowdown affects exports • Deal with EU eliminated most tariffs, primarily providing more cars and parts to EU, while greatly increasing openness for EU agricultural products in Japan • Traditionally strong in automation and technical talent • Debt-to-GDP still a concern • U.S. friendly and strong regional trade and military ally, which helps maintain free flow of trade in the region.

4.03 WORLD BANK LPI SCORE

THAILAND

GDP	\$455	X FACTOR
EXPORTS	\$310	1
IMPORTS	\$249	
US FDI	\$15	

New leadership is campaigning to encourage foreign investment Large investments in transportation and digital infrastructure for freight and tourism • Emphasis on Eastern Economic Corridor to connect to other regional trading partners Striving to rank in the top half of Bloomberg's Innovation Index within the next few years, but not yet part of TPP • Historical leadership and rights concerns remain, but the country promises law and education reforms.

3.41



The growing manufacturing capacity that is shifting from China to the rest of the region currently consists of lower-tech, lower-value goods for export rather than higher-tech, highervalue products. To expand, companies are laying off the risk to other countries in the region rather than moving out of China. The ASEAN Single Window initiative is helping regional economic integration by enabling electronic exchange of trade documents to expedite cargo clearance, so getting in with any ASEAN member can help speed flows throughout the region. That speed is important because omni-channel commerce using mobile devices is common throughout the region. In addition, the World Bank and Asian Infrastructure Investment Bank are making large infrastructure investments.

INDIA		
GDP	\$2,601	X FACTOR
EXPORTS	\$495	
IMPORTS	\$573	
US FDI 👋	\$44	

WORLD

BANK LPI SCORE

Diverse economy and large population with many highly educated people, but also many poor • Increased emphasis on improving road and power infrastructure to encourage trade investments • Strong move up to 35th from 54th in the Logistics Performance Index • Still a high percentage of population in agricultural industry • An emphasis on speaking English and historical western ties enable a strong information services industry, which drives supply chain excellence.





 GDP
 \$315
 X FACTOR

 EXPORTS
 \$225
 Imports

 IMPORTS
 \$203
 Imports

 US FDI
 \$15
 Imports

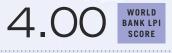
Third-largest trading partner with EU, after China and Singapore • Viewed as likely beneficiary of U.S.-China trade friction • Scaling back ambitious rail and road infrastructure plans coordinated with China, but primarily to achieve more realistic loan repayments • The world's sixthlargest natural rubber producer and top producer of rubber gloves Strong and growing electronics exports, but heavy reliance on China trade creates pressure • Trying to move up the value chain from lower-cost products.



SINGAPORE

GDP	\$324	X FACTOR
EXPORTS	\$561	-
IMPORTS	\$483	2
US FDI	\$274	

Small, but positioned as a strong Asian hub for trade, particularly because of its location along vital trade routes and investments in physical and digital logistics infrastructure • Produces and consumes little in comparison to the amount of trade facilitated • Strong ports and infrastructure Ranked fifth in the 2018 Global Innovation Index • Viewed as a top pro-business country with low corruption and tax rates • High GDP per capita with emphasis on education and higher-paying professions.



GDP	\$573	X FACTOR
EXPORTS	\$317	-
IMPORTS	\$260	
US FDI	\$17	

Remains an electronics production leader • Highly educated and traditionally Western-friendly • Push by U.S. and Chinese companies encouraged more integration with China, but current U.S.-China trade war leaves Taiwan in an uncertain position • Purchasing Managers' Index rank has fallen significantly over the past year to below 50 • Other countries have taken over Taiwan's previous leadership in many heavy industries.

3.60 BANK LPI

INDONESIA

GDP	\$1,016	X FACTOR
EXPORTS	\$207	\mathbf{a}
IMPORTS	\$195	• ()
US FDI	\$15	U

The world's fourth most populous country and largest market in Southeast Asia • Strong GDP growth, but also a fast-growing trade deficit, resulting in higher interest rates and import taxes • Greatly dependent on commodity pricing due to strength of natural resources, much of which helps fuel Chinese trade growth, but also suffers when demand drops • Rapidly expanding middle class

 Many global brands willing to establish a presence in major cities.



*: BANGLADESH

	-	
GDP	\$250	X FACTOR
EXPORTS	\$38	\mathbf{a}
IMPORTS	\$51	
US FDI	NA	U

Approximately 11,000 garment factories, ranking second to China, provide the greatest boost to economic development and nearly 80 percent of exports • History of catastrophic flooding and poverty, plus industrial accidents, but reforms and 6 percent annual growth for a decade are changing the story • The United Nations says the country will soon be able to graduate from Least Developed Country status • Technical capabilities around the country are not strong, but largest cities have invested in digital infrastructure.



KEY

LPI The Logistics Performance Index ranges from 1 to 5, a higher score represents better performance. The World Bank provides this score based on its survey of forwarders and express carriers on the logistics "friendliness" of countries where they operate and trade. Countries are scored on customs, infrastructure, international shipments, logistics competence, fracking and tracing, and timeliness.

X FACTOR A +1, 0, or -1 score based on existing/potential disruptions or opportunities/strengths.

US FDI Foreign Direct Investment.

ALL AMOUNTS in US\$ billions.



Civil unrest wrapped around transportation issues • Unemployment high compared to other advanced economies in the region • Has a reputation for regulatory burdens on business • Strength in research institutions and well-positioned logistically Capable infrastructure for current and increased trade, plus leading initiatives focused on flow of goods within cities • Healthy export growth • Concern over too much reliance on relatively lowertech industries that face global competition.

3.84 WORLD BANK LPI

KEY

LPI The Logistics Performance Index ranges from 1 to 5, a higher score represents better performance. The World Bank provides this score based on its survey of forwarders and express carriers on the logistics "friendliness" of countries where they operate and trade. Countries are scored on customs, infrastructure, international shipments, logistics competence, tracking and tracing, and timeliness.

X FACTOR A +1, 0, or -1 score based on existing/potential disruptions or opportunities/strengths.

US FDI Foreign Direct Investment.

ALL AMOUNTS in US\$ billions.

UNITED KINGDOM

	ΨZ,0ZZ	. ATAOTON
EXPORTS	\$801	1
IMPORTS	\$837	: _
US FDI	\$748	_

Brexit uncertainty reportedly causing stockpiling plus heavy planning for alternative sourcing locations and facilities to maintain easy EU access • Risk of a potentially slower EU supply chain • Could be an opportunity for non-EU companies and countries wanting UK access to make deals • Still one of the most diverse countries in the world regarding the global distribution of goods • London will still be a financial flow capital and remain attractive to world trade.

WORLD

BANK LPI

SCORE

SWITZERLAND

 GDP
 \$679
 X FACTOR

 EXPORTS
 \$441
 Imports
 \$366

 US FDI
 \$250
 \$250
 \$366

Tops the 2018 Global Innovation Index • Recognized as one of the world's most open and sophisticated economies • Emphasizes quality education and R&D • Highly dependent on global trade, but GDP growth has been low in recent years • Due to its location, not known as a logistics hub, but has well-developed transportation infrastructure and a budget position to maintain it Strong base for merchandising companies that facilitate global flows of goods without those goods actually passing through the country.



CZECH REPUBLIC

 GDP
 \$216
 X FACTOR

 EXPORTS
 \$171
 Imports
 \$156

 US FDI
 \$5
 \$5
 \$1

Working with the EU as a lowcost industrial producer and exporter greatly boosted GDP and lowered unemployment • Approximately 80 percent of GDP relies on exports, creating greater exposure to economic cycles and trade contractions • One of the lowest unemployment rates in the EU, but that is constraining continued industrial growth and causing higher wages • Raising interest rates significantly to cool a booming economy • Large lithium reserve, estimated at 3 percent of world supply, may help fuel a lithium and battery industry to support auto manufacturers.





Well-connected transport network, with Brussels serving as the EU center • Diversified economy includes both high-tech and heavy industry • Completely dependent on external energy sources and closing all nuclear facilities • Attempts to raise competitiveness by adjusting labor policies and benefits are causing increasing strike threats • High debt ratio • Heavily exposed to UK trade and Brexit outcome.

4.04 WORLD BANK LPI SCORE

GERMANY

GDP	\$3,677	: X FACTOR	ļ
EXPORTS	\$1,737		
IMPORTS	\$1,459		
US FDI	\$136		

Still a machinery and automation powerhouse • Strong tech, workforce, and innovation make it the leader in the region in manufacturing capacity and a center of EU finance and direction • Recent growth of the world's fifth-largest economy has slowed to around 1 percent and current downward revisions point to more of the same along with the rest of the Euro zone • Demographically challenged for continued growth Energy challenges with plans to end production at all nuclear plants by 2022 and switch to renewables.





The sheer size of the EU—both geographically and its 28 member countries—has the greatest influence on the region, providing unified trade direction and planning within the EU and globally. Not immune to global trade tensions and affected by an internal rise of protectionism within several members, the entire region would likely prefer no Brexit and certainly not a no-deal Brexit. Western Europe has great strength in markets, logistics infrastructure, and technical capability, particularly in high-tech-capable Germany and Switzerland, along with the Netherlands' logistics strength. Its many ports and interconnected road and rail systems provide advantages for companies establishing bases, whether within its EU members or not. Eastern Europe is still establishing logistics infrastructure, but the EU is emphasizing development of Eastern Europe capabilities through considerable investment. Domestic demand has been strong.

NETHERLANDS

GDP	\$826	X FACTOR
EXPORTS	\$714	
IMPORTS	\$618	
US FDI	\$937	

One of the world's strongest logistics hubs for global trade connections for a variety of products • The sixth-largest EU economy • Viewed as businessfriendly, with an emphasis on education and high scores in almost every global business ranking • Capable in agriculture, but more in processing, making it second in agricultural exports. Looking to build upon recently developed "Food Valley" food technology capabilities and research • Well-respected for openness regarding innovation and entrepreneurship.

 BOLAND

 GDP
 \$526
 X FACTOR

 EXPORTS
 \$286

 IMPORTS
 \$265

 US FDI
 \$13

Strong growth in past two years • Business-friendly in general, but not highly entrepreneurial, with excessive regulatory restrictions • Facing worker shortages due to economic successes and demands, plus a shrinking population • Turning to surrounding countries, primarily the Ukraine, to provide additional workers • Logistics infrastructure needs greater investment • A history of heavy industry, but has pursued diversifying its economy.



NORTH AMERICA

North, Central, and South America clearly follow their separate identities, with three vastly different sets of economies. North America is by far the best performer and the leader in infrastructure, political stability, and overall capabilities. Central America is the weakest performer overall but has Panama as its shining difference maker, serving as the most likely base for any company wishing to not just reach regional markets, but to conduct international business as well.

CANADA

GDP	\$1,653	X FACTOR
EXPORTS	\$511	\mathbf{a}
IMPORTS	\$548	÷ ()
US FDI	\$391	

U.S.-Canada trade relationship the greatest influence on economy and flow of goods, accounting for approximately 75 percent of Canadian exports Abundant natural resources. highly educated population, stable government • Very capable east-west ports and road/rail systems infrastructure More open to immigration than U.S., but targets specific skills needs • More plans than U.S. to participate in multicountry trade pacts • Viewed as having restrictive policies regarding some industries such as electricity, air transport, and distribution.

3.73 WORLD BANK LPI SCORE

MEXICO

-		
GDP	\$1,151	X FACTOR
EXPORTS	\$436	
IMPORTS	\$457	- () -
US FDI	\$110	

The world's 11th largest economy has great promise as a close-by and high-volume trading partner to the U.S. • Steadily becoming more competitive vs. China as a lower-cost producer • Greatly encouraged by onset of USMCA Growing GDP recently at around 2 percent • Inequality, poverty, crime remain concerns • Transformed leadership promises corruption and crime reforms, plus increased public investment and support for an apprentice program • More than 90 percent of trade is under free trade agreements.

WORLD BANK LPI SCORE

UNITED STATES

GDP	\$19,391	X FACTOR
EXPORTS	\$2,329	6
IMPORTS	\$2,895	200
US FDI	NA	
		- 37

One of the world's economic bright spots in 2018 due to tax reform stimulus that boosted growth • Low unemployment and job creation, but without significant increases in wages and inflation • Shadows cast by China trade war, relationship with Mexico, an attitude toward multi-country trade agreements Growing deficit is a concern, particularly when considering potential infrastructure investments • Strong technological capability • High levels of oil and gas production have boosted economic position • Deregulation fueling growth in many sectors.



KEY

LPI The Logistics Performance Index ranges from 1 to 5, a higher score represents better performance. The World Bank provides this score based on its survey of forwarders and express carriers on the logistics "friendliness" of countries where they operate and trade. Countries are scored on customs, infrastructure, international shipments, logistics competence, tracking and tracing and timeliness.

X FACTOR A +1, 0, or -1 score based on existing/potential disruptions or opportunities/strengths.

US FDI Foreign Direct Investment.

ALL AMOUNTS in US\$ billions.

PANAMA

GDP	\$62	X FACTOR
EXPORTS	\$26	
IMPORTS	\$28	
US FDI	\$5	

Economic and logistics leader in Central America due to Panama Canal doubling of capacity and other infrastructure and finance investments • Strong GDP growth and historically fastest and longest economic expansion in Latin America, averaging about 6 percent for a quarter century Rise of global trade helpful to economy, but also exposed to slowing of that trade due to global protectionism • Attractive base for business in the region with a good business-friendly reputation Income distribution a concern, but high income per capita for Latin America.

3.28 WORLD BANK LPI SCORE

COLOMBIA

GDP	\$314	X FACTOR
EXPORTS	\$46	
IMPORTS	\$62	
US FDI	\$7	

Mining, oil exploration, market reforms, and greater stability in politics helped make great strides and shake off much of the reputation for drugs and civil conflict • More strides needed in developing logistics infrastructure, but high investment underway in a tripling of spending on transport infrastructure • Too much reliance still on energy and mining exports World's second-largest cut flowers exporter, a fact not widely known • Corruption issues remain Many free trade agreements developed and in progress.

WORLD 2.9 BANK LPI SCORE

SOUTH AME<mark>RICA</mark>

South America is strong, but has little consistency from country to country. Brazil is the largest physically and economically, but international business friendliness is better found in Chile. Colombia is rising, but challenged by infrastructure issues. Venezuela is likely lost as a trade destination for a generation unless dramatic change takes place. Many rich resources exist, and for decades many have talked about South America's potential, but political instabilities and infrastructure have limited trade to agricultural resource-focused exports. Some of that focus will continue for South and Central America as advanced countries worldwide seek resources and locations for lower-value manufacturing work until their economies and stable leadership evolve and they begin turning toward internal development.

BRAZIL		
GDP	\$2,056	X FACTOR
EXPORTS	\$258	$\mathbf{\alpha}$
IMPORTS	\$237	• ()
US FDI	\$68	
-		

Largest Latin American economy and eighth largest in the world also has high level of debt • Strong foreign direct investment aimed toward developing its own economy rather than converting resources for export, however Chinese investment is high and typically focuses on resources • Low recent GDP growth expected to rise • Inflation at record lows • Wages higher than other average advanced economies and public pension system needs reform • Needs significant investment in transportation infrastructure • Working on free market reforms.



*		
CHILE		
GDP	\$277	X FACTOR
EXPORTS	\$80	- -
IMPORTS	\$75	
US FDI	\$26	

Most prosperous and most North American-friendly trading nation in South America • First country to sign pre-emptive agreement with UK when/if Brexit is complete • First nation to sign free-trade agreement with China in 2005 • Long known for mining copper, also has the world's largest lithium reserves; pursuing a leadership position in batteries manufacturing, but currently most batteries are made in South Korea and China • Strong in agriculture, particularly wine and cherries • Focused on cutting red tape and continuing FDI growth.



KEY

LPI The Logistics Performance Index ranges from 1 to 5, a higher score represents better performance. The World Bank provides this score based on its survey of forwarders and express carriers on the logistics "friendliness" of countries where they operate and trade. Countries are scored on customs, infrastructure, international shipments, logistics competence, tracking and tracing, and timeliness.

X FACTOR A +1, 0, or -1 score based on existing/potential disruptions or opportunities/strengths.

US FDI Foreign Direct Investment.

ALL AMOUNTS in US\$ billions.

C* TURKEY GDP \$ EXPORTS \$

IMPORTS

US FDI

\$852 X FACTOR \$211 \$250 \$4

Suffered one of the largest currency collapses in recent history • Ranks well in infrastructure, education, and innovation, but uncertain political stability and freedoms • Despite leadership and relationship tensions, a strong free-market economy • Starting and running businesses difficult • Agriculture still a relatively high 25 percent of employment compared to peers • Highly dependent on imported energy, creating vulnerability to price changes • Developed great production and export diversity to become a good base for multi-national companies to establish a regional presence.

WORLD BANK LPI SCORE



Russia has been the outsider as it continues to pursue conflicting policy with the EU and the rest of the world, but also continues to provide significant flows of energy to Europe. Sanctions and a challenged business environment are expected to continue both for Russia and its nearby neighbors, making the micro-region less attractive for investment.

•	
•	
•	
•	
•	

UKRAINE

GDP	\$112	X FACTOR
EXPORTS	\$54	1
IMPORTS	\$62	
US FDI	NA	
		-1

Since Crimea annexation, tensions with Russia continue to drag down trade and investment, but agreements have the EU replacing Russia as top trading partner • Strong traditional agricultural producer • Low but positive growth in recent years following previous heavy GDP drops • IMF providing funding boost to help with economic growth policies and stabilize cash flow • Increasingly trained and motivated workforce.



RUSSIA

GDP	\$1,578	X FACTOR
EXPORTS	\$411	1
IMPORTS	\$326	
US FDI	\$14	L .

Made progress over time to be more market-driven rather than a central planning state, but still too much state control and power in the hands of too few • A large, valuable economy for those who are willing to navigate the hurdles • High dependence on the price of the oil and gas it produces, causing large economic swings, but also exposed to the price of metals it produces, particularly aluminum and steel • International sanctions following global adventurism and interference have hurt the economy • Infrastructure to serve internal market is challenged.





THE STRENGTH AND SPEED OF A POWERHOUSE POR

With a robust transportation network and a roster of more than 20 ocean carriers, Port Everglades provides the quickest, most strategic course from ship to shore, and beyond. Count on us to move your cargo in powerful new ways. Visit porteverglades.net or call 800-421-0188.

- · Less than one mile from the Atlantic Shipping Lanes
- Direct highway access
- One traffic signal to Los Angeles
- Rail connections throughout the U.S.
- On-port Foreign-Trade Zone
- Ocean shipping to 150 ports in 70 countries





MIDDLE EAST & AFRICA

The Middle East continues to be highly dependent on oil and gas, but all countries in this guide are diversifying their economies before reserves run out. Significant reforms encourage international businesses to invest in the Middle East, but may not be happening fast enough for young professionals looking for opportunities outside oil and gas. In Africa, countries vary in economic health and leadership stability, but infrastructure for trade within the continent remains challenged. South Africa, long the region's strongest economic star, faces challenges regarding race relations and some basic capabilities, such as water supply. However, its economy is diverse and focused on connecting with the world. With better infrastructure, South Africa will be wellpositioned to be an even stronger leader.

SOUTH AFRICA

GDP	\$349	X FACTOR
EXPORTS	\$104	\mathbf{a}
IMPORTS	\$99	
US FDI	\$7	

Leads the region in political stability and history of strong trade ties to the western world, but also has significant inequality and high unemployment • Recent challenges with water availability, but has rich supplies of other natural resources • Best positioned to serve as the base of industrial operations in the region if it can develop better logistics infrastructure and political stability.

UNITED ARAB EMIRATES

GDP	\$283	X FACTOR
EXPORTS	\$384	
IMPORTS	\$277	• ()
US FDI	\$17	

Continues to diversify its economy beyond oil and gas, but those commodities still contribute to the majority of the country's wealth • Business friendly with free trade zones and low taxes as part of the plan to be the region's premier trade hub • Energy pricing still the greatest influence on economic measures • Diversifying the economy by enabing greater foreign ownership in businesses and allowing longer visas to encourage external business interests.



QATAR GDP \$167 X FACTOR EXPORTS \$85 IMPORTS \$62 US FDI NA

Oil and gas are greatest assets • Quitting OPEC surprised many • Signed agreement with EU to open up air transport, the first in the region • Conflict with other Gulf states over a variety of issues creates little opportunity to partner for growth • Faith in ability to develop infrastructure resulted in winning 2022 World Cup bid • Established new trade routes following 2017 blockage by Saudi Arabia, the UAE, and other states • Pushing to diversify in technology, finance, and services.



SAUDI ARABIA

GDP	\$687	X FACTOR
EXPORTS	\$239	
IMPORTS	\$196	
US FDI	\$11	U

With UAE, highly influential in the region • High unemployment among young people, attributed to employing many lowcost foreign workers • Prince Mohammed promises to grow opportunities for youth focused on developing a more diverse economy • Despite desire to reduce reliance on oil and gas, pursuing external projects internationally to compete with other multi-national companies since Saudi Aramco is state owned. • Rise of U.S. energy prominence impacts ability to sell and keeps prices artificially low.

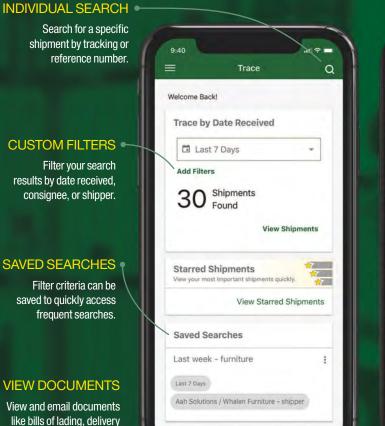


X FACTOR A +1, 0, or -1 score based on existing/potential disruptions or opportunities/strengths. US FDI Foreign Direct Investment. ALL AMOUNTS in US\$ billions.

KEY

LPI The Logistics Performance Index ranges from 1 to 5, a higher score represents better performance. The World Bank provides this score based on its survey of forwarders and express carriers on the logistics "friendliness" of countries where they operate and trade. Countries are scored on customs, infrastructure, international shipments, logistics competence, tracking and tracing, and timeliness.

Introducing Lynden's New Mobile App!



		-		
			,ıll 🕆 🗖	
9:40	-		: /	
K Back	30 Shipm	30 Shipments		
-	CONSIGNEE	STATUS	LYNDEN CO.	
SHIPPER	WHALEN FURN	TURE	Shipper	
	BNA	+ SJU		
5716890 n Transit	e Number - Leigin	Dieren	50	
55W/d	LAY	→ SAN	公	
5718880	(Number drigt	Deployed	al r	
n Transit			1	
5718878	LAX	→ LAX	ioi	
Received			M 0	
5719522		→ LAX	*	
Received	okumuer gingin	Desting		
AAH SOLU	TIONS / WHALEN	(FLIDA	5	
5717176			IRE Shipper	
In Transit	Number SAV	+ CLT Destinat	lien 🕁	
5717175			-	
In Transit	Mumber SAV	+ EWR	ion 🗘	
			5	
		and a	Raa 9	

SHARE RESULTS

Export and email a spreadsheet of your shipment tracking results.

SIMPLE SORTING Sort your shipments by

shipper, consignee, status, or Lynden company.

STAR FAVORITES

Mark important shipments using the star feature so they can be quickly viewed later.

STAY ALERT

Receive shipment status updates via email by clicking on the alerts icon.



receipts, and invoices.

Lynden is continually looking for ways to streamline the shipping and logistics process. Our new mobile app was developed based on feedback from customers and provides accurate, up-to-date shipment information directly from your iPhone or Android device. Easily view shipments without having to remember a tracking number; sort, filter and search to find exactly what you are looking for, whenever you need it.

To download or learn more visit www.lynden.com/mobile, or search "Lynden" in the App Store or Google Play.

GTM 2019 GUIDE



Managing a global supply chain is complex, so condensing and simplifying your processes is a must. That's where a global trade management (GTM) system comes in.

GTM systems connect sourcing and logistics to make global trade transparent, efficient, and as cost-effective as possible. They work to mitigate the risk of failing to comply with trade restrictions by offering a number of tools that manage documentation and customs clearance and facilitate collaboration among trading partners for end-to-end efficiency. From resource planning and transportation management to analytics and reporting, these solutions can help take some stress out of managing your global supply chain.

If you're in the market for a GTM solution, our Global Trade Management guide can help. We list some of the leading vendors in the sector, along with product descriptions and functionalities, to help you build your short list of prospective solutions.

GLOBAL TRADE MANAGEMENT

Some leading vendors in the GTM Solutions market

ACUITIVE SOLUTIONS

Charlotte, NC • acuitivesolutions.com

> Global TMS

Platform: Cloud based

Description: Dynamically routes inbound/ outbound shipments to align mode, provider, and service selections based on each shipment's need/cost.

Functionality: Supplier management, transportation management

APTEAN

Alpharetta, GA • aptean.com

> TradeBeam

Platform: Cloud based

Description: Agile, multi-tenant, highly secure platform that integrates easily with other back-office solutions.

Functionality: Transportation management, event management, compliance content, analytics and reporting

AMBER ROAD

East Rutherford, NJ • amberroad.com

> Global Trade Management Solutions

Platform: Cloud based

Description: Plans, optimizes, and executes all aspects of global trade with broad functionality.

Functionality: Supplier management, transportation management, booking functionality, compliance content, analytics and reporting, FTZ

BLINCO SYSTEMS

Toronto, ON • 3rdwave.co

> 3rd Wave Global Trade Solutions

Platform: Licensed to user (installed locally), cloud based

Description: Reduces complexity of operations, delivers visibility, and supports collaboration among internal and external partners and providers.

Functionality: Supplier management, transportation management, booking functionality, event management, compliance content, analytics and reporting, FTZ

BLUJAY SOLUTIONS

Chelmsford, MA • blujaysolutions.com

> Customs Management

Platform: Licensed to user (installed locally), hosted on the vendor's website, cloud based

Description: Manages connectivity to all global customs agencies and stays up to date with customs and compliance regulations around the world.

Functionality: Supplier management, transportation management, booking functionality, event management, compliance content, analytics and reporting

CARGOSMART

San Jose, CA • cargosmart.com

> CargoSmart Transportation Management

Platform: Hosted on the vendor's website, cloud based

Description: Provides global shipment management solutions that benchmark ocean carrier sailing schedules, performance, and contracts. Leverages IoT, weather, and news data for enhanced shipment visibility.

Functionality: Supplier management, transportation management, booking functionality, event management, compliance content, analytics and reporting

CDM SOFTWARE

Houston, TX • cdmsoft.com

> Global Trade Management Software

Platform: Licensed to user (installed locally), cloud based

Description: Offers efficient global trade solutions that reduce paper trails and let businesses trade electronic information using the latest technology.

Functionality: Supplier management, transportation management, booking functionality, event management, compliance content, analytics and reporting, FTZ [GUIDE] **GLOBAL TRADE MANAGEMENT**

Some leading vendors in the GTM Solutions market

CLEARTRACK

Brentwood, TX • cleartrack.com

> Clarity for Global Trade Management

Platform: Hosted on the vendor's website, cloud based

Description: Offers applications and professional services configured to fit each organization's requirements. Manages the complexities of today's global trading networks through a unified collaboration network offering managed data services, business intelligence reporting, and advanced analytics to protect brands, control costs, reduce risks, and maintain trust.

Functionality: Supplier management, transportation management, booking functionality, event management, compliance content, analytics and reporting

DESCARTES SYSTEMS GROUP

Waterloo, ON • descartes.com

> Global Trade Content

Platform: Licensed to user (installed locally), hosted on the vendor's website, cloud based

Description: Provides management tools for logistics operations, compliance, classification, valuation, denied party screening, and market research.

Functionality: Supplier management, transportation management, booking functionality, event management, compliance content, analytics and reporting, FTZ

eCUSTOMS

Buffalo, NY • visualcompliance.com

> Visual Compliance

Platform: Licensed to user (installed locally), hosted on the vendor's website, cloud based

Description: Includes compliance solutions such as restricted party screening, integration, license management, classification, document creation, and AES filing.

Functionality: Supplier management, transportation management, booking functionality, event management, compliance content, analytics and reporting, FTZ

Elemica

Wayne, PA elemica.com

> Elemica QuickLink Email Buy

Platform: Cloud based

Description: Allows businesses to integrate suppliers into their processs network without requiring suppliers to have integration software. Automatically converts electronic purchase orders to email and routes them to suppliers to support end-to-end transaction processing, giving full visibility to orders.

Functionality: Supplier management, booking functionality, event management, analytics and reporting

E-FREIGHT TECHNOLOGY

Alhambra, CA • efreightech.com

> eCargo

Platform: Licensed to user (installed locally), hosted on the vendor's website, cloud based

Description: Offers freight management, security filing, and supply chain management solutions to serve the forwarding and international shipping industries.

Functionality: Supplier management, transportation management, booking functionality, event management, compliance content, analytics and reporting

GLOBAL TRADE MANAGEMENT

Some leading vendors in the GTM Solutions market

ENVISTA

Carmel, IN • envistacorp.com

> myShipINFO

Platform: Licensed to user (installed locally), hosted on the vendor's website, cloud based

Description: Provides shipment visibility, carrier performance monitoring, management reporting, currency, and VAT visibility across all modes through cloud-based, global freight audit and payment solutions.

Functionality: Transportation management, compliance content, analytics and reporting

FREIGHTOS

Miami Beach, FL • freightos.com

> International Freight Marketplace

Platform: Cloud based

Description: Helps top-tier Beneficial Cargo Owners reduce costs and increase efficiency with instant air, ocean, and land freight quote comparisons, booking, and management across 50+ global logistics providers and carriers.

Functionality: Supplier management, transportation management, booking functionality, analytics and reporting

GTKONNECT

Irvine, CA • gtkonnect.com

> GTM Platform

Platform: Licensed to user (installed locally), hosted on the vendor's website, cloud based

Description: Features a highend platform with end-to-end solutions and capabilities to enhance global trade management efficiencies.

Functionality: Supplier management, transportation management, booking functionality, event management, compliance content, analytics and reporting

FREIGHTGATE

Fountain Valley, CA • freightgate.com

> Transportation Management System

Platform: Licensed to user (installed locally), cloud based

Description: Provides transportation management software for all modes of transportation. Offers global rate management, global tender management, and global visibility solutions.

Functionality: Supplier management, transportation management, booking functionality, event management, compliance content, analytics and reporting

GT NEXUS

Oakland, CA • gtnexus.com

> GT Nexus Commerce Network

Platform: Licensed to user (installed locally), hosted on the vendor's website, cloud based

Description: Cloud-based collaboration platform that automates supply chain processes across entire global trade communities.

Functionality: Supplier management, transportation management, booking functionality, event management, compliance content, analytics and reporting, FTZ

INTEGRATION POINT

Charlotte, NC • integrationpoint.com

> Integration Point Platform

Platform: Cloud based

Description: Suite of global management products enabling companies to achieve global compliance while maximizing supply chain savings.

Functionality: Compliance content, analytics and reporting, FTZ

LOG-NET

Tinton Falls, NJ • log-net.com

> LOG-NET Platform

Platform: Cloud based

Description: Capabilities include order management, supplier management, visibility, customs ISF, and entry costs, all through multiple modes of transportation.

Functionality: Supplier management, transportation management, booking functionality, analytics and reporting

[GUIDE] **GLOBAL TRADE MANAGEMENT**

Some leading vendors in the GTM Solutions market

MIQ LOGISTICS

Overland Park, KS • mig.com

> International Supply Chain

Platform: Licensed to user (installed locally), hosted on the vendor's website, cloud based

Description: Delivers value by combining services across MIQ Logistics to create a complete end-to-end solution.

Functionality: Supplier management, transportation management, booking functionality, event management, compliance content, analytics and reporting, FTZ

NAVEGATE

Mendota Heights, MN • navegate.com

> Navegate

Platform: Cloud based

Description: Provides supply chain visibility, end-to-end tracking, vendor/manufacturer compliance, organized collaboration, delivery and pick-up confirmations, and documents.

Functionality: Supplier management, transportation management, booking functionality, event management, compliance content, analytics and reporting, FTZ

nVISION GLOBAL

McDonough. GA • nvisionglobal.com

> iMpact TMS

Platform: Licensed to user (installed locally), hosted on the vendor's website, cloud based

Description: This global track-and-trace tool with multi-mode, multi-carrier visibility provides supplier/order management and shipment planning and execution.

Functionality: Supplier management, transportation management, booking functionality, event management, compliance content, analytics and reporting, FTZ

ORACLE

Redwood City, CA • oracle.com

> Global Trade Management Cloud

Platform: Licensed to user (installed locally), hosted on the vendor's website, cloud based

Description: Optimizes and streamlines business processes related to cross-border trade.

Functionality: Supplier management, transportation management, booking functionality, event management, compliance content, analytics and reporting, FTZ

PRECISION SOFTWARE (QAD)

Downers Grove, IL • precisionsoftware.com

> Global Trade Management Software

Platform: Licensed to user (installed locally), cloud based

Description: Automates documentation production and customs reporting to help companies adhere to regulatory requirements and reduce hidden costs.

Functionality: Transportation management. compliance content, analytics and reporting

QUESTAWEB

Clark, NJ • guestaweb.com

> Global Trade Management Software

Platform: Licensed to user (installed locally), cloud based

Description: Facilitates timely and compliant movement of goods from origin to destination, across borders, anywhere in the world.

Functionality: Supplier management, transportation management, booking functionality, event management, compliance content, analytics and reporting, FTZ

GLOBAL TRADE MANAGEMENT

Some leading vendors in the GTM Solutions market

SAP

Newtown Square, PA • sap.com

> SAP Transportation Management

Platform: Licensed to user (installed locally), cloud based

Description: Speeds customs clearance, reducing unnecessary delays, and minimizes fines and penalties from trade compliance violations

Functionality: Supplier management, transportation management, booking functionality, event management, compliance content, analytics and reporting, FTZ

SEKO LOGISTICS

Itasca, IL • sekologistics.com

> Global Trade Management Tool

Platform: Licensed to user (installed locally), hosted on the vendor's website, cloud based

Description: Provides instant access to all current regulations, for any combination of countries, with full integration into MySEKO.

Functionality: Supplier management, transportation management, booking functionality, event management, compliance content, analytics and reporting, FTZ

TOC LOGISTICS

Indianapolis, IN • toclogistics.com

> Global Logistics Services

Platform: Hosted on the vendor's website

Description: Provides visibility and metrics tracking and reporting.

Functionality: Supplier management, transportation management, booking functionality, compliance content, analytics and reporting, FTZ

TRANSPOREON GROUP

Fort Washington, PA • transporeon-group.com

> Transporeon & Ticontract

Platform: Cloud based

Description: Collaborative, modular logistics platform that links manufacturers, retailers, and wholesalers with logistics service providers, connecting a global network of more than 1,000 shippers and trading companies, almost 90,000 carriers, and more than 100,000 users in 100-plus countries.

Functionality: Supplier management, transportation management, booking functionality, analytics and reporting, FTZ

TRANSPORTATION INSIGHT

Hickory, NC • transportationinsight.com

> International Logistics

Platform: Cloud based

Description: Combines multi-modal expertise with a blended technology platform to improve agility to respond to changing global shipping demands.

Functionality: Transportation management, booking functionality, event management, compliance content, analytics and reporting, FTZ

TRANSPORTGISTICS

Mt. Sinai, NY • transportgistics.com

> TGI

Platform: Licensed to user (installed locally), hosted on the vendor's website, cloud based

Description: Easy-to-execute global rate management portal with bid/response capabilities, as well as tendering, tracking, rating, reporting, and analysis.

Functionality: Supplier management, transportation management, booking functionality, event management, compliance content, analytics and reporting

5 REGIONS AND COUNTRIES THAT MERIT SERIOUS THOUGHT BY ANY COMPANY DOING BUSINESS GLOBALLY

THE

 \bigcirc

BY BETH PRIDE



ever has trade held such a prominent place in the minds of corporate leaders. The economic and supply impacts of

tariff and non-tariff barriers pose a credible threat to corporate success; they also might push some small to mid-sized enterprises to the brink of failure. The trade wars and other protectionist actions led by the United States and followed by many other countries are not going away soon.

Five regions/countries merit serious thought by any company doing business globally: the United States, Canada and Mexico, the United Kingdom, Russia, and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) countries.

UNITED STATES OF TARIFFS AND TRADE WARS

President Trump has implemented some protectionist policies that may backfire against some U.S. companies. For example, Section 201 tariffs on washers and solar panels; Section 232 tariffs on steel, aluminum, and uranium; and Section 301 tariffs on Chinese Intellectual Property represent \$32 billion worth of new taxes on American business.

If the increases originally scheduled for March 2, 2019, are eventually implemented, the total impact rises to \$129 billion. If the administration moves ahead with imposing additional tariffs, long-run Gross Domestic Product (GDP) would fall by 0.38 percent (\$94.4 billion) and wages by 0.24 percent.

Additionally, 292,600 full-time equivalent jobs would be eliminated, according to the Tax Foundation Taxes and Growth Model, April 2018. Global trade has gotten even more complicated now that countries including China, the European Union, India, Turkey, Russia, Canada, and Mexico are imposing \$29.1 billion in retaliatory tariffs on many goods that are essential to the U.S. economy. American farmers shut out of foreign markets due to the retaliatory tariffs have been promised a \$12-billion bailout program but had received only \$838 million as of November 2018.

And while the "truce" between China and the United States allowed China to buy U.S. soybeans for the first time since July 2018, it's still a fraction of what's imported during a typical year.

As a result, many companies are reviewing their supply chains and looking to move manufacturing operations from China to countries not subject to these tariffs. Companies that cannot quickly or cost-effectively move their manufacturing are looking at engineering design changes to avoid the tariffs. Some companies are scrambling to request exclusions from these tariffs, however less than 25 percent of such requests have been approved.

The bill that averted the government shutdown in February 2019 included \$4.5 million for "contractor support to implement the product exclusion process for articles covered by actions taken under Section 232," according to bill text posted by the House Appropriations Committee.

CANADA AND MEXICO FREE TRADE AGREEMENT?

On December 1, 2018, U.S., Mexican, and Canadian leaders signed the United States-Mexico-Canada Agreement (USMCA) at this year's G-20 meeting after NAFTA had been renegotiated. It still needs to be ratified by each country's legislature, which will be a lengthy process. Estimates are that the agreement won't go into effect before 2020.

The bitter reality is that any progress on Canada or Mexico ratifying USMCA will be stalled until the United States removes the tariffs on aluminum and steel. Equally troubling is the likelihood that the U.S. House of Representatives will be reluctant to hand President Trump any type of political victory. Unfortunately, a USMCA implementation bill has yet to be introduced to Congress.

There is fear that Congress' failure to ratify USMCA would result in President Trump withdrawing from NAFTA, forcing some companies to pay duties and taxes on items that have been free for the past 25 years. Increasing the cost of goods traded between the North America countries could cripple all three economies.

UNITED KINGDOM Deal or no deal?

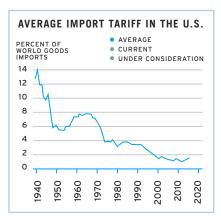
The United Kingdom is due to leave the European Union (EU) on March 29, 2019, unless the UK somehow changes its own laws. As of this publication date, it is looking less likely that any trade deal will be settled between the EU and the UK and there will be no deal on March 29th.

As we wait for news of deal or no deal, companies should be preparing for all eventualities of Brexit, whether deal, no deal, or the least-likely no Brexit. What should companies be considering? We recommend analyzing it from an organizational perspective.

The **trade compliance department** should consider how each scenario

TRADE PROTECTIONISM

IMPORTS AFFECTED BY NEW TARIFFS PERCENT OF WORLD GOODS IMPORTS REST OF WORLD UNITED STATES 6 5 4 3 2 1 0 Ω ģ ģ ģ ģ ģ œ Jan ٩ar May Jun , ang ö . Dec



IMPACT ON NOMINAL GDP OF TARIFF Hikes on all U.S.-China trade flows



If all new tariffs currently under consideration were to be implemented, more than 5 percent of global goods trade would be affected, and average U.S. tariff rates would increase to levels not seen since the late 1960s. The dampening impact of trade tensions involving major economies could be amplified by adverse confidence effects. The cost of protectionism can be multiplied through global value linkages, particularly in emerging markets.

SOURCE: GLOBAL ECONOMIC PROSPECTS, WORLD BANK GROUP impacts the export license requirements for dual-use items from the UK to the EU, and vice versa. Companies should have inventories of all existing export licenses issued in the UK. They should classify and value goods correctly for import, export, and customs documentation for the UK supply chain when Brexit happens.

Tax and finance departments should consider the value-added tax (VAT) impact of the various scenarios and identify deferment options and budget for customs duty expenses on imports in and out of the UK.

Deal Brexit may result in new preferential trade agreements and No Deal Brexit will apply the World Trade Organization's most-favored-nation duty rate, which will have significant fiscal impact. Companies should register for an Economic Operator Registration and Identification (EORI) number for shipments in/out of the UK to the EU, a requirement for any party intending to import to, or export from, the EU.

The movement of goods between countries within the EU is described as "arrivals and dispatches" while goods moving across EU borders are "imports and exports." If the UK separates from the EU, movement of goods in and out of the UK will require an EORI for shipments to the EU.

Contracts and product compliance departments should review contracts for Incoterms (standard commercial terms). They should update contracts and commercial invoices to reflect "importer" and "exporter" language, as well as specific product compliance language. And companies should determine whether their products require declaration of compliance with EU safety legislation.

Human resource departments should review all EU nationals in the UK, and UK nationals in the EU, because there may be visa considerations.

The IT department must consider GDPR compliance and the reality that they cannot store customer data in the UK. They will need to move UK servers to a server in an EU country.

RUSSIA It's complicated

In recent years, the United States has implemented economic sanctions on Russian people or entities, including banks, oligarchs, cyber contractors, business tycoons, and a shipping agent. Treasury Department Office of Foreign Assets Control sanctions were put in place following Russia's military intervention in the Ukraine and annexation of Crimea.

The sanctions added a significant administrative burden to U.S. companies doing business with Russia, requiring them to determine if one or more blocked person owns 50 percent or more in the aggregate of an entity. Companies have to secure ownership details that may not be publicly available or may be difficult to obtain and validate.

For many years Russia has enacted tariff and non-tariff barriers on U.S. companies, including technical regulations and product testing and certification requirements that pose significant barriers because only entities registered and residing in Russia can apply for these product certifications. Importing alcohol products requires all customs duties, excise taxes, and VAT be paid in advance using a bank guarantee and deposit.

A myriad of Russian government agencies administer licenses that add complexity that companies do not face in other countries. Almost all U.S. food and agricultural exports have been banned since 2014, when the United States imposed sanctions on Russia.

Russia has specifically enacted laws that give priority to Russian software. Russian government agencies can buy foreign software only when similar software is not available on the Russian Communications Ministry software registry. The Russian Federal Service for Supervision of the Sphere of Telecom Information Technologies and Mass Communications can fine Russian citizens who store personal data on servers physically located outside of Russia.

And Russia, like many countries,

has imposed retaliatory tariffs of 25 to 40 percent on U.S.-origin products in response to U.S. Section 232 tariffs on steel and aluminum. There are Russianmade substitutes for all these products, such as road construction equipment, oil and gas equipment, tools for metal processing and rock drilling, and fiber optics.

In December 2018, the World Trade Organization Dispute Settlement Body approved the United States' second request for formation of a dispute panel to review the legality of Russia's tariffs in response to U.S. Section 232 tariffs on steel and aluminum.

CPTPP COUNTRIES Something to hope for

When the United State withdrew from the Trans-Pacific Partnership (TPP) Agreement, the 11 remaining TPP nations (Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam) moved forward and negotiated a new trade agreement the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), also known as the TPP11 or TPP-11. The combined economies of these 11 countries equal 13.4 percent of the U.S. GDP.

These 11 countries, a majority of which have centers of manufacturing excellence, are worth watching in the coming years. They didn't slow down when the United States withdrew from the TPP; instead they recrafted a deal that will lower tariffs among their countries

The signatories are also keen to dampen Chinese influence in the region by reducing their dependence on Chinese trade. This is something that the U.S. administration should welcome and salute. Had the United States remained in the agreement, a biproduct was that all the signatories would be brought closer to the United States.

Companies will benefit by doing business in these countries now that the CPTPP entered into force on December 30, 2018. The agreement will generate significant economic benefits for Canada by providing access to Japan and other fast-growing markets, including Malaysia and Vietnam.

The expectation is that these benefits will also extend to new members. CPTPP members will gain a predictable trading environment that will give manufacturers and exporters an advantage in new markets.

The CPTPP also includes annexes that address specific challenges faced by exporters of pharmaceuticals, medical devices, information and communications technology, and cosmetics. And there will be a phased tariff elimination for vehicles and automotive parts.

There are several potential members to this new agreement: South Korea, Taiwan, the Philippines, Colombia, Thailand, Laos, Indonesia, Cambodia, Bangladesh, and India. One striking reality of the CPTPP is that prospective members would have to strike existing protectionist trade policies in order to join the agreement, benefiting all.

A COMMON THREAD

Because companies can't avoid the trading realities that these regions/ countries pose, they must plan strategically to react swiftly to the challenges 2019 will certainly bring.

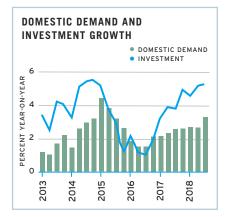
The common thread when planning for 2019 and onward is for companies to leverage their existing data when building an effective strategy. Companies should look inward to assess how they operate and how current trade issues impact their operations.

Whether it's China, the CPTPP countries, Russia, North America, or the UK, companies should map out all potential scenarios and develop contingency plans.

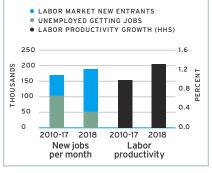
ABOUT THE AUTHOR

Beth Pride is president of BPE Global, a global trade consulting and training firm. Contact: beth@bpeglobal.com or 415-845-8967.

UNITED STATES



ADDITIONS TO LABOR FORCE AND PRODUCTIVITY GROWTH





To date, the U.S. economy is experiencing robust growth, with strength in domestic demand. There are signs that productivity and labor participation are increasing. Nominal wages have been outpacing inflation, resulting in modest real wage gains. Fiscal and monetary policies will stimulate activity in the near term but are likely to become a drag by 2020.

SOURCE: GLOBAL ECONOMIC PROSPECTS, WORLD BANK GROUP

TODAY'S DISTRIBUTION CENTER:

OU SAY YOU WANT AN

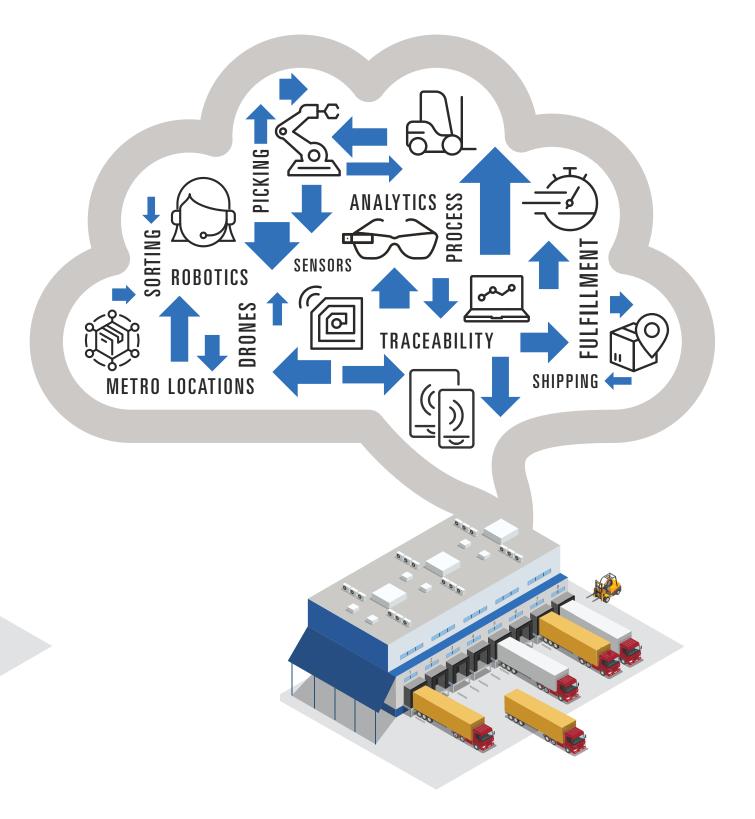
Today's distribution centers provide far more than just short-term storage and cross-docking. By locating closer to urban areas, leveraging technology, and adding amenities to attract skilled workers, DCs are morphing to accommodate e-commerce demands and rapid delivery expectations.

BY KAREN KROLL

As businesses strive to accommodate customers' Aexpectations for ever-faster delivery times, many are focusing on enhancing and improving their distribution centers (DCs). "I see distribution centers taking on a more critical role," says Tracie Longpre, vice president, supply chain with Applied Industrial Technologies, a Cleveland-based distributor of MRO supplies, tools, and industrial equipment. "Industrial consumers have become conditioned to want only what they need, exactly when they need it."

To meet this expectation, products have to be stationed closer to the customer. "Applied Industrial continues to expand the breadth of products in its distribution centers, and to process product through DCs more rapidly," Longpre says. That includes daily overnight deliveries from the DCs to local service centers.

Companies with DCs that can move a greater range of



products quickly and cost-effectively "can create a competitive advantage," says Mike Marks, managing partner with Indian River Consulting Group. "They can make more profit at the same selling price."

Retooling a distribution center is not easy, however. Not only must inventory move more quickly, but it moves in larger volumes of small orders—fewer pallets and more eaches—which boosts complexity. Even five or 10 years ago,



Customer demand for quick and efficient e-commerce order fulfillment is driving many distribution centers to employ robots.

distribution centers might house several thousand SKUs. Today, many hold tens of thousands.

"There's pressure on DC operations to pick, process, fulfill, and ship orders quickly, even as the number of orders has grown," says Chris Merta, product manager with The Raymond Corporation, a warehouse solutions provider.

One way to meet these goals is to locate

more products in distribution centers that are near or in urban areas. This has the added benefit of providing access to larger numbers of potential DC employees.

That solution runs headlong into another challenge: the lack of available land in many metro areas. To address that challenge, some companies are building up, rather than out, in multistory DCs, says Bob Silverman, executive vice president, supply chain and logistics solutions with JLL, an investment management company specializing in real estate.

In 2017, warehouse owner Prologis broke ground on a three-story fulfillment center near Seattle, the first of its kind in the United States. Trucks can access both the first and second levels, which are geared to fulfillment. The third level is for light manufacturing and laboratory work, among other functions.

These types of facilities make up a tiny percentage of DCs within the United States, but their numbers are growing. That's especially true in metro areas, such as San Francisco and New York, that are surrounded by water. "Companies that can't find a location in the city wind up 90 minutes away," Silverman says.

Along with metro areas, some DCs are opening near transportation hubs, such as the intersection of several interstates, says John Rosenberger, director of Global Telematics for Raymond. He points to the area around Pittston, Pennsylvania, which is home to numerous distribution centers. The closest metro areas are Wilkes-Barre



Intelligent technology directs a Raymond automated guided vehicle to move products between pickup and deposit points.

and Scranton, with a combined population of about 120,000. However, Pittston sits astride several major highways, including Routes 81, 476, 84, and 380.

Another shift that impacts both DC size and location is the growing number of workers needed to handle itemlevel picking. "A distribution center for e-commerce fulfillment may require between three and 10 times the number of people needed in a DC that's moving pallets or other bulk quantities," says Rich Thompson, international director, supply chain and logistics solutions, with JLL. That translates to larger parking lots, break rooms, and other worker amenities.

Many retailers are also considering whether to repurpose space in some stores as DCs or online fulfillment centers. By

HITTING THE LOCKER ROOM

In some metro areas, it's not unusual for delivery trucks to park for hours outside a single apartment or office building while the driver delivers packages. That ties up streets and alleyways.

"Rethinking how to use the load/unload space is now necessary," says Barbara Ivanov, chief operating officer with the Supply Chain Transportation and Logistics Center at the University of Washington. Ivanov is working with the city of Seattle to design a common locker system—essentially a tiny distribution center—where a delivery truck pulls up and unload its packages into separate, secure lockers. The recipients would receive an alert and have a set amount of time to retrieve their packages.

Early next year, Ivanov and her team plan to test common lockers within an eight-block area of Seattle. Previous

testing has shown a locker can cut more than three-quarters of the time a delivery person otherwise would spend in a building.



doing so, they can address the challenges inherent in last-mile delivery, as they'd simply fill some orders from the DCs within their stores. In the end, most retailers likely will convert just a portion of their stores and maintain a brick-andmortar presence.

DC TECHNOLOGY

To improve productivity within its DCs, Applied has focused on developing a lean culture, as well as technological opportunities that make financial sense. This includes warehouse management systems with advanced data management capabilities, logistics traceability, and analytics. Applied also is also investigating more progressive automated storage and retrieval systems and sorting capabilities, along with opportunities to digitize the supply chain.

"The benefits of having visibility to the entire network in real time are substantial," Longpre says. "Visibility helps significantly reduce delivery lead times and optimize freight and inventory management."

Ryder System, Inc., a supply chain solutions company, is combining robotics, drones, sensors, and wearables within three of its fulfillment centers. "The goal is to operate more productively and effectively," says Alec Hicks, group director, solutions design.

For example, drones are able to complete a cycle count of an entire facility within three hours, rather than the customary two days, according to Ryder. And the use of smart glasses that project directions for order fulfillment within the user's field of view cuts five to seven seconds off the time required to scan each inventory item.

The use of "goods to person" technology—small mobile robots that bring containers or products to pickers is growing within many DCs. The reason? The workers picking orders can spend 70 to 80 percent of their time traveling and only 20 to 30 percent actually picking. "Goods to person technology seeks to greatly reduce or even eliminate the distances workers travel," Silverman says.

"There's pressure on DC operations to pick, fulfill, and ship orders quickly, even as the number of orders has grown."

The result can triple productivity. While some of this technology has existed for a while, it has advanced even as its costs have dropped.

In the Group also uses goods to person technology. Totes containing the SKUs needed to complete different orders arrive automatically at the workstation where order fulfillment will be completed. The workstation tells the operator what to pick and where to place it, boosting accuracy. The finished totes are automatically moved so the next task can start.

Currently, goods to person technology makes up about 95 percent of the "goods to" market, says Paul Hermsen, director Even existing DC technology solutions are providing more capabilities. For instance, distribution centers can leverage today's warehouse management systems (WMS) to make better decisions around how much inventory to allocate to various sales channels, says Jeff Clark, executive vice president with ODW Logistics.

Say a pallet of socks needs to be divided between e-commerce fulfillment and retail replenishment. Advanced WMS capabilities can efficiently allocate the inventory between the channels to more accurately meet demand,

Over the past 10 years, box erectors, or machines that convert packaging material



The growing number of workers needed to handle high-volume order fulfillment and shipping affects both the size and location of distribution centers.

with Inther Group. As more DCs and warehouses deploy robots as pickers, and as the picking robots become more capable, that ratio will shift.

One current obstacle to greater use of robots as pickers is variations in the products being picked. Robots today typically can handle rectangular cartons that weigh less than one kilogram (about 2.2 pounds). Products that are heavier, oddly shaped, or encased in plastic are more challenging. to boxes more efficiently than humans can, have increased in throughput and accuracy, even as the cost to install them has come down. "That makes the ROI much more appealing and palatable to companies looking to reduce labor requirements," Clark adds.

Other traditional DC equipment, such as lift trucks, can be outfitted with visionguided technology to automate some tasks. For instance, The Raymond Corporation integrates vision-guided technology in its automated lift trucks. The truck learns the operation it will be performing, such as moving a pallet of goods from one location to another, and then can replace manned vehicles for some tasks, leaving employees to handle more complicated jobs. "The technology optimizes both labor and assets to be most efficient," Merta says.

As the number of people needed in DCs continues to grow, while unemployment remains at record lows, DC managers are struggling to find workers. "Finding labor is the biggest challenge today," Thompson notes. One solution is to provide a more welcoming environment. "Everyone wants to work in a nice place," he says. Many DCs, however, have been little more than brick blocks with few amenities.

That's changing. Thompson recently toured a DC in Japan that boasted of its "human-centric design." It featured an on-site child care center and rock-climbing wall, as well as eating areas that rival some restaurants. "We'll see more of this in the United States," he predicts.

Just as AirBnB and Uber upended the hospitality and rent-a-car industries, warehouse-on-demand firms aim to do



UPS GETS IN THE BIKE LANE

Some companies are thinking outside the distribution center when working to deliver products to customers quickly. For instance, electric bikes now power some of UPS's brown delivery vehicles. In the United States, UPS has launched

44 THE GOAL: TO DELIVER PACKAGES WHILE CONTRIBUTING LESS CONGESTION, NOISE, AND CARBON EMISSIONS THAN TRADITIONAL TRUCKS.**77** eBike programs in Pittsburgh and Seattle; worldwide, about 30 programs are up and running, says Kristen Petrella, a UPS sustainability spokesperson. Trailers and containers loaded with packages are attached to the pedal-assisted eBikes, which travel sidewalks and bike lanes. Each eBike can hold up to 40 packages.

To start their journeys, the eBike containers are attached to traditional UPS delivery trucks and then dropped off in a city center. Cyclists secure a container to their eBike, make deliveries, return

the container when done, and attach the next container with packages ready for delivery. The same guarantees regarding package delivery apply whether packages are delivered via a cargo eBike or delivery truck.

"We're finding interest for projects like this in cities across the country," Petrella says. the same for distribution centers and warehouses. "On-demand warehouse companies don't own space, but match those looking for space with those that have access," Thompson says.

"Our goal is to bring flexibility to supply chains," explains Dave Galgon, director of network development with Flexe, an on-demand warehouse firm that offers access to more than 1,000 warehouses in North America.

Some retailers use Flexe to add capacity when the situation warrants it. Ace Hardware, for example, used Flexe to stock generators, box fans, and other larger items needed during weather emergencies in Florida, Georgia, and Texas. With this capacity in place, Ace was able to move shipments of these goods to areas affected by Hurricane Florence within 24 hours, on a Saturday. "We enable companies to position products closer to the market and provide better service," Galgon says.

WILL DCS REPLACE WAREHOUSES?

While DCs play a more significant role within many supply chains, they're unlikely to eliminate the need for warehouses. Some products require longterm storage, perhaps because the raw materials are available only at specific times, or manufacturers need to produce in large quantities to capture economies of scale.

At the same time, ever-shortening delivery windows mean distribution centers and the new technologies deployed within them will continue to play an increasing role within many supply chains. More distribution centers will use artificial intelligence (AI) to better predict demand, and thus reduce inventory carrying costs. "If you have good demand information, you don't need lot of inventory," Marks says.

For instance, AI tools can examine timesince-order (TSO) to determine trends in order placement, and then use this to finetune inventory levels.

One thing that won't change is the DC's ability to speed order fulfillment and deliver products quickly.



Flexibility you didn't think possible.

We connect full Domestic and International capabilities across 90 worldwide stations with the best web-based technology in the industry. Unlike others who use off-the-shelf systems, our IT is developed by our own in-house programming group which allows us to create flexible and integrated solutions. This enables us to do what others can't. Contact us to learn how our global presence and superior IT can improve your daily operations. www.transgroup.com



Our World is Logistics® 90 Stations | 5 Continents

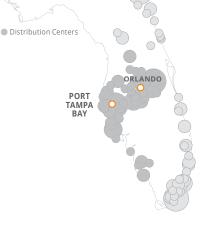
YOUR LAST MILE JUST GOT SHORTER

COSCO

SAVE MILLIONS WITH IMMEDIATE ACCESS TO FLORIDA'S LARGEST AND FASTEST GROWING CONSUMER MARKET

The Tampa Bay/Orlando I-4 corridor region is home to Florida's largest concentration of distribution centers and its hub for the retail and food/beverage sector.

- New on-dock 135,000 square foot state-of-the-art cold storage facility
- Big ship Post-Panamax capability
- Global container connections including new direct Asia services and expanded service to Mexico
- Significant savings in logistics/distribution costs



COSCO, SHIPPING

NS.Q~



REROUTE YOUR THINKING™

1101 CHANNELSIDE DRIVE, TAMPA, FLORIDA 33602 WWW.PORTTB.COM | 800-741-2297

SPONSORED CONTENT









The Logistics Advantage Charles Advantage

In the world of logistics, Georgia offers both the ways and the means.

Georgia

General and President Dwight D. Eisenhower said, "You will not find it difficult to prove that battles, campaigns, and even wars have been won or lost primarily because of logistics."

Ike was speaking in a military context, but the truth he espoused is just as incontrovertible when applied to the art and craft of moving goods from here to there. And the landscape (and air- and seascape) over which those goods travel is highly likely to include Georgia, a leading point of origin for companies to move products to their customers.

A superior infrastructure and position as home base for many leading global logistics companies and practitioners enhance the state's inherent geographical advantage.

From port to rail to air to road, Georgia offers the logistics ways and means. With service from CSX Transportation, Norfolk Southern, and nearly two dozen shortline railroad companies, Georgia features the most extensive rail system in the Southeast and serves as the region's largest intermodal hub. If that were not enough, Georgia interstates connect to 80 percent of the U.S. population within a two-day truck drive.

Hartsfield-Jackson Atlanta International Airport continues to see year-over-year gains in the volume of cargo traffic it supports. And Georgia's seaports serve as magnets for international trade and investment.

The litany of Georgia's logistics advantages is so long that one may argue the only challenge logistics providers face is trying to single out the state's greatest logistics asset. Take a breath. Let the litany begin: As the westernmost container port on the U.S. East Coast, the Port of Savannah enjoys a significant geographical advantage in reaching important inland markets.

A network of major interstates, including north-south corridors I-95 and I-75 and east-west routes I-16, I-20, and I-85, means key cities and manufacturing points throughout the U.S. Southeast and Midwest may be reached within a one- to two-day drive.

• Georgia boasts one of the most extensive rail freight systems in the United States, with approximately 5,000 miles of track transporting 200 million tons of freight each year. The rail hub of Atlanta handles cargo destined for locations ranging from Dallas to Chicago and the Ohio River Valley and beyond.

LAUNCHED FOR LEADERSHIP

A key component in all of these logistics assets is the Georgia Ports Authority (GPA), which facilitates global trade through deepwater ports in Savannah and Brunswick.

"Our approach to continuous improvement can be summarized as the three Rs—river, rail, and roads," says GPA Executive Director Griff Lynch. "Savannah's harbor deepening is now 50 percent complete and fully funded this year, and six neo-Panamax cranes will arrive within a year. "By April, we will grow the Port of Savannah's big ship berth capacity by 50 percent, and in five years we will have the ability to handle six 14,000-TEU vessels simultaneously," he adds. "No other single container terminal in North America has the ability to expand berth capacity at this rate."

To ensure cargo fluidity beyond the port's gates, the Authority is building the Mason Mega Rail Terminal, which will double Savannah's rail lift capacity to 1 million containers per year. This massive rail expansion is now 25 percent complete. And in August 2018, the GPA opened the Appalachian Regional Port, an intermodal facility serving northwest Georgia, northeast Alabama, and parts of Tennessee and Kentucky.

"Additionally, the Georgia Department of Transportation is extending a four-lane route from our main gate so that trucks that already have a direct link to Interstate 95 will also have expedited access to Interstate 16 for east-west service," Lynch says.

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

The Savannah market is also seeing significant private development. Over



STREAMLINED TRANSPORTATION SOURCING

Turn the key on strategic LTL transportation procurement. Automate the RFP process, expand your carrier network, lock in pricing and optimize transportation spend with seamless integration to existing systems.



Visit smc3.com to learn more.

Georgia



Atlanta Bonded Warehouse, which provides temperature-controlled warehousing and LTL/TL transportation services in the Southeast, continues to expand its logistics footprint in Georgia and views the state as a crucial part of its customers' supply chain strategies.

the past 24 months, private investors have added 9 million square feet to bring Savannah's total industrial real estate market to 60.6 million square feet. The rate of construction has since accelerated, with another 9.2 million square feet of industrial space currently under construction.

"Part of our job at Georgia's ports is not only to stay ahead of the growth curve, but also to identify and focus on new market opportunities," Lynch says. "In an exciting development, the U.S. Department of Agriculture recently approved the Port of Savannah to handle chilled cargo from origin countries worldwide. Georgia's worldclass port services, combined with shorter overland routes to inland markets, mean time-sensitive cargo can reach customers faster, fresher, and at lower cost."

The export of resin pellets produced by petroleum refineries in states such as Texas and Louisiana represents another opportunity for Georgia.

E-commerce fulfillment centers and traditional distribution center operations will continue to mean strong demand for port services via Garden City Terminal. Lynch notes the recent announcement that Wayfair will add more than 1 million square feet and 1,000 jobs to handle cargo moving through the Port of Savannah. "As the third-busiest gateway for containerized trade in the United States, Georgia will continue to expand capacity, helping new customers reach growing markets across the U.S. Southeast and Midwest," Lynch says. "The GPA will play an important role by continuing to invest in the infrastructure necessary to provide services our customers view as essential in the coming years."

STRATEGIC INVESTMENT

Georgia has had its share of catchy slogans over the years. In fact, an entire website is devoted to 40 of the catchiest—from "Put your dreams in motion" to "Wisdom, Justice and Moderation." But here's a new one we might suggest with logistics especially in mind: "Investing in tomorrow."

Hal Justice, vice president of sales and operations for Atlanta Bonded Warehouse (ABW), can quickly cite some of the reasons such a slogan would be apt. "Georgia continues to invest heavily in infrastructure with the deepening and extension of the Port of Savannah, multiple improvements to the highway system in and around Atlanta, and the opening of the northwest Georgia Inland Port," he says.

The GPA's new inland hub features a 388-mile direct link via rail carrier CSX Transportation to the Port of Savannah.

ABW, the leading provider of temperature-controlled warehousing and less-than-truckload and truckload services in the Southeast, has played a significant role in Georgia's logistics prominence for more than seven decades.

Peter Paul, a candy broker seeking to provide protective warehousing to the confectionery industry, organized the company in 1948. It operated under the name Acme Bonded Warehouse until 1981, when the current name was adopted. After two expansions, the original Acme facility encompassed 42,500 square feet of refrigerated storage space with a 10-foot clear height.

The company's contributions to the state's logistics assets continue. "Over the past six years, ABW's footprint has expanded at a 16-percent compounded growth rate," Justice says. "Our business from and to the Port of Savannah has fueled much of that growth. In the past year, we have opened two new facilities with more than 500,000 square feet of storage capacity. One of those facilities is dedicated to handling the expansion of our co-packaging and LTL consolidation programs. We had simply outgrown our existing facility."

Justice is proud of the state's attention to the details necessary to retain its leadership in the ever-changing



CUTS TRANSIT TIMES BY 24 HOURS

MASONMEGARAIL.COM

Georgia

logistics marketplace. "We believe that the decision-makers in Georgia recognize the unique geography and natural assets of the state," he says. "They work diligently to use those advantages to expand business and employment opportunities in manufacturing, processing, and logistics across the state."

Amid this continuous improvement, ABW remains mindful of the work that it must do to retain and enhance its own competitive edge. "We focus on building relationships based on strategic fit and trust," Justice says. "We are family-owned, giving customers direct access to decision-makers. Our operational focus and approach is high engagement and low noise, meaning we focus on serving the customer first and doing what is right every time."

With everything the state has going for it, what's next for Georgia? Justice sees more of the same, only better.

"The marketplace already views Georgia as the premier regional distribution hub for the Southeast, similar to how the Dallas and Chicago markets serve their respective regions," he says. "Georgia will start to take a more visible role in serving markets beyond the Southeast as technology advances and the competition to reduce supply chain costs pushes for simpler distribution models."

HOTLANTA MEANS BUSINESS

"They used to say all roads lead to Chicago," says Jeff Lantz, founder and CEO of C.L. Services, Inc. (CLS). "Today we can safely say that about Atlanta."

CLS is an industry leader in providing over-the-road truckload transportation, intermodal, and drayage services, with additional offerings including warehousing and transloading. The company's location near the Hartsfield-Jackson Atlanta International Airport serves as an ideal point to dispatch its technology into the field.

"Atlanta is the hub of the South," Lantz says. "We're right in the middle of everything."

Atlanta's position as a major redistribution hub has been a steady catalyst for company growth. "We have added assets in the form of trucks, something we thought we would never do," Lantz says. "We are finding more demand for drop trailers in and out of our area to service the southeastern states."

CLS co-owner Russ Caudell shares his business partner's enthusiasm. "Aside from the obvious advantages of access to multiple interstate highway systems and close proximity to the ports of Savannah and Charleston, having access to a highly skilled workforce through the many colleges and universities is a definite advantage," he says. "Many of these institutions offer supply chain/logistics programs.

"C.L. Services contributes by recruiting the majority of our employees from these colleges and universities, thus creating new jobs and opportunities for our state," he adds.

The partners see only more opportunity ahead. "We are in a prime location to continue our growth," Caudell says. "With all that Atlanta and the surrounding areas have to offer, it is a great place for people to build their careers and raise their families. Our great weather and four distinct seasons make it ideal."

"I see us continuing to take advantage of the growth of inbound and outbound freight," says Lantz. "Our challenge is finding enough qualified people. We



C.L. Services, a provider of transportation, intermodal, warehousing, and drayage services, values its location near the Hartsfield-Jackson Atlanta International Airport for its access to both infrastructure and talent.

Our name is local but our service knows no boundaries



For more than 60 years, the mission of Atlanta Bonded Warehouse and Colonial Cartage has remained constant:



to provide best-in-class integrated warehousing, transportation, and co-packaging services to the food, pharmaceutical, and related CPG industries. Our goal is nothing short of total customer satisfaction.



3000 Cobb International Blvd., Kennesaw, GA 30152 | www.atlantabonded.com | www.colonialcartage.com Hal Justice 678-322-3120

Georgia

have a cultural standard and we do not want to just fill seats and provide mediocre service."

That emphasis on high standards has enabled the company to be an industry leader throughout its 23 years of service to the Georgia and Southeast markets.

"Whenever we are asked about our competitive advantage, the first thing that always comes to mind is our size," says Caudell. "While we are not the biggest in the industry by any means, we take pride in being accessible to all our customers and carriers alike. We show our contact information, including cell phone numbers, on all our business cards and web pages."

Lantz characterizes all members of the company's team as "outside-thebox thinkers." The company's character, along with the advantages of the hot Atlanta market, combine to create an exciting future for CLS and the state.

"We have lots of room to go up," says Caudell. "More and more, people and companies want to escape the weather north of Atlanta, the high taxes of the Northeast and other areas, and high crime rates that cripple other areas of the country. "Georgia is a great place to come to," he adds. "The state offers a businessfriendly environment."

WORKING TOGETHER

For all of Georgia's logistics advantages—from location to workforce to infrastructure—perhaps the state's greatest advantage is its spirit of collaboration, cooperation, and communication.

"State government, the airport, local governments—they're all in alignment," says Dennis Lombardi, director of strategic development for Romark Logistics.

He points to the Georgia Center of Innovation for Logistics, part of the Georgia Department of Economic Development, as an example of the priority the state places on logistics.

The Center of Innovation for Logistics helps companies take advantage of the state's world-class logistics sector, so that they can improve supply chain efficiencies, support growth, and increase global competitiveness. The Center connects companies to the technical industry expertise, collaborative research, and partnerships that cargo-owning companies need.

The Center regularly publishes "logistics market snapshots" to keep industry professionals abreast of important metrics. Using numbers provided by the Georgia Ports Authority, for example, a recent snapshot noted that the Port of Savannah moved 351,366 TEUs in December 2018, making it the busiest December in the GPA's history. During calendar year 2018, the Port of Savannah moved 4.35 million TEUs, its highest annual volume ever and a 7.5-percent increase over 2017. Nine of the GPA's 10 busiest months, in fact, were in 2018.

Lombardi views the Georgia state of mind from a broad perspective. Romark owns and manages more than 7 million square feet of office and industrial real estate throughout New Jersey, Pennsylvania, Georgia, Texas, and California. In its nearly seven decades in the supply chain and logistics sectors, the company has diversified its operating business by acquiring some of the leading packaging, transportation, and warehousing companies in the United States and blending them into



Romark, a top provider of temperature-controlled facilities for the pharmaceutical industry, started its Georgia operations with JTP Romark Logistics in Forest Park, just outside Atlanta, in 2015 and now has nearly one million square feet of space in the Atlanta area.

SHIPPING THAT IS PROSPONSIVE® NOT RESPONSIVE

FAST. DEPENDABLE. PERSONABLE.

C.L. Services is delivering Prosponsive® solutions to the world of transportation. Effectively combining decades of logistics experience, and best-in-class TMS technology and the industry's strongest commitment to customer success, C.L. Services sets the standard for exceptional freight management.

Unload your logistics needs on us. EXPLORE C.L. SERVICES TODAY!

🕀 WWW.CLSERVICESINC.COM 📋 INFO@CLSERVICESINC.COM 🔀 (678) 686-0933



Georgia



JIT Warehousing & Logistics, which offers intermodal services from the Port of Savannah, emphasizes port-to-track capabilities.

a strong and value-added business unit that operates today as the Romark family of companies. The company's expertise extends to helping clients navigate the sometimes-challenging procurement and certification processes governments require.

The company started its Georgia operations with JTP Romark Logistics in Forest Park, just outside Atlanta, in 2015 and quickly established itself as a top provider of temperature-controlled facilities for the pharmaceutical industry.

"In total, we operate almost one million square feet of space in the Atlanta area and a mid-sized fleet of trucks, trailers, specialized equipment, and reefers," Lombardi says. "We are going in and out of the Hartsfield-Jackson Airport every day."

The airport, under the leadership of General Manager John Selden, has positioned the area for continued growth through constant air cargo capabilities and service improvements, Lombardi notes.

Further, Romark is enthusiastic about the hot Atlanta real estate market. The quality of the market enables Romark to act on its "real estate gene" by providing quality space to a host of affiliated companies. For example, "We are in the process of opening a second and larger Container Freight Station facility in Forest Park that will be fully operational by mid-April 2019," he says.

Romark's ability to respond quickly to the opportunities that present themselves in Georgia is key to its success. "We are either a very small large company or a very large small company," he says. "We have all the advantages of size, but our corporate structure isn't cumbersome. We can perform and compete with the largest third-party logistics (3PL) providers, but we offer personalized service always. That's our slogan."

Lombardi views the rapid growth of the Georgia market as both an opportunity and a challenge. "Extreme growth must be managed in a measured way," he says. "You have to get it right the first time."

Both the company and the state embrace that formula for success. The result, Lombardi says, is that both can grow, adapt, and remain competitive in a constantly evolving and complex setting.

MAKING CONNECTIONS

Located just half a mile from GPA's Ocean Terminal and about 3.5 miles from the container port, JIT Warehousing & Logistics offers numerous services from the Port of Savannah. You might say the company puts the "inter" in intermodal, with more than two decades of experience in the import/export industry, offering shipside delivery and port pickup as well as container draying, shipping, stuffing, crossdock, and a division that handles overdimensional freight.

JIT operates facilities on both the CSX and Norfolk Southern rail lines. The company's Savannah warehouse facilities consist of more than 850,000 square feet of covered storage and an additional five acres of outside storage. JIT operates throughout the United States and handles numerous commodities including metal products, paper, wood products, and palletized cargo.

"Port-to-track" capabilities loom large in the company leadership's view of Georgia's significant logistics assets. Evelyn Goldberg-Davis, executive vice president, enumerates these assets, including: "The amount of land available for logistics use, enhanced by increased rail and inland railports. Beyond that, the continued building of warehouses in Savannah and nearby areas, and the opening of large fulfillment centers from Savannah to Atlanta."

"We are opening up new rail spurs,"

LOGISTICS DISTRIBUTION TRANSPORTATION PACKAGING REAL ESTATE



PERSONALIZED SERVICEALWAYS





NEW JERSEY GEORGIA PENNSYLVANIA TEXAS CALIFORNIA For over 60 years Romark Logistics has provided best-in-class, third-party logistics services to our customers in the food, beverage, pharmaceutical, healthcare and retail industries around the world.

Our flexible public and dedicated solutions, allow our customers to grow, adapt and remain competitive in an ever-evolving global marketplace.

With our food grade, refrigerated and temperature controlled industrial spaces, we can handle any of your logistical needs.

LET US KNOW HOW WE CAN HELP YOU.

www.romarklogistics.com 1.800.276.2719

Georgia



The growing team at Syfan Logistics, which delivers perishable food products, is dedicated to providing seamless service to shippers.

adds her father, company president Ben Goldberg. "If you build it, they will come, and Georgia is a great example of this."

Goldberg makes his assessment from the vantage point of 31 years in the logistics business. He opened JIT (Just In Time) in 1998, and now the family's second generation is moving the company forward.

Daughter Anna Lockwood serves as vice president, and her husband, Trevor Lockwood, who has been with the company for 12 years, functions as vice president of project cargo. In that capacity he oversees the company's overdimensional division, which includes road escort, rigging, and additional trailers for heavy haul.

This leadership team sees the variety of services JIT offers as one of its greatest advantages. "We have the equipment and capacity to handle a multitude of cargo," says Goldberg-Davis. "Due to our variety of capabilities, many of the lines and entities that work alongside the GPA call us first when they have to solve a problem."

She is likewise bullish on the state's overall logistics prospects. "We have the population and available land to

continue to outpace other port areas in growth," she notes.

The company leaders also believe Georgia will become an even bigger player in the logistics marketplace over the years to come. "The more businesses decide to move their freight via Georgia ports, the more opportunity there is to fill new niches," says Goldberg.

As an example, the Savannah Port has now surpassed 4 million TEUs annually and expects to double that number in the next nine years.

A PACKAGE DEAL

Georgia has the whole package, says Andrew Slusher, president and CEO of SMC³, an information systems provider for technology and manufacturing companies. "Georgia is truly a hub of transportation and logistics, not only in the Southeast region but nationally and globally," Slusher says. "In 2017, Deloitte ranked Atlanta as the number two city for digital supply chains, and Georgia was named *Site Selection* magazine's top state for business in 2018. I can't say enough about all the logistics assets that exist in Georgia.

"In terms of the major supply chain players, UPS, Saia, and

other supply chain companies are currently headquartered in Atlanta, and a number of major Fortune 500 companies also call the city home," Slusher adds.

In particular, he cites the Hartsfield-Jackson-Atlanta International Airport and the Port of Savannah as the state's premier advantages. "Shippers that route cargo through the port benefit from Georgia's extensive supply chain infrastructure," he says.

SMC³ provides data for technology and manufacturing powerhouses around the country and beyond. Its client list includes Oracle, MercuryGate, McLeod Software, and SAP. The company maintains its headquarters in the Atlanta suburb of Peachtree City.

"We serve all the major logistics companies in the Atlanta area," Slusher says. "Our applications and software are utilized widely, especially in the LTL arena.

"A majority of all LTL shipments in the country move on the SMC³ CzarLite base rates," he notes. "It is the industry's leading base rate, and we have different means of delivering that data through our RateWare XL and CarrierConnect XL solutions.

"Beyond that, we recently brought other solutions into the mix," he adds. "SMC³'s Cost Intelligence System is extensively used in the LTL industry, and is gaining a larger footprint in the truckload industry as a tool trucking companies use to manage decisions around carrier pricing and network optimization."

The company also has modernized the platform for its LTL procurement solution, Bid\$ense. "We now offer a subscription-based service for that product, which is a new twist for 3PLs and logistics companies that have multiple bids throughout the year," Slusher says. "It's more of a self-service tool than it once was." SMC³ will be rolling out truckload procurement functionality within the Bid\$ense tool later in 2019.

Simply World Class



JIT Warehousing & Logistics is a proven leader in the warehousing and distribution industry. JIT operates throughout the United States moving various commodities including steel and metal products, machinery, wood products, palletized cargo, and more.

Our Savannah, Georgia warehousing facilities consist of over a million square feet of inside storage and an additional 10 acres of outside storage. We are located only a half mile from the Georgia Port Authority's Ocean Terminal and 3.5 miles from Garden City Terminal. Over a quarter of a century in the import/export industry, JIT offers world class warehousing, trucking, shipside delivery, intermodal services, specialty hauling, crane services, cross docking, escort services and so much more. All Company owned equipment! JIT is your turn key, J ust-In-Time operator.

Now offering two three state of the art rail logistics complexes serving Norfolk Southern and CSX to meet all your logistics needs!



866-522-2200

216 East Lathrop Ave. • PO Box 861 • Savannah, GA 31402 • 912-201-0050 • Fax: 912-201-0307 • quotes@jitwhse.com

Georgia

The evolution of technology in logistics continues at a rapid pace. One of the biggest changes in logistics technology centers on data delivery. In the past, a significant amount of information was delivered via electronic data interchange (EDI), which remains the predominant method of transmitting information throughout the industry.

But, Slusher says, "APIs (application programming interfaces) are in play now, and SMC³ has its own suite of solutions up and running for delivering transit time information, visibility, and rating. We're also moving toward a dynamic pricing environment, with volume LTL our first foray into that.

"We are on the move with delivering solutions that leverage the latest technologies in the industry and broadening the portfolio of solutions that we offer customers," he says.

And the control center for all this progress will be Georgia. "SMC³ will

remain front and center as Georgia's role in logistics evolves," he says.

POSITIONED FOR GROWTH

When enumerating Georgia's logistics advantages, Syfan Logistics CEO Jim Syfan cites its breadth of transportation infrastructure.

"Through Atlanta's Hartsfield-Jackson International Airport and the deepwater ports in Savannah and Brunswick, there is a high availability of freight in Georgia," he says. "Four interstate highways and an intricate state highway system make moving freight anywhere inside and outside the state easy. Also, the state has nearly 5,000 miles of railway tracks to move freight. This combination of transportation avenues makes Georgia a major market for intermodal service."

Syfan Logistics, which is wellrecognized as an expert in delivering deadline-sensitive, perishable food products, is strategically located to take advantage of the airport in Atlanta and the ports in Savannah and Brunswick, as well as the major rail and highway systems. The company is located in Gainesville, just north of Atlanta.

With its strategic location and access to major transportation corridors, Syfan Logistics works extensively with the nation's largest foodstuffs companies in the poultry, seafood, confectionery, cereal, and soft drinks industries.

The company also serves the largest package-delivery companies in the world, along with all expedited divisions of America's major automotive manufacturers. Syfan Logistics has been recognized as one of UPS's top partners during Christmas seasons. *Inbound Logistics* has named Syfan as one of the Top 100 Logistics Companies in the United States for the past five years.

Syfan is confident that the state's long history of leadership in the logistics marketplace will continue well into the future. "Georgia has been the

PICK-UP and DELIVERY so seamless

we might as well be invisible.

It's our job to transport your cargo to its destination with zero complications – on time, every time, drama-free – and we do it well.

Syfan Logistics is an asset-based, \$150 million company with over 250 team members and four decades of experience. We are a leader in transportation logistics because of our **24/7** commitment to technology, communications, our own fleet of trucks – and the experience to eliminate problems before they happen. We haul it all, while our industry expertise is focused on food, auto and package delivery.

No surprises. Just reliable shipping and logistics. Because when we make a promise, we deliver.

number one state to do business with for years," he notes. "Georgia has the infrastructure, industries, and planning process to grow infrastructure to allow new companies to locate to the state."

He is similarly confident in the leadership of the company that bears his family's name. The company started in the poultry business where company leaders learned the importance of communication and delivering on time. Syfan Logistics was established in 2011, and Jim Syfan now operates the company with sons Greg and Steve.

Syfan Logistics owns its own fleet of Syfan Transport trucks. It recently added several new Peterbilts to that fleet. Syfan Transport hauls a broad range of products with an expertise in food, auto parts, and package shipments. The company has set up teams under each category to meet its customers' needs.

"We complete loads seamlessly,"

Syfan says. "Communication, accessibility, and open transparency are characteristics that Syfan customers can count on."

Underlining the point, the company's newest advertising campaign states: "Service and delivery so seamless, we might as well be invisible."

BRIGHT FUTURE

Syfan believes the most important logistics development in Georgia over the next two years will be the addition of two inland ports, bringing the total to three in all. One of the two new ports will be located in Gainesville, where Syfan Logistics is based. The Northeast Georgia Inland Port will link to Savannah by rail and is expected to be completed in 2021.

Northeast Georgia Inland Port is located less than 10 miles from Syfan headquarters and will offer additional business opportunities for logistics companies in the area. It will be the new shipping hub for millions of tons of goods set to be imported or exported through Savannah. Officials estimate the inland port will eventually keep 150,000 trucks off the road each year.

The second new inland port will be located in Chatsworth in northwest Georgia. The state currently has one inland port in Cordele in southwest Georgia.

Syfan Logistics mirrors the state's logistics growth. "We are completing a \$3.5-million expansion at our headquarters that will add 19,000 square feet to our existing 12,000 square feet of offices," Syfan says. "We are currently at 351 employees and the expansion will allow us to add several hundred more employees in the coming years.

"Our company is growing and expanding," he says. "And we are extremely excited about the future of logistics growth in our marketplace."

770.287.8485







An American Tradition in Transportation

– IN GOD WE TRUST –

SyfanLogistics.com | Gainesville, GA | 855.287.8485 |





Atlanta Bonded Warehouse Corporation • www.atlantabonded.com

Atlanta Bonded Warehouse (ABW) has been providing public and contract foodgrade, temperature-controlled distribution services for 70 years. ABW is a leader in providing integrated asset-based logistics solutions for the food, pharmaceutical, household durables, and CPG industries. Our goal is total customer satisfaction through continuous innovation in technology and in best practices by focusing on teamwork, integrity, and accountability, all in a safe working environment.

C.L. Services, Inc. • www.clservicesinc.com

Dependability, accuracy, knowledgeable staff, and customer service are the hallmarks of C.L. Services, Inc. C.L. Services moves shipments both nationally and internationally, and specializes in providing dry and temperature-controlled truckload service throughout the United States and Canada. With year-round rate contracts and flexible spot-pricing, C.L. Services knows how to get the job done.





Georgia Department of Economic Development www.georgia.org/logistics

Engineering your supply chain is easier out of Georgia, thanks to its superior geographical location and extensive cargo transportation network. The Center of Innovation is the central source for accelerating business growth in Georgia, providing collaboration with leaders in university research, business, and access to intellectual capital. The state also provides outstanding air, ocean, and rail services. If logistics is your business, you'll be in good company in Georgia. Find out more at the website.



Georgia Ports Authority • www.gaports.com

The Georgia Ports Authority (GPA), which includes the Port of Savannah, the Port of Brunswick, the Bainbridge Inland Barge Terminal, and the Columbus Inland Barge Terminal, is committed to maintaining its competitive edge through development of leading-edge technology, marketing, and operations to move cargo faster. Deepwater ports in Savannah and Brunswick, together with inland barge operations in Bainbridge and Columbus, are Georgia's gateways to the world—the critical conduits through which raw materials and finished products flow to and from destinations around the globe. Find out more at www.gaports.com.

Simply World Class

JIT Warehousing and Logistics • www.jitwhse.com

JIT Warehousing and Logistics specializes in the handling of steel products and palletized cargo. Our Savannah, Georgia, warehouse facilities consist of more than 100,000 square feet of covered storage and an additional five acres of outside storage. We are located only a half-mile from the GPA Ocean Terminal, and offer crane service and direct discharge from the Port of Savannah. With more than 21 years of import/export experience, we offer warehousing, trucking, shipside delivery, port pickup, container draying, stripping, stuffing, crossdock, and a double drop trailer for your overdimensional freight.



Romark Logistics • www.romarklogistics.com

Make Romark Logistics your choice for nationwide warehousing, distribution, contract labor management, fulfillment, packaging, real estate development, and transportation solutions. Our commitment to continuous improvement, customer satisfaction, and the spirit of partnership has been the foundation of our growth and success for more than 50 years. Romark Logistics operates more than 3 million square feet of contract distribution and packaging centers, and can customize a supply chain solution for your most demanding challenges.



SMC³ • www.smc3.com

Shipping management software for companies of all sizes. Works with all carriers and modes. Use it to compare freight rates, select carriers, track shipments, and audit freight bills. Provides end-to-end supply chain visibility. Use as a stand-alone application or integrate with your other software. Visit our website for more information.



Syfan Logistics • www.syfanlogistics.com

Since 1984, Syfan has provided customers with a competitive advantage through superior transportation and logistics services. Syfan consistently strives to meet and exceed customer expectations of service through timely communication and quality information. Leveraging its rich experience and dedicated team, Syfan's commitment is to provide you with on-time pickup and delivery–every time.

Celebrating 96 Years of Freight Payment in 2019



PLAN &	Dynamic multi-attribute routing & pricing solutions;
Execute	Premium discounts for LTL freight; TMS & complete 3PL services
VERIFY &	Global, multi-modal solution delivering
Settle	ISO 9001:2015 & SOC certified audit & payment services
Measure & Analyze	Unified global BI platform & spend repository for comprehensive data visualizations, spend analytics & report management



ctlogistics.com 216.267.2000, ext 2190 sales@ctlogistics.com

[IN PRACTICE]

ETALES

Getting Up on the Right Side of the Bedding

THE CUSTOMER

Buffy Inc., a direct-to-consumer e-tailer offering the Cloud Comforter product. Free shipping, a 30-day trial program, and free returns created logistics challenges.

THE PROVIDER

Boxzooka, an e-commerce order fulfillment, WMS, and global selling partner.

by Jennifer Baljko

Direct-to-consumer bedding e-retailer Buffy Inc. woke up in a logistics world where quick-turn, no-hassle deliveries and returns have become routine.

In December 2017, Buffy launched with a single product, its Cloud Comforter, offered in three sizes. As orders increased, the company realized early on that it needed a better way to optimize warehouse and order fulfilment operations. Buffy wanted a logistics solution that would meet its business requirements and help it grow in the unpredictable business-to-consumer space. It found what it was looking for with Boxzooka, a third-party logistics (3PL) and warehouse management system provider.

"Our model is different from other B2C companies because we offer a free 30-day trial for customers," says Jordan Bloom, Buffy's director of operations. "That means we had to figure out both the outbound shipping and the returns process. Customers have the option of testing our product, and sending it back if they don't want it.

"Luckily, most of them keep it, but it's critical that we have a good return platform in place," she adds.

Buffy's try-before-buying direct-toconsumer (DTC) model aims to create a personal relationship with bedding customers looking for an eco-conscious comforter. But that concept presented the New York City-based startup with several logistics challenges-most notably its ability to compete and scale in a business environment growing ever more comfortable with the Amazon Prime model of hyper-fast delivery.

"Our main logistics worry is that we need to compete in an Amazon Prime world," says Bloom. "Our customers expect to get their product in two days. We try to optimize for customers getting their product as soon as possible while ensuring that they have a great unboxing experience." She notes that the company's initial shipments arrived two to four days after order placement.

Meeting customer expectations sparked the search for a 3PL partner and a strong technology-based warehouse management system (WMS) solution.

THE STARTUP CRUNCH

Like other young DTC e-retailers, Buffy had to face the unknowns associated with securing supply and manufacturing capacity, managing inventory, processing and fulfilling orders, satisfying customers, handling returns, and developing brand recognition.

On the supply planning and manufacturing side, Buffy had an advantage. One of its founders, Leo Wang, comes from a family that has been in the bedding industry for more than 30 years. His family makes pillows, sheets, and comforters for big box retailers, and has strong relationships with Chinese manufacturing companies. Buffy was able to tap into this industry expertise and build on that tradition as a way to carve

CASEBOOK STUDY

Bed Check

CHALLENGE

Startup bedding company Buffy Inc.'s direct-to-consumer business model required quick-turn order fulfillment and fast delivery times.

SOLUTION

Boxzooka's warehouse and order fulfillment solution helped the startup respond faster.

RESULTS

• Streamlined Buffy's order management and shipping activity through two Boxzooka fulfillment centers in New Jersey and California.

• Improved order fulfillment process to more consistently meet the two- to three-day delivery requirements.

• Optimized capability to ship on the same day orders come in.

• Recouped savings on kitting and bulk shipping rates that were previously unavailable to the startup company.

• Created efficiencies in the returns process.

NEXT STEPS

• Ramp up new top-of-bed product SKUs, with warehouse and order management running through Boxzooka's WMS and 3PL facilities.

• Possibly add another fulfillment center in the middle of the United States to complement existing bicoastal operations.

• Continue to shorten delivery times to U.S. customers.

• Leverage Boxzooka's capabilities to expand Buffy's footprint beyond the United States. out its own niche in the luxury bedding product segment.

The overall bed linen and bedspread industry is projected to reach approximately \$61 billion by 2020, according to Statista. However, the global luxury bedding market, a smaller part of the pie, was valued at \$2.02 billion in 2017, and revenue is expected to expand at a compounded annual growth rate of 2.6 percent between between 2018 and 2025, according to Coherent Market Insights.

The tougher piece was getting comforters out the door as quickly as possible during the first Christmas holiday and winter season Buffy was in business. The company, which started in San Francisco before the founders moved and launched the business in New York, used a small Bay Area 3PL for a short time to get things going.

Simultaneously, Buffy had to set up an easy returns process, and then do something with the returned comforters; discarding them in a landfill was not an option for a company marketing itself as an Earth-friendly business.

GIVING BACK

Buffy opted not to refurbish its comforters; a host of hygienerelated bedding-specific regulations that vary from state to state made refurbishment unfeasible. Instead, it set up a donation program that distributes returned comforters to homeless shelters and food banks via a partner community organization. Although Buffy's returns rate runs about five to six percent, lower than the standard direct-to-consumer volume of around nine to 10 percent, this part of the equation required attention, strategic insight, and an experienced logistics partner who could accept and reroute returns to the appropriate recipients.

Post-launch, Buffy's branding and marketing position as a high-quality comforter maker generated social media buzz, and orders began to grow. Buffy now averages between 12,000 to 14,000 orders monthly.

OFF THE START LINE

A few months after launch, Buffy's sales volume outgrew its 3PL's order management and fulfillment capabilities. As a small operation, the 3PL struggled to get orders out quickly, on the same day they were placed. These delays caused Buffy to fall short on its delivery commitments to end customers.

Buffy also wanted to set up bicoastal fulfillment capabilities, holding inventory on both the West and East coasts to ensure speedy delivery almost anywhere in the United States, but the initial 3PL set-up was unable to manage that kind of expansion.

Bloom, who joined the company around the time it launched, was charged with finding a 3PL that could handle Buffy's increasing order volumes.

To start, Bloom asked for recommendations from others working in



E-commerce bedding retailer Buffy was able to scale operations, improve inventory management, and get its comforters to customers quickly with Boxzooka's WMS technology.

the B2C space and researched companies online. Working off a list of 40 3PLs, Buffy narrowed the choice down to two or three providers, ultimately selecting Secaucus, New Jersey-based Boxzooka as its 3PL fulfillment and WMS provider.

"We picked Boxzooka for a few reasons," Bloom says. "First, after visiting its facility, I felt they could help maintain our highquality standards for product packing. Our branding and unboxing experience is a big part of how customers get to know us.

"Second, I felt Boxzooka could help us grow, and that we could go to them with any challenge and they would help us solve it," she adds. "We are a young company and needed an experienced logistics partner.

"The third aspect was its WMS solution," Bloom notes. "Boxzooka's software was the most user-friendly, and allowed us to easily do what we needed to. It was also the most technology-focused solution for us as a business-to-consumer startup. Our whole business runs online, so it was important to work with a 3PL that was technology-focused."

The two companies teamed up in July 2018, with Boxzooka taking over a portion of Buffy's fulfillment distribution and running it through its New Jersey warehouse. Boxzooka also deployed its enterprise cloud-based WMS for Buffy's San Francisco operations.

ROLLING IT OUT

The WMS rollout at the San Francisco facility happened over a weekend and was "very easy," Bloom says. The system was easy to use and provided instant access to inventory and order information.

By January 2019, Boxzooka moved Buffy's business to its Los Angeles hub, allowing Buffy and Boxzooka to more efficiently coordinate inventory, orders, shipping, and returns without any downtime.

"We have a strong connection with the e-commerce sales platform Shopify, as more than half of our customers, including Buffy, are on it," says Brendan Heegan, founder of Boxzooka. "Orders are placed on Buffy's website, and then drop into our WMS in real time. We begin fulfilling the orders as they come in and then quickly send them out."



Startup bedding company Buffy learned early on that it needed to optimize its operations. The company turned to a 3PL provider's warehouse and order fulfillment solution that meets its demanding direct-to-customer shipping requirements.

The decision to use Boxzooka's 3PL and WMS solutions has shortened Buffy's shipping times, allowing the company to more consistently hit its promised two-, maximum three-day delivery window for U.S. customers.

"We started with Boxzooka on the East Coast for a few months to see how things would go. Now, moving into Boxzooka's center on the West Coast has streamlined our whole process," Bloom says. "Having inventory with one company instead of spread across two companies has been great.

"Also, because Boxzooka has two fulfillment centers, we can manage the shipping based on what makes the most sense from a fulfillment standpoint," she adds. "We don't need to draw a line down the middle of the country and say the East Coast fulfills these orders and the West Coast fulfills the others. Fulfillment is thoughtfully split up so we can optimize shipments by location."

Boxzooka also helps Buffy on the returns side by receiving and storing the returned comforters, checking the quality of the returned items, and redistributing them in bulk to the appropriate local organizations.

This level of service has helped the relationship evolve.

"When we were developing the WMS, we focused on making it user-intuitive and user-friendly," say Heegan. "We wanted our clients to be able to run their business on it. They can see orders in real time. They can see inbound freight coming into the facility and being put away. Basically, they can look over our shoulders, and feel empowered about what's happening with their business while being able to streamline their communications flow."

A SOLID BASE

Creating a good user experience and shipping one main product in limited size formats has given Buffy a solid base to build on.

One short-term goal is to expand its topof-bed product lines and offer items such as sheets and duvet covers, Bloom says, adding that she expects Boxzooka's WMS and fulfillment solutions will help Buffy reach its next growth level.

Specifically for logistics, Buffy wants a two-day order-to-delivery turnaround to be the company's competitive norm. Achieving that goal will likely require setting up a third facility somewhere in the middle of the country to ensure that every customer is within a two-day reach of Buffy's inventory.

Serving international customers is also on the radar, says Bloom. The company currently can send items to Canada, but is looking to grow beyond North America over the next few years.

Will Boxzooka be part of those plans? "We have had a good experience

with Boxzooka so far," Bloom says. "The easiest path is to have one company that we have a very good relationship with own everything."

It's that kind of confidence that ensures a good night's sleep.

IN THIS SECTION: Global Logistics

GLOBAL LOGISTICS

bit.ly/IL WCC



COSCO Shipping Lines (North America) Inc. • www.cosco-usa.com

China Ocean Shipping (Group) Company (COSCO), the national flag carrier of the People's Republic of China, is one of the world's premier full-service intermodal carriers. The company utilizes a vast network of ocean vessels, barges, railroads, and motor carriers to link the international shipper with the consignee. COSCON's 20 main-line services connect over 100 ports worldwide to reach more direct ports of call than any other carrier in the world, with weekly, fixed-day service to many destinations. The AUM-Pendulum Service's direct ports of call include Tokyo, Qingdao, Shanghai, Yantian, Hong Kong, Charleston, Norfolk, New York, Boston, Valencia, Naples, Genoa, and Barcelona.

CT Logistics • www.ctlogistics.com

Since 1923, organizations have leveraged CT Logistics to provide global freight audit and payment and transportation management solutions. Partner with CT to design and implement customized supply chain and rate management solutions. CT's Business Intelligence platform provides global spend visibility and data analysis using SOCII and ISO 9001:2008 certified processes. Services also include: shipment execution, bid management, shipment planning and execution software, and professional services for consulting and advising.





Lynden • www.lynden.com

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

Port Everglades • www.porteverglades.com

Nobody moves cargo in and out faster than Port Everglades. The port is part of a thriving global transportation network that counts among its attributes a favorable location less than one mile from the Atlantic Shipping Lane, direct access to multimodal inland links through Florida's interstate and highway systems, and an FEC rail hub within two miles. Across the street is Fort Lauderdale Airport, one of the fastest-growing airports in the nation. Visit the website for more details.



IN THIS SECTION: Global Logistics

GLOBAL LOGISTICS

bit.ly/IL WCC



Port of Long Beach • www.polb.com

The Port of Long Beach is one of the world's busiest seaports, a leading gateway for trade between the United States and Asia. During the next 10 to 15 years, the Port of Long Beach plans to create at least four container terminals of more than 300 acres each, and to build at least one other large terminal. The new terminals will have dockside rail facilities, which allow cargo to be transferred directly between ships and trains. Such transfers speed deliveries between Long Beach and markets nationwide. For more information on the advantages and services offered by the Port of Long Beach, visit www.polb.com.

Seaboard Marine • www.seaboardmarine.com

Seaboard Marine is an ocean transportation company that provides direct, regular service between North America, the Caribbean Basin, Central and South America. With a fleet of more than thirty vessels serving over 35 ports, Seaboard Marine is a trade leader in the Western Hemisphere.





Sunset Transportation • www.sunsettrans.com

Sunset Transportation isn't just another 3PL. We are driven by the right-size fit for each business, using all levels of global and domestic supply chain resources and services. Our culture allows customers to feel like family, while offering advanced TMS solutions, reporting, and shipment reliability. Our approach is simple: through analysis of historical shipping data, we identify opportunities for optimization, service improvement, and technology enhancements. All this is done with five promises we make to every customer, every day: savings, visibility, data-driven decisions, continuous improvement, and relationships. Sunset is the right size 3PL for your growing business.

Transgroup • www.transgroup.com

www.transgroup.com provides comprehensive information about TransGroup Worldwide Logistics, including locations, services, and global transportation and logistics capabilities. Detailed information about TransGroup's Webbased logistics management tools is also provided, as well as customer log-in access and links to resources useful to shippers. To learn about TransGroup Worldwide Logistics, visit www.transgroup.com, or contact TransGroup at 800-444-0294, or by e-mail at info@transgroup.com.



IN THIS SECTION: Logistics IT - Ports

LOGISTICS IT

bit.ly/IL WCC



Elemica • www.elemica.com

As the global leader in supply chain process integration and collaboration, Elemica enables companies to achieve operational excellence by replacing complex approaches with automated systems and intelligent business processes. Utilizing leading-edge technology and in-depth process expertise, Elemica integrates disparate enterprise business systems and processes into one unified network across all customers, suppliers, and third-party service providers irrespective of company size or industry.

OCEAN

Evergreen Shipping Agency (America) Corp. www.evergreen-shipping.us

Evergreen is a truly global container carrier with the resources to meet the needs of virtually every shipper. Evergreen offers extensive ocean service enhanced by intermodal capability to every continent, and also the flexibility of a modern, specially built fleet of more than 100 container vessels. Since the company's founding in 1968, the Taiwanese-based carrier has grown to be one of the largest container carriers in the industry, while retaining our self-reliant character and independent status in most trade lanes.



PORTS



Halifax Port Authority • www.portofhalifax.ca

Halifax is perfectly positioned to provide international shippers with rapid access to the eastern and central markets of Canada and the United States. It is one of the few ports on the East Coast of North America capable of handling fully laden ultra-class vessels over 10,000 TEU. Halifax is a multipurpose port with expertise in handling every configuration of cargo, including container, ro/ro, bulk, breakbulk, and special project including heavy lift. The diversity of the port is accommodated through two container terminals, an automobile handling facility, and two common-user multi-purpose facilities.

Port of New York and New Jersey • www.panynj.gov

The Port of New York and New Jersey is the largest seaport on the East Coast in North America–trading a remarkable \$149 billion worth of cargo each year. The Port Authority of NY & NJ has invested over \$2 billion at the port and has earmarked another \$2 billion for investment over the next 10 years with the goal of providing the necessary tools and infrastructure to streamline cargo transportation needs.



IN THIS SECTION: Ports - Truckina

bit.ly/IL WCC





Port Tampa Bay • www.tampaport.com

Tampa/Hillsborough County boasts some of the highest-rated international and domestic shipping facilities in the nation. Strategically located on Florida's west coast, the Port of Tampa is easily linked to rapidly expanding markets in Central and South America, and beyond the Panama Canal. The port also provides ship building, maintenance, and repair. To learn more about these services, point your browser to the port's website.

SUSTAINABILITY

EPA SmartWay • www.epa.gov/smartway

In 2004, EPA launched SmartWaySM—an innovative brand that represents environmentally cleaner, more fuel-efficient transportation options. In its simplest form, the SmartWay brand identifies products and services that reduce transportation-related emissions. The impact of the brand, however, is much greater as the SmartWay brand signifies a partnership among government, business, and consumers to protect the environment, reduce fuel consumption, and improve air quality. All EPA SmartWay transportation programs result in significant, measurable air quality and/or greenhouse gas improvements while maintaining or improving current levels of other emissions and/or pollutants. Find out what you can do to save fuel, money, and the environment with SmartWay.



TMS



nVision Global • www.nvisionglobal.com

nVision Global is an industry leader in providing configurable logistics services and solutions for customers around the world, enabling them to optimize their supply chain and gain access to critical data. Our solutions include a global, multi-modal TMS application, international freight audit and payment, and loss & damage/ overcharge/service failure claims management, as well as industry-leading logistics analysis solutions. With locations in North America, Europe, Asia, Central America, and South America, our staff is fluent in more than 25 languages. We process and pay freight invoices from more than 190 countries, in more than 40 currencies.

TRUCKING

Old Dominion Freight Line • www.odfl.com

Old Dominion Freight Line is a less-than-truckload carrier providing complete nationwide service within the continental United States. Through its four product groups, OD-Domestic, OD-Expedited, OD-Global, and OD-Technology, the company offers an array of innovative products and services to, from, and between North America, Central America, South America, and the Far East. The company also offers a broad range of expedited and logistical services in both domestic and global markets.



Supply Chain Insights THE LATEST FREE WHITEPAPERS, VIDEOS, PODCASTS, AND MORE...

video

RETHINKING THE JOURNEY OF A BOX Sealed Air

bit.ly/RethinktheJourney

Follow two pairs of shoes—one packaged in a corrugated box and the other with StealthWrap—through their fulfillment journey from plant to final consumer. See how StealthWrap, an ultra-durable cartoning solution, helps optimize billable weight, improve fulfillment velocity, enable space savings, and support sustainability initiatives. Will you rethink the box?



whitepapers



bit.ly/shippingplaybook

3PL Parcel Shipping Playbook *Pierbridge*

Global e-commerce is driving unprecedented shipping volumes as consumers expect more for less. As a result, businesses are seeking guidance from third-party logistics companies (3PLs) that can help them navigate the carrier capacity crunch, spend less time and money on shipping, and spend more time focusing on their core business. Download this whitepaper to find the best plays to help you ship better globally from the first mile to the last inch.



bit.ly/6Expectations

The Top 6 Global Supply Chain Expectations for 2019

Amber Road

It's a new year for global trade, with erratic trade policies, sourcing shifts, and transportation woes. What else does 2019 have in store for supply chains? And how does your company plan to prepare? With insights and predictions from top industry experts, this whitepaper helps you navigate the future route of global trade.



bit.ly/5WaystoCut

5 Ways to Start Cutting Supply Chain Costs TECSYS

The ultimate challenge for companies trying to remain competitive in a fast-paced distribution environment is being able to meet skyrocketing customer demands while reducing costs. That's a tough ask. Learn five proven ways to cut your supply chain costs, and how the right warehouse management system can start you on the path to greater efficiency.

Supply Chain Insights

whitepapers



bit.ly/InsideDropShipping

An Inside Look at Drop Shipping enVista

Retailers that expand their item assortment can dramatically increase customer satisfaction and sales. Vendor drop shipping enables retailers to easily add and test SKUs—without taking on additional inventory carrying costs. Read this whitepaper to discover how to develop an optimal vendor drop ship strategy and how to enable ship from vendor—in only months.



bit.ly/DebunkTMSMyths

Debunking Popular "Myths" About TMS

Trinity Logistics

Despite the potential for increased efficiencies and cost savings, less than half of all organizations use managed transportation solutions to handle their supply chain activities. This whitepaper debunks some of the common Transportation Management System (TMS) myths with a people-centric approach. Find out how combining the right people with transportation technology can deliver continuous value to your supply chain



bit.ly/TransportEvolution

The Logistics Transport Evolution: The Road Ahead

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

podcast



Supply Chain Trends Impacting Today and Shaping Tomorrow

GUEST: Scott Sureddin, CEO North America, DHL Supply Chain

Supply chain professionals are subject to any number of challenges that require them to either predict and prepare ahead of time or quickly address and adapt in real time. From technological developments such as artificial intelligence and robotics to negotiating tariffs and trade wars, Scott Sureddin of DHL Supply Chain shares his perspective on the challenges impacting the industry today and some trends to watch in the future.



[IN FOCUS]

PRODUCTSPOTLICHT

Storage Systems



BITO pallet racking system: This storage solution allows convenient access to every pallet. Users can easily modify and extend the racking configuration. The system is available in multiple versions, including broad-aisle, narrow-aisle, and mobile-pallet racking.



Ridg-U-Rak Drive-In storage systems: The high-density system allows for easy lift truck access and is suited for last-in, first-out storage requirements. The solution features narrow pallet-storage lanes running perpendicular to the working aisles. Pallets are stored on the floor and on parallel rails. Operators fill the system back to front to access all pallet positions.

Storeganizer:

This high-density storage system lets warehouses store small items in columns of suspended, easyto-access pockets made of flexible and durable fabric, which can be installed in all types of pallet racking. Storeganizer allows warehouses to store more small items per square foot, optimizing rack space and boosting picking efficiency.



Steel King pick modules: The materials handling manufacturer and integrator creates custom pick modules by combining dynamic rack systems with conveyors or other flow components. Ideal for e-commerce fulfillment, the pick modules can include a multi-level system that enables optimal space utilization, allows for dense product storage, and reduces materials handling.

UNEX SpeedCell: This high-density storage solution optimizes unused space within storage racks and allows orders to be picked faster. SpeedCell is composed of high-strength industrial textiles that resist mold, rust, and flame. These cells are suspended from a pre-galvanized steel track system that integrates into existing pallet rack beams.



Cimcorp MultiPick: This solution combines buffer storage and order picking into one automated operation. The robotic materials handling system controls and streamlines a DC's material flow—from goods receiving and buffering to picking, replenishment, order consolidation, palletizing, loading, and dispatch.

.....









Westfalia AS/RS: This automated storage and retrieval system uses a double-mast storage and retrieval machine (S/RM) to transport pallet loads, full unit loads, layer loads, or extra-large loads. The S/RM, using Westfalia's Satellite technology, covers large horizontal and vertical distances reaching horizontal speeds of 900 feet/minute and vertical speeds of 400 feet/minute, and can accommodate up to 16,000 pounds per load.

[IN FOCUS]

NBREF

New Services and Solutions

> TECHNOLOGY



Robotics and warehouse automation company **GreyOrange** launched a modular sortation system known as Flexo. As the newest addition to its lineup of AI-powered solutions, Flexo enables scalable sortation systems.

Retail planning and collaborative supply chain optimization solutions provider **Logility** released new demand-sensing and analytics capabilities within its *Logility Voyager* solutions. The software enhances visibility and collaboration across departments, enabling retailers to assess and respond to consumer behavior. Foodservice supply chain technology provider **ArrowStream** is set to launch its strategic sourcing solution in the second quarter of 2019. It connects sourcing to spend analytics and contract management tools, linking restaurant buyers directly to suppliers.

Shipping line **Seaboard Marine** joined the TradeLens blockchainpowered freight transportation platform developed by Maersk and IBM. The ocean transportation provider will use the technology to enhance customer relationships, business intelligence, and data processing and security.

Indigo Ag launched Indigo Transport, a full-service logistics platform designed for the agricultural shipping industry. The platform connects shippers, buyers, and carriers to address system-wide concerns such as backhauls, demand inconsistency, and carrier shortages.

E-transaction and data capture services provider **CloudTrade** launched its *CloudTrade Logistics* solution. The platform enables freight payment providers, 3PLs, and business process outsourcing partners to automatically process documents.



> LATAM Cargo added a direct route connecting Chicago to Campinas, Brazil, cutting transit time between the cities to less than 15 hours. Serviced by the Boeing 767-300F with a 50-ton capacity, the new route also connects cargo with Buenos Aires, Argentina, and Santiago, Chile.





In-transit supply chain tracking solutions provider **Tive** partnered with **USPS** to launch a returnby-mail real-time tracker, which simplifies return logistics for manufacturers and other shippers.

> TRANSPORTATION

NVOCC Shipco

Transport launched two LCL services between the United States and Asia, running from Los Angeles to Shenzhen, China, and Haiphong, Vietnam. The Shenzhen service takes 23 days and the Haiphong route 25 days, both shorter than the routes currently on the market.

Virgin Atlantic is

launching daily flights between London Heathrow and Tel Aviv in September 2019, providing more import and export opportunities for customers in the United States, UK, and Israel. The Airbus A330-300 flights will have 20 tons of cargo capacity, responding to Tel Aviv's increasing volume of cargo shipments.

> PRODUCTS

Tompkins Robotics

added the t-Sort Plus to its t-Sort independent robot unit and parcel sortation system. The t-Sort Plus unit can carry a standard payload size of up to 19x40 inches, and has the ability to move in any direction and run up to four hours on a charge.

Rite-Hite updated its system so elements of the RiteVu Hazard Recognition System are now available as retrofit or standalone equipment for any loading dock, rather than only with specific products. The available equipment includes the ApproachVu drive approach warning system; PedestrianVu interior dock warning system; and Lok-Vu, an external camera that provides employees inside with a real-time view of vehicle restraint.

Warehouse operators can boost labor efficiency and increase throughput in order picking, unloading, and other warehouse tasks with **Yale Materials Handling's** new end rider pallet truck series. The Yale MPEO60-080VH end riders let operators easily navigate between pick locations by enabling precise bi-directional control.

A new line of Robust UHF antennas designed for industrial applications, such as vehicle mounting on industrial forklifts and container tracking, joined the **Feig Electronics** lineup. The antennas have the highest certification for impact rating on their sealed housing and can function in a wide temperature range.

Adam Equipment's new AE 403 digital weight indicator offers features for numerous applications,



Graphic Products' new DuraLabel Kodiak prints extra-wide signs and labels to draw awareness to hazardous areas or help improve the flow of operations in warehouses and distribution centers. It prints 4- to 10-inch-wide signs, up to 8 feet long.



including parts counting and dynamic weighing. Designed for shipping and receiving, the indicator performs well at food processing plants and loading docks.

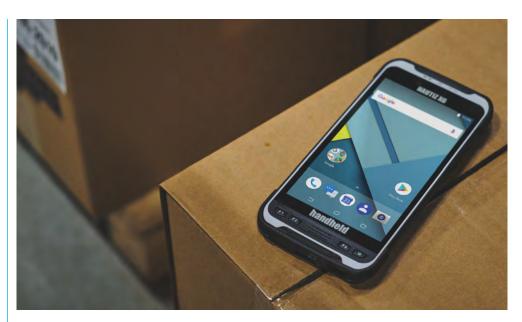
> SERVICES

BigCommerce extended its e-commerce platform with new BigCommerce Shipping. The free endto-end shipping solution offers BigCommerce customers access to discounted shipping rates, dimensional shipping, and a streamlined management system.

Dangerous goods shippers using **ProShip's** software can now access hazardous materials tables, validation checks, and compliant shipping papers. The supply chain solutions provider partnered with hazmat packaging solutions provider Labelmaster to simplify the shipping process.

Kerry Logistics

bolstered its global e-commerce fulfillment services by starting a joint venture with Asia-based EServices Group. The newly formed Kerry ESG combines Kerry Logistics' global supply chain with ESG's technology, marketplace, and e-commerce experience.



Rugged mobile computer manufacturer **Nautiz** launched a new Android phablet (phone-tablet) known as the Nautiz X6. The X6 is designed for industrial and field applications, with an IP67 rating, Android software, and one-button scanning to track warehouse inventory.

Shippers can expect greater control over inventory and pricing with **Ryder's** new e-commerce fulfillment solution, which moves orders directly from manufacturers to customers. The company plans to open two purpose-built facilities and expand a warehouse for the program.

Logistics company **Compass Forwarding** now serves as the New York/JFK forward stocking location for two aircraft parts distribution programs. The operations include inventory management and distribution of flight safety electronics and spare parts.



Southworth Products' new LiftMat low-profile lift tables allow worker access to all four sides of a palletized load. With a capacity of 2,200 pounds, the tables have a lowered height of 3.25 inches and a raised height of 31.5 inches. They can be heightadjusted using a foot switch or remote to eliminate the need for bending and stretching. Transportation technology company **Ontruck** launched short-distance road freight operations in Paris, France. The Paris expansion supports the company's continued European growth.

Dart Transit Company

opened an operating center in the metro Atlanta area. Its new Ellenwood, Georgia, facility, located near the Hartsfield-Jackson International Airport, allows the transportation services provider to support more shippers in the state and region.

Shippers in the pharmaceutical and clinical research sectors can now quickly transport biological products and patient-specific treatments under multiple temperature options inside specialized thermal packaging. DHL launched its Medical Express service between Brazil and the United States that will deliver to most U.S. destinations in 24-48 hours.

Worldwide Flight

Services invested in a new pharmaceutical facility at Copenhagen Airport to keep up with a 90-percent year-on-year volume increase. The facility provides temperaturecontrolled end-to-end handling.



A-Safe's iFlex Pedestrian Guardrail 3 Rail visually defines traffic routes in warehouses and physically protects pedestrians and drivers if an accident does occur by cushioning and deflecting impact forces. The flexible material absorbs and reforms repeatedly upon impact.



CALENDAR YOUR LOGISTICS



Los Angeles Area Chamber of Commerce

World Trade Week 93rd Annual Kickoff Breakfast

bit.ly/WTWbreakfast | Los Angeles, CA | MAY 2, 2019

AUDIENCE: Supply chain stakeholders **FOCUS:** Evolving challenges and advantages of trade in a digital world; how global trade impacts and improves the local and national economy; insights from supply chain professionals

CONFERENCES

APR 25–26, 2019 Dallas, TX Generis

American Supply Chain Summit 2019

supplychainus.com

AUDIENCE: Procurement and supply chain professionals

Focus: Rolling out workforce management, advanced analytics, process improvements, and automations; achieving innovation, maximizing profitability, and increasing visibility to mitigate risks; taming complex supply chains to reduce costs

APR 28–MAY 1, 2019 Columbus, OH Warehousing Education and Research Council

WERC 2019: 42nd Annual Conference for Logistics Professionals

wercconference.org

AUDIENCE: Logistics and warehousing professionals

FOCUS: Global warehousing strategies; developments in direct store and lastmile deliveries; deploying robotic picking strategies; stopping injuries among workers and drivers; attracting and retaining employees

MAY 13-16, 2019 Phoenix, AZ

Gartner Gartner Supply Chain Executive Conference 2019 bit.ly/gartnerevent

AUDIENCE: Supply chain and logistics executives

FOCUS: Defining and deploying digital logistics strategies; supporting the challenges of modern healthcare;

maximizing value in manufacturing industries; leveraging external manufacturing capabilities for business planning

MAY 15–17, 2019 San Antonio, TX North American Rail Shippers Association NARS 2019 Annual Meeting

railshippers.com/events

AUDIENCE: Rail shippers FOCUS: Initiating changes relative to infrastructure needs, NAFTA modifications, technology, and the economic outlook; understanding the shortline perspective, the railcar outlook, and the regulatory landscape

JUNE 9–12, 2019 Amelia Island, FL Transportation Marketing & Sales Association

Logistics Marketing & Sales Conference

bit.ly/TMSAconf

AUDIENCE: Supply chain stakeholders and sales executives

FOCUS: Making investments in digital systems; leveraging data to deliver outstanding customer experience in the transportation and logistics industry; formulating and executing multi-channel initiatives

JUNE 10–12, 2019 Chicago, IL Global Cold Chain Alliance Global Cold Chain Expo

globalcoldchainexpo.org

AUDIENCE: Perishables industry professionals

FOCUS: Streamlining the distribution of perishable products; improving facility operations; construction codes; market intelligence and research; new products and technologies impacting the future of the perishables supply chain

JUNE 24–26, 2019 Colorado Springs, CO SMC³

Connections 2019

smc3connections.com

AUDIENCE: Supply chain professionals **FOCUS:** Succeeding in supply chain; the evolution of reverse logistics; blockchain's impact on the supply chain; navigating the current marketplace

SEP 15-18, 2019 Anaheim, CA

Council of Supply Chain Management Professionals

CSCMP EDGE 2019: Supply Chain Conference & Exhibition

cscmpconference.org

AUDIENCE: Supply chain professionals FOCUS: Female leaders in the supply chain industry; what young supply chain professionals need to know about the business; cutting-edge supply chain solutions; maximizing and transforming supply chains; global supply chain best practices; integrated business planning

SEP 16–18, 2019 Las Vegas, NV Association for Supply Chain Management ASCM 2019

bit.ly/ASCM2019

AUDIENCE: Supply chain professionals **FOCUS:** Keeping up with changes in supply chain; best practices for S&OP, inventory, and materials management; utilizing robotics, IoT, and virtual reality for efficiency and reliability; keeping up with trends in the industry; endto-end education, from planning and procurement to delivery and return

SEMINARS & WORKSHOPS

APR 25-26, 2019 Cambridge, MA MIT Sloan Executive Education

Supply Chain Strategy and Management

bit.ly/MITsupplychainstrategy

AUDIENCE: Logistics and supply chain professionals

FOCUS: The next big trend in supply chain strategy; how to better structure your supply chain strategy; making smart sourcing decisions; assimilating sustainability into your supply chain strategy

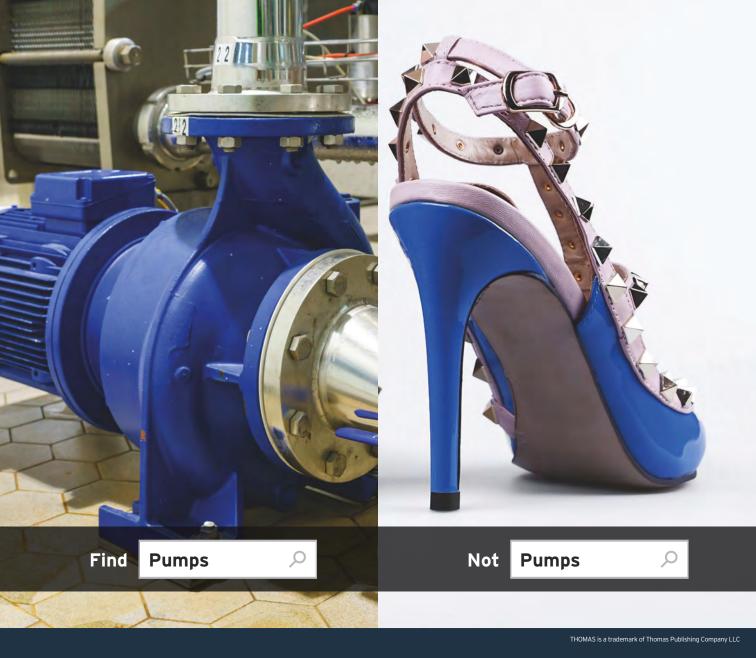
FIND IDEAS. SOLUTIONS. INNOVATION. ADVANTAGES. YOUR WOW.

With over 1,000 solution providers, ProMat 2019 is where manufacturing and supply chain innovation comes to life – in person and in action. So come find WOW-worthy solutions, network with your peers and learn from the industry's brightest minds in keynotes and over 100 conference sessions. **PROMAT**

McCormick Place | Chicago April 8-11, 2019 promatshow.com

powered by

ATTEND FOR FREE Promatshow.com



Search industriously at Thomasnet.com[®].



SUPPLY CHAIN SOLUTIONS



BROTHERS FREIGHT MANAGEMENT

Class A CDL Truck Drivers / Owner Operators (OTR) Los Angeles - Rochester - Charlotte

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

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

Minimum Job Requirements Include:

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

For More Information, contact Walter • 888-595-0514 Info@brothersfreightmanagement.com

Brothers Freight Management is also Looking for Experienced Broker Sales Personnel

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

RESOURCE CENTER INBOUND LOGISTICS WORKS FOR YOU!

3PLs

Atlanta Bonded Ware	house pg. 71
www.atlantabonded.com	678-322-3120
C.L. Services	pg. 73
www.clservicesinc.com	678-686-0933
CT Logistics	pg. 82
www.ctlogistics.com	216-267-2000 x2190
Echo Global Logistics	Cover 4
www.echo.com	888-514-8376
JIT Warehousing & Lo	ogistics pg. 77
www.jitlogistics.com	866-522-2200
Lynden	pg. 47
www.lynden.com	888-596-3361
Pilot Freight Services	pg. 5
www.pilotdelivers.com	800-HI-PILOT
Romark	pg. 75
www.romarklogistics.com	908-789-2800
RR Donnelley	pg. 31
www.dls-ww.com	888-757-0291
Syfan Logistics	pg. 77-78
www.syfanlogistics.com	855-287-8485
TransGroup Global Lo	gistics pg. 63
www.transgroup.com	800-444-0294

Education

George Mason University	pg. 33
www2.gmu.edu	703-993-8099

Events

MHI	pg. 99
www.promatshow.com	704-676-1190
World Trade Week	pg. 27
www.worldtradeweek.com	213-580-7569

Freight Payment Services

nVision Global Technology		
Solutions	pg. 13	
www.nvisionglobal.com	770-474-4122	

Logistics IT

Elemica	pg. 50
www.elemica.com	484-253-4674
SMC ³	pg 67

SMC°	pg. 67
www.smc3.com	800-845-8090

Ocean

COSCO Shipping Lines (North America)	pg. 29
www.cosco-usa.com	866-830-2550
Evergreen Line	pg. 7
www.evergreen-line.com	201-761-3000
Seaboard Marine	pg. 15
www.seaboardmarine.com	305-863-4444
Packaging	
Absolute Packaging & S	upply pg. 21
www.thisbagisnotatoy.com	973-278-0202

5	
Uline	pg. 97
www.uline.com	800-295-5510

Ports

Georgia Ports Authority	pg. 69
www.gaports.com	800-342-8012
Port Authority of New Yo and New Jersey	rk Cover 2
www.portnynj.com	888-767-8696
Port Everglades	pg. 45
www.porteverglades.net	800-421-0188
Port of Long Beach	pg. 34
www.polb.com	562-283-7000

03.19

Port Tampa Bay	pg. 64
www.porttb.com	800-741-2297

Sourcing Platform

ThomasNet	pg. 100
www.thomasnet.com	800-699-9822

Real Estate Logistics/ Site Selection

Artha Capital	pg. 9
www.artha.com.mx	01-800-00-ARTHA

Pharr International	Bridge	pg. 17
www.pharrbridge.com		956-402-4660

Sustainability

EPA SmartWay	Cover 3
www.epa.gov/smartway	734-214-4767

Trucking

Old Dominion Freight Line	pg. 3
www.odfl.com	800-432-6335

INDEX

ADVERTISER	PAGE
Absolute Packaging & Supply	21
Artha Capital	9
Atlanta Bonded Warehouse	71
C.L. Services	73
COSCO Shipping Lines (North America)	29
CT Logistics	82
Echo Global Logistics Co	over 4
Elemica	50
EPA SmartWay Co	over 3
Evergreen Line	7
George Mason University	33
Georgia Ports Authority	69
JIT Warehousing & Logistics	77
Lynden	47
MHI	99
nVision Global Technology Solutions	13

ADVERTISER	PAGE
Old Dominion Freight Line	3
Pharr International Bridge	17
Pilot Freight Services	5
Port Authority of New York	
and New Jersey	Cover 2
Port Everglades	45
Port of Long Beach	34
Port Tampa Bay	64
Romark	75
RR Donnelley	31
Seaboard Marine	15
SMC ³	67
Syfan Logistics	77-78
ThomasNet	100
TransGroup Global Logistics	63
Uline	97
World Trade Week	27

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



UNDERGROUND?

Switzerland says yes. A Swiss-led consortium, Cargo Sous Terrain (CST), is digging in by developing a digitized underground system that moves cargo quietly and reliably, connecting Swiss business centers with cities and industrial areas.

DDDDG

IS THE FUTURE OF FREIGHT TRANSPORTATION

\$3.4 BILLION Estimated cost of CST. The entire project relies on private financing.

WINTERTHUR

ZÜRICH

LUZERN

ST. GALLEN

BASE

HÄRKINGEN

NIFNFRRIP

LAUSANNE

GENÈVE

BERN

THUN

More than 320 MILES OF TUNNELS

serving more than 80 hubs for the loading and unloading of industrial and commercial goods for about 10 million people. Each tunnel is around 20 feet wide and 164 feet below ground.

> **30%** Anticipated reduction of freight traffic in cities.



GREEN POWER

The system will run entirely on renewable energy, transporting pallets and other containers. It's designed for the supply of fresh goods as well as for waste disposal and recycling.

Nearly **11 MILLION SQUARE FEET** of surface undergro making CST the

of surface underground, making CST the largest warehouse in Switzerland. 2020

Anticipated start of the building permit and planning phase

2025

Projected construction start date

2030

Expected completion of the tunnel system connecting Härkingen-Niederbipp with Zurich

2045

Projected completion date

SOURCES: WWW.CARGOSOUSTERRAIN.CH; PANALPINA; IEEE SPECTRUM

TO REDUCE THIS...

AND SAVE THIS ...

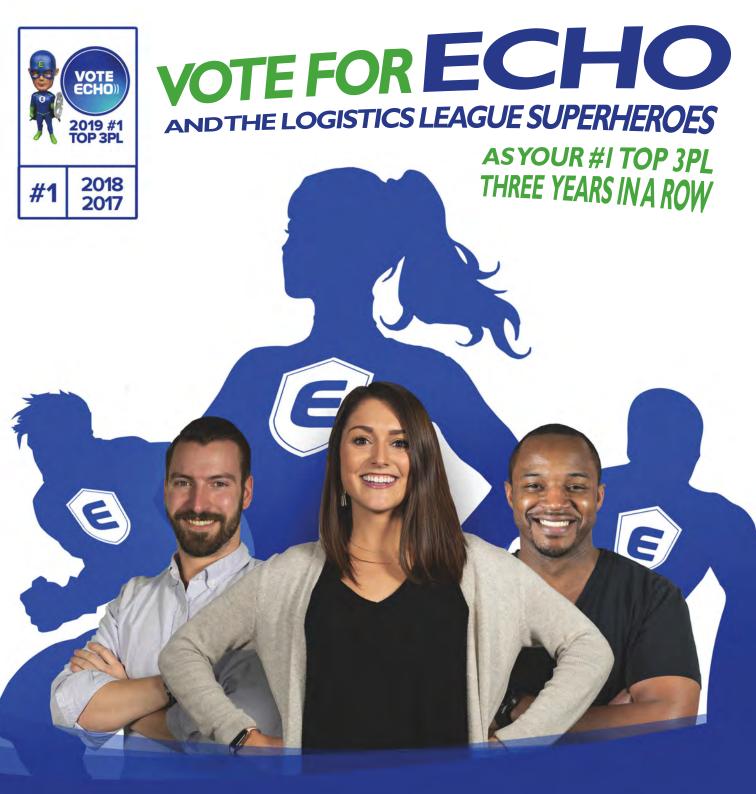


Partner with SmartWay®

SmartWay Transport Partnership is the smarter way to ship goods. SmartWay can help your company put its best foot forward to reduce its impact on the environment, improve its bottom line, and better manage its global freight supply chain. This innovative public-private collaboration helps your company increase operational efficiency, incorporate sustainability, and gain a competitive edge. It's no wonder over 3,700 companies have joined SmartWay. Since 2004, they have lowered fuel costs by \$33.4 billion and reduced emissions of harmful air pollutants by 119 million tons. To learn more about becoming a SmartWay Shipper Partner, drive over to www.epa.gov/smartway/become-smartway-shipper-partner



Any way you ship it, move it the SmartWay.



Logistics is complicated. Who to vote for is simple.

Last year you voted us #1 for the second year in a row because every day our team members use their passion and industry expertise to solve problems and simplify your transportation management. Armed with our advanced technology and extensive network, they work hard to be your superheroes. Vote today for your Uncomplicators. **Visit ECHO.COM/VOTE**

ECHO.COM 800.354.7993

r & Ocean Transportation Simplified

Managed Transportation • LTL • Truckload • Partial Truckload • Intermodal • Expedited • International Air & Ocean © 2019 Echo Global bgistics. All rights reserved